

AL MUHARRAQ :
ARCHITECTURE,
URBANISM AND
SOCIETY IN AN
HISTORIC ARABIAN
TOWN.



AL MUHARRAQ : ARCHITECTURE, URBANISM AND SOCIETY IN AN HISTORIC ARABIAN TOWN

A Thesis presented to the University of Sheffield (Department of Architecture) for the degree of Doctor of Philosophy

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ABSTRACT

Al Muharraq is a small historic town on the eponymous island in the State of Bahrain, Arabian Gulf.

This thesis describes fifty nine buildings in Muharraq, built between 1800 and 1940. There are a large number of drawings and photographs covering plans, elevations and sections and details of construction and decoration. There is a description of the town plan and its historical growth process. The principles of architectural design are discussed, and examples of craftwork are catalogued. A framework for distinguishing and dating historical periods is proposed. The building industry and methods of construction are described. Lastly, a detailed account of the architecture and commercial organisation of the buq (market) is presented. All this material is placed in the context of the history, social structure and lifestyles of the inhabitants. Lessons for future design are pointed out.

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There were many pleasant and helpful people (whose names I never learnt,) who smiled at me or chatted with me in the street - thus making me feel welcome. The ordinary Bahraini is extremely friendly, decent and kind, and I never felt ill-at-ease whilst undertaking this

work. On a negative note, I did not find anyone in the Museums service who wanted to help me.

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Chapter 1

INTRODUCTION



Chapter 1

INTRODUCTION

1. Aim of the Thesis and Summary of Content.

This thesis is concerned with the town of Al Mubarraq, an historic town in the State of Bâhrain, which is an island in the Arabian Gulf. The town is perhaps the best example (on the southern side of the Gulf) of a particular type. It is, however, decaying quickly and will be more-or-less lost in (perhaps) twenty years. It has never been studied in detail. I worked as Head of the Department of Urban Renewal, Ministry of Housing, Government of Bahrain from June 1983 to June 1985. The photographs and drawings were made in this period, and the interviews carried out between October 1984 and May 1985. During these two years, my family and I lived on Road 1615, Halat Bu Maher.

This thesis has six basic aims..

- (i) To describe a representative selection of the best buildings in Mubarraq, covering detailing as well as plans and elevations.
- (ii) To propose a sequence of stylistic periods, giving approximate dates where possible.
- (iii) To describe the method of building construction and the structure of the building industry.
- (iv) To describe the urban form (and in particular the form of the Suq) and explain the origins of that form.
- (v) To review the historical context in social, economic, political and cultural terms, in order to allow town and buildings to be more properly understood.
- (vi) To explore the relevance of historical precedent (as revealed in this study) to the design of future towns in the same cultural context.

The historic period under study is 1790 to 1940 A.D. As to the building survey, I decided that it would be better to cover a larger number of cases (of buildings and building elements) but with less accuracy. I am assuming this is a "zero-sum game" and that extra effort on accuracy of survey would reduce the range of material. My aim is not to achieve that level of accuracy which would allow an individual monument to be properly restored, for example, but rather to generate a comprehensive overview of an entire system. My own judgement has been that this is the more appropriate aim for Al Muharraaq. I would justify this by arguing that the quality of the buildings as cultural property, as art-objects is not the highest; by comparison with cities such as Ispahan, Cairo or Sana'a it is a minor achievement. However the significance of the whole cultural phenomenon for the local area (the Gulf region) cannot be disputed as regards its future development, and study should be directed accordingly.

2. Methodologies and Sources.

2.1. Building Surveys.

The buildings were not fully measured. I made detailed sketches on site and took the key dimensions. Where it seemed important I would measure something fully. The architecture is so modular that one can gain some dimensions approximately by measuring one structural bay and then counting bays. The diagonal dimensions across large courtyards were paced, and checked from the official survey maps (which closely resemble U.K. Ordnance Maps). The drawings cannot therefore be called "measured drawings" although they are obviously rather more than sketches. I experienced no difficulty obtaining permission to survey occupied or locked premises and found Muharraquis without exception to be very friendly, open and obliging to strangers.

2.2. Interviewing People.

I would lay no claim to special anthropological skills, and my attempts at ethnographical research are not very sophisticated. I kept notes during discussions and where these have been drawn upon a footnote indicates the person whose statements are cited. Generally speaking, it would be wrong to place much reliance on the accuracy or objectivity of these statements. Everyone was relying on memory, which in such a context can be faulty. Furthermore, the presence of a foreign interviewer would colour what was said in some cases. I found that oral recollections were generally more "rose-tinted" than the academic writers (such as Rumaihi and Nakieb) would suggest. It may, however, be that their original sources (such as India Office Records and newspapers) record only problems and so present an unbalanced impression. I have attempted to corroborate statements where possible - by obtaining a statement on the same subject from another interviewee, or from a book, dated photograph or other source. The footnotes make the corroboration (or lack of it) clear.

I interviewed twenty-one people (apart, of course, from frequent conversations with my former colleagues in the government and former neighbours in Muharraq). I list them below with a note on their background and the subjects we discussed.

(a) Eid and Yusuf Bokhammas.

Owners of a long established Builders' Merchants business in the Suq.

The historic structure of the Suq. Tools in building.

(b) Khalid Engineer and Janet Engineer.

Prominent businessman and wife.

The building industry, particularly contracts. Social history.

(c) Said Khalil Hashim.

Former building worker; later an employee of the Museum Department.

The building industry, particularly family involvement, size etc.

(d) Yusuf Abdullah.

Former building worker, then R.A.F. foreman; now retired, but runs shop opposite Sufi House.

The building industry. The Sufi House.

(e) Najji Bu Sherar.

Plaster carver.

Plasterwork.

(f) Mariam Al Jalahma.

Wife in the Al Jalahma family.

Al Jalahma House.

(g) Yusuf and Mohammed Mattar.

Businessmen and senior members of the Mattar family.

Both Mattar houses and a range of general data on the Suq.

(h) Sheikh Khalifa bin Abdullah al Khalifa.

Judge. Owner of Sh. Abdullah bin Mohammed House.

Sh Abdullah and Sh Salman houses.

(i) Hassan Abdullah Seyadi.

Businessman.

Seyadi House.

(j) Abdul Wahed.

Singer. Musician, habitue of Suq coffee houses.

Social history and general range of points about the Suq.

(k) Mohammed Mohsin.

Local man: works as Manager of Al Hidd post office and friend of Mattar and Seyadi families.

The Suq.

(l) Michael Hall.

Director of Bahrain Drainage Project.

Sewerage, Drainage, Health.

(m) Sultan Nasr al Suweydi.

Assistant Director, Waqf Department (Justice Ministry).

Waqf endowments and various legal matters.

(n) Hillaal Salem.

Formerly a Pearl Diver.

Spatial distribution of families in Halat Abu Maher prior to 1930.

(o) Ahmed Mugla.

Member of Mugla family.

Life in Abu Maher

(p) Hamza Mohammed.

Trader in the Suq, (Tijjar Road).

The Suq.

(q) Hakim Malik.

Young member of Malik family.

Malik House.

(r) Rashid Fakhroo,
Manager at BAPCO.

Yusuf Abdulrahman Fakhroo House.

These people were not questioned in equal depth. In some cases - Mrs. al Jalahma, for example - only a short discussion was held. In other cases, many hours of discussion occurred. For instance, I spent altogether over seven hours with the Bokhammas father and son spread over four meetings.

2.3. Books and Maps

A bibliography is appended. There are, in fact, very few written sources on Bahraini architecture or on any aspect of Al Muharraaq at all. Rashid Al Oraifi's book, "Architecture of Bahrain" which he published himself in 1978, is a commendable attempt, but is really no more than a pamphlet. Dr. Lewcock, with Richard Hughes produced three short reports (undated) for UNESCO around 1980 which deal with technical and policy problems of building conservation in Bahrain. They are limited in scope, but (of course) very valuable. These were never published. Only the Ministry of Information, UNESCO and the authors retain copies. Mme. C. Hardy-Guilbert and M. C. Lalande wrote a book entitled "Sh Isa House" which arose from the work of the French Archaeological Mission. This is a very good book, but it does have the limitation that it concerns only one house and so lacks a wider perspective. There is an article by G. King on the Al Moayyed house (in Manama) in the Journal of Arabian Studies Vol.4 (1977), and a book by A. Coles and P. Jackson entitled "A Windtower House in Dubai" (1975) which have some bearing on the present subject. On Iranian architecture, Roland Rainer ("Anonymes Ba en Iran") and Beazley E. and Harverson M. ("Living with the Desert: Working buildings of the Iranian Plateau") give insights about the relationship between Iran and Bahrain in this respect. Most valuable is the book "Traditional Architecture in Kuwait and the Northern Gulf" (London 1978) by Ronald Lewcock and Zara Freeth. Such work obviously does not relate directly to Bahrain, but is useful in providing a background.

Literature on the general cultural and political context is comparatively plentiful. I have relied most heavily on the excellent book by M.G. Rumaishi: "Bahrain: Social and Political Change since the First World War" (Bowker Press and Durham University, 1978), and "Tribe and State in Bahrain" by Fuad I. Khuri (University of Chicago Press, 1980). Other sources are given in the bibliography, and one may draw attention to Al Watheeka, which is a good local history journal published in Bahrain. There are no descriptive accounts of any real architectural interest from the past. Belgrave (1960), Harrison (1924) and Rihani (1930) give a good deal of contextual insight from the recent past, and Palgrave (1865), Bent (1890) and several others are also worth consulting as regards background studies.

I obtained a print of the 1950 aerial photographs (flown by the R.A.F.) from the Survey Directorate, Ministry of Housing. The historic maps discussed in Chapter Three were copied from the originals in the India Office Library Map Collection, although I had seen copies of a few of them earlier in Bahrain.

2.4. Archive Material

There are six sources of archive material of which I am aware, but there are doubtless many others, particularly (I imagine) the records of local Muharrag families, but I could never find anyone who admitted to the existence of such. Generally I found little of relevance to an essentially architectural thesis, although they are all endlessly fascinating from other points of view. (In this I had to resist the temptation to be drawn away from the "centre ground" of the study.)

(1) India Office Records: Files of the Bushire Residency and the Bahrain Agency. Survey Maps and Incidental Notes made by Surveyors.

Information on the building industry (particularly costs) can be got from files R/15/2/52 to 55 (Agency Buildings from 1900 onwards.) and file R/15/2/1265/6/47 (Claim of S.M. Ghaus against Government for building works carried out), and various other files on building maintenance. Files in the same series yield a few insights into rents (1301/6/82 Rent Control); life in Muharrag, (1938 Miscellaneous Correspondence with Muharrag Notables and 1927 F/3 Correspondence with Muharrag Municipality.) The annual reports through the 1920s

and 30s, compiled by Belgrave, (the Government Advisor,) are illuminating summaries of public affairs, including construction projects at that time. The notes made by the marine surveyors of the Hon. East India Company and later the Royal Navy when travelling inland also yield occasional insights into town life.

(11) Mr. and Mrs. Theodore Bent's Archive, Royal Geographical Society.

Several photographs and sketches are interesting and help confirm dates. The Bents visited Bahrain in 1889.

(11) Belgrave Archive, Middle East Centre, University of Cambridge.

There are photographs and written observations but none predate the 1920s, of course. The archive is not completely accessible to the public, however. Belgrave was the Advisor to the Ruler.

(14) Collection of Photographs, Directorate of Heritage, Bahrain.

The photographs mainly concern personalities, but a few show buildings in the background and help confirm dates. Very few predate 1920.

(15) Archive of the American Medical Mission to Arabia, New Jersey Theological Seminary, New Brunswick, New Jersey, U.S.A.

I have been unable to visit this archive, but have corresponded with the archivist. The archive has not been fully investigated, and quite possibly has much to reveal. Reports by doctors visiting Muharraq are of general interest. (1)

There are in addition, collections of photographs of the region by Gill Grant, Middle East Centre, St. Anthony's College, University of Oxford, and Andrew Wheatcroft, (whose Bahrain collection will be published by Kegan Paul International in due course); I have consulted both, but neither had much material of interest to the present architectural topic.

3. Basic Data on Muharraq

3.1. The Site.

Bahrain is located at 26°:4'N and 50°:3'E, comprising several islands of 660 square kilometres total area, of which Muharraq Island is now 2% (after extensive reclamation). Muharraq Island is about 2 km off the north-east tip of the main island. It has a fluid "M-shape": there are three peninsulas upon which are sited (west to east) Al Muharraq, Arad and Al Hidd towns. The town of Al Muharraq is thus surrounded on three sides by water. The small island of Abu Maher lay off the southern tip but has been connected to the mainland by reclamation early this century. Along the north coast is a broad strip of agricultural land, with several agricultural villages (two of which - Samahij and Arad - gave rise to the earlier names of the islands). The produce from these areas was marketed in Muharraq Town. The land is generally between 2 and 4 metres above average high water mark. The highest point of the town is in the centre: land slopes gently down to the coast. The original coast is marked now by a slightly steeper gradient, (in places about 1 in 8) but this is now well inland due to the extensive reclamation. The sea is very shallow indeed, and much land is exposed at low tide. The bays between the towns are intertidal flats up to 3 kilometres wide, which dissipates wave energy and protects the coast.

The following notes on geology are drawn from Doornkamp, Brunnsden and Jones (1980). The area consists of sediment - veneered quaternary limestone. On the northern outskirts of the town (and linking north and eastwards to Al Hidd) is a raised beach complex. One metre of sediment comprises loose layered shelly and gravelly sand (which is medium grade calcareous grains). This complex slopes inwards towards Arad bay and assumes the blistered salt-encrusted surface of a typical sabkha, with superficial deposits of loose fine quartzose sands and abundant gypsum in the surface layer. The sabkha grades into the intertidal flats composed of loose muddy sand with high proportions of calcareous silt and

clay. The sand is composed of quartz and carbonate mainly but with high gypsum concentrations near the surface.

3.2. Population

Statistics are given in the Table below from published government surveys. The first survey was in 1941 and I have made a projection back to 1890; see the graph. This would indicate a population in 1930 for Muharraq of about 19,000 and in 1900 of about 17,000 persons. Palgrave in 1863 estimates the total population as 70,000 persons. The 1941 census gave the population as 89,970.

	1941	1950	1959	1965	1971	1981
Muharraq						
Town	21,439	25,577	27,115	34,430	37,732	57,688
Manama						
Town	27,835	39,648	61,726	79,048	88,785	115,054
Total for						
Bahrain	89,970	109,650	143,135	182,203	216,078	350,798

Table: Population Statistics

Average Household size in Muharraq town in 1965 was about 6.7 persons. In backward areas (in the Central Region for example) it was then about 9.0 persons. My informants subjective guesses at dwelling occupancy averages in Muharraq town in the 1920s range between 12 and

14: this does not sound unreasonable. Taking the figure of 12 persons per house, we may estimate there were 1,500 houses in 1930.

3.3. Climate.

Data on climate is readily available from the Meteorological Department. The Bahrain climate is moderated by the sea in comparison with adjacent desert areas at low latitude.

There are three types of season:

(i) December to March is relatively cold. Mean daily temperatures in January are (maximum) 19.9 deg. C and (minimum) 14.3 deg. C. Almost all of the annual rainfall (67mm, a 28 year average) occurs in this period.

(ii) June to August is the hot season. Mean daily temperatures in August are (maximum) 37.7 deg. C and (minimum) 30.7 deg.C. Relative humidity in August was 85% (maximum) and 44% (minimum).

(iii) April and September/October have moderate temperatures but the highest humidity. The maximum daily average is 92% in October and the lowest is 38% in May. Note that temperatures and rainfall are 28 year averages and humidity is a 15 year average.

The prevailing winds are known as the "Shamal" - a northwesterly damp wind - and the "Qaws" - a southeasterly hot wind from the direction of the mainland desert. The wind rose (for direction) is shown below, and it will be seen that the Shamal is by far the most frequent phenomenon.

It should be noted, in conclusion, that the climate is very hot (but not so hot as Nejd or Oman), and very damp, but with a restricted diurnal range (unlike the usual desert climate which is very cold at night).

4. The Place of Bahraini Architecture in the Wider Region.

Lastly, I would like to outline the architectural context of Bahrain. Obviously the architecture of this precise time and place was not entirely autochthonous. One would expect it to have incorporated (perhaps several) influences from more powerful cultures surrounding it. However, it is hard to give a thorough account (for there seem to be large gaps in knowledge). One conclusion from my reading is that main channel of influence is from Persia and in particular that there is a similarity between Bushire and Bahrain. The architectural similarity before (say) 1900 is not clear from available photographs. However, there are points of similarity between Bahraini and Safavid architecture (2). Persia had a claim to Bahrain, and had from time to time occupied it for long periods. There were also many arabs settled on the Persian coast (3).

Lewcock and Freeth (1978) contains a number of interesting points on the differences and similarities between Bahraini architecture and that of Kuwait, Bushir, Basra and Zubayr. Zubayr architecture relied on domes to some degree owing to the lack of timber for roof joists (4). Wall construction is baked brickwork. These are occasionally topped by small arched roof ventilators which lead air down ducts emerging in wall niches. (The book gives some photographs of these.) The blank walls are pierced by elaborate doorways with brick surrounds.

The old houses of Basra are distinguished by cantilevered wooden balconies carrying latticework privacy screens. This type was introduced from Turkey via Baghdad in the second half of the last century. The construction is generally timber framed with brick infilling - the predominant mode of Ottoman house construction. Prior to 1850, construction was like that of Zubayr: i.e. single storey mud-brick walls.

The book by Warren and Fethi on the old houses of Baghdad gives a basis of observing this Ottoman influence, and one can see a certain similarity between the twentieth century houses in Baghdad and "Late Period" Bahraini houses in respect of doorway design and window screens (5). A florid curvilinear style replaced the Islamic geometry during this century, reflecting the impact of European fin-de-siecle style via Istanbul (6). This too

can be seen in Bahrain. Wrot ironwork is also common. I could find no relevant references on Basra and have been unable to visit it.

Kuwaiti architecture resembles Bahraini in many respects, but there are major differences: the wall structure is solid, not framed, and there are fewer first floor apartments. There are small multi-directional wind-towers but only about a metre square, and projecting a metre above parapet level. The large wind-towers of the lower Gulf (particularly Bahrain and Dubai) were possible because of a far lower dust deposition than in Kuwait. Looking at Bushir (in Lewcock and Freeth's account) one can see a far clearer resemblance to Bahrain. Several of their photographs of Bushir could be readily mistaken for Bahrain (7). The links between Bushir and Arabia were always strong and the Bushiris themselves were mixed Persian and Arab stock, much as one finds in Bahrain. There is a similar resort to framed structures comprising piers and thin infill panels. Also, there are many examples of first floor rooms with large loggias or liwans in Bushir as in Bahrain. As to the question of who influenced whom, Lewcock says that Bahraini masons may have helped in Bushiri construction after its rise to importance in 1734 (when Nadir Shah made it his naval base). The Rev. S. Zwemer notes the large number of Bushiris in Bahrain (8). Also there was an influx of migrants from Lingeh to Dubai around 1900 (9). Probably this occurred to Bahrain likewise.

The crucial influence of Iran upon Bahrain architecture is clear. I have found few books to draw upon, unfortunately, except for Pope (10). Fatemah Taghi has done a detailed survey of a lot of houses in Ardakan, a large town in Yazd province, and one can see that the framed construction and its visual interpretation is very close to Middle Period Bahraini architecture (11). Construction is entirely of brick, however. The house designs are both old and modern - certainly dating back several centuries and thus predating the "Middle Period" (i.e. early twentieth century) in Bahrain. Furthermore, the arches in Bahrain are false, whereas in central Persia they are structural. Does this argue for cultural diffusion from Persia to Bahrain, the false arch being copied from authentic ones?

There are several photographs in Hutt and Harrow which show window tracery in Kashan, Shiraz and Mahan from the nineteenth century which closely resemble such tracery in Al Muharraq "Middle Period" buildings, particularly the majlis of the Seyyidi House (12). Also the doorway of a "Late Period" House in Sh Isa Road (described later in the thesis) seems to betray a Qajar influence, particularly the two rather comical lions in the spandrel panels. The ports along both sides of the Gulf are probably all a mixture of Arab and Persian influence. One writer said: "Dans les rue de Bender-Abbas, les habitations des Persians et des Arabes se distinguaient d'elles memes. Le cachet national ne manquait ni aux unes ni aux autres. Les premieres, gracieuses, ornementees; les secondes, lourdes, massives" (13). Palgrave also speaks of the "Perso-Arabic appearance of Muharraq (14) speaking of houses "in the Persian style" he says: "They are elegant and spacious with ogival arches, balconies, terraces, porticoes and lattice windows. Here dwell the wealthier inhabitants.... (15).

To sum up, then, it seems to me that in the Middle Period one can see major Persian influences. In the Late Period however, the influence of Iraq creeps in. The explanation may lie in political events. Persian influence was perhaps affected by the turmoil that country experienced in the revolution of 1905 - 1909. The new Iraqi influence may be attributed to that country falling into British hands after the First World War, so that the Gulf became virtually a British lake. Previously the Turkish administration and Britain's low profile had kept the two areas a little apart. Now, however, Britain upgraded its interest in Bahrain. Regular steamship services started connecting the new Mesopotamian railway to India.

I would like now to briefly consider the relationship between architectures within the lower Gulf - Bahrain, Dammam, Doha, Dubai and the north coast of Oman - and between the Gulf and Zanj.

The old architecture of Doha is very similar to that of Bahrain (16). The Sh Abdullah bin Qasim al Thani house (now restored as the National Museum) is an example akin to a "Middle

Period" house in Bahrain. The architecture of Dubai is also very similar. The Bastakia district contains a very fine collection of wind-towers (17). The coast of Nejd has also similar architecture, although it is apparently little studied or published. The Master Plan for Dammam includes surveys of several major houses which are very revealing (18). There seem to be no wind-towers which may be due to excessive wind-blown dust. The construction is apparently very similar. There was large scale immigration of Al Dawasir tribe from this area to Bahrain early this century until they were expelled by force at the orders of the British Resident. Furthermore, Bahrain became a transshipment port for Nejd in the twenties. There was a lot of social and economic interaction. I found that even now many families are split between the neighbouring states - including Oman - and travel between them for domestic reasons. One can therefore see a cluster of places in the south-eastern Gulf area which shares a basically similar architecture in this century. The evidence on the "Early" and "Transitional" periods is lacking. The position of Oman is slightly different, however (19). The architecture of the north coast is not dissimilar to that of the lower Gulf, and one may recall that Bahrain had been part of the Omani empire. Furthermore, there was a large contingent of Omanis in the Muharraqi building industry early in this century. However, I detect in addition a marked resemblance to the architecture of Dhofar, the Wadi Hadramaut and the adjacent towns such as Mukulla. Carving and design of doors, roof beams and windows is much richer and more skilful, but the geometric patterns of decorative panels and timber screens are the same. Building massing is more coherent and severe. Window arches contain carved plaster panels and not fanlights. The links between Oman and Zanj, (the East African coast) were very strong for many centuries, of course, and Omani culture is evident in the architecture of Lamu, Malindi, Kilwa, Mombasa, Pemba, Zanzibar itself to some degree and Mozambique and Madagascar. Little architectural research (so far as I know) has been done on this except for work by Lewcock (20) and Gariake (21), although the Government of Kenya has published a report on the Conservation of Lamu. As a general proposition, there may be some influence fed back

(or arising from interaction) with Zanj as well as with the Malabar Coast and Indonesia. The trade in building materials between the Gulf and these places was considerable - even from pre-Islamic times as one learns from "The Periplus of the Erythrean Sea" (of the second century A.D.).

Origin of the "Early" and "Transitional" Style (as recorded in this thesis) is a different matter - the structure is generally not expressed and there are no arch forms. Possibly it flows from a more-or-less autochthonous Arabian styles subject to influences in the remote past. There are several possibilities. One first thinks of ancient Mesopotamian building practice, as represented in more recent times by a town such as Zubayr. Obviously one refers to Leonard Woolley's excavations and reconstructions at Ur and also to Babylon as a source for vernacular Gulf building style (22). There was trade between Mesopotamia and Dilmun (Bahrain). Ratnagar produces evidence of trade between the Indus Valley civilisation (Harappa), Oman (Magan) and Dilmun (23). Certainly there are striking similarities in built form between many Islamic cities and these ancient settlements. Ronald Lewcock observes how traditions might continue undisturbed over vast stretches of time. One may hypothesise about influence from the Zoroastrian or Magian civilisation: it has been argued that Al Muharrag - meaning "place of burning" - refers to an ancient Magian Fire Temple. In his Literary History of Persia E.C. Browne says that in Bahrain when the Persian marzuban (or governor) embraced Islam, some of the people continued in the faith of Zoroaster. This was during the seventh century A.D.

To conclude, a tentative hypothesis would therefore see Bahraini architecture emerging from ancient traditions - perhaps particularly of Mesopotamia. The stream was mixed with Persian architecture as settlers from Persia crossed the Gulf at various times in recent centuries. The superior vigour and sophistication of Persian design apparently came to dominate the more local tradition more and more as the volume of movement within the Gulf expanded.

- (1) See ANTHONY T.A. (1984) for a general appraisal of this archive.
- (2) See ORAZI R. (1976) which deals with wooden grilles for example.
- (3) For an historical summary, see for example KHURI F. (1980) Chapter 2.
- (4) Timber could be imported (mainly from Zanj) into Bahrain because it was a port. Domes are not found in Bahrain until the 1950s.
- (5) See WARREN & FETHI (1982) page 179 for example.
- (6) Ibid page 71 and 121 for example. See also REUTHER O. (1910).
- (7) LEWCOCK & FREETH (1978) pages 108 to 113.
- (8) See ZWEMER S. (1899). Also Calcott Gaskin, the Political Agent, notes the heavy dependence of Bahrain on Bushiri craftsmen. See India Office Records File R/15/2/52 (3/1), (Agency Buildings 1900 to 1911). He also states that building materials have to be imported from Persia as local materials are inferior.
- (9) See COLES A. & JACKSON P. (1975) page 2. The Huwalah (or "returned") Arabs in Bahrain are known to speak Bastaki dialect of Farsi i.e. they come from Bastak. The district which Coles and Jackson describe is called "Bastakia". See Chapter 2 for ethnographic history.
- (10) See POPE A.U. (1939). Also RAINER R. (1977).
- (11) Miss Taghi prepared this for a degree at The National University, Tebran, but it was never presented or published.

- (12) See HUTT & HARROW (1978) Volume 2 plates 75 and 144 for example.
- (13) DE RIVOYRE (1883) page 119.
- (14) PALGRAVE W.G. (1865) Volume 2 page 219.
- (15) Ibid page 209.
- (16) The French Archaeological Mission has produced several papers on Qatari architecture. See for example HARDY-GUILBERT C. (1980).
- (17) See COLES A. & JACKSON P. (1975).
- (18) See KINGDOM OF SAUDI ARABIA (N.D.) for various photographs and axonometric projections of historic houses.
- (19) For example, see GALDIERI E. (1975).
- (20) LEWCOCK R. (1971, 1976).
- (21) GARLAKI P.S. (1966).
- (22) See WOOLEY Sir L. (1954) pages 175 to 184.
- (23) See RATNAGAR S. (1981).

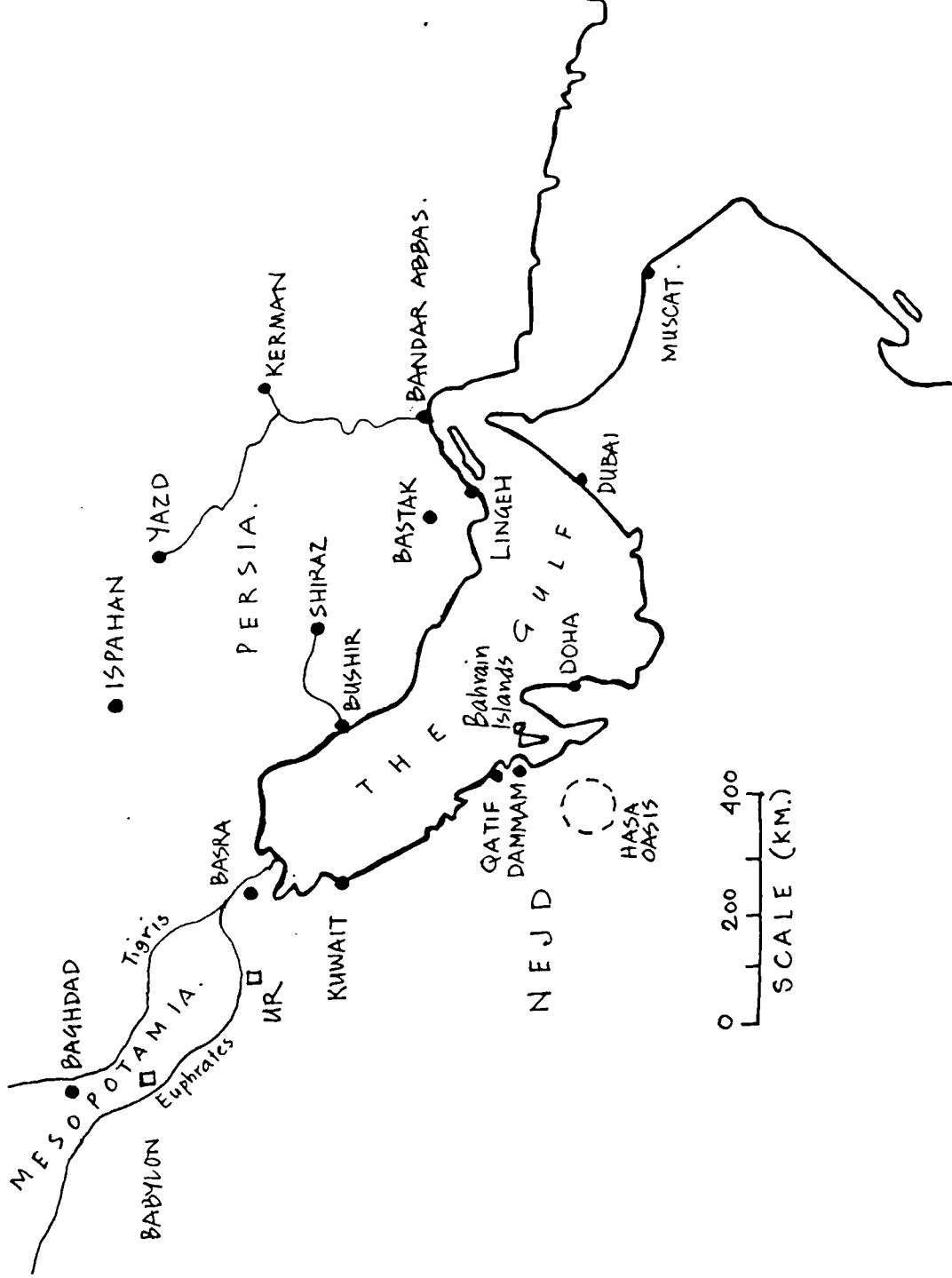


Fig 1.1
REGIONAL
MAP.

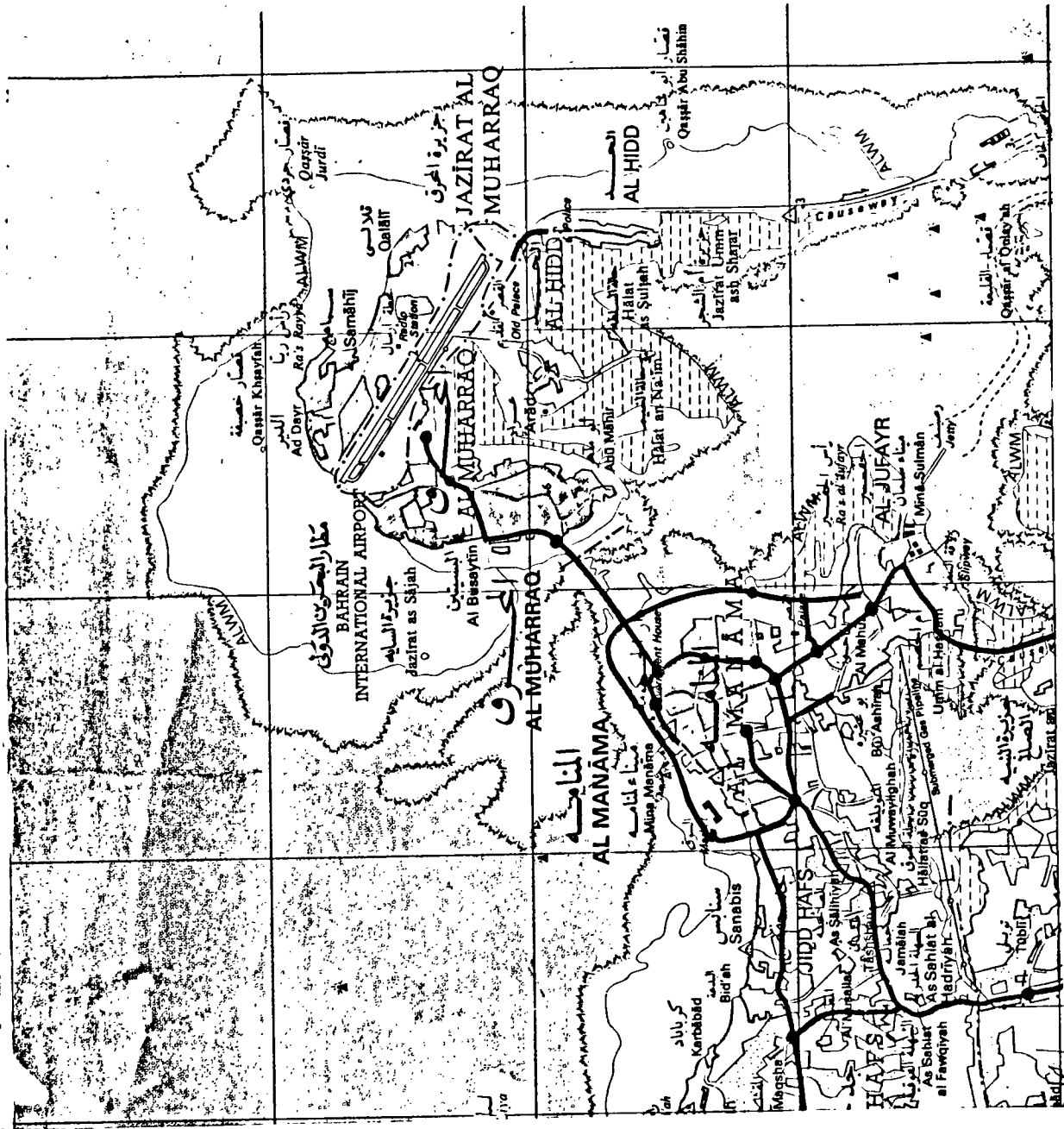
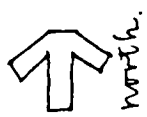
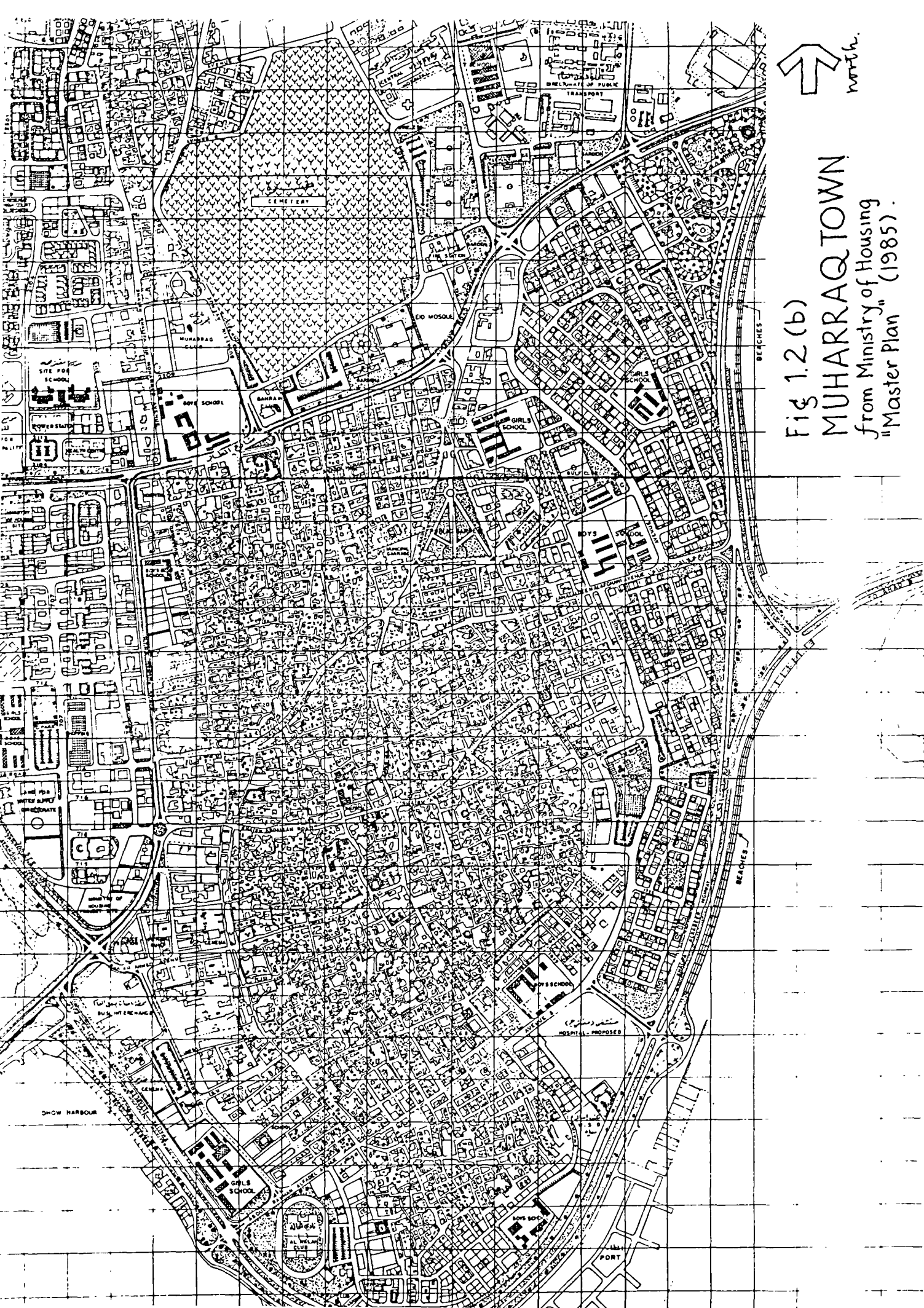


Fig 1.2 (a)
 MUHARRAQ ISLAND
 from Gov. Survey (1978)



north.

Fig 1.2 (b)
MUHARRAQ TOWN
from Ministry of Housing
"Master Plan" (1985).

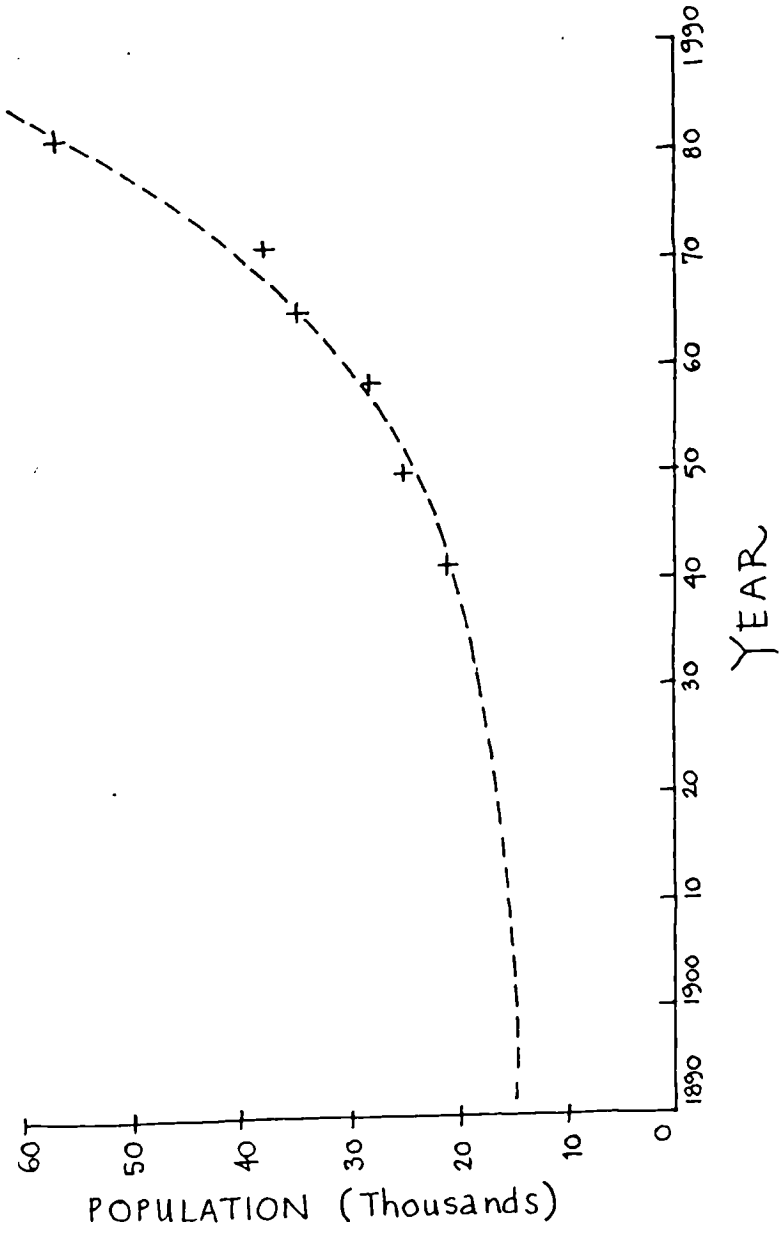


Fig 1.3
POPULATION
GRAPH.

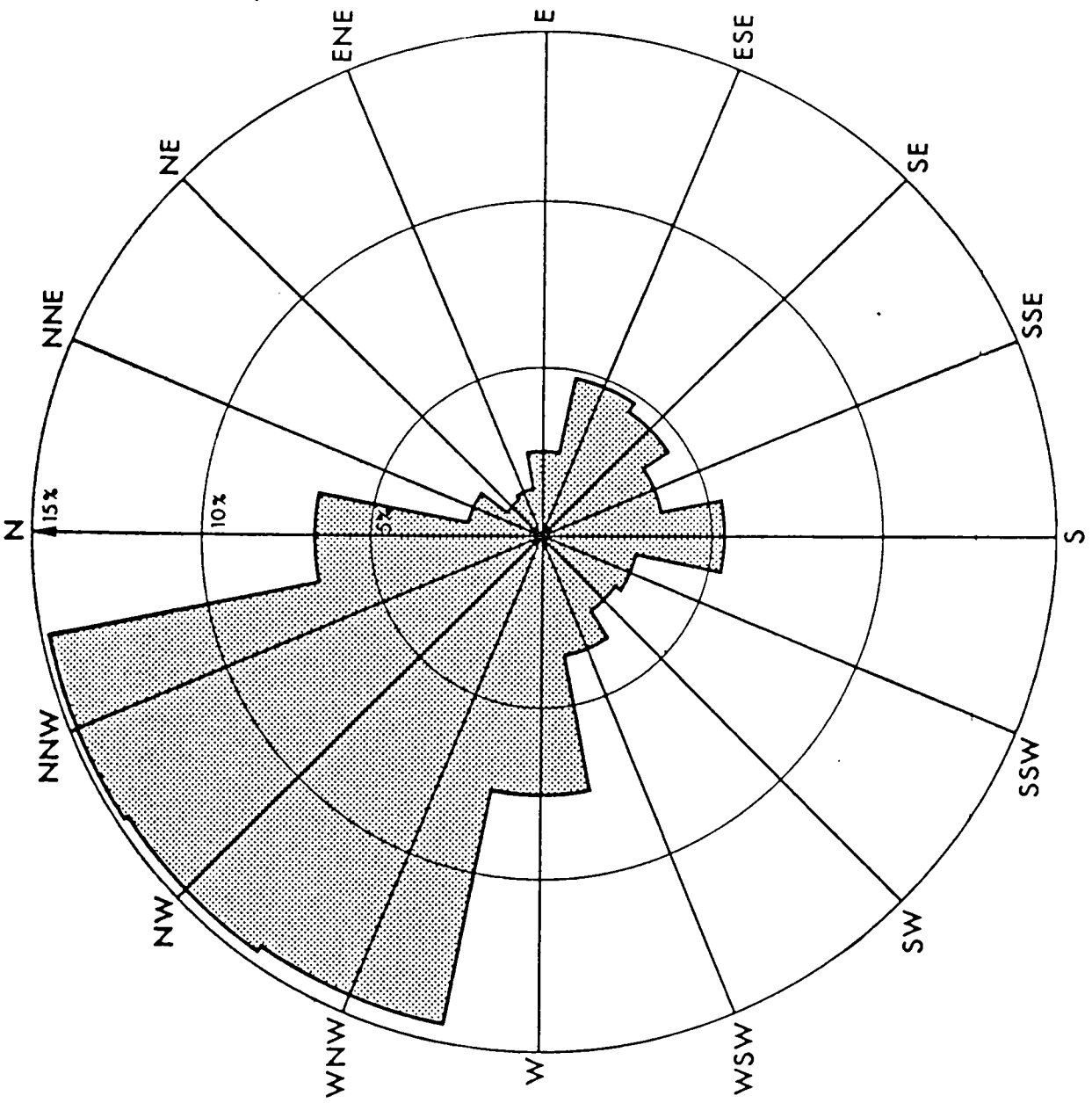


Fig 1.4.
WIND ROSE.
for Muharraq

Chapter 2

THE SOCIAL, ECONOMIC AND CULTURAL CONTEXT.



Chapter 2

THE SOCIAL ECONOMIC AND POLITICAL CONTEXT

1. Introduction

The aim of this chapter is so to describe the general context of urbanism in Muharrag that the reader is able to understand and critically interpret the architecture and urban form. In particular four aspects are covered (in the following sequence, which works from the general to the particular):

- (i) The general characteristics of Islamic culture most likely to have some impact on urban life prior to 1940
- (ii) The history (economic, ethnographic and political) of Bahrain so that architectural style and urban growth can be related to economic and political conditions.
- (iii) The nature of the state in Bahrain and the processes of administration, identifying the consequences in terms of public life.
- (iv) The life style and related domestic circumstances in Muharrag early in this century so the reader may imagine the kind of family life going on in the houses described in the later chapters.

The conclusion tries (by way of summary) to indicate how the inhabitants and creators of the town would themselves have perceived it.

The technique employed is perhaps best described as collage or tapestry - the assembly of a wide variety of facts which individually may seem remote from architecture but which, woven together present a picture of urban life.

2. Islamic Society: General Observations

2.1. Urban Impact of Islam.

Islam is the religion of Divine unity: it has a monolithic nature. It orientates all aspects of the individual and social life to the worship of God. No domain of human activity is exempt from Divine authority. All institutions of an urban community are religious ones in this sense - fully integrated with each other, and with rules of personal and social morality regulating almost every aspect of life.

It would seem that Islam had a vocation for city development in its early days. Although it emerged from a mainly nomadic culture, it stimulated extraordinary urban development across Mesopotamia, Iran, Syria, Egypt, North Africa and Spain. New towns appeared and grew at a fantastic rate; (Kufah grew to 100,000 people in 30 years and Basrah to 200,000. Baghdad - founded in A.D. 762 - grew to 2 million people by A.D. 88). Ancient cities fallen into decay found a new vigour and prosperity under Islam: Damascus, Bokhara, Samarkand, Cordova and Seville are examples.

How did the original Islamic culture make such an urbanistic impact? The Prophet himself was very concerned to establish an institutional framework for city life. During the ten years he spent in Medina as an emigre from Mecca, he endowed the Muslim community with its basic institutions. Michon suggests that the wisdom of these institutions played a critically important role in the successful conquest of other empires, whose inhabitants found Islamic government vastly more congenial than that of, say, the Byzantines or the Sassanids (1). The "Medina State" outlined and established by the Prophet (over a period of ten years) served as a model or frame of reference for subsequent exercises in urbanism (2). The ideals were never entirely lost, in spite of the aggrandisement of princes, the rigidity of the ulema, the rapacity of merchants and the indolence of the population.

2.2. Islam and Social Cohesion

The Qur'an places great importance on human groups. The nation (Ummah) of believers is a critical idea; (it encompasses all races or cultures which accept Islam, and may be

contrasted with secular nation states). The Qur'an is concerned to promote a virtuous urban society:

"God coined the parable of a city. It stood in safety and peace; there flowed to it riches in abundance from every side. Then it denied the blessings of God. God then made its people taste the terrors of hunger and fear in punishment for their deeds." (XVI,112)

To avoid such objective evils, the community should conduct its affairs in a virtuous manner. The community is an organic totality in which each individual finds a place. One hadith says:

"Believer is to believer as the mutually upholding sections of a building."

The Prophet also said:

"You will see the Muslims in their goodness, affection and fellow feeling form a single body which, when one member is sick, seeks to share out its sleeplessness and fever throughout that body." (3)

The bonds that link an individual to the community are very tight. Certainly a man stands alone before God to answer for personal conduct. But in reality he also depends largely upon those around him. It is therefore necessary for each individual to exhort his fellows to truth and to patience, and to help one another to perform good works. A man will therefore pursue personal salvation through fulfilling his role as a citizen. The Prophet says that a community of such people would never be unanimous in making an error. From this derives the principle of *ijma*, (which means the consensus of believers,) believed to be a source or method for elaborating the law or resolving unclear legal situations. There is also a stress on human equality. Certainly Bahraini society contained very serious injustices (of a political and economic type), yet this sense of basic equality was never altogether lost. It led to a lack of ostentation in the houses of the wealthy as regards the outward facade.

To conclude, the individual duty to submit to God's will takes place within a social framework of mutual obligations (fard ayn). This is the basis of Islamic urbanism. As J - L Michon writes:

"In the Muslim city, the striving after individual salvation involves ipso facto the sacralisation of the social, whilst inversely the Community entrusted with the Divine Message, wise institutions and the example of the just conserves their content for the benefit of its members. (4)

2.3. Basic Religious Practices.

2.3.1. Introduction

The Muslim is required to undertake certain practices which are specified in detail in scripture. Their aim is the constant refreshment or remembrance of the original covenant with God. They do have a decisive impact on the characteristic flavour of urban life. There are five forms of worship, (ibadat), namely the attestation of faith, prayer, fasting, alms-giving, and pilgrimage. These are obligatory: in addition the Muslim is enjoined to read the Divine Book and to invoke the names of God. The injunctions regulating social life are related to the search for divine favour: for instance patience and equity or fairness will bring the believer closer to God, who calls himself "the Patient" and "the Just". By such means the Muslims will draw close to God through the daily conduct of his life. The proclamation of faith and the remembrance (dhikr) of God by a devout Muslim aims "at weaving the sacred into his temporal dimension no less than the space in which he evolves, and into his innermost being no less than his family or social surroundings" (5). The Qur'an gives the Prophet as a fine example to follow. Great importance was attached to collecting his sayings, advice and actions by the first companions and their followers. In the third century of the Hegira these hadith were brought together. From the present standpoint, they contain a lot of detail on practical details of belief and to spiritual or moral directives applicable to social life and individual conduct. So many practical and everyday matters are covered in detail, that the sunnah contribute much to the characteristics of the Muslim city and its way of life. (6)

2.3.2. Fasting. (Siyam)

The fast must be observed from dawn to dusk during the month of Ramadan. After dusk, feasting is held for a large part of the night, and many people spend much of the night at the mosque listening to readings from the Qur'an. The fast is a form of divine remembrance: a hadith has the Prophet say - "The fast is for my sake, and I reward him for that fast." It also provides an occasion for charity and social solidarity. People will exchange food and cooked dishes, and visit each other all night. The streets are full of people late at night. Particularly is food given to the poor, and this reminds the rich man of his precarious position. The rich man fasts only in Ramadan. The poorest fast all the year: this is a lesson for the rich.

I had the opportunity to experience the generosity of my neighbours whilst living in Muharraq during two Ramadans; the atmosphere was very warm and sociable. Perhaps the nearest British equivalent would be a good traditional Christmas in a village.

2.3.3. Alms-Giving (Zakat) and Waqf.

Zakat is prescribed by Islam. It aims to ameliorate or cut out attachment to material goods, which, it is believed, can become a god to compete with God, and (being an illusion), can cause a man to set illusion on an equal footing with truth. Enjoyment of goods is only a temporary favour from God. To give them up is a test of piety. Zakat is fixed as one tenth (or for some types of goods, one fifth) of yearly gains above a certain level.

Voluntary almsgiving is also urged (but not required) by Islam. There is no limit to this. The Prophet is reported as saying:

"Make no reckoning, for then God will make His reckoning with you; make no limits, for God will set limits against you; give in alms everything you can."

Another form of giving is the institution of mortmain endowments, known as Waqf. According to hadith, the Prophet advised the gift in perpetuity of income from fixed property to the poor as a way of using resources in a way agreeable to God. The property

cannot be sold as it is in the perpetual ownership of God, as it were. (I discuss below at greater length the significance of Waqf endowments in Muharraq.)

2.3.4. Prayer (Salat).

Prayer is at the heart of Islam. It has an important aspect from the present standpoint, namely, the ordering of ritual in time and space. Respect for the time of prayer is important. It is said at five precise times daily which occur at dawn, midday, afternoon, sunset and after nightfall. The call of the muezzin creates a rhythm to the day for each individual from puberty to death.

Spatially, the qiblah pointing towards Mecca creates a symbolic regrouping of believers at the place where Abraham built his temple to God: this is the intersection of the axis mundi with the earth, a phenomenon providing an orientation for all space beyond it. The worshipper faces this point to which God sends down his favour and from which his favour radiates. Another aspect of prayer is the need for ritual ablution to attain a state of cleanliness: this led to the creation of lavatories, pools, fountains and public baths (hammam) in Muslim cities.

Finally, prayer is claimed in hadith to be far more valuable done communally than individually. It brings a community together, equal before God, and actualises the ideal society obeying the law of God which is to say, the central collectivist concern of Islam. (Nor is the mosque only a place of collective prayer - it is a community centre or forum. It is a centre for religious education where people of all conditions may meet to listen to teaching).

2.4. Jurisprudence and the Role of Ijtihad.

The prescriptions of Qur'an and Sunnah are often barely elaborated. Moreover they are not applied to unforeseen situations which arose as the realm of Islam grew to encompass other cultures or new situations. Thirty years after the death of the Prophet, with the founding of the Umayyad dynasty, religious and temporal authority were separated. A concern to develop and codify law, that is to say, jurisprudence (fiqh) emerged. This was done by an effort of ijtihad (that is, research, reflection or deduction,) based upon the contents of

the Qur'an and Sunnah. Ijtihad proceeded by three methodologies, namely personal opinion, (ra'y), analogy with similar situations (qiyas) and Ijma, that is, consensus of the doctors of religion. It is notable that the prescriptions of all the schools of law have hardly changed since their founding in the eighth and ninth centuries A.D. They represent now an ideal law drawing substance from conditions in the Prophet's day or shortly thereafter. It is widely felt to be dangerous and impious to wish to make the law evolve and respond to changing conditions. A few writers have expressed the contrary view, namely that as the Prophet welcomed rational arguments in order to apply Qur'anic principles to new situations, the effort of ijtihad should continue now and in the future if Islam is to renew itself as a civilisation. (7)

So far only Sunni fiqh has been mentioned. The Shia faction of Islam does not recognise the actions of the three "rightly guided Caliphs" as a source of law (as the Sunni do). The imam descendants of Ali (son-in-law and cousin of the Prophet) are recognised, however, as a source of law, particularly Muhammad al-Mahdi, the twelfth Imam (occulted in A.D. 940). He still dwells among men, it is thought, and guides them in the extension of Shia law into new situations, and guides men in applying ijtihad to new situations. Thus Shi'ism seeks to practice ijtihad, but to the Sunni, it is generally felt that the "gates of ijtihad are closed".

Overall, it appears there has been an historic failure. The judiciary lost its grip on the issues reshaping society.

"They failed to apply their principles. Many of them were inclined to combine irredentism with adaptation at the level of the actual state of affairs ...(so that) ...to a great extent the modernity of these societies has its origins in sources that were alien to Muslim thought and law." (8)

2.5. The Relationship of State, Community, Family and Individual in Arabia.

It is important to distinguish between state, religious community (or ummah) of all believers, and tribe, and to grasp the relationship and interplay of these. The historic position in Arabia incorporated the individual into the family clan or tribe and

subordinated him to it, or, (on a faintly more abstract level) to the umma, the total community of Muslims. The state provided only limited external coordination. The position, at least in recent centuries, in the West, stressed the supreme importance of the individual but also his integration into the state. The east had therefore loyalty to individuals and human groups but the west had loyalty to institutions, - a contrast of personal and impersonal relationship types. The west had individualism, but the east had concrete individuality. For a Muslim (in the past at least) the basis of his position in the world is his status as a believer. It is suggested by Grunebaum that self-analysis by Muslim individuals - except when religiously based - is rare: the Islamic subjection to God largely blotted out trust or belief in man.

"Because man properly understood, is not a free agent, genuine significance accrues to his activity only with regard to his relationship to God in his capacity as a believer. The nature of man need be understood only in the light and according to the standard of the Koranic revelation. The opening of the inner life as subject and problem of literary endeavour is one of the most significant results of contact with the West." (9)

The concept of the ummah, supranational community of all Muslims, is comparable to the mediaeval "Christianitas", (argues von Grunebaum) expressed in the "Rome concept". The lack of a real political foundation did not necessarily harm the psychological and political efficacy in either case.

Classical Islam developed no state or municipal law. The ummah lives under a divine law (Sharia) whose protector is the ummah itself. The ruler was neither source nor guarantee of the law, but only an executive power. The state was unimportant to the population as regards boundaries and structures so long as it preserved religion.

In the Islamic world generally, there seems to be some confusion as to the nature of urban government. S.M. Stern suggested that the Islamic city was little more than a collection of disjointed interest groups and individuals holding offices defined by tradition and appointed by the local ruler (or originally, the Caliph) (10). This type of argument has

given rise to some unfavourable comment (11). Certainly reading the details of the city government in medieval Sana'a, (Serjeant and al Amri) (12) one cannot but be impressed by the processes of urban administration. The government of mediaeval Baghdad as described by Abdel Aziz Duri is similarly comprehensive (13). It would seem to be agreed that Islamic cities were not organised on the basis of municipal autonomy and local self-government (as in Europe) and therefore the appointed officials were not representatives or spokesmen for the populace. The state had never developed quite the autonomous strength and recognition which one found in Europe. In the Sunni tradition, a rulers legitimacy depended upon his capacity "to enjoin the good and forbid the evil" but in reality few rulers would submit themselves to the Sharia when their interests were affected and so the qadis (religious judges) were powerless to enforce judgements (14). Thus state institutions grew up alongside the authentic Islamic institutions when Persian governmental habits infiltrated the state: that is, the rise of the Abbasid Caliphs. The ruler was theoretically always in a somewhat precarious position: inherited titles were ruled out, and a failure to uphold religion removed all claim to legitimacy. In Arabia this was doubly so - for as Ibn Khaldun's theory of cyclical government indicates - the bedouin sheikh would seize control of a town if he could: urban luxury induced weakness in him or his successor and his family was ultimately replaced by another bedouin sheikh (15). As Harrison pointed out, even in the desert, he was in a precarious position: an absolute ruler so long as he was fit, he would be cut down in a moment if he lost his grip (16). The Sunni ruler never could appropriate inherent divine support, and as state institutions split from religious ones, the ruler generally became a tolerated necessity by no means central to society as a whole, which was capable of organic self-regulation. One must also remember in this context that most Muslims societies display a certain type of egalitarianism. One elderly person told me of a relation who had had an argument with the first Sh. Isa: he went home to bring a gift of clothes presented to him by Isa some time before. He came back saying: "There, now I owe you nothing". In the west, sovereignty (the divine/legal recognition of the ruler) was appropriated by the democratic state at a later date. Ruthven observes that

an informal style still characterises Muslim government, and kinship ties are decisive in this (17). Harrison suggests that government (in the Gulf around 1910) had a very restricted view of its role. Concerned with specific legal and diplomatic matters, it would not regard public improvements - creating proper docks for example - as part of its job. In Bahrain, the creation of a "modern" administration - setting up a Municipality with certain engineering functions, for example - followed the appointment of Belgrave as Advisor. Harrison said:

"The Arab Sheikh.... takes no interest in the promotion of public health. (He) also makes no effort to direct the economic life of the community.... (He) does not imagine he has any function to stimulate or guide development. The idea that he should take the initiative in public improvements..... would seem to him a curious and insane notion ... No ruler in the world has less sympathy with the socialist idea that the government should be the instrument of the cooperative economic life of the community." (18)

2.6. Islamic Society and Capitalism.

There has been a considerable academic debate on the question of whether Islam, or perhaps certain aspects of Islamic society, tended to block capitalist development. The religious prohibition of riba (lending at an interest) was widely evaded by the artificial purchase of merchandise which concealed the interest element of a loan. Rodinson stresses the Prophet's very positive encouragement of trade; the condemnation of practices disturbing the free play of supply and demand contained in fiqh; and the importance attached by the Qur'an to rationality (19) Rodinson suggests however that the bourgeoisie never achieved political power as a class. The merchant class was unable or unwilling to dislodge the power of the dominant military-bureaucratic class and thus could never inaugurate a capitalist revolution, although a process of petty commodity production employing wage labour had been achieved at the end of the Mediaeval period. Pace Weber, this is not attributable to Islam, argues Rodinson, for the reasons stated above. Turner seeks to interpret Weber's writing on Islam in another way: the failure to develop capitalism may

not be due to Islam as such, but rather to the structure of Islamic states, their administration and jurisprudence; in other words to socio-political rather than religious criteria. (20)

Ruthven suggests Sharia law had a negative impact by preventing the growth of powerful autonomous organisations such as the European City Guilds (21). Sharia implies that each individual is answerable only to God for his actions and militates (he argues) against the public recognition of any group interests (other than kinship groups). Sharia law contains no concept of a "legal personality" such as that found in Roman law. A "legal personality" may be the public interest or companies, corporation or other groups. The interest of the community or any other interest group cannot receive independent recognition and expression through the legal process. The legal stress is always upon individuals and kinship groups. According to Schacht, Islamic law did not recognise cities as such nor did it admit corporate bodies (22). The city remained (says Ruthven) a collection of villages in which family interests predominated over collective ones.

The interaction between capitalism and social values is now well understood: the mediaevalist Troeltsch wrote:

"Where the spirit (of capitalism) predominates, it makes all values abstract, exchangeable and measurable. It mobilises and it groups economic values and the possibilities they contain., The economic system based on money depersonalises values, makes property abstract and individualistic." (23)

The Islamic city was (and Muharrarq to some extent still is) pre-capitalist. Property is not even now entirely abstract or exchangeable. A house is still felt to be part of one's family and personal identity and to sell it would be like cutting off a limb. This is the "unchanging land" to which Troeltsch refers:

"(Capitalism) tends to a restless and changing social differentiation which is not based on unchanging land but upon accidental accumulations of money which can change anything into anything else. The personal relations which depend on nature and on social groups are dissolved: The individual gains an abstract

freedom and independence... He makes up for the loss of concrete individuality ... by abstract individualism." (24)

This is a general point but in the specific field of urban design, it leads to (what Manfredo Tafuri calls) "the disarticulation of form and the anti-organic quality of structure" (25).

2.7. Summary.

It may perhaps be helpful to make a short summary of the main points made so far:

- (i) Islamic religion is concerned to regulate many details of personal social and community life, which are thereby integrated into a religious schema.
- (ii) Islam is concerned to establish the community of believers (Ummah) in the membership of which the individual finds his only true significance.
- (iii) Religious observance creates a framework in space and time, imbuing life with ritualistic structure.
- (iv) Islam is very concerned with the development of the law based on religion and this has taken on a static and conservative character in recent centuries.
- (v) The Islamic Community became separated from the idea of the state, which remained without divine right and derived usually from the personal authority of the chosen Ruler. The State was not concerned with the improvement or regulation of the "public realm".
- (vi) Personal significance arose from ones position in tribe and Islamic community. The lack of individualism was balanced by a warm and supportive network of human and institutional relationships.
- (vii) Islamic Law never embodied the idea of "public interest" and could only regulate the interaction of private individuals (such as proximate neighbours).
- (viii) Islam did not develop capitalism, or a market in land and property.

This concludes the discussion of general issues of Islamic or Arabian culture, and we now turn to consider the history of Bahrain.

3. History of Bahrain: Political, Ethnographic, Economic.

3.1. Recent Political History.

3.1.1. From 1750 to 1920 (26)

Niebuhr (27) in 1761 said there were sixty villages and a long series of wars had ruined the others (that is, around 300 villages). There was an invasion by the Utub tribes (led by the Khalifa tribe) in 1783. This was an attempt to establish a permanent base safe from the growing expansionist pressure of the Wahhabi tribes on the mainland. It brought some stability and ended local "Baharnah" rivalry (28). The Utub settled mainly in Jaww (Jau) on the east coast but due to lack of a harbour withdrew to Muharraq in 1800 (29). No doubt it was also easier to defend (29). Also in 1800 the Imam of Muscat invaded and in 1803 the Wahabis took over. Much of the population fled. The Imam then supported the Al Khalifa to eject the Wahhabis in 1811. In 1816 the Al Khalifa overcame a Muscati invasion. In 1820 some order was restored when Bahrain signed a Treaty with the East India Company, and the Muscati threat was ended by a treaty in 1829. The period from 1840 up to 1870 was again a turbulent and difficult time. The usurper Mohammed bin Khalifa bin Sulman seized Muharraq island for a time, subsequently withdrew to the mainland and invaded again in 1843. He overthrew the ruler Abdullah, whose son raided Bahrain repeatedly. The Qataris then invaded and Muhammed fled. His brother Ali succeeded, but was fined 100,000 Maria Theresa dollars by the British for breach of the 1861 Treaty of Peace. Muhammed invaded again and seized the throne, but was soon deposed by Muhammed, son of the former ruler Abdullah. In 1869 the British restored order and placed Isa (Son of Ali) on the throne. This ushered in a period of stability and building activity. One may surmise that there was a building lull between 1840 and 1870 which we may best count as part of the early period.

3.1.2. From 1920 onwards. (30)

The early years of this century were characterised by major socio-political change, although the state was never threatened. The Arab movement for nationalism arose in

Bahrain in the early 1920s. The Literary Club was founded to propagate foreign literature. Egyptian newspapers arrived in the 1920s. The first local newspaper was established in 1939.

In 1915 there was only one simple printing press and only one car up to 1918. Communications were in a primitive state, consisting largely of letters written by a few educated and enlightened merchants from foreign cities (such as Bombay) describing news of the outside world.

There was a long series of political wrangles with the British, who took a higher profile for political reasons after 1920. The "Bahrain Order in Council" enhanced the power of the Political Agent at the expense of the traditional Sheikhs and Qadis in respect of jurisdiction over foreigners and application of the Sharia law. Resistance led the Agent to take the Heir Apparent hostage and threaten to bombard Manama. The Agents deported a number of people, some of them Bahrainis and dictated membership of the Municipality. Anti-British feeling grew and contributed to emerging Bahraini nationalism.

Shia grievances against the Sunni elite concerning corvee, unfair taxes, land seizure, improper justice and so on, were expressed in a petition to the Political Resident when he visited Bahrain from Bushire in 1921, and to Sh. Isa himself in 1922.

In 1923 the British forced Sh. Isa to abdicate believing him incompetent and weak. They also sought to satisfy some Shia demands. The reaction from part of the Sunni elite was fierce, and some communal violence occurred in the villages. There was also a "National Congress" formed, however, to pressure the British to end their interference. The British seized the leaders by trickery and deported them.

In 1925, the Agent appointed a British adviser to the Ruler. Charles Belgrave took up his post in 1926.

Political discontent continued to simmer below the surface, with occasional communal violence. In 1924, the Agent appointed a British Customs official and redirected Customs dues from Sh. Isa to government funds (from which Civil list payments were made). Police

and the Courts were somewhat reformed, so that by 1930, Bahrain had the bones of a modern administration, but British involvement in it was now on a large scale.

In 1934-5, the Shia petitioned Sh. Hamad on their grievances. But now the British had changed sides and supported the Sunni - feeling perhaps that their own position was now best served by supporting the status quo. A Consultative Committee was established as a sop, but little came of it.

Oil developments diverted the people in the mid 1930s, but in 1938 more trouble arose. The influx of foreigners employed by the oil industry (and the growth of modern services financed thereby) no doubt opened the eyes of the people to new ideas: in particular there were improvements in education. The influx also created resentment that job opportunities were being taken up by foreigners. Labour relations at BAPCO were poor (31). Resentment against the Advisor, foreign officials and the British ran increasingly high. People did not appreciate the serious and valuable reforms pushed through by the British which had improved their lot immeasurably, (for instance the Pearl Diving Reforms of 1924 and Land Tenure Reform).

Oil field workers and students joined the merchants in agitation and for the first time Shia and Sunni came together. The leader was Yusuf Fakhrroo. The demands were for a legislative Council of Sunni and Shia; the law should be codified, and the police and judiciary should be reformed. The Advisor led the Ruler to reject the demands and the movement petered out in despair. The youthful element revived the demands soon after, discussions were held and promises made. A strike at BAPCO was rumoured. The alleged ringleader, Ahmed al Shirawi was arrested, and an insurrection was narrowly avoided. The strike petered out, but another Committee was formed which pressed moderate demands on the same lines as before, including requests to improve educational provision. Concessions were made, but nothing very tangible occurred.

It is clear that by 1940, although on the surface no dramatic changes had occurred large elements of the people were now politically aware, well mobilised and highly aware of their national identity. The process was fairly traumatic, however. The legitimacy of the Al

Khalifas was not successfully challenged: it would seem that foreign interference had helped to clarify national identity, unify religious groupings and bring most people together behind the local Ruler, (who people saw as dominated by the British in the same way as everyone else).

3.1.3. Conclusion.

In my opinion there were several historical periods:

1. First Interregnum (up to 1820).

A sudden influx of people from Jau occurred in 1800, but the Omani invasion occurred in the same year. Little building activity would have been possible for much of the period and buildings would often be abandoned.

2. First Period of Peace (1820 - 1840).

Considerable building activity would be possible.

3. Second Interregnum (1840 - 1870).

Building activity must have reduced again.

4. Period of Peace and Stability (1870 - 1920).

This was probably a good time for building, in respect of cultural as well as political stability. Social injustice existed, but had not disrupted the prevailing order.

5. Modernisation Period (1920 - 1940).

In this period, Bahraini society was integrated into the modern world. The regime was not seriously shaken, however.

3.2. Ethnological History.

3.2.1. Introduction.

There were three main groups in Al Muharraq during this period: the original inhabitants, the invaders who became a new ruling class, and the immigrants from Persia who formed a commercial and intellectual elite. To this should be added the slave class, and - particularly after 1920 - a group of foreigners, mainly Indians and British. There was also a significant but small Jewish community. This section deals only with the first

three groups known respectively as the Baharnah (which is simply Arabic for Bahraini), the Bani Utbah and the Huwalah (32).

Taki, cited by Rumaihi (33) lists Utub families, those from Al Muharraq being Al Jalabma, Al bin Ali, Al Musallam and Al Bokuwara. Ibn Abbas (34) in 1873 list Muharraqi Utub families as follows. Estimated numbers and occupation are given in brackets: Al bin Lahdan and Al bin Bisboogh, (600 divers); El Sadeh (200 divers); El Menaneh (350 divers); El Naaem (100 divers); Al Salaleh (150 divers); Bu Falasah (170 divers); Al Mudhabekeh (200 divers); Al Leeananah (100 ship owners and traders); Al Muawideh (150 ship owners and traders); Al Jalahmeh (80 ship owners and traders); Al Simabeejee (Shia 300 persons also in Manama, Fishermen and divers); El Hayaaycheh (Shia, 80 persons also in Manama, sail-makers).

He also refers to Baharnah notables as Al Umrān, Al Majid and Al Abd al Rauf. Al Zayani, cited by Al Tajir, says the Al Jasas and Al Maris of Muharraq are descendants of Al Mughirah (35). Lorimer in 1915 lists leading Baharnah families as Anabirah, Asafirah (or Al Asfur), Asakirah, Ghabarah, Hadadid, Al Majid, Al Muslim, Al Rafyah, Al Rahmah, Al bin Suwar (36).

Captain R. Taylor (in 1818) states the Utub tribes and their allies as follows: "Al Khulefe, the Governor, 600 souls; Ali Zauyed, 1200; Ali Mauzeed, 2000; Ali Muhavideh, 3000; Ali Sulaim, 3000; Ali Mao Sullim, 1000; Ali Sumait, 900; slaves 2000. Total number of Utoobees and others, 13600 souls." Also he says "the Bahraines are 10,000 in number." (37). The spelling varies; one can guess at Muawideh/Muhavideh; Musallam/Mao Sullim; Majid/Mauzeed; and so on. Baharnah family names often referred to original occupations, which indicates ignorance of tribal ancestry - a matter to which the Utub and all desert tribes attached great importance (which one might interpret these days as snobbery!). Examples include Coppersmith (As Safafir), Well-digger (An Nabirah), Weaver (Al Rajyah) and so on.

3.2.2. Al Baharnah.

The Baharnah are descendants of the Abd-al-Qais tribes of Eastern Arabia who occupied Awal (Bahrain) in pre-Islamic times. They were converted to Shi'ism around 36 AH, according to

Al-Tajir (38). A lot of erroneous opinions were held by foreign scholars as to their origins. Probably they came from the Tihamah region of Yemen around the 4th Century after Christ. In the twentieth Century a number of Baharnah pearl-dealers established close links with the key pearl centre of Bombay and even went to live there, returning as the trade collapsed in the 1930s. Mostly, however, the Baharnah were date planters and farmers - only the notables being in possession of their own land. The majority were very poor and had been dispossessed by the invaders from the late eighteenth century onwards. They are said by several writers to be at least half the population of Bahrain, but a hundred years ago occupied mainly villages on Muharraq, not the town.

3.2.3. Bani Utbah and Followers.

The invaders of 1783 - the Al Khalifa family and those who followed them - were descendants of the Utub tribe (which is descended from the Anazah and other central Arabian tribes). Al Tajir (39) explains that the Anazah and Abd al Qais tribes are both descendants of the Asad. The Anazah originally came from central and northern Arabia (Al Aflaj in Nejd and also Oman) prior to their settlement of Kuwait, move to Zubara (in Qatar) and eventually to Bahrain. They are Sunni - mainly Maliki.

3.2.4. Al Huwalah.

The Huwalah (or "returned") Arabs emigrated to the Persian coast a long time ago but returned gradually in recent times. A sheikh of this group held Bahrain around 1720 until the Persians took over a few years later. The arrival of most Huwalah occurred therefore soon after 1720 A.D. They are of the Shafi'i division of Sunni Islam. They carry a lot of Persian culture and al Tajir says they speak Bastaki (a Persian dialect from the Bastak region), amongst themselves (40). Lorimer says they are the most numerous community of Sunnis, townsmen by trade, but important only commercially because they have no solidarity. However, they were the most enthusiastic about education in the 1920s and the first to espouse new nationalistic and democratic ideologies.

Abu al Qasim ibn Abbas (cited by Al Tajir) in 1873 says there are about 2000 Huwalah Arabs living in Manama and Muharraq, divided into two families, the Kashkanara and Al Gabandee

(41). He counts them as supporters of the Utub i.e. Al Khalifa. Rumaihi mentions the families of Kanoo and Al Moayyed, as Huwalah (42). Al Tajir says Al bu Kawarah are Huwalah and Ibn Abbas estimates their number as 50 in 1873 (43)

3.2.5. Conclusion: An Island Divided.

There was a lot of conflict and mutual contempt between the Baharnah and their Utub rulers. This was partly a religious conflict, but was also due to the hatred usually felt between invaders and conquered. There was also much exploitation of the Baharnah, such as forcible seizure of land, inequitable taxation and corvee, with no scope for legal redress. The tribes who came with the Al Khalifa were a tight knit community. Inter-marriage took place only within this circle. We may therefore picture a good deal of social division in Muharraq at this time: a dispossessed proletariat, a ruling class, and a class of merchants and intellectuals having little concrete power, but crystallising discontent and (from time to time) offering leadership to the politically alienated.

There is a good deal of evidence for the contention that the islands were a divided society from the Utub invasion onwards. Major Daly (the Political Agent) reported fully on abuses in 1922 (44). Hakken (45) also shews that this has been true relatively recently. In 1818, Captain Taylor found things in a bad state:

"The aboriginal inhabitants of Bahrain, now subjected to a foreign power, suffer from tyranny of their masters more keenly than language can express." (46)

When G.B. Brucks made his map for the East India Company Marine Service (47), he made survey notes (as was the general practice at the time). His report is dated 21st August 1829:

"The people of the island are much divided. Those who are termed Arabs and are not engaged in trade are attached to the Sheikh and his government; the other part, consisting of all those engaged in mercantile pursuits, and by far the most wealthy, are much dissatisfied and it was by no means uncommon during the survey of the island for the people, when they thought themselves safe from being overheard, asking whether the English were not going to take possession of the

island, and appearing both incredulous and disappointed when replied to in the negative." (48)

When Lt. Col. Lewis Pelly had witnessed the reduction of Muharraq Fort (i.e. Abu Maher Fort) in 1868 (as a punishment to Sh. Muhammed for breaking the 1861 treaty with Britain) by the gunboats "Clyde" and "Mary Rose", he found it:

".... agreeable to add that in all our proceeding at Bahrain, public opinion was obviously on our side. Our British India subjects expressed their satisfaction by saying it was the first time they had seen day for three years. While on Captain Brown and myself going ashore, the lower class of Arab were demonstrable in their joy." (49)

I have cause to comment later on the contrast between the social divisions (which written sources indicate) and the social solidarity - the lack of anomie, absence of crime, prevalence of mutual aid and so forth - of which everyone (Bahraini and foreigner) speaks. In a simple traditional society, it is perhaps possible for certain social and political processes to remain rather independent: strong religiously sanctioned traditions will keep localised social relationships intact, even though political chaos reigns in the state as a whole.

3.3. Economic History

3.3.1. Some Nineteenth Century Trade Figures.

There seem to be very few sources covering the whole picture. Brucks, however in his report prepared whilst surveying the islands for the Marine Service of the East India Company, obtained a statement from the Ruler's vizier and the Company's broker, which is given below (50).

<u>Exports</u>	<u>German Crowns</u>
Pearls to India	1,200,000
Pearls to Arabia, Turkey & Bussora (51)	300,000
Pearls to Persia	100,000
<u>Various Articles to India</u>	
Dry dates	15,000
Tortoise Shell	3,500
Bahreïn Canvas	3,000
Shark fins	2,000
<u>To Persia</u>	
Bahreïn Canvas	3,000
Mats	1,200
Date Syrup	2,000
Dry Dates	1,200
<u>To Bussora</u>	
Bahreïn Canvas	5,000
Mats	1,200
Coarse Coloured Cloth	1,000
<u>To Al Quaat or Grane (52)</u>	
Bahreïn Canvas	5,000
Mats	800
<u>To Other Places</u>	
Sundries	5,000
<hr/>	
(TOTAL)	1,648,900
<hr/>	

Imports German Crowns

From Hindoostan

Rice from Mangalore (60,000 morahs)	65,000
Rice from Bengal (8,000 bags)	24,000
Sugar (600 bags)	12,000
Sugarcandy (500 tubs)	5,000
Pepper (400 morahs)	10,000
Solder or block tin	2,000
Iron (5000 bars)	10,000
Lead (2000 pigs)	2,400
Steel (100 tubs)	1,000
Plank and ship timber	17,000
Coir	5,000
Blue and white Common and Dugaree Cloth (600 bales)	100,000
Cinnamon	600
Other spices	4,000
Musk	2,000
Indigo	2,000
Turmeric (400 bags)	4,500
Camphor	4,500
Sandalwood	2,000
Drugs	5,000
Tamarinds	2,000
Sundries	1,800

TOTAL FROM INDIA

284,300

<u>From Red Sea and Muskat</u>	
Coffee (1,520 guntras)	93,000
<u>From Muskat and Persian Coast</u>	
(*) Dry fruit, grain and India Produce	200,000
(*) <u>From Bussora</u>	
Dates, grain etc.	200,000
<u>Various Places</u>	
Sundries	30,000

TOTAL	807,300

Brucks states that the items asterisked are re-exported to India, Muskat and other parts but are not mentioned in the list of exports.

This list gives one a general insight into the economy at the time. The reliance of the economy on pearls is confirmed, and even at this time, the dominance of the India trade is clear. By far the greatest proportion of pearls go to India, and also India plays a crucial role regarding imports. From this flowed the British involvement and the presence of many Indians in Bahrain - the "Indianisation" process. I was told by many older Bahraini men that they visited (and still visit) Bombay frequently - almost that it was a second home. Many went there to escape political turbulence in Bahrain, and many have returned later. It is interesting that the level of inter-Arab trade has been very low in recent years too.

(53)

Pearls filled a role analogous to oil, in the sense that they were a natural resource upon which the economy was very heavily dependent and both commodities are subject to the vagaries of international supply and demand and prices fluctuated considerably (and unpredictably) with fairly severe consequences. Very few manufactures were exported, and even at this date Bahrain evidently did not rely on the skills of its populace in this

respect in order to trade. There is some evidence that many of the higher skills in the building industry were imported (54).

The positive trade balance is impressive, and the surplus must have allowed the wealthy class a good deal of luxury. Re-export was clearly important even at this stage. Several writers say that Bahrain's role in trans-shipment emerged (in respect of Nejd) in the 1920s, but one can see that it was entrepot also at this time. Indeed Ratnagar draws attention to such a role also in the distant past (55). As a consequence probably port and suq have always enjoyed the cosmopolitan character which Charles Belgrave so eloquently describes in "Personal Column" (56).

As regards building, it is confirmed that iron, lead, steel and timber were imported from India.

3.3.2. Economic Growth and Change

The following information is from Rumaihi and the sources are cited by him (57). In 1775 Parsons estimated the value of pearls landed between £112,000 and £187,000. In 1833 the value landed was estimated as £200,000 by Wilson. This grew slowly towards 1900, with an estimate of £303,941 by Zwemmer in 1896. From then the value soared upwards. An estimate by Harrison in 1913 was £1,850,000 and by Belgrave from 1926 to 1931 was £1,500,000 per year. From then it fell to £62,000 in 1946. Employment levels reflect this pattern also. In 1889 Bent reports 400 boats. Taking a complement of thirty men per boat this would be a force of 12,000 men. From 1926 to 1931, there were over 20,000 men employed in 500 boats according to Belgrave. By 1940 the figures were 191 boats and 7,500 men and by 1954 only 11 boats remained.

Imports into Bahrain were estimated at £1,529,758 in 1916-17 by Dickson. This level was approximately constant through the 1920s. In 1929-30 it was £1,930,000 according to Prior. By 1931-32 this fell to £821,824. Later figures in the 1930s are not to be found, but no doubt the decline continued. The imports were latterly in fact mainly transshipments to Nejd arising from the breakdown of diplomatic relationships between Kuwait and Ibn Saud - the transshipment function having previously rested with Kuwait.

Oil revenue to the state rose from Rupees 379,000 (58) in 1934-35 to Rupees 2,110,000 in 1936-37, whilst total government income for these years was Rs. 1,153,000 and Rs. 3,281,000 respectively (Rumaihi). Employment in the Bahrain Petroleum Company rose from 3,350 in 1938 to 6,078 in 1947, with Bahraini employment (as opposed to employment of foreigners) being 2,000 and 4,650 respectively.

In conclusion, a review of this information suggests there were several broad periods:

1. Slow Growth (up to 1900).

2. Boom Period (1900-1930).

(a) Early Boom up to 1920: accelerating growth of pearling.

(b) Main Boom from 1920 onwards as steamship links, banking, transshipment and other international roles emerged. There were short periods of recession due to rapid fluctuations in pearl prices caused by due to speculation.

3. Recession (1930-1936).

This fell between the decline of pearling and the rise of the oil industry.

4. Partial Recovery (1936 on).

BAPCO took up some of the slack created by the collapse of pearling. This recovery was interrupted by the Second World War when Bahrain suffered greatly, as Sir Edward Wakefield shews in his autobiography.

4. The Nature of the State in Bahrain.

Prior to the 1920s the state was regarded as the personal property of the Shuyukh or Ruler. There was no distinction drawn between public revenues and the private purse of the Ruler. Similarly the authority of government and the economic rights of the citizen were appropriated by the Ruler. Fuad Khuri reinforces Harrison's opinion, speaking here of Sheikh Isa:

"The Ruler spent a large part of the revenues on his retinue which included fidawis (59), servants, guards, clerks and favourites; on guests and gifts and sometimes on tribute to neighbouring dominant power blocs. Expenditure on roads, schools and maintenance of public facilities received little or no attention. Public expenditure was understood to be synonymous with acts of welfare and charity granted on a purely personal basis by the regime to the wretched, the miserable or the physically unfit." (60)

There being no public delegation or consent, no standardised law or equity, the Ruler could only rely on his sons or brothers to control resources: he would otherwise lose office. Khuri observes that "the ruler had to rely on elementary social relationships to control resources and power bases...." (61).

The sheikhs were quasi-independent of the Ruler, holding rural estates as fiefs and exercising almost complete autonomy over their people. Khuri says "the shuyukh was primus inter pares" (62). It is important to grasp how, in this feudal situation, the Ruler could exercise little power over his cohorts in order to understand the inability of the government to halt the appalling attacks and massacres of the early 1920s (63). The British (particularly Major Daly, the Agent for six years in the 1920s,) sought to establish laws and courts able to discipline all citizens equally, and specifically to end various sheikhly abuses - particularly forced labour. The sheikhs foresaw an end to their license and accordingly rebelled. By 1930, they had been more-or-less curbed, and a modern state began slowly to emerge.

It is important to understand the relationship of town and country. None of the landlord sheikhs lived in their villages. Generally, they lived in Mubarraq. The reason for this was to be close to the seat of power. Also they would doubtless be insecure in a hostile environment. Their administrative staff (wazir and kikhda) (64) lived on the estates. The fidawis and courtiers would live in Mubarraq with the Sheikh. To some extent, then Mubarraq lived off the countryside - at least, the neighbourhoods of the Khalifa sheikhs and their supporters did so.

The cities of Manama and Mubarraq were governed by the "Imara", that is, an assembly comprising an amir and thirty fidawis. The amir was a high-ranking fidawi appointed by the Ruler. According to Khuri, these men belonged to the "bani khadr" category - in other words they had no clear tribal origin. For instance, they might be Baluchis, Omanis, Africans or "stray" Arabs (65). This tendency to create a coercive apparatus comprising outsiders, (with no axe to grind, so to speak) established its loyalty to the Ruler. Otherwise, a fidawi's primary loyalty would always be to his own family or tribe regardless of fair play or the interests of the state. However, the fidawis often took the law into their own hands. "Physical power was the language of the law. They carried sticks and never hesitated to strike those who refused to acquiesce in their orders." (66). This led to many complaints and eventually the Advisor created a police force (al Nartur) organised along more modern lines.

The task of the fidawi was to execute the will of the Ruler and the Sunni jurists (and others) appointed by the Ruler. They enforced order in the market, and would arrest, question and punish people. There was no appeal to a higher authority. They carried out the decisions of Sunni jurists on marriage, divorce, inheritance and family matters. They collected taxes, tributes and rent. However, Khuri states that:

"Highly placed rich merchants did not pay taxes; they presented gifts. In return they were granted special favours on duties, prices, wages, imports, exports and other matters related to trade. There were no standardised controls and this gave the merchants a free hand to seek maximal profits." (67)

The Amir of Muharraq acted as a judge. On the north-west corner of the junction of Tijjar Road and Sh. Hamad Road was a large concrete bench with armrests (datcha) on which the Amir sat. Accused persons were brought before him there for judgement. If judgement had to be delayed, the accused was kept in an open place behind an adjacent coffee house with hinged and locked timbers around his legs. Any case with religious ramifications would be passed to the Qadi.

Prior to the deposition of Sheikh Isa Sharia punishments were followed. For example, a hand was amputated for theft; unmarried adulterers were flogged and married adulterers were partly buried and stoned by the entire populace when they came out of the mosque after Friday prayers. Such punishment fell into disuse gradually after Sh. Hamed came to the throne - no doubt prompted by British influence (68).

Before the British-sponsored reforms of 1923 there was a special "diving court" (Makhama al Ghaws) designed to adjudicate disputes between captains and divers (69). This consisted of two or three of the more influential captains appointed by the Ruler. There was no evidence taken. The matter was decided by sworn statement, which captains circumvented by buying witnesses. Rumaihi states that divers rarely found justice there.

The period of Sh. Hamad's rule brought reforms to the legal system. The Advisor was instrumental here. A lot of complaints were received by him about the corruptness of the old system and he created a magistrates court on the British system, which was situated on Government Avenue in Manama. He was himself a magistrate. The Sharia punishments fell into disuse. This coincided with a period of unrest, political agitation and economic recession, with an apparent rise in crime. (One may hypothesize that this was due to the further disintegration of the self-regulation of traditional society.) There was no gaol under the traditional system as justice was summary (70). I was told that there was very little crime at that time. When the British took a higher profile (in the 1920s and 1930s) a gaol became necessary.

5. Living in Muharraq.

5.1. Introduction.

I would like to narrow the discussion to consider aspects of daily life as it occurred early in this century in Muharraq. I will cover domestic life (particularly as regards the position of women and children); slavery; health, and finally work (or at least, some aspects of it).

Bahrain is nowadays regarded by Westerners as the most congenial part of the Middle East - the most relaxed, reasonable, flexible place between (say) Turkey and Singapore. It may be interesting to note that this was (reportedly) the case over a century ago as well. Here is Palgrave, after crossing Central Arabia:

"It was a good eight months since we had last sat in a public coffee house and that in the suburbs of Chazzah of Palestine; the rest of our journey having been through lands too backward in civilisation or forward in bigotry to admit of such establishments. But Bahreyn is beyond the Wahabee circle, and breathes the atmosphere, so to speak, of Basrah and Persia. We gladly took our seats on the high matted benches amid turbaned townsmen and gaily-dressed shopkeepers Meanwhile, the white-vested waiter prepared and presented our coffee, after filling huge Nargeelahs here in use with strong Oman tobacco, the bugbear of Riad.

But here nous avons changes tout cela." (71)

In passing, one may note that the issue of the availability of alcohol also has a history, and the government records of the early decades of this century (in the India Office Records and Library) contain many references to problems. At one stage, even eau-de-cologne was used as a substitute, leading to quite widespread drunkenness. The response was relatively liberal: nowadays alcohol is openly available, and few Bahrainis get drunk. Finally, we may mention religious controversy:

"Of religious controversy I never heard one word. In short, instead of Zelators and fanatics, camel-drivers and Bedouins, we have at Bahreyn something like 'men of the world who know the world like men,' a great relief to the mind." (72)

There are few early nineteenth century descriptions of the Bahrainis themselves, and it may be interesting to quote Mignan's account of divers at length:

"The wives and children (of the divers) live on the island in cabins formed by the branches of date interwoven with reed. The population is very limited. Their appearance and manners are precisely similar to all the maritime Arabs of the Arabian shore, with the exception of their stature which is invariably tall and slender. They suffer from cutaneous diseases and inflammation of the eyes, which in its effects becomes as painfully distressing as the Egyptian ophthalmia. They never attain any great age, notwithstanding their habitual abstemiousness; and although they cultivate the beard, it is by nature weak scanty and soon turns gray. They wear no other covering than a cotton kerchief, girt around their loins by a number of small leathern thongs.... Their heads have no other than that of an immense bush of hair anointed with fetid grease." (73)

This conveys clearly a picture of the generally primitive condition of part (at least) of the population, and counterbalances Palgrave's more positive impression.

5.2. Domestic Life.

5.2.1. The Problem of Sources.

The only sources on domestic matters in Bahrain which I have found are P. Harrison's "The Arabs at Home", Amin Rihani's "Around the Coasts of Arabia" and (more recently) Fadwa El Guindi's "Status of women in Bahrain". There are also a few useful comments in Rumaishi. A good scholarly account is given by Levy, and also by Montgomery Watt but these apply to Islamic law and sociology in general. I have not found a book which gives an intimate insiders account for Bahrain to match Doreen Ingrams "A Time in Arabia" on Hadramaut, or Zahra Freeth's writing on domestic life in Kuwait. I daresay the position in Hadramaut resembled that in Bahrain on many points. Mrs. Ingrams gives a wonderfully sensitive

portrayal of the private life of women in the middle and upper class in the earlier decades of this century. The writing of both women may help us to imagine a little of the domestic life in Bahrain at that time.

5.2.2. Polygamy.

Dr. Harrison states that polygamy was widespread (in the 1920s). The poor could have only one wife, but apparently a large part of the population had several. Speaking of the rich, he writes:

"He may divorce any wife at pleasure and sell any concubine. Thus he may change partners at will and contract a new alliance any time the fancy strikes him The pleasure licensed by such a public opinion came to dominate the whole emotional horizon." (74)

Harrison notes two particular consequences. He feels that children are regarded as a "mere necessary encumbrance", although, "they are petted and spoiled". Secondly he notes that the incidence of venereal disease at his hospital in Bahrain was probably as great as that in New York (75). It was possible to marry a slave, (which some men may have done in order to make a smaller mahr (or dowry) payment, suggests Levy.) There was no lower age limit for marriage, although a girl would not be handed over to her husband until fit for marital congress, which may have been at twelve of fourteen years old. Rihani writes (in the 1920s):

"In Bahrain, polygamy has undergone no change, nor has it yet suffered from any of the modern influences of Cairo and Angora. We still have our wives, its men seem to say, and we don't care what you do with yours. We follow the law of the Prophet - two, three or four according to a man's ability and sense of justice: but our only trouble in observing the law is the lack of women. There are not enough to honour the Prophet. That is what I was told." (76)

Therefore the men have to search the Persian Coast towns, Kuwait, Oman, Basrah or India for wives.

"Such a condition is a pedestal for woman; and as to divorce, a fig for your prerogative, O mere man! Khadijah or Fatimah snaps her fingers and walks out. Many a turbaned and scented sheikh welcomes the opportunity that will save him a sea voyage. And Khadijah, who an hour ago snapped her fingers in the face of one husband, now claps her hands for joy of another." (77)

I have no idea whether Rihani's interpretation of the attitude of women at that time is fair and accurate. He writes like a sensation-mongering journalist, but there is no other account from Bahrain. I think the truth was probably nearer Doreen Ingrams' account of Hadramaut women, who Mrs. Ingrams thought were as sad and resentful at a husband's new marriage as any Western woman would be. Moreover, she knew the harims as well as any foreigner could, whereas Rihani was an outsider (78).

Talking to old men and women in Al Muharraq I had the impression that polygamy had been very widespread, but that divorce was not nearly so common as Dr. Harrison and Amin Rihani suggest. It was suggested to me by several men that the old system was not so bad as Westerners might think. The older wife would remain honoured as the senior person, and would advise and guide the younger wives. They would work for her, and often harmonious and sisterly relations would emerge.

5.2.3. Position of Children.

The position of children was arguably better than Harrison portrayed it. Writing from an Edwardian perspective, Harrison perhaps did not fully understand the strength of the extended family living together, in which uncles, aunts, cousins and other relations would all care for a child. The intensity of the link between parents and child was not so strong as that doubtless found in the American nuclear families which Harrison perhaps took as a model. Several people described to me perfectly happy childhoods in large houses in which all the children would play together visiting all the uncles and aunts around the house and having a jolly time of it. I cannot help wondering, however, if the relative lack of a "one-to-one" relationship in childhood blunted individualism and personal dynamism compared to the Western mode of parenting. However, also, it must be recalled that Islam

places great stress on love and support of parents: this injunction is generally far more honoured in Bahrain than in Britain these days.

5.2.4. Social Relations and Womens Role.

These houses were, of course, very crowded. Privacy within the family was often impossible: to retire to one's room to read a book or write a letter alone is a modern expectation. I was told that rarely could one escape company. This must have been exacerbated by the very Arab fondness for visiting. At the slightest excuse, visitors will arrive and spend many hours socialising and sharing joy or pain. Men and women socialised separately, of course. Men would often meet in a suq coffee house or on a datcha (stone bench) which lined main streets but which have now all but disappeared, to sit endlessly, converse, smoke a hubble-bubble, sip tea or coffee (made to the Bahrain recipes). If meeting at home, then the majlis was, of course, next to the entrance so visitors did not see the women and children. The women met only at home. According to Rumaihi (79) the womens' role was restricted to running the house and raising children, and they had little say in important family matters. However, Dickson (a Political Agent) noted that Sheikha Aisha - wife of Sh. Isa - was among the three or four most powerful persons in Bahrain, so apparently it was possible for a woman to attain power in special circumstances (80). Fadwa el Guindi suggests that Bahraini society was matrifocal (81). The reason was that the long absences of men on pearl-diving expeditions caused women to act as de facto heads of households, and sometimes undertake income-producing activities - wielding much power as a result. Rumaihi asserts that generally women stayed at home all day unless socialising with other female relations, but wives of fishermen helped clean and sell fish and wives of peasants worked in the fields and brought produce to market. Freeth notes that poorer women were much less restricted than rich ones (82). There was a small Jewish community until 1947 or so, and Jewish women were better able to trade from door to door. All women were veiled, as a few old women still are.

5.2.5. Attitudes to the Human Body.

Many Westerners are confused by Islamic social and religious customs into supposing that Moslems are narrow-minded. Rihani tells amusingly of merriment occasioned by wading to the Manama/Muharraq ferry:

"The naturalness on the part of the women, however, is spoiled by a tradition: they will wade like the men but they will not uncover their faces. One of them, when we reached Muharraq, surprised me with her generosity, as she stepped out of the boat into the water, which was only two feet deep; but she must have imagined it was a fathom or she preferred the sun as a garment; and my companion, seeing me hesitate with the camera, said: 'It is something familiar; there is no harm in taking the picture.'" (83)

I did not quite believe this when I read it, but, later found a reference in Rumaihi: apparently Major Daly, (incensed by the sort of scene Rihani describes with evident amusement,) had issued an edict requiring all ferry passengers to don long cotton underwear (84).

Another interesting tradition is the decoration of the marriage bedroom. A reconstruction is shown in the Department of Heritage in Manama. Apparently all members of the tribe possessing a mirror would lend it to the bridegroom's family, and the walls of the chosen room would be covered with mirrors. Large glass spheres (tinted red, yellow, blue and green) would be hung from the ceiling. Mrs. Ingrams comments on polite ribaldry within the harims amongst women which amused her but would probably have shocked a few of her contemporaries in England (85).

5.2.6. Family Patterns.

Lesser families would accept leadership from greater families. Such relationships were very slow to change. Leaders of major families would act on behalf of lesser ones in representing their interests to the Ruler. Such leaders would also give judgement on minor disputes which lesser families would accept. Marriage occurred only between members of the same class. Some families habitually intermarried: in my study of Abu Ma'ber, the Musallam

and Jalahma tribes are a case in point (86). Some occupations (and hence some families) were considered low class. Tribes followed one or two specific occupations. A few people would hold other jobs, or pursue other seasonal tasks, but these were the exceptions. It was occasionally possible for a member of a low class family to accumulate more wealth than his fellows, but his family name would always identify him as lower class. Some tribal names indicate occupation, of course, such as Al Jalalif (boatbuilders); As Sagagh (goldsmiths); Al Hadadah (blacksmiths) and so on. Some areas are likewise associated with important trades - Al Bana'in with building, (as al Banna is a mason) for example. In some cases such tribes may not initially have been related by blood but rather coalesced around a trade, adopting its identity and name.

The leader of a tribe would be the oldest and richest person. However, wealth mattered more than age in the choice of a leader simply because wealth tended to allow greater political influence with the Ruler and other influential men. A poor man would rarely succeed in defending his tribal interests against wealthier rivals (87).

The leader of a major tribe would meet his followers in his majlis. For much of the day there would be a stream of visitors. Many would perform services and act as honorary servants. One can get something of the general atmosphere from Rihani's account of Sh Isa's majlis although the majlis of other leaders would be less splendid.

"After meandering through (the bazar) to the residential quarter we turned into an avenue of human forms, statuesque and stunted in the pose. On both sides of the street, against the walls, squatted a hundred odd Arabs, silent and sombre and immobile. They may be either the retainers of Grand Sheikh or a certain class of his daily visitors, whose rank admits them no further, unless they have a cause or grievance. Near the entrance were a few men with falcons on poles; they are mascots of the hunt. The Grand Sheikh of Bahrain, Sheikh Isa Aal Khalifah sat in state in a vast open court with benches of stone Roman-like around the walls, where more Arabs, swords or sticks in hand, statuesquely graced the scene. His coffee-bearers were the most picturesque and imposing I had seen in Arabia. In

six feet of orange-coloured cloth, a saffron sash, an embroidered koufiyah of cashmere wool held by an ighal of gold thread, approached majestically a broad shouldered Arab, with features neither ingratiating nor ferocious, bearing a very large coffee pot Beside him walked a boy in blue and gold carrying the cups. They stood before the Grand Sheikh who motioned them towards me. The boy handed the cup to his chief, who poured in it a thimbleful from his magnificent vase-like thing of brass, and presented it to me with his right hand. I took it with my left and lost my reputation as a scholar and a well-bred man." (88)

To sum up we can envisage a spatial pattern of tribal areas with lesser families clustering around leading families. The majlis or courtyard of the leading man acts as a social centre and minor court of justice. There was a rigid class system, and this was preserved by fixed rules on profession and intermarriage. In this way a certain quarter (firaj) would become associated with a particular profession - the Bin Hindi firaj with boat building, for example. The adoption of the name of one's occupation may indicate Shia allegiance. The focus of Shia Communal life may be a matam (or "funeral house") which functions as a social centre and (more crucially) as a centre for religious gatherings to celebrate the rituals of Ashura - the commemoration of the martyrdom of Husain (89), and for disseminating Shia ideas. It is not a place for worship. Maatim are "parapolitical institutions" (to borrow Khuri's phrase,) with which certain political or philosophical ideas may be identified. Ashura processions involve mass self-flagellation, and a display of group hysteria (which seems so out of keeping with Bahraini character, and indeed, one has the impression the participants regain their equipoise and common sense soon after the proceedings). According to Khuri, the strongest basis for fellowship may often be that "we beat together" - in other words, group flagellation of Matam members is a substitute for kinship (90).

A Shia "family" or "tribe" did not cluster in long descent groups. According to Khuri, few Shia owned stable economic assets that permitted them to maintain large concentrations of

kin. They grouped in kindreds related by intermarriage going back only two or three generations.

The organisation of the Shia community differs from that of the Sunni. Loyalty to long descent groups does not arise beyond the scale of the extended family. Community solidarity is condensed via a matam. In the timescale discussed here, the wider spatial grouping was on a basis of profession, (although that broke down thirty or forty years ago). In fact, there were very few Shia living in Muharraq town, and they were mainly concentrated in As Sagagh and Al Hayayik districts (but this is discussed in greater detail in the next chapter).

5.2.7. Furniture.

Very little furniture was used. There were mats or carpets on the floor and people sat or squatted around the walls. This presumably influenced how the windows were located. One may hypothesise that once western-style furniture was introduced (mainly imported from India), the requirement for taller windows became evident. There does appear to be a chronological correspondence.

The rosanna (wall niche) was used for practical storage and decorative display - in the buildings I visited one could still see the kind of trinkets which are to be found on mantlepieces, sideboards and window sills in Britain.

Prior to the 1920s, furniture was generally made in Bahrain and consisted mainly of beds, small cupboards and suspended (swinging) cots. Most people slept on mattresses on the roof terraces, however, and woke early because of the flies and occasionally the condensation on the bedclothes. The beds were low and very simply constructed, with crude but effective carving: see fig. 2.1. The cots were made from palm-frond ribs: see fig. 2.2. After 1920, there was an increasing flow of imported beds made by the more sophisticated and mechanised workshops of India. I found these remaining in several houses and they were all quite similar in design, incorporating decorative tilework and canopy supports: see fig. 2.3. In a later period, one finds modern furniture of the type seen in Britain during the 1930s and 1940s.

5.2.8. Conclusion.

It is not easy for modern westerners to imagine what sort of a life was lived in these circumstances. Lawrence Stone gives some insights into a similar situation in the west but the comparison is suggestive and in no way conclusive (91). Were affective individualism and a companionate marriage possible or prevalent? Perhaps not: within a household life was collective. Identity would mainly arise from one's position in the wider social system of family and tribe. A system of manners, including dress, evolved to help integrate the individual into the group. Duty - the performance of obligations - was paramount. One wonders to what extent did self expression and self-discovery in our modern sense ever arise as a possibility.

In such societies the usefulness of the wider family was clear. In the desert, the capacity to act as a disciplined whole had meant the difference between life and death. The absence of the state in the modern sense (as we discussed earlier) meant that reliance was placed on the family and tribe for such purposes. The rigours of urban life were not so extreme as those of the desert - although quite appalling by modern standards, of course. Even here, advancement could only be guaranteed by the support of relations and those who owed a duty to you - and in return you had to accept the burden of such duties owed to others (92).

5.3. Slavery.

Slavery was to some extent present through the period. Slaves were kidnapped from Persian coastal villages and sold in Muharrag even in the 1940s when Wakefield was the Resident. Slave owning may create an appalling insensitivity and arrogance in some men. Many slaves were very badly treated particularly in Doha. Both Wakefield and Harrison give first hand accounts (93). The slaves would then try to avoid work and be as passively disruptive as possible.

However, there were fewer slaves in Bahrain than on the Pirate Coast, and they were much better treated (according to both Wakefield and Harrison). The treatment here was usually benign and paternalistic; slaves found a place in the household. Slave children were paired

with free children in rich houses and would grow up as their servants and companions for life. They were usually cared for in old age. Lieutenant Heude, speaking of Muscat, says slaves were treated "with a degree of humanity that would do honour to our climes" (94). At present, the servants in many houses (now from India rather than Africa) take the place of slaves. In a more materialistic age, the treatment of the labourer class is often desperately unjust. But I often saw examples of the old paternalism, such as an old Sheikh personally taking his servant to a private hospital to have the servant's health problem attended to by expensive foreign doctors whom the Sheikh doubtless patronised himself. In the 1920s the British created a system whereby slaves could apply for manumission to the Political Agent. The slave always received it with no protest from the owner. But many preferred to remain slaves and many manumitted slaves turned to prostitution. It led, eventually, to government action followed by a Prostitutes strike in 1942, about which Sir Edward Wakefield tells some amusing and scandalous anecdotes.

5.4. Health.

5.4.1. Disease.

The state of public health at the beginning of the century was very bad. The American Medical Mission records are valuable. Disease control by the Municipality in the late 1920s and the drilling of artesian wells brought big improvements. Dr. Stanley Mylrea records that in 5 years he went through two epidemics of cholera and two of bubonic plague. An epidemic of plague was expected alternate years. Cholera epidemics were terrifying. He writes that:

"They swept into Bahrain like a forest fire and people died by the hundred within a few hours. A man would collapse in the street and in no time be in his grave. Panic would completely undermine the public morale. There were instances where a family would be wiped out, and I was in more than one house in which there was not a single occupant - just men, women and children, lying dead. It was difficult to get corpses buried." (95)

Dr. Harrison notes that almost everyone older than 35 suffered from chronic rheumatism perhaps due to diving or going barefoot (but this is also caused by Guinea worm). Eye diseases were very common and quite a lot of people went blind (96). Doctor Lucy Patterson wrote:

"About 75% of people seem to have eye trouble of some sort. Trachoma, trichiasis, ulceration and opacity are the commonest forms." (97)

Malaria was also a serious threat, until the Municipality eradication programme took effect in the late 1920s. Dr. Patterson also draws attention to tuberculosis:

"Tuberculosis is terribly prevalent Pulmonary tuberculosis is common enough, but it appears to be outnumbered by the cases of tuberculosis of the bones, joints, skin, peritoneum etc. ... the thousands of divers from Bahrain and Kuwait suffer a good deal from ear trouble and seem specially disposed to tuberculosis. This is not surprising when we know that many of them expectorate blood for a week or two at the beginning of the diving season."

Parasitic diseases, such as Guinea Worm and Madura Foot were common until Artesian Wells became the main water supply

5.4.2. Life Expectancy.

Life expectancy data is only available from 1965, when it was 58.4 years, rising in 1981 to 65.9, an annual increase of one per cent (98). A crude projection backwards (of a compound rate) suggests a life expectancy of about 42 years in 1920. This resembles the expectancy in some deprived countries today and so may not be an unreasonable guess.

5.4.3. Sanitation and Health.

Generally one or more cesspits were dug for each house into which "black" waste was deposited (99). Cesspits were quite soundly constructed with coral blocks which were porous, of course. Waste water might be thrown on the ground, where it would be quickly absorbed. Generally there was about one toilet for every one or two apartments (located at roof level if possible in a small room adjacent to each apartment). It comprised a round hole with a channel drain, surfaced with mortar.

Latterly a cast iron pipe would pass down the external wall face to a cesspit in the street, but earlier the pit would be located directly under the hole.

Zahra Freeth states (of Kuwait):

"In humbler homes part of the roof was often used by women as a privy. Excrement dried in the hot sun, and would later be swept up and collected as a fertiliser for the small market gardens on the edge of the town Large numbers of the male population used the edge of the sea without benefit of cubicles."

(100)

Islam includes religious injunctions on defecation, for instance, the Hadith:

"Avoid the three accursed: excreting in streams, in thoroughfares and in the shade." (101)

Al Muharraq was probably settled originally on the high ground in the middle of the island. It was possible there to dig a deep pit into the coral rock, and the waste would soak away with no difficulty. This may have been reasonably healthy. When development densities were low the infection of well water may not have been especially serious.

The low lying areas have a high water table however - less than two metres below the surface. It seems there were two problems. The wells became seriously polluted with faecal matter (which would have been the cause of Cholera and Typhoid outbreaks). Also the cesspits flooded frequently because they were never desludged. This was aggravated in winter by rainfall which - in the absence of storm drainage - filled the cesspits. In more recent times the use of far more fat in the diet of local people no doubt made the digestion process in the cesspits work less well.

There would be frequent overflows down streets of polluted water at least in winter. One may hypothesise that as these became more troublesome, owners would construct drains outside their property. According to the Ministry of Works Sanitation Engineers and their consultants (John Taylor) there is an extensive system of drains predating the 1920s. No-one knows its extent. Generally it has a square or rectangular section, and is lined with coral blocks. The depth varies, and there is no consistent gradient to an outfall: the

invert levels go up and down. There is no evidence that they were constructed or coordinated by a public agency. Most probably each owner or family built the length outside their property at different times and with no reference to an overall design. Such polluted drains created an ideal habitat for rats, and this was no doubt related to the serious incidence of Bubonic plague (as rat fleas transfer the disease to man).

5.5. Social Impact of Employment.

5.5.1. Pearling.

Until the rise of the oil industry, this was overwhelmingly the major employer. It proved to be disastrous socially to the population as a whole, and was responsible for a great deal of misery.

The main problem arose from the financial system. The men (divers, pullers and so on) were not paid a wage but were entitled to a share in the profits. They were given an advance (Salafiya) by a Captain to support families whilst they were away for the season. There were later loans for maintenance and pocket money. Earnings never covered this debt, which was carried forward with interest to the next season. As early as 1818, it was stated that:

"The fishermen borrow for their support from noted bankers amounts in money or grain, on which these gain a profit of thirty per cent or more ..." (102)

The worker was then in the control of the Captain. Harrison wrote:

"It is probably easier for a negro slave on the Pirate Coast to escape, than it is for a Bahraini diver to regain his freedom. As long as he is in debt he cannot change his employer, no matter how badly he is treated, nor can he leave town, except under the bonds to return before the diving season begins, and he will never be able to get out of debt. He cannot read or write. There is no witness to the transactions that take place between the captain and himself. It is a recognised thing for divers to receive the loan in rice ... the sum written in the books is regularly about 50% greater than the market value of the rice. If necessary entirely false entries are written in." (103)

Nor could the men escape by death. Rihani writes:

"His debts were inherited by his sons or brothers who were forced to enter the pearl industry themselves unless they had money or property to clear the debt. Some of the more inhuman captains would insist on marrying the widow of the diver as payment for the debts, and in doing so, obtained for themselves the diver's children to be later trained as divers themselves." (104)

If, however, a captain fell into debt, he would go for a loan to a pearl merchant upon which interest was paid, (Sharia law being circumvented by the "Mukalaba" system of sale and buy-back of goods at differential prices).

Other social factors in this industry were the length of the diving seasons, (particularly the main season from June to October) for which the menfolk would be away from home and family, and also the medical problems caused by the physical stress of the occupation.

5.5.2. Agriculture.

The situation regarding agriculture in the Muharraq villages was little better. Rents were not monetary, but consisted of a fixed quantity of the crop irrespective of the harvest that year or other conditions on the island. In a bad year, the tenant was forced to buy the crop on the open market to pay the landlord and probably go into debt. The landlord held the only copy of the lease (Dhaman) and it was often altered by him (according to Daly). Also a date garden tax was arbitrarily collected by local sheikhs from peasant land-owners and reduced them to the same economic level as tenants (105). The majority of Baharnah had to accept the situation because diving - the only alternative for many - was the province of the Sunni.

Brucks mentions (in 1829) that the island produces "citrons, pomegranates, mulberries, dates, figs, melons and other fruits". He also refers to a few barley, wheat and clover fields. He writes: "cattle and poultry are rather dear being brought from other places". (106) The main crop however was the date. The tree had so many uses that one of Rumaihi's informants called it their "mother and father". Khuri writes:

"The Arabs of Bahrain ... live off the sea and the Palm Tree, not the camel. Palm tree branches (sif) are used to build dwellings. Leafless branches (qidhf) are used for making beds, roofs or fishtraps. Bunches of palm (ldq) are used for sweeping, the flowers and buds for medicine and the leaves for matting and basket-making. The inner soft part is eaten as food; the kernels are used as animal feed. A whole variety of dishes are prepared with dates or syrup. Many songs, stories, legends and proverbs are composed about the palm tree. Even human beings are sometimes classified according to the various types of date; a pretty girl is Khilas, which is often eaten fresh and a thickheaded person is naghil which is slightly bitter in taste." (107)

In 1829 Brucks noted the agricultural potential of the islands, but states that it is seriously neglected. The soil of about a quarter of the islands was very rich, but proper cultivation is "not ever likely to take place while the island remains under the present government, as for want of encouragement the people entirely neglect it" (108). He refers to quite significant production, however, elsewhere in his "Memoir", and so one may feel he is exaggerating the neglect. However, neglect would not be surprising if one bears in mind the sort of abuses mentioned by Rumaihi.

6. Conclusion.

6.1. Introduction.

The aim of this chapter was to convey the flavour of a complex phenomenon by a "collage" technique. Part of the aim was to evoke a general feeling for the quality of life at that time and place. It is, of course, hard to summarise, for each reader will draw his or her own conclusions. There are three particular points, however, which I want to draw out. I will return to these points in a different way in the concluding chapter and also at various places before then.

6.2. Pre-Capitalist Vision of the City.

If one places oneself in the position of paleo or pre-capitalist man in Muharrag, and appraises critically the Western metropolis, one would be more acutely aware of its empty individualism, merciless commercialisation and spiritual bankruptcy. Speaking of "metropolitan man" or "the man without qualities" with his blase attitude, Georg Simmel wrote:

"The essence of the blase attitude consists of the blunting of discrimination. This does not mean that the objects are not perceived, as is the case with a half-wit, but rather that the meaning and differing values of things, and thereby the things themselves, are experienced as insubstantial. They appear to the blase person in an evenly flat tone This mood is a faithful subjective reflection of a completely internalized money economy. All things float with equal specific gravity in the constantly moving stream of money." (109)

However, at this time in Muharrag capitalism had not been able to complete the alienation of man from man or man from environment by defining the value of each in essentially monetary terms and by creating markets for their exchange: the pre-capitalist man and environment have an intrinsic rock-like reality which later dissolved in the "constantly moving stream of money", becoming in effect, commodities endowed with abstract values. Can one try (by some act of empathy) to see an environment in this old way? Perhaps it is like lifting a veil through which one sees only the outward form of things, as it were.

The environment and the man is then invested with some quality which exists entirely outside any market place - within the realm of feeling. Then the man and the environment enter into us, and some form of unity is created between what is within and what is (in a more literal sense) outside. It may seem perverse to write about alienation in metropolitan western society, when much of this chapter has been devoted to the divisions within Bahrain society. Muharrag itself comprised a class of feudal lords living off a peasant class in the rural hinterland whose property they had earlier confiscated; a lumpen proletariat of divers and others, and a proto-capitalist class of pearl merchants and captains, held apart by sectarian hatred or class snobbery. What, one may ask, could be less edifying than this? Quite so. And yet, at the local scale - within the tribe, professional group, matam group, family - there was a higher level of social and spiritual solidarity. In any case, the alienation of which Simmel wrote is concerned with an entire Weltanschauung - an alienation on a more profound level, at which particular group conflicts are less significant than the general Wertfreiheit, the freedom from value, of the positive technological society. Against this, some scholars (such as Titus Burckhardt, A.U. Pope or Ardalan and Bakhtiar) draw attention to the quite concrete spiritual symbology of the Islamic craftsman:

"Symbols of esotericism are welded to the arts and crafts so that the artisan is able to achieve 'spiritual perfection' by integrating the inner and outer aspects of his being through his work." (110)

However degraded this phenomenon may have become over the years, it is to some degree present in the historic architecture of Muharrag.

6.3. Time and Change.

In a pre-capitalist society at a mature or degenerate stage, culture is likely to be more or less stable. The impulse (often egotistical) for self-realisation powered the ceaseless innovation of the West. However, we have noted the static qualities in several respects of Islamic culture in (say) the last four centuries. A possibly cynical orientalist such as von Grunebaum could write that the Islamic city was transfixed in the "Sleep of the Just":

"Interest in the universe is limited to its role within an anthropocentric design of salvation. Through his prophets, God has communicated to man the essential truths he needs to know to qualify for Paradise. So human reason is charged not so much with discovering unknown areas of fact as with uncovering the insights and directions implied in divine or prophetic announcements. So the true task of thought is comment and interpretation." (111)

The western criticism here would be that long ago Moslem man ceased to be free agent, capable of autonomous self-construction through (supposedly) creative struggle. On the other hand, as Tafuri wrote of the western city in modern times:

"The whole phenomenology of bourgeois anguish lies in the 'free' contemplation of destiny. It is impossible not to be confronted continually with the perspectives opened up by that freedom. In this tragic confrontation it is impossible not to perpetuate the experience of shock. The shock derived from the experience of the metropolis is, in itself, a way of rendering anguish 'active'. Munch's 'Scream' already expressed the necessity of a bridge between the absolute 'emptiness' of the individual, capable of expressing himself only by a contracted phoneme, and the passivity of collective behaviour." (112)

Returning to the Islamic city, many writers have noted the reliance upon traditional artistic languages as the "given" framework for new creation, and no-one has expressed this better than Arthur Upham Pope, who is writing here of Persia:

"Unity of purpose, so characteristically lacking in the Western world, is one of the principal sources of mental and spiritual energy ... Work was favoured by simple and basic integrity which released imagination and fixed purpose. There were always elements of danger. But there was a stability of outlook provided by religious conviction harmoniously adjusted to national disposition, which enabled the artists to face their aesthetic problems with souls well knit and spiritual battles won." (113)

Elsewhere he writes:

"Isolation of the artist and concentration on his precious individuality have had no counterpart in the history of Persia, although for centuries it has been characteristic of the art of the West." (114)

I think then that one must try to imagine a milieu in which the basic patterns are settled: "eternal archetypes are reflected in temporal forms whose variations define styles of different historic periods" (115). Presumably, "progress" - the free contemplation of destiny - was a foreign idea, and so "time passing" must also have had a different meaning. The internal rhythms of a society would determine its "clock" so to speak. This is presumably what Grunebaum meant when he mentions the "Sleep of the Just". If perfection is already attained - or at least understood - what is the need for change, except to draw nearer to an ideal already in view? This would cause the inhabitant to have a different view of architecture and the city. The notion of modernity, fashion, historical contexts, conservation and so forth, become marginal: all time is the present. The problem of separating present and past leads to a problem of envisioning the future as potentially better, worse or different.

6.4. The Idea of the "Public".

It seems to me that there was a different concept of the "public realm" at this time and this must be grasped in order to understand a town such as Muharraq. The term "public realm" can mean either a physical area or type of space or it can mean an abstract notion of responsibility or polity.

As I have already discussed, it seems that the law did not recognise an overall abstract notion of the "public interest". Also, no capitalist land-owning class emerged which in the West had been motivated to control and hence plan large areas as assemblages of consumable objects. The government (which was generally the leading Sheikh and the officials appointed by him) likewise felt no obligation to plan organise and manage the town as a whole. In the modern West the idea of the "public" as a group (and the "public interest" as a general good) was a universal utilitarian and essentially egalitarian idea, existing outwith any specific categories of ethnic or kinship grouping and religious or cultural

allegiance. This neutrality was not formed in Arabia: one's individuality existed only within the context of tribe and ummah: you existed as a Moslem and a member of a family. The sum of tribal or similar groupings constitutes society - the ummah - but does not also constitute government which in practice exists as a rather separate and disjunct element. In the modern West, by contrast, government has been neither more nor less than the control mechanism for that whole social system. This comprehensiveness is balanced by the relative insignificance of membership of kinship and religious groupings - the individual citizen is "free but lonely". Arabian society was an organic growth with overall coordination limited in scope, (having shallow roots in society as a whole). Arabian society stresses inwardness (batin: the inward, private and spiritual life), building all cultural structures by phases from within. This has important implications for understanding the city and urban life. I return to this issue several times in later chapters. Suffice it now to say that one should try to grasp how the urban form expresses precisely this organic continuum in an Arabian city. There are no "public" places and no "public" in the Western sense, perhaps because society endowed no agency with the right to articulate and focus the public will in terms of intellectual and practical endeavour.

FOOTNOTES FOR CHAPTER 2

- (1) See MICHON J-L (1980) page 15 and 16. For a discussion of the tolerance and generosity in the constitution of Medina, see HAMIDULLAH M. (1981).
- (2) This idea has also been used as a model for future planning - see SARDAR Z. (1985) and (1977).
- (3) This is quoted by J-L Michon, *op cit*.
- (4) *Ibid*, page 17.
- (5) *Ibid*, page 24.
- (6) For example, the reception of guests, preparing food and eating it, cutting hair and beard, use of henna and some perfumes, defecation and ablutions and so on.
- (7) SARDAR Z. *op cit*, cover this point and argues for renewal of *ijtihad*.
- (8) BERQUE J. (1981) page 80. The "alien sources" were of course, the imperial powers.
- (9) GRUNEBRAUM G. von (1962) page 23.
- (10) See STERN S.M. (1970). For example page 48.
- (11) For example ABDEL-RAHIM M. (1980) page 41.
- (12) SERJEANT R.S. & AL AMRI H. (1983).
- (13) DURI A.A. (1980).
- (14) This point is made by many writers - see, for example BERQUE J. (1981) page 79.
- (15) Refer to Ibn Khaldun's *Al Muqaddima* (1377 A.D.), discussed also in GELLNER E. (1968). The intervention of the British ended the cycle by protecting the Ruler.

- (16) See HARRISON P. (1924) page 143.
- (17) RUTHVEN M. (1984), see Chapter 4.
- (18) HARRISON P. op cit, page 160.
- (19) RODINSON M. (1977) pages 34 and 55.
- (20) TURNER B.S. (1974) page 13.
- (21) RUTHVEN M. (1984) pages 177 to 179.
- (22) SCHACHT J. (1959) page 563.
- (23) TROELTSCH E. (1931) page 251.
- (24) Ibid, page 251.
- (25) TAFURI M. (1976) page 41.
- (26) The historical account in para. 3.1.1. is taken from RUMAIHI M.G. (1976), KHURI F. (1980), NAKLEH E. (1976) and ABU-HAKIMA A.M. (1965) although obviously it is much condensed. In fact the main early source for writers appears to be the "Bombay Political Proceedings" in the India Office Records and Library, and in particular the historical accounts reported by Francis Warden who was in fact a member of the government.
- (27) NIEBUHR C. (1972) Vol.2. page 152.
- (28) The term "Bahannah" refers to the original Shia inhabitants prior to the Utub invasion - see section 3.2.
- (29) The map by Brucks shows a large town in ruins at Jau - see Chapter 3. His survey report dates the evacuation at 1800 - see paragraph 3.2.5.
- (30) The account in paragraph 3.1.2. is taken from RUMAIHI M.G., KHURI F., & NAKLEH E., op cit. Again the main original sources are the British India Government files, principally correspondence between the Agent, the Resident and Simla.

- (31) BAPCO was the Petroleum Company.
- (32) Bani Utbah means the Utub tribes. Huwalah means Arabs returned from the Persian coastal area.
- (33) RUMAIHI M.G. op cit page 34.
- (34) Cited by AL TAJIR M. (1982) page 25.
- (35) Ibid page 7 and page 23.
- (36) LORIMER J.G. (1915) page 208.
- (37) GOV. OF INDIA "Bombay Selections" (XXIV) 1856 page 23. Entitled "Extracts from Brief Notes etc." by Captain R. Taylor prepared in the year 1818. This is filed at the India Office Records and Library.
- (38) AL TAJIR M. op cit page 33.
- (39) AL TAJIR op cit page 17.
- (40) Ibid page 7.
- (41) Ibid page 25.
- (42) RUMAIHI M.G. op cit page 28.
- (43) Cited by AL TAJIR M. op cit. pages 25 and 37.
- (44) See Daly's report to Colonel A.P. Trevor (Political Resident, Persian Gulf;) "Some examples of oppression of Baharnah Subjects etc." File 15/1/327/1 India Office Records and Library. Problems included forced labour, confiscation of property, grazing animals on the land of peasants and so on.
- (45) HAKKEN (1933).
- (46) TAYLOR R. (1818) from Bombay Selection (XXIV) page 23.
- (47) The map is discussed in Chapter 3.

- (48) BRUCKS (1829). This is from the Bombay Records Selections (XXIV) page 564. At this time there were clearly a lot of Bahannah merchants.
- (49) Letter 111 of 1868 (Political Dept.) from Lt. Col. Pelly (HBM Political Resident, Persian Gulf) to Secretary of Government, Political Dept., Bombay.
- (50) From the "Memoir Descriptive of the Navigation of the Gulph of Persia etc." dated 21st August 1829 and published in Bombay Records Selections (XXIV) 1856 page 568.
- (51) That is, Basra.
- (52) Alternative names for the same place i.e. Kuwait.
- (53) RUMAIHI M.G. (1976) pages 59-66, makes this clear.
- (54) This is discussed in Chapter 6, Civil strife and the repression of the Bahanna may be another reason.
- (55) RATNAGAR S. (1981)
- (56) BELGRAVE C.D. (1960)
- (57) RUMAIHI M.G. (1976) Part Two (pages 41 to 96).
- (58) One rupee was about 1s.6d. (i.e. 7.5p)
- (59) Fidawi was a private policeman.
- (60) KHURI F. (1980) page 50.
- (61) Ibid page 45.
- (62) Ibid page 50. Shuyukh means Ruler.
- (63) Described at length in RUMAIHI M.G. (1976) Chapter 9. The attacks were mainly on Shia villages by Sheikhs opposed to the reforms advanced by the new ruler, Sh. Hamad and supported by the British and the Shia.

- (64) In this context, a wazir was a rent farmer (i.e. middle man) and a kikhda was a tax collector.
- (65) KHURI F. (1980) page 51.
- (66) Ibid page 51.
- (67) Ibid page 51.
- (68) The information (in this paragraph and the previous one) was given to me by Eid Bokhammas.
- (69) RUMAIHI M.G. (1976) page 48.
- (70) According to Eid Bokhammas.
- (71) PALGRAVE W.G. (1865) page 206. The coffee house scene has not changed much (in the Suq, at least).
- (72) Ibid page 219.
- (73) See MIGNAN Captain R. (1839) Volume 2 pages 206-7.
- (74) HARRISON P. (1924) page 68. Palgrave (op cit, page 215) tells how Sheikh Mohammed (ruling in Muharraq) was excessively uxorious marrying a new wife "on trial" every fortnight; "enough to put Rome and Messalina to the blush".
- (75) There are yearly figures for Venereal disease in the Annual Government Reports from the mid 1920s; (India Office Library and Records). They do appear extraordinarily high.
- (76) RIHANI A. (1930) page 263.
- (77) Ibid, page 264.
- (78) INGRAMS D. (1970) particularly Chapter 6.
- (79) RUMAIHI M.G. (1976) page 153.
- (80) This is cited by Rumaihi, op cit, pages 172 and 186.

- (81) EL GUINDI F, (1985) page 78.
- (82) She is speaking of Kuwait. See LEWCOCK R, & FREETH Z. (1978) page 7. EL GUINDI op cit says the same (page 82).
- (83) RIHANI A, op cit (page 266).
- (84) RUMAIHI M.G, op cit (page 186).
- (85) INGRAMS D, op cit Chapter 3.
- (86) This study is presented in Chapter Three (below).
- (87) The points made in this section were told to me by several informants, particularly by Hillal Salem, but corroborated in parts by Khalid Engineer, Ahmed al Jowder and others.
- (88) RIHANI A, op cit page 267. I quote this at length because it is a rare eyewitness evocation of the character of a majlis.
- (89) Hence the name "funeral house".
- (90) KHURI F, (1980) page 169.
- (91) STONE L, (1982). See Chapters 6 and 8 in particular.
- (92) Ruthven makes the point that such support can be construed by Westerners as corruption. RUTHVEN M. (1984) Chapter 4.
- (93) See WAKEFIELD (1966) Chapter 6 and HARRISON op cit page 89.
- (94) HEUDE W, (1819) page 25.
- (95) The Mission archive is referred to in Chapter 1. See ANTHONY T.A, (1984) which quotes Dr. Mylrea.
- (96) Op cit, page 314-27/ HARRISON P.

- (97) Quotations from Dr. Patterson taken from ANTHONY T.A. Op cit.
- (98) See GOVERNMENT OF BAHRAIN (1979, 1981).
- (99) The information and opinion here came from discussions with A.J.S. Herbert, and M. Hall of the Ministry of Works (unless stated otherwise). In some cases it resulted from my own direct observation.
- (100) LEWCOCK R. & FREETH Z. (1978) page 6.
- (101) Quoted by HAKIM B.S. (1986) page 147.
- (102) "Extracts from Brief Notes (etc) prepared in the year 1818" by Cap. R. Taylor Bombay Selections (XXIV) 1856 page 22.
- (103) HARRISON P. (1924) page 80.
- (104) RUMAIHI (1975) page 46.
- (105) RUMAIHI op cit pages 49 to 54.
- (106) BRUCKS G.B. (1829) "Memoir" from Bombay Selections (XXIV) 1856 page 567.
- (107) KHURI F. (1980) page 39.
- (108) BRUCKS G.B. op cit page 567.
- (109) SIMMEL G. (1950) page 409 on.
- (110) ARDALAN N. & BAKHTIAR (1973) page 10.
- (111) von GRUNEBAUM G. (1962) page 19.
- (112) TAFURI M. (1976) page 1.
- (113) POPE A.U. (1930) page 226.
- (114) Ibid page 225.

(115) ARDALAN page 10.

Fig. 2.1 Example of a Traditional Bahraini Bed
(found in the Fakroo House).

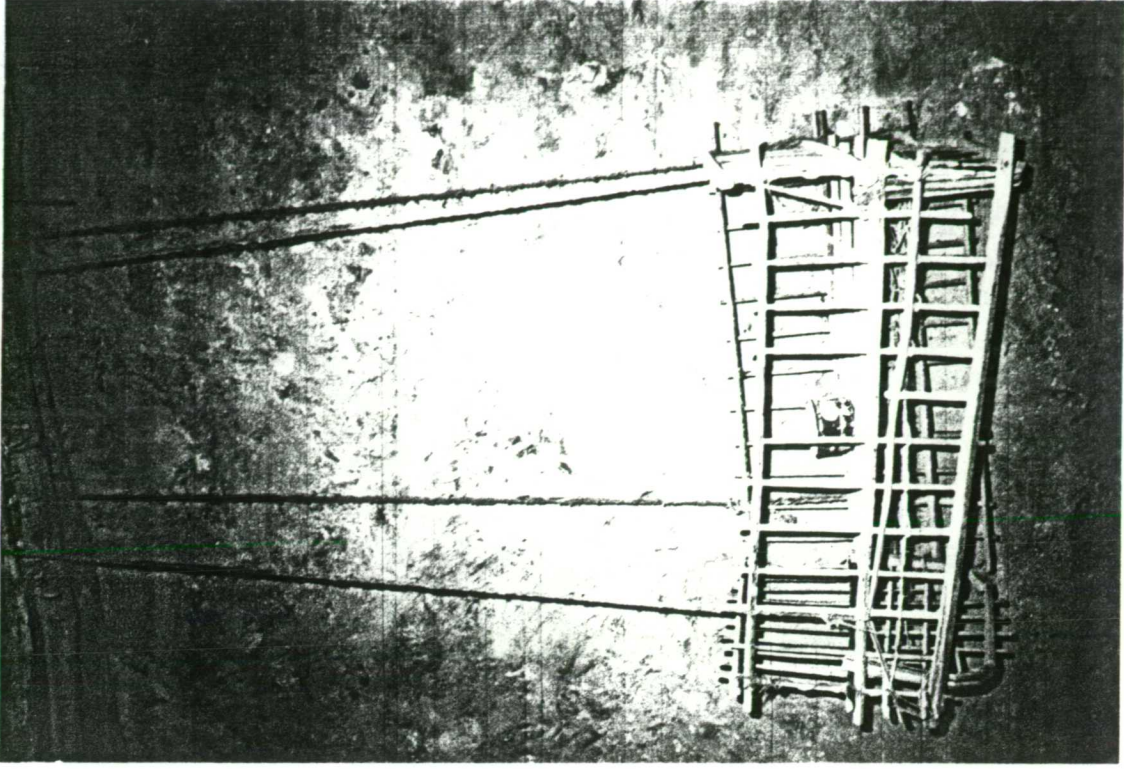


Fig. 2.3 Example of a Suspended Cot (found in the A. Mattar House).

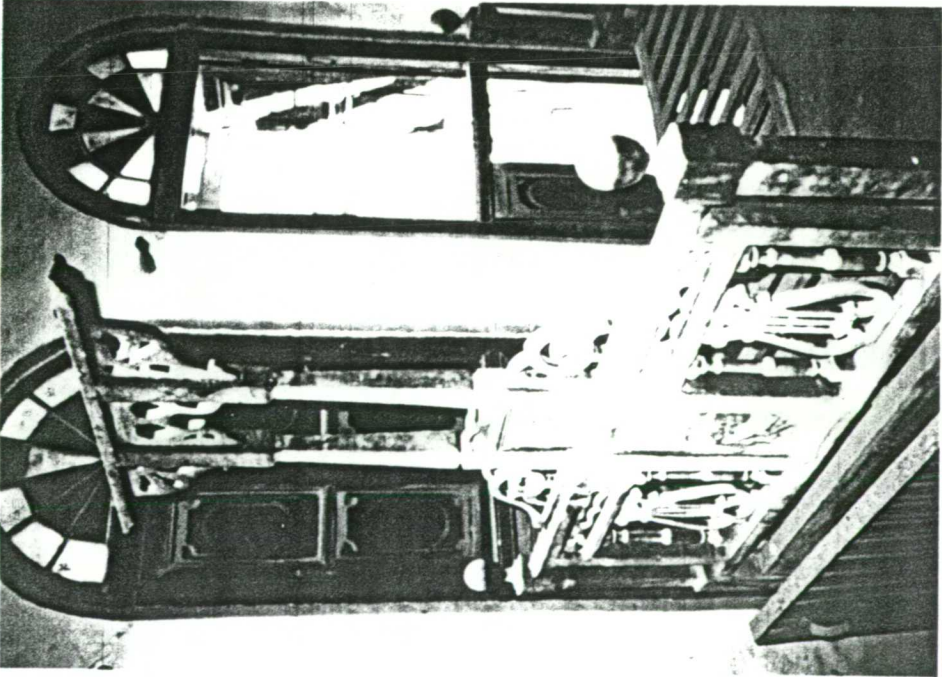
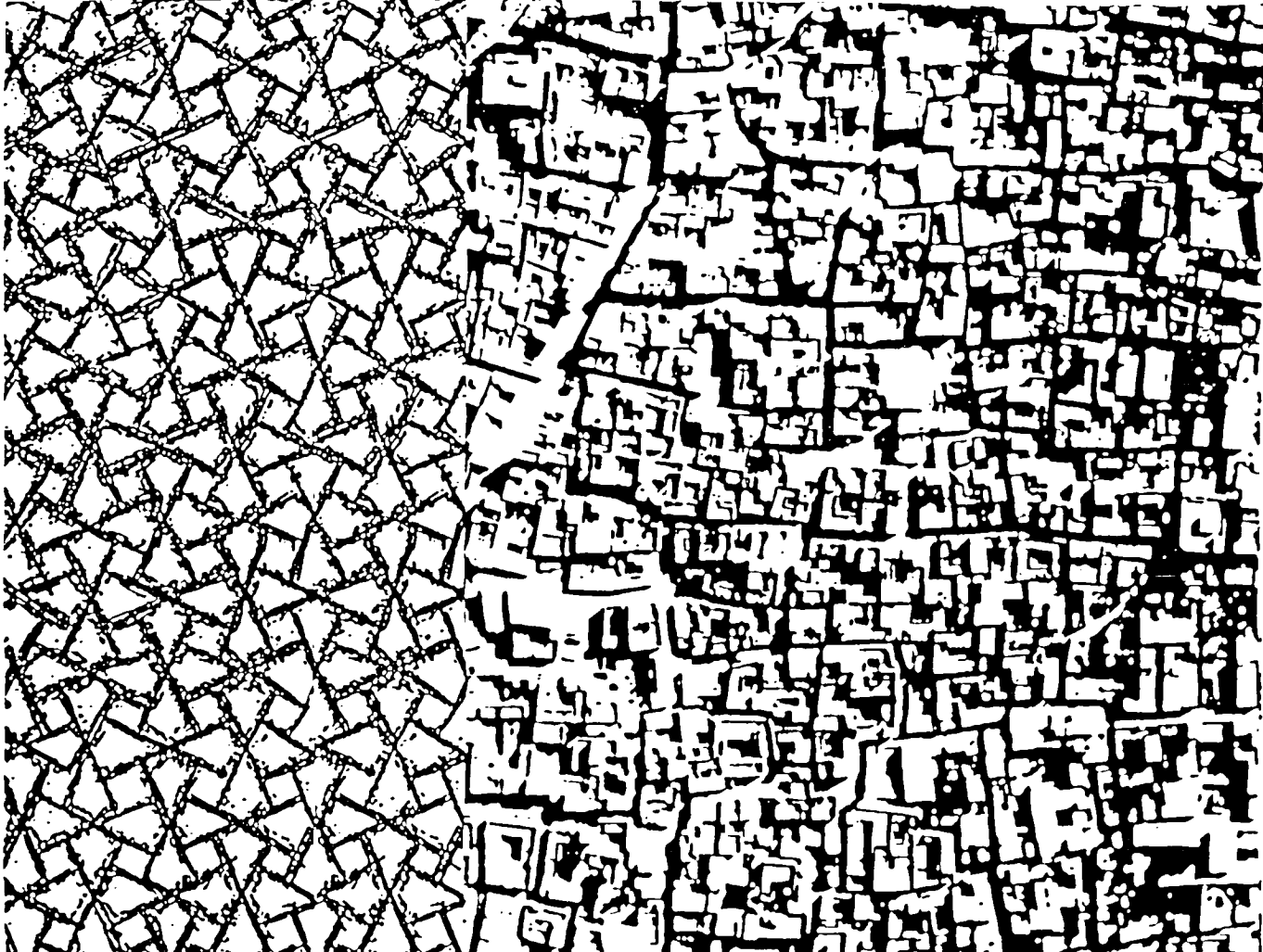


Fig. 2.2 Example of an Imported Bed (found in the A. Mattar House).

Chapter 3

THE URBAN STRUCTURE.



Chapter 3

THE URBAN STRUCTURE

1. Introduction

The purpose of this chapter is to describe and account for the urban structure - that is to say, the physical and social pattern of the town as a whole.

There are seven parts:

- (a) The Islamic City: General Observations
- (b) Historical Accounts of Al Muharraq
- (c) Historic Growth Process of Al Muharraq
- (d) Physical Description
- (e) Social Pattern
- (f) Hypothesis of Urban Structure
- (g) Conclusion: Form follows Family.

2. The Islamic City: General Observations.

2.1. Al Muharraq shares most generally recognised characteristics of the archetypal Islamic City, which I will now describe.

2.2. Montequin (1) suggests that the initial Arab urbanisers, being desert nomads, would find the rational - for example, orthogonal - plan type distasteful, due to an original lack of a strong material existence and the salient priority the bedu gives to the forces of instinct.

Ibn Khaldun (2) commented that the nomad raids houses for stones to put beneath his fire or for props for his tent - he is averse to any form of permanence in the environment. Ibn Khaldun's "theory of circulating elites", as Gellner calls it (3), also suggests that nomads invade cities when vice and luxury has weakened the city rulers only to be replaced by new nomadic invaders when they have likewise succumbed. The bedouin spirit is thus repeatedly reasserted in this way. This was, of course, precisely what happened when the al Khalifa invaded Bahrain, and a repeat of the cycle was prevented only by the treaties entered into with the British.

2.3. The archetypal Islamic City is a private religious city contrasted to the public secular city of our classical tradition - *polis* and *civitas*. The great importance which Islam attaches to privacy, home-life and "the internal side" (*batin*) conditions the morphology and physiognomy of the city. Sura XLIX is often quoted:

"The interior of your house is a sanctuary:

those who violate it by calling you while you are still there do not keep the respect they owe to the interpreter of heaven".

This religiously-determined trait dictated that the house be sealed from the public realm, and the courtyard form of ancient Middle Eastern practice - of the Hittites, most obviously - was appropriated and adapted for this end in the region of its original use. In parenthesis, I would add that other regions of the Islamic world appropriated local forms

common before Islam. For example, the tower house forms of Yemen resemble those shewn on the Stela of Axum.

There is also a strong desire to avoid ostentation, that is, an outward display of wealth. This applies not only to buildings. It is religiously-determined. For instance, the wearing of gold ornaments is forbidden. One can see the typical dress of the Bahraini lady as an example: a black abba hides a gorgeous, elaborate and brightly coloured dress underneath. Burckhardt suggests (4) that Islamic male dress is a generalised priestly costume, which hides the subjectively passionate aspect of the human body and emphasises its contrary spiritual aspect. Another factor restricting ostentation is the supposed equality of all Muslims before God: Islam is a highly egalitarian religion, and furthermore, it inculcates in the genuine believer a sense of the fragility of worldly position and wealth (although it must be stated that this often coexisted with a love of private luxury). God can take away what he has given. This motivated the modesty of outward facades of buildings: there is enrichment inside, and on facades facing internal courtyards, but street facades are hardly designed at all - they just do not have conscious exteriors. This modesty perhaps also leads to the camouflage of the separate dwelling in the collective form. It is generally impossible to identify the boundaries of a single dwelling whether from the street or from aerial photographs: the city form is collective: See figure 3.3. which is a "Bird Eye View" of the bin Khatir area. I have argued elsewhere that in this the city parallels the collective social consciousness - the individual is secure in his tribal identity and, (beyond that,) in his membership of the umma itself, the ultimate socio-religious collective of Islam (5). It is evident that the flux of this collective form facilitates and arises from the extension and the subdivision of property as generations pass: the notion of an open market in property hardly arose (until recently) in Bahrain in our western sense. The refined divisibility of property rights in the Islamic City has had an effect on urban form. The freehold is the dominant form of ownership in the modern city, and the indivisible nature of most ownerships is reflected in the separate identity or even formal separation of building structures. The Islamic

tradition, however, has allowed the separation of title from usufruct. Subdivision arises when children inherit after a death and series of subdivisions to tiny areas, create complex rights of access and lead to extreme intensification of land use. If subdivision is not pursued then joint ownership arises. I found in my work for the Ministry of Housing in Al Mubarraq that ten related joint owners for a house was quite common. They might live scattered over a wide area and rarely communicate - let alone agree on a course of action with regard to their property (This makes urban renewal very difficult). This helps create, it seems to me, the collective urban form to which I refer above. For one thing, it must be very hard to see a house as "real property" - as an object in itself to be traded on the open market, and indeed such a market hardly exists in the old town of Al Mubarraq even now.

2.4. I now pass to discuss public space - the street and the square. The street and square in Western cities are - and in some measure always have been - designed to:

- facilitate the efficient circulation of traffic (of whatever type);
- provide a setting for the appreciation of architectural ostentation, and
- provide occasion-adequate space for social intercourse and communal spectacle.

The Muslim city has not, in general, had streets or squares in this sense, and it may be less misleading to adopt another term, such as "thoroughfare", which is less loaded with cultural assumptions for us. It is an amazing fact that wheeled traffic was very uncommon until the motor car was introduced and so a thoroughfare need only be wide enough for donkeys.

The design of a house has always dominated the design of a street, whereas the reverse is the case in the Western city. The modern street is laid out for maximum efficiency as a piece of engineering, and the house forms accept this discipline. In more sophisticated environments, there is also a spatial concept or a townscape concept conceived by a designer (or a sequence of designers) to which the houses must likewise conform - or at least, there is a dialectical interplay between such external concepts and the internal thrust of the house layout itself. In the Islamic city, however, such external concepts are

entirely absent, so the design process goes from inside to outside. The public realm is the accidental by-product of countless individual private house-building decisions - hence the characteristic tortuous, narrow form of thoroughfares. There are sudden shifts of alignment for no apparent reason, and the whole effect is without obvious pattern or hierarchy. As one looks over the city, the flux of the form appears to be uninterrupted by the thoroughfares: they have no form-generating role.

2.5. Another factor, (which I have already discussed in Chapter 2) is the absence from Shari'a law of the concept of a "legal personality" which would recognise the public interest as a force in defending proper public works - streets in this case. However useful and inspiring the idea of awqaf might be, it could hardly create and maintain streets as they are essentially joint - not personal - enterprises. Thus one finds that even where a wide street or public place may have existed (at the insistence of a zealous muhtasib) (6) it quite soon gets invaded by adjacent owners who will seize the land for their own uses up to a point at which minimum width necessary for movement remains. And why not? After all, it would be said that nobody owns it. The legal restraint on such behaviour, as Janet Abu Lughod makes clear (7), is acceptance or opposition by proximate neighbours - in other words, those whose personal interests would be directly and drastically affected - that much is contained in Islamic law. Wider public interest had no channel for articulation.

2.6. The modern city is largely a product of state authority or at least a centralised technocratic and professional guidance system. Form exists first on the drawing board - as an Olympian rational idea - and is then imposed as an external discipline upon the raw energy of the development process. The historic Islamic city, by contrast, arose with no such external guidance. The form is not accidental in the true sense, but comprised countless private actions governed by rules of neighbourly behaviour; by the local construction tradition and by the inherent physical limits of each situation as it confronted (increment by increment) each individual involved. The scope of such limitations on action, whilst universal in principle, is localised in application, rather

like perhaps the rules governing the growth of - say - coral, lichen or crystals: each increment of growth obeys rules in responding to the situation existing at that precise time. Each increment alters the constraints on the next increment - adjacent structures, ownership boundaries, rights of way and support etcetera. In the modern city, the constraints by contrast are to a great extent aspects of the pre-ordained rational-abstract plan (though in practice by no means entirely). An increment - such as a house - does not accommodate itself to the adjacent houses directly, but rather to the plan, which mediates their relationship.

2.7. It is clear that the absence of structure to the Islamic city does not arise from any lack of intellectual resources. There may indeed have been such a lack in small towns such as Muharraq, but if one looks at the parent civilisation, even in periods of relative decline (such as the Qajar period,) then one sees that the geometric decoration of surfaces, perfection of vaulting and so forth equal and surpass anything produced elsewhere. Equally, there are a number of examples of building complexes lacking structure or disregarding inherent formal possibilities in which financial, legal or other material factors could never have played a role (such as Topkapi Sarayi or Fatehpur Sikri). Many writers have spoken of the lack of evident focus, the continuous merging of spaces without direction or centre within building complexes which were subject to the control of one architect and patron. Grube writes of the Alhambra:

"It is not given a centre or focus to emphasise power. Instead it is a maze of rooms and courtyards, passages and corridors, of water basins and canals ... we are truly aware of being in the presence of an architecture that is distinctly and unmistakably different ... It's spirit is clearly "readable" ... It is that of a metaphysical concept of the world rooted in the religion that created it - Islam."

(8)

It would seem then that Islamic culture had an inclination to dematerialise by deconstructing plan forms (as well as expression of elevations - a point I return to in

Chapter 4) with the intention, perhaps, of causing the mind of the beholder to return constantly to a plane of abstraction.

If this is indeed true of major building complexes in which design control and patronage were in the hands of intellectually and politically strong men, then it must be (at least) equally true of layout at the scale of the city. It is hard to escape the conclusion that for the culture as a whole unstructured city planning was a deliberate statement. It is possible that - given this predisposition - it was never seen as necessary to call the legal or administrative infrastructure into existence which would permit city planning in our sense.

2.8. Finally, I want to quote Janet Abu Lughod who makes an unusual but very important practical point about the Islamic city (9).

"Planning and ownership began with the ceding of urban space to supra-individual entities ... These supra-individual groups may have been related by kinship, descent, common origin or function, but in any event they were assigned space within the evolving urban pattern on which to set out their own 'communal settlement': the details of the arrangement were left to them."

This characteristic has probably slipped away (with modernisation) in most Islamic towns long ago, but in Al Muharraq precisely this picture obtained in the very recent past and is still, indeed, to a limited extent found today. This indicates a social basis to urban structure, a point I return to examine in detail as regards Muharraq in Section 6 (below). First, however, it will be convenient to deal with historic documentation, the growth process and physical form of Muharraq town.

3. Historic Descriptions of Muharraq

There seem to be very few architectural descriptions of Muharraq from past decades or centuries. Nabhani visited it during the 1920s and makes some comments. Also Rihani is worth reading to get a little of the atmosphere. De Rivoyre unfortunately did not visit Bahrain but he was in the habit of observing buildings. Other writers (such as Wellsted or Heude) have nothing to say.

The one traveller who gives us a few visual descriptions of Muharraq is Palgrave, and for this reason I will quote him fully (10).

"The town of Moharrek, situated on the southern side of the islet to which it gives its name, lies like a long white strip on the shore of the channel which separates it from Menamah, whose buildings occupy a corresponding position on the margin of the larger island. Moharrek is far the prettier of the two to the eye; its white houses set off by darker palm huts (for the extreme mildness of the climate renders this mode of habitation very common and almost desirable,) the large low palaces of the Khaleefah family much resembling the better sort of bungalows at Malabar Point or Breach-Candy, two or three imposing forts close to the sea shore, a long coast battery good for show at a certain distance; all these form an ensemble worthy of a sketch; if not a picture, I much regretted that evening my want of drawing implements..."

And well might we echo his regrets one hundred and twenty years later. He continues:

"As a whole Moharrek is curious and worth seeing ... from its Perso-Arabic appearance, its small snug houses, its paved market place, and its high raised benches everywhere along the walls, announcing an out-of-doors life; besides it owns a degree of close-packing and agglomeration different from the straggling style of most Arab cities". (11)

The "high raised benches" are gone and I am not sure where the market place was. The "coast battery" is interesting: it is not shown on historic maps, but fortifications to the

north (i.e. a land defence) are shewn on the Brucks and Rogers Map of 1825. I present this map in the next section. Could Palgrave have got confused on this point? Captain Mignan (travelling in the 1830s - about thirty years earlier than Palgrave) also refers to defensive walls and towers, however:

"The town of Bahrain is walled and flanked by a few towers, after the Arabian style of building, and seated near the shore. A small suburb surrounds it, inhabited by the poorer classes and the bank divers." (12)

4. Historic Growth Process

4.1. Al Muharraq has grown by expansion on land northwards and by reclamation from the sea. Its present size and shape are very different from the historic position. One can establish this by:

- a) inspection on the ground to ascertain the general age of the fabric of the buildings;
- b) by studying form and width of streets, which are straighter and wider after the establishment of the Municipality;
- c) by reference to old maps and aerial photographs.

4.2. With the aid of the Map Collections of the Ministry of Housing, Government of Bahrain; the India Office Records and Library and the Ministry of Defence, Hydrographic Section, Taunton, Somerset, I have collected copies of several interesting maps which throw some light upon the historic growth process. Extracts from these maps are given in figure 3.4. under the reference letters given in the following list.

- A. Seventeenth Century Portuguese map of Bahrain shewing Arad Fort, (right) and the so-called "Portuguese Fort" (Qalaat-al-Bahrain) near Karranah village on the main island, (left).
- B. Survey Map of Bahrain dated 1825 made by the Hon. East India Co. Marine Service, Lieutenants Brucks and Rogers. This map shows a large ruined town at Jaww (Jau) but does not name it. It shows fortifications to the north of Muharraq. The island is a different shape. Zimma Bay penetrates further north than on later maps, and it seems that Bu Maher islet is connected to the main island (as are the other islets south of Arad).
- C. Sketch map of Muharraq fort (i.e. Abu Maher fort) made by Lieutenant Lovell during the 1868 punitive bombardment, It may show the coast at low tide - Bu Maher islet is linked to Muharraq island and there is no water in Muharraq

Bay. Bu Maher is shewn as having a small collection of "Arab Huts", that is, barastis.

D. Admiralty chart of Bahrain Harbour (by Commander Constable and Lieutenant Whish I.N., sailing in H.M.S. Mahi I.N. 1860 Corrected 1875). This shews Bu Maher fort connected to Bu Maher islet in an L-shape. The islet is very narrow and no structures are shewn. The chart incorporates an elevation of the island from the north as an aid to pilots, but this is not of great value for present purposes. The paper presented by Whish to the Bombay Geographical Society in 1860 (13) has a very similar map. Arad village is shewn as a separate island.

E. Admiralty Chart No. 3380 (dated 1901-2) of Bahrain Harbour (made by Commander T.H. Heming of R.I.M.S. Investigator). This is the first map which makes a reasonable attempt to shew the pattern of main streets.

F. Map of Bahrain dated January 1933 made by Naval Staff, Intelligence Division. This is rather sketchy. Abu Maher appears to have grown but is still separated from the main town. A landing ground is shewn for the first time.

G. Map of Bahrain by British Military Survey, probably about 1940. There is a major northwards growth, and Bu Maher is now connected at its western end to the main island. The first causeway is shewn.

H. Map of Muharraq Town by British Military Survey prepared directly from the 1951 Aerial Photographs. The coastal road to the airport is shewn and further land is reclaimed from Muharraq Bay. Note that streets roofed over on the aerial photographs are here not shewn as streets at all, (as it was not a ground survey).

These maps are within the historical timescale of this thesis, but it may be of interest to complete the picture (so to speak) by relating the historic form to the contemporary (1985) situation. There is a ground survey map produced by the Ministry of Defence Directorate of Survey (Feltham) Series K962; Sheet: Jazirat al Muharraq - 3; Edition 3 - G.S.G.S. which

shews Muharraq Town in 1969. There is also the State of Bahrain Survey maps prepared by Fairay Surveys Ltd (1978).

The Master Plan of Muharraq which distinguished existing buildings, roads etc. was prepared by the Ministry of Housing Physical Planning Directorate, (1985) version, and is shewn in Chapter 1 (fig. 1.2.). The 1969 map resembles the 1951 map except for growth in the north-east corner of the town.

4.3. From these maps it is possible to construct the approximate boundaries of the town at various periods in the past, and this is shewn in figure 3.5. This resembles the "growth rings" of a tree. The area of each growth ring is also tabulated. Looking at the historic maps, one is struck by the fluidity of the coastline. Large areas of reef were exposed at high tide, and this may have sometimes made the line of the coast a little ambiguous. These shallows provided the basis for the gradual process of land reclamation which allowed the town to grow, though not before it had become "close-packed", as W.G. Paigrave pointed out (14). Examining figure 3.5. one is struck by the tendency of certain street-lines to reflect the growth process: Wali-al-Ahd Road, Al Khalifa Road, Road No. 3, the main Suq routes are all cases in point. The only explanation, I think, is that these roads represented routes along shorelines and fortifications taken to by-pass the dense narrow alleys of the old town. When new land was reclaimed from the sea, the beach was permanently reserved as a road.

5. Physical Description

5.1. General Layout

5.1.1. The Al Khalifa family built their own palaces and the two major Friday mosques on the highest ground in the centre of the urban area. Lalande and Hardy-Guilbert (15) quote Sh. Khalifa ibn Ahmed al-Nabhan:

"The first thing that engages the eye is the splendid arrangement and position of the palaces of the nobles. The palace of his excellency the Ruler (Sh. Isa) stands in the middle, while all around are the palaces of his noble sons, so that it seems to be a moon among the stars."

If one discounts for the flattery, the image is apt - particularly so a century ago when most of the surrounding buildings would have been humble barastis. The reasons for this location may include symbolic/psychological reasons, military reasons and climatic reasons. It accords with a long-standing Islamic urban tradition: the rulers palace was the centre of administration, political patronage and upper class social life - a magnet for many people, as the account of a visit there in the 1920s by Amin Rihani (16) makes clear. The symbolism of the ruling power being located on the highest and most central land is too obvious to be laboured. From a military standpoint it may have been more defensible - fighting through narrow alleyways would give a better chance of repelling marauders (who might approach from the sea) than a coastal site would. Finally, the slight elevation might be sufficient to reduce humidity and increase wind speed, which could add to the comfort of the occupants.

I have identified the location of Friday mosques and palaces on figure 3.6. The Friday mosques were located centrally not only to be close to their founders houses, but mainly to focus the large community which worships there each week.

5.1.2. The suq is a long thin shape along the (former) western coast - that is, facing Al Manama (17). It arose on the beach for three reasons: other suitable land was taken up; it was a major route linking the outlying areas to the Manama ferry boats (bypassing the

alleys of the town) and ships could unload there. The attenuated form arose because it was easier to extend along the coast before expanding by reclamation into the sea.

5.1.3. One should also mention Abu Maher Fort, built around 1840, which was significant for a period until the Pax Britannica was established in 1869. It was built close to an important fresh-water spring and may perhaps have been intended to defend it. The two invasions of the early 1840s by the usurper Mohammed bin Khalifa bin Salman al Khalifa and the subsequent raiding by the ejected Ruler's partisans, was followed successively by a Qatari invasion, a new invasion by Mohammed and his subsequent deposition: all in all, a turbulent time during which the location and access to the fort (particularly from the Al Khalifa firaj) must have been very important. Access to the spring would also have been very important.

5.1.4. In identifying the most important routes, some caution is needed. The modern pattern is most deceptive because several new links have been added in the last thirty or forty years which obscure the significance of the historic pattern. Sh. Hamed Road and Sh. Isa Road were widened 1983/85 along their entire length. Earlier than this smaller schemes were undertaken. Sh. Hamad Road had been widened around 1930, as the Government Report (written by Belgrave) for that period indicates. Sh. Hamad Road was terminated originally by the northern courtyard of Sh. Hamed house. This was partly demolished around 1960 and the road was extended to meet Sh. Isa Road. The original layout gave a lot of importance to Sh. Muhammed Road as a north-south link, but after this road extension scheme, Sh. Isa Road became far more important as a north-south link. Sh. Muhammed Road is now read as an unimportant alleyway. Sh. Isa and Sh. Muhammed Roads were crucial links between the villages to the north, (which contained summer palaces of the nobility,) the palaces of the Al Khalifa firaj in the core, and Abu Maher fort to the south. Sh. Hamad Road and Sh. Abdullah Road linked the central palaces to the coast and hence the ferries to Al Manama. There is also a ring road, mainly along former beaches (Al Khalifa Road/Sh. Abdullah bin Mohammed Road/Bu Maher Road/Road 1123) but also Wali-al-Ahd Road, which was a route from Dair and Samahij villages to the suq and the Manama ferry along the northern limit of the

built up area as it was in the 1920s: see figure 3.6. for an analytical diagram of this pattern.

5.1.5. The layout of alleys appears to have an orientation underlying its complicated higgledy-piggledy character. This is conditioned by the qibla i.e. common orientation of mosques to Mecca. There are so many mosques that their orientation has an impact on the orientation of the close-packed courtyard house-forms between them (given the roughly rectangular house form) and by the same token, upon the direction of alleys. One can say, perhaps, that the common orientation in space with which the qibla endows the entire Moslem world, and the sense of unity which arises from this, are here extended to the entire town.

Another factor affecting street orientation appears to be the orientation of the coastline. Alleys are generally approximately at right angles to the original coast, which probably minimised the walk distance from boat to house. Also it would be easier to build along the steep incline (parallel to the original coast) than at an angle to it. The obvious tendency to zig-zag streets also slows wind speed and enhances shading from the sun, but I doubt this was done deliberately and consciously in order to achieve such a result.

5.1.6. The Airport Road (Sh. Salman Road) was built at British instigation in the 1940s to facilitate the link between the airfield and the Manama causeway. Streets in the 1950 to 1975 period are noteworthy for their naive orthogonal grid and unreasonably small blocks. From 1925 to 1950 north of Walli-al-Ahd Road - streets are wider and straighter than previously, but there was apparently insufficient technical capability to produce overall plans, set them out on the ground and enforce compliance, so that the result is still informal.

The Muharraq Municipality was established in 1927 but it achieved virtually nothing as regards town planning. Its role in street-widening was significant and various public-health functions were very useful. Concern about town-planning surfaced after World War Two. The Political Agent foresaw that a sudden building boom was likely to occur after the war and believed the government was unprepared. He called for regulations to be created,

and these were modelled on the Quetta Municipal Regulations (18). The idea was to use a good example already worked out in India as a basis. It is interesting to see how the concern with town planning was at the front of peoples minds in the mid-1940s and how once again the B.P.A. was seizing initiative several steps ahead of the government and its Advisor.

After 1970, a different approach to layout prevails. The key planner in this period has been a Bangladeshi, Mohammed Nur un Nabi, who worked first for the Municipality and afterwards for the Ministry of Housing. He trained at Liverpool University after a first degree in Engineering. He worked for Runcorn Development Corporation. See figure 3.7. which compares examples of the different types of layout prevalent in the various historical periods.

5.1.7. The observations contained in this section seem inadequate, however, to account fully for the character of the urban structure, because they are essentially physical analyses of what is fundamentally, perhaps, a social phenomenon. In the next section, I therefore present a further analysis based upon sociological principles.

6. The Social Pattern

6.1. I have already quoted Janet Abu-Lughod's observations about the gifting of land to groups such as kinship groups, and the further layout within such zones being left entirely to the group concerned. I was struck by her account, which I read shortly after I left Bahrain, because it describes the situation in Al Muharraq as it had been described to me. It would appear from her researches that this is typical of most Islamic cities.

6.2. At this time, it is popularly acknowledged that Muharraq is divided into perhaps nineteen zones, each being named for a major tribal grouping, except for Al Kazinu, a loan word based on the Casino, a public garden, and Steeshan which is also a loan word, the arabised name for Station - that is, the northern bus station before the Airport Road and Causeway allowed public transport to get around the town. A tribal area (or firaj) is only very loosely defined on the ground. Prior to the National Addressing Project, the Building Permission records gave addresses simply as the tribal areas (19). I attempted to use these records to ascertain where investment had been going in recent years: I found it impossible because the overlap of perceived boundaries was so great. Neighbouring houses would often be described as being in different tribal areas. In recent years property has been acquired beyond actual original boundaries, but perceived boundaries have been extended to keep pace, so that one can only now represent them in the vaguest way. However, by talking to old people it is possible to reconstruct historic boundaries with some precision and I did this for Halat Bu Maher - see below. It is important to realise, however, that there was a degree of evolution in the historic boundaries before the modern era, (that is before 1950). Tribes would divide into groups descended from notable men and would be re-named accordingly and related families or client families would arrive from other villages and towns, setting up a small area of their own. Terminology therefore evolved over time.

6.3. One can present a generalised picture of a leading tribe having lesser, client families occupying space around them so as to form a cluster. The tribal system was described in the last chapter. The leading tribes still remembered and recognised are listed here, and the land they occupied is shown on figure 3.8.

(a) Original Core

Al Jalahma
Al Qasasib
Al Mu'awdah and Al Bana'in
Al Bin Ali As Saghah
Al Bukhamis
Al bin Shiddah and Al Mahmud
Al Hayayik
Al Kharu
Al bin Khatir
Al Shaikh Abdullah (al Khalifa)
Al Shaikh Hamad (al Khalifa)

(b) Halat Abu Maher

Al Jalahmah
Bin Mughala also known as Al Bukuwara

(c) Extension Areas

Bin Hindi also known as Al Mananah
Al Mirri
Al Amamrah
Al Ghamrah
Al Zayayinah

Note that the extension areas also include extensions of the original areas of Al Bukhamis, Al bin Ali and Al Mu'awdah. Note also that the paired areas are so interpenetrated as to be indistinguishable.

6.4. Taki (20) refers to Al Jalahma, Al bin Ali, Al Musallam and Al Bukwara as being Utub families - that is, Sunni and followers of the Khalifa. Al Tajir (21) says the Bukwara are Huwalah Arabs, so there is some disagreement perhaps. (But see also Hillal Salem's opinion in paragraph 6.6. below on this question). Ibn Abbas in 1873 mentions Al Mananah (350 persons, pearl divers, shipowners and traders), Al Jalahma (80 persons, shipowners and traders), Al Hayayik (Shia, 80 persons, sail-makers), and Al Bukwara (50 persons) (22). The other family names cited by these writers are lost. We can assume the pearl divers mentioned above are Sunni because Rumaihi says that job was largely monopolised by Sunni. Some of the bin Ali tribe became goldsmiths, although many moved to Manama early this century. In Muharraq, they and others had set up the Goldsmiths Quarter (i.e. As Saghah firaj).

6.5. Two other observations can be readily made. Firstly, all the Shia matams (23) lie east of a north-south line parallel to (but say 50 metres east of) Sh. Isa Road. There are twelve matams in that zone, and seventeen mosques. West of that line (and excluding the area north of Wali-al-Ahd Road as being too recent) there are 22 mosques and no matams at all. On Abu Maher there are three mosques and no matams. (I am counting daily and Friday mosques together). For locations, refer to figure 3.9. Secondly, one can count the number of barastis in each area (as defined above) from the 1951 aerial photograph and take this as a very approximate indication of the erstwhile poverty of the area and the eponymous tribe - at least in relative terms. The figures are presented (with firaj areas in hectares) in figure 3.10. I surveyed also the incidence of existing historical houses built of stone in each firaj and the results are likewise plotted. A pattern of sorts is clear: barastis are generally concentrated on the east-facing side of the peninsula, where very few really decent stone houses exist. These are concentrated on the west side. Clearly barasti and stone dwellings - rich and poor people - were mixed together to a great extent. This analysis shows that there was nonetheless a poor quarter and that the Shia were concentrated in it. Their Waqf Director told me that there are no Shia waqf endowments in the old town.

6.6. As a case study I tried to establish in greater depth the pattern of family areas on Halat Abu Maher prior to 1930. Several people gave me information, but most came from Hillal Salem, a former pearl diver (24). There were nine families, which I list below:

- (a) Jalahma
They owned ships and lent money to pearl divers. Earlier they had been pirates (25). They had about 40 houses. They originally came from Dammam.
- (b) Musallam
They were ship-owners and pearl-traders. They had about 30 houses and came originally from Iran. One branch of the family is in Al Hidd.
- (c) Bukuwara (or al Mughla)
They were ship-owners and pearl-traders, originally from Ruwais in Qatar.
- (d) Alyham
They are another branch of the Bukuwara and together they had about 60 houses.
- (e) Al Atawi
They were fishermen and watercarriers (from the three springs on Bu Maher to houses). They were originally Bahraini.
- (f) Al bin Halul
They were divers and fishermen originally from Bahrain.
- (g) Al Mihayza
They were a branch of the same family as the bin Halul.
- (h) Al bin Aqah
They were divers and fishermen originally from Bahrain.
- (i) Al Jalalif
They were shipbuilders and sailors originally from Bahrain.

The two main upper-class families were the Jalahma and the Bukuwara, who would associate with the Ruler, and intermarry with the Khalifa. The Musallam were also an upper class family who intermarried with the Jalahma and accepted their leadership and judgement. The Alyham and Bukuwara were the same family as were the Al Mihayza and Al bin Halul. The

five lower class families, (Al Atawi, Al bin Aqah, al Jalalif, Al Mihayza and Al bin Halul) were tributary to the Bukuwara, who would represent their interests to the Ruler. This structure can be summarised in a hierarchical diagram - see figure 3.12.

I turn now to the spatial pattern. The firaj boundaries and the original shore-line are shown in figure 3.13. The spatial pattern parallels the social pattern in the sense that socially related families cluster together: the Jalahma group west of Quarantine Road (also known as Bu Maher Road) and the Bukuwara group east of it. The leading families are on the western half of the island. Hillal Salem thought that about 50 houses (at the most) were stone built and the remainder were barastis. The stone houses were in the Jalahma/Musallam/Bukuwara area. This situation lasted until the mid 1930s, when the impact of the oil industry helped many families upgrade their houses.

I now consider the relation of the firaj boundaries to the street pattern. It would seem that the boundaries generally follow the major streets. This general statement needs to be qualified, however. Road No. 1630 was the shore-line before the land reclamation of the 1925-50 period took place. When this occurred, the families extended across this road to occupy the new land. For this reason the road is not a firaj boundary although it is comparatively wide. I must admit, however that Halat Abu Maher is a very small area to base a general hypothesis upon. I was unfortunately unable to undertake a larger study through lack of time. Also, of course, it is very hard to arrange enough interviews with suitable people.

6.7. To complete the Bu Maher picture, and somewhat in parenthesis, I will mention the mosques. The Friday mosque was built by Isa bin Shaheen of the Bukuwara. He died in 1924 aged 50, and led the tribe jointly with Da'an bin Shaheen. The smaller mosque at the east end of the island was built by Ali bin Alyham at the same time - that is around 1920.

7. An Hypothesis of Urban Structure

7.1. In this section I will attempt an hypothesis to explain the structure as so far described. First a few background notes will be in order. Prior to 1783 the land was held by the Baharna (26). Thereafter land was regarded as the property of the ruling family and its allies: land seizure occurred frequently until the reforms of the 1920s and 1930s. Khuri writes:

"When they first invaded Bahrain, Al Khalifa obviously did not own land there; it was only gradually transferred to them. Oral tradition says they initially confiscated the land of those who opposed them and granted land to those who supported them. A number of Shia merchants who did not oppose the conquest were permitted to retain their land" (27)

This reminds one of the aftermath of the Norman Conquest in eleventh and twelfth century England, or perhaps the colonisation of America by the white man. Rumihi (28) chronicles cases which appear no better than gangsterism, but we must remember that this was part of the Arabian system since time immemorial, as Ibn Khaldun's theory of circulating elites would suggest. Each invasion from the desert would bring the values of the nomad *razzia* into the urban setting. Many Shia fled to other countries. In 1937 all foreign-owned land was confiscated - this being directed mainly against big Persian landlords. The point is that the Ruler was able to redistribute land on a large scale by gift. It seems highly likely that the spatial distribution of families was made according to political criteria. I found this still goes on: the Minister of Housing (when I worked in the Ministry) would go through all new allocations of land personally - a burdensome quantity of detail for a Cabinet Minister - and the general view was that he was ensuring the political acceptability of the spatial pattern of families. Certainly the historic pattern looks as if it evolved in this way: to cite one case, the Al bin Khatir firaj is next to Sh. Abdullah firaj and the two families were very close. (The gifting of land by Sh. Isa was not based on records so that the same land was often gifted twice. Such mistakes happened until

very recently on occasion, but the process of improvements began with the foundation of the Land Department in 1927 to survey and register land and issue title deeds.) Also as regards the countryside, allocation and reallocation of estates was used as a political tool or weapon:

"The Ruler of Bahrain granted the estates as "benefices" to Al Khalifa Sheikhs without giving them the authority of inheritance. The Ruler reallocated the estate to another landlord depending on the rising power balance." (29)

To sum up, I think one must see the historic pattern as an outcome of an earlier seizure/gifting process in which land (or, more generally, space) was treated as a political commodity and manipulated accordingly. This may have been for reasons of security, power-brokering or to endow prestige.

7.2. I have observed that there was no market in property in our sense. The feeling is that a family home is somehow linked to ones identity and origins, so that many people have a sentimental attachment which prevents them selling - even though the home may be abandoned long before. The property is not yet fully reified as a commodity (devoid of moral investment), suitable for trading on an open market. The alienation between space and personal identity is not wholly broken even now.

7.3. One could hypothesize that tribal areas were originally bounded by (i.e. separated by) major roads. That would seem logical. However, it is possible that certain streets already existed as well-worn routes when such land grants were made. In this case, two blocks of land would be defined on either side of the road. Also, as the town grew, tribes would expand across the new roads which ran along the earlier coast-line. (In this way, Al Bukhamis firaj crosses Al Khalifa Road.) Finally, as the years went by, property would change hands at the margin of areas and certain streets would be widened for traffic thus obscuring the earlier pattern. This hypothesis would be very difficult -perhaps impossible - to test, and for the present I leave it as a mere hypothesis. However, I may add that in discussing the position of firaj boundaries with several people, it was said very often that the boundary ran along a particular major street. Within each tribal area the tribe

itself would create plots for its constituent families and secondary roads would immediately arise to give access to these. Over the generations however each plot would be subdivided many times according to Sharia Law. Until the last twenty five years such subdivisions were actually occupied. Each such division would entail the creation of an independent access. Khalid Engineer told me that during most of this century a committee from the Municipality would visit a property to agree changes in layout and create any new lanes which were needed to access such subdivisions. It is usually obvious on the ground when a lane has arisen in this way. They are mostly culs-de-sac, but often a through lane would be more convenient. The cul-de-sac is celebrated by some authors as a particularly valuable and interesting innovation of the Islamic city - al Darb - that is, a semi-private street which allows movement between relatives houses without emergence into a wholly public realm (30). As barrastis at low densities were gradually converted to stone structures at high densities, the diagonal paths would become inconvenient. Orthogonal building layouts would be better accommodated by zig-zag paths about a diagonal line than by a diagonal path itself. Land would be exchanged by informal agreement to achieve this.

7.4. To sum up, I think one can see that the historic pattern of roads fills the function of defining human territory as well as permitting movement. The territory relates to tribal, sub-tribal, family and household origin and so the road pattern models the identity of the man. There seems to be no engineering pattern, no physical or material hierarchy. The pattern is social in nature, and so it is harder to analyse by simple inspection - particularly when the social pattern has more or less passed away.

8. Conclusion: Form follows family

The usual western paradigms used to grasp Western cities are not used here, and that is doubtless why such layouts as this one seem to us incomprehensible. The "townscape" and "city image" paradigms are not applicable, and nor is any engineering thinking useful. I found this particularly fascinating as I have generally used a version of the townscape and city imagery method in my various urban design projects. But applied to Al Muharrag it fails to yield anything. Beyond a few basic "desire-lines" linking important destinations, there are no such aesthetic, perceptual or technological patterns. Form follows family. The physical form arises automatically from the social process with no apparent intervening ideation, whether unintentionally, as S.M. Stern implies, (by arguing that City government hardly exists,) or intentionally, as Burckhardt thinks (31). The urban structure resembles a cloud or the sea, its organisation immanent (and even ineffable?).

CHAPTER THREE - FOOTNOTES

- (1) de MONTEQUIN F-A (1983) page 46.
- (2) See IBN KHALDUN; al Muqaddimah (translated by F. Rosenthal) 1958.
- (3) GELLNER E. (1968).
- (4) BURCKHARDT T. (1967) page 114.
- (5) This point was dealt with at greater length in the previous Chapter.
- (6) A muhtasib was a public official with a wide range of responsibilities for enforcing regulations.
- (7) ABU LUGHOD J. (1983) page 67.
- (8) GRUBE E. (1978) page 14.
- (9) ABU-LUGHOD J. page 65 op. cit.
- (10) PALGRAVE W.G. (1865) page 204. He is approaching the town by boat from Manama.
- (11) Ibid page 206.
- (12) MIGNAN Captain R (1839) Volume 2 page 211
- (13) WHISH Lieut. R.W. (1860) Article on Bahrain includes a map of Muharraq
- (14) PALGRAVE W.G. op. cit. page 206.
- (15) HARDY-GUILBERT & LALANDE (1981) page 91.
- (16) RIHANI A. (1930) Part Four.
- (17) I have discussed the circumstances of its growth fully in Chapter 8.

- (18) See File 10R/15/2/1309 India Office Records; for example letter from Deputy Secretary, Gov. of India, to P.A. Bahrain on 27 April 1946.
- (19) The Addressing Project was completed in 1980. The Building Permit records are held by the Municipality but were not held in any adequate filing system.
- (20) Cited by RUMAIHI M. (1976) page 34.
- (21) AL TAJIR M. (1982) pages 25 and 37.
- (22) Cited by AL TAJIR M. (1982) op. cit. page 25.
- (23) A matam is a Shia social centre and focus for certain rituals particularly at Ashura. See Chapter 2 for a fuller discussion.
- (24) See Chapter 1 for list of informants.
- (25) Jaber al Jalahma had been an ally of the Khalifa but for a time the families became enemies. Jaber and Rahma bin Jaber figure extensively in British records as regards anti-piracy actions and there are many stirring stories.
- (26) According to BELGRAVE J.H.D. (1952).
- (27) KHURI F. (1980) page 41.
- (28) RUMAIHI M.G. op. cit.
- (29) KHURI F. (1980) page 44.
- (30) See for example HAKIM B.S. (1986) page 26 or de MONTEQUIN F.A. (1983) pages 50 and 58.
- (31) STERN S.M. (1970) and BURCKHARDT T. (1976).

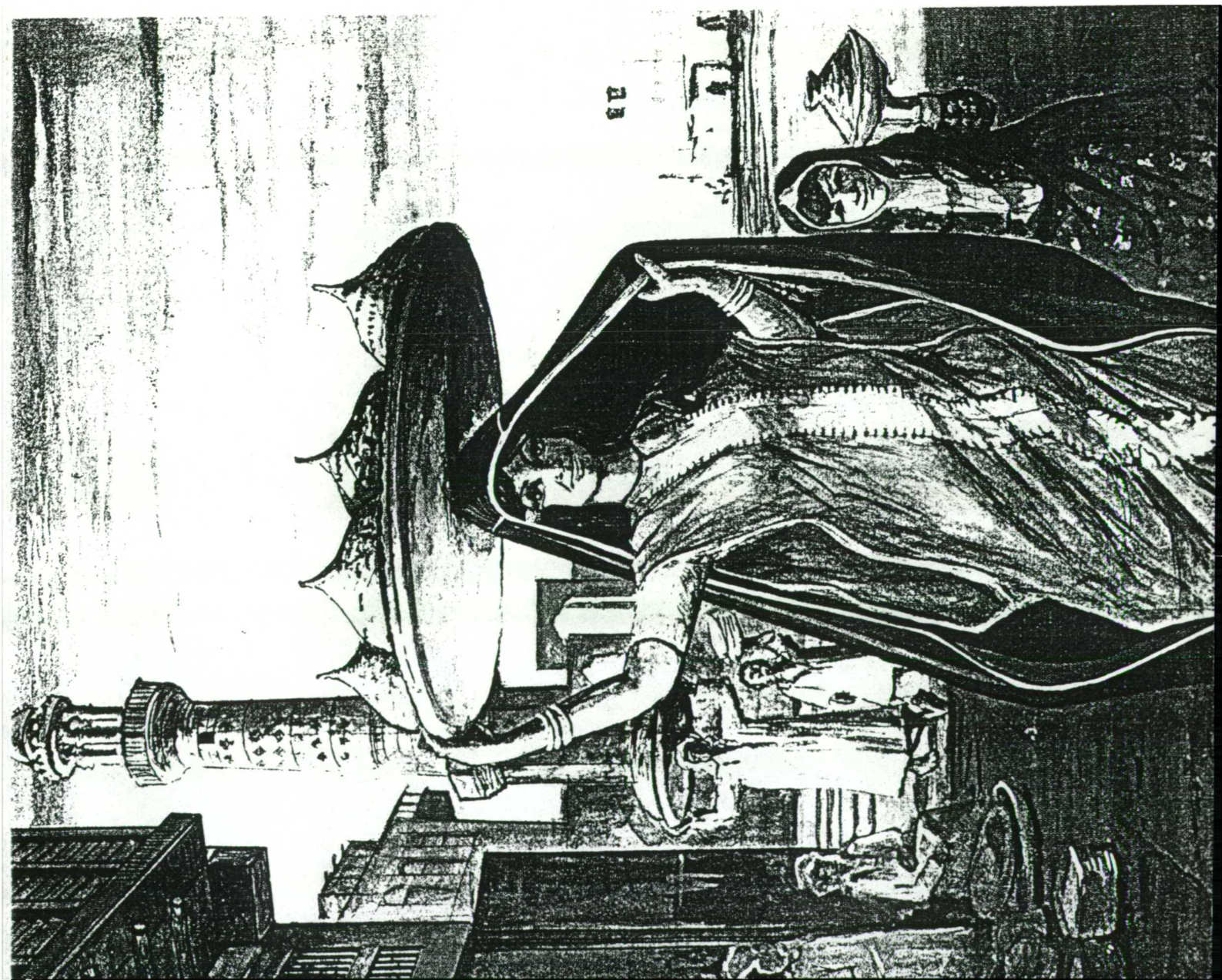


Fig 3.1
BAHRAINI LADY
painted by A.al Muharraqi

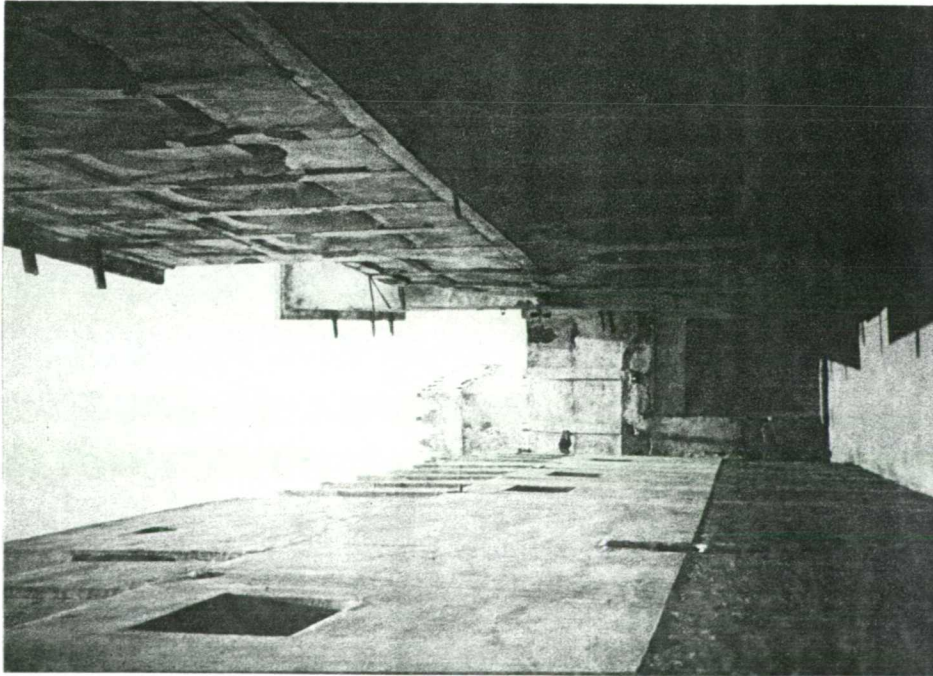


Fig. 3.2(A) Aspects of Townscape: narrow street; rhythm of structural bays; doorway facing down street and first floor apartment visible above it.

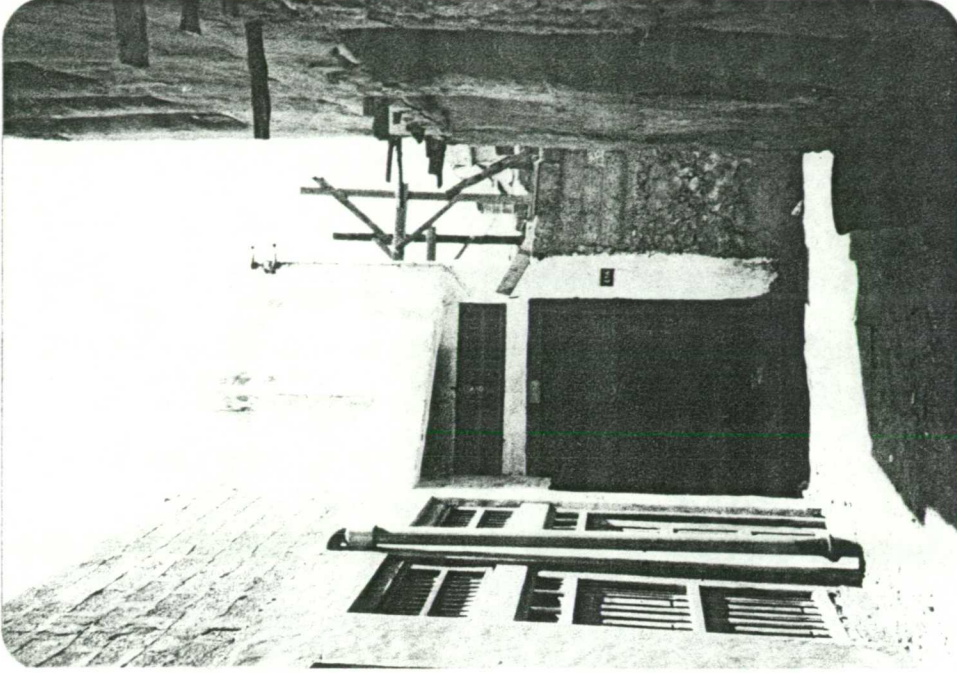


Fig. 3.2(B) Aspects of Townscape: doorway.

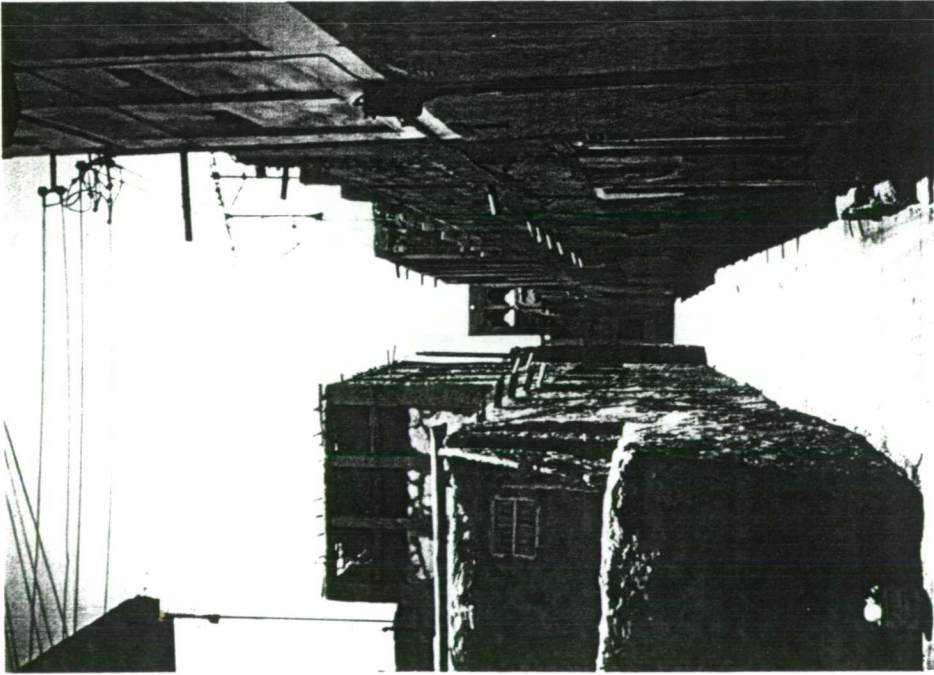


Fig. 3.2(C) Aspects of Townscape: first floor apartments high above the street.

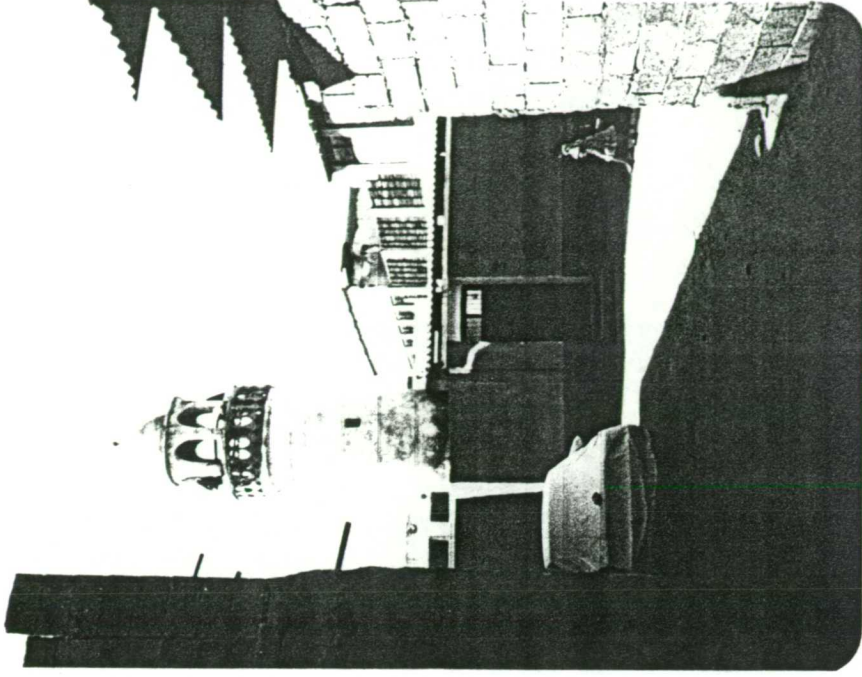


Fig. 3.2(D) Aspects of Townscape: street widens out in front of mosque.

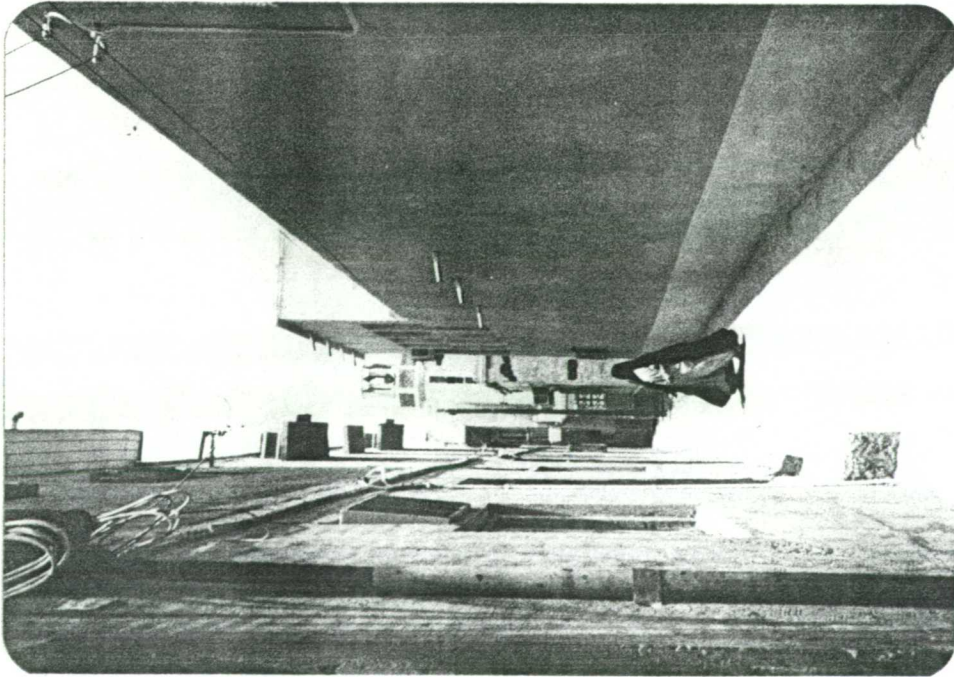


Fig. 3.2(E) Aspects of Townscape: narrow street and blank walls; minaret at end; solitary figure.

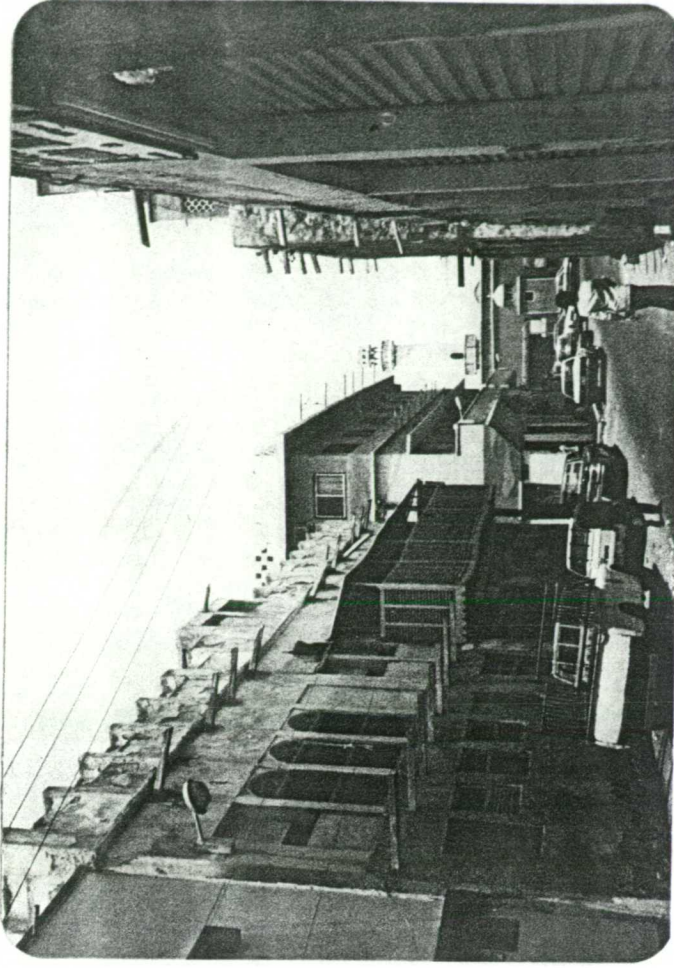
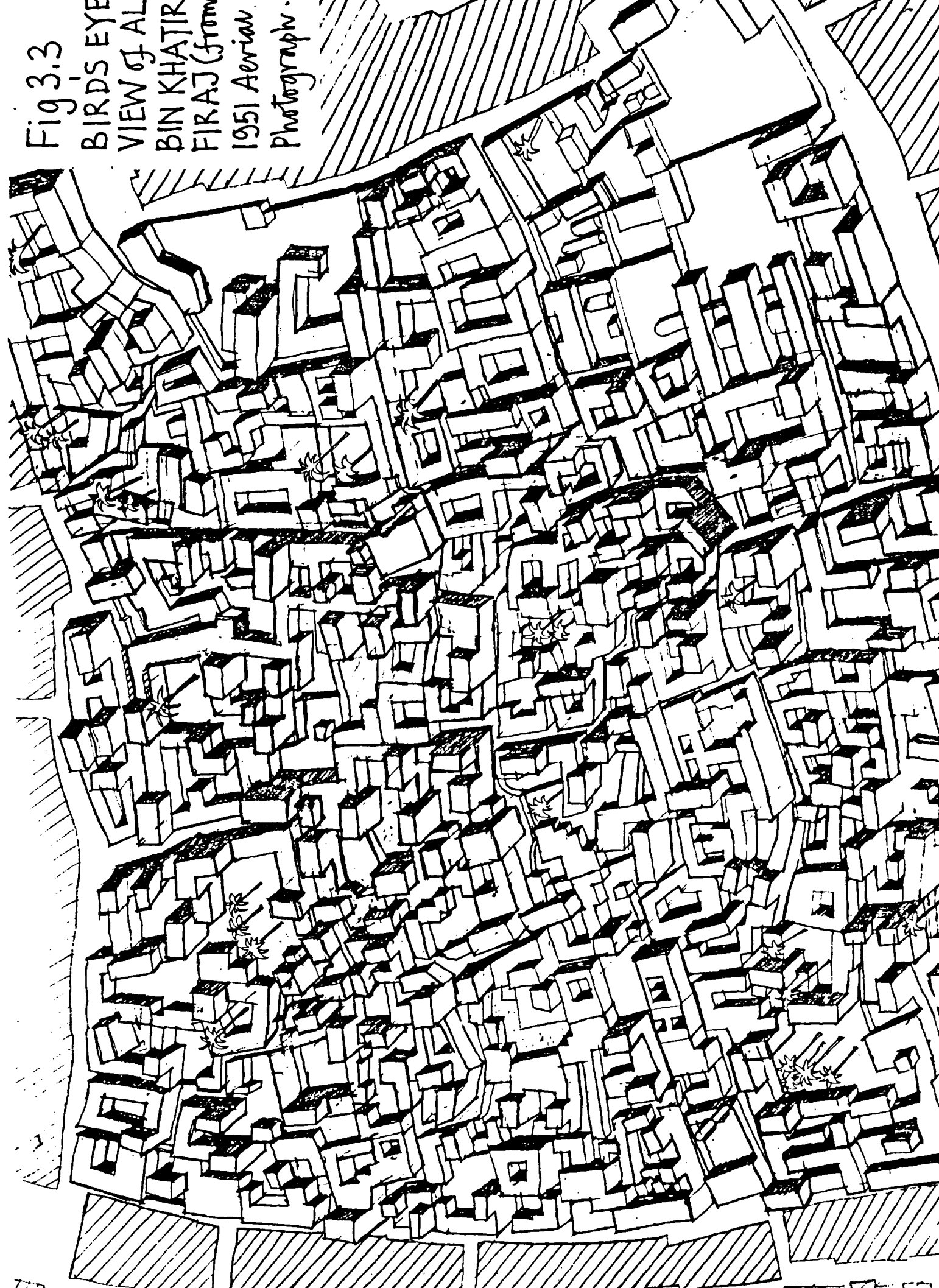


Fig. 3.2(F) Aspects of Townscape: example of a more recent street (formerly along the sea shore). Greater width and formality.

Fig 3.3

BIRDS EYE
VIEW OF AL
BIN KHATIR
FIRAJ (from
1951 Aerial
Photograph.



DEMONSTRAÇÃO DA ILHA DE BAREM.

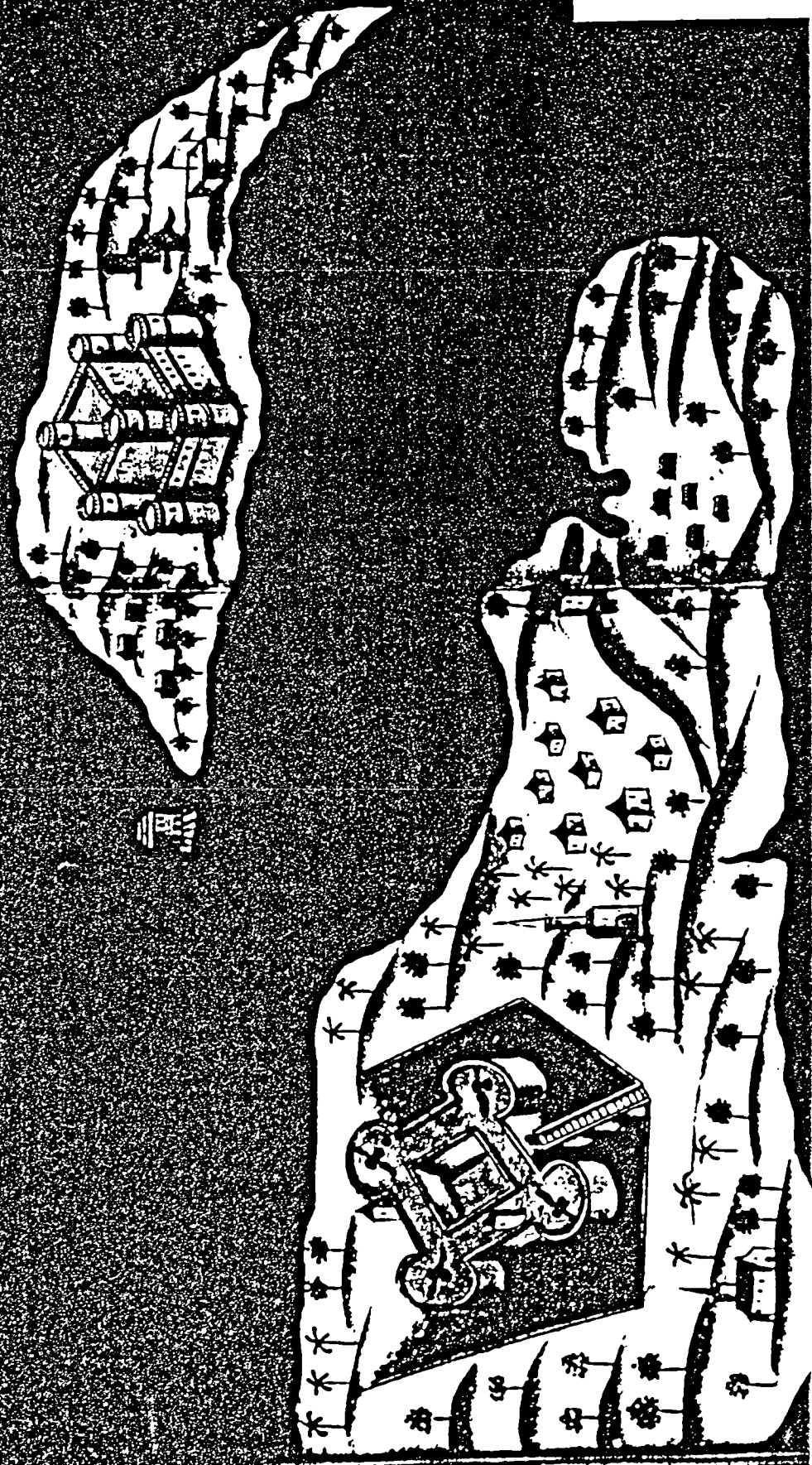
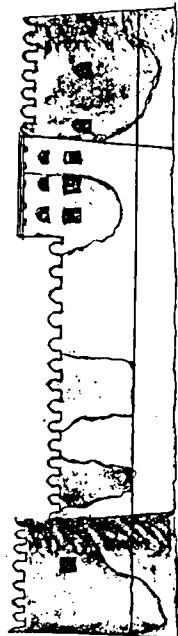
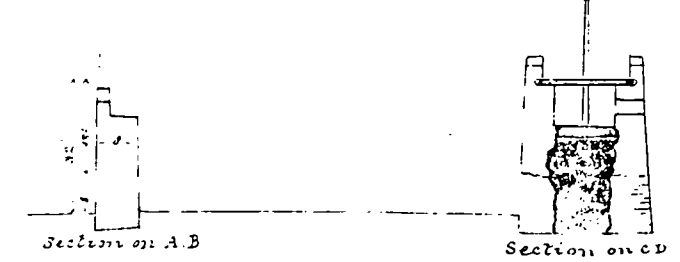
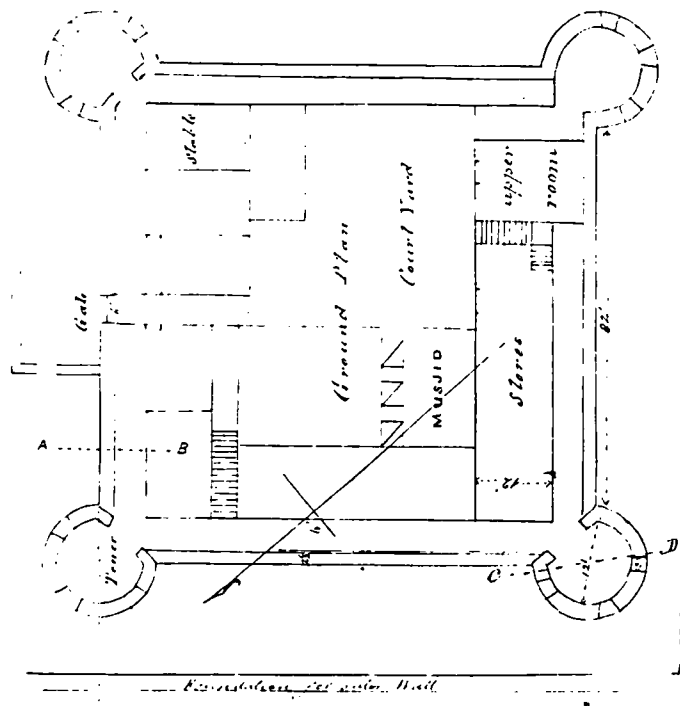
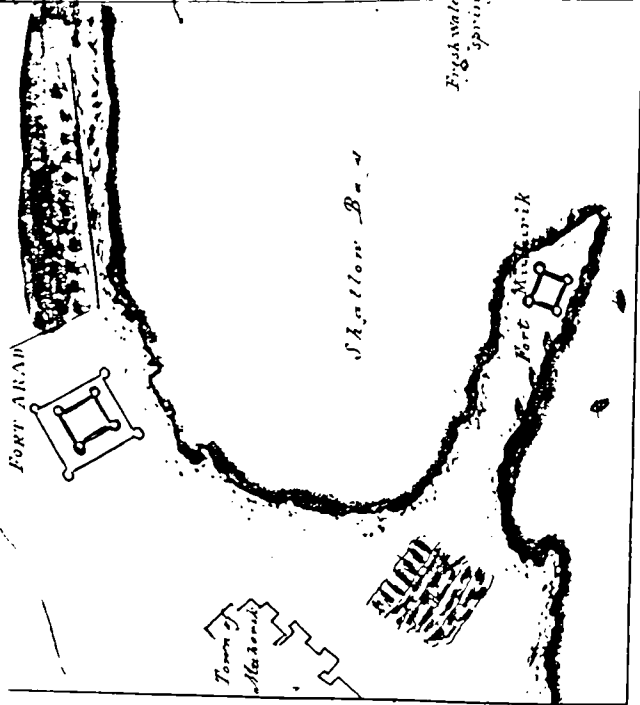


Fig. 3.4
(A)



Fig 3.4
(B)



S.W. ELEVATION
SCALE

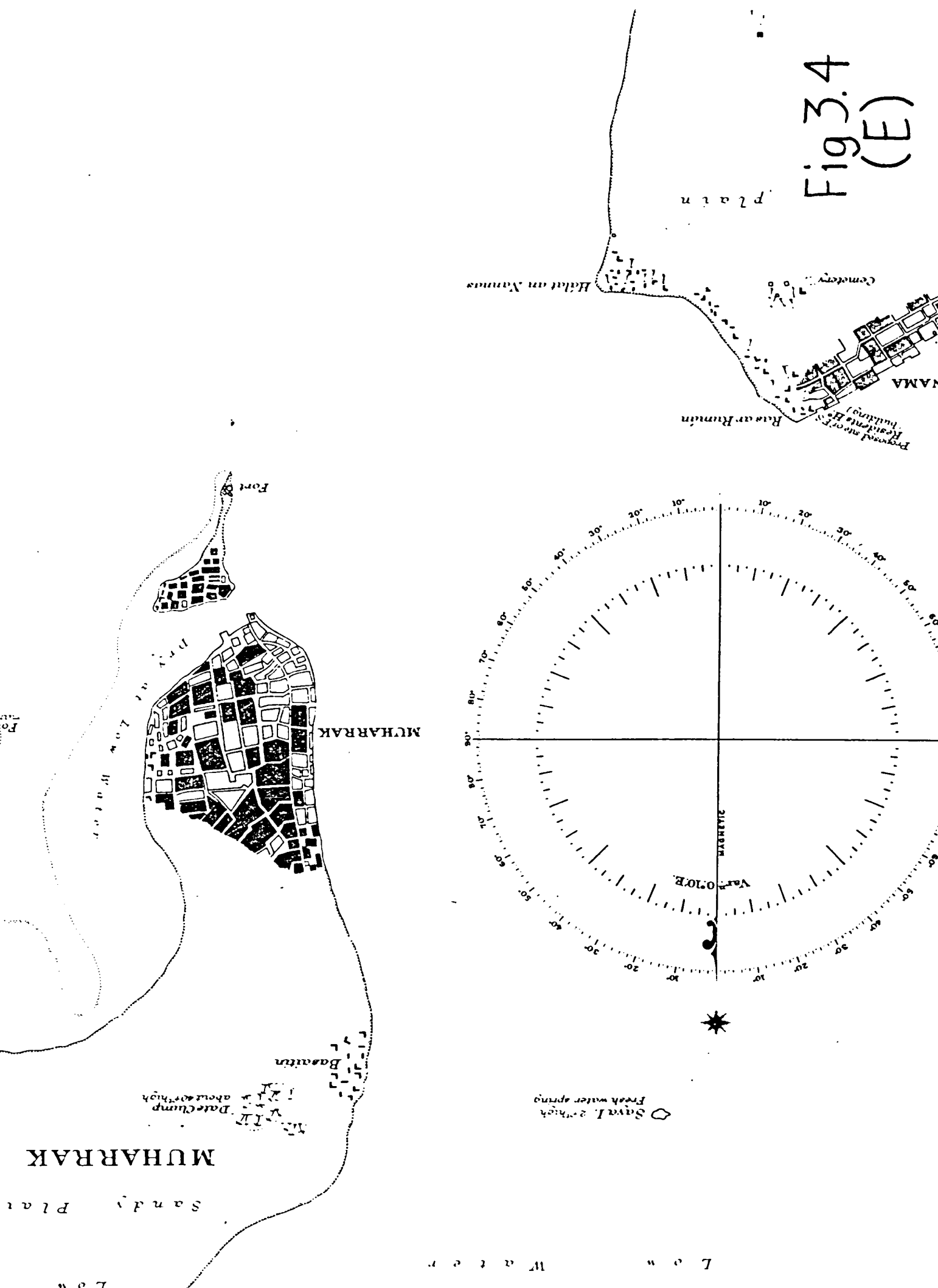


To Lt Col. Lewis Baily
H. M. Political Resident
Persian Gulf.

(Signed) B. Lovell, Draft R.E.

Fig 3.4
(C)

Fig 3.4
(E)



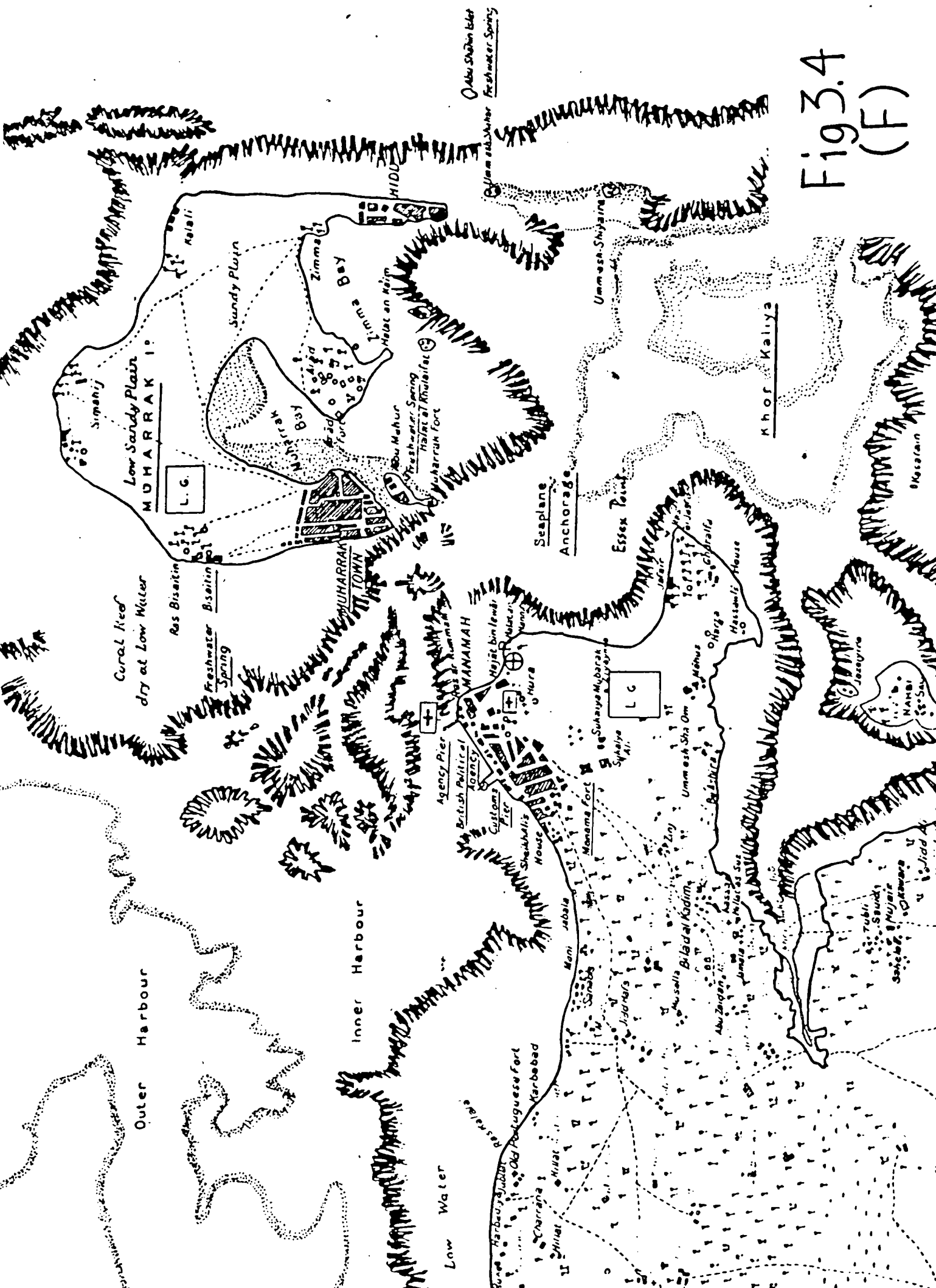


Fig 3.4 (F)

Abu Shadin Islet
Ummash-Shayna Freshwater Spring

Simaniy
Low Sandy Plain
MUHARRAK I.
L.G.

Coral Reef
dry at Low Water
Ras Bisaitin

Outer Harbour

Low Water

Sandy Plain
Muharrak Bay
Zimmah Bay

Freshwater Spring
Muharrak Fort

Inner Harbour

Charraina
Harbour
Old Portuguese Fort
Karbabad

Muharrak Town
Agency Pier
British Political Agency
Customs Pier
Shekhalis House

Hidd

Manamah
Hajjat bin Lawdi
Muharrak
Hura

Manamah
Sukayya Mubarak
Syalye Ali
Mandama Fort

Essex Point
Seaplane Anchorage

Ummash-Shayna

Manamah
Hajjat bin Lawdi
Muharrak
Hura

Ummash-Shayna
Essex Point
Seaplane Anchorage

Khor Kaliya

Ummash-Shayna

Ummash-Shayna
Essex Point
Seaplane Anchorage

Ummash-Shayna
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Ummash-Shayna

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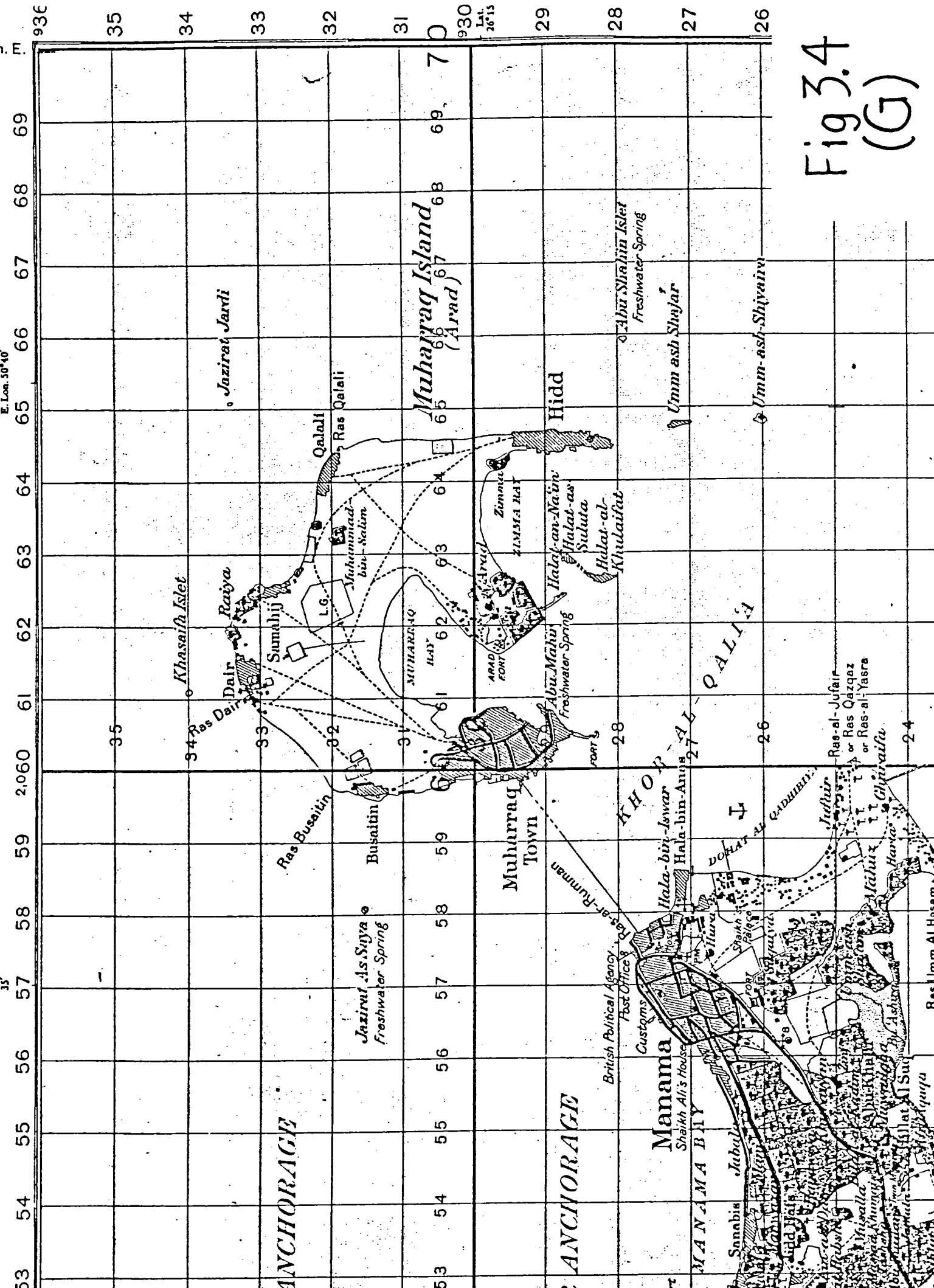


Fig 3.4
(G)

Fig 3.4
(H)

Khor al Qalaa

Abu Mahir

Abu Mahir
Fort



6000 Feet

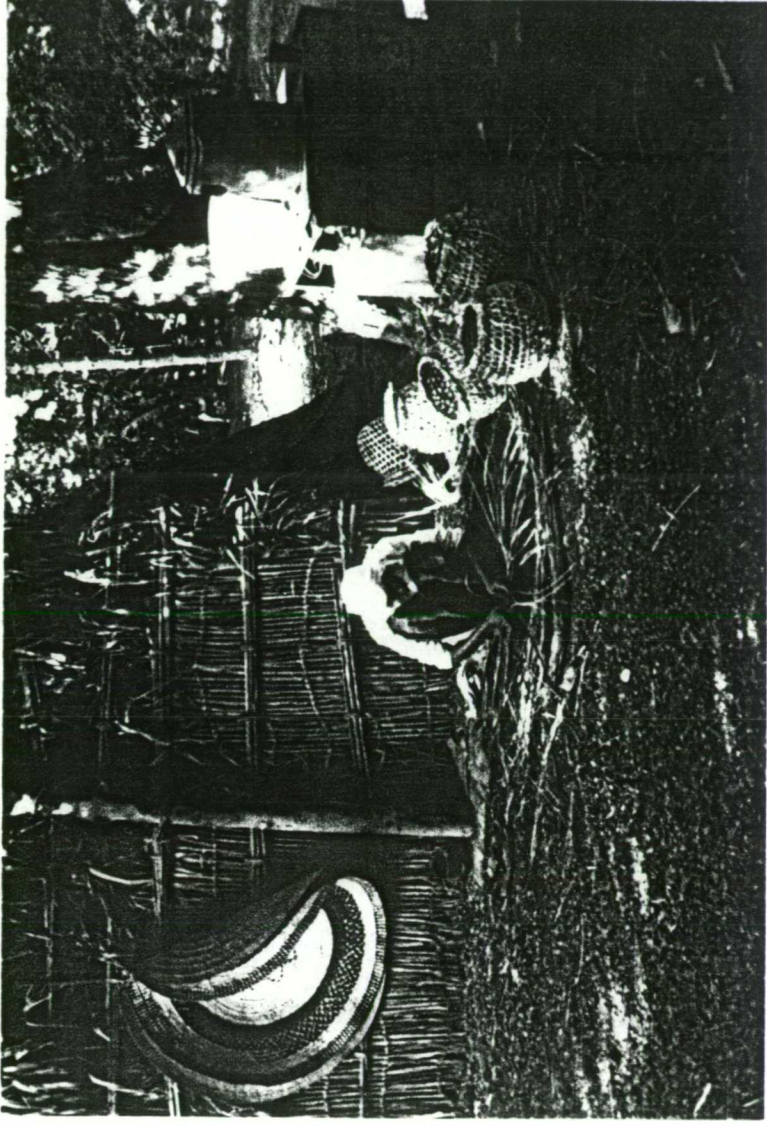


Fig. 3.11 Barasti shelter.

Ref	Firij	No of Barashts	Area ha	* Barashts per ha.	Comments
1	Jalahma.	47	6.3	7	Well built area.
2	Qasab.	32	6.8	5	
3	Muawdah + Al Bana'in	48	6.0	8	Poor area.
4	Al bin Ali	241	10.5	23	Poor area.
5	Bukhamis	61	3.2	20	
6	Bin Shiddah + Al Mahmud.	57	6.2	9.	Fairly poor area.
7	Hayayik	137	8.1	17	Well built area.
8	Kharru	33	4.7	7	Well built area.
9	bin Khafir	31	4.2	7	Well built area.
10	Sh. Abdullah	36	6.7	5	Well built area.
11	Sh. Hamud	46	7.3	6	On Halat Bu Maher
12	Jalahma	63	4.7	13.	Large colony of barashts at eastern end.
13.	Bukunara.	137	5.0	27.	
14.	Bin Hindi	44	4.7	9.	Whole area is emerging
15	Mirri	41	6.1	7.	Emerging area on coastline
16	Amamrah	144	9.8	15	Emerging area on coastline.
17	Ghamrah.	74	5.2	13.	
18	Zayqayinah	53	5.8	9	

* = Rounded Figures.

No. of BARASTI STRUCTURES

BASED ON 1951 AERIAL PHOTOGRAPHS.

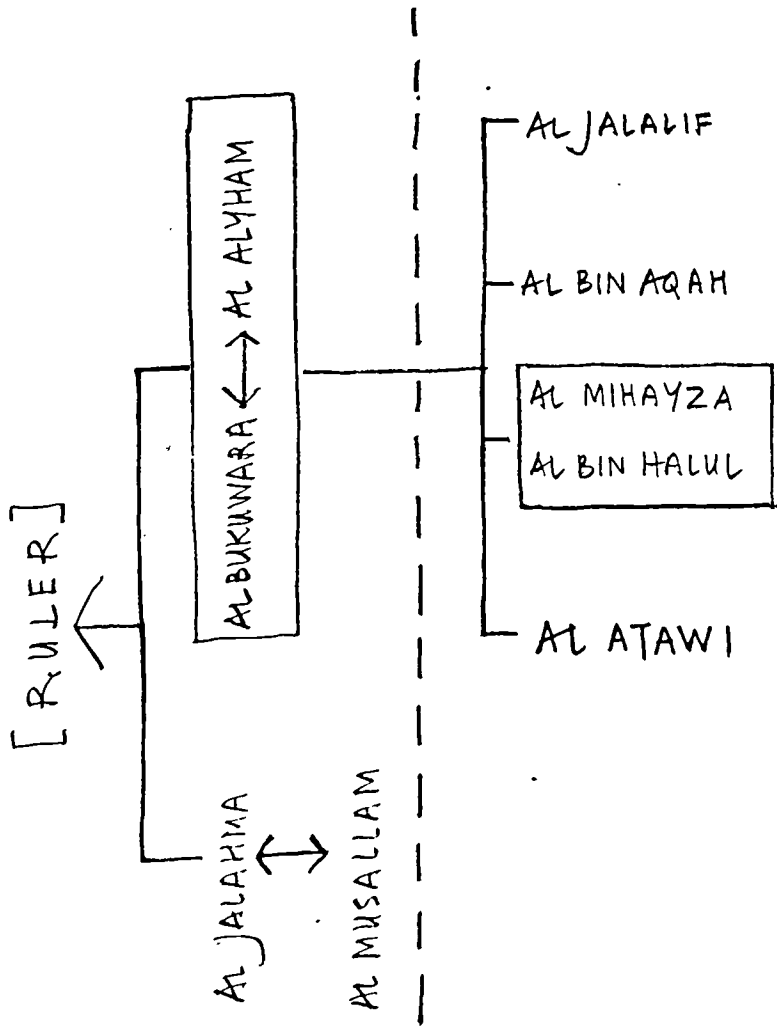


Fig 3.12
 FAMILY
 HIERARCHY
 IN ABU MAHER
 C. 1950

Houses on reclamation land shown hatched



- 1 AL JALAHMA
- 2 AL MUSALLAM
- 3 AL BU KUWARA
- 4 AL ALYHAM
- 5 AL MIHAYZA
- 6 AL BIN HALUL
- 7 AL BIN AQAH
- 8 AL JALALIF
- 9 AL ATAWI

Fig 3.13
SPATIAL PATTERN
of TRIBES
ow Abu Maher c.1950

Chapter 4

ARCHITECTURAL DESIGN.



Chapter 4

ARCHITECTURAL DESIGN

1. Introduction

This chapter aims to describe the repertoire of architectural elements or themes. I do not intend to touch on building construction, materials and techniques which are dealt with in a later chapter. Four aspects are covered.

- a) House form and layout
- b) Building Envelope
- c) Geometry
- d) Crafts.

It is impossible to give a complete picture, but the analysis offered may help one grasp the underlying systematic quality of much of the design.

2. House Form and Layout

Broadly speaking the form of houses comprises four crucial elements:

- (i) Courtyard (al Hoosh)
- (ii) Ranges of buildings planned around the courts. They are generally one structural bay deep (about 3.000m) but occasionally a depth of two bays is attained in the Transitional Period usually when a liwan fronts an apartment (1).
- (iii) Roof terrace (al Sathi) accessed by staircase from a courtyard.
- (iv) Single room apartments at first floor. They are approached along the roof

terraces. There may be a liwan before the apartment.

Apart from the kitchen (al Matbakh), stores and animal stalls (al Zariba), all rooms are multi-functional, but their utilisation depends on climatic conditions - particularly how hot it is. A room may be used for sleeping, eating, socialising and so forth. But ground floor rooms would be used in cold weather (winter) and upper rooms in hot weather (summer). Many people would sleep on the terraces. Also the upper room would gain heat on a still summer day, but (having a design of low thermal capacity) would lose it quickly at night. This room may be used at night as it would be then cooler than the ground floor room. The ground floor room would lose heat through the night, and could be occupied on a still hot day. A wind would cool the upper room more effectively than the lower room, however.

The most basic planning considerations are privacy and territoriality. In so far as wealth permitted it, male visitors were segregated from the family; young men from young women; servants and slaves from others; and passers-by from residents. When a son married, he might take an apartment in the house for a time, and a separate territory would be established. To sum up, there might be territories for visitors, young men, young women, servants, head man's family and so on. However, it would be wrong to exaggerate the

rigidity of the separation. Slaves would be companions of their masters or mistresses, children would visit their uncles' and aunts' rooms in a carefree way (as part of their play) and so on. I had the strong impression that the territoriality was not an oppressive or onerous thing but was treated reasonably and flexibly (2).

A courtyard may be the focus of a specific territory. Alternatively a court may be split into two or more territories - at different ends or corners, perhaps. Each territory will have a staircase leading up to a roof terrace and its associated apartment. (The roof territory is not always physically above the corresponding ground level accommodation.) The territories may be articulated by four means:

- (i) Blank walls along one side of a room cut off contact with other adjacent territories: on the other hand windows and doors establish links.
- (ii) Tall badgers or screens (louvre or lattice) cut off visual contact from terrace to court.
- (iii) Gates and fences on roof terraces separate adjacent territories.
- (iv) Entrance passage (al Dihriz) is L-shaped or screened at the end.

The street doorway - and sometimes the door between courtyards - may be endowed with significance spiritually. Titus Burckhardt has written on the symbolism of the doorway (3). The street is lined with largely featureless walls, which seem to me to be tense membranes holding apart different realms. The door pierces this membrane and suddenly tension is released. This calls forth an opposite reaction: the visual reinforcement, celebration, strengthening of the place of piercing, the transition between realms, that is to say, the doorway. In some cases there is more than one street door located so that the family does not have to pass through the visitors territory, or young women through men's territory and so forth. The social function of male hospitality is so important that the majlis access route is always to some extent separate from family territory.

In fig. 4.1. we analyse examples of one, two, three and four courtyard houses as territorial diagrams. An idealised general structure underlies each of these cases, shown as a matrix

in fig. 4.2. There are N territories each containing the four elements: roof terrace and living room; staircase; court zone; living and service rooms at ground level. The connections between territories occur mainly from one court zone to another, and also as service routes to the rear of first floor apartments, but there were apparently also connections at terrace level where appropriate.

The principles described here began to break down in the extrovert house forms; (Jalahma and Shirawi extensions). These are not full houses and are untypical of Muharraqi planning. I suggest in a later chapter that they represent a new spirit - they are the precursors of the "Villa" form borrowed from the West, which is now all but universally accepted in Bahraini contemporary architecture.

The general qualities of building massing are shown by birds-eye-views of six houses - see figs. 4.3. to 4.8. An informal impression is uppermost in all the earlier houses. However, there is an overall unity in the most complex houses. It arises from the common structural module and also from the courtyard form itself which unifies adjacent structures by focusing or condensing their identity. But there is another most interesting factor, namely the roof terrace system. The terraces generally have a common level. The parapet base is often a visually evident line which runs around the entire courtyard. A terrace system may be very extensive, connecting many houses together over areas of several hectares. This is truly a "Collective Form".

The world seems a different place when viewed from the terrace: see fig. 4.9. The courtyard encloses but the terrace releases. One is exposed to sun, moon, stars, wind. On the terrace you are much aware of the sky, but little aware of the courtyard: you see only apartments dotted here and there, and space flows freely between them. It looks more like a family village than a family house (in the Western sense). The courtyard focuses and condenses the identity of the household and provides a setting for its daily round. Several writers (4) suggested the courtyard - heart of family life open to the heavens but isolated from mundanity of public life - is a metaphorical link to God. The house opens to the sky; the heavens penetrate to the heart of the house. The court is the "hidden

treasure" of the house just as the body of man hides the soul. (I suspect this was not a conscious theme always in Muharraaq, but we may believe it was an archetypal vision towards which Muslim designers in some lands have tended.)

In this situation there is a dual polarity; inside/outside; up/down. The sense of being within or without, above or below, is intense. There is no blurring of these zones. Their identity is crisp and consistently maintained. Can deeper echoes be grasped when contemplating the character and purpose of each place:

Inside/Outside : Above/Below

Family/World : Heaven/Earth

Wet/Dry : Hot/Cold

Female/Male : God/man

Can we detect a potent cultural structure with deep and wide roots in the whole region?

3. Building Envelope

Construction is described in the next chapter. Structure may be either a masonry wall or a frame comprising masonry piers and timber tie beams. There are infill areas - windows, niches (rosanna), decorative panels etc. The arrangement is governed by a strict orthogonal grid. Surfaces are generally smooth, arrisses sharp, angles perfect. Each type of infill has a row reserved for it. The bays are of equal width and the bay arrangement is repetitive in character.

There is a clear modular system deriving from the properties of materials. This is described in a later chapter.

Reviewing all the elevations surveyed in this study, one could construct a theoretical model of a two storey structural bay comprising 19 parts (or fewer).

1st Floor:Parapet

Eaves

Roof beam level (cornice and gargoyle (marzam) level)

Panel 1/2/3

Beam level 1/2/3

Panel 4 (Rosanna level)

Beam level 4

Main Row (window/badgir level)

Beam level 5

Panel 5

Ground: Floor Beam level

Panel

Beam level

Main Row (Badgir level)

Dado

No house in fact has all these levels: each has a different selection - see fig. 4.10 for six instances.

Each of these levels may have a different realisation. For example a parapet may comprise badgirs (coped or uncoped;) timber louvres or lattices. Parapets may be coping; corner merlons; coping and corner merlons; row of merlons and so on. The options for each level are tabulated in fig. 4.11.

The principal elements here seem to be:

- Merlons
- Moulding
- Incised decorative plaster
- Recessed panels
- Voids
- Arches - true, blind, flush and inset
- Windows and Doors
- Brackets

Drawing upon the buildings surveyed, the designs found for these eight elements are tabulated in fig. 4.12. There is considerable richness and variety - fourteen types of merlon, for example. In reality there must be far more. The analysis could be carried much further than I have done here and one hopes other students could extend it.

The Bahraini terminology for basic arch types was told to me as follows:

- Semicircular : Al Hillali (Crescent)
- Trefoil : Al Bukhdadi (from Baghdad)
- Ogee : Ar Rumi (Peacock)
- Multifoil : Ar Rumi Imthaniyan (Decorated Peacock) or Al Qaous al Muffanial (Coffee Cup Arch).
- Pointed : Al Bahraini (from Bahrain)

It would seem that the pointed arch was regarded in Bahrain as a specifically local form.

4. Geometry and Design

4.1. Much has been written on the significance of geometry in the arts of Islam (5). The general mathematical principles are now well known. Regarding Bahraini architecture, geometrical principles underlie incised plaster panels and also small amounts of stained glass and tacked lath decoration. Geometrical principles can also be found in the design of elevations.

A number of plaster panels and friezes are illustrated in figs. 4.13 to 4.34. The "guiding scheme" which structures a pattern is set out with rule and dividers in soft plaster before carving begins. The construction of seven guiding schemes is now described for panels, fanlights and elevations.

4.2. The Seyadi Majlis wooden panel and plaster panel (see fig 4.43) are derived from the square - the so-called "Root Two" system of proportion (6). There are six actions: (A) Inscribe a circle within a square; (B) Construct an octagon star within a circle; (C) Join the left and right hand apices in (both) opposite corners. (This involves four lines); (D) Join top and bottom apices to both adjacent apices and produce the lines; (E) Join the centre of the circle to the internal apices of both the top and bottom points; (F) Join the corners of the larger square to the internal apices of the left and right hand points. The tessellation can be created by selecting lines from this grid.

4.3. The Seyadi Majlis flower pattern plaster panel - see fig. 4.44 - can be constructed as follows. This is now known as "Hamada's Moustache", but I do not know how the name arose. Najji Bu Sherar said he assumed it was from the inventor's name. The design is based on the "Root Two" proportional system. There are three stages, as follows: (A) Describe a circle within a square and draw the diagonals of the square. Construct a second square with corners at the intersection of circle and diagonals. Repeat this twice more. There are now four squares. Construct a similar figure adjacent to the first; (B) Produce the vertical sides of the third square up and down to intersect the top and bottom edges of the second square. This forms a rectangle within each figure. Connect each corner of this

rectangle to the centre point of the adjacent figure. Produce these lines; (C) Describe one circle centred upon each corner of the rectangle, one circle at the centre of each rectangle, and one circle at the intersection of the horizontal centre line and the vertical edges of each square. The radius of the circles should be one quarter of the length of the diagonal of the rectangle. All this only gives the guiding scheme, of course. The interpretation artistically remains to be made.

Those intersections in the scheme which do not form the centres of circles are marked by small diamonds. The finished lines pass from one circle to the next where they touch and so form the wavy lines which are the apparent basis of the pattern. It is interesting that the guiding lines which connect the centre of each rectangle to the corners of the adjacent rectangles (and hence the circle centres) are also tangential to the other circles.

4.4. The Seyadi majlis window fanlights are both derived from a decagon (7). Refer to fig. 4.45. There are four stages: (A) Construct a decagon and then a decagon star within it, by joining every third apex; (B) Construct a smaller decagon star inside the larger one, rotated half a point; every fourth apex should be joined; (C) Connect adjacent apices of the outer star. Produce the lines in both directions; (D) Produce lines which form the inner star. To obtain the frame, of fanlight 1, scribe a circle. The centre is the centre of the decagon, of course, and the circle should pass through the intersection of the lines produced by (C) and (D). To obtain the frame of fanlight 2, the circle should pass through the intersection of lines produced by action (C).

One may create the tessellation by selecting lines from the resulting grid.

4.5. The decorative plaster panel in fig. 4.46 is based on a double hexagon. There are three stages: (A) Construct adjacent squares. Describe circles passing through the corners of each square. Using the same centres, describe small circles touching the adjacent large circles; (B) Describe a circle within each square. Construct a double hexagon star, (joining every third point) within each circle. Connect all apices (both internal and external), to the centre of the circle; (C) Construct a similar double hexagon star within

the smallest circle. Ensure that the points of both large and small stars are aligned on the same radii.

The interpretation given to this guiding scheme has the radii to internal apices connected to the centre, but the external apices connect to each other. A puzzling feature is that in three corners of each square, the star point is reversed - it points inwards and not outwards as you would expect. The result looks confused.

4.6. Some elevations show a clear but simple system of proportion. An analysis of an elevation of Sh. Abdullah bin Mohammed house is shown in fig. 4.47. The elevation below the top groove is a double square. (Internally it is very nearly a double cube.) An arc described about a lower corner with a radius to the top of the merlons will intersect the floor at the far side of the central doorway. Produce a line vertically from this point. A square results. Bisect the bottom edge. With this point as a centre, describe an arc through the top corner of the square. The arc is tangential to the corner of the building. This produces the "Golden Section" or "Divine Proportion" (as it was known in the West). In other words, if the length of the elevation is E; the length of the larger square is S, and the Golden Section is \emptyset

$$\frac{E}{S} = \frac{S}{(E-S)} = \emptyset$$

The elevation details are also governed by proportion. It would appear that if the sides of the smaller square are divided into sixths, then the horizontal lines define the decorative grooves and the vertical lines define the sides of windows and incised plaster panels. Divided likewise into quarters, the first horizontal and vertical lines are the centre lines of the first window. The centre line of the larger square (from which the Golden Section arc is described) is the centre of the second window.

4.7. I have also analysed the main door to House 117 Sh. Mohammed Road, which was part of the Sh. Ali bin Mohammed House. Refer to fig. 4.48 for the analysis. This is shown in

three parts: (A) Construct a square resting on the ground. This defines the door-head and the inner edges of the aedicule. Bisect the top and sides: with these points as centres, describe arcs passing through the corners. This will define a larger square: the sides and centre-line are tangential to the arcs. This second square defines the sides and top of the recessed frame; (B) Join the top corners of the large square to the bottom corners of the small square. Where the diagonals intersect, scribe a circle passing through the centre points of the sides of the larger square; (C) Construct a double hexagon within the circle. This will now apparently define the intrados of the pointed arch and the position of the main decorative panels.

4.8. I also analysed courtyard elevation of the Ahmed Mattar house. Please refer to fig. 4.49. It would appear that the first floor apartment plus the bays below at ground level altogether form a square. Describe a circle tangential to its sides and construct a hexagon within the circle. Joining the apices on either side of the top point gives the line of the upper tie-beam. Similarly the lower apices gives the lower tie beam. Divide the square into four small squares. Inscribe a circle in each and a second square within this circle. This square now defines the position of piers and cornice.

I think it is also clear that in some later houses the distance between apartments on a particular elevation is controlled by extending the proportional system. This may mean that the space itself - the courtyard - is consciously proportioned. In any event, one is aware of an objective and effortless serenity in a few of these courtyards. It is not to be found in the earlier houses because they were not designed as a whole. It represents the apogee of the classical spirit in Bahraini architecture.

4.9. A few of the general masons and door-way specialists may have grasped the esoteric cosmological significance of the mathematics (8). It is more likely that it was a craft skill passed between generations with no more (and no less) religious meaning than any other form of work. At any rate, the author found that even this technical knowledge is now more or less lost.

It will, of course, be obvious that the analyses provided here may not have been used by the craftsmen to construct actual panels etc. I became aware (whilst constructing the drawings presented below) that various "short cuts" can be taken. Once a prototype is worked out, certain dimensions may be measured or even memorised. Usually craftsmen are pragmatists not theoreticians, and very likely used dimensions empirically determined from basic models provided by their predecessors.

5. Architectural Crafts

5.1 There are four noteworthy crafts in Bahraini architecture. Metalwork was restricted mainly to decorative wrought iron window grilles in the Transitional Period, of which few now remain. Woodcarving was focused mainly on the bolt hasps and central stops of doors and shutters and also architrave cover beads. The other noteworthy craft forms in timber are fretwork (mainly window screens but also Middle Period Ceilings) and tenoned grilles for windows. Stained glass fanlights are a noteworthy feature of Middle and Late period buildings. Lastly, plaster carving in panels and friezes is a ubiquitous feature, justly well known and much loved locally.

The finest work - at the Seyadi House - was executed by Persian carpenters and is nearly unique in Muharraq. It is not clear whether this was made in Persia and shipped to Bahrain (9). It must be mentioned of course, but its position relative to Bahraini cultural mainstream should be grasped. The only tacked lath decoration and the only glass marquetry are found here. The timber fretwork and carving on certain doors is a unique prototype which spawned many inferior copies in the following decades. Refer to fig. 4.50 and 4.51.

5.2. Wrought iron grilles set in timber frames (covering windows externally) are found at Sh. Abdullah majlis, Sh. Hamad House, Al Jalahma House and the house in Lane 1140. These were the only examples the author found but probably others still exist. Refer to fig. 4.52. Clearly they follow a particular design idiom. There are parallel vertical bars usually running from top to bottom. There are curlicues back-to-back on these bars and they form horizontal rows. There may be "petals" formed by bars enclosing the curlicues. The Sh. Abdullah design has beautiful double flowers. This craft form died out around 1900 - at least I found no later examples. The wrought iron has not rusted very much despite having had no maintenance for well over a decade and the grilles are still in good condition. One intuitively feels this is not a home-grown craft. There are many similar

grilles in towns in Iraq. It may be that Iraqi craftsmen visited Bahrain at this time or that the grilles were imported ready-made.

5.3. Wooden Carving and Fretwork

Timber door or shutter stops are generally nailed through one door leaf into the rails behind using dome-headed iron nails. Widths are about 10cm (doors) or 5cm (shutters). Carving is generally in three styles: see fig. 4.53 (10).

(a) Lozenge style: the cross section is rectangular with a "necklace" of lozenges and rectangles with pointed ends - elongated lozenges, so to speak. The lozenge sides are often carved in steps, which gives a very distinctive (almost crystalline) appearance.

(b) Fluid style: the cross-section is rectangular and it is carved into a "necklace" of fluid shapes, mainly circle, quatrefoils and rectangles with semi-circular or trefoil ends.

(c) "Lily" style: the cross section is (at least in part) semi-circular. There is a stylised lily at the top. The most characteristic decoration is vertical fluting which becomes spiral in form and again vertical. It would appear that the "lily" style was initiated by the Seyadi House and is thus an import from Persia around 1920. It is not uncommon in a debased type in Al Awadiyyah district of Manama (11).

The necklace panels are decorated with various patterns. They use many of the same motifs as plaster decoration and were set out in the same way - using compasses and straightedge - but on a much finer scale. The commonest motifs are "flower" patterns based on squares or hexagons. Zig-zag and S-forms based on square grids are not uncommon.

I now turn to mortice and tenon window grilles. These are made from short pieces of wood about 1cm or 1.25cm square section joined by mortice and tenon. However the grille frame may be subdivided by timber members having the same section but spanning from side to side (12). The strength of these grilles is notable - surprising in view of the very small component size - being due to the geometry of the pattern. One can see in fig 4.54 how the joint system apparently also contributes to this strength: each element is joined into the middle of another element. Such grilles may be found at Sh. Abdullah bin Mohammed House and Sh. Salman House (majlis) and Mattar House. The grilles at Sh. Isa House have been

removed and one hopes they will be restored, but this is probably unlikely. These grilles have a uniform grid. There are four types. The Seyadi majlis grilles are more complex, with outer panels framing a centre panel of a different design. They are superb by any standard. See fig. 4.54 to 4.59 (13). Note that some of the grille designs are also found in plasterwork. The use of short elements was no doubt economic in areas where high quality timbers in large sections were expensive or, more probably, not available. There is a second type of grille using fretted laminae, usually in three rows of seven. There are few of these - Sh. Salman House, Sheikh's apartment and the Fakhroo House are the only ones surveyed here. There were seven types: see fig. 4.60 and 4.61. The designs are all fluid, bold - baroque, one might say (14). They resemble the forms of fretted ceilings found in the Mattar Houses and Seyadi women's majlis, or the painted ceiling at the house in Lane 918. They strike one at first as very free, but further study will reveal a repertoire of shapes, which are reminiscent of the sections of scotia, torus, cyma, astragal, ovolo, cavetto and so forth of classical architecture in the west. In addition there are flower-like forms (which remind one of honeysuckle and a rose-bud), and sundry other baroque flourishes.

Architrave decoration occasionally includes a foliage theme - as at Sh. Isa House main door (fig. 4.62). There are several common mouldings, which occur in many houses - barley-sugar, decorated trefoil, zig-zag, sawtooth, scotia and so on.

Some mouldings have names in Arabic, such as Mishara - meaning Tooth (zig-zag) - and Altatet Habel - meaning Twisted Rope (barley-sugar). Most mouldings are not named, or the names were unknown to my informants. The architrave (Gaidhan) is simply patterned (mangoush) or plain (sadah).

I think it is clear that a vocabulary of decoration could be drawn up. This study is probably not exhaustive. The effort of collection and analysis would be worth while because it could inspire new types and lead to the application of this decorative language in contemporary contexts.

5.4 Stained Glass Fanlights

I have recorded thirteen stained glass fanlight designs. There may be more, but clearly they are not common. All have timber comes. See fig. 4.63. They fall into three categories.

(a) Radial Glazing Bars

Type A is by far the most common - perhaps 70 or 80 per cent of all fanlights. Type B is not uncommon. Of types C and D I found only single instances. Bars are straight pieces of wood, which ensure the window is very simple to construct.

(b) Free Glazing Bars

The bars will not support themselves. These are found only in the Seyadi and Fakhroo Houses. Types G to J are exquisite floral designs. Types E and F are geometric. Radial struts at the rear provide the support and can hardly be seen through the glass. These appear to have been introduced by Ahmed Seyadi's Persian craftsmen in 1920 (or so). Type B is a common Qajar Persian design as well and may have arrived at this time.

(c) Late Type

Types K to M are coarser. Introduced in the late 1920s and 1930s this type is more common in Manama, particularly Al Awadiyyah district. It is rare in Muharraq, but see the House in Sheikh Isa Road (15). The comes are thicker. Each radial is fretted from one piece of wood and so is self supporting. The forms are fluid, representing foliage and also very explicit birds. The delicacy and refinement of the previous type is lost.

5.5 Plasterwork

Matters of technique and geometrical analysis are mentioned elsewhere. Incised plasterwork is the main form of decoration in Bahraini architecture. The relationship to henna decoration practiced by Bahraini women on their hands is worth a serious study. Different patterns exist for Sunni and Shia. The range is very wide, but clear themes recur. The obvious interest of the decorative panel - usually rectangular - and traditional frieze should not cause one to overlook other forms. I would mention six types:

(1) Decoration of arch extrados. There are four examples of of extrados decoration in Sh. Isa House and Sh. Hamad House.

(11) Incised representational art e.g. lions on the house in Sh. Isa Road. The Qajar influence is clear.

(111) Incised scroll motifs found in the Seyadi House; Khan in Tijjar Road and elsewhere.

(iv) Hamman screen crenellation e.g. at Shirawi and Sh. Salman Houses.

(v) Symbolic panels on chamfered corners at Sufi House; Several houses in the Al Kharu firaj and also, of course, the corners of the Seyadi Majlis.

(vi) Other incised motifs include:

moon and stars

linked horns

cross and dots

pendulum clock

scales

jug, pitcher and perfume sprinkler

As for the plaster panels they mainly fall into six groups (although the variations seem almost infinite).

(a) Two large circles side by side with other overlapping circles, forming two flower or turbine forms.

(b) Eight circles in two rows of four with overlapping circles forming similar flower forms. Circles may be linked by diagonal crosses or V-shapes.

(c) Fine-grained pattern of intersecting circles (of small radius).

(d) Herringbone or similar arrangements of long rectangles whose zig-zag interfaces form two large lozenges or some such pattern.

(e) Fine rectilinear grids interlaced with small arcs, circles, octagons, squares etc about each node. The pattern is small-grained.

(f) Floral patterns, typically based on waving lines and interlacing foliage.

Generally one pattern covers the whole panel, but in a few cases a frame is provided around a central panel, and this will have a different frieze-like motif.

There was an extensive Arabic terminology for each motif or sub-motif. This has (it would seem) now been largely forgotten, but one informant has mentioned the following words (16). A full lexicon if it could be reconstructed and analysed might clarify the mental paradigms of the craftsmen involved.

Al Baythawi	= Egg shaped one
Al Wardeh	= Flower
Al Najmah	= Star
As Salsaleh	= Chain
Al Baydaneh	= Almond
Al Mu Thelathat	= Triangles
Ash Shuwarab Hamada	= Moustache of Hamada
Al Musa	= Banana
Ash Sharjariyah	= Tree design
Al Mujassimeh	= The planned one.

Examples of these designs are given in figs. 4.13 to 4.34 taken from various houses: the method entailed rubbing with soft crayon on thin paper.

CHAPTER FOUR : FOOTNOTES

- (1) Examples are found in, e.g. Sh. Salman House (below the Sheikh's apartment) and Sh. Abdullāh bin Mohammed House. Refer to Chapter 7 for details of each house.
- (2) This account is based on conversations with numerous people during 1984/85, in particular Khalid Engineer, S.K. Hashim and Ahmed Mugla.
- (3) BURCKHARDT T. (1967).
- (4) See, for instance, ARDALAN N. and BAKHTIAR (1973); BURCKHARDT T. (1976); FATHY H. (1972).
- (5) See, for example, CRITCHLOW K. (1976); HANKIN E.H. (1925); EL-SAID I. and PARMAN A. (1976); and BOURGOIN J. (1973). I drew upon the work by El Said and Parman in respect of the analyses described in paragraphs 4.2 and 4.4. Elsewhere I worked out the answers myself.
- (6) A convenient explanation of this terminology is given in EL SAID I. and PARMAN A. op cit. pages 8 and 50.
- (7) These patterns are common throughout the Islamic World. Design 1 is used in the Dome of the Rock, Jerusalem for example. Design 2 may be found in tilework from the Masjid-i-Jami, Isfahan and as early as the 11th Century (A.D.) at Qalah-i-Bist, Afghanistan (as well as countless other places).
- (8) CRITCHLOW K. op cit deals at length with this.
- (9) Similar work is apparently to be found in some Persian cities. See Chapter 1, Section 4.

(10) In Chapter 1 I have mentioned the relationship of design here to other towns on the Gulf, but a fuller discussion is given in LEWCOCK and FREETH (1978) Chapter 6 where the resemblance between Bahraini doors and those of Dubai is pointed out.

(11) This district was developed partly by Huwalah Arabs from the Persian Coast and closely resembles the Bastakia district of Dubai described in COLES A. and JACKSON P. (1975).

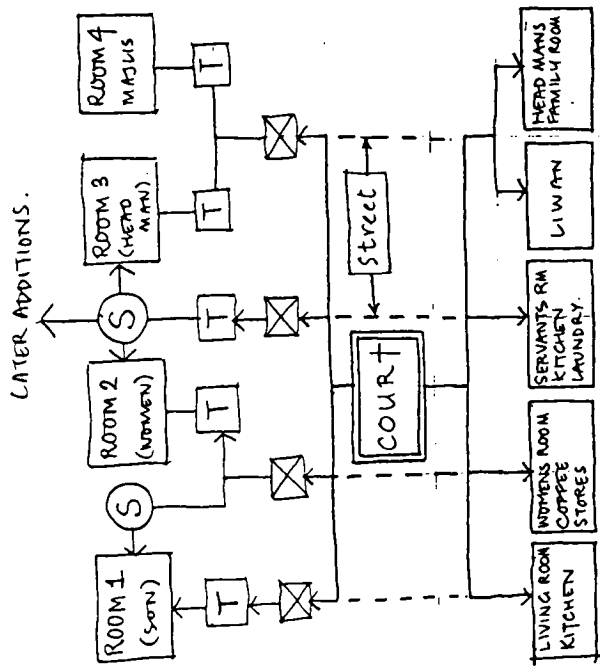
(12) Some of the designs are also found in Baghdad. See WARREN J. and FETHI I. (1982) pages 109 and 145.

(13) The designs from the Seyadi House are widespread in the Islamic world. The pattern of the central panel of Fig. 4.57 is also found in plaster panels and tacked lath decoration in the Seyadi House. See Section 4 for an analysis of it. The pattern in fig. 4.58 is based on the "Warden" pattern.

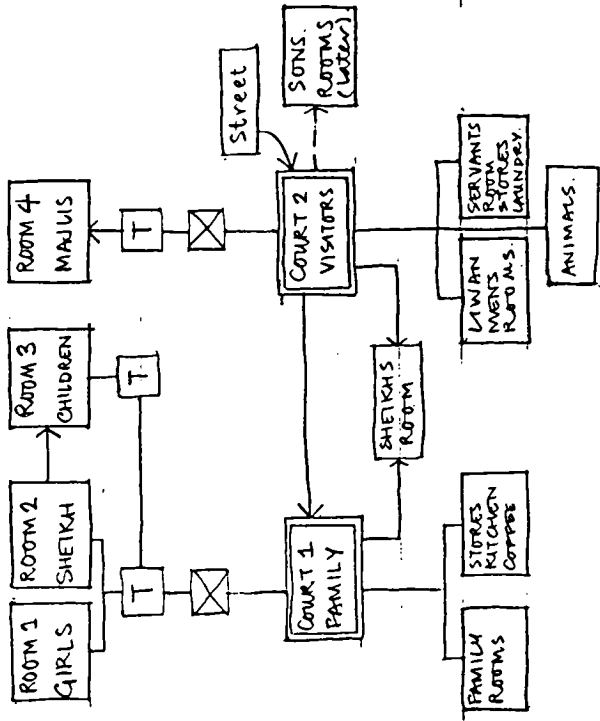
(14) Similar grilles are shown in COLES A. and JACKSON P. op cit page 10 (i.e. in Dubai).

(15) This is discussed in Chapter 7 paragraph 3.4(n).

(16) The informant was Najji Bu Sherar.



Example 1: SHIRAWI.



Example 2: SH SAIMAN.

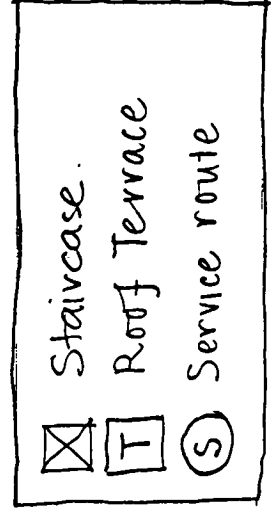
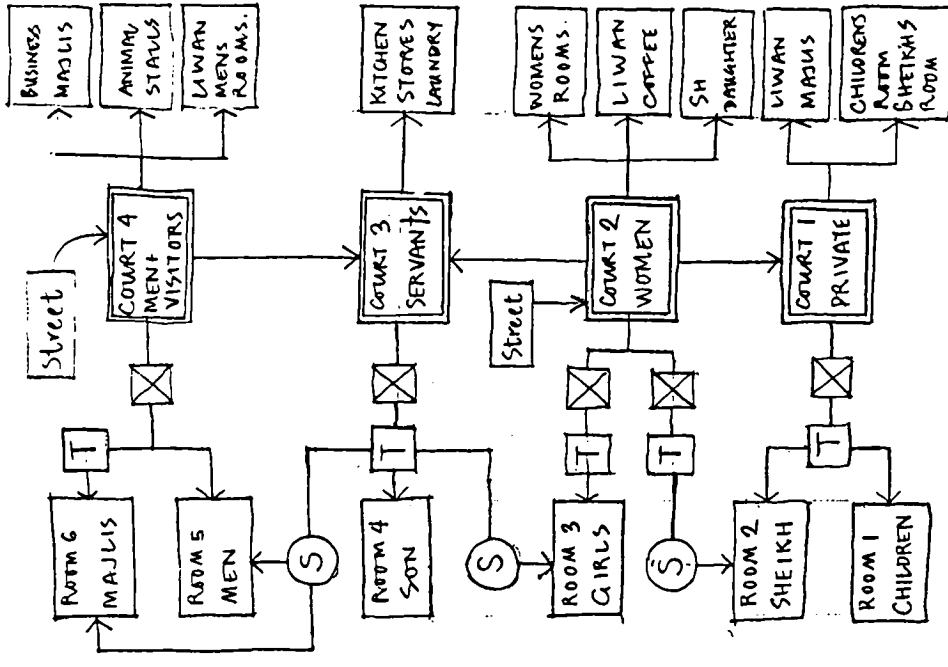
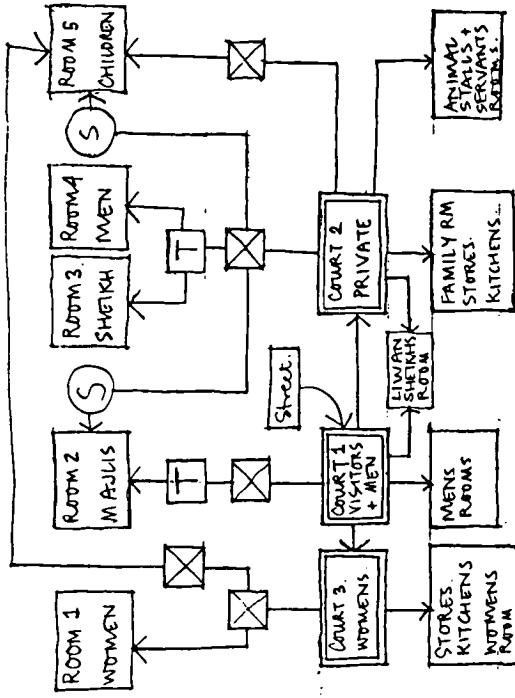


Figure 4.1 (page 1).
TERRITORIAL
DIAGRAMS.

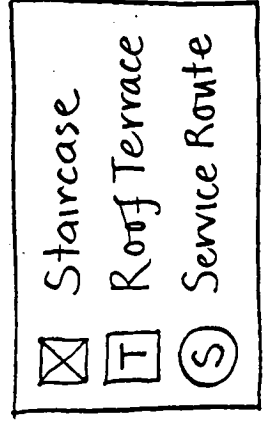


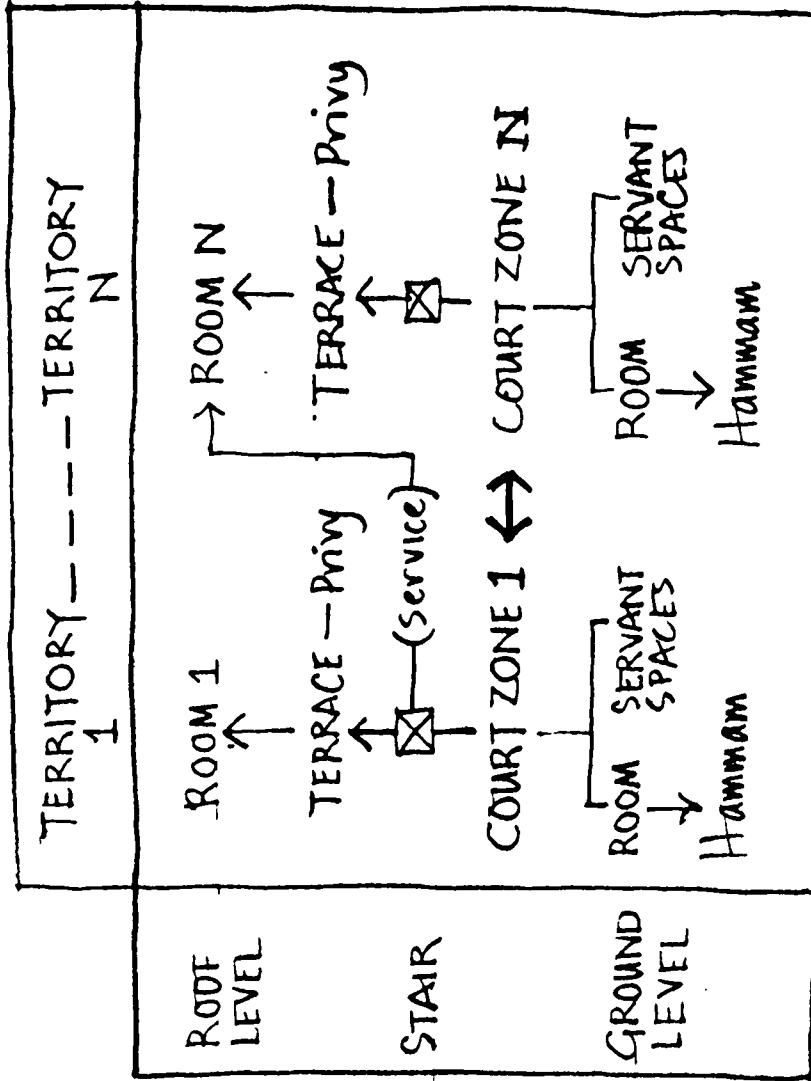
Example 4: SH ISA



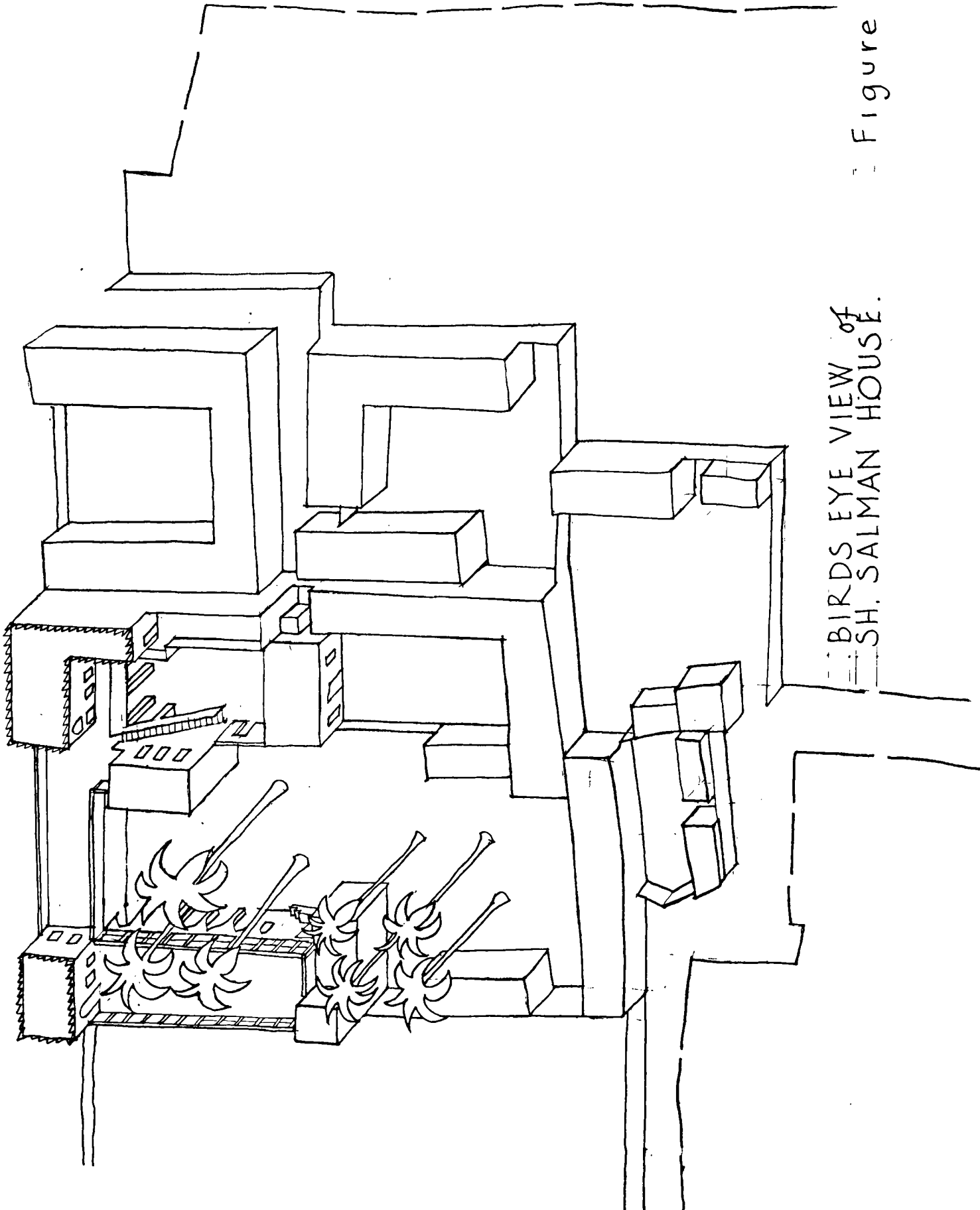
Example 3 SH ABDALLAH

Figure 4.1 (page 2)
TERRITORIAL
DIAGRAMS.



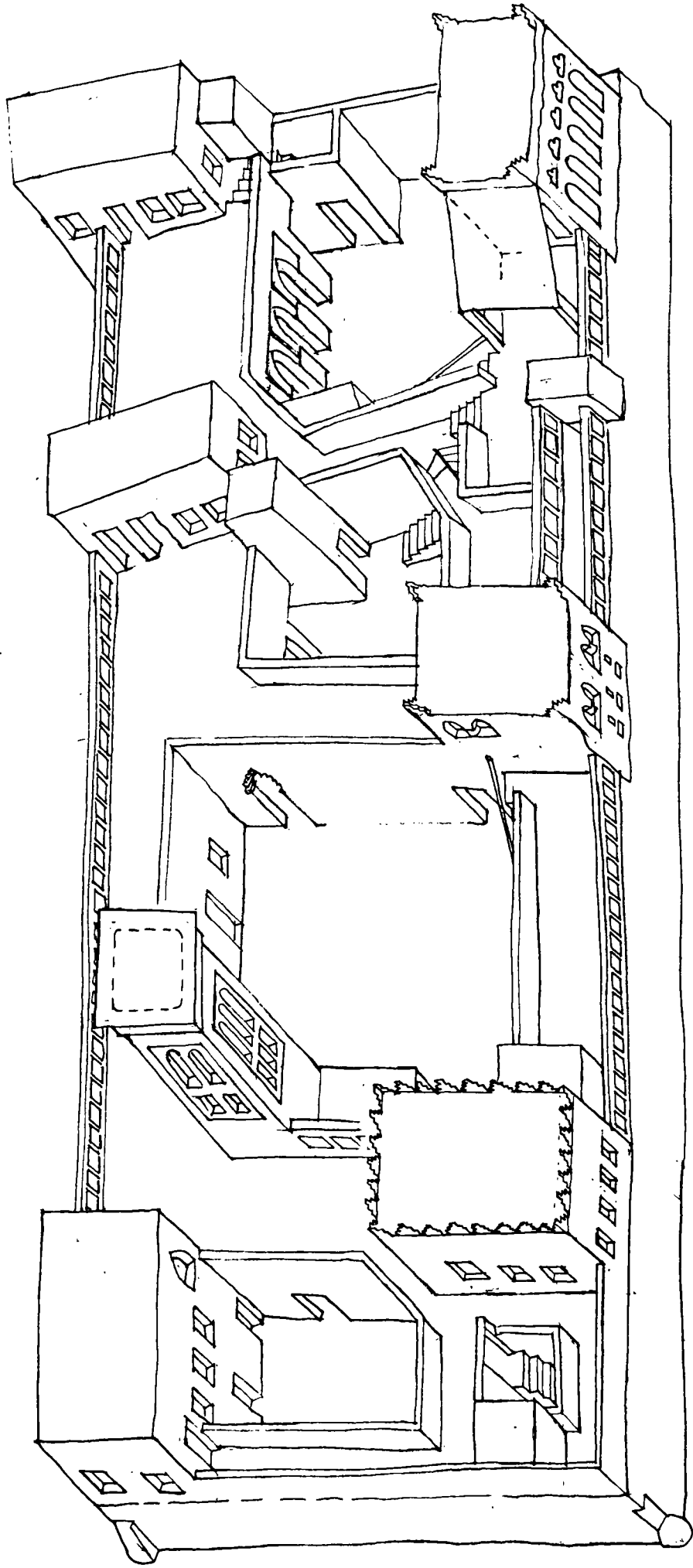


TERRITORIAL STRUCTURE Figure 4:2.



BIRDS EYE VIEW OF
SH. SALMAN HOUSE.

Figure 4.3



SHEIKH ISA HOUSE
BIRD'S EYE VIEW

Figure 4.4

SH. HAMAD HOUSE :
- BIRDS - EYE VIEW.

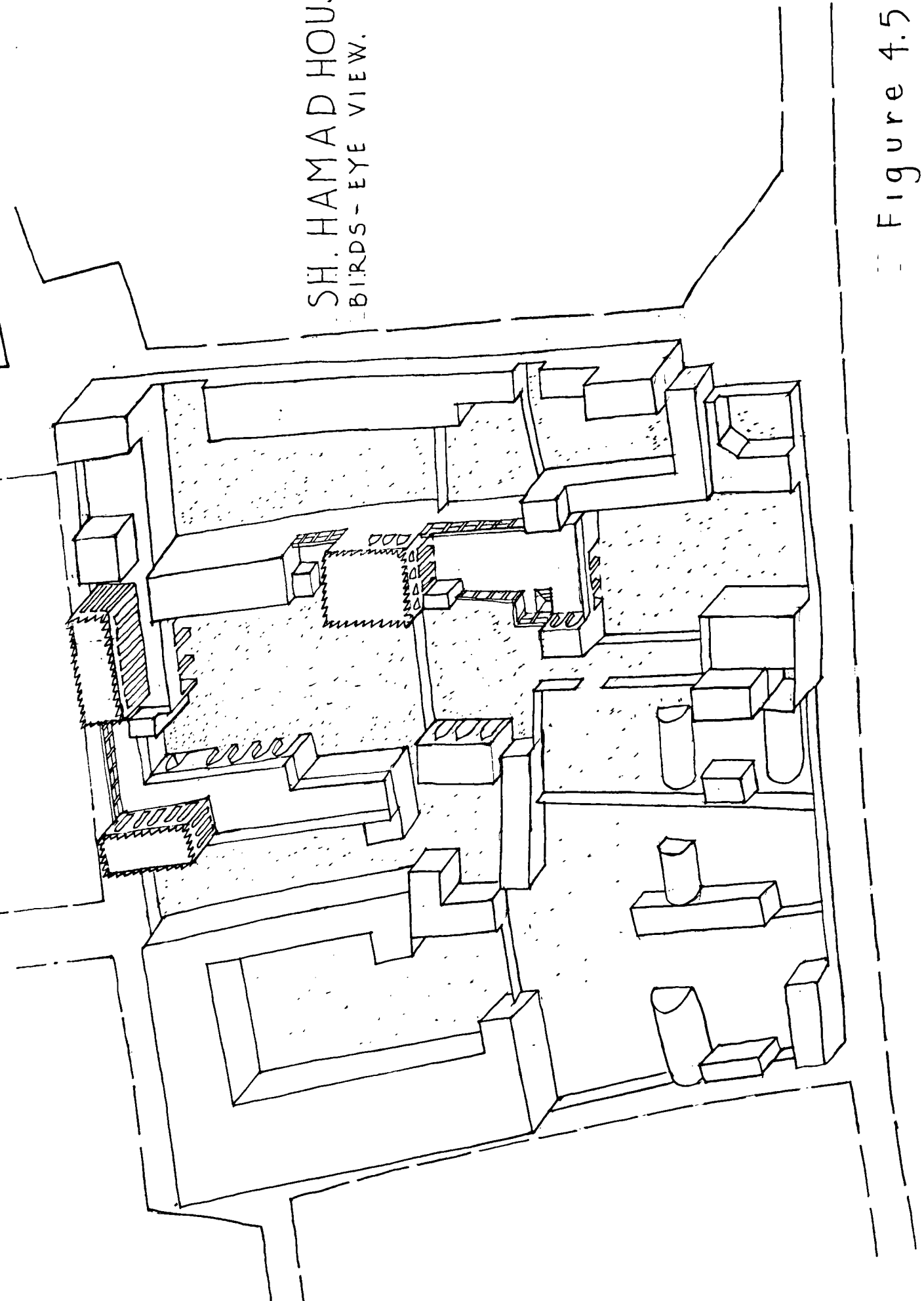
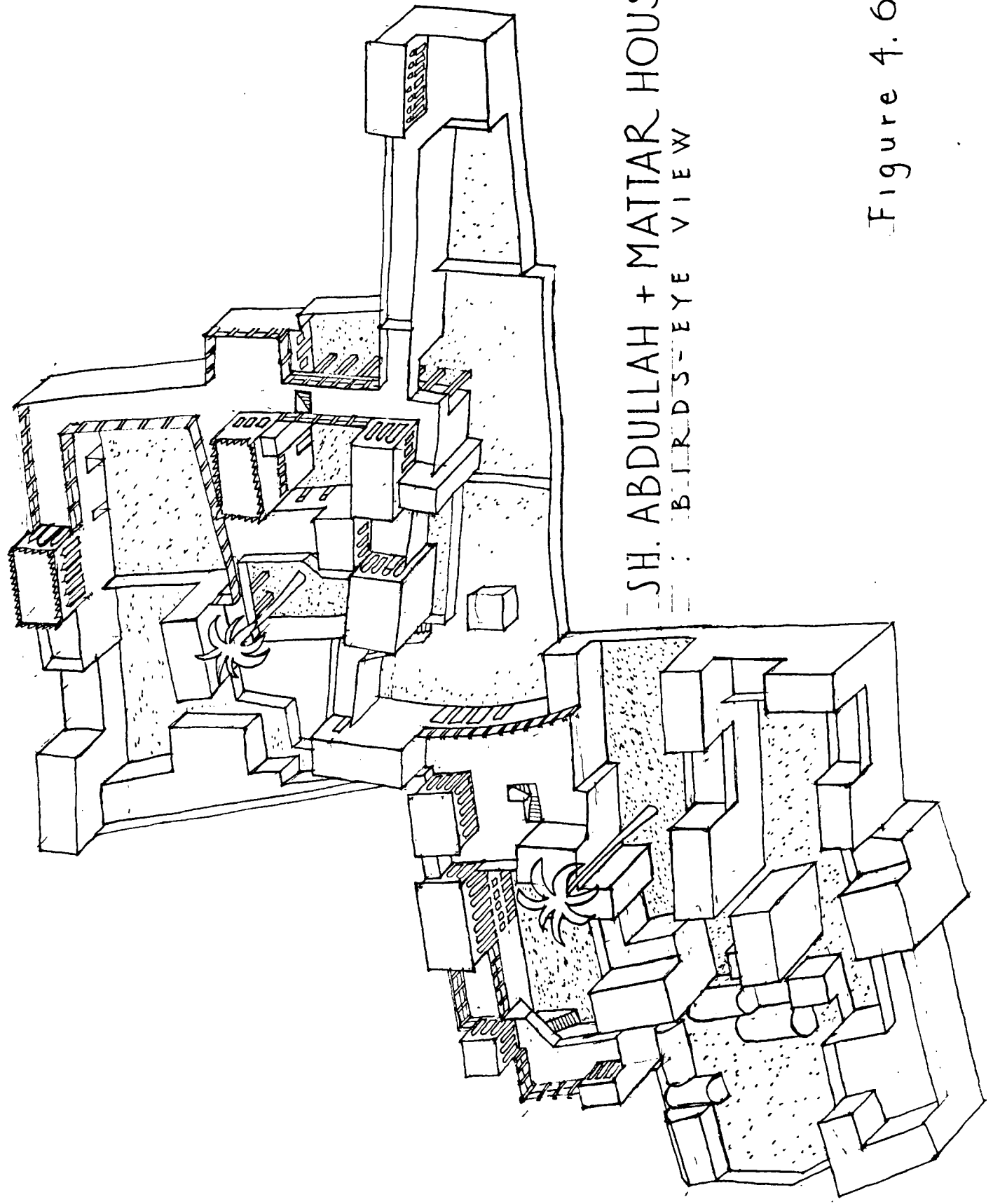
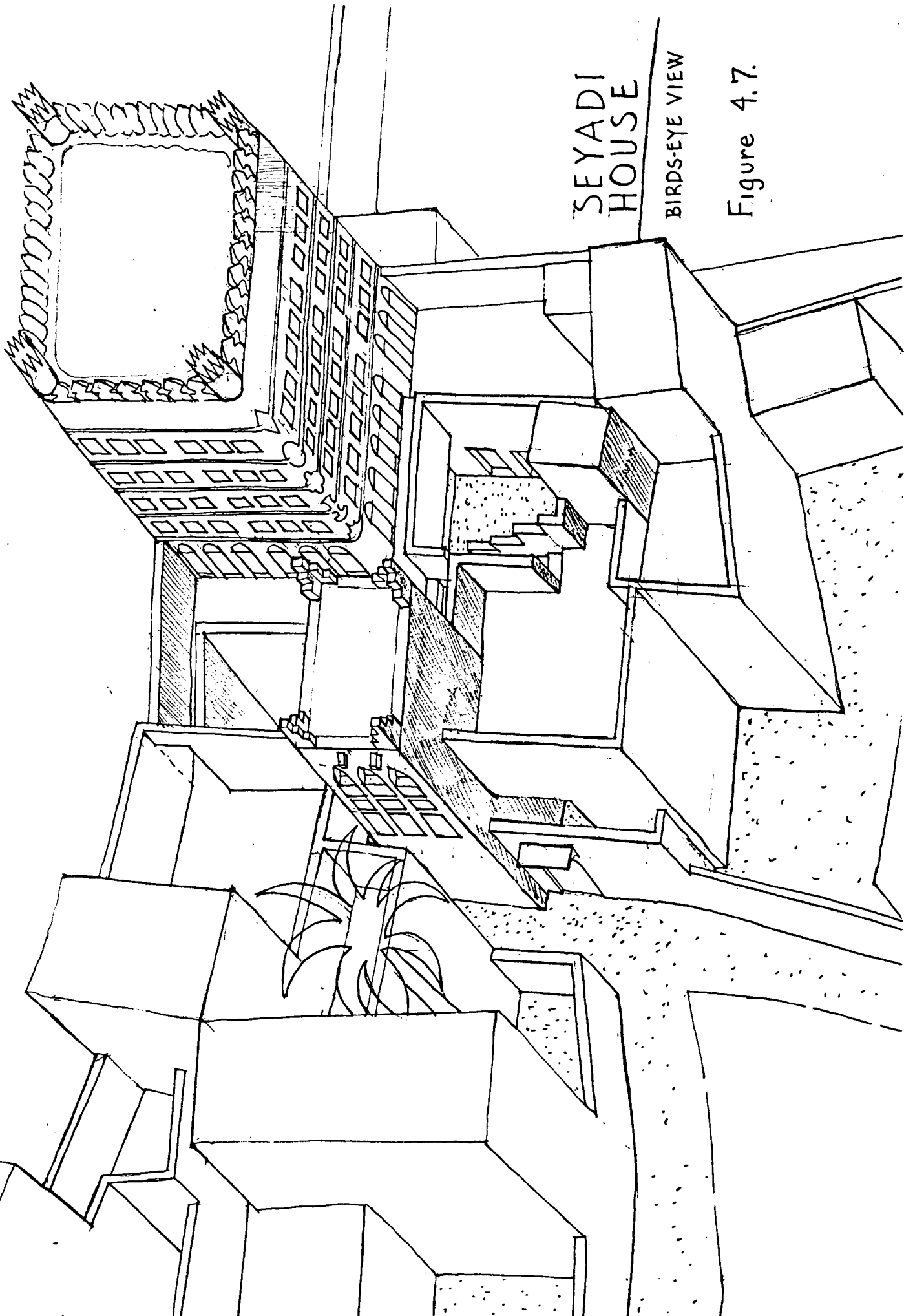


Figure 4.5



SH. ABDULLAH + MATTAR HOUSES
BIRDS-EYE VIEW

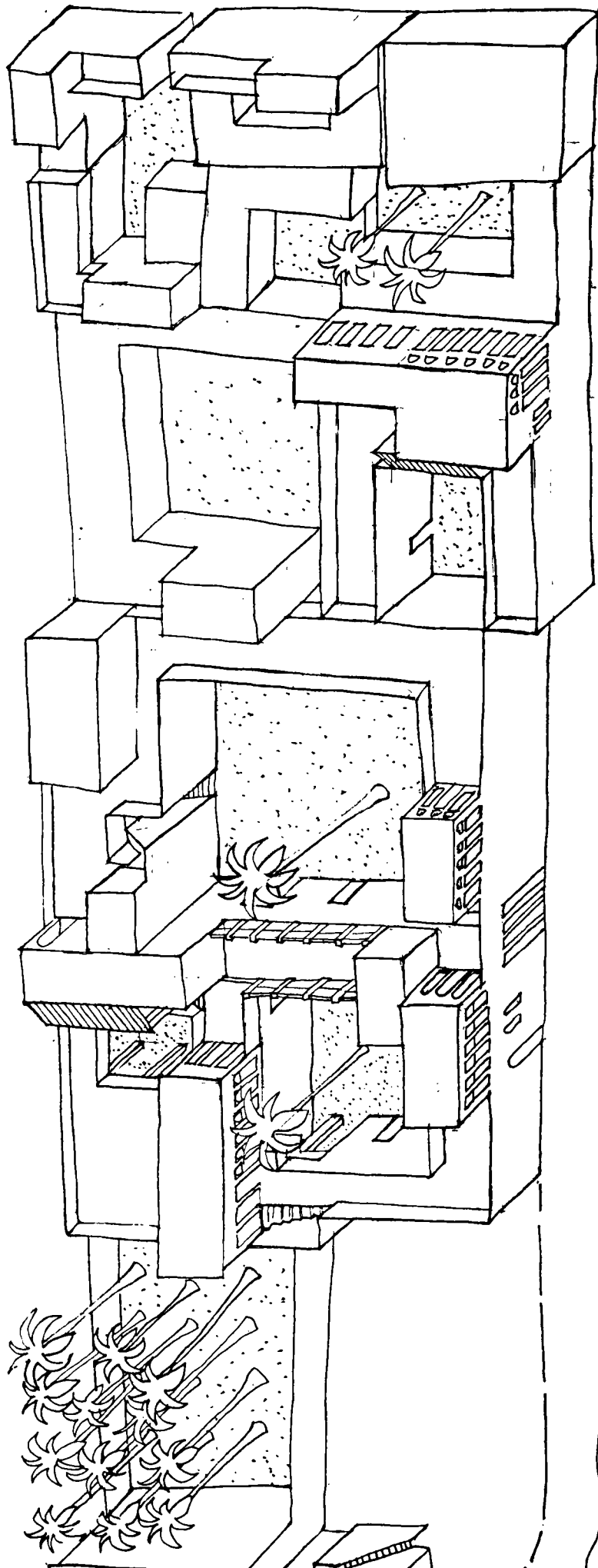
Figure 4.6



SEYADI
HOUSE

BIRDS-EYE VIEW

Figure 4.7.



FAKHROO HOUSE
BIRDS EYE VIEW

Figure 4.8

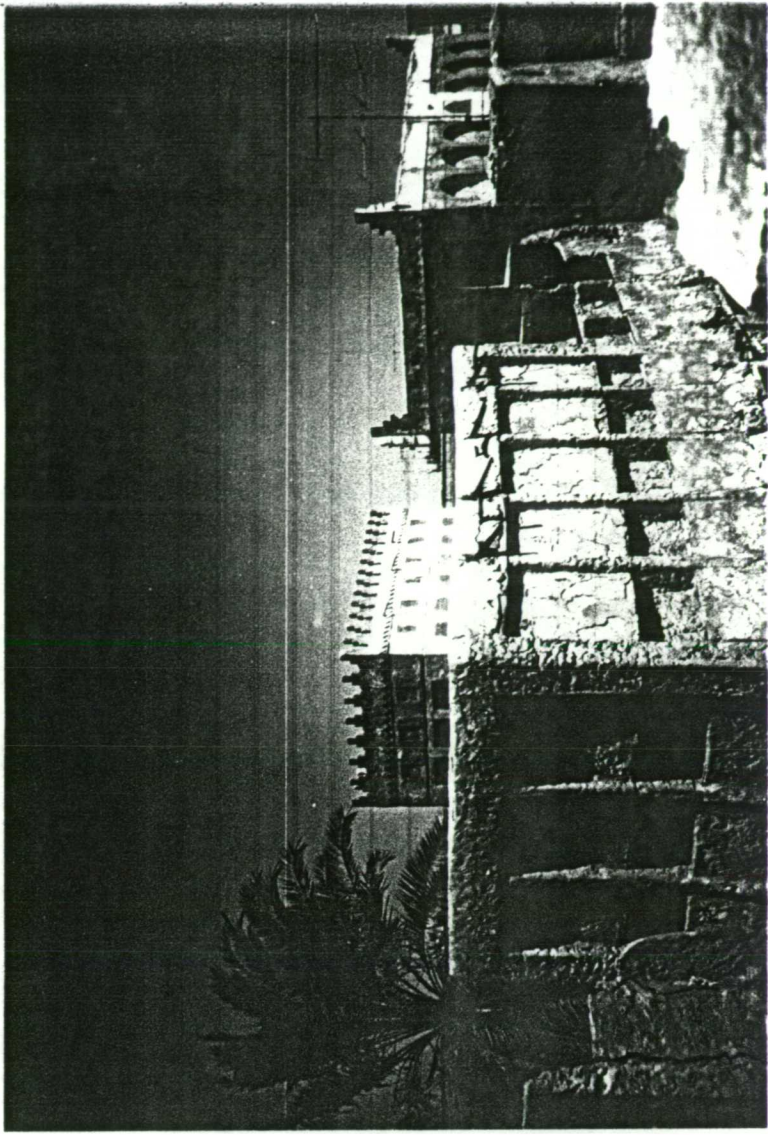


Fig. 4.9(B) Views from Roof Terraces: Sh Abdullah House from the roof terrace of the Mattar House.

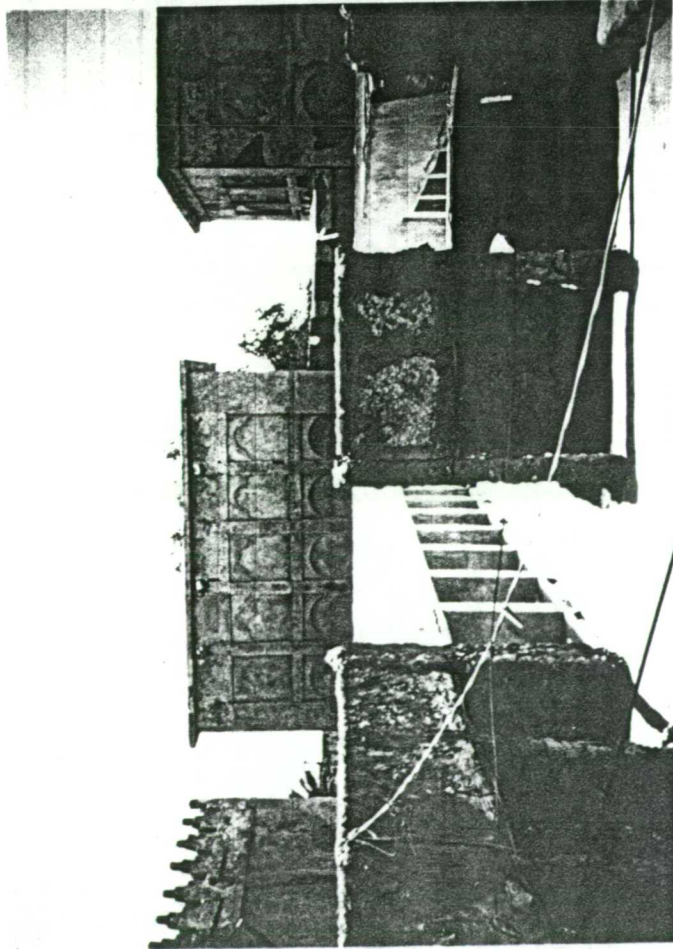
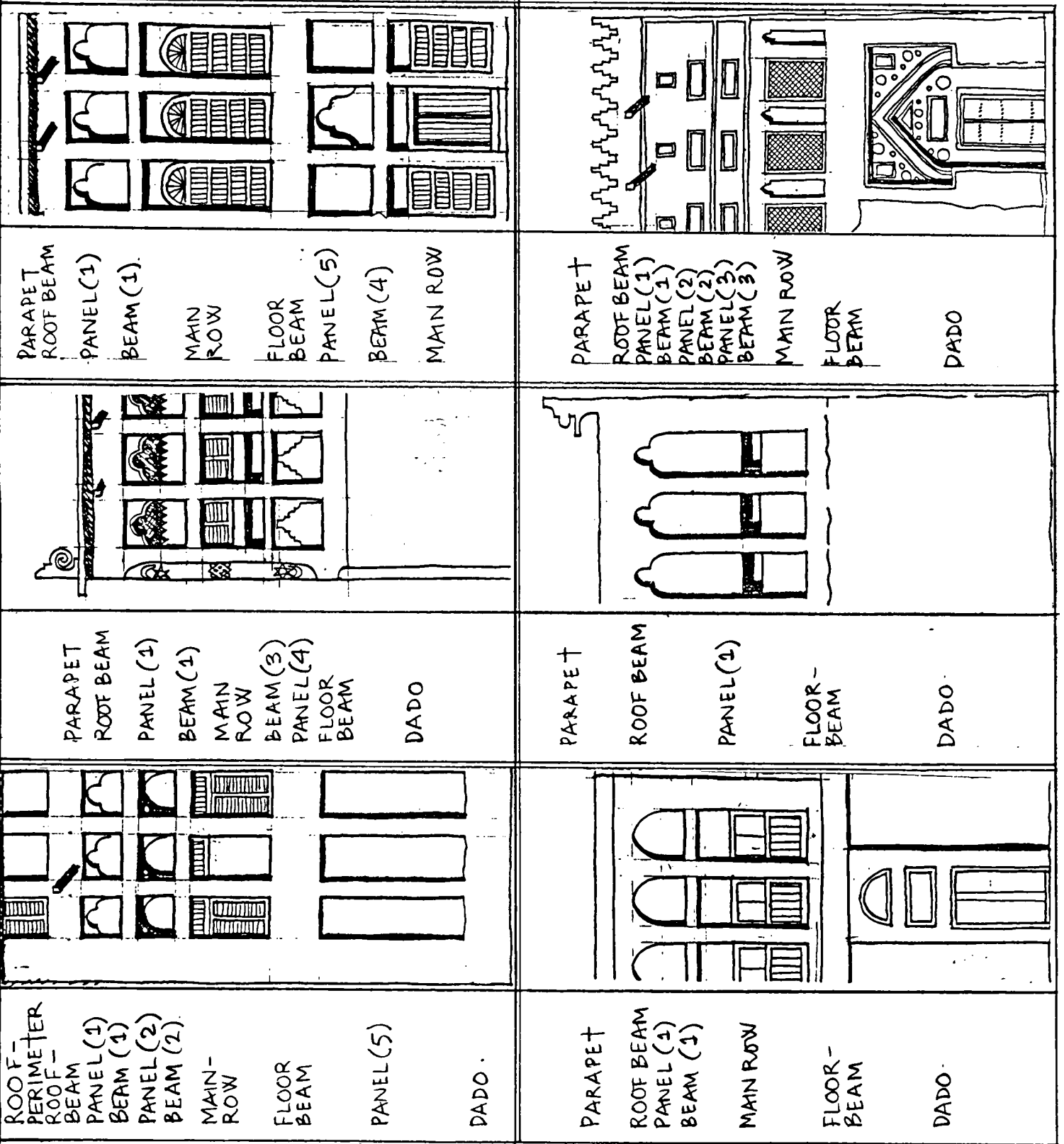


Fig. 4.9(A) Views from Roof Terraces: from Sh Ali House southwards to the Mattar House.

SIX TYPICAL BAYS - ANALYSIS

Fig 4.10:

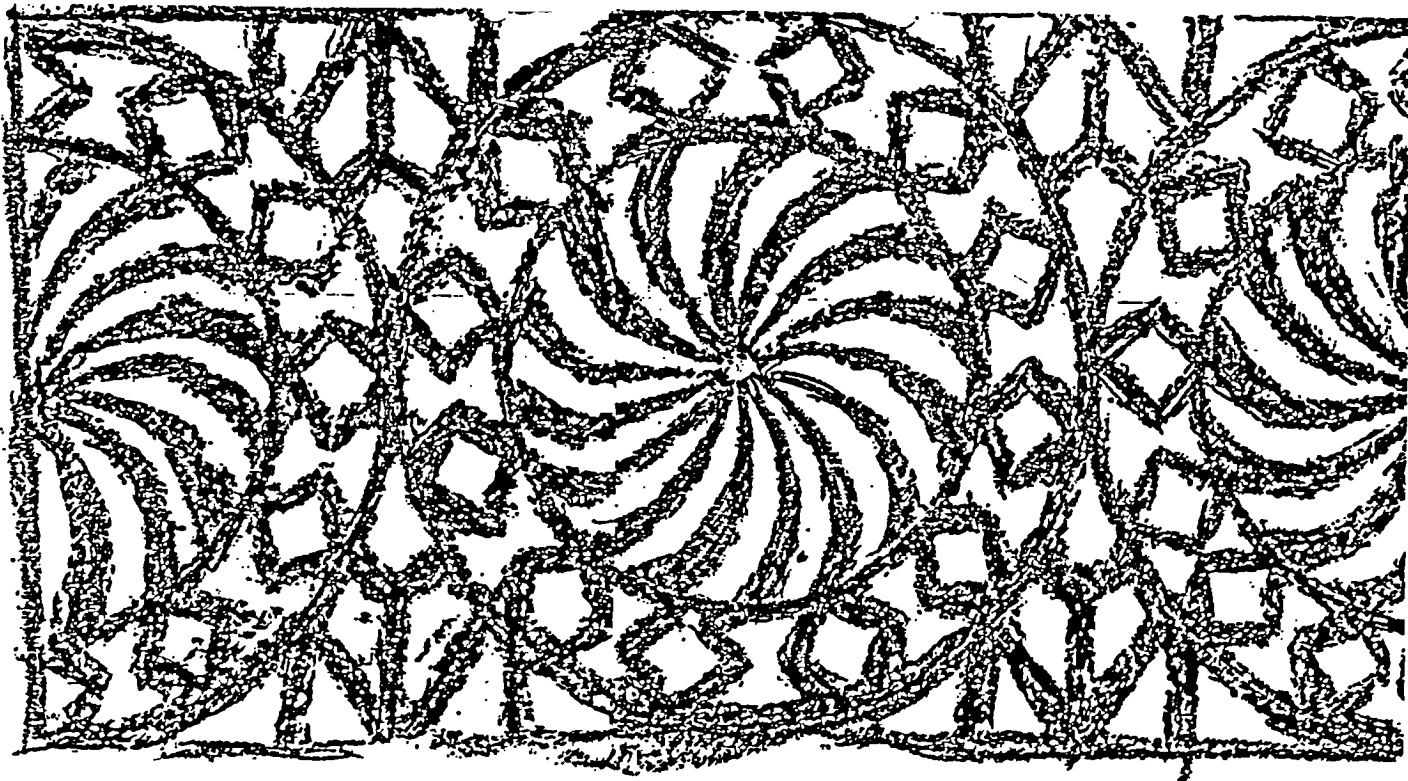


ROOF PERIMETER	BADGIR (MAY BE COPED)	TIMBER LOUVRES	TIMBER LATTICE	FARSH PANEL + DECORATIVE ARCH	NIL		
PARAPEL	COPING	CORNER MERLONS	ROW OF MERLONS	COPING + CORNER MERLONS	COPING + ROW OF MERLONS	PLAIN	
ROOF BEAM LEVEL (+MARZAM)	MOULDING	REBATE	GROOVE	PLAIN	FLUSH ARCH		
PANEL 1 or 2	INCISED PANEL	INCISED + RECESSED PANELS (ALTERNATE)	PLAIN PANEL + ARCH.	VOID	PLAIN	NIL	
BEAM LEVEL 1	GROOVE	EXPRESSED BEAM	NIL				
PANEL 3 (+ROSANNA)	INCISED PANEL	INCISED + RECESSED PANELS (ALTERNATE)	PLAIN				
BEAM LEVEL 2	GROOVE	EXPRESSED BEAM	ROUNDELS	NIL			
MAIN ROW (+WINDOW)	FLUSH OR RECESSED WINDOW	FLUSH WINDOW + RECESSED PANEL (ALTERNATE)	PLAIN PANEL	TALL INCISED PANEL	PLAIN PANEL + ARCH	BADGIR IN PLAIN PANEL	BADGIR - PANEL BELOW HAS ARCH.
BEAM LEVEL 3	GROOVE	EXPRESSED BEAM	NIL				
PANEL 4	PLAIN PANEL	PANEL + ARCH.	BAND	NIL			
FLOOR BEAM	GROOVE	EXPRESSED BEAM	EXPRESSED BEAM				
PANEL 5	PLAIN PANEL	PANEL + ARCH	INCISED PANEL(S)				
BEAM LEVEL 4	EXPRESSED BEAM	NIL					
MAIN ROW (+WINDOW)	FLUSH OR RECESSED WINDOW	PLAIN PANEL	PANEL + ARCH	BADGIR IN PLAIN PANEL	PLAIN	DOOR	NIL
DADO	PLAIN	NIL					

TABLE OF OPTIONS FOR EACH LEVEL IN A FAÇADE BAY.

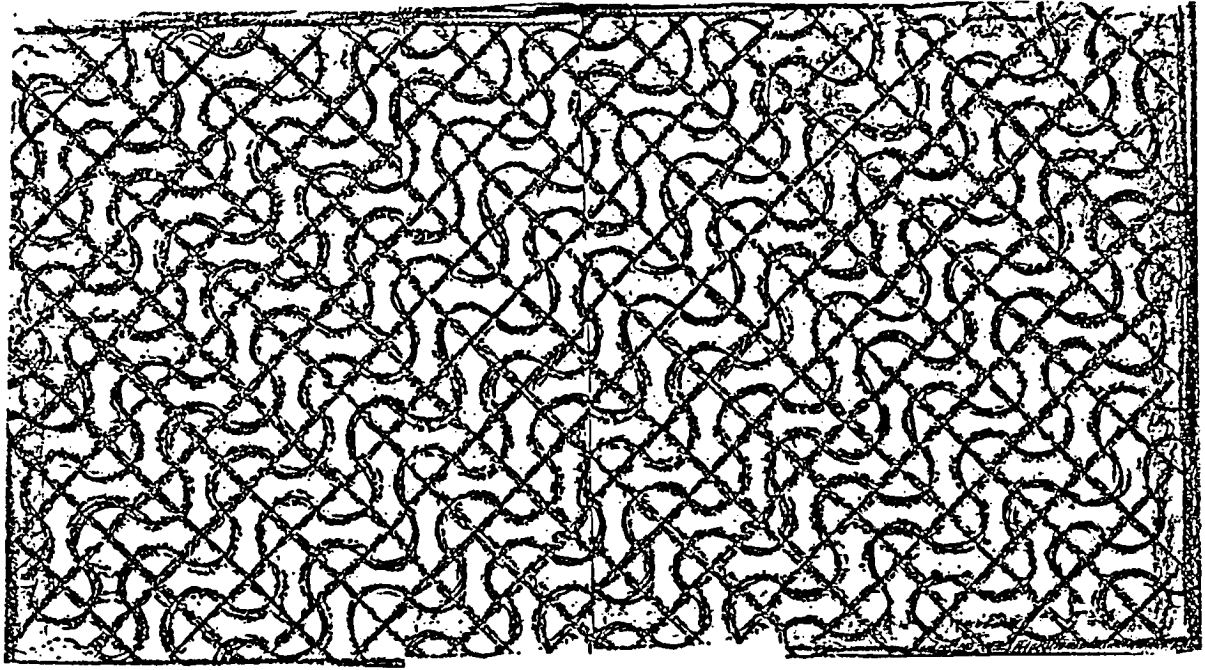
Figure 4.11.

MERLONS																																																																																																				
BRACKETS																																																																																																				
ARCH FORMS																																																																																																				
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WINDOWS																																																													<																																							

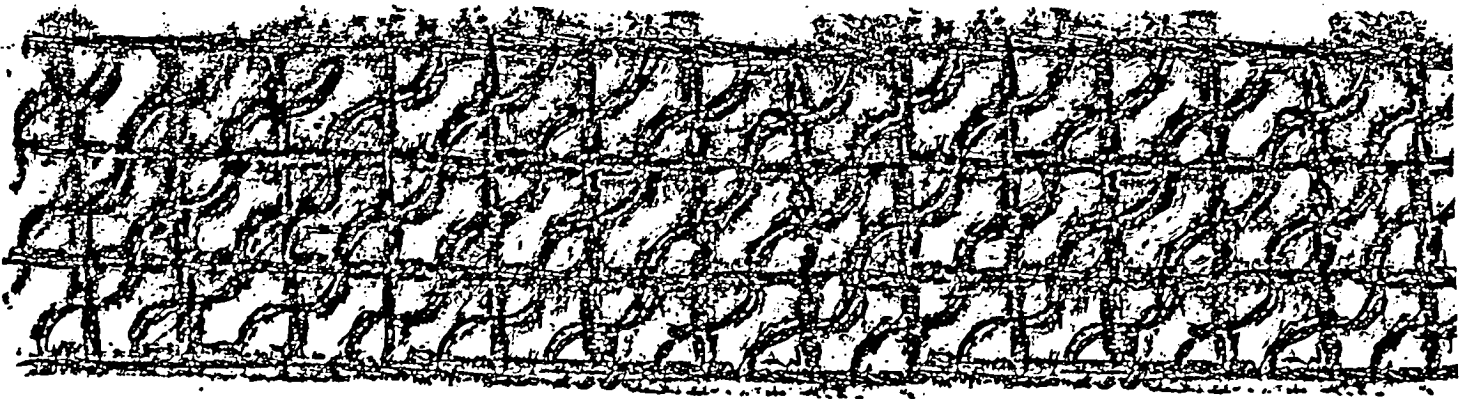


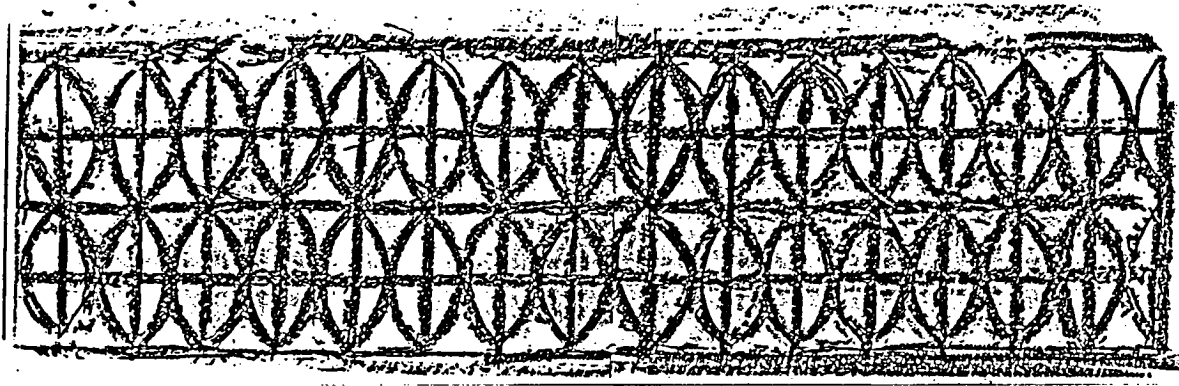
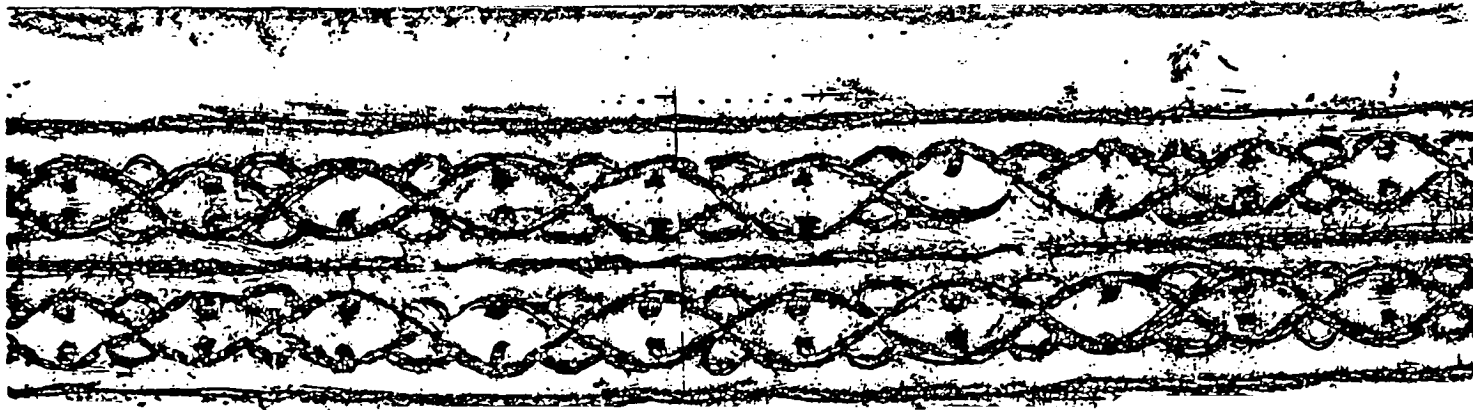
AL MOOSA

Figure 4.13



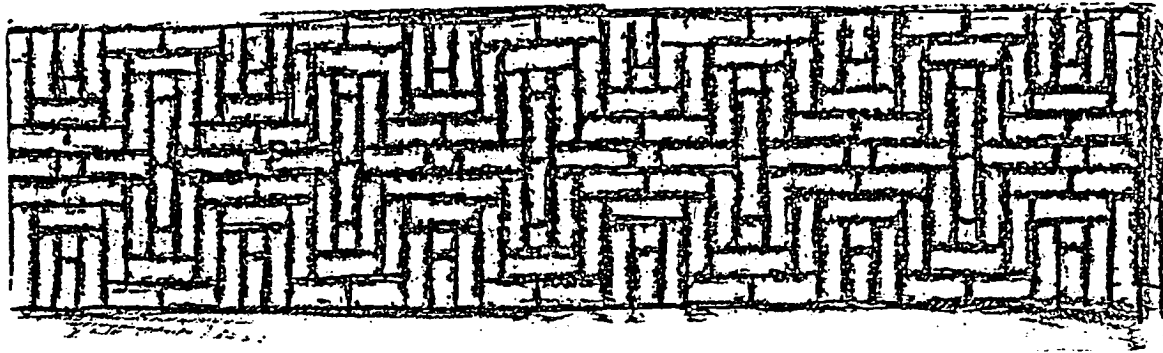
AL SALSLEH Fig 4.14



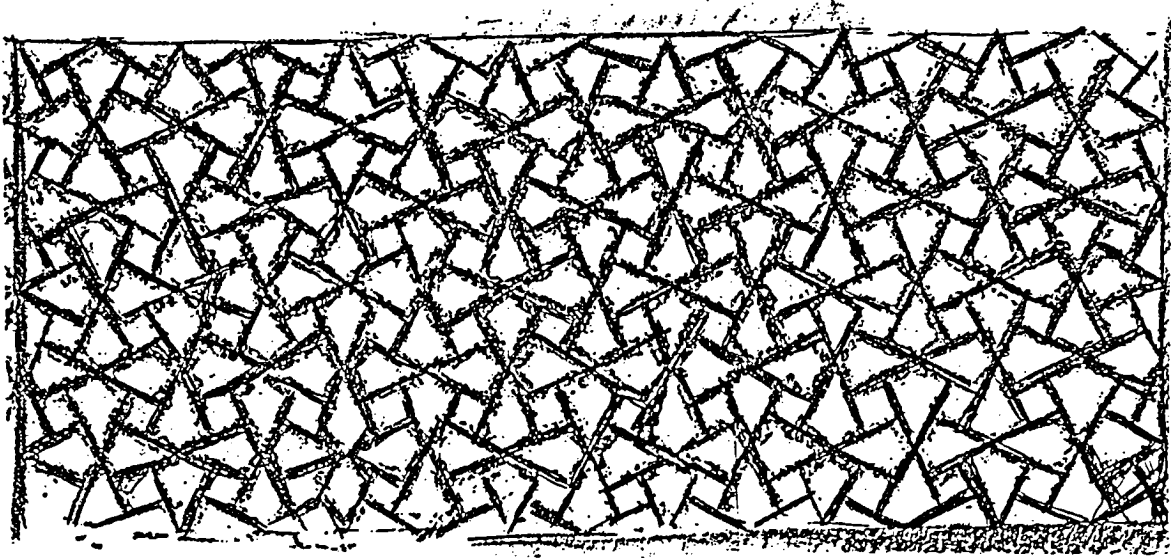


AL BAYDHAWI

Figure 4.15



AL WARDEH.
Fig. 4.16



AL MU THELATHAT

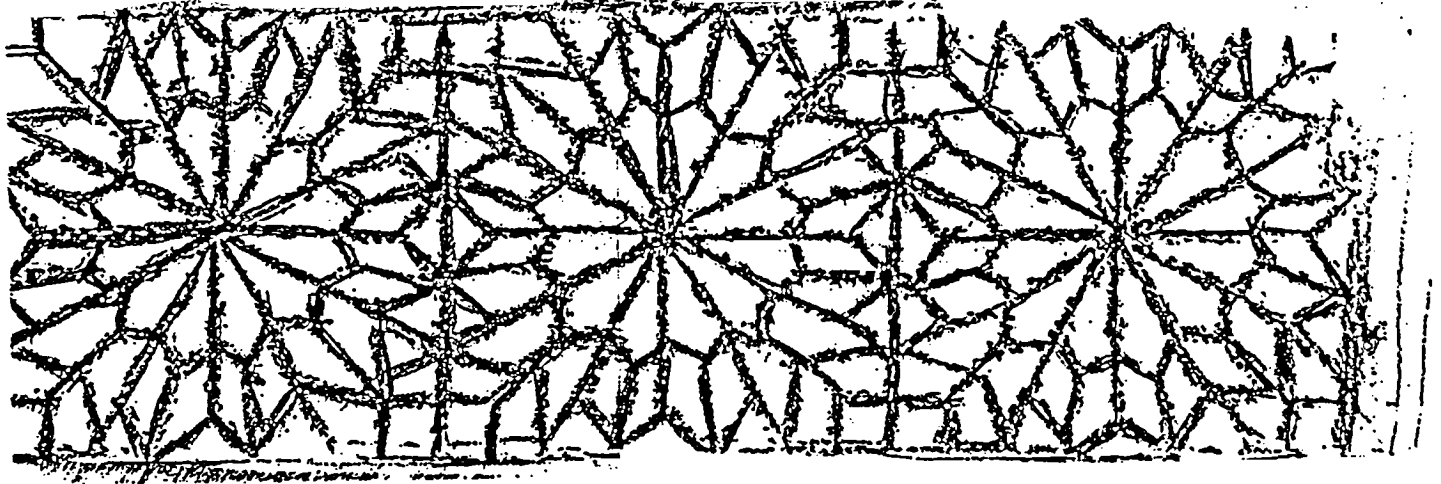
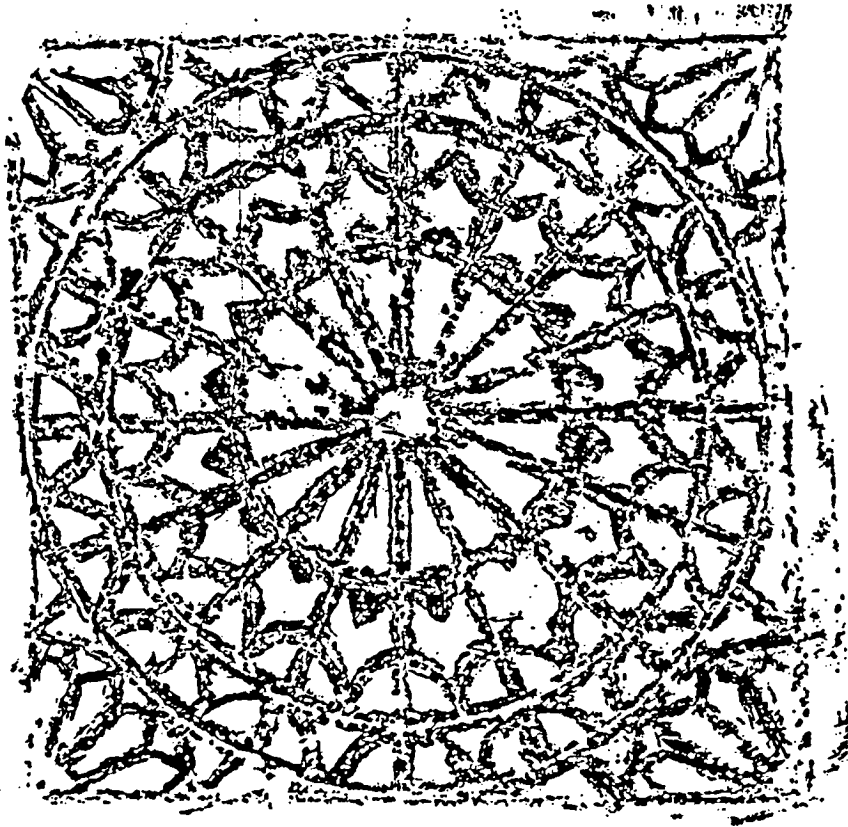
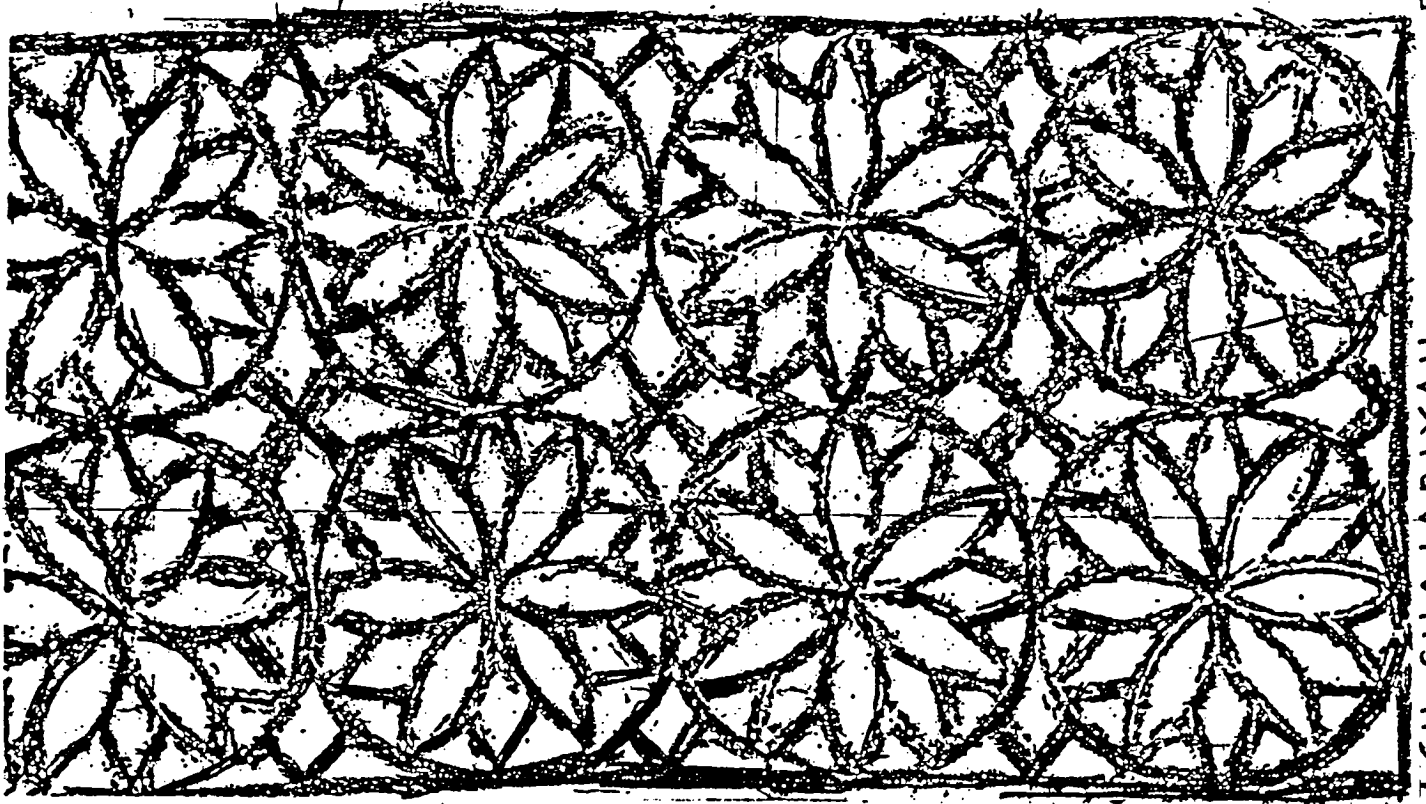


Figure 4.17

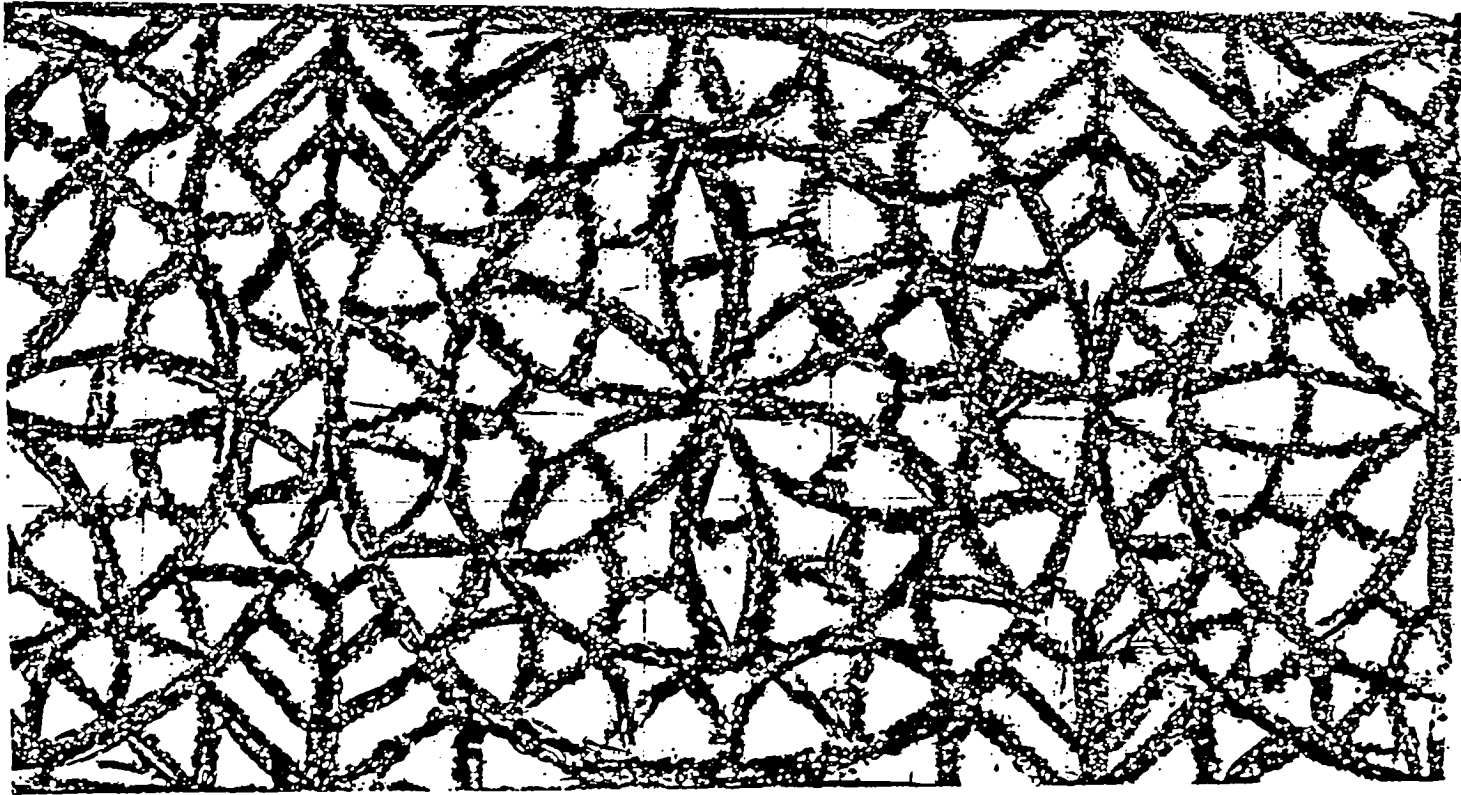


ASH SHAJARIYAH



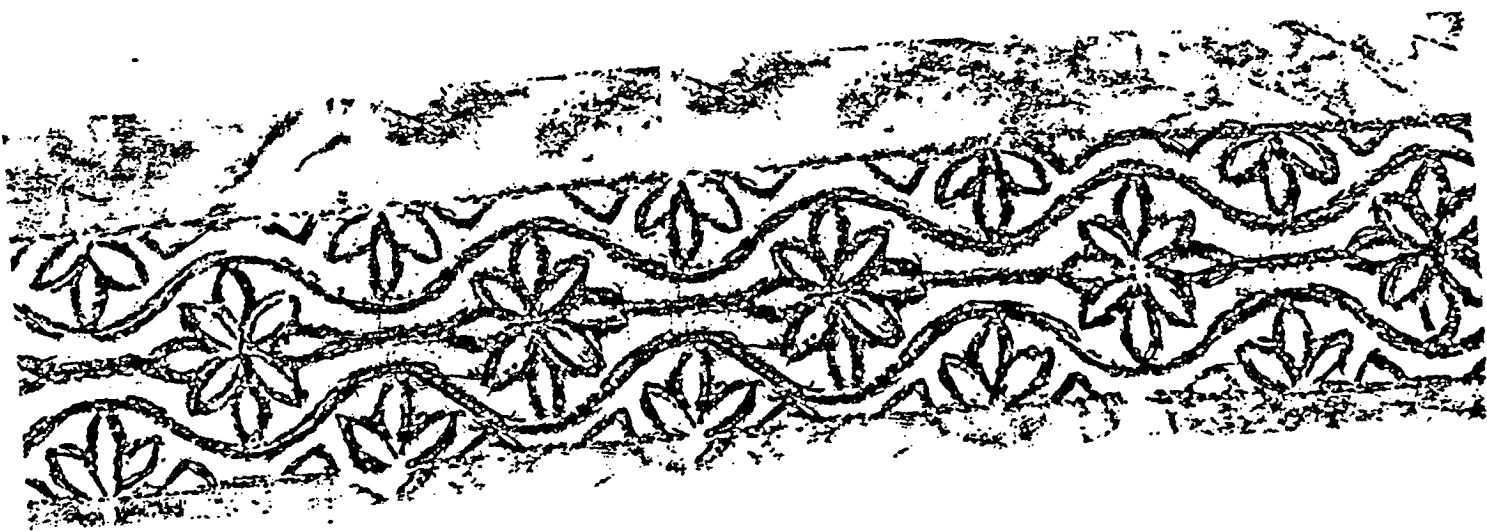
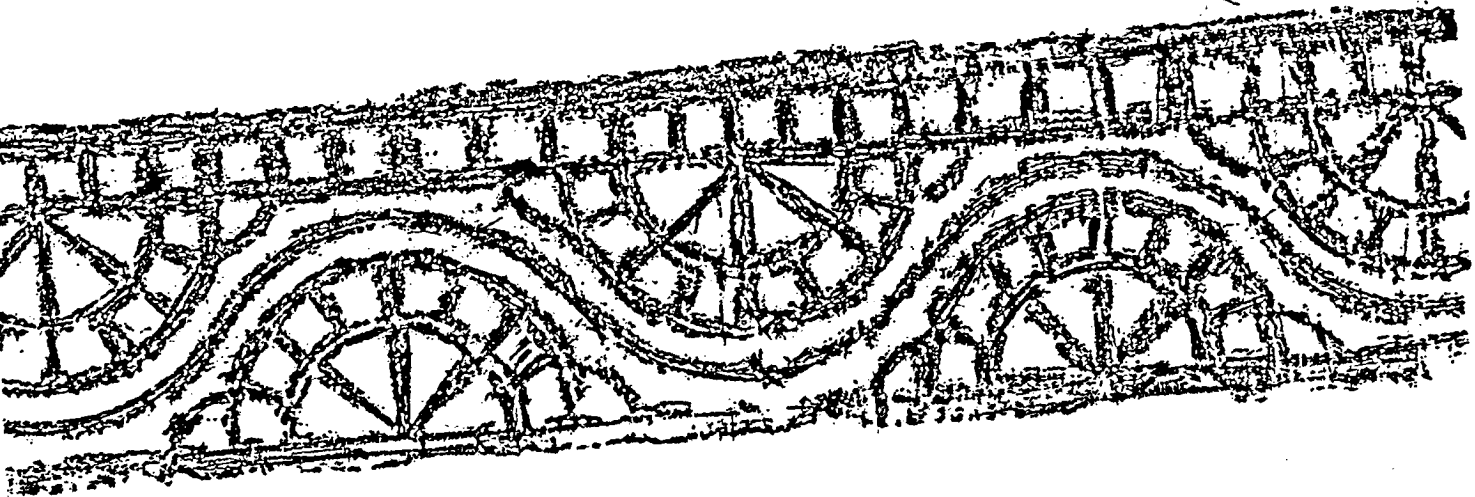
ASH SHAJARIYAH

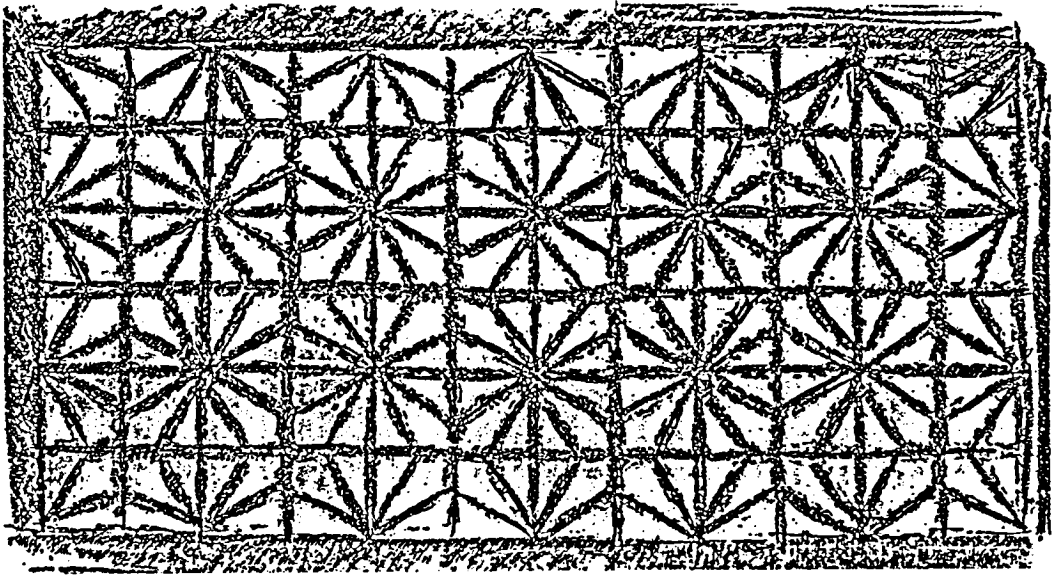
Fig. 4.18



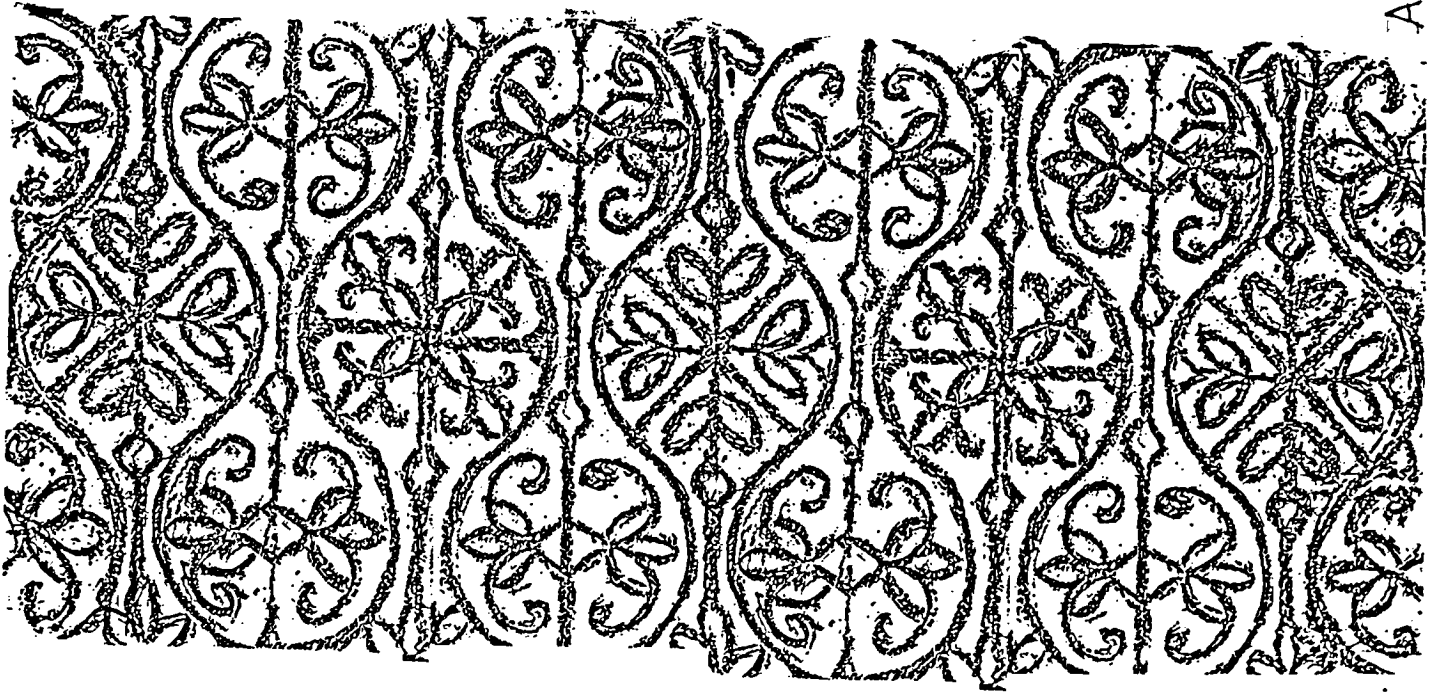
AL SHUWARAB
HAMADA

Fig 4.19



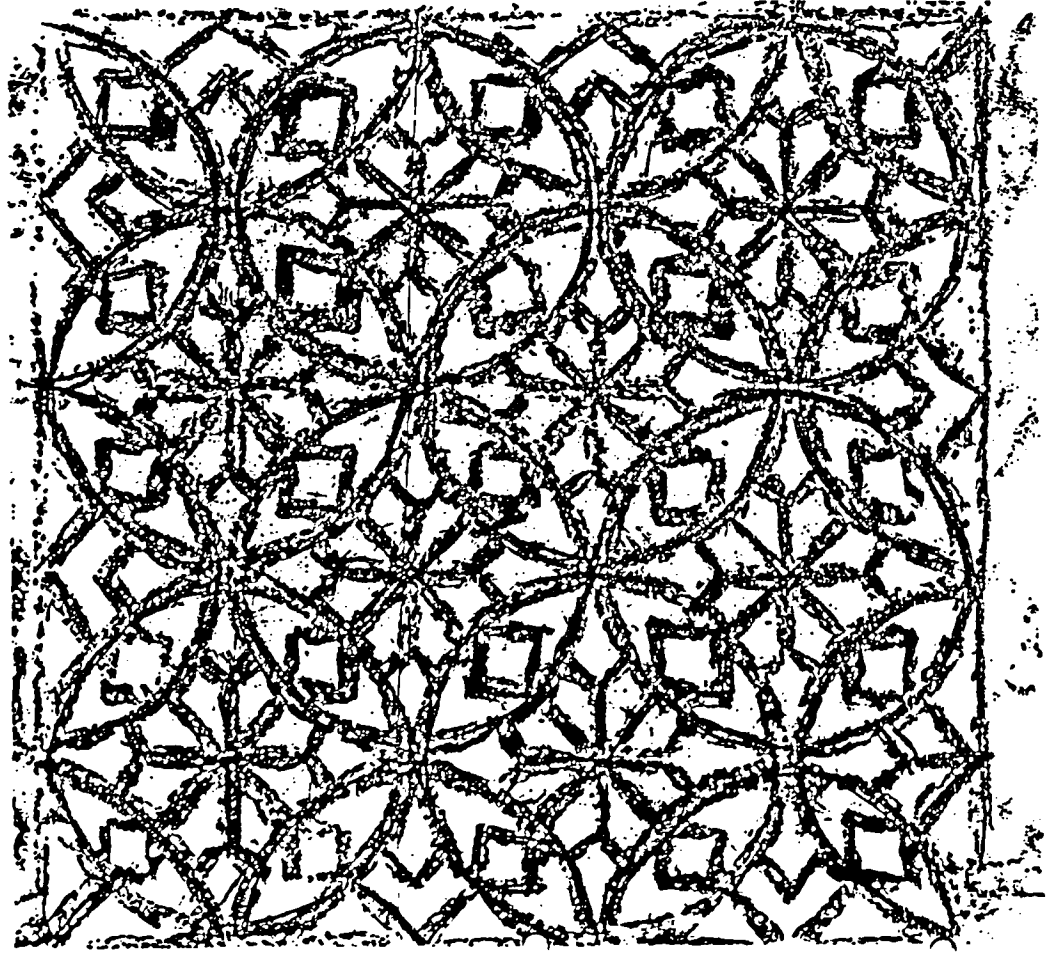
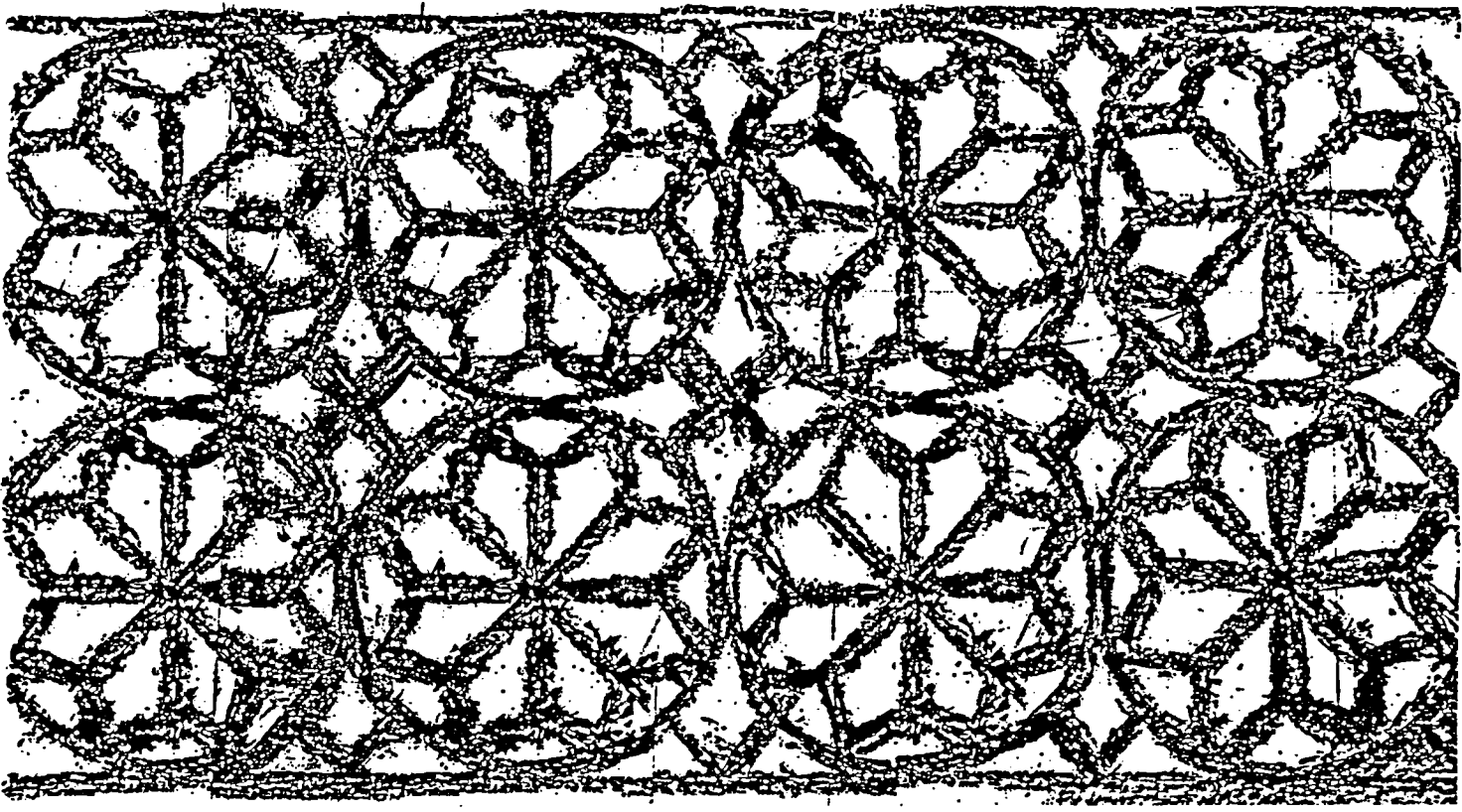


AL NAJMAH.



AL SHUWARAB HAMADA

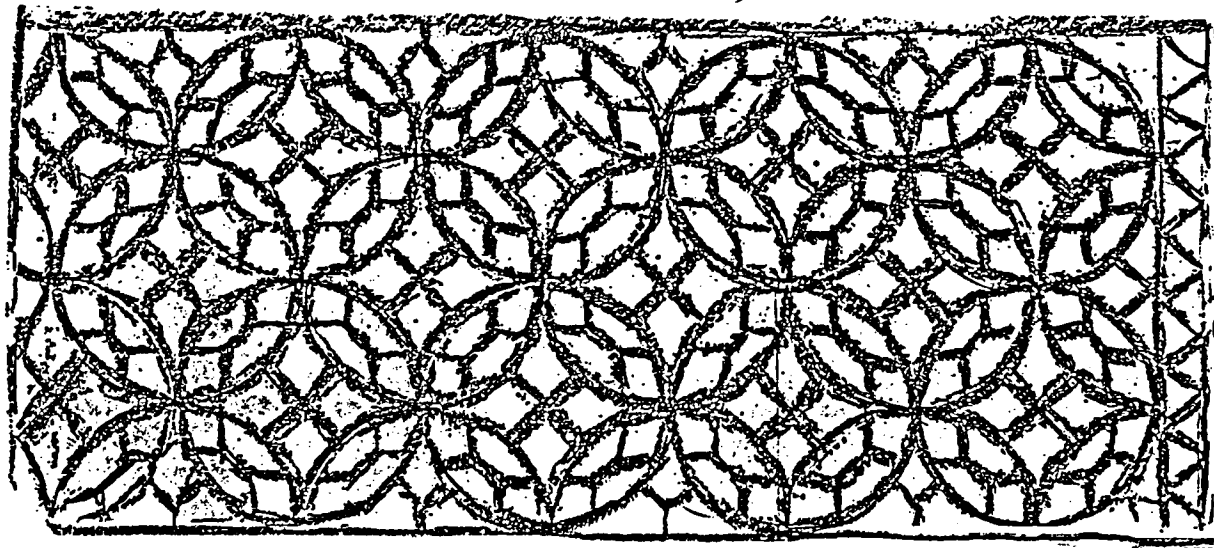
Fig. 4.20



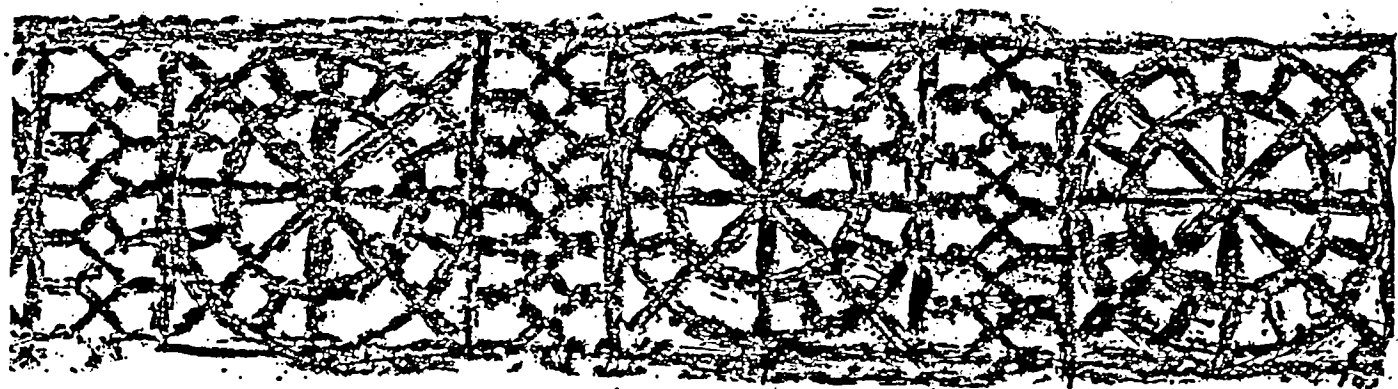
AL MUJASSIMEH

Fig 4.21

Fig 4.22



AL MUJASSIMEH



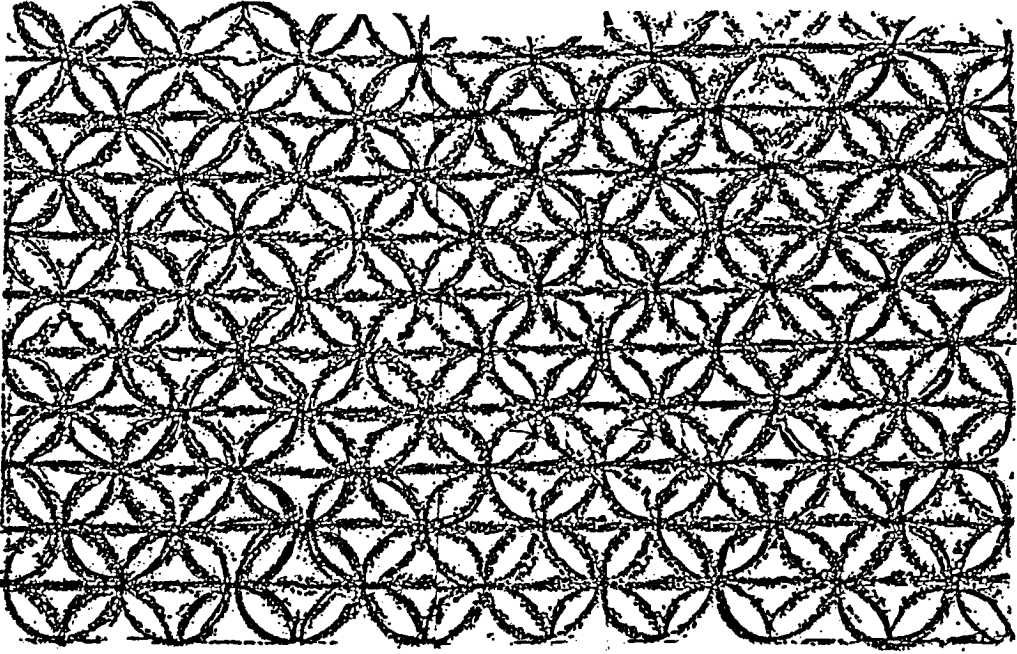
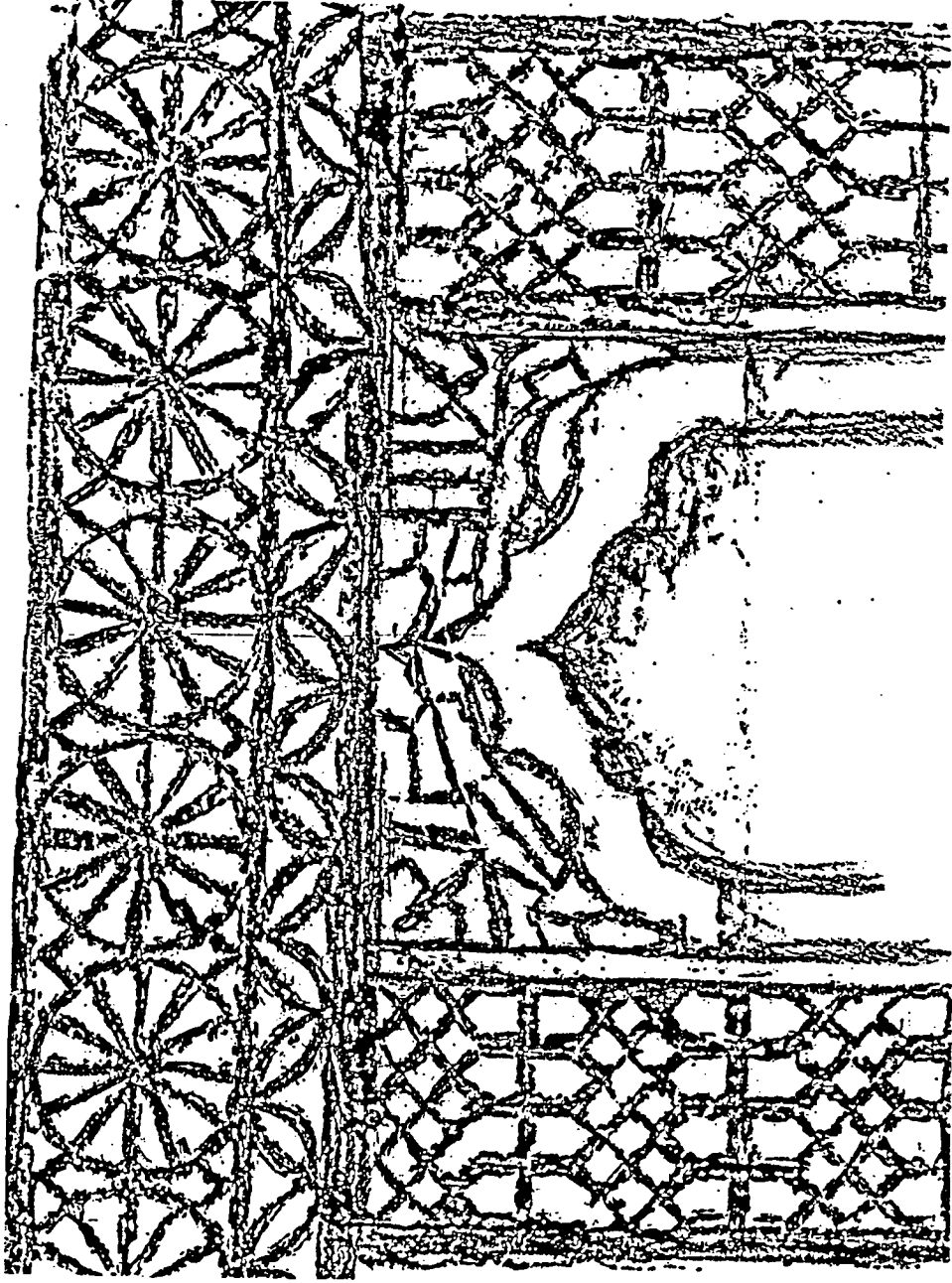


FIG 4.23

AL BAYPANEH





AN INCISED PLASTER COMPOSITION - SHAMAD HOUSE

Fig 4.24.

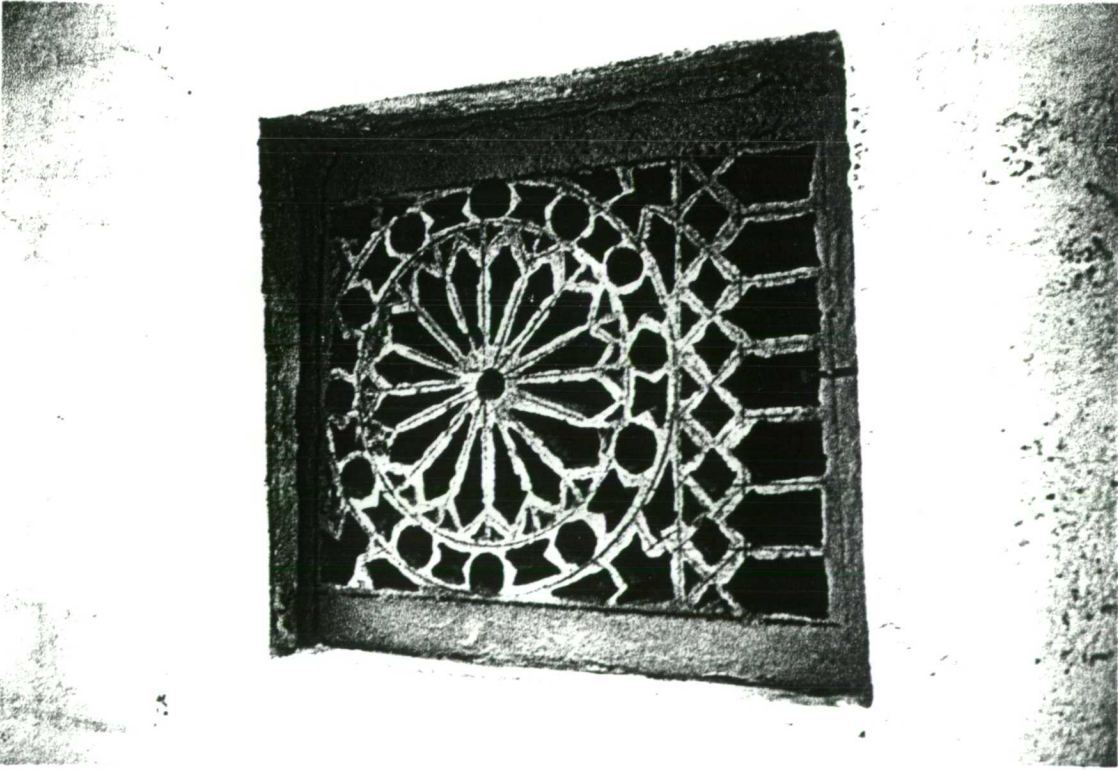


Fig. 4.35 Plaster grille at Sheikh Isa House, "Ash Shajariyah" design.

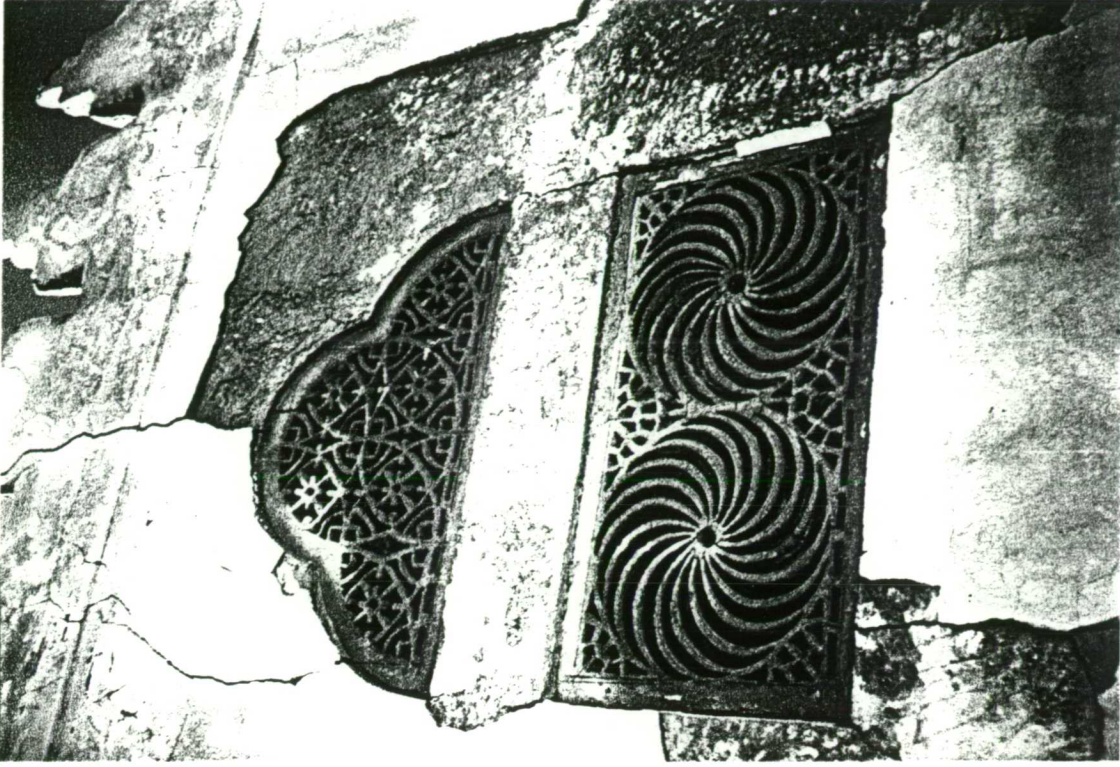


Fig. 4.36 Two panels above the door to the east apartment, Salman Mattar house. The lower panel is Al Moosa pattern, the trefoil panel Al Mujassimeh.

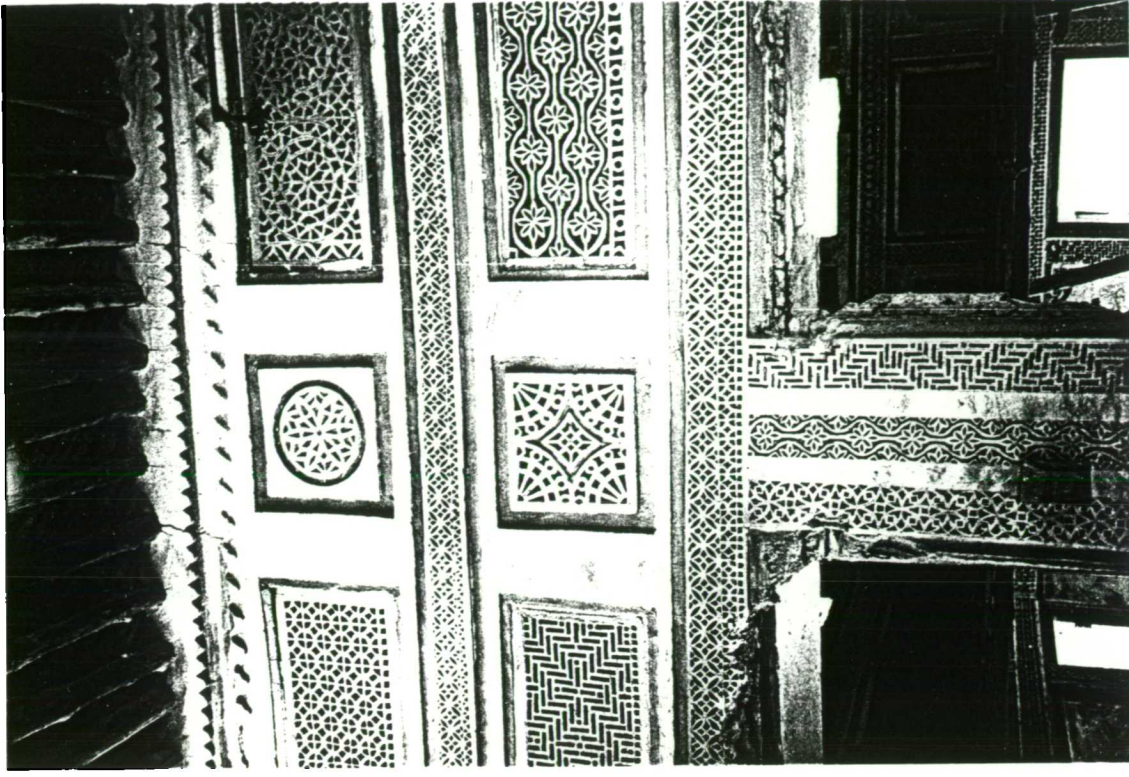


Fig. 4.38 Sheikh Hamad House: a detail of the east elevation of the Sheikh's apartment. This shows how incised decoration could be composed on a facade.

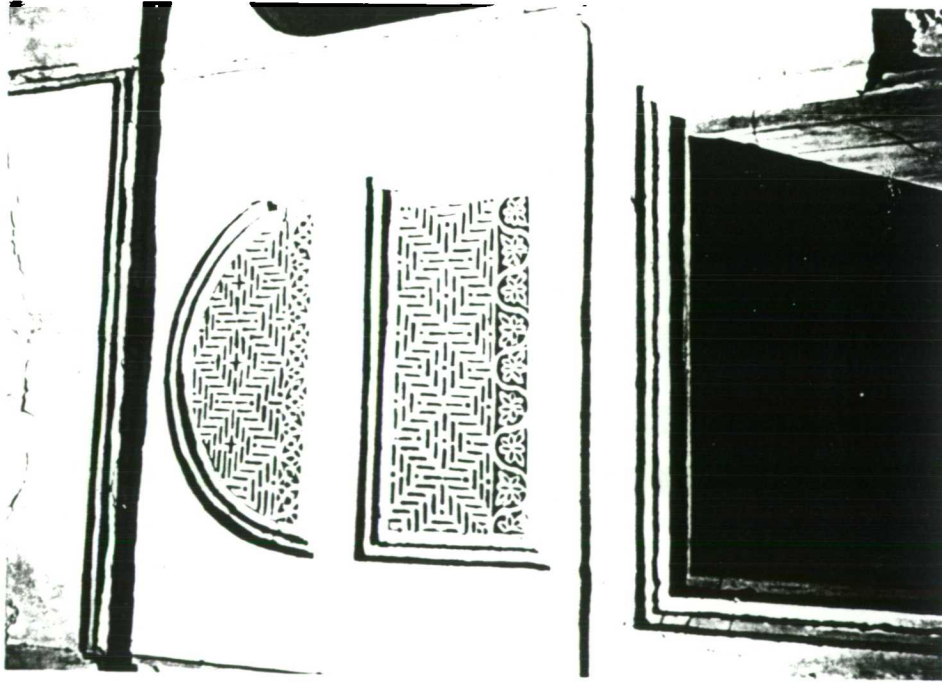


Fig. 4.37 Two panels above the door to a ground floor room from the courtyard of Salman Mattar house. Both panels are al Wardeh pattern with an Ash Shuwarab Hamada frieze along the bottom.

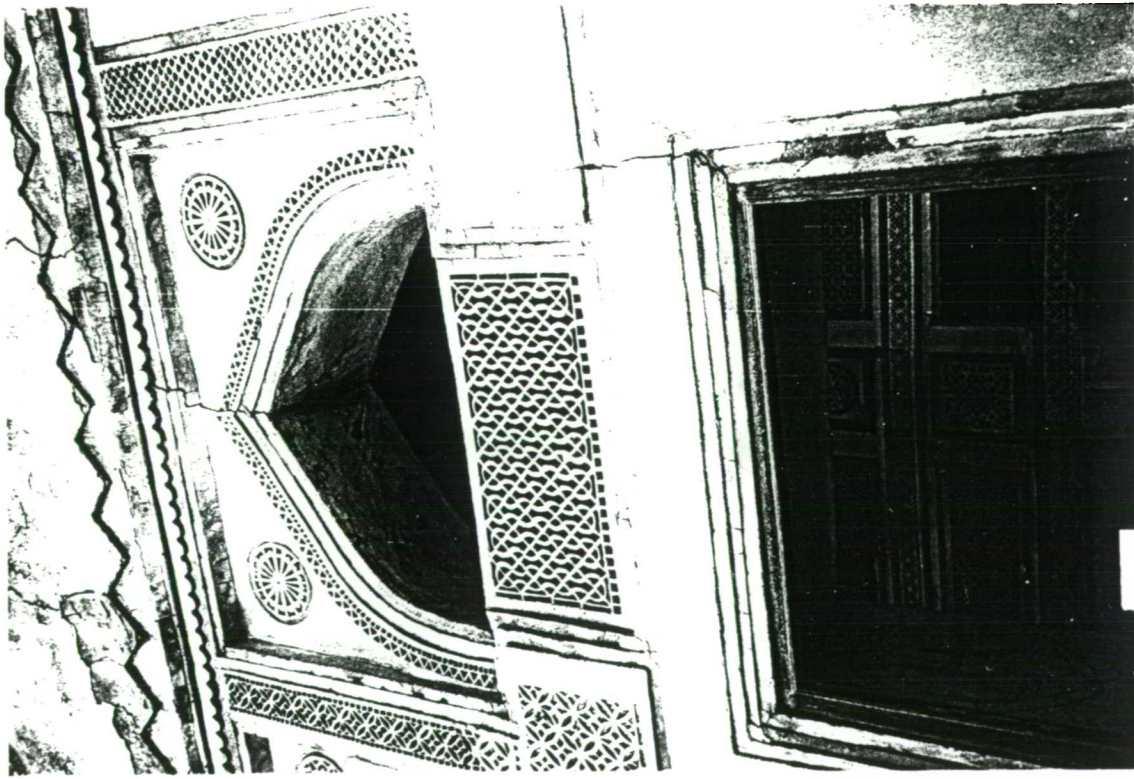


Fig. 4.39 Sheikh Hamad House: Sheikh's liwan - detail of the inner wall. This shows how decorative friezes and panels could be used.

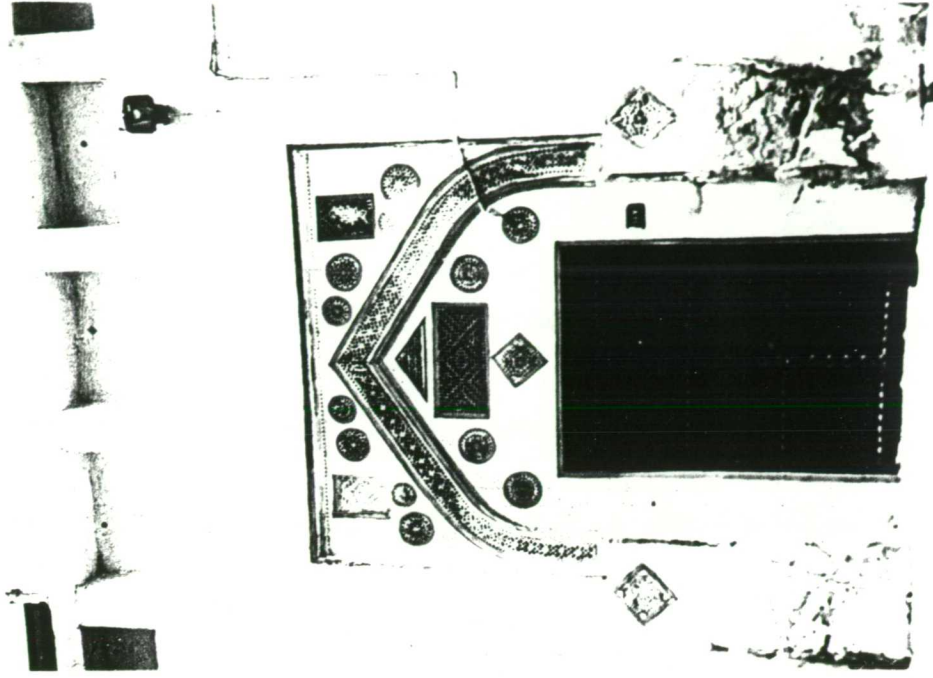


Fig. 4.40 Sheikh Ali bin Mohammed House: eastern doorway to street.

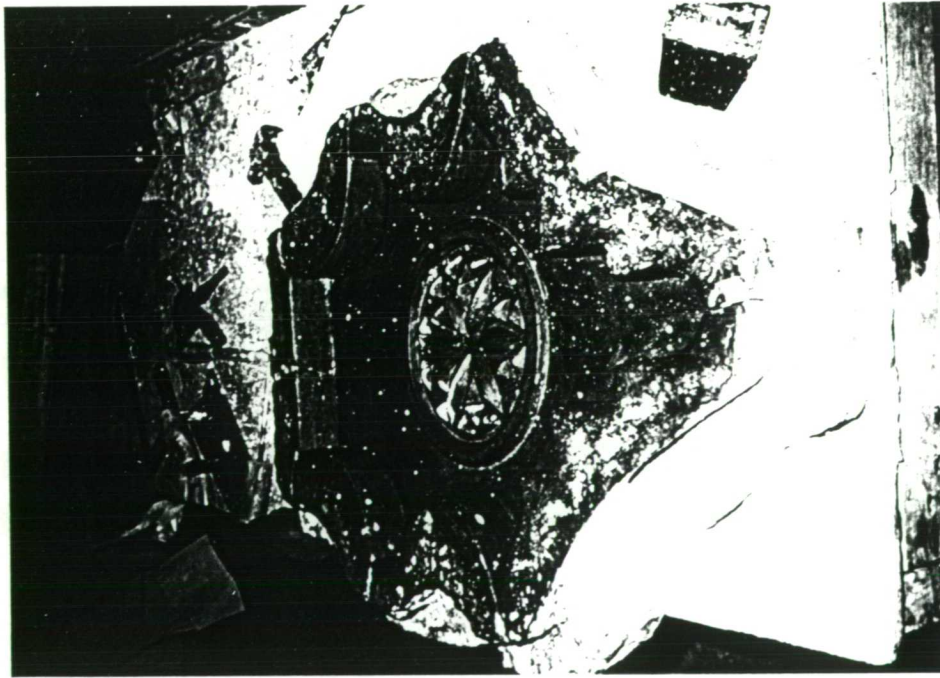


Fig. 4.41 Mould for casting merlons used in the restoration of Sheikh Isa house. This is not, however, authentic

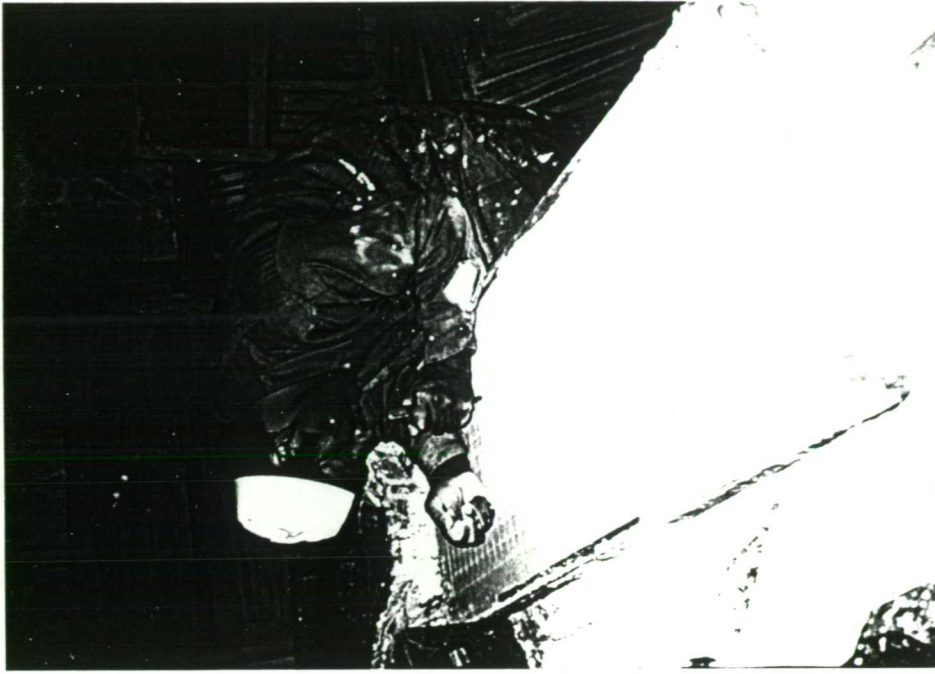
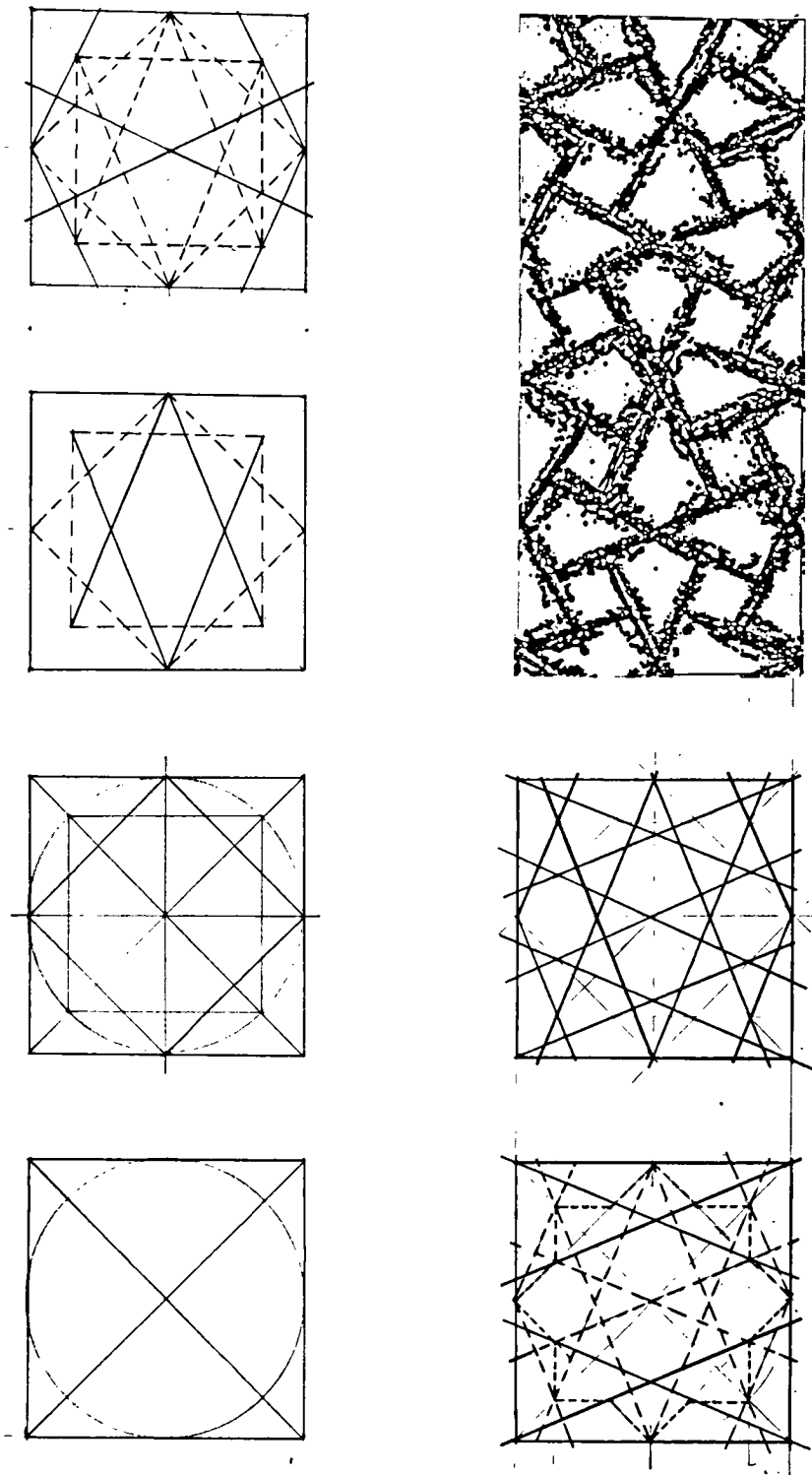


Fig. 4.42 Najji bu Sherrar carving a panel of al Wardenh pattern into the soft plaster.



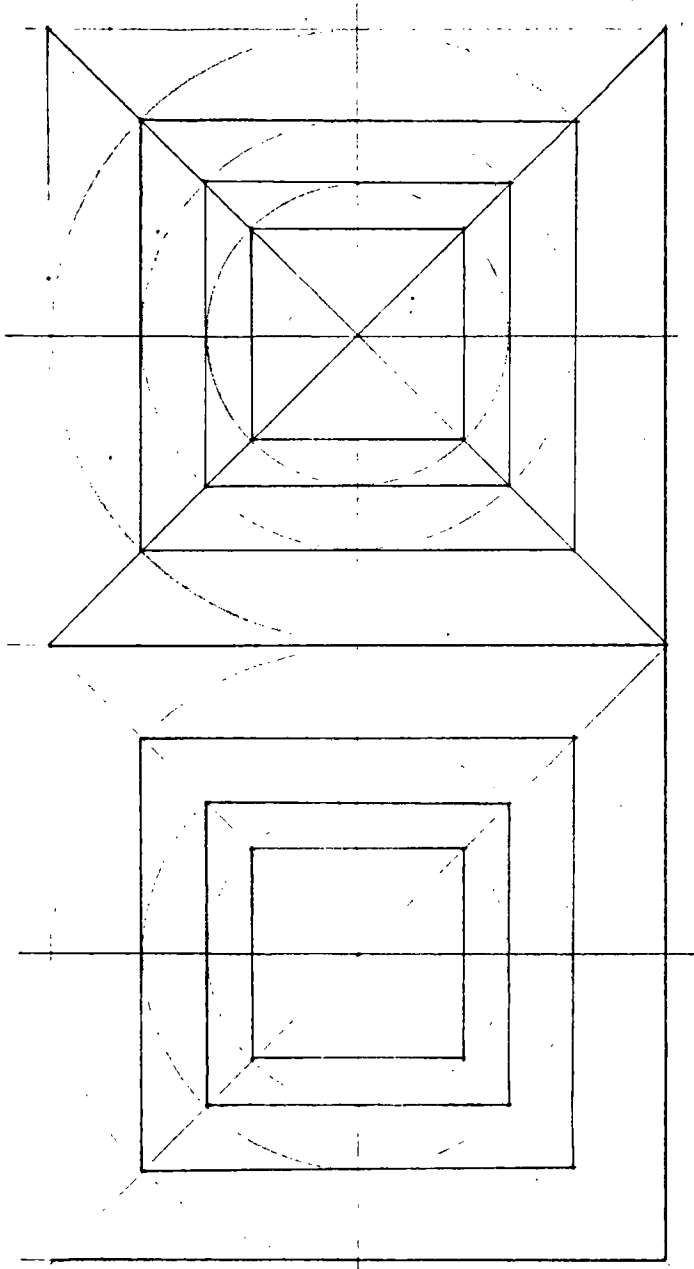
SEYADI HOUSE - PLASTER PANEL + TACKED LATH PANELS
 GEOMETRIC ANALYSIS.

Figure 4.43.

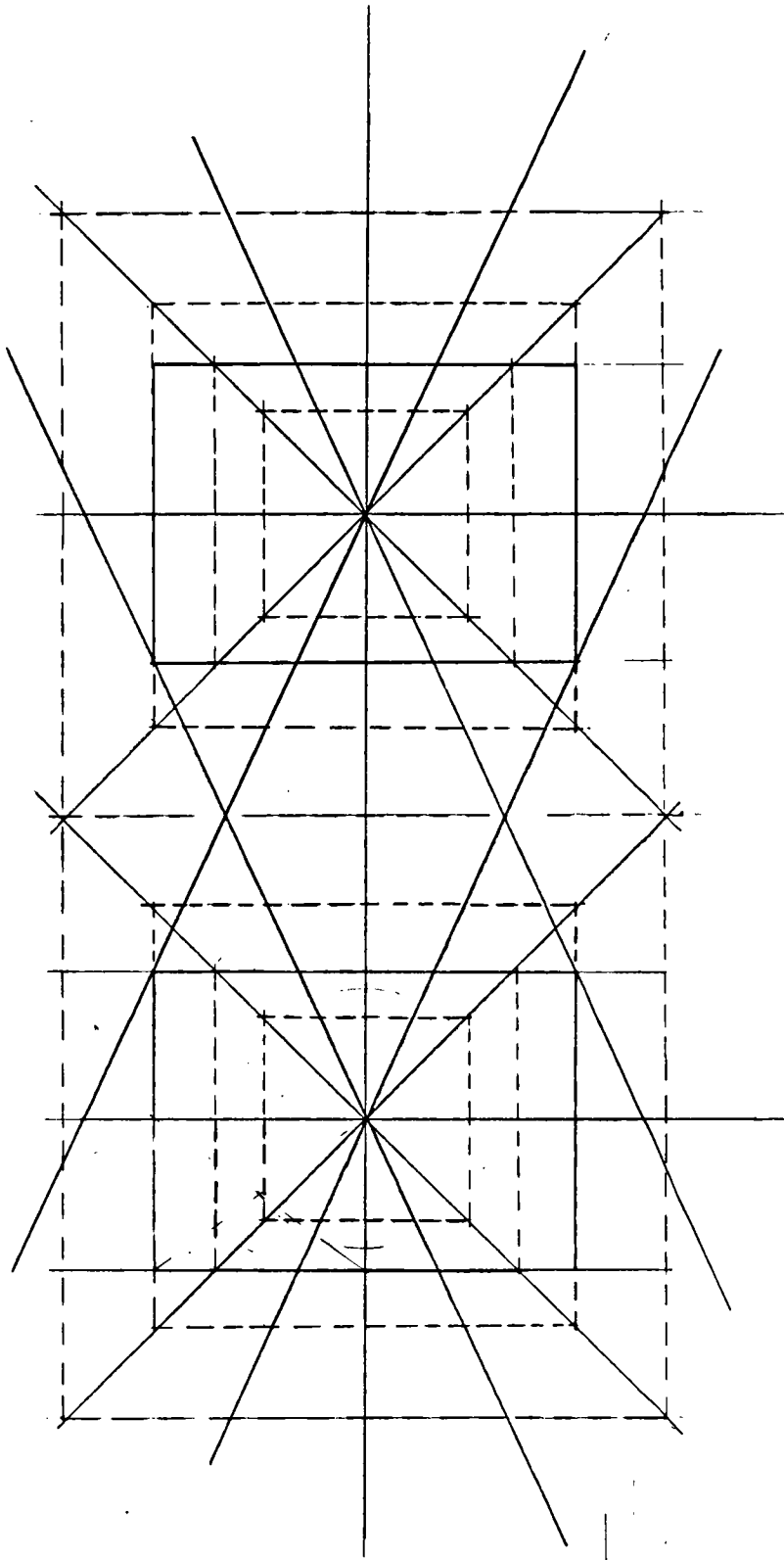
Figure 4.44

SEYADI HOUSE

GEOMETRIC
ANALYSIS &
PATTERN
(Sheet 1)



A

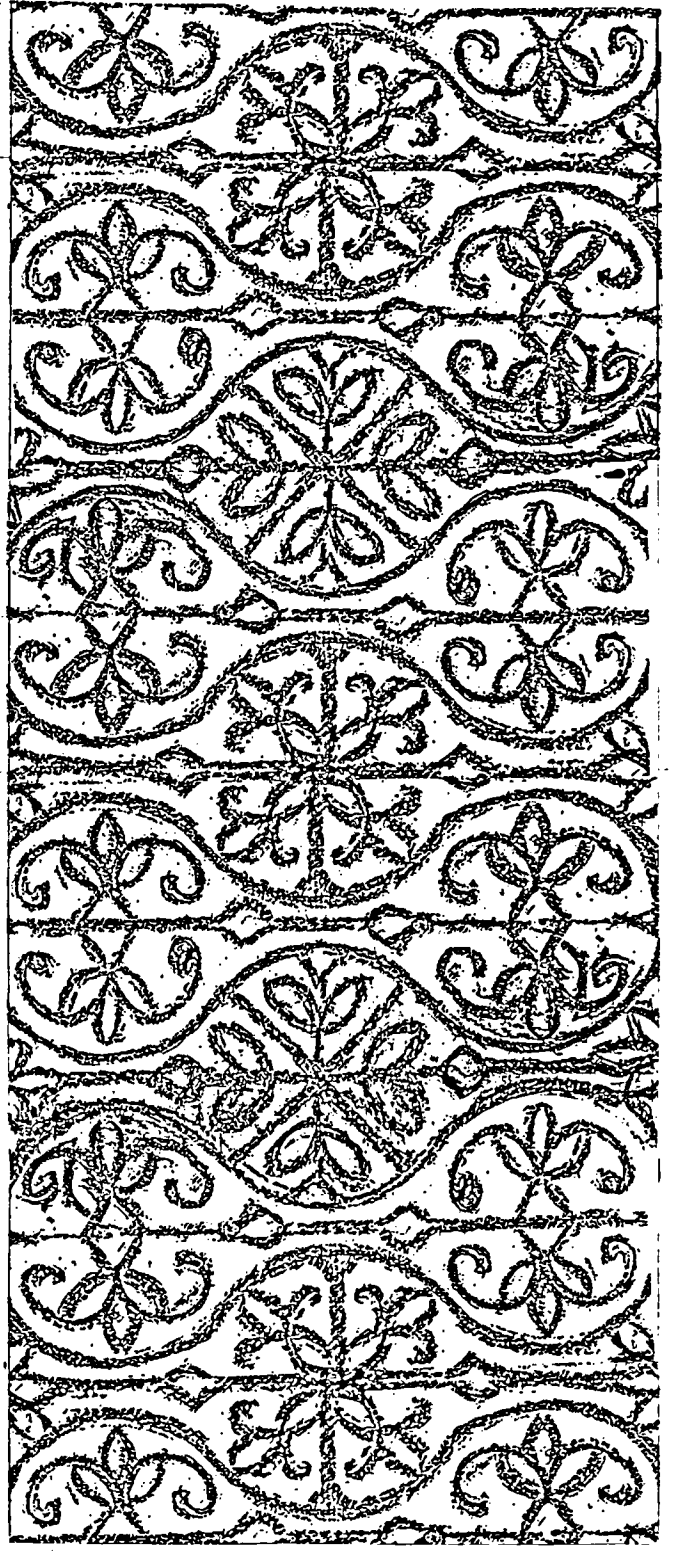
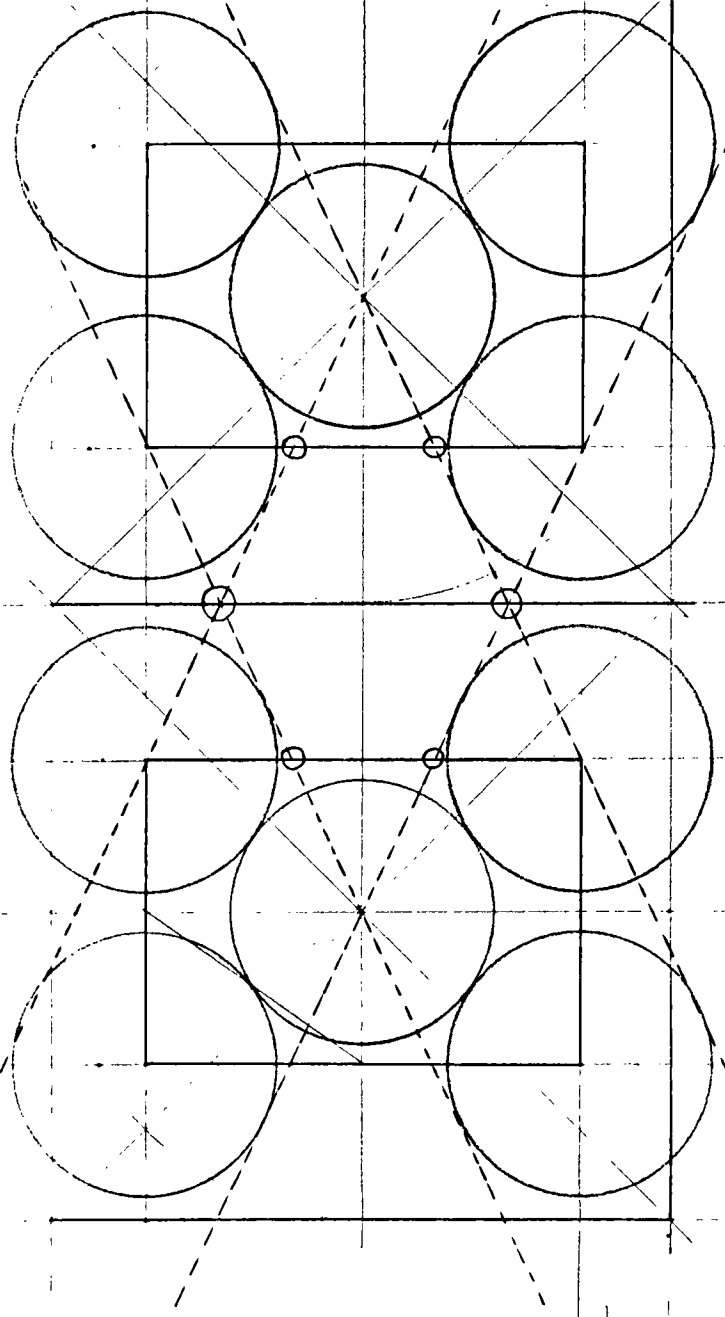


B

Figure 4.44.

SEYADI HOUSE

GEOMETRIC
ANALYSIS OF
PATTERN
(Sheet 2)



C.

D.

S.E.Y.A.D.I. MAJLIS FANLIGH.T.S

G.E.O.M.E.T.R.I.C A.N.A.L.Y.S.I.S

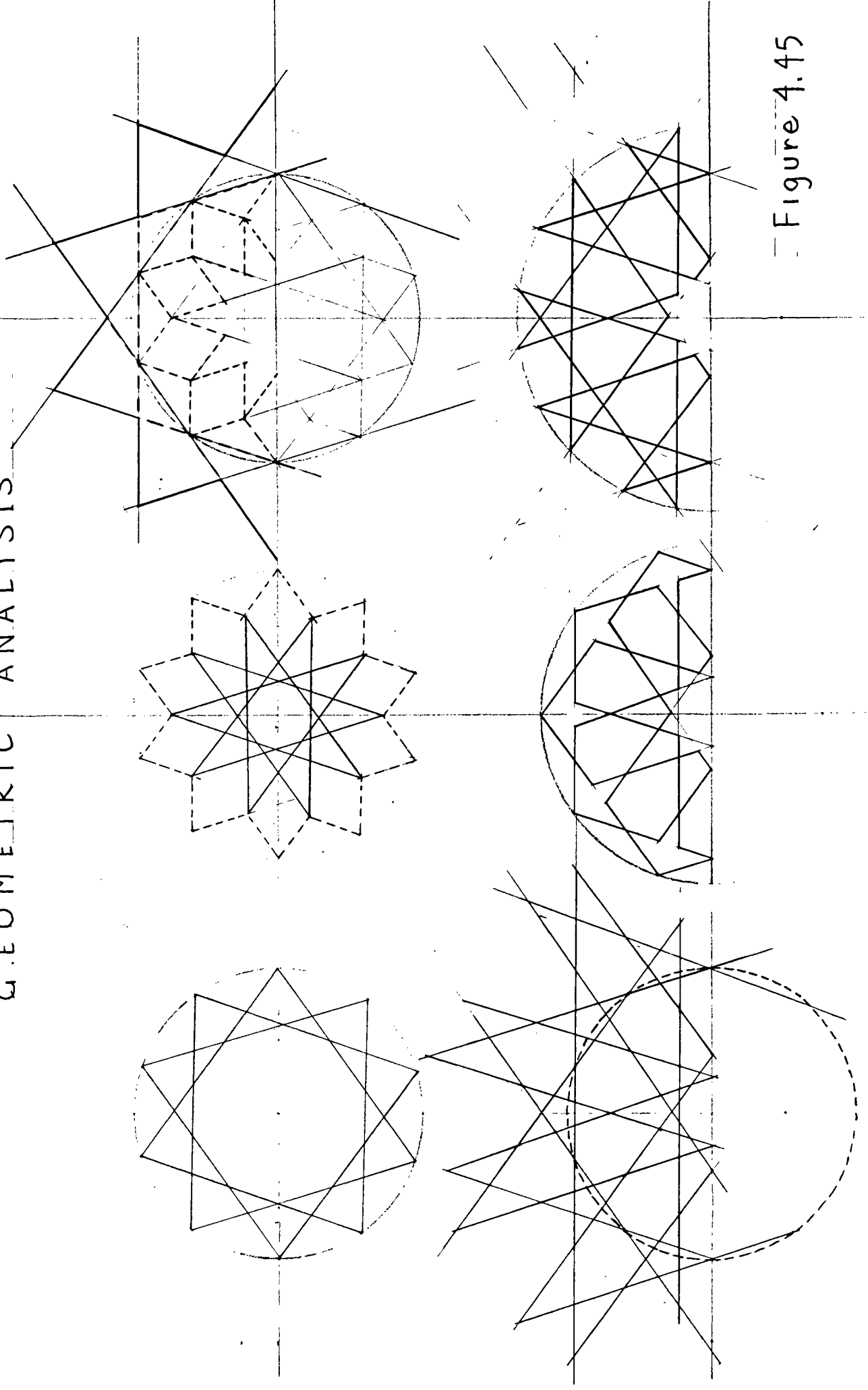
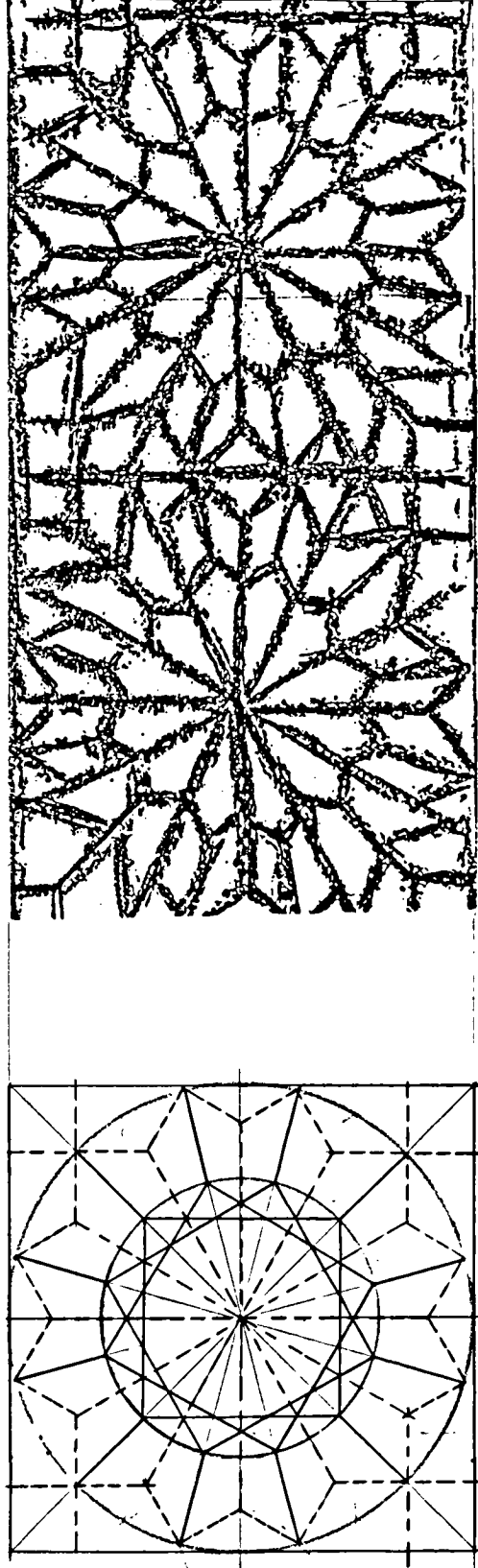
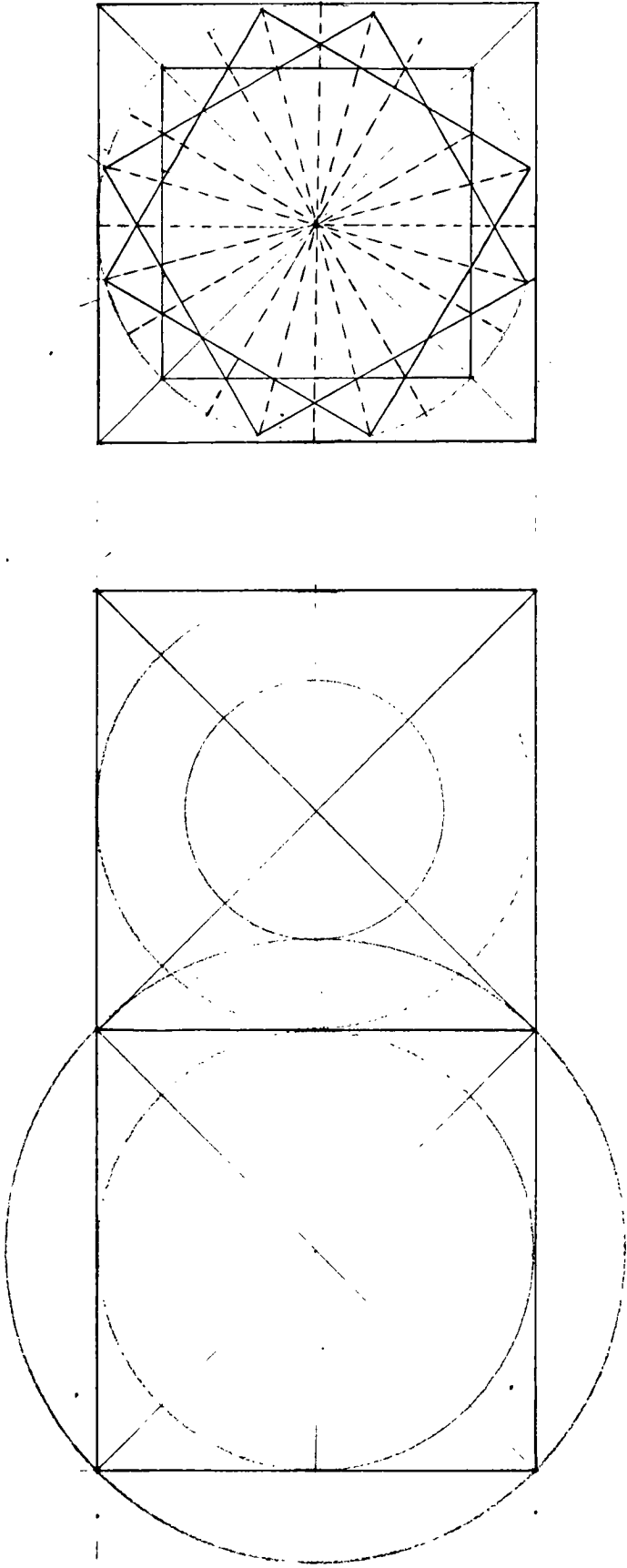
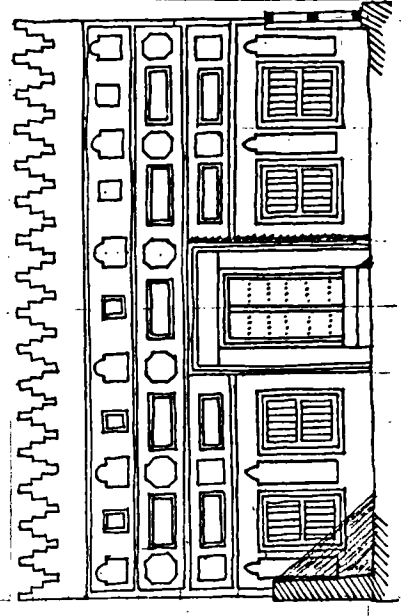
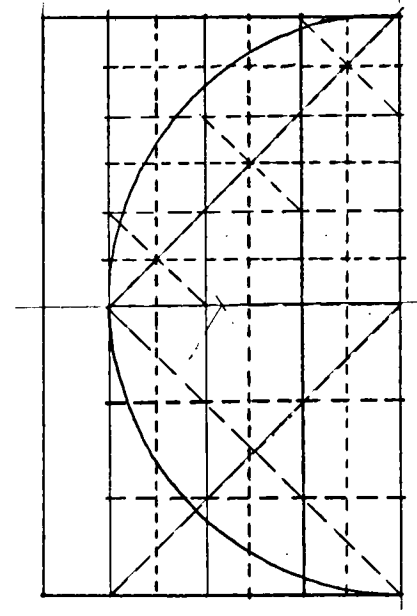
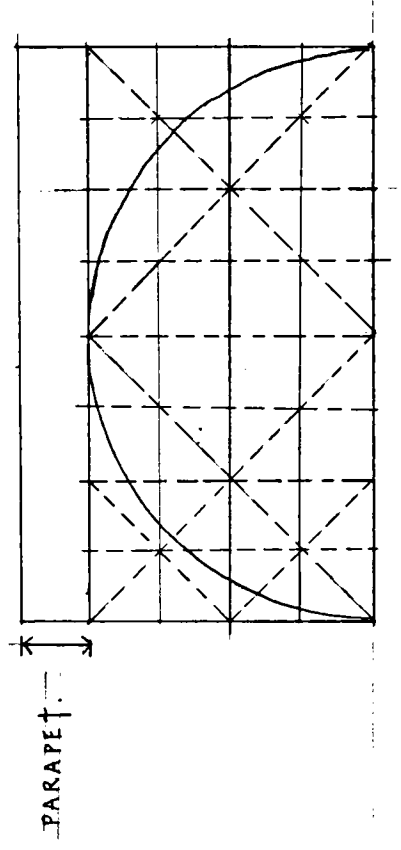
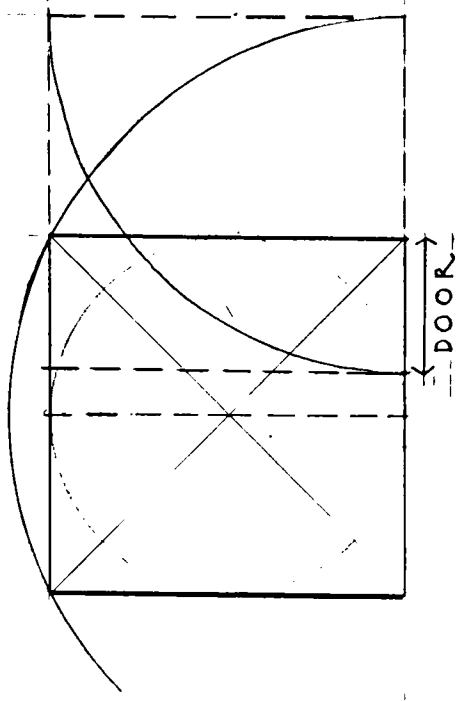


Figure 4.45



GEOMETRIC ANALYSIS - PLASTER PANEL.

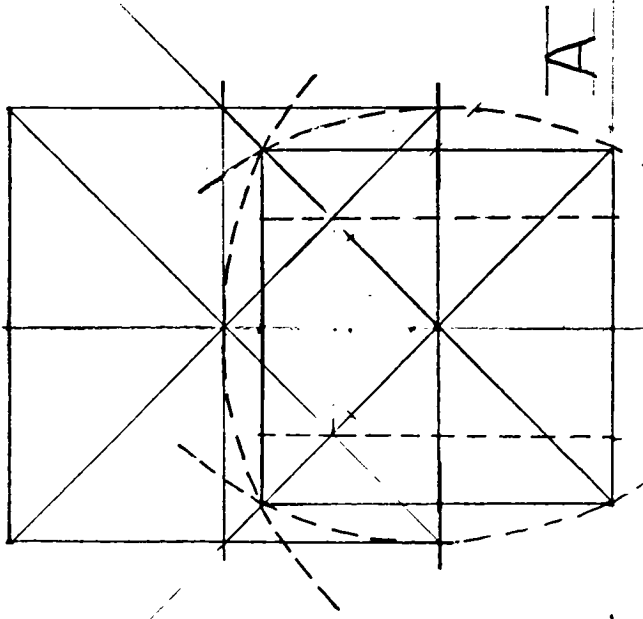
Figure 4.46



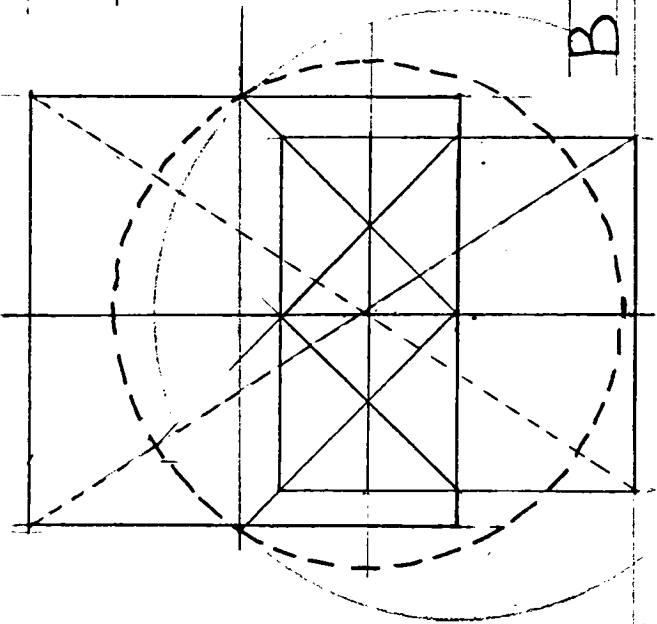
SH ABDULLAH BIN MOHAMMED HOUSE

GEOMETRIC ANALYSIS

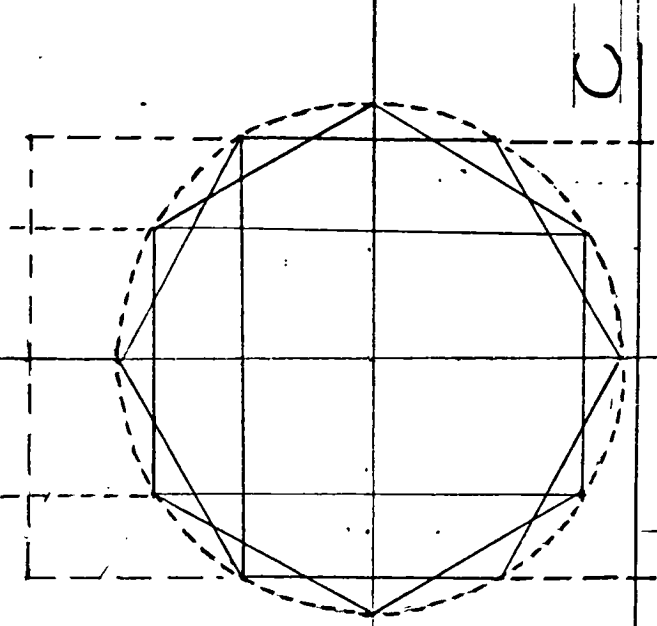
Figure 4.47



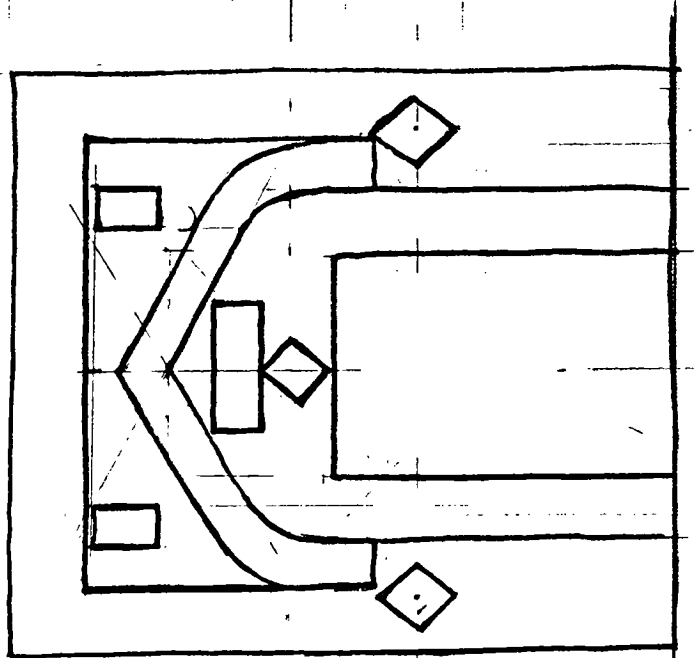
A



B



C

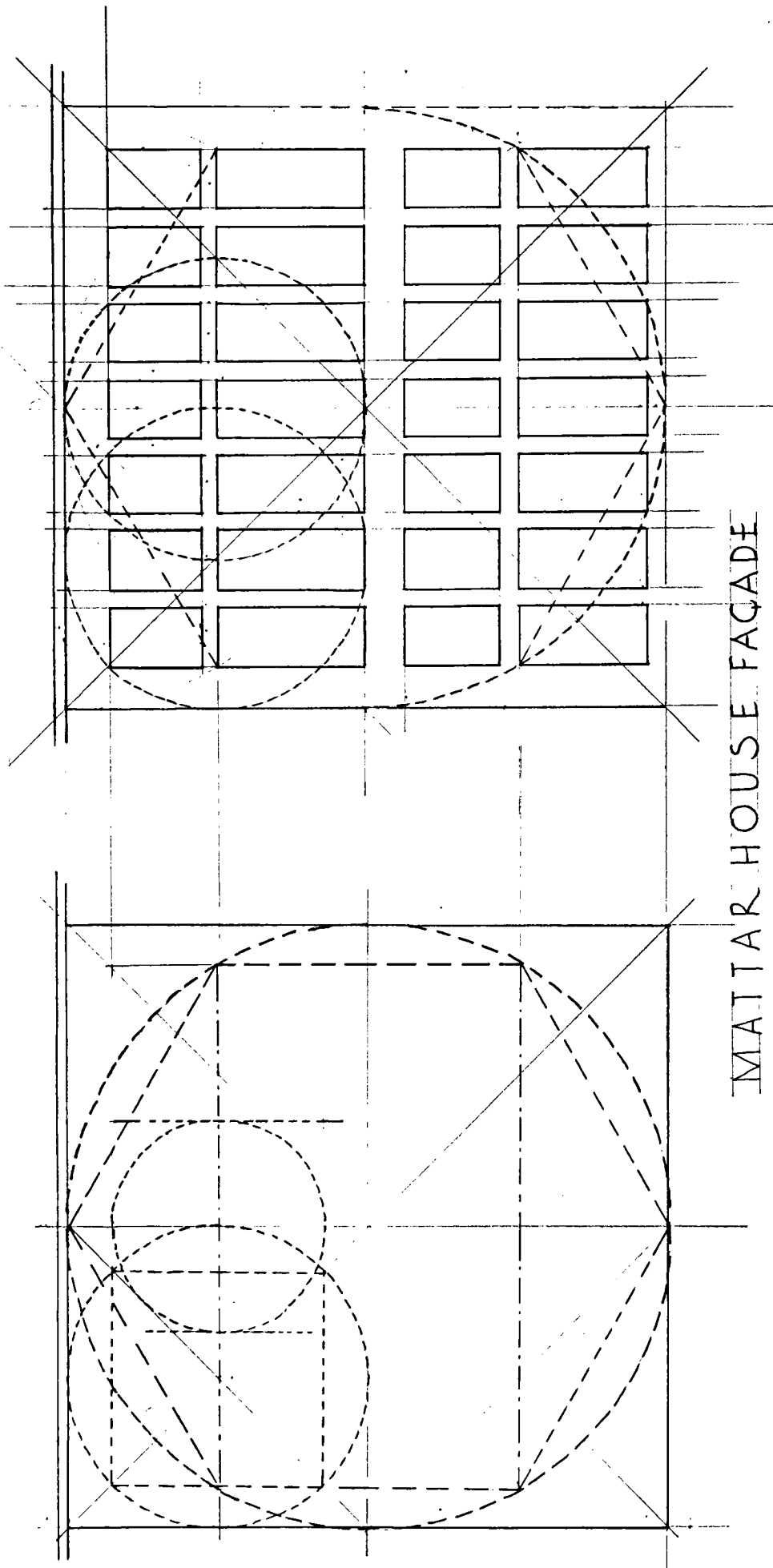


D

Figure 4:48.

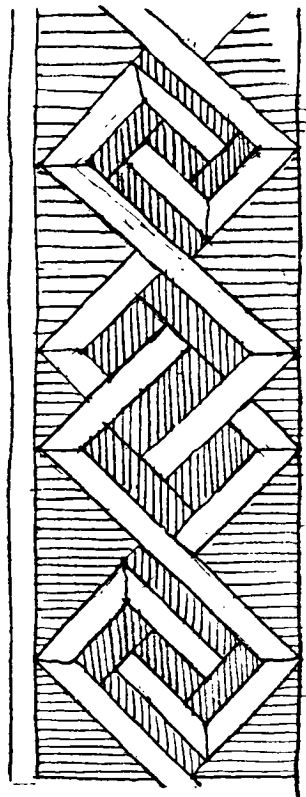
GEOMETRICAL
ANALYSIS

Sh Ali b. Mohammed
H o, n s e

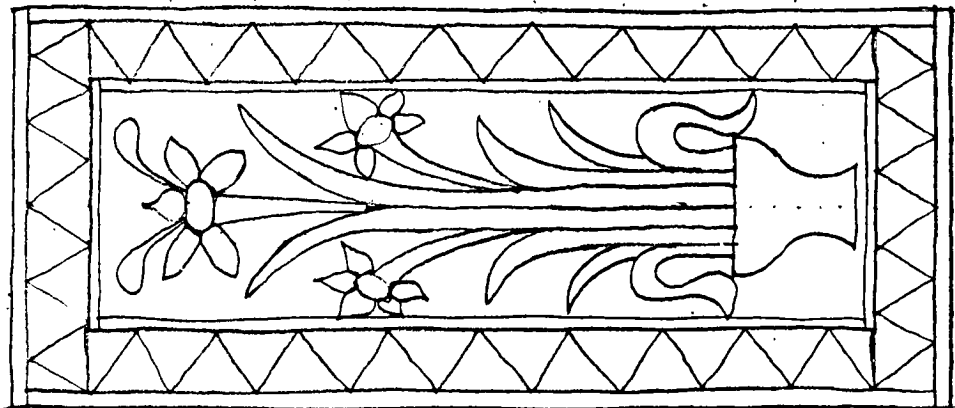


MATTAR HOUSE FACADE
GEOMETRICAL ANALYSIS

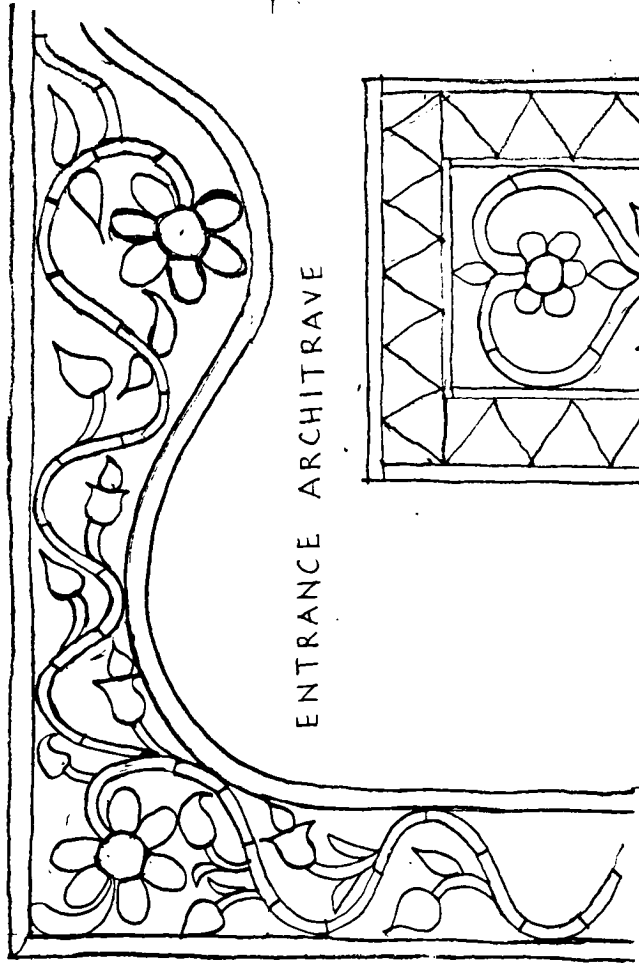
Figure 449



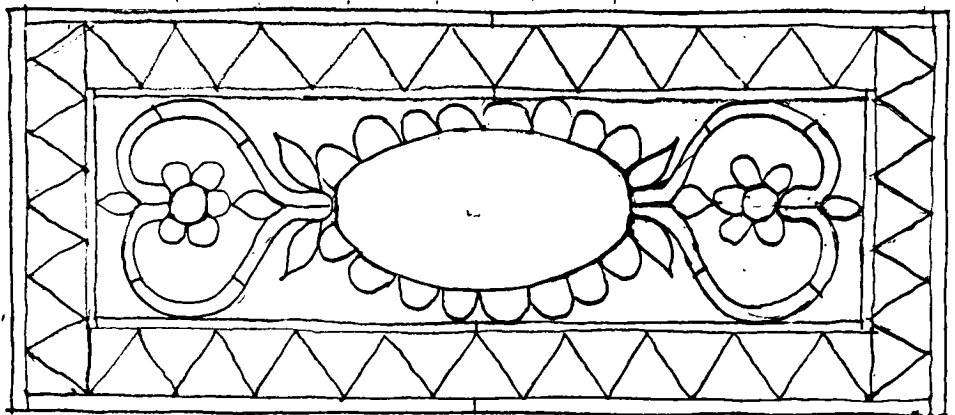
CUPBOARD FRAME MOTIF



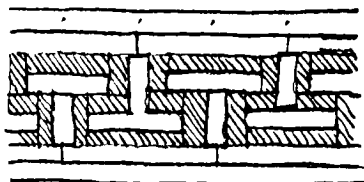
PANEL DECORATION



ENTRANCE ARCHITRAVE



DOORS

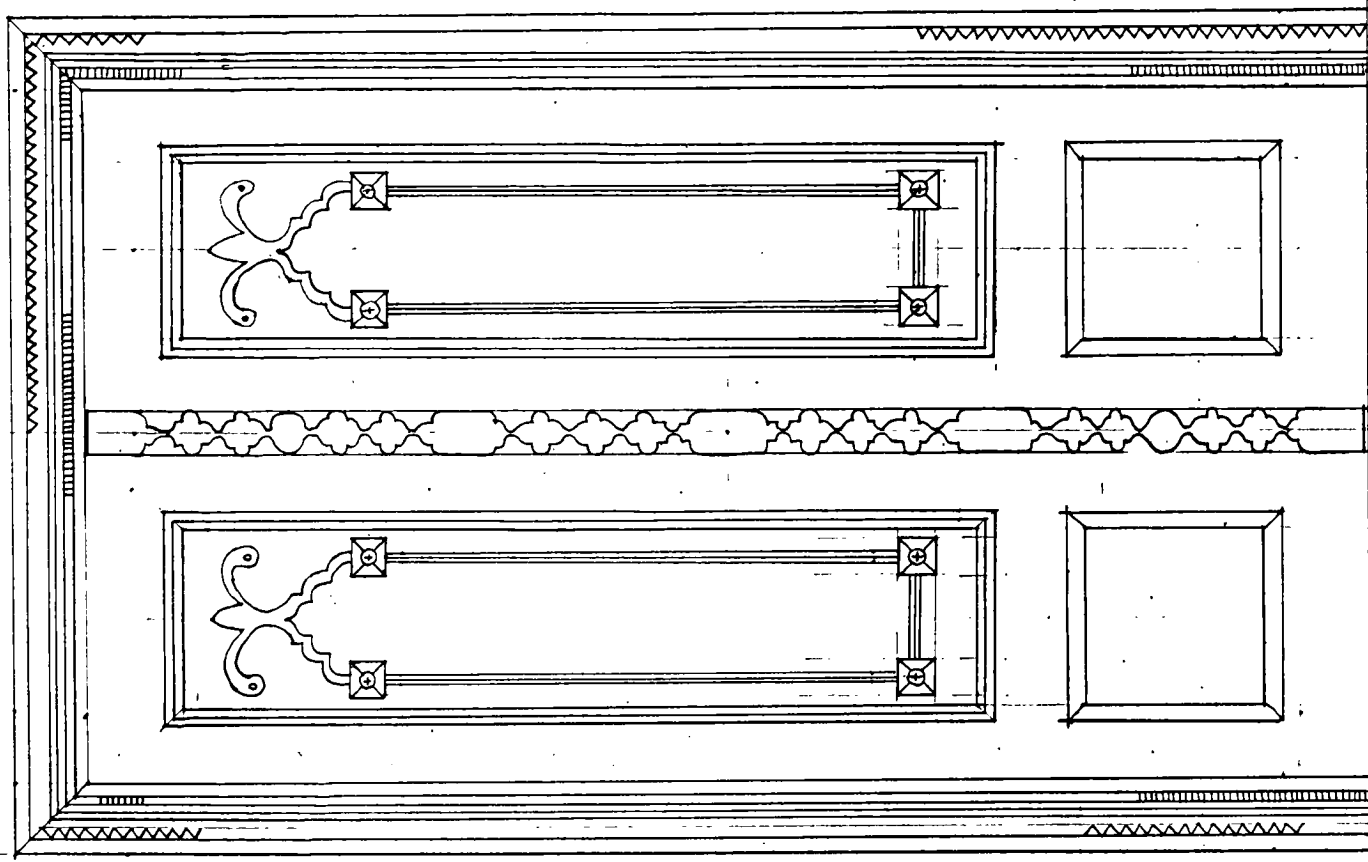


CUPBOARD FRAME MOTIF

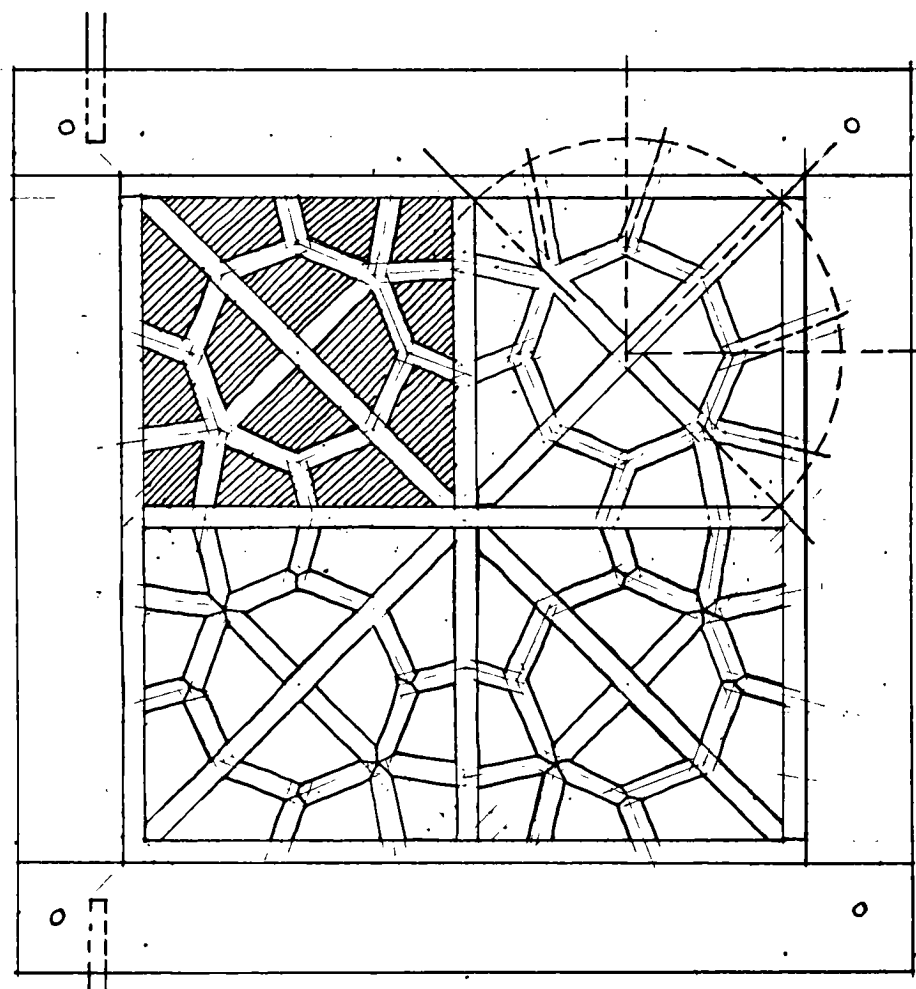
GLASS + MIRROR MARQUETRY

SEYADI HOUSE.

Figure 4.50



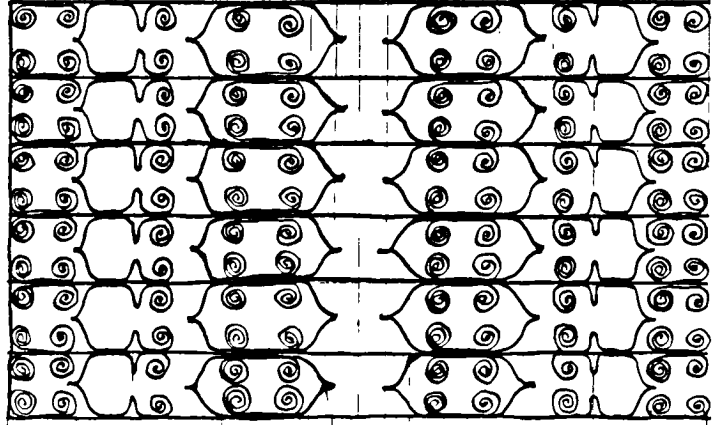
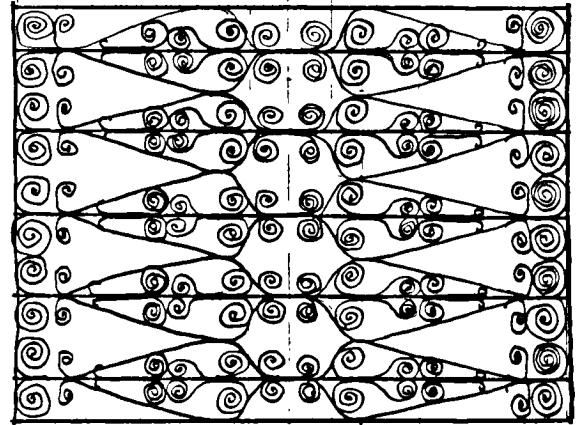
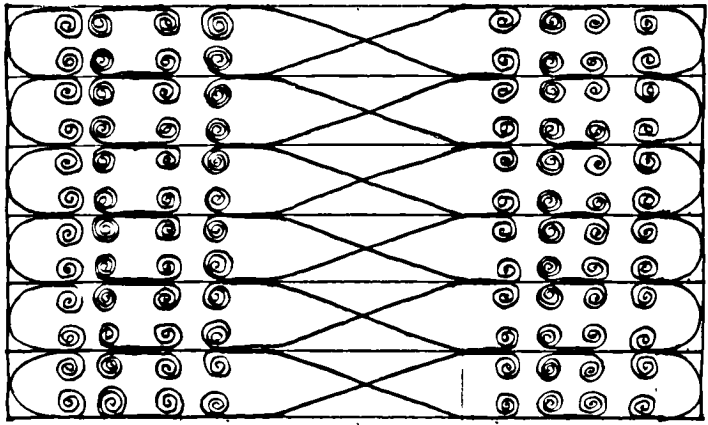
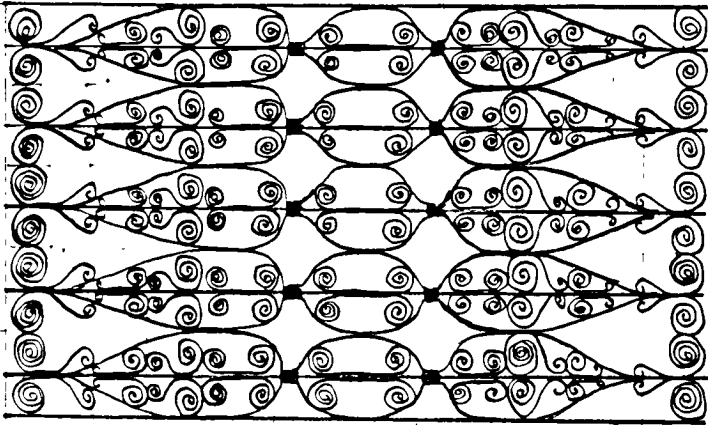
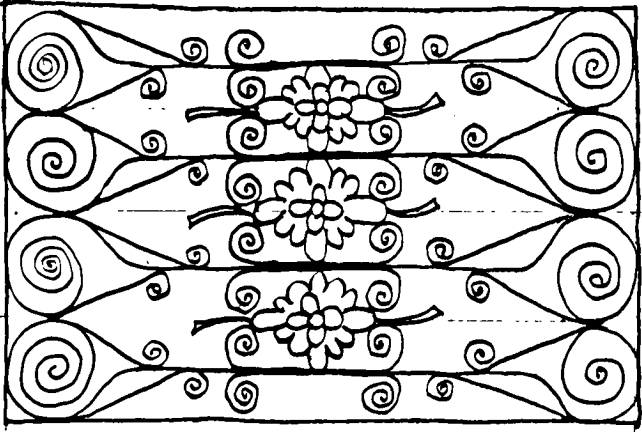
DOOR IN VISITORS COURTYARD



WINDOW SCREEN-OPENING PORTION

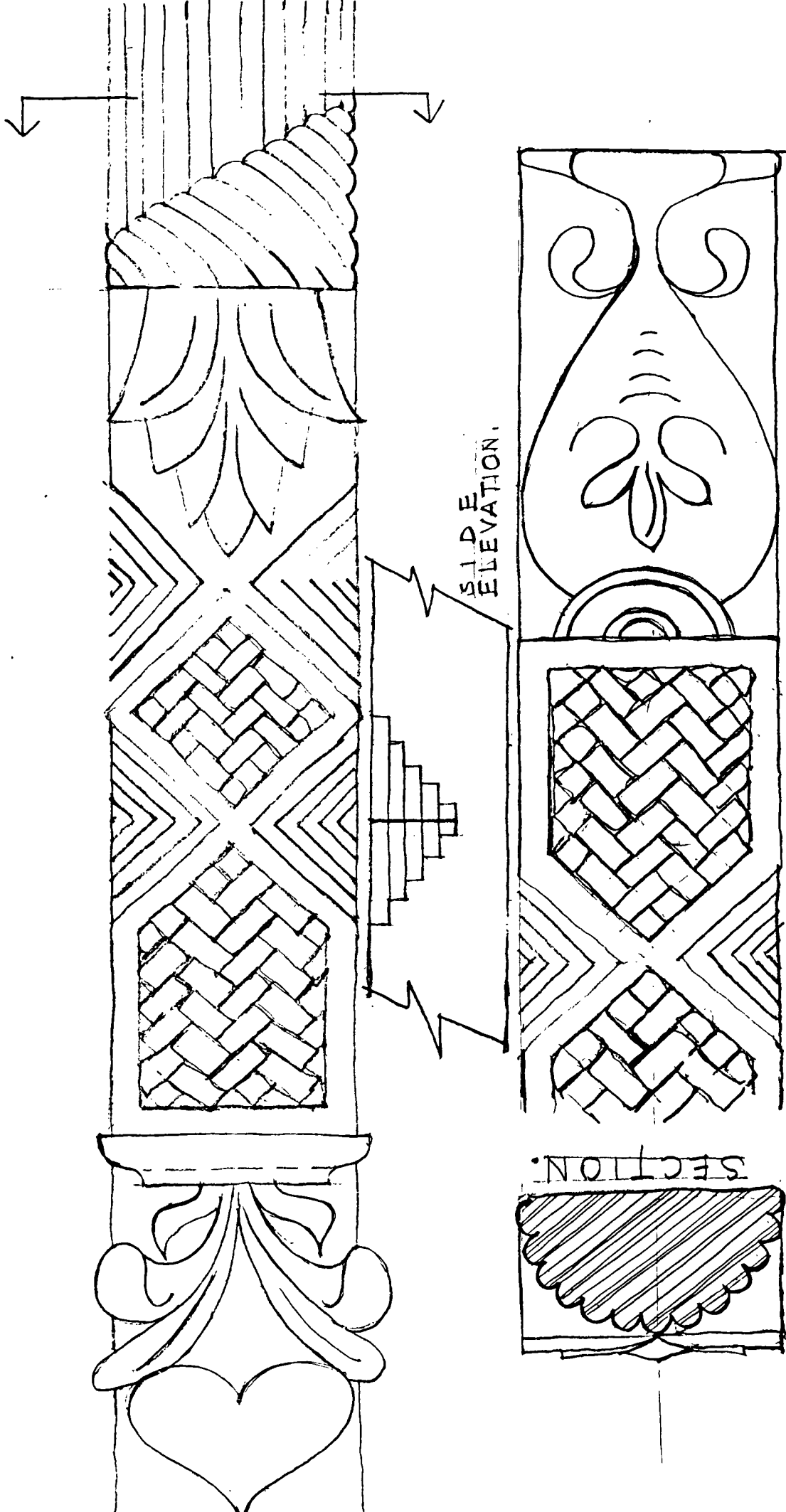
SEYADI HOUSE

Figure 4.51



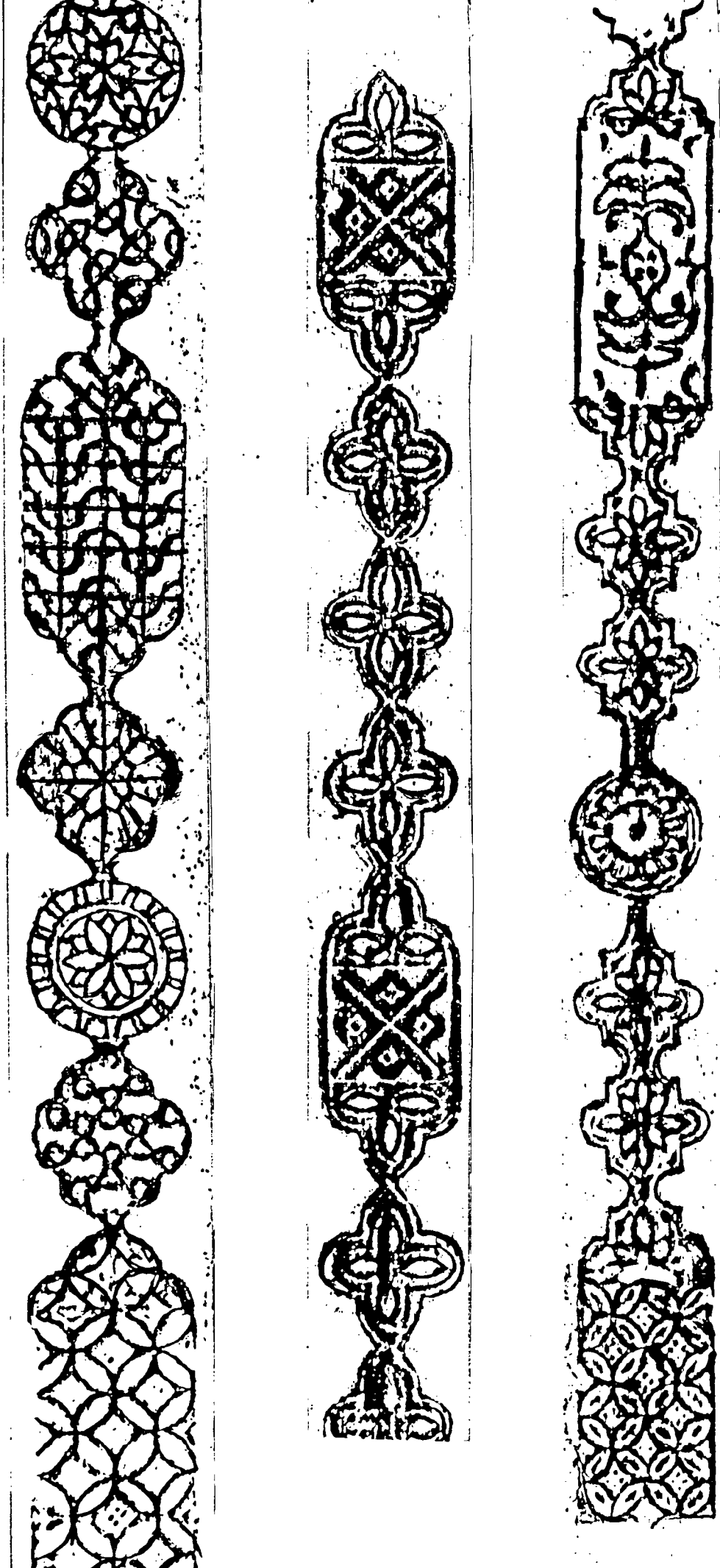
WROT-IRON
GRILLES

Figure 4.52

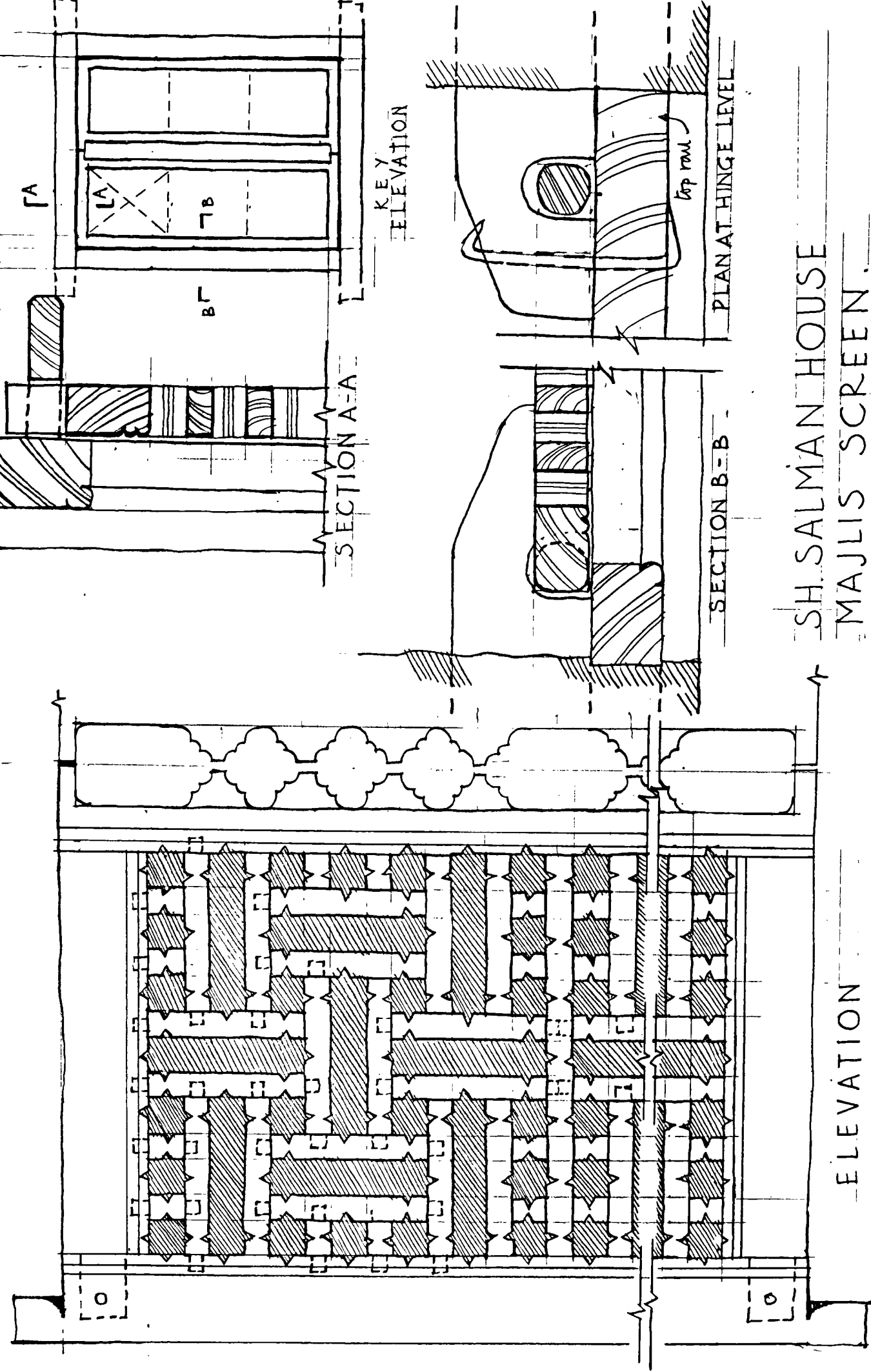


DETAILS FROM A "LILLY" STYLE POST.

Fig. 453(1)



DOORPOST CARVING. Figure 4.53(ii).

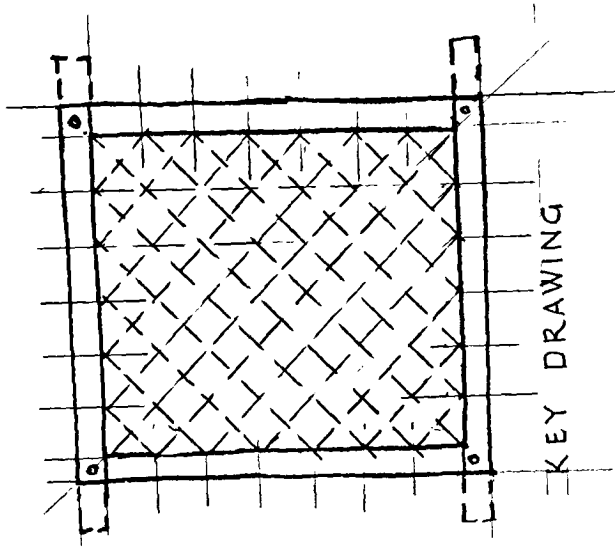
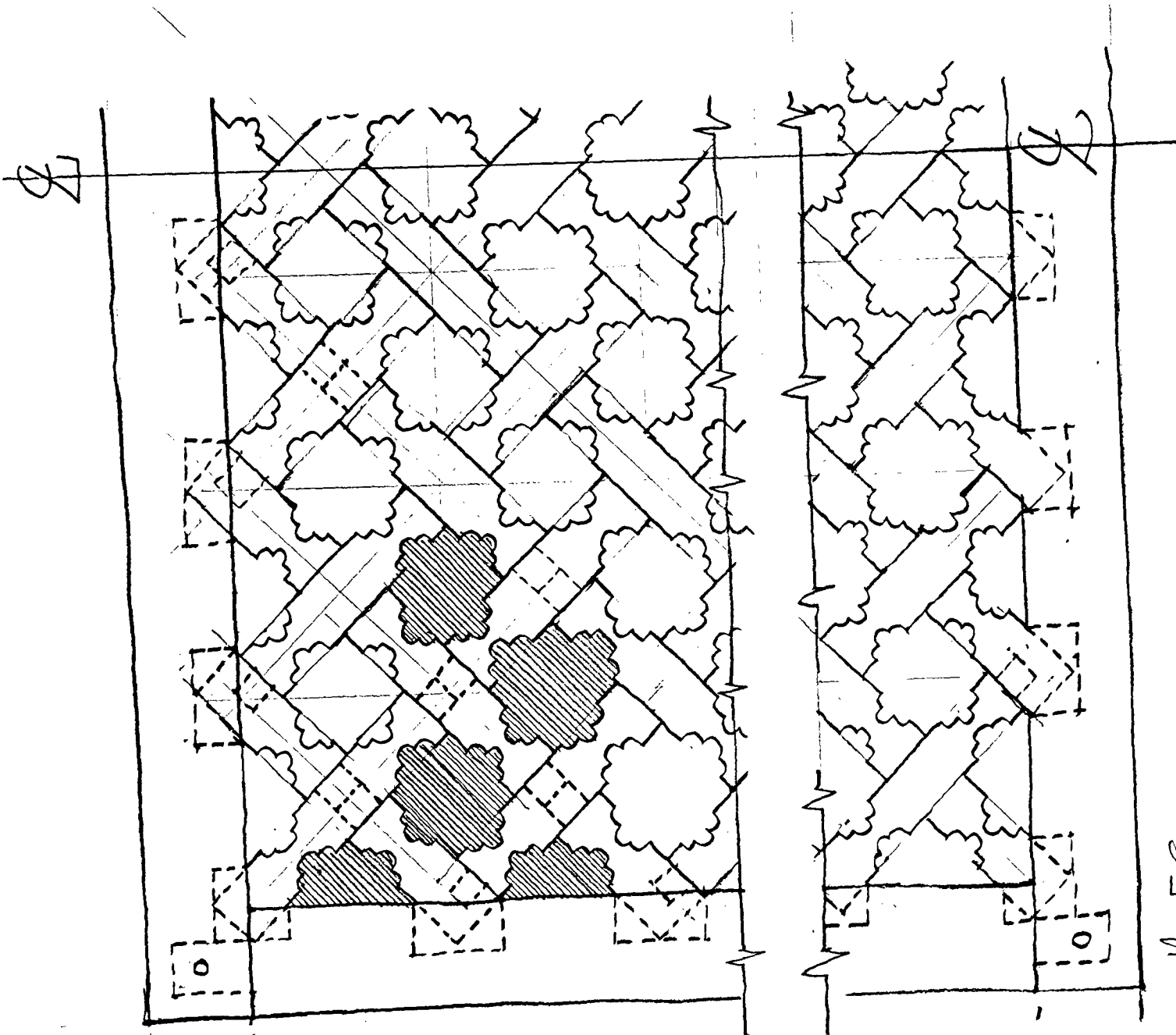


SH. SALMAN HOUSE
 MAJLIS SCREEN

scale 1/2 FS

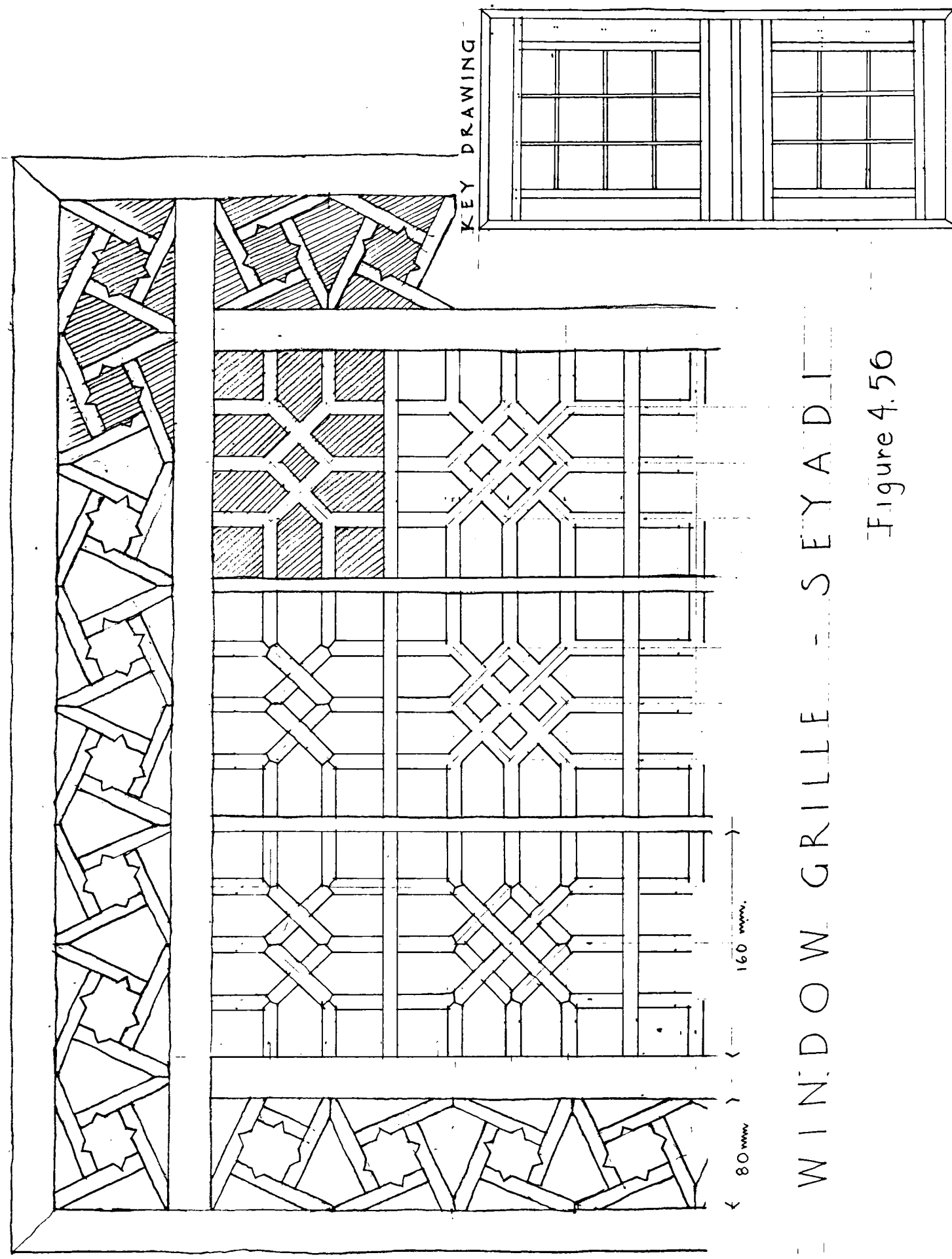
ELEVATION

Figure 4.54.



SH SALMAN MAJLIS
WINDOW SCREEN.

Figure 4.55.



W I N D O W G R I L L E - S E Y A D I

Figure 4.56

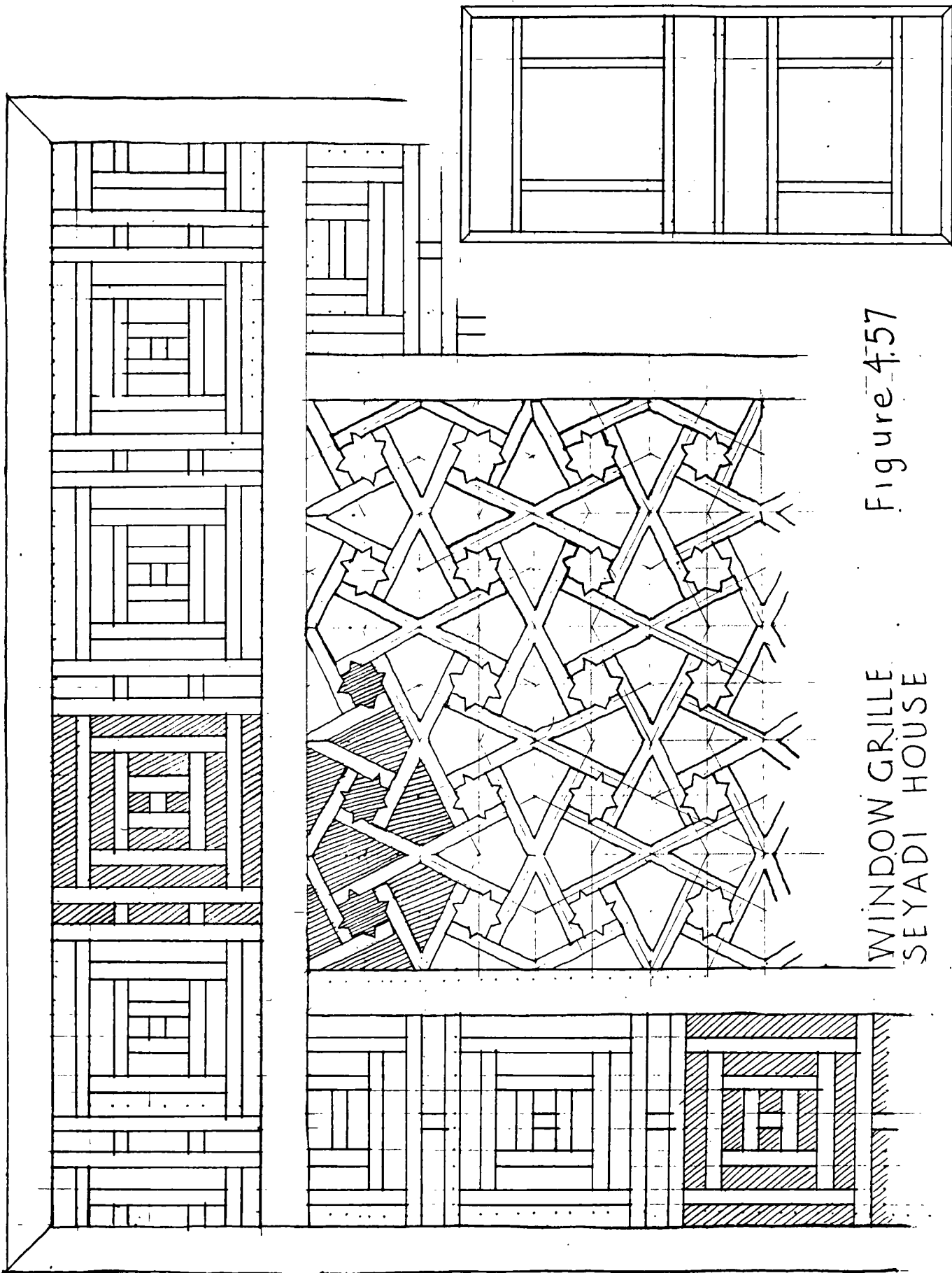


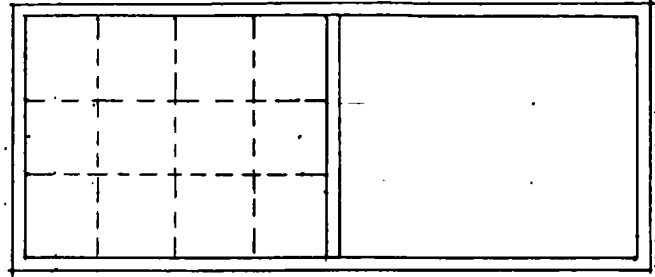
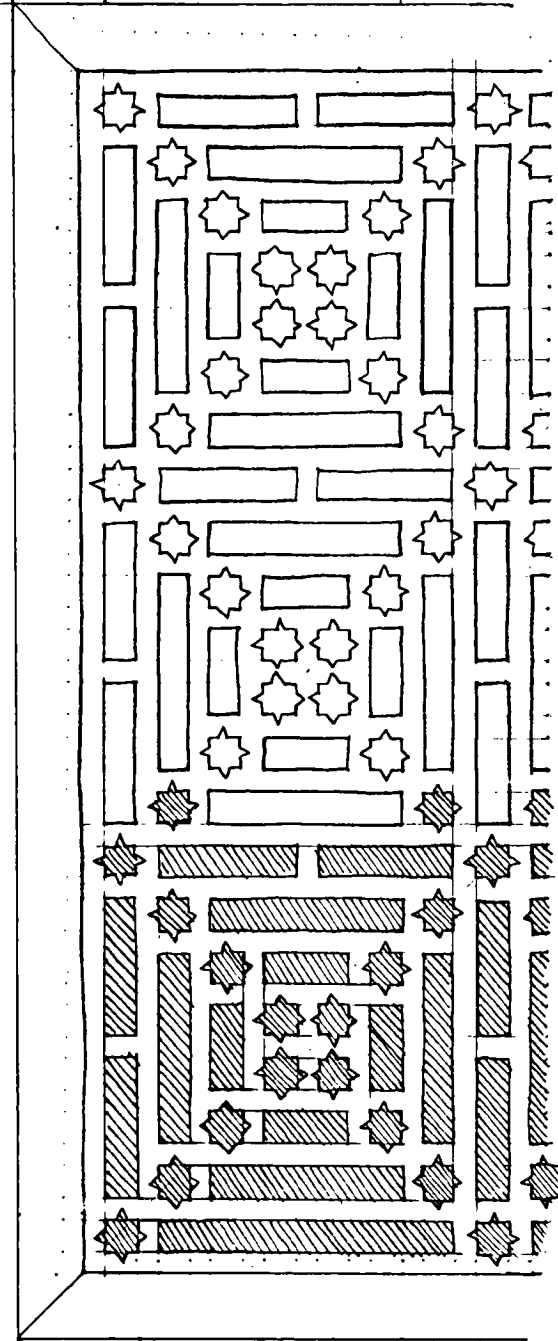
Figure 4.57

WINDOW GRILLE
SEYADI HOUSE

KEY DRAWING

TIMBER WINDOW SCREEN
SEYADI HOUSE

UPPER PANEL
(ONE ROW)



LOWER
PANEL

9
CENTRE of
LOWER PANEL

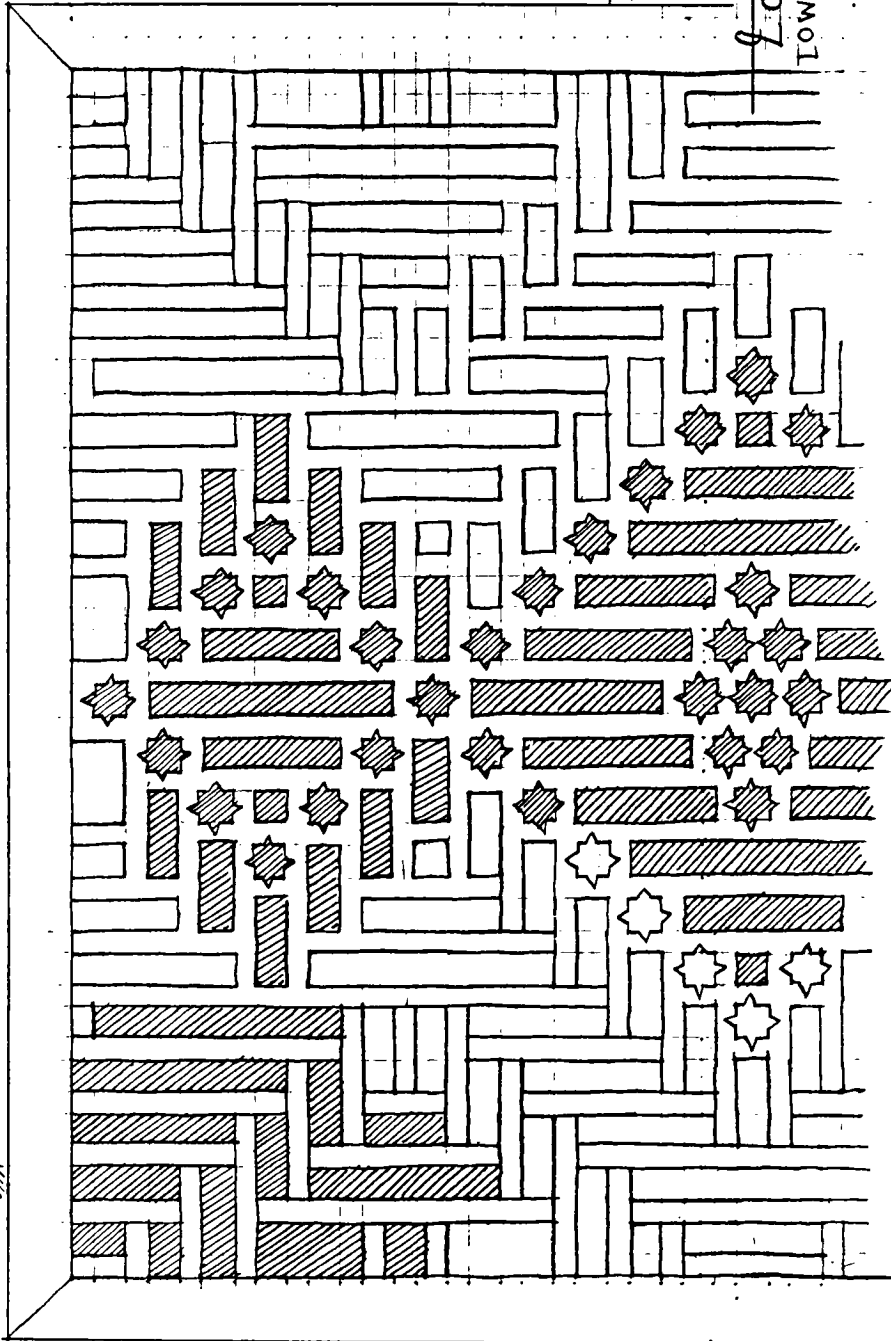


Figure 4.58

SEYADI HOUSE -
WINDOW SCREEN

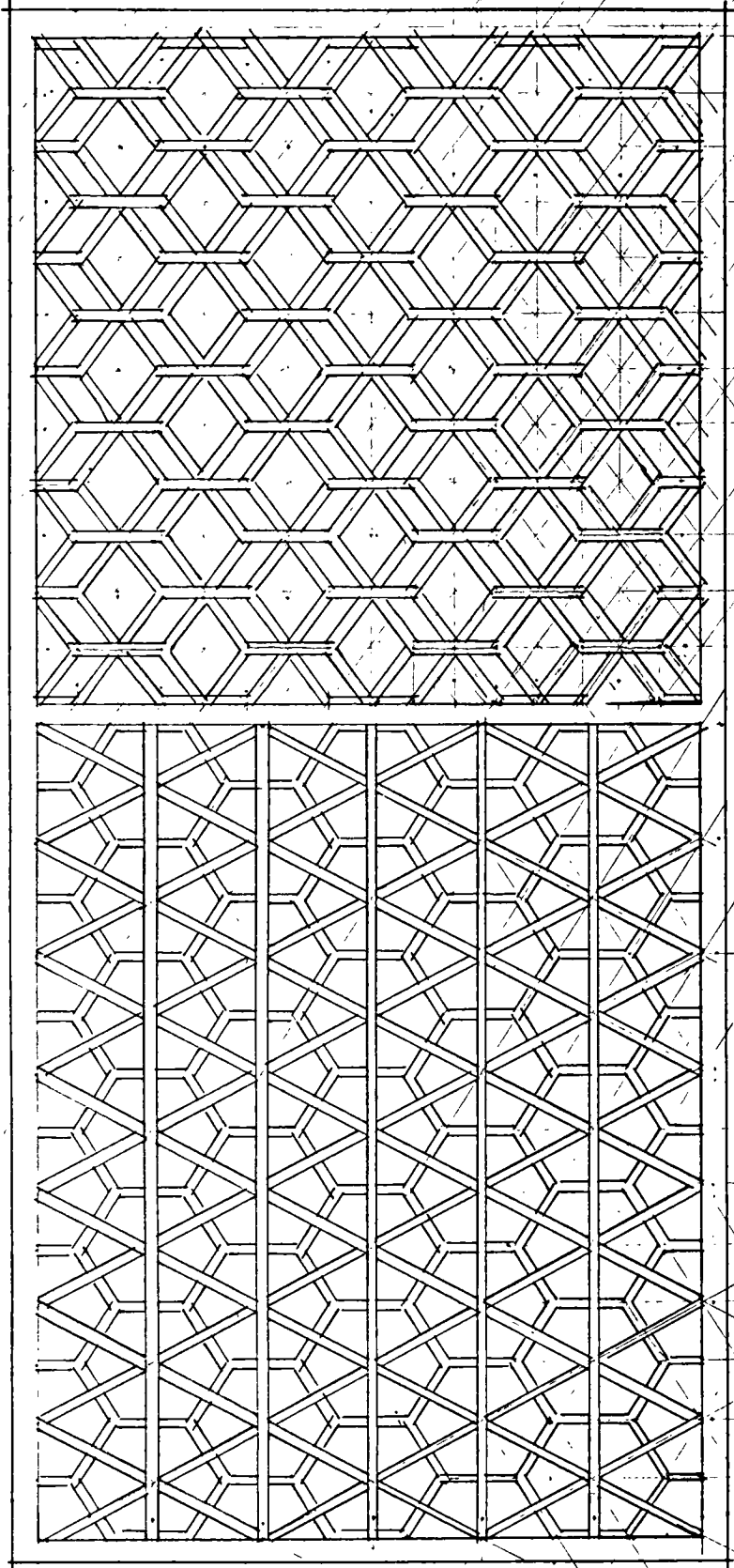
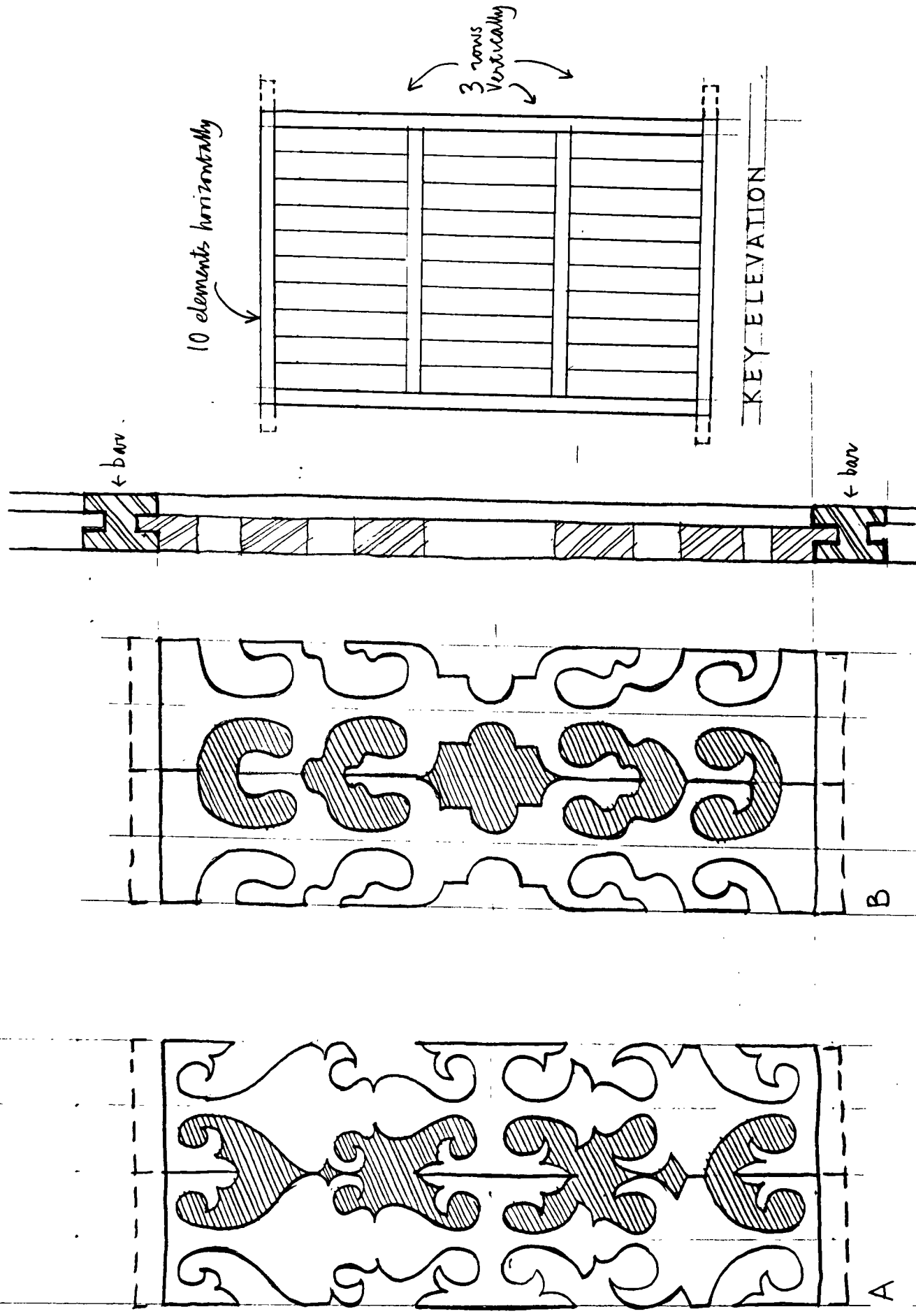


Figure 4.59

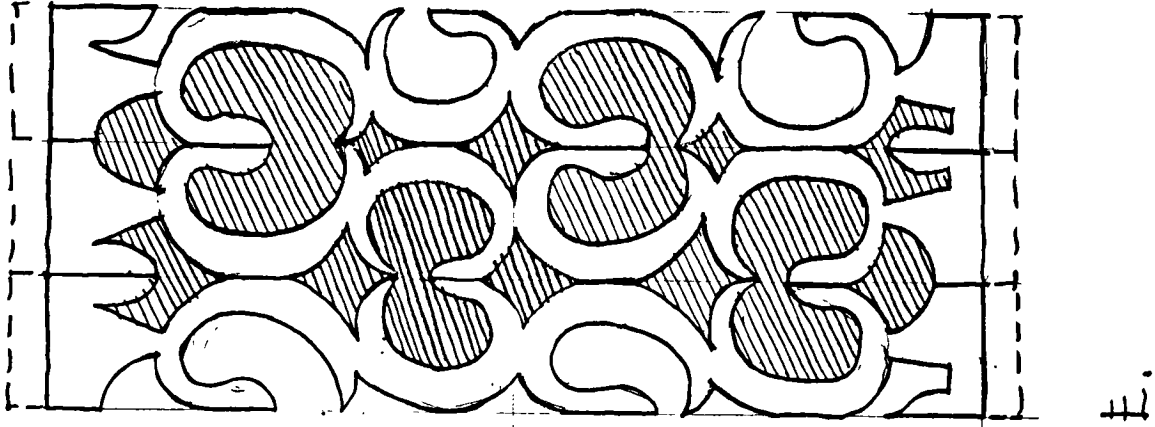
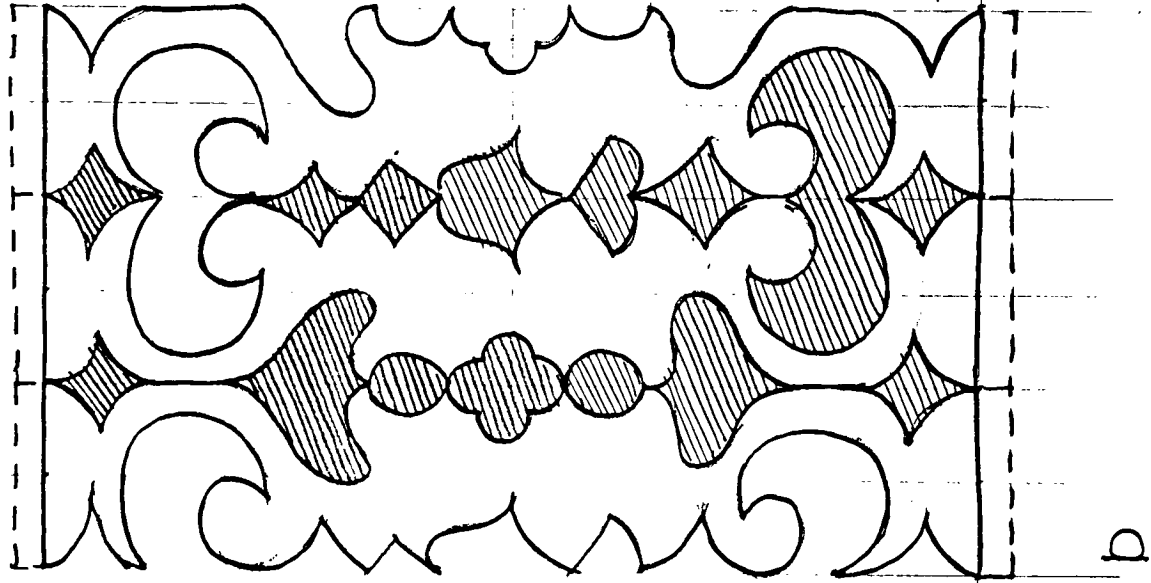
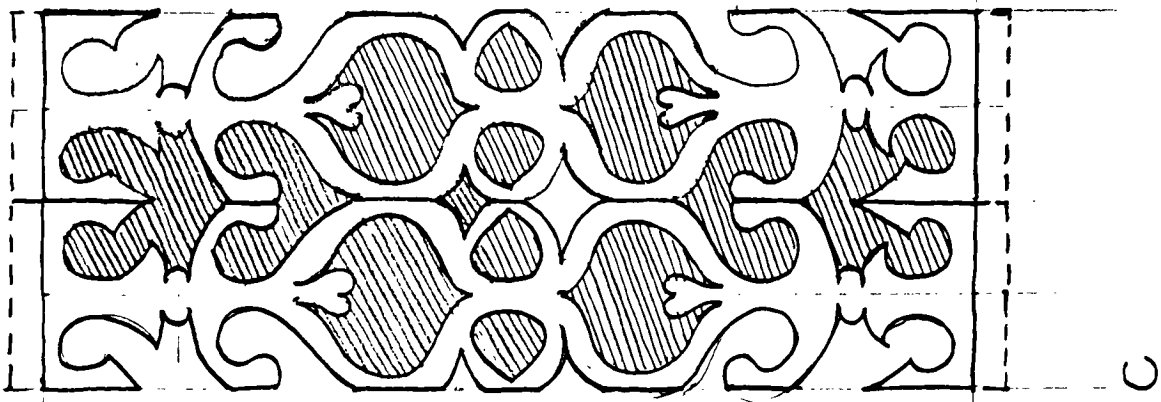


TIMBER SCREENS

VERTICAL SECTION

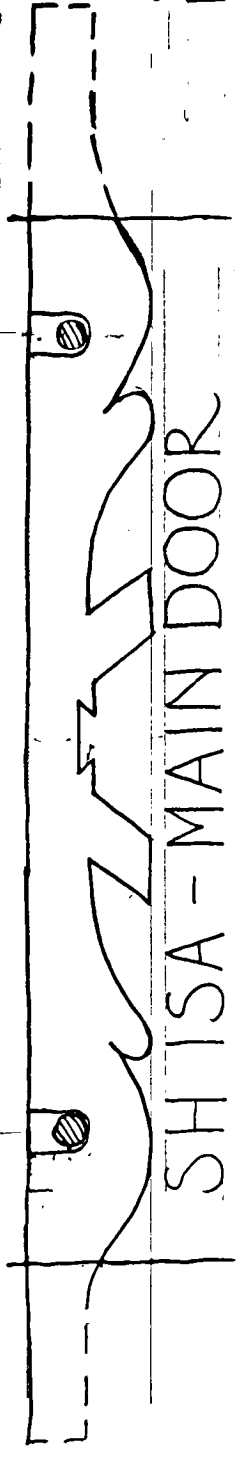
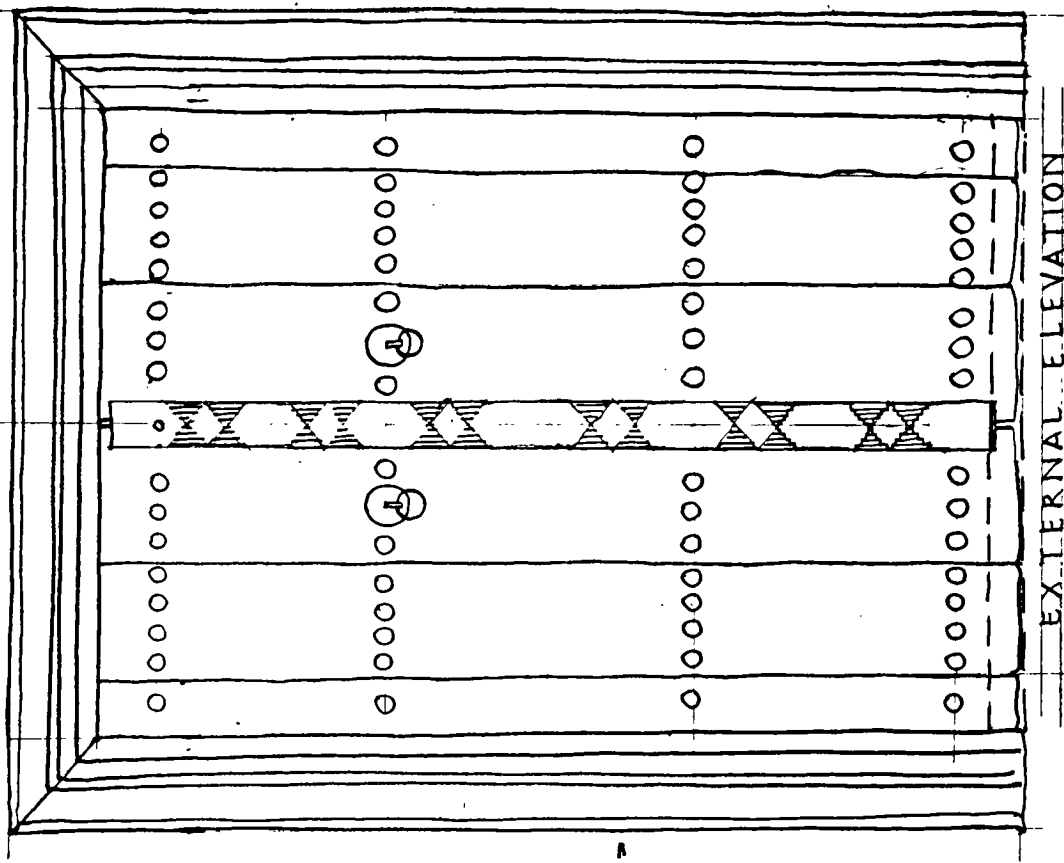
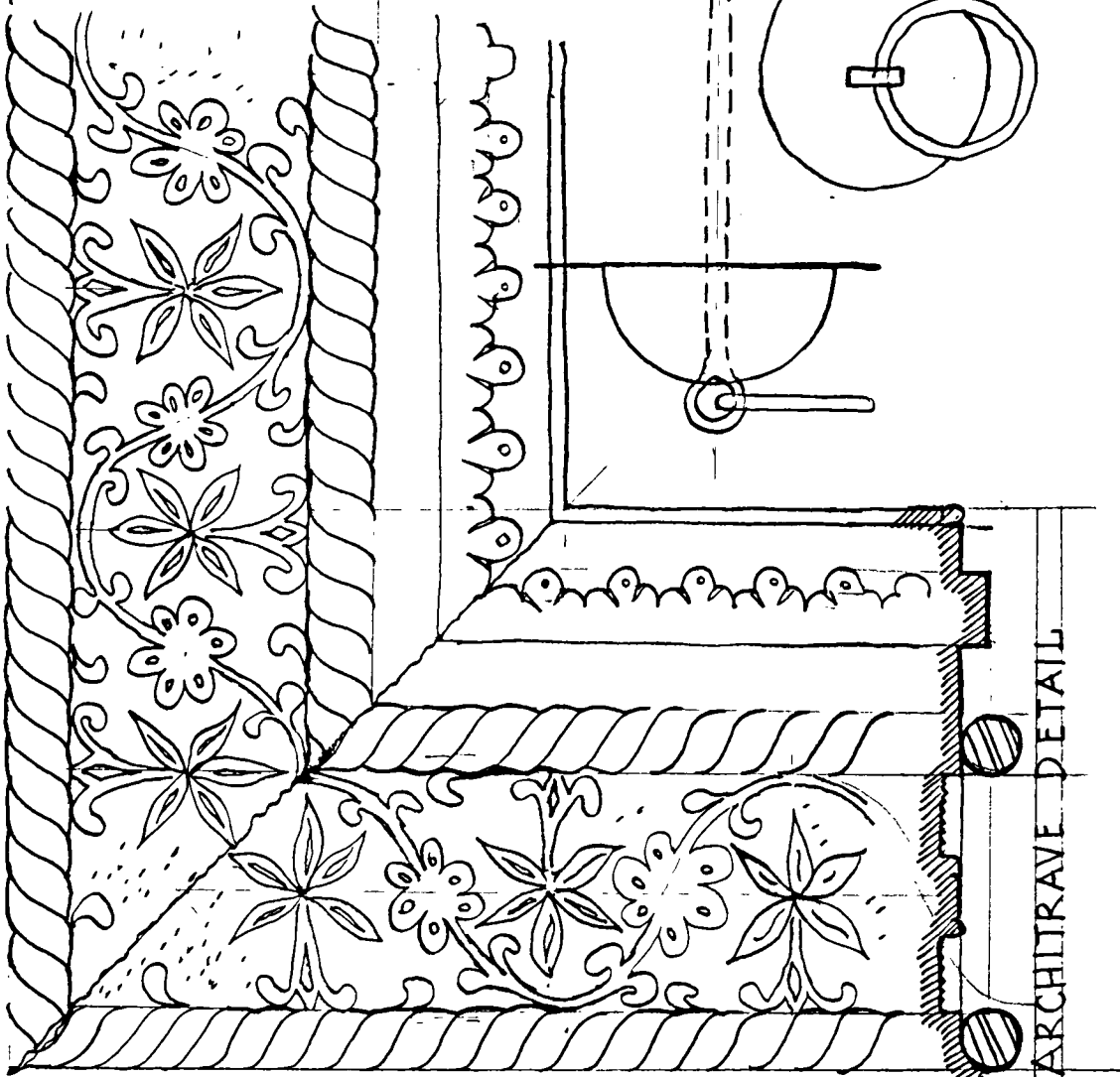
KEY ELEVATION

Figure 4.60

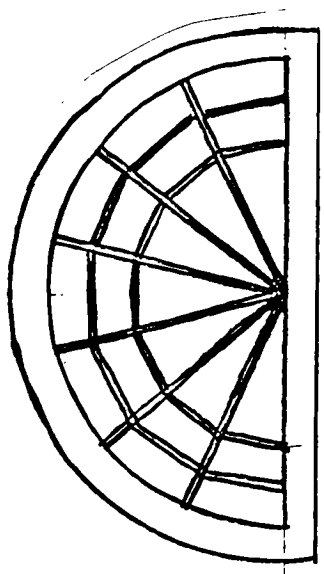


SH SALMAN HOUSE - TIMBER SCREEN LAMINAE - SHEET 2.

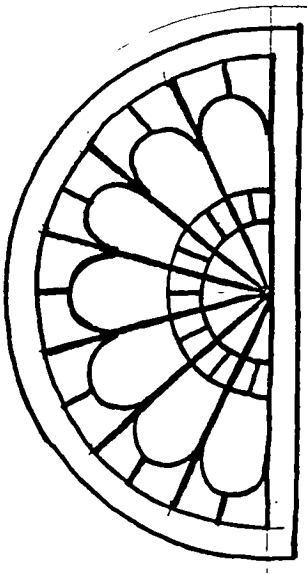
Figure 4.61



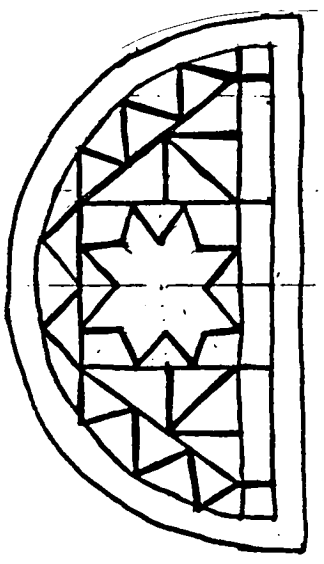
scale 1:12.5
Figure 4.62



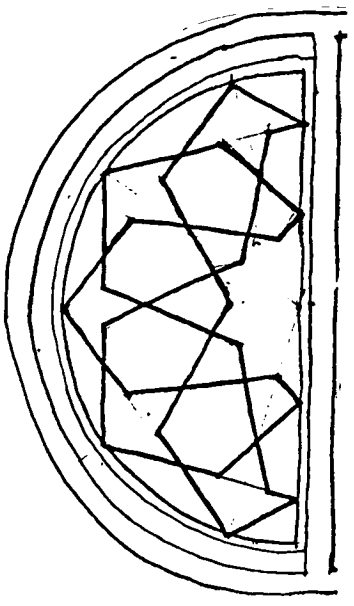
A.



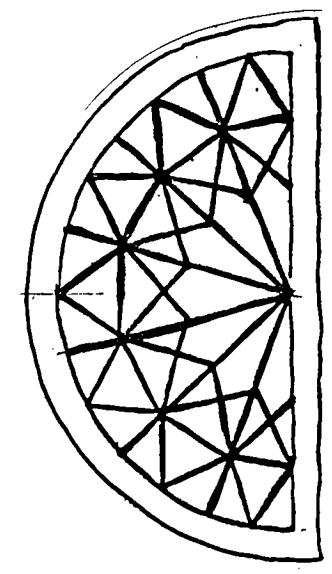
B



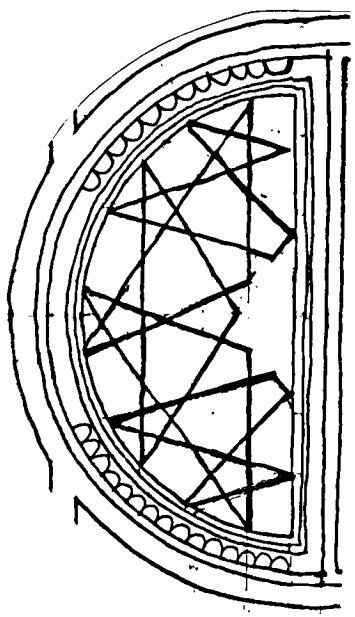
D



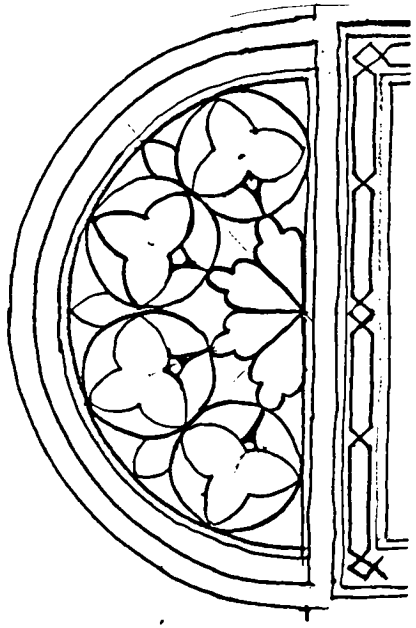
E



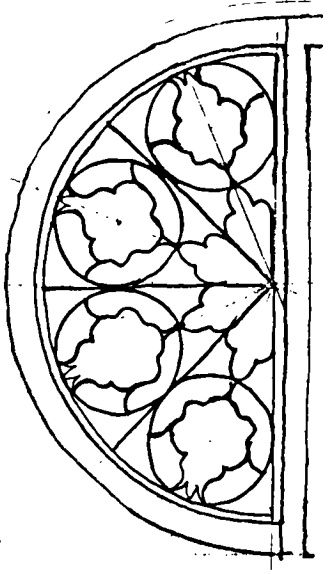
C



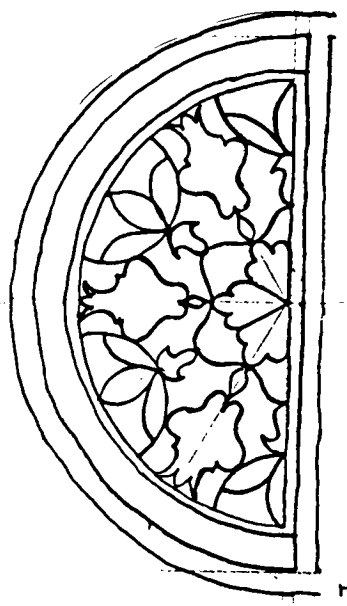
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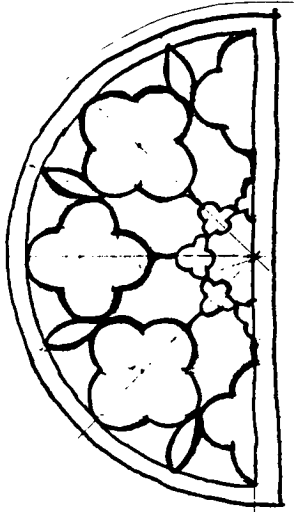
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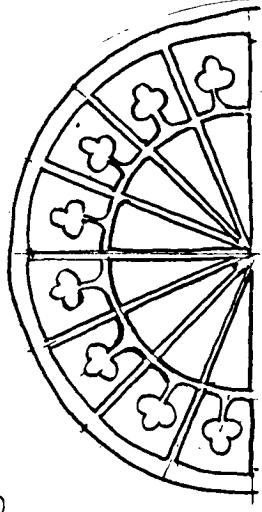
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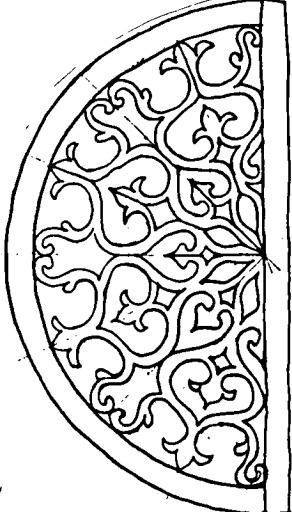
Figure 4.63



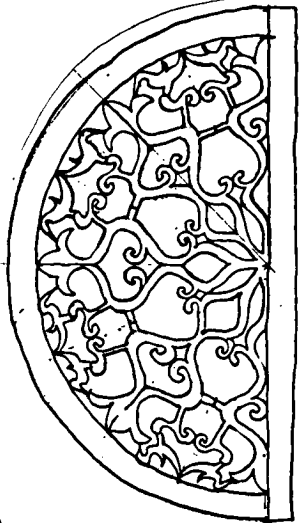
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FANLIGHT DESIGNS.

Figure 4.63 sheet 2.

Chapter 5

HISTORICAL ANALYSIS OF STYLES.



Chapter 5

HISTORICAL ANALYSIS OF STYLES

1. Introduction

The aim of this chapter is to identify and describe different architectural styles; to put them in time sequence and date them and to show how one style developed from another, so one can grasp the cultural dynamic and guess at some of the creative impulses of the time. This will also help the observer to work out the sequence in which different parts of building were executed, and so to understand its practical and artistic significance. A recent study of Sheikh Isa House states that it was all built at one time (except for the wind tower). A stylistic analysis of a wider range of buildings would have revealed that the Majlis was built about eighty years later than the remainder; that the roof and shutters in the children's apartment were added perhaps seventy years later and so forth.

2. Description of Periods and Styles

2.1 Early Style

Several examples of the Early Style are shown in fig 5.1. Rooms are quite low, (3 metres) with traditional mangrove pole roofs exposed to view. Externally there are high parapets which may have corner merlons or rows of simple 3-step merlons. Structural piers are not expressed. Windows are small and almost square. They are almost at floor level. Above each window is either one or two incised plaster panels. The top panel is very small and much narrower than the window. The lower panel is as wide as the window (or wider) but only about half as high. Generally speaking solid piers equal or predominate over voids (that is, windows and panels). The impression is rather squat and massive. Internally, there are deep niches half way up the wall (located behind the second row of external plaster panels). Above and below the niches there may be decorative plaster friezes which run horizontally round the entire room. This lends a horizontal stress, which seems to be typical of this style. Horizontal zig-zag mouldings at or below cornice level are a characteristic feature internally and externally. At ground floor, internal treatment is extremely simple (often with virtually blank walls). There may be horizontal grooves round the room between rows of decorative panels. They are small and far apart so the plain wall predominates. The effect is finicking yet heavy. Panels may be recessed with inset pointed arch heads. These may alternate with incised plaster panels.

There are no badgirs (ventilators) in these rooms. Roof terrace badgirs may be later additions and so one is tempted to think badgirs were not used in Bahrain at this time. It is hard to comment on site layout and general massing, because what remains is adulterated. Probably most buildings were single storey (with a roof apartment a rich man's privilege). The courtyards would arise by gradual addition (or conversion of barastis to stone structures). The whole would have an improvised and very informal air.

2.2. Transitional Style

Most features of the Early Style are present, but they are more highly developed. Examples are shown in fig. 5.2.

High parapets with zig-zag mouldings and three step merlons are still features. Windows and voids are much bigger. Wall piers are narrower. This gives a lighter feeling and also allows the emergence of the column. The piers are slender enough to lend a slight vertical emphasis. This is balanced by much use of horizontal grooves. There may be an upper row of pointed arched windows with a wide hood moulding (plain or decorated) above. There may be an incised decorative panel below the window. Arched windows (and large voids generally) indicate a later date. There is the "Arch and Frame" motif: an arch may be recessed in a rectangular frame. This comprises beam and pilasters, with a stanchion (or wider pilaster) below the arch springing (and flush with its intrados). There may be a circular incised panel in the spandrel. This "arch and frame" motif occurs in liwans as well as apartment elevations.

Pairs of high level windows with pointed arches may rest centrally on a short fat column. Normally however, windows are at floor level and only about 1 metre high (rather as the Early Style). Beautifully florid wrought iron grilles to windows externally were fashionable at this time. Internally, horizontal friezes are still used. But now a lot of tall vertical friezes occur round doors and blank bays or niches. This lends a marked vertical emphasis inside rooms. The lower ratio of solid to void means larger niches and windows; the piers and beams are now slender and may be wholly covered by friezes. The arched windows at high level create a sense of expansive lightness which buoys up the heavy parapet. As a result, the feeling of heaviness (or even awkwardness) evident in the earlier period has gone. Elevations are more harmonious and balanced. The range of decoration is much larger. This includes polylobed forms on arches, moulding and friezes. There are circular, square and triangular incised panels. There is a large variety of recessed panels. The disposition of decorative panels, grooves and friezes is more organised rich and confident and is sometimes positively gorgeous. There is an "arcade

manner" which has the piers expressed on the long wall of first floor apartments, usually with pointed arch heads. The shorter elevations (facing the roof terraces) are in the normal style. This combination looks odd but there is no evidence that it results from later alteration.

The highly distinctive main entrance doors of this period generally consist of a pointed arch set within a rectangular hood. There may be a semi-circular arch set within the pointed arch. The spandrels and tympana are decorated with incised plaster panels which may be rectangular, triangular, circular etc. The decorative panels are organised by geometrical principles: see Chapter 4.

2.3. The Middle Period

The range of styles is greater, and four can be distinguished. Certain things are common. The gorgeous, rampant (and sometimes chaotic) quality of the previous period gives way to cool restraint and discipline. Even in richly decorated buildings - most notably the Seyadi Majlis - there is a serene logic at work: there is no striving or jostling for effect. The underlying geometric order is more firmly and skilfully handled. There is an increasingly strong (but not universal) tendency to express structure - to make piers and beams visible on elevations. There is a strict and simple orthogonal grid organising all facades: the top row of panels was narrower than those below during the earlier periods, but now all panels and windows line up.

Timber boarded ceilings are an innovation. Environmental conditioning is now a concern: building mass (and hence thermal capacity) reduces and there are badgirs in most apartments and in some ground floor rooms. Incised plaster decoration is used much less (but there are exceptions to this rule - particularly Seyadi House). The abstract geometry of the incised panel yields somewhat to a new decorative language (usually in fretted wood). This involves baroque shapes (fluid and semi-naturalistic) (1).

As time goes by windows get taller (up to two metres or more), and the stained glass fanlight is very common. Structure becomes (or appears) much more slender. Windows or screens have an airy filigree quality. Much of the work is light on its feet, so to speak.

Merlons shapes become increasingly fantastic. Copping (thin but boldly projecting) is more common as time goes by.

In the Middle Period framed doors and window shutters were introduced. But the plank and rail type was still used (particularly for large doors). Iron bars were introduced late. **They were put vertically in wooden frames and also used like radial spokes in fanlights** over doors as well as windows. They were used flush with the outside wall as an alternative to fretted timber screens.

Site layout is more formal at this time. No doubt this was possible because wealth allowed an entire family house to be built at one time. Masons and clients were therefore able to develop a conceptual capacity to plan a whole site and not only a single structure additional to an existing layout.

I propose to divide the Middle Period works into:

1. The Arcade Style
2. The Perpendicular Style
3. The Columnar Style
4. The Smooth Style.

They are described in that order.

(a) Arcade Style

The main feature of this style is that the arch extrados is flush with parapet and piers, thus forming an "arcade" motif on the facade. The piers are always expressed on all four elevations. Usually no tie beams are expressed. Windows usually are rectangular and low down (that is at floor level and with no fanlight). There may be merlons but never coping. Bay heads may be semi-circular, pointed ogee, trefoil or other arch shapes, or they may be flat. Flat heads are usually a sign of a late date. Refer to fig. 5.3 for examples.

It seems to me that some buildings in this style (which have low windows) are in an "Early Middle" period (or perhaps one could say a "Late Transitional" period). I say this because the designs share characteristics of both periods. Examples include the majlis of

Sh. Abdullah House; the Sheikh's apartment at Sh. Salman House; the south-west apartment at Sh. Hamad House.

(b) Perpendicular Style

Usually a single beam is expressed above window head level roughly 2.200 metres above floor level. Cornice and floor level beam are also expressed - up to four beams in all. The corner piers are very wide and the top (cornice) beam is deep. This provides a "frame" for each elevation. A recessed ogee, trefoil or semi-circular arch below this beam decorates an otherwise plain infill panel. Pointed arches are never found (nor is incised plaster decoration externally).

The infill panels may be about a third taller than they are wide. The windows are two and one half times taller. The floor to ceiling height is greater than earlier (3.500m). Visual emphasis is powerfully perpendicular. The bold horizontal emphasis of the projecting coping balances this vertical emphasis. Merlons are rare. There is a strong rhythm of bays and piers: usually each bay is identical (except for details of fanlight tracery and window screens).

Seven bays on the long elevation is not uncommon and the short elevation always has three, of course. The facades which result are simple, plain refined and noble. The arch forms are recessed behind the rectilinear structure and this creates a cool analytical quality. See fig. 5.3 for examples.

(c) Columnar Style

This is a late development of the Perpendicular Style. Liwans are very large and may run the whole length of an apartment or along two, three or all four sides. There may be a colonnade at ground level below the liwan. Mostly there are no arches - just a cornice beam - and columns are emphasised as the main visual feature. They may be round, octagonal or square, with plain capitals and bases of contrasting form (e.g. octagonal column on a square base). See fig 5.5. Columns are surprisingly tall due to lateral bracing by mangrove poles half way up. Decorative brackets at the junction of capital and beam are a feature. At the Al Khalifa Summer Palaces in Juffair the liwans face an

internal courtyard, and so the basic plan is traditional. In Muharrag, however, some of the plans are of a "pavilion" type, with central apartments. The liwans face in several directions (including the street). Privacy is protected at first floor by louver screens, for example, or high garden walls at ground level. But it is still a big change in house layout - nothing less than turning the traditional courtyard house inside out. This is the forerunner of the modern villa, with its centralised plan and open space on the periphery of the site.

Elevations are typical of the Perpendicular Style described earlier: beams and piers are expressed and stained glass fanlights are a common feature. With the innovation of large open liwans, the new spirit of the Perpendicular Style goes further. Long vistas are now possible inside buildings and there are large airy spaces flooded with light and the sounds smells and sights of the outside world. Is this a response to the increasing exposure of Bahrain to the social liberation of the modern world?

The British administration started building in this manner around 1900 and probably started a fashion. They had developed the idea earlier in India, perhaps under the influence of the Portuguese "varanda".

(d) Smooth Style

The essential point is that no structure is expressed. In the "Smooth Style" there are tall windows with fanlights (as in the Perpendicular Style). Above each window is one or several rectangular incised panels. The top panel is often either a trefoil or semi-circle. There is usually no coping and there may be corner merlons only. Refer to fig. 5.4 for examples.

As a variant, the decorative panel or the window may be recessed in a rectangular frame, which creates more of a vertical emphasis. In a more extreme version of the smooth style, the facade becomes a curtain with its own abstract decorative geometry masking the functions of the building behind. This represents a partial return to older models - the use of incised decorative panels and horizontal grooves, for example.

2.4 Late Period

Bahraini architecture dissolves into eclecticism and plurality. There is much loss of quality - fine detailing is rarely found and this reflects the economic consequences of the collapse of the pearling industry.

On the other hand the basic themes of previous periods are more or less intact. The expression of structure; the tall window and stained glass fanlight; the bold coping: all are present.

There are more tie beams expressed on elevations, and so panels are often approximately square. The perpendicular emphasis is lost: see the Sufi House and Sh. Abdullah House on Airport Road. Badgirs may have thin coping which rises to a central apex and looks rather like a pediment. Badgir posts may have low pyramids on top. There may be badgirs on the first storey roof indicating its use for sleeping. Mashrabiyyas - previously rare - are now a common feature. It may be due to the arrival of a few Iraqi masons bringing new fashions from abroad. Timber louvres are in common use at windows, mashrabiyyas or as a substitute for badgirs.

Incised decorative friezes along cornice beams became quite popular. Square stained glass windows divided into 9 by 9 (that is 81) panels of various colours were introduced in facades (at high level below the cornice beam). There was a bewildering variety of doorway designs as models copied from different places and previous periods were combined eclectically. The most common theme, however, is a quadrant cove on either side of the door with a heavily moulded cornice above. See fig 5.11.

The doors themselves may be flush panelled with timber laths tacked on to form a rectangle with simple carved decoration at the top in fluid leaf-like abstract designs. This is almost a universal feature after this time (until quite recently). The main precursor locally was perhaps the doors at the Seyadi House. This was Persian in origin but now it was debased. However, one could also see this as an extension of the baroque tendency evident in the Middle Period, also indicating a European influence via Istanbul and Baghdad. Some window tracery also uses this same leafy arabesque (see fig 5.12). But it is

finicking and rather crude - the glazing bars are too big - compared to the flower tracery of the previous period.

Building is fairly plain. Interiors are often barely finished - owners concentrated on completing the outside before the money ran out. Those with wealth to build had gone - to Manama or Rifaa - and Muharraaq has never recovered since. Refer to fig. 5.5 for examples of Late Period design.

2. Framework for Dating

3.1 Sheikh Salman ruled from 1794 to 1825 (2) and it seems likely that the earliest parts of the Sh. Salman House were initiated at the end of the eighteenth century. The move from Jaww to Muharraq in 1800 may signal a starting point for construction. The majlis was probably added at the end of his reign (or even later). The invasion by Oman and the Wahabis forced Salman to retire to Zubara. It was only in 1820 that the treaty with the Honourable East India Company was signed and some semblance of order returned. It may therefore be reasonable to date the start of the Early Period from 1820. Prior to this, building activity was presumably limited. However, Lewcock has drawn attention to extant mosques of a much earlier date and one should not assume that 1800 or 1820 was an absolute new beginning. No doubt there had been an earlier building tradition of which we are now perforce largely ignorant (3).

The so-called Sh. Isa House was built by Hasan, eighth son of Abdullah and grandson of Ahmed al Fatih (the Conqueror). Abdullah reigned from 1825 to 1842 (1236 to 1258 A.H.) coming to the throne as a fairly young man. It seems likely that his eighth son would not reach early manhood before 1840 and it is possible that this house was built during the 1840s (perhaps prior to the onset of the political turbulence which lasted until 1869). Sh. Hamad was first son of Sh. Isa. The chronicle written by Sh. Khalifa ibn Ahmad al Nabhan - who was a traveller - refers to Sh. Hamad's palace being south of Sh. Isa palace and east of the Jami mosque (4). He was born in 1848 and ascended the throne in 1869. He may have initiated work on the palace about 1880 as his son was reaching manhood. The Al Nabhan chronicle also refers to the palace of Mohammed (who was Sh. Isa's third son) as standing west of Sh. Isa House. This suggests a similar date.

3.2. I have found only five buildings which have dates carved on them, although of course there may be others: see fig. 5.6.

(a) Amara in Tijjar Road is dated A.H. 1345 (1925 A.D.). This is in the Middle Period Smooth Style. The carving is on a door panel.

- (b) A house in Road 914 is dated 1352 (1931 A.D.). This house is in the Middle Period Arcade Style. The carving is over the door.
- (c) House in Road 627 (al bin Shiddah firaj) is dated 1342 (1922 A.D.) over the door. This is a simple house in the Middle Period Arcade Style.
- (d) A large house in Lane 913 is dated 1339 AH (1921 A.D.) by carving on the door. This is a renovation which appears to be in the Middle Period Smooth Style.
- (e) A ruined house on Sh. Isa Road (Kharu firaj) has an inscription on an internal pier dating it as 1367 (1946 A.D.). It is a very basic building with no obvious stylistic features. It confirms however that the traditional methods were still in use in the late 1940s.

Note that houses referred to in (a), (b) and (c) are discussed further in Chapter 7.

3.3 Informants have offered the following dates (5).

- (a) Windtower in the Suq (Road 1523) around 1925 (6)
- (b) Warehouse in the Suq (Road 1523) around 1890. This is in the Middle Period Arcade Style (7).
- (c) Seyadi Mosque was rebuilt in its present form in about 1912 (8).
- (d) Seyadi: Majlis around 1923 and lesser apartment perhaps around 1850. The majlis is Middle Period and the lesser apartment Transitional Period (9).
- (e) Sufi House: around 1935. This house is Late Period (10).
- (f) Sh. Abdullah bin Mohammed House (in Sh. Isa Road): around 1880. This is a Transitional Period house (11).
- (g) Mattar House was built about 1928. This is in the Middle Period Perpendicular Style (12).
- (h) Waterfront Khans: these were built one after the other by Salman Mattar approximately 1929 to 1931 (13).
- (i) Jalahma House: the majlis or hathiz was built around 1915, and this is in the Middle Period Columnar manner (14).

3.4 Unfortunately there are very few useful photographs. Theodore Bent has a photograph of a house in Rifa'a which he took in 1889 A.D. It is very like Sh. Abdullab bin Mohammed House, and has also hamman screen crenellation. Bent also has drawings which show polylobed pointed arches which I have associated with the Transitional Period (or earlier). There are various photographs of official or semi-official British buildings in the Gulf dated 1900 which show the "Columnar Style" (15). Most other photographs are too recent to prove anything about dating.

3.5 On this basis, I would propose the following period dates as a broad framework:

- a) Early Period up to - 1850
- b) Transitional Period 1850 - 1890
- c) Middle Period 1890 - 1930
- d) Late Period 1930 - 1940

If further information is brought to light it may be possible to refine or modify this. I have no doubt that a lot more research could be done into dating, and it is to be hoped that a fuller account will be put together in due course by a Bahraini student talking to local families. Title deeds exist for some new buildings after the late 1920s, but they are hard to retrieve from the Land Registration Directorate (with or without the owners permission). Even on official Ministry projects, the retrieval of deeds was (I found) an extraordinarily slow business, and, in practice, I could not make use of it for the present purposes.

4. Conclusion

4.1 What generalisations can be made about the whole span of this evolutionary process? What processes of change can be identified and can one deduce from them any conclusions about the creative or cultural impulses of the time? If one overlooks a few exceptions to the rule, then ten evolutionary tendencies are clear:

- (i) Solids reduce and voids increase as time goes by: in other words, windows, niches and panels get bigger. One could say that a structure evolves from a solid wall to a frame. Rooms get higher and longer.
- (ii) The elements of structure (piers and tie-beams) are more clearly and elaborately expressed on the facades. There is an increasing concern with regular and repetitive rhythm.
- (iii) There is progressively less use of surface geometric decoration on facades. (Of course there are exceptions to points (ii) and (iii), particularly the Seyadi House.)
- (iv) Where decoration occurs - particularly internally - it becomes orderly and orthogonal, less gorgeous but more delicate.
- (v) Decorative elements become increasingly pseudo-structural. In other words, they provide a visual and poetic exposition of the structure. Brackets and arches are the most common examples.
- (vi) It is increasingly true that each visual element is separated or articulated. For instance, a tie-beam might be given its own plane (recessed or projecting relative to the piers, arches, shutters, upper or lower panels etc.). Internally a similar tendency is clear. The various layers of plaster are cut back - or built up - to create several planes (for grooves, recessed panels, decorative panels, beads, friezes etc.).
- (vii) There is general tendency towards a perpendicular visual stress.

(viii) Merlons are associated with a horizontal visual emphasis. Coping is associated with a perpendicular emphasis. There seems to be a visual homeostasis at work: contradictory tendencies balance out. Thus the boldly projecting coping absorbs and terminates the vertical thrust. Stability and repose are reasserted.

(ix) More attention and technical ingenuity is lavished on environmental conditioning - badgers, correct orientation etc. - as time goes by. This point is explored further in the next chapter.

(x) Site plans are increasingly deliberate. In other words, design concepts encompass increasing numbers of buildings or larger areas of land. The disjointed layout - put together bit by bit - is less in evidence. Rooms become more open to the outside - whether an enclosed court or even the street.

4.2. The thing to realise is that there was a considerable creative development in the space of little over a century. This may be unexpected. In so small and apparently impoverished a state one might expect stagnation. True, the basic technical means available changed very little. There were no new materials or methods (although some improvements occurred at the margin, such as imported tools, better quality gypsum and so on). Even so, technical advances occurred in cooling and structural economy which are quite impressive. The hypothesis may be put forward that some advances were enabled by the influx of techniques from Persia, which had developed there a long time before. In Chapter 1, it was explained that a major influx of migrants from the south of Persia had occurred around the turn of the century.

One senses that most masons in Bahrain were really concerned with structure. Their wish was to narrow the load-bearing elements as much as they dare, and also to demand more of them. This was to be made clear on the facade by expressing those elements in as slender and daring a manner as possible. Surely they felt this was the essential reality of the building. The starting point had been a solid wall, into which holes were cut (for various

purposes). This had always been strengthened by quartered palms laid horizontally and tied at the corners. This surely was a latent frame although not developed as such at the outset. At that stage, the basic reality was the solid wall. It was perceived as a plane, a veil, a surface.

Between 1880 and 1900 one may conclude that a new feeling emerged (although the process of gestation and growth precedes and follows on from that, no doubt). One could summarise it as the "Wall-as-Structure" concept. The "latent frame" which lay buried inside the stonework emerged from its hiding place to become the main visual expression.

There was also a secondary philosophy - an undercurrent - which tried to retain the concept of "Wall-as-Surface", exemplified mainly by the Seyadi House. Here too it was felt to be desirable to reduce the amount of stone, increase window size and so forth. But the instinct was to integrate windows into a wider pattern of surface decoration.

4.3 Houses in the Middle Period become increasingly formal, consistent, integrated. In the Early and Transitional periods most house plans arose by an evolutionary process - increments being added gradually over many years. Apparently designers did not feel much need to integrate the latest addition into the whole so as to achieve a consciously unified ensemble. A rather ad-hoc spirit prevails. Sheikh Isa House, which was mostly built quickly, shows no architectural composition at a scale bigger than an individual apartment (although it would have been easy to achieve). Unity in that house arises from the coherence of the overall form - for example, long straight facades to the streets; roof terrace system all at the same level; the courtyards completely contained, and so forth. Within this framework the house as a whole is informal. There is no concept unifying the totality.

In the Middle Period, plans became more formal, however. In the Shirawi House, the apartments are symmetrically placed at each corner of the courtyard, and the design of all four apartments is very similar. The ground floor elevations to courtyards at this period are usually formally composed: doors are in identical projecting bays with a rectangular and trefoil (or semicircular) incised panel above, and the distance between doors usually

does not vary. There is a fixed number of identical windows between each door. The effect of an unchanging structural grid and a consistency in design of windows and other elements helps create an air of deliberation and considerable mastery. The canvas of the designer is much bigger - he aspires to a wider and deeper unity than hitherto. This was due partly to the greatly increased wealth which allowed large building complexes to be conceived at one moment and executed without any delay or interruption. But this surely is not the whole story: an intellectual growth had also occurred. Designers were now able to hold more variables in their imagination and manipulate them with greater skill (even though no plans were ever drawn).

The next step would naturally have been town planning schemes beyond the boundaries of single properties. One gets a hint of this broader unity on the Old Suq waterfront with the three colonnaded khans.

4.4 Lastly I want to discuss the nature of structure and decoration in Muharrag! architecture in relation to Islamic architecture as a whole. The general view held by scholars on conceptual impulses of Islamic design is that structural expression is obscured and tectonic values dissolved by various means, particularly repetitive decoration, so that the reality of the building is dematerialised, so to speak, and the mind removed from a mundane plane to an abstract or spiritual plane. The same end is achieved by the lack of hierarchy, symmetry, axiality and suchlike structural devices on plan and elevational composition. It is also argued by Grube that elevations rarely show a consistent relationship to the plan or structure of the building behind them (16).

How can one square this with my earlier comments (para. 4.2) to the effect that masons here were really concerned to express structure - that this was for them the reality of the building (after 1890 A.D. or thereabouts)? I am inclined to believe that the architecture of this region is to some extent an exception to the general rule.

Dalu Jones points out that structural motifs in Islamic architecture are often "multiplied, magnified or reduced, exploded and reconstructed endlessly..." (17). Niches and arches, squinches and pendentives are cases in point. Much decoration was derived from essentially

structural origins but applied in a way which was not only non-structural, but lacked structural logic. It had cut loose from structure altogether. This is really not true of Bahraini architecture. Visual features in this architecture - whether decorative panels, or piers, beams, brackets or arches - all are directly connected in a necessary and contingent relationship to the real structure (real forces and the fabric carrying them).

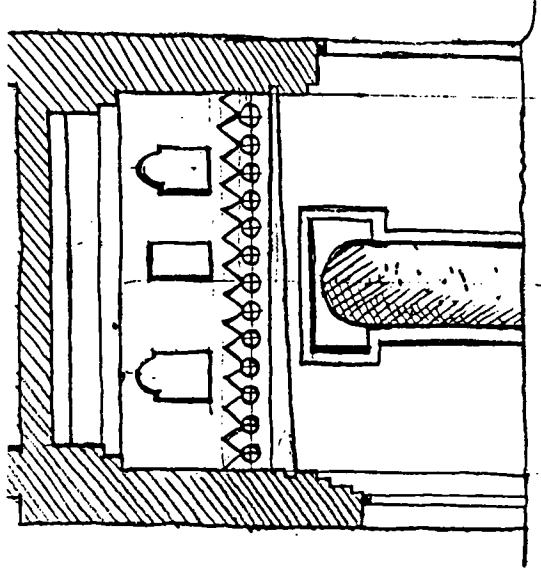
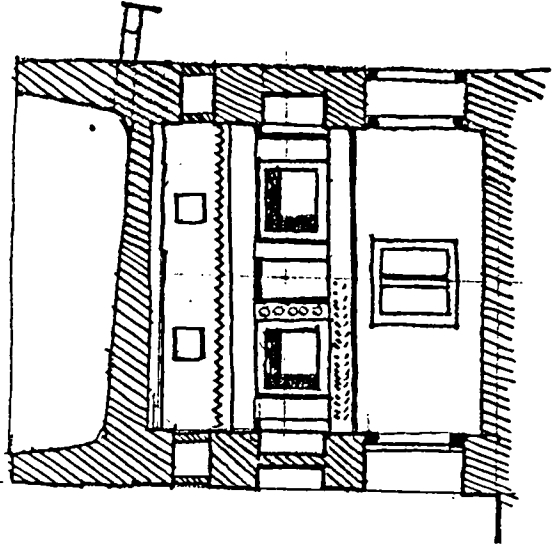
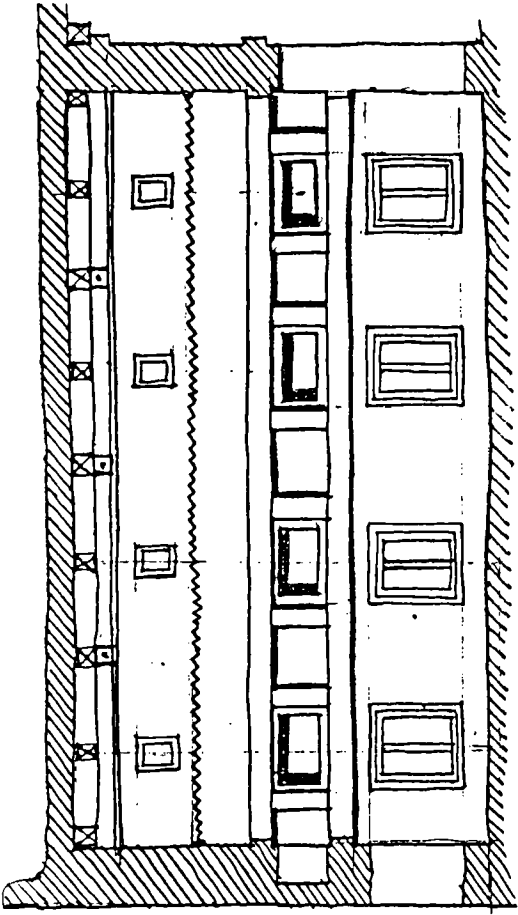
As if to confirm this view, we find that surface geometrical decorative is cut down and even abandoned at precisely that point in the process of stylistic change when structure becomes fully expressed and articulated.

On the other hand it is true that architectural expression (of structural bays most obviously) is repetitive, with no symmetries, foci or climaxes. It is clearly Islamic in character, but has a more solid, materialistic character than the mainstream. Perhaps this is due simply to its origins as the vernacular of a simple society.

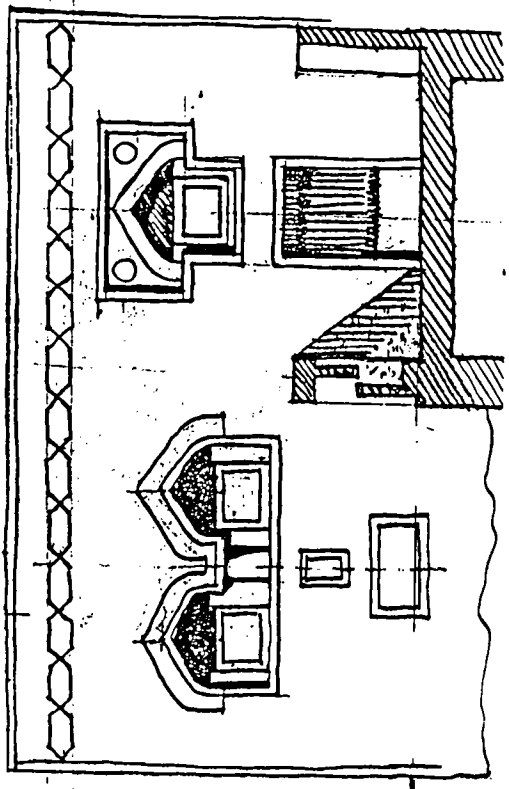
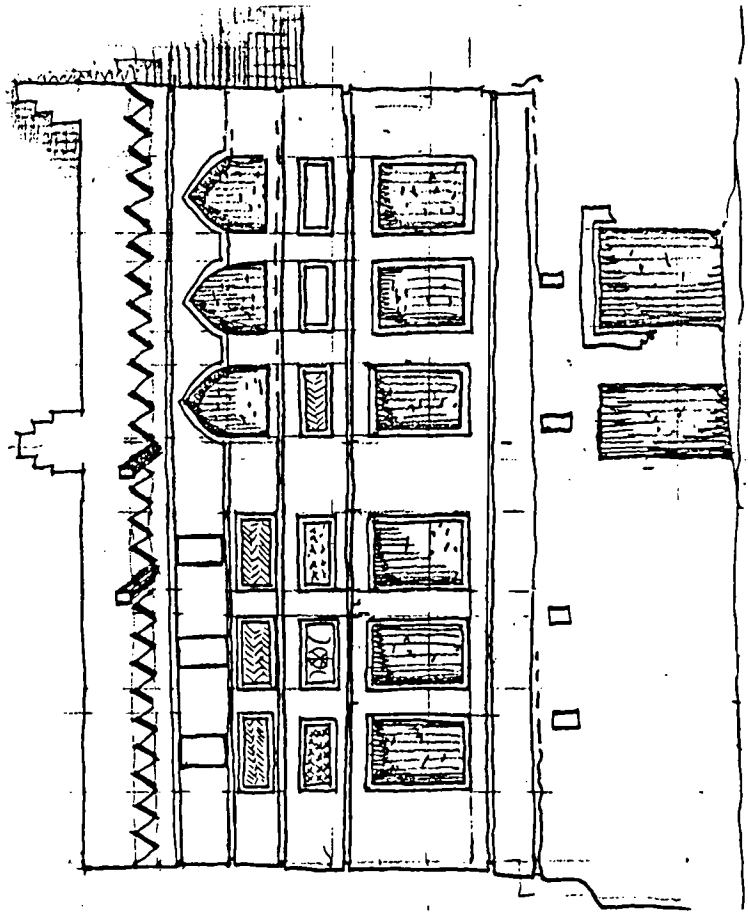
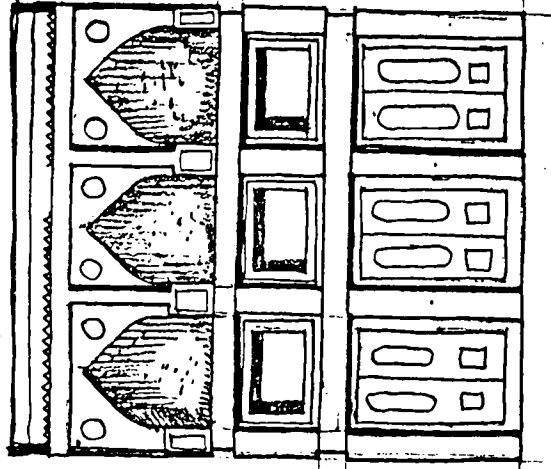
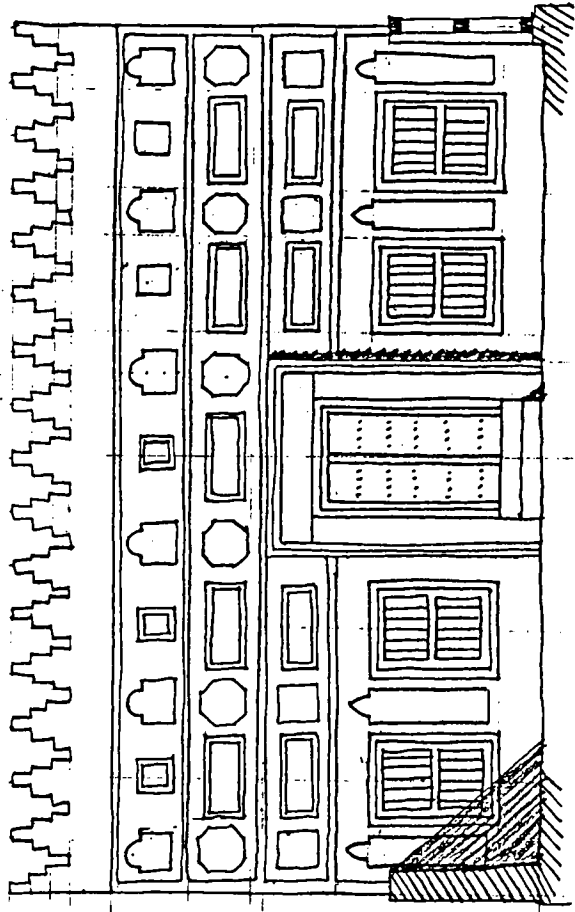
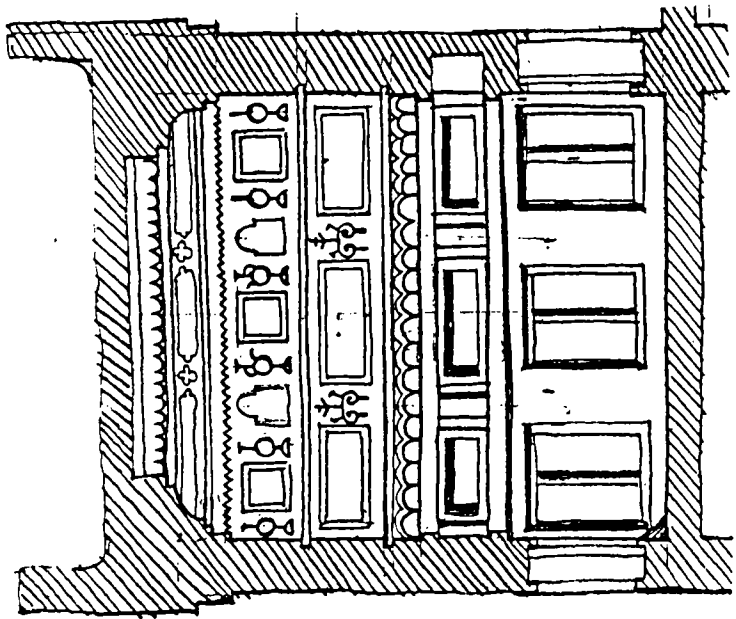
CHAPTER FIVE : FOOTNOTES

- (1) I suggested earlier that this was a Western influence filtering to the Gulf via Istanbul and Baghdad. The predecessor was the Ottaman Baroque style.
- (2) The dates of rulers are taken from HARDY-GUILBERT C. and LALANDE C. page 93.
- (3) See LEWCOCK R. (undated) Reports on Conservation of Monuments of Bahrain (U.N.E.S.C.O.)
- (4) See NABHAN K. al (1923).
- (5) Informants are described in Chapter 1, Section 2.2.
- (6) Informant: Abdul Wahed.
- (7) Informant: Hamza Mohammed.
- (8) Informant: Hassam Abdullah Seyadi.
- (9) Informant as for (8)
- (10) Informant: Yusuf Abdullah.
- (11) Informant: Sheikh Khalifa bin Abdullah al Khalifa.
- (12) Informant: Yusuf Mattar.
- (13) Informant as for (12).
- (14) Informant: Mariam al Jalahma.
- (15) See BENT T. (1890). Also WHEATCROFT A. (1986) contains photo graphs of "Columnar Style" buildings.
- (16) GRUBE E.J. (1978) page 12. Perhaps he overstates his case.

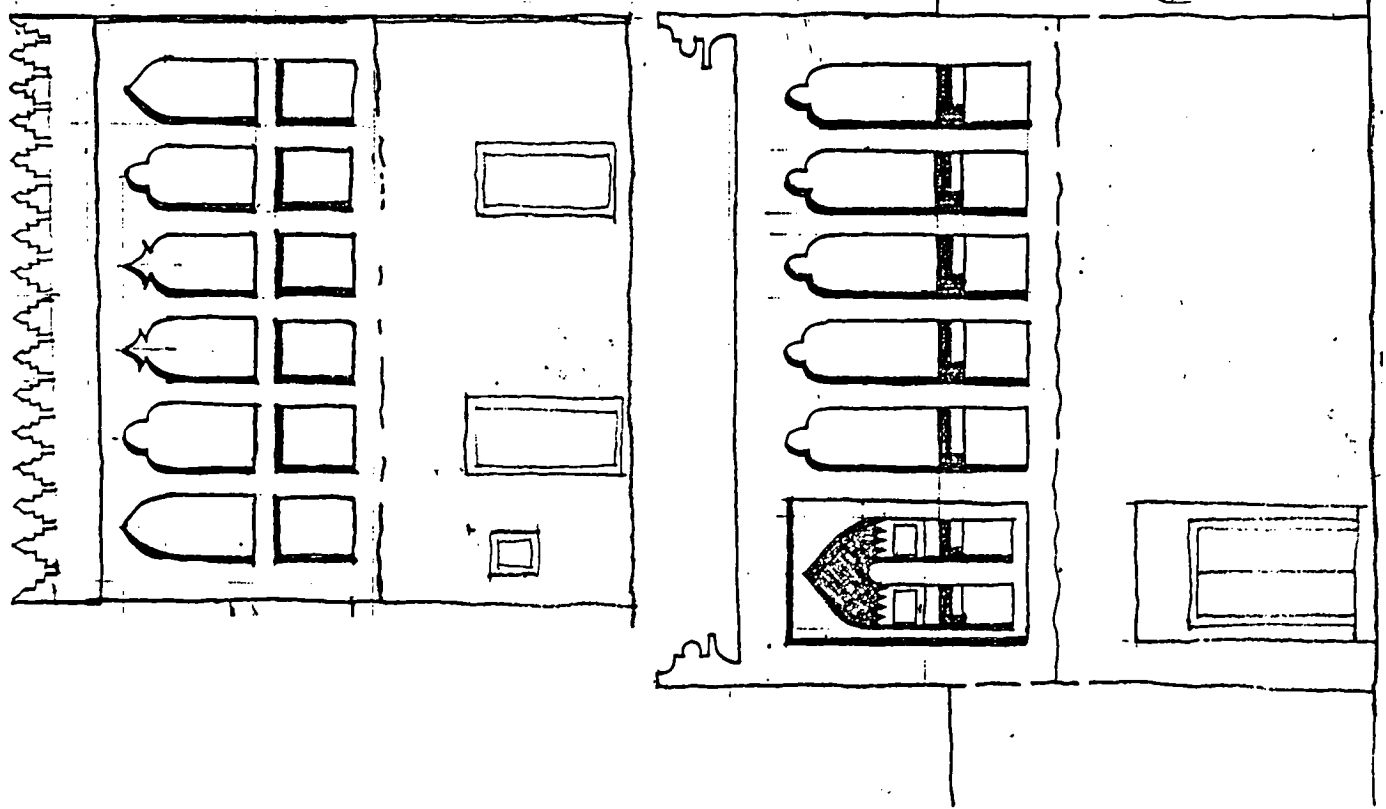
(17) JONES D. (1978) page 163.



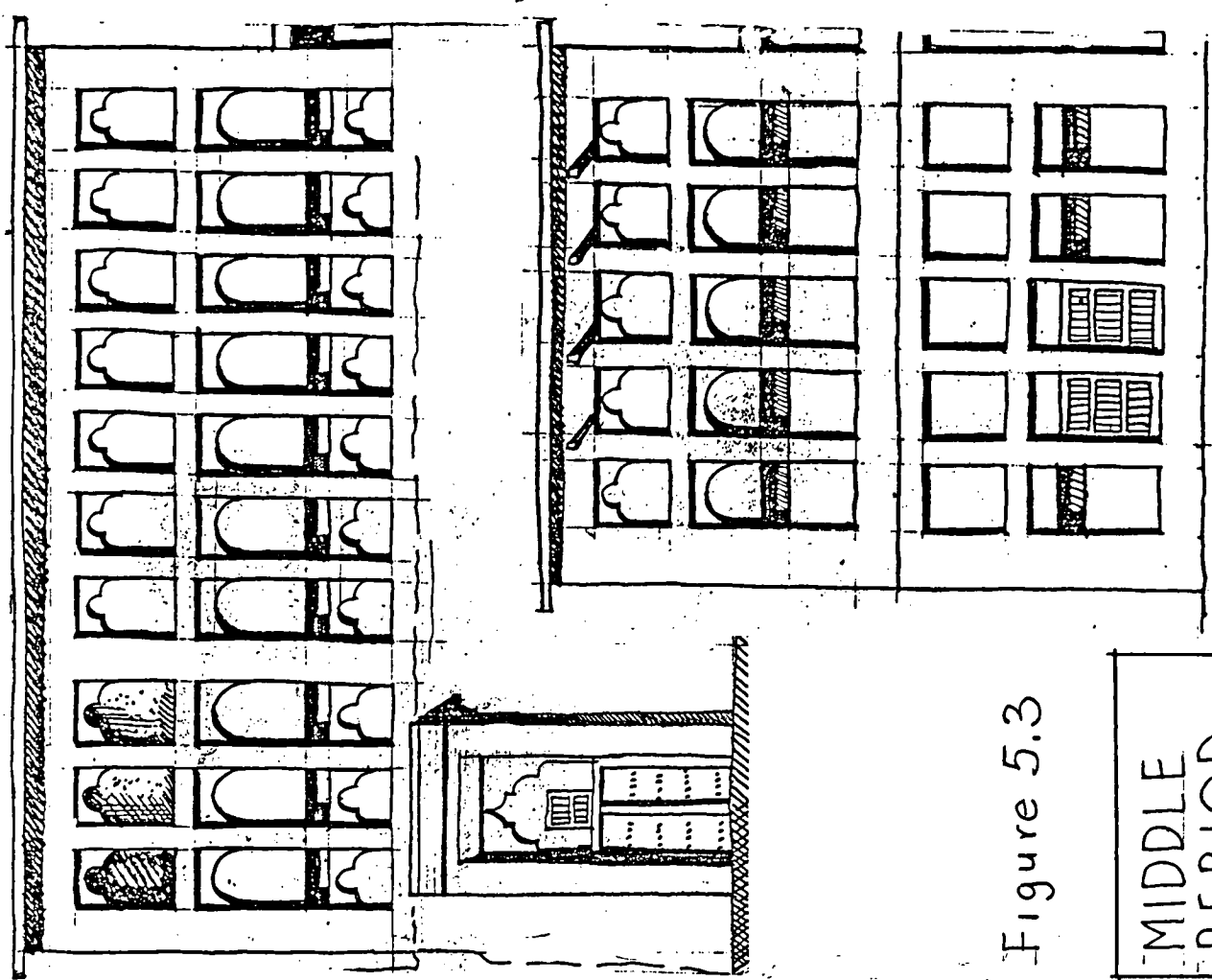
EARLY PERIOD EXAMPLES Figure 5.1.



TRANSITIONAL PERIOD
EXAMPLES. Figure 5.2



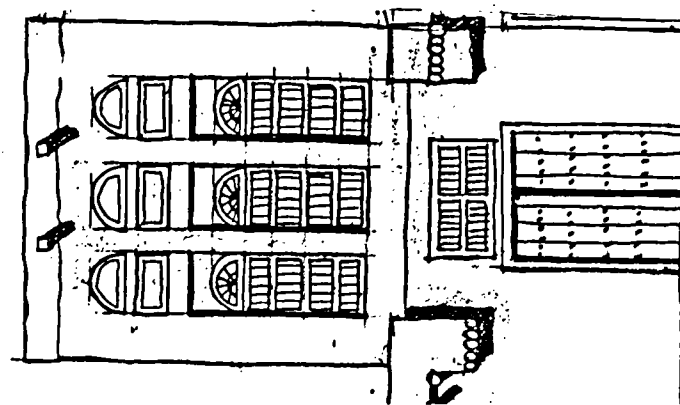
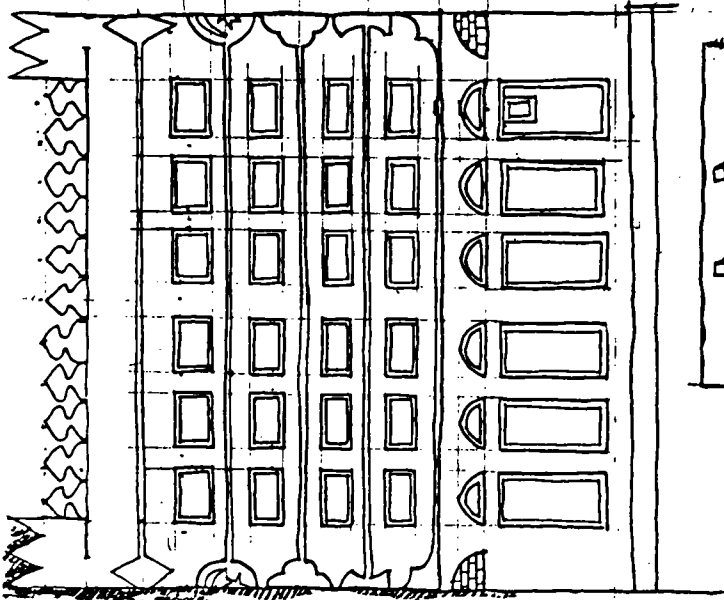
"ARCADE STYLE"



"PERPENDICULAR STYLE"

Figure 5.3

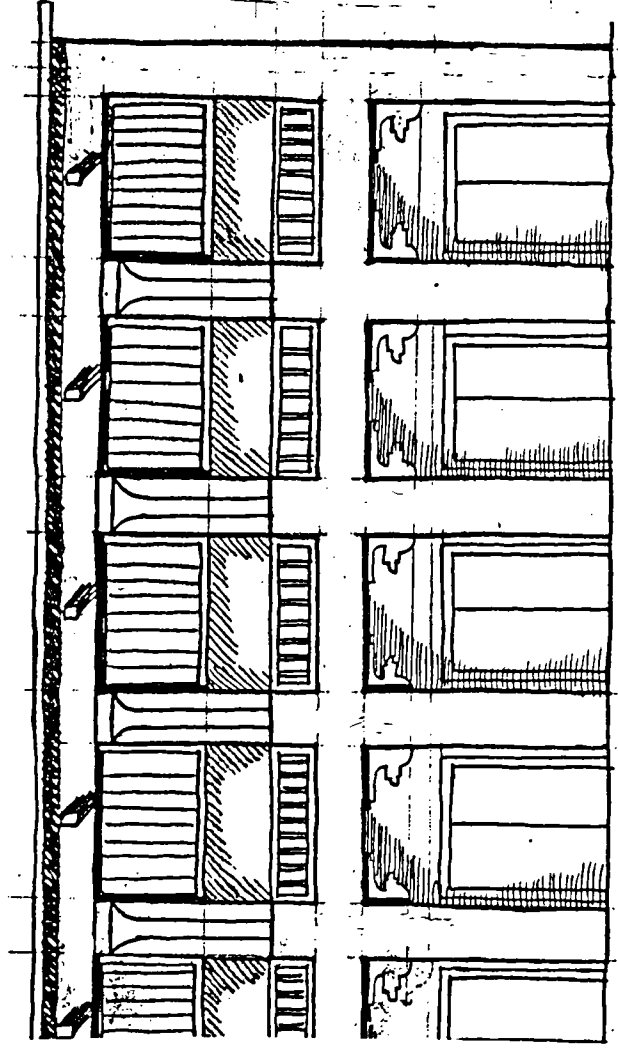
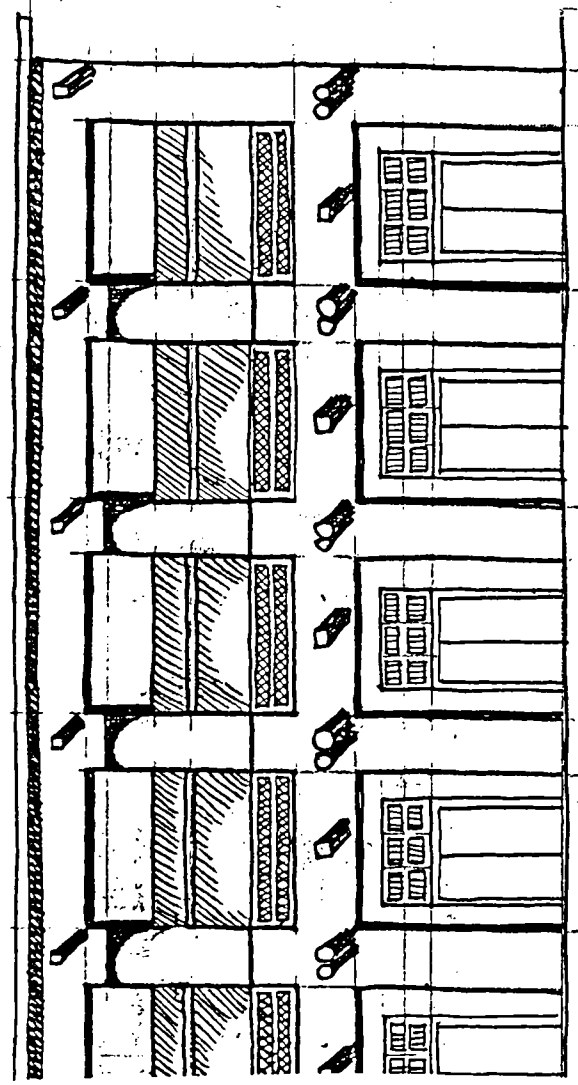
MIDDLE PERIOD EXAMPLES



"SMOOTH STYLE"

Figure 5.4.

MIDDLE PERIOD EXAMPLES



"COLUMN MANNER"

Chapter 6

BUILDING CONSTRUCTION AND THE BUILDING INDUSTRY.



Chapter 6

BUILDING CONSTRUCTION AND THE BUILDING INDUSTRY

Introduction

This chapter is divided into five parts:

1. The Building Industry
2. Materials and Construction
3. Design for Climate
4. Tools
5. Conclusion: Lessons for Today

Most of the information has come from observations or from informants (1) but written sources do exist on Bahraini building materials and construction (2) and general principles of design for hot climates (3).

Much of the information here is of purely historical interest. Some information, however, helps one to understand why the buildings are the way they are and it also reveals how the client and users perceived their environment. The absence of a design process in the modern sense, and the important role played by the client in the construction process are both examples. After all, the mechanics of any production process have an impact on the resultant form, and one cannot grasp the form unless one sees how it emerged from that process.

Finally the historic building contains a few vital lessons for today, for example economic solutions to problems of climate - extreme heat, humidity and a small diurnal range. Energy is no longer cheap in Bahrain; houses now are designed with little regard to climate - apparently in the belief that air-conditioning will always be a total technical fix. This is not wise.

1. The Building Industry

1.1 There were no architects. A Master mason (al Banna) would agree the proposal stage by stage with the client. No detailed drawings or construction drawings would be made, and the masons were chosen by reputation, not by tender. The contract sum was agreed after the mason was chosen. In some cases a few rough sketches would be made by the client or mason so as to communicate and agree the basic requirements at inception - for example, the general disposition of rooms, doors, staircases etc. Otherwise, things were agreed on site, perhaps drawing on the ground by sprinkling lime (nura) or marking detailed requirements as to fixings and finishing on walls and ceilings. There were no building companies in the modern sense. All workmen were independent. They owned and provided their own tools. They were hired for each job, and might be hired for the next job if they had performed well. There were certain places where workmen gathered, and the masons (and possibly clients) would inspect the men and hire some. In the depression of the 1930s, certain builders changed some of their workers each day.

1.2 The Political Agent, Calcott Gaskin, wrote in 1900 to the Resident in Bushire on the matter of the proposed new Agency building in a way which cast aspersions on Bahraini labour and materials:

"The building materials obtainable locally are unquestionably far inferior to those procurable in Bushire and the major part thereof will have to be brought from that port. Also, all the available masons, carpenters and labourers come from Persia, and while being inferior workmen, demand a hire from 50 to 100% more than what the best workmen earn elsewhere, and it would be advisable to engage the superintending mason and builders from Bushire and to have all the doors and windows sent across." (4)

Gaskin also notes (22 February 1902) that most labourers are farmers from Persia. My informants told me, however, that in the 1920s and 1930s most labourers came from Oman.

He notes that Chendel (rafter) poles are expensive in Bushire and Bahrain, and arranges to import them from Karrachi. This was in 1901.

In 1906, the Agent F.B. Prideaux indicates there was a serious shortage of craftsmen and coolies in Bahrain. He writes to the Agency at Linga (Lingeh) asking the Agent to recruit men and send them to Bahrain (5). From this sort of evidence one may conclude that at this time the industry in Bahrain was dependent somewhat on the Persian Coast. This dependence may have ebbed and flowed, however, as building demand rose and fell, immigrant workers settled, or market prices fluctuated.

The usual contractual arrangement was called al Maz. The building owner and mason would agree a price for constructing a building as marked out on the ground, on the basis that all materials and joinery items were supplied by the owner - the mason simply organising site labour and directing site works.

Doors and windows were available - at least in the 1920s and 1930s - ready made. But special items would be commissioned from a carpenter (al Najjar) and brought to site by the owner on a hired donkey. Therefore if the quality of fittings and fixtures was to be changed this did not affect the contract sum. The mason would be paid at intervals as the job progressed up to the maz contract sum. He would then pay the hired workers.

The building owner would have to go to quite a lot of trouble to secure some materials - or so it would seem to us today. For instance at one time it was common to hire a boat owner to bring gypsum from Qatar. The boat owner and his men would actually excavate it with wrecking bars themselves. Upon the boat's return, the building owner would hire a specialist burner to calcine the gypsum and pulverise it. He would then hire a donkey to bring the material in a cart or panniers to the building site. To supply materials for a house could involve an owner in a lot of separate operations of this type and a good deal of organisation which now normally falls to the contractors lot. What was the reason for such a system? Perhaps there were few men with the entrepreneurial and organisational skill to provide a total service for the client. Each man probably preferred to act as an individual doing a single task so far as possible, leaving the client to do a lot of the

necessary management tasks. Probably also the client felt it was cheaper and left him with more control over the total process.

There were no specifications and no working drawings. Reliance was placed on the honesty and sincerity of the mason: in so small a community a builder whose services were much questioned would soon be out of business. Also, an unreasonable client would spoil his family name and be subject to social pressure to behave correctly. There was simple way of building, with a very narrow range of choice as to materials and components. Standards were well known and widely observed. The author was struck by how many people of the older generation knew all about the traditional building methods - people who had never worked in the industry can discourse on the properties of materials and how they were produced etc. Apparently technical knowledge was widely diffused in the community. For all these reasons technical documentation was not needed. The situation today is very different of course. There is a bewildering array of materials and components, many barely tested; technology evolves rapidly and is often not fully understood by the designers (let alone the hapless public). Finally, the incidence of incompetent - if not exactly sharp - practice is growing. The contract documentation gets more complex and the argument generated by its interpretation more heated all the time.

1.4 As regards the local industry in Muharraq, there were four main families from whom masons were drawn. The number of masons earlier this century in each family was roughly as follows:

Al Hayki	=	30 to 40 masons
Al Sakran	=	25 to 30 masons
Al Banna'in	=	25 to 30 masons
Al Sadeh	=	20 to 25 masons

There were thus about 100 to 125 masons. Of these, about a quarter would be a master (al Astadh) and three quarters would be assistants or apprentice masons (al Musayed Banna). Entry to the trade was based on family membership, and youths would join uncles or fathers to learn their skill. There were no guilds and no formal examination to gain admission to

the status of a master. On good quality work there would be one or two labourers per mason and on poor quality work about four or five. An average would be around three. A labourer (al A'mel or Al Koollee - the latter a loan word, of course) would rarely if ever rise to be a mason.

The size of the building industry proper (excluding carpenters, blacksmiths and materials procurement people) in the 1920s and 1930s therefore was about 400 to 500 persons (or less in times of economic slump). At certain times, there was (as we have seen) an influx of workers, including craftsmen, from abroad, and this must have increased the total size of the industry considerably.

1.5 A good deal of evidence on building costs can be found in the India Office Records. The new Agency is shown on plan as about 8,500 sq. ft. at two storeys - a total of about 17,000 sq. ft. The total cost is estimated as R 18,450 (13 July 1901) (7). This includes items as follows. Note that one rupee equalled 16 annas and there were about 13 or 14 rupees to one sterling pound.

Bahrein Stones (1000 boat loads at R 3½)	R 3500
Rafters (120 score at R 20 per score)	R 2400
Busreh (Basra) mats (1000 at 8 annas)	R 500
Date sticks (850 bundles at R 8 per score)	R 340
Clay (6000 donkey loads at R 8 per 100 loads)	R 480
Gypsum (200 caras at R 20)	R 4000
Teak Planks (16 tons cubic)	R 2500
Carpenters Wages	R 600
Masons Wages	R 2800
Rods of Iron (for windows)	R 190
Door and Window Fittings	R 200
Pine planking for Reception Room Ceilings	R 150
Varnish, Paint	R 270
Water	R 180

Note that one cara equals 1080lbs. In 1903 Gaskin says an average boatload was 67 cubic feet.

In 1905 (and subsequently), more estimates were produced by F.B. Prideaux for major extensions to the Agency:

Building	Area (sq.ft)	Total (R)	Labour (R)	Contingency (R)
Guard House	900	650	100	50
Servants Houses	2000	2200	350	200
Stables	600	500	60	40

Gaskin's estimate (1901) indicates a cost rate of around R 1.1 per square foot. Prideaux's estimates (1905) indicate cost rates of R1.1 (Servants Houses), R0.8 (Stables and R0.7 (Guard Room). It subsequently emerged that the estimates were too low, and the job had to be skimped (because the Government of India was keeping tight budgetary control in order to contain and reduce expenditure). One could perhaps therefore say that R1.5 per sq. foot was enough for a reasonable house and R0.7 was a very cheap price rate.

Gaskin's estimate of labour cost was just below 20% of the total cost, and Prideaux's labour percentages go as low as 13% for the Stables. Presumably this reflects relative complexity of design.

The original skimping led to the need for increased expenditure on fitting out in 1907. There are estimates for this too. Staircase costs were as follows. No doubt this was a western-style staircase.

1 ton packa teak wood	R 200
Carpenter wages	R 200
Masonry work and labour	R 100
Iron fittings	R 50
5% contingencies	R 27

Total	R 577

Costs for fifteen wooden verandah doors and sun shades were as follows:

313 cu. ft. teak	R 1622
Brass fittings and glass panes	R 374
Labour	R 1443
5% contingencies	R 172

Total	R 3612

As data supplementary to that given by Gaskin, I will quote some of Prideaux's costs. Gutch (or gatch, that is, mud or what Gaskin calls clay) is variously costed as: One boom (i.e. boat) gatch at R66; Six boats raw gutch cost R342; Three hundred donkey-loads of black gatch (i.e. from the shore) at R14 per 100 loads cost R42. Firewood (for burning gatch) was R10 per rifah. Lime (nurah) prices are quoted as two rifahs of lime costing R28 and five rifahs of lime costing R65. (One rifah or reefah was 560lbs.) Date rafters (yadhaw) were R100 for two hundred. Ten doors plus thirty six windows were R740. Three hundredweights of rod iron - sufficient for four windows - was R20. Evidently the frame comprising stone, mortar and rendering was 40% or 45% of the total cost. The roof and floor elements were about 30 to 35% of the total. Fitting out could be 20% if one includes the items Prideaux costed in 1907. If economy was practised the cost could be less than 5%.

My informants stated that wages were about 2 rupees a day for an average mason and about 10 or 12 annas for a labourer. The figures varied from time to time, of course and a labourers' wages could be as low as 6 annas. This was in the 1920s and 1930s.

Earlier in the century Prideaux wrote that a labourer's wages were $6\frac{1}{2}$ annas in 1904 but $9\frac{1}{2}$ annas per day in 1907.

If we assume that the figures presented above are reasonably representative of the early decades of this century, then it is possible to make some "back-of-an-envelope" calculations which reveal a little of the scale of the industry. Wage payments to 100 masons and 300 coolies would be around R400 per day. If we assume that 150 working days per year were spent on new-build (the remainder being on maintenance) then the annual wage total would be R60,000 (8). If this was 20% of the total investment, then that total would be R300,000 per year. At R1.5 per sq. foot cost rate 200,000 sq. foot of accommodation could be built per year. This calculation should be treated with great reserve, as it is based on obvious assumptions and the cumulative error could be serious. On the face of it, I think the figure looks suspiciously high. Nonetheless that seems to be the logical implication of the estimated cost figures given earlier.

We can relate this to income levels. We know that Belgrave's salary was R9600 per year (9). Middle ranking civil servants would receive R1200 per year (10). Junior staff and sweepers or other well-placed menial staff would get R120 per year (11). A craftsman could earn around R600 per year (12)

One source speaks of a clerk on a monthly salary of R100 paying a rent of R10 per month. This may or may not be typical of the middle class, but it could suggest that some people paid around 10% of their income on housing. If we assume the space rented was at least 250 sq. ft. (an apartment plus hamman) at a capital cost of R375, then the annual rent (R120) suggests about three years purchase, or an interest rate of 30%. Is this reasonable? In fact, Taylor speaks of interest rates being charged on loans of 30% or more, and his tone suggests horror (13). Of course, interest rates in the west were a mere fraction of this, and so the westerner might assume this was unusual exploitation. I was

surprised to find that some property investors in 1983-5 were expecting to recoup their money in 5 years or less. The causes historically might be the rapid degeneration of buildings due to poor construction and a hostile climate; a lack of political stability or psychological attitudes embedded in local culture.

In fact income levels seem quite high relative to building costs. A wealthy middle class family might have three wage earners with a total income of R3 to 5,000, and a house of (say) 2,000 sq. feet costing R3,000. If they saved only 10% of their income, it would only take 10 years or less to accumulate the necessary sum. Harrison however, seems to think many local people were feckless and shortsighted (14). In effect, he says the divers became poor unnecessarily because they were enslaved by debt. He thought their income would have been sufficient to meet their needs very adequately if they had been less spendthrift and more organised. He cites the divers of Qatar as an example of how things could be better managed. It may therefore be that in the housing system a similar lack of organisation was found.

I will finally make some brief observations on maintenance costs. My informants suggested that about half the resources of the industry would be devoted to maintenance in a typical year (15). Major S.G. Knox noted that the Government of India normally devoted 2% of the capital cost of building to maintenance each year, but that in Bahrain, due to the aggressive climate and poor materials, 3% per year would be appropriate (16). Let us assume this to be typical (which it might not be - but I found no other information). The annual expenditure on wages for maintenance of the Muharraq industry would be R60,000. Adding R10,000 for materials, this manpower would be able to maintain a building stock to the value of R2 million. However, a number of people are said to have maintained their own property. Again this "back-of-an-envelope" calculation must be treated with extreme reserve until more information is uncovered.

2. Materials and Construction

2.1 Construction was basically a frame of stone piers and timber tie beams. Both piers and beams were at intervals of around 1.100 metre. The beam intervals vary to reflect the location of voids, but the pier intervals generally do not.

The voids may be windows; doors; ventilators (badgir); thin coral panels (farsh); plaster decorative panels (pierced or incised and interior niches (rosanna). Elements may be combined, of course. For example, two incised panels may be placed in the same void - one facing in each direction

The span of the mangrove poles tends to create a maximum room width of about 3 metres. From this arises a comfortable length, which is not more than 9 metres and usually nearer 6 metres. It is commonly assumed that the maximum span is 3 metres. This is not really true, and I.O.R. files often refer to mangrove (or "Zanzibar") poles of 20 feet. It is clear, however, that they were expensive. Perhaps also they tended to sag and create the problems of leakage to which Lorimer alludes: see para. 2.12 below. Another reason for narrow buildings was to help wind-cooling.

Exploitation of the qualities of the construction system gives a strong module, which governs the rhythm of facades; the volume or shape of buildings and even the grain of the cityscape. This contributes to the sense of cohesion and unity.

The mangrove poles came mainly from sites which at one time were within the Omani Empire. This included Bahrain, of course. One can speculate that the trade patterns of this empire are responsible for the traditional form of construction (17).

2.2 Coral block (known as "sea stone": Hadjar al bahr) was calcareous gritstone used to build structural piers and walls. It was cut from the sea at low tide with picks and brought to site as unshaped rubble. It is crystallised carbonate of lime, reasonably strong but very salty. This was used for building piers and solid walls. Farsh stone is regular bedrock strata also from the sea. It occurs naturally up to about 7 centimetres thickness. It was quarried by driving wedges into the strata and levering with a bar. This split the

stratum off, sometimes in large areas which could then be trimmed by axe (18). This was used for infill panels between piers and also for partitions. It was used for coping in the Middle and Late periods.

Sometimes a higher quality calcareous stone from the quarry on Jidda Island was used for foundations (19).

2.3 Djuss (gypsum) was used for rendering walls and roof surfaces. It was made by crushing and burning limestone. Much was latterly imported from Saudi Arabia and Qatar. This was less prone to crumble than the Bahraini product. Previously however the small cottage industry near A'ali was the only source. Local stone was built into a small dome and a fire was lit below. The workers would gather round a small pile of burnt stone and attack it with small wooden hammers, beating in rhythm and repeatedly calling out the name of God.

The gypsum was mixed with lime (nurah) particularly for external use, which improved its workability.

When supplies were imported from Qatar or Nejd (Saudi Arabia) to Muharraq, specialist burners would calcine it by covering the stone with timber and setting fire to it. This was another method (20).

2.4 Palm trunks (yadhaw) were quartered (by two-handed axe) and used as wall plates and tie beams. These were embedded within the masonry, with a vertical spacing of about 0.700 metre (or less if required to bridge over windows or other voids). Mangrove poles (Denchel or Chendel) were imported from Malabar (Calicut) and East Africa (Zanzibar, Lamu). They were used mainly for floor and roof joists. It is long lived, very strong and amazingly flexible: (it will deflect without harm). Rascheel (which is a type of bamboo) was imported from the same areas. When split it was laid in a diagonal trellis on the mangrove joists and supported the roof mats.

Woven palm frond matting (mankrur) was placed on top of the bamboo grid, and a layer of small pieces of coral rock bedded in clay was put on top. This was stamped down by the workmen's feet to compact it. Mankrur was mainly imported from the Basra region, and was

sometimes called "Basra (Bussora) mats". The roof would nevertheless crack in the summer heat. But when rain came, the material would expand and liquify to seal the cracks. A roof fall (roughly 1 in 40) to wooden gargoyles (marzam) at roughly 3 or 4 metre intervals would drain the roof. The surface was not always plastered, and the likeliest place for serious leaks was the perimeter parapet. Patching with plaster would be done there every year or two (21).

Jute rope played an important role. It bound roof timbers to wall plates and also to diagonal bracing timbers. It was wrapped loosely around joists to promote adhesion of plaster.

Joinery was generally of imported woods of higher quality; Krum, a red wood from Indonesia and Malaya; Siami, from India; and Sunbar from East Africa. These were also used in boat building and the author found they still are.

Several photographs showing various materials in situ are given in fig. 6.1.

In the Middle Period, some ceilings were boarded in. This was usually a suspended ceiling framed by timber laths and hung from the mangrove poles. Seyadi has tacked lath geometric decoration. Sh. Isa children's room has the boards above the joists. Often fretted patterns were affixed.

2.5 Rifaa Clay (Tin al Rifaa) was brought from Rifaa on the centre of the main island. It had been produced by the weathering of the exposed rocks in the central depression. It was used to cement the rubble in the core of walls and was also mixed with the lime mortar for certain purposes, perhaps to reduce the susceptibility of gypsum plaster to action by water (particularly on the sulphates and other salts).

Some mortar was made from burnt mud from the coral reefs. There was also a third source. A type of white mud was collected at Bu Ghazal, which was on the coast near Sitra but is partly destroyed now by land reclamation. Ship owners would be commissioned by owners or builders to collect the mud and bring it to Mubarraq harbour. This took 2 or 3 days. The man would then hire a donkey to transport the mud to his site. This was too expensive for poor people prior to the 1920s or 1930s, who used mud from the local reefs.

2.6 Prideaux (corresponding on construction works on Agency land) mentions "saruj", otherwise known as "Lingeh cement" (22). "This saruj," he writes, "is valued here almost as highly as Portland Cement for its power of resisting moisture in the soil." He says he wanted to face all his buildings with this, but could only afford to do it to dado height. He mixed it with Portland Cement. No doubt the expense arose from the need to ship saruj from Lingeh. This is interesting also because it indicates that Portland Cement was to some extent in use at the turn of the century. Dr. Lewcock ascribes the recent deterioration of buildings to the use of Portland Cement render (leading to adverse chemical reaction and also thermal cracking). A return to the traditional renders (such as lime and gypsum) is recommended (23).

2.7 Plastering was done by the masons. There were commonly three layers of plaster. The first layer (al Tetrees) was mud (tin) used to fill up the holes or major unevenness in the masonry. The second layer (al Misaih) was mud, probably with gypsum added: this established a reasonably smooth surface. The third coat (al Tabidh) was a smooth decorative coat of lime and gypsum.

The chemical composition of the plaster in Sh, Isa House was analysed by Hardy-Guilbert and Lalande (24).

Only one very thin coat of gypsum was applied to farsh panels. It might only be two or three millimetres thick.

The top coat may be set back about 3 cms from niches, windows etc. on all sides so as to create a rebate moulding. The top coat may also be omitted here and there so as to form inset panels as part of the decorative scheme. (They might be rectangular, or have semi-circular or pointed heads and so on.)

This was done by using wooden templates which would be temporarily fixed to the previous coat and then plastered up to. Templates were also used to form the horizontal grooves and zig-zag mouldings.

It would seem that neat arrisses were formed by bringing the lowest coat up to a point. This was harder than the gypsum and would form a convenient edge to plaster against.

Incised plasterwork decoration was also done by masons. The panel was cast in a frame. Before the plaster was dry, a nail or sharp piece of metal would be used to set out the basic lines of the pattern: these can generally be seen if one looks closely at the finished panel. A straightedge was used to set out lines: for circles or arcs either two nails joined by cotton thread or dividers were used. Small knives were used for carving. In the old days only the basic lines would be set out, and the more detailed parts of the pattern would be done by eye. The setting-out itself was not planned carefully beforehand, with the result that many panels contain apparent errors, for instance, where a pattern unit cannot be accommodated within the panel (25).

Nowadays work is mostly cast from a carefully designed mould. The surface is smooth whereas the old panels are rough. There is a mechanical perfection in the pattern geometry, but the spontaneous charm and tactile quality of the old panels has been lost. It would take a day to produce an old panel, but many can be cast by the modern method in one day.

2.8 A new modern range of imported materials and products came into use at the end of the last century. Iron bars (about ½ inch diameter) became common in external window grilles probably imported from Indian ironworks (such as Tata at Jamshedpur or Bengal Iron at Kulti). Locks, hinges, porcelain door knobs, bronze bolts and elaborately bevelled mirrors are not uncommon (Fakhroo House, Sh. Isa majlis) (26). The Sh. Isa majlis has 4cm wide decorative cast plaster friezes on the built in cupboards.

Most significant architecturally, however, is the stained glass used in fanlights (blue, red, green, yellow, orange and transparent). It was available from about 1890 onwards. Strangely enough no-one knows where it had been imported from, and I could find no such reference in books on the architecture of the wider region. Niebuhr, however, says that glass in the Yemen (Sana'a) came from Muscovy and Venice (27). Glass was made in Persia and Turkey at one stage, of course. One informant said he thought the glass had come from Dantzig, but there is no proof (28).

2.9 I now consider a few particular matters of interest, namely arches, staircases, doors and shutters (29).

All arches are false - in other words, they are decorative, not structural. There is a structural beam above the apex resting on piers (which may emerge as columns below the springing of course). Permanent pre-cast formwork was made from plaster. It is about 5 cm thick. For pointed arches there are two halves, front and back, whereas semi-circular arches have one unit per side. These were propped from a timber joist between the piers. The bottom of the formwork was timber, but this was temporary. Layers of small lumps of coral rock and mortar were laid. Each was left to dry before the next was laid. The final rendering abuts or covers the formwork which is left in position, and may be cut back to form a polylobed moulding along the extrados. After removal of the timber formwork, the intrados was rendered in a concave fashion.

At one period the formwork was sometimes expressed so that it looks like a heavy pointed hood moulding over the window.

The whole strikes one as unstable and yet it lasts very well even in abandoned and derelict buildings.

There are a few staircases following the Western pattern (e.g. from the Fakhroo House servants' court to the majlis terrace). Nevertheless the usual method was to form a single flight by laying about 6 mangrove poles from ground to first floor, (supporting them with an intermediate sleeper wall if need be). The steps were then roughly formed from coral rubble and mortar. Each step was held in position by the step below. The lower stones would trap the upper ones. It was then rendered with qaddad. In later houses small timber laths were laid over the rubble before the qaddad was applied. The mangrove soffit was exposed. In the Middle Period, dogleg staircases and more complex arrangements were introduced, but the principles were still the same. Landings would trim the joists supporting each flight. Refer to fig. 6.2 for photograph of staircase.

Generally timber doors have two leaves. They have four or five tapering rails which are notched into the post. Apparently there was no need for cross bracing. The post is

fashioned into a pivot pole (about 5cms diameter) top and bottom. There is a socket stone below and a socket rail about 20cm x 4cm above, which is built into the wall on each side. This is carved. There are about three vertical planks fixed with 15cm dome-headed iron nails. They form visually distinctive rows on the outside, and are simply hammered over on the inside. The doors still swing very easily, even in abandoned property.

Refer to figs. 6.3 and 6.4 for two examples of doorway construction.

Door knockers are thin wrought iron hemispheres loosely fixed by a nail. The nail has a looped end from which the ring "knocker" hangs. A rather clear bell-like sound is made. Prior to the middle period there are two horizontal sliding wood bolts and a wood hasp on each leaf of the door - a symmetrical arrangement. At Sh. Isa House, one hasp was cut to allow a modern metal lock to be fixed, but there are clear signs of an old tumbler lock. In the Middle Period imported bronze bolts were used with padlocks. Knockers of similar design were also bronze.

In the Middle Period a few doors were the frame and panel type - such as the Seyadi main door - but the old kind were not superceded.

Shutters are constructed like small doors in every respect except they have turnbuttons, not bolts. In the Middle Period the frames are jointed by mortice and tenon and dowelled. Raised panels may be decorated. Refer to figs. 6.5 and 6.6.

2.10 The covering of streets in the market (suq) is of interest. Most first floor slabs projected about 0.500 to 0.800 beyond the building face. Sometimes at intervals of about 3.000 metres poles projected a metre. In one case still extant there are low sleeper walls built on' the projecting slab. Mangrove poles span between these little walls (parallel to the facade). Refer to fig. 6.7.

There would be fabric awnings with ropes tied to the poles. The awnings were often made of off-cuts (of dhow sails) sewn together for economy. The slabs would receive joists. Wooden sheets would be laid upon them. Probably the sleeper walls were intended to create a vent to let the hot air below escape.

2.11 It is easier to grasp building construction from drawings than from words. How do all the parts come together? In describing this synthesis, one drawing is worth a thousand words so I have tried to represent a few typical buildings in "working drawings", so to speak. Refer to figs. 6.8 to 6.10.

2.12 It is worth quoting Captain D.L.R. Lorimer's views on the construction of the Agency premises. I have the impression from the files that British government was extraordinarily incompetent in procuring buildings in the Gulf region, and so Lorimer's comments may not apply to the general run of buildings. One cannot be sure. He is very distressed by draughts, damp and leaking roofs. He criticises the lack of fireplaces and the extreme cold in winter. He blames all this for Prideaux's rheumatism and sciatica as well as Major Knox's "serious illness". He comments on roof construction as follows:

"It is impossible to keep the roof in proper repair because to add fresh layers of mud or gatch only accentuates the mischief and makes the roof unsafe. Hollows are formed on the surface of the roofs in which water collects and remains until it has filtered through the cracked and defective substance of the roof When there is heavy rain the dining room is quite uninhabitable" (30).

He later comments on the problem of damp ground which was common on the periphery of Muharraq.

"The ground on which the Agency stands is barely above high water-level and is by nature damp. The material of the buildings is of a highly absorbent nature. There is further no proper drainage and when heavy rain falls large sheets of standing water are left until they are gradually absorbed by the ground. In due course, this water is drawn up by the buildings. The floors of the ground floor become damp and the damp spreads up all the walls to a height of 4 or 5 feet inside and out alike" (31).

3. Design for Climate

3.1 The function of the windtower and badgir are already very well understood and much documented (32). They utilise the 'Venturi Principle': that when funnelled from a wider to a smaller aperture, wind speed increases. A windtower has four faces of about 7 to 10 square metres open area. The central diagonal walls funnel this wind whatever its direction. The negative pressure on the leeward side draws air up from the room. At night when there is no wind a "stack effect" is created whereby the hot air inside rises up the tower and draws in cooler air from outside. I think one author is wrong to say the tower cross walls radiate heat to enhance the stack effect at night - they are farsh - thin and of low thermal capacity.

The badgirs may be either parapets to roof terraces or wall panels on the street side of rooms - usually at first floor but sometimes on the ground. There are two farsh panels. The upper panel is about 15 centimetres inside the lower (the gap being purely horizontal). The upper panel is supported on a small pole spanning between coral block piers. On roof terraces there may be a deep coping (of rendered mangrove poles) across the top. The depth of the upper panel is about 0.400 metre and the aperture 10 or 15cms. (33). The effect of these devices is quite startling - a refreshing little breeze is created even on a still day and it is brought down to sitting or sleeping level.

3.2. Wall materials (gypsum, coral and farsh) have low thermal capacity - they do not heat up much. They have good insulating properties - they let little heat pass. This is due to their open texture. Rooms for summer night time use were on the roof where the thin farsh panels lost their daytime heat very quickly (34). Ground level walls are usually thicker. This kept the occupants warm on winter nights. The incised decorative panels may have voids behind them, and this too would reduce the mass in the void, trap air and so reduce thermal capacity.

3.3 Windows never have glass except for the fanlights - and that is stained to cut glare and thermal transmittance - since otherwise a 'greenhouse effect' would arise. The screens

allow air movement but cut down heat and glare, and also preserve privacy. There are shutters to retain daytime heat in the room on winter nights. Shutters also cut out high winds or driven dust when the shamal blows hard. Larger windows in the Middle Period would promote higher indoor air speeds (35). Reflection is helped by pale colours and smooth surfaces. Absorption of heat may be cut to 20% (the remainder being reflected) (36).

3.4 What of orientation and building form? There are two considerations. A thin long building - one room wide - seems best because it has maximum exposure to wind and least resistance to cross ventilation. If oriented with its long axis east-west (i.e. facing north-south) this will minimise heat gain from the sun according to Olgyay (37). The prevailing wind is north westerly and so one would expect to find the badgir walls facing north-west or within 45 degrees of this orientation for maximum benefit according to Givoni (38).

The study of building layout using aerial photographs taken in 1950 suggests that buildings generally do not follow this rule, but so many are post-war constructions that this may be a poor indication. Of the houses the author studied in detail, there are 33 first floor apartments. Of these 17 are oriented correctly (facing north-south), Five of these have the badgirs on the north wall, four on the south wall and eight have no badgirs. A more detailed analysis shows that in the Early and Transitional Periods, ten apartments were wrongly oriented and two correctly. However in the Middle and Late Periods fifteen rooms were oriented correctly and six wrongly. It may be that people became aware of the value of correct orientation around 1890 (39). But it is clear that other layout factors (such as privacy) affect the direction of the badgirs more than does the prevailing wind. Tabulated data on orientation is given below.

Usually a tall room is thought somewhat preferable. Note however that doubt has been cast on this belief recently (40). Other things being equal, a taller room has a lower surface to volume ratio and this cuts heat gain. It also allows hot air to accumulate further

above the heads of people, but surprisingly there is no attempt to remove this by high-level ventilators.

The zig-zag street form is helpful in promoting wind flow, and the staggering of first floor apartments does the same thing. But in reality one suspects this is more due to chance than to planning.

3.5. Courtyard proportions are generally regarded as a key factor in control of temperatures, since they trap cold night air, which (being heavier) continues to cool adjacent rooms for part of the day (41). In Bahrain, courtyards can be very large, except where lack of land and subdivision of inherited property has led to densification. From this one may conclude that small courtyards were not adopted as a deliberate design feature. The reason may have to do with the low diurnal variation - in other words, the air at night was not cold enough to achieve much daytime cooling. Breeze may have been a more effective cooling agent, in which case larger courtyards could have advantages.

3.6 The wall and roof materials allowed passage of water vapour. The plaster would absorb some vapour. Therefore little condensation arose: it might have been unpleasant as well as damaging to the plaster and the timber roof structure. Low thermal capacity and high reflectivity ensured that the wall surface did not heat up very quickly; it remained cool to touch and did not expand or crack as much as - for instance - portland cement. Serious cracking would be troublesome. In any case, annual maintenance was vital to seal cracks which would admit rain in winter. Large cracks could admit blown salt. Rain would leech out both the clay cementing the rubble core and the salts. These would then attack the plaster. Lewcock says salts crystallise behind the plaster and cause it to spall off the wall (42).

Given proper maintenance there seems no reason why the buildings should not last for hundreds of years, but if neglected they decay beyond repair in ten or twenty.

4. Tools

4.1 The supply of metal for tools in the 1920s relied heavily on scrap. There were several Iranian scrap-metal dealers; old anchors were a common source.

The blacksmiths (Al Hadadah) melted scrap down and made the metal parts of tools and nails. Some iron was also imported from India, and sheets of high quality steel from Sweden (from which saws were made locally). To obtain a good chisel (fuladh) it was necessary to find an old steel hammer or file which a blacksmith would melt down and make into a chisel. Occasionally chisels would be brought back from India by travellers.

Carpenters made and fixed the wooden parts of tools. If you wanted a tool it was usual to go to the blacksmith first and then take his product to the carpenter to have the handle made and fixed.

In 1878 Bokhammas set up a builders' merchants shop in the suq selling tools ready made, but apparently it was still common in this century for craftsmen to find their metal and commission blacksmith and carpenter separately.

4.2 The masons used hammers (jadum) for breaking stone (large hammer) and chipping stone (small hammer). The iron heads were 10cm or 20cm long. They had a square cross-section, which came to an edge parallel to the handle. The handles were local wood, fixed by an iron nail or wedge driven into the end of the shaft.

Palm trees and other large timbers were cut by large two-handed axe (fass); there were no large saws. Small locally made adzes were used to shape wood.

Denchel and bascheel were cut by handsaw (mishara khashab). Rectangular sheets of high quality steel (imported from Sweden) were cut locally into two triangles and the teeth were made by the blacksmith. The carpenter then fixed a simple handle with two rivets.

Hand drills (Mijidah) of a common Asian type were made locally. Also a smaller and lighter type were imported from India. There was a handle attached to a rotating drum to which a bit holder was fixed. The bits (nasal) were made locally, and were square on cross-section with cutting end brought to an edge. One would buy the drill and ask the blacksmith to

make a bit for it. There was a bow (goas) made from local timber and cotton string (watar) imported from India. The string was wrapped around the drum (which had circular grooves to improve adhesion). The bow was then moved to and fro with the left hand whilst the right hand grasped the handle. The spring in the bow held the string sufficiently tight. There were simple wooden planes (randa), made locally. The blade was inserted into a central tapering void in the wooden plane and secured by a wedge. A small plane (randa sakhir) was used for rebates and grooves. There was no sandpaper or equivalent - planes were used. A large sharpening stone which had come from Iran was taken round to allow craftsmen to sharpen their tools.

4.3 Brass plumb bobs attached to cotton string (both imported from India) were used. Scaffolding was roughly constructed from timber laths, and pulleys were used (at least in the 1920s) to haul baskets containing stones. The pulleys had steel wheels set in a solid timber frame and were no doubt imported.

4.4 Plaster was applied by hand using a large glove - or rather mitten - latterly made of rubber. Floats and trowels were used to create the surface and finer work respectively. Imported steel dividers were common for use in setting up plaster patterns.

4.5 The human body was the measure of distance until very recently. The units were double armspan (ba'ah); lower arm from finger tip to elbow (drah); and spread hand (shiber). The mason would use his own body to set out the building, by for example marking his fingertip position, placing his elbow on it, marking again and so on.

Farughy gives some details on measures (44). He implies that they were fixed quantities. For instance he says that a Drah (or Dhra) equals one cubit or nineteen inches. A Ba'ah (or Ba') equals four dhra or a fathom, that is six feet four inches. My informant, however, implied that the lengths varied from one body to another (depending on who was using their body to do the measuring). Probably the truth is that the situation was in a state of transition from the latter system to the former as the requirements for accuracy increased. Farughy also gives weights, but I have not seen these used in other documents, except for the Rufa.

70 Habba = 1 Mithqual (70 grains)
10 Mithqual = 1 Bar (700 grains)
40 Bar = 1 Ruba (4lbs avoirdupois)
14 Ruba = 1 Man (56lbs)
10 Man = 1 Rufa (560lbs)

Knotted string was used to transmit dimensions. For example the size of an opening would be given to the carpenter in this way in order to produce correctly sized windows. (It is said that one or two carpenters would reknott the string in order to sell a product they already had in stock.) The knot method was also used to establish the proportional geometry of a facade. For example, a string measuring the distance from a door to a corner might be folded into four to establish the distance between horizontal grooves.

5. Conclusion

5.1 Looking back - but also looking at present problems and future directions - what strikes one as significant? Everyone will make their own personal interpretation, but I am struck by four things.

Firstly, certain standards of honesty and competence were guaranteed (more or less) by the social context of the industry. It was conducted within a family and community framework which was able to enforce certain standards of behaviour. This framework has disappeared but no new institutions have replaced it.

Secondly, the industry was fragmented into independent specialisms. The client virtually ran his own management contract (to use modern terminology). There was no general contractor. The craftsmen commissioned their own tools from materials supplier, blacksmith and carpenter severally. We have observed other examples of this lack of economic integration. This pre-industrial pattern perhaps avoided the modern alienation which separates both worker and patron from the product.

On the other hand one imagines it was inefficient (but it would not be easy to prove that). It probably called for very little management skill and required little ability to think up and operate organisational systems. This particular aspect of local culture is probably a more serious contemporary problem than any lack of specific technical expertise. It is interesting to see the historic precedent.

5.2. Thirdly, the buildings were capable of maintenance; the routine was demanding, but perfectly practical. Given proper maintenance the investment would be sound and long-lived. This was due to the construction technology being well within the available skills and resources. How different is the situation now! Reinforced concrete is a problematic material where a suitable water supply is not available and where the climate is very hot indeed. Curing the concrete then becomes difficult and the structural strength can be seriously impaired if skill and attention are lacking.

It is virtually inevitable that many buildings will be badly built using this technology in the prevailing circumstances. The problem is that once failure sets in - particularly if it involves rusting reinforcement - it may be impossible to contain no matter how much maintenance is undertaken. A building after thirty years is often ready for demolition (45).

Finally, the whole historic approach to building arose from the problems of climate. By contrast modern buildings rarely pay any attention to orientation, insulation, shading and so forth. A typical plastered hollow-block wall has a U-value of 2.5 W/M 2 deg.C. The minimum U-value recommended in a paper produced in Bahrain by government staff was 0.6 W/M 2 deg.C (in line with other Gulf States) but this has been generally ignored (46). The net cost of upgrading insulation to this standard for a house of 135 square metres was quoted as BD.1,712 which was 15% of the house cost at that time. The savings were costed as BD.85 taking account of the government subsidy on electricity costs, but the true saving was BD.280 per year. The investment would be recouped in a few years. At the moment everyone assumes that air conditioning is the answer to environmental conditioning problems. However, electricity in Bahrain is no longer cheap. The generous government subsidy on electricity costs might be better spent on reducing the air conditioning load. There is a substantial period of the year when air conditioning is not needed. If structures had better insulating, lower thermal capacity, better shading and orientation and harnessed the cooling power of the wind, that period might be extended (by as much as two months?)

5.3 To conclude, one is struck by a conservation consciousness and a certain parsimony in the past - materials were recycled; building life was extended by routine maintenance and design flowed from key environmental factors.

CHAPTER SIX: FOOTNOTES

- (1) My main informants for this topic were: Eid Bokhammas, S.K. Hashim, Yusuf Abdulliah and Hamza Mohammed.
- (2) See LEWCOCK (n.d.) and LEWCOCK and HUGHES (n.d.). These are U.N.E.S.C.O. Reports on the conservation of cultural property. See also AL ORAIFI R. (1978) and especially HARDY-GUILBERT C. and LALANDE C. (1981) Chapter 3 (pages 101 to 106).
- (3) Such as KOENIGSBERGER O et al (1974), OLGAY V. (1963), DUNHAM D. (1960), BADAWY A. (1958) TAVASSOLI M. (1977) and many others.
- (4) See File 10R:R/15/2/52:(3/1) "Agency Buildings from 1900 to 1911" India Office Records. Letter dated 20 October 1900.
- (5) See *ibid* letter dated February 23rd 1906.
- (6) See *Ibid*: Letter dated April 1st 1907 to the Resident in Bushire.
- (7) *Ibid*.
- (8) The informants, Eid Bokhammas and S.K. Hashim suggested that about 25 weeks (at 6 days per week) were spent on new build.
- (9) Stated in BELGRAVE R. (1984).
- (10) See letter from Gaskin to Resident (Bushire) dated 20 October 1900. File 10R:R/15/2/52:3/1. India Office Records.
- (11) *Ibid*.
- (12) Figures given above.

- (13) TAYLOR R. (1818) in Bombay Selections (XXIV) 1856 page 22.
- (14) HARRISON P. (1924) page 93.
- (15) Informants as above: see Note 8.
- (16) Letter to Col. P.Z. Cox, Resident in Bushire, 5 January 1911. India Office file cit.
- (17) This is discussed in Chapter 1 (Part 4). See also LEWCOCK R. (1976).
- (18) Informant was Ahmed al Jowder (a colleague in the Ministry).
- (19) According to HARDY-GUILBERT C. and LALANDE C. (1981).
- (20) Informants as above plus Abdel Wahed.
- (21) But see para. 2.12 below. If long Chendel poles were used there was a risk of sagging and ponding which led to leaks.
- (22) Letter to Resident dated April 1st 1907. India Office File cit.
- (23) LEWCOCK R. and HUGHES R. (n.d.) U.N.E.S.C.O Report "Conservation for the Monuments of the State of Bahrain" page 17.
- (24) HARDY-GUILBERT C. and LALANDE C. (1981) page 103.
- (25) The information on methods stated here was told to me by informants but could also be observed in operation at the restoration of Sh. Isa House started in 1985 (following sound methods) by a Tunisian architect.

- (26) I.O.R. file cit shews Prideaux ordering brass hinges and screws from Messrs. Herman and Company, Karachi on 2nd February 1906. The files contain a good many such orders direct or via the "Mesopotamia and Persia Corporation" to companies in India.
- (27) NIEBUHR C. (Trans, Heron R. 1972). The original was published in 1772.
- (28) There were German firms in Bahrain which could have imported it. Prins and Sturfers opened in 1902. Also Wonckhaus, which was involved in an infamous incident in 1904. See RUMAIHI M.G. (1976) page 167. Further study might reveal something on the German origin of the glass.
- (29) This section is based on my own direct observations.
- (30) Letter to Col P.Z. Cox dated 26 May 1911. India Office file 10R:R/15/2/52:3/1.
- (31) Ibid.
- (32) For example see ROAF S. (1983).
- (33) But BENT T. (1890) speaks of much wider ventilators (which people could stick their heads out of). I do not think I saw these and cannot fully understand his comments.
- (34) This point is made by LEWCOCK R. (n.d.) "Conservation Restoration and Presentation of Archaeological Monuments" page 18.
- (35) See EVANS M. (1980) page 74.
- (36) See KONYA A (1980) See Appendix 1.
- (37) OLCYAY V. (1963) Sections 6 and 11.

- (38) GIVONI (1969) page 261.
- (39) This coincides with immigration from the Persian Coast (Lingeh, Bastak etc.) See further discussion in Chapter 1. In other words, the lesson may have been learned from Persia.
- (40) See KONYA A (1980) Chapter 2.
- (41) See DUNHAM D. (1960). for example.
- (42) The analysis in this paragraph is based on LEWCOCK R. and HUGHES R. (n.d.) Section 4.
- (43) The information in this section came from several interviews with Eid Bokhammas. Also I bought numerous old tools from the junk shop of Hamza Mohammed in the suq and he gave me a good deal of supplementary information concerning them.
- (44) FAROUGHY A. (1951) page 46.
- (45) See ALLISON T.R. (1977).
- (46) See Gov. of Bahrain P.W.A. (CONSTRUCTION PROJECTS AND MAINTENANCE DIRECTORATE) (n.d.).

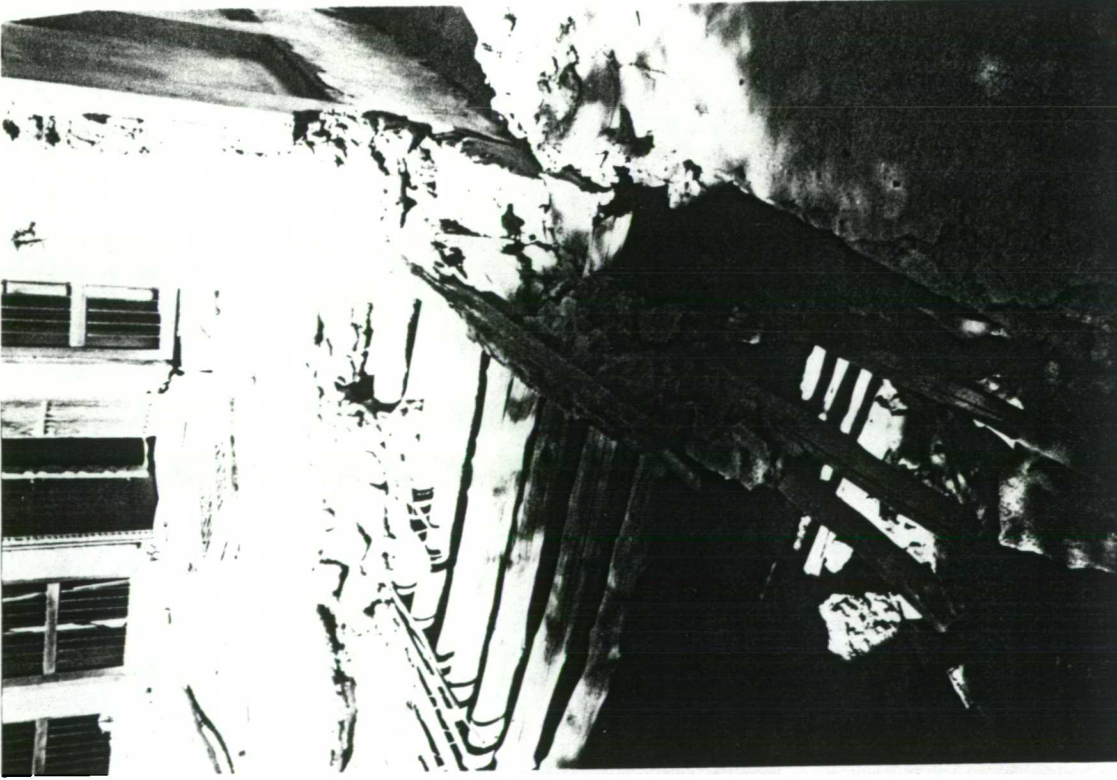


Fig. 6.1(A) Floor construction from Mattar House Roof Terrace. The mangrove rafters are resting on a wallplate also of mangrove. The split bamboo is visible at the left.

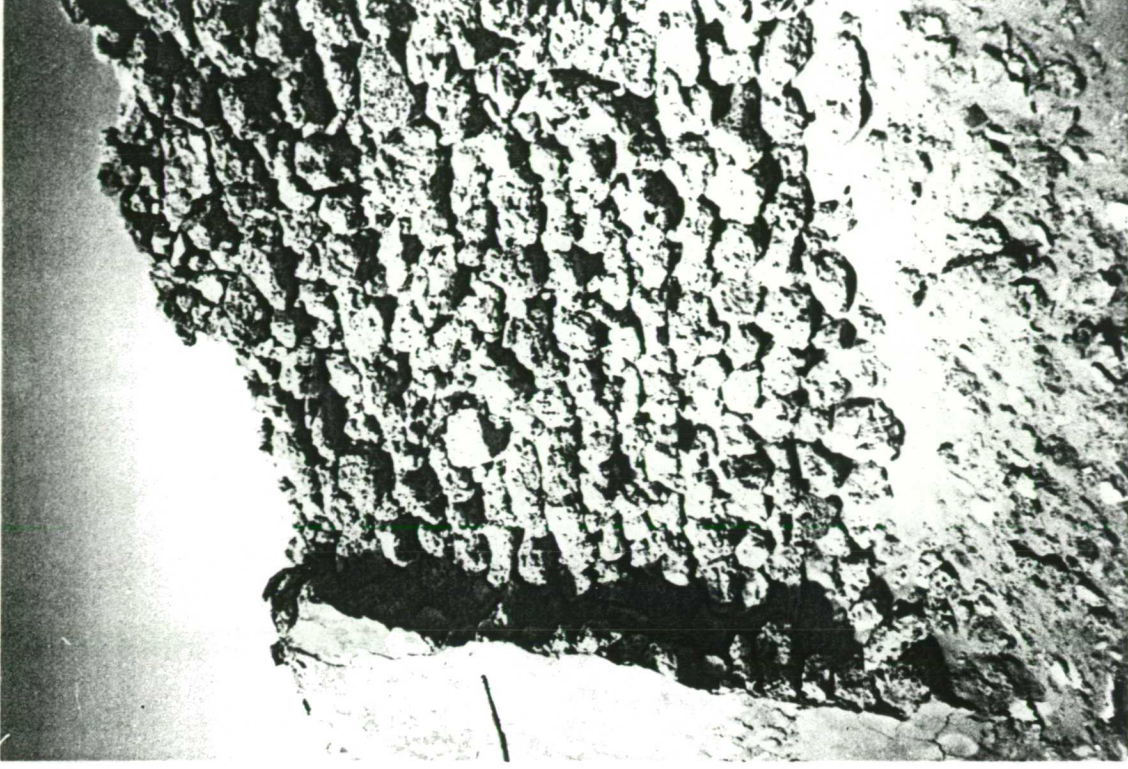


Fig. 6.2(B) A collapsing random rubble wall at Sh. Isa House. The mud used to bind the stones together is washing out and piling up at the bottom of the photograph.



Fig. 6.1(C) Roof terrace badgir post from Sheikh Ali Fouse. The post is not rendered. The upper half of the badgir is absent, but the pole which supported it is still there.

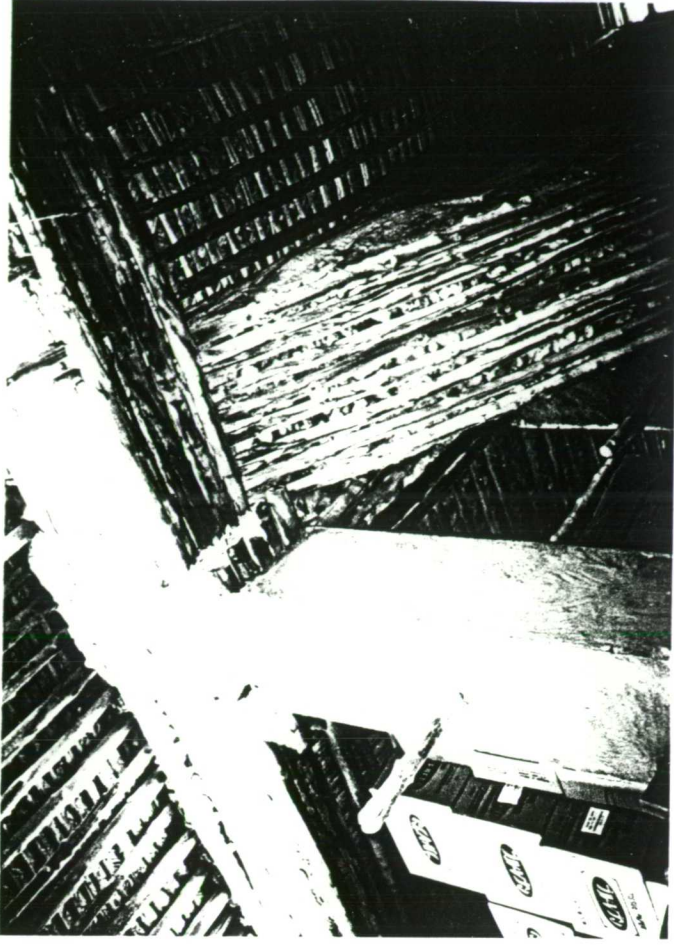


Fig. 6.1(D) Roof construction in a Suq Amara. One can see how perimeter beams (comprising four chandel poles) are bedded on a spreader plate (of short lengths of chandel). The columns are braced by poles. The underside of a staircase can be seen: this comprises eight poles supporting masonry rubble treads. There is a clerestory to provide light and ventilation.



Fig. 6.1(F) Ruined House. One can see the Basra mats in the roof structure clearly.



Fig. 6.1(E) Window frames from Salman Mattar House.

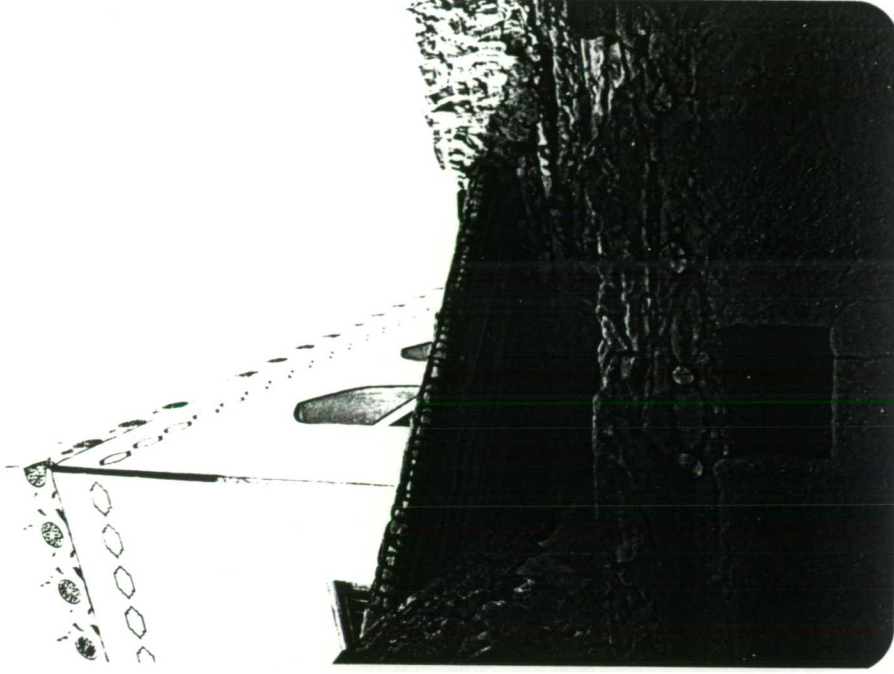


Fig. 6.1(H) Roof structure in one corner of the Mens Court at Sheikh Isa House. One can see how the chendel poles are bound together by rope, which also gives adhesion for the plaster.

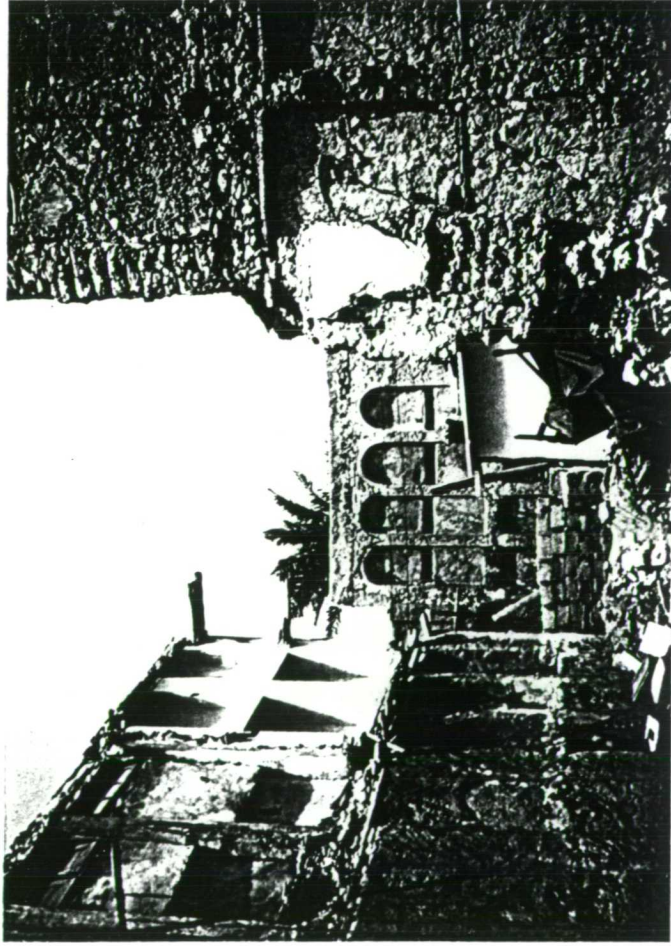


Fig. 6.1(G) Ruined House. The distinction between the seastone piers and the farsh infill panels can be seen (at the right of the photograph).

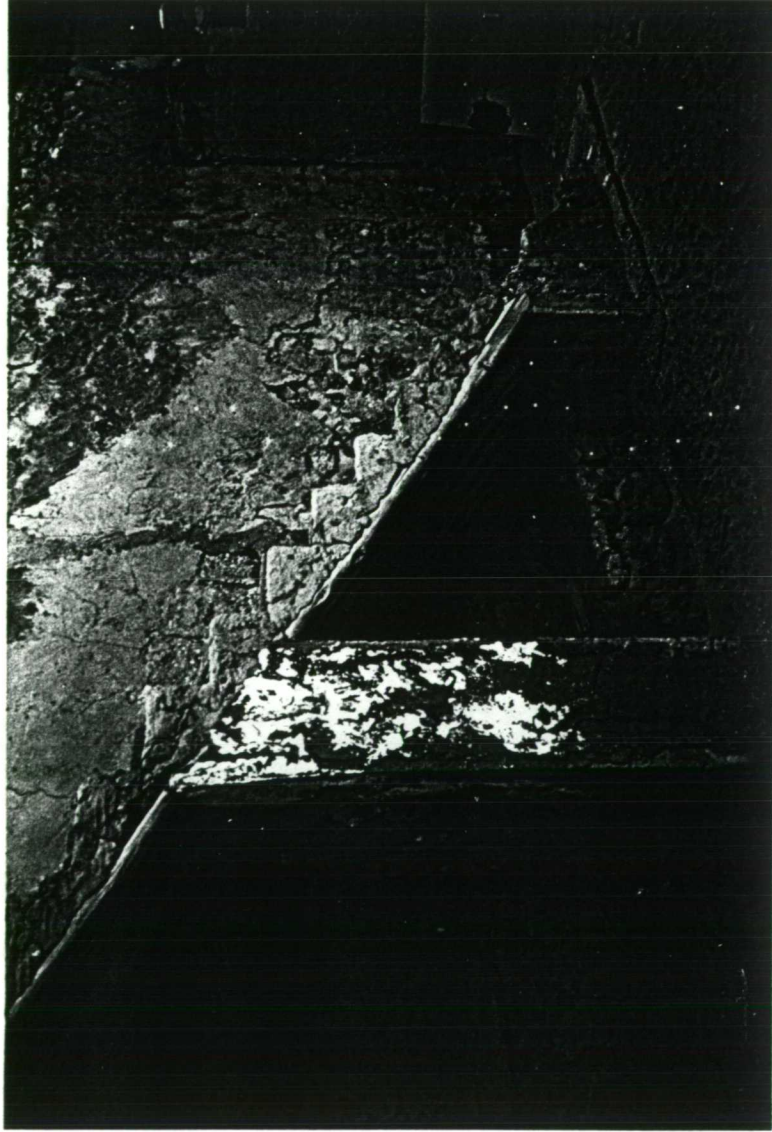
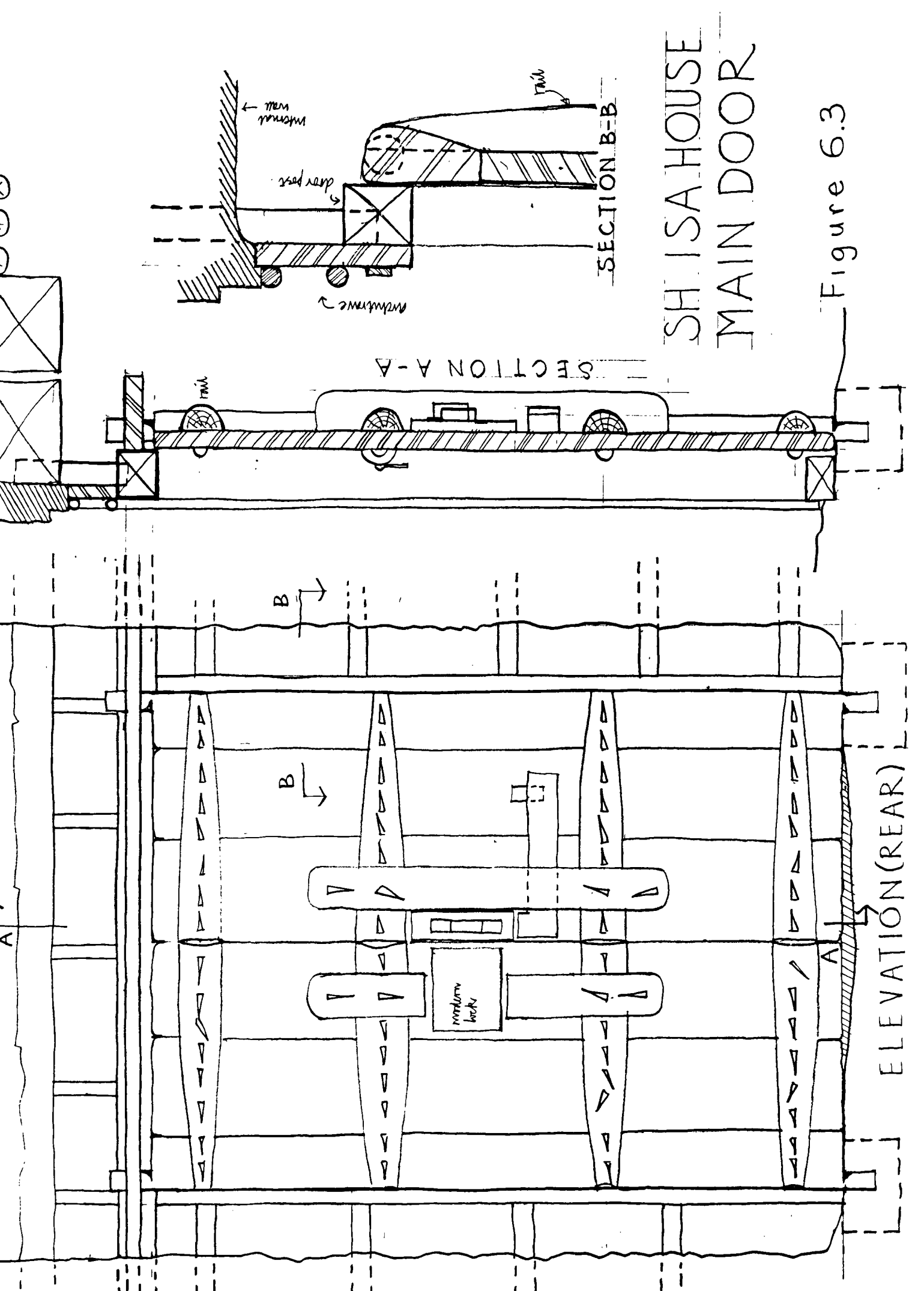


Fig. 6.2 Traditional Staircase from Sheikh Isa House, Mens Courtyard.



SHILISA HOUSE
MAIN DOOR

Figure 6.3

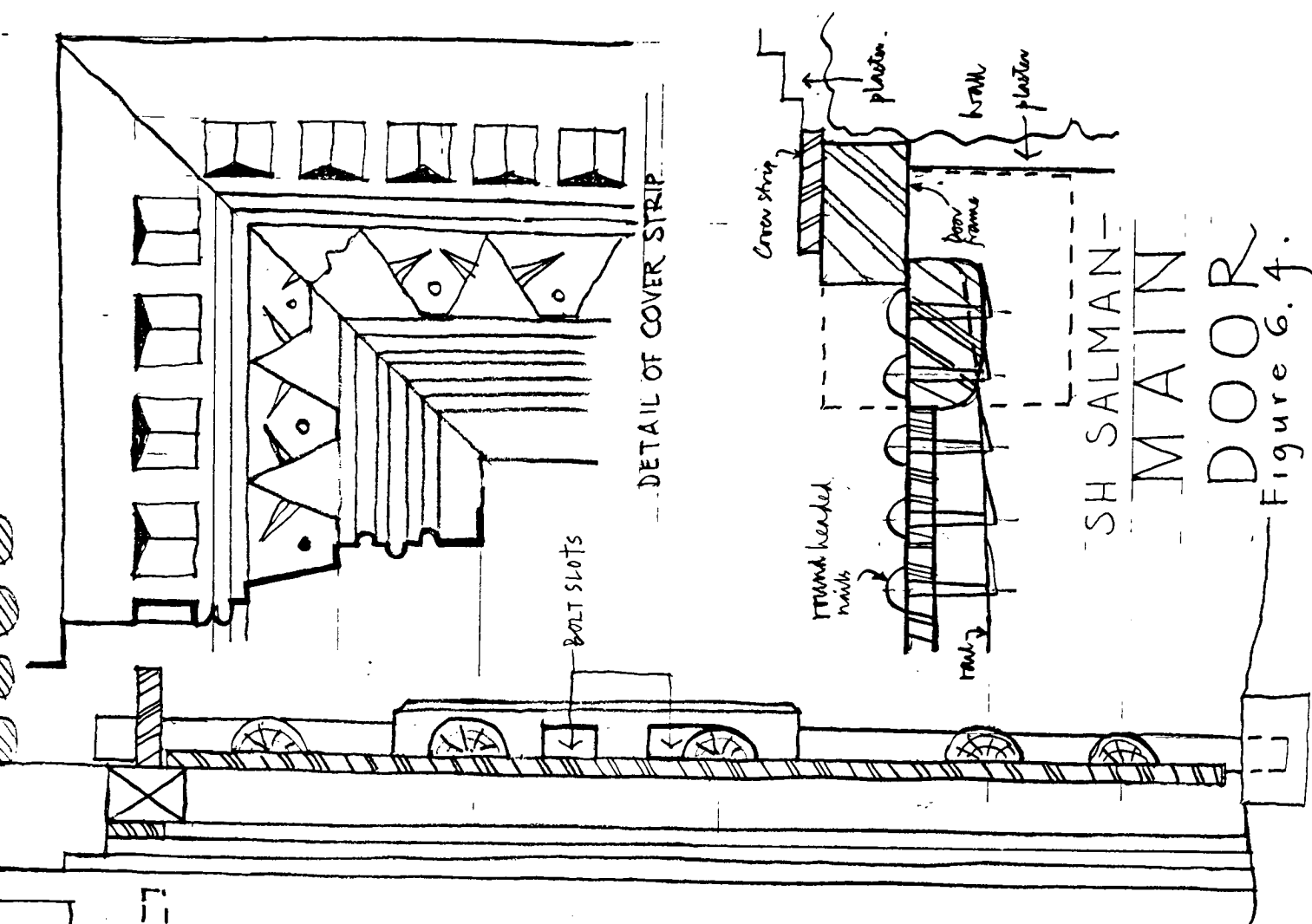
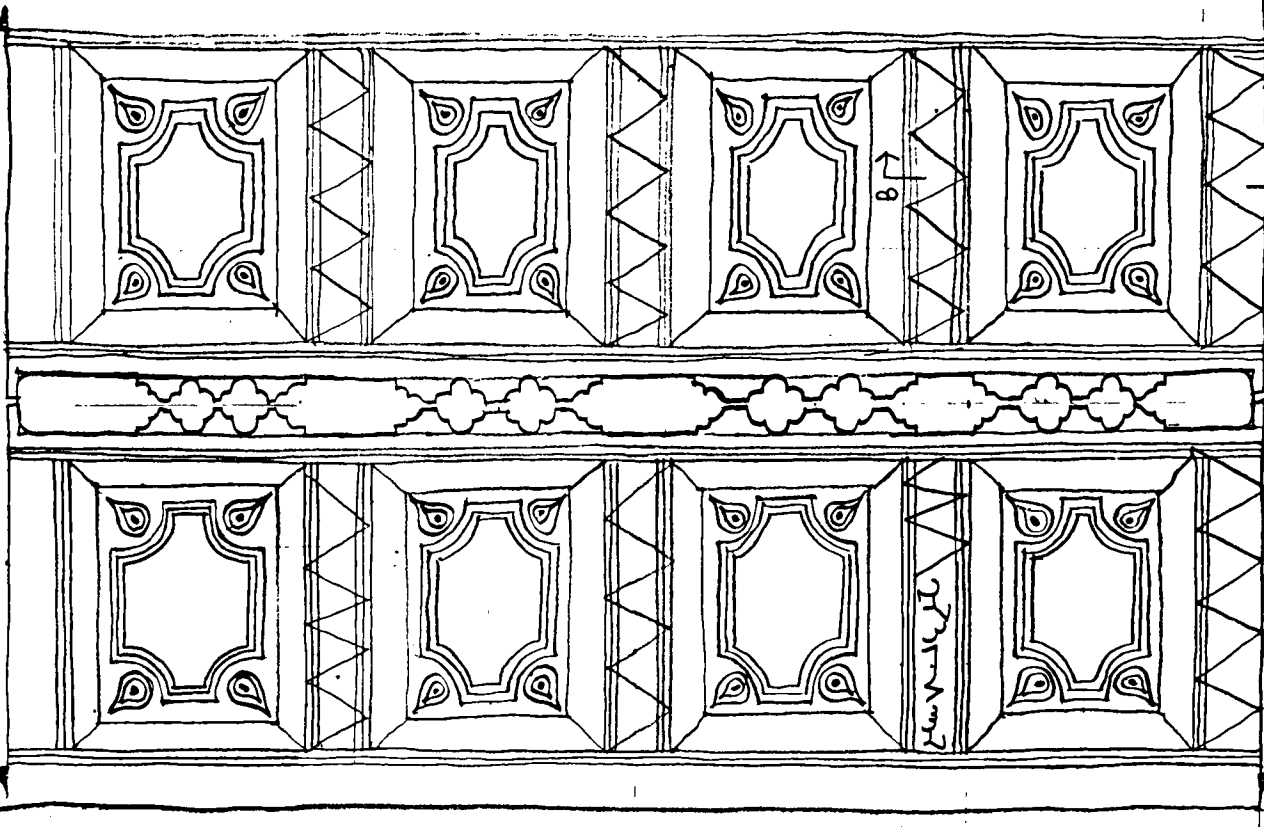


Figure 6.4.

ELEVATION 1:5

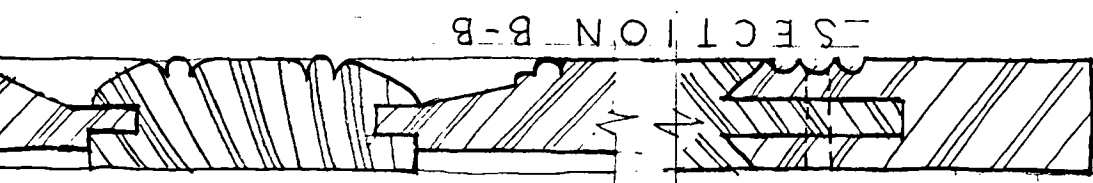


TWO INTERNAL SHUTTERS - SH ISA HOUSE CHILDRENS APARTMENT.

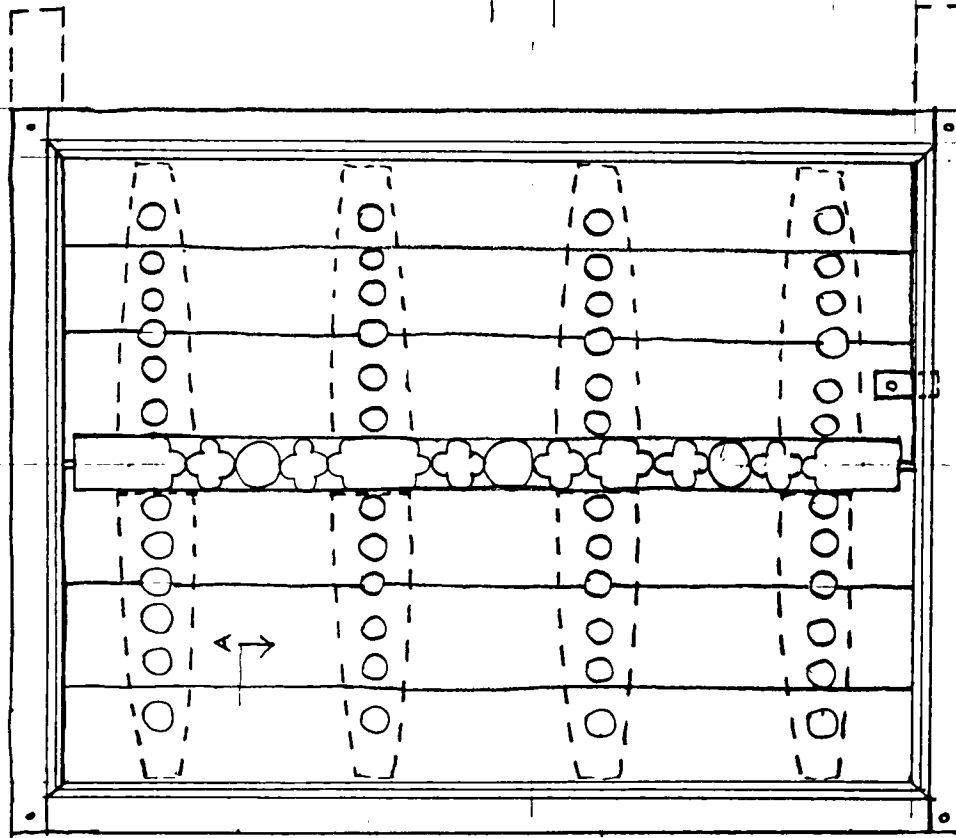
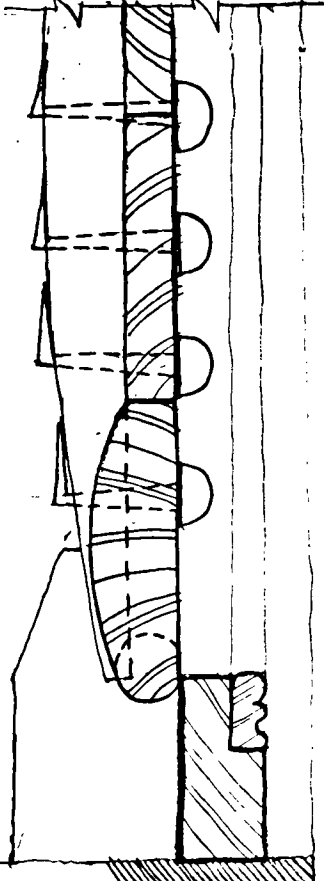
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INSCRIPTION - 'ALI BIN (?) BIN ALI

Figure 6.5



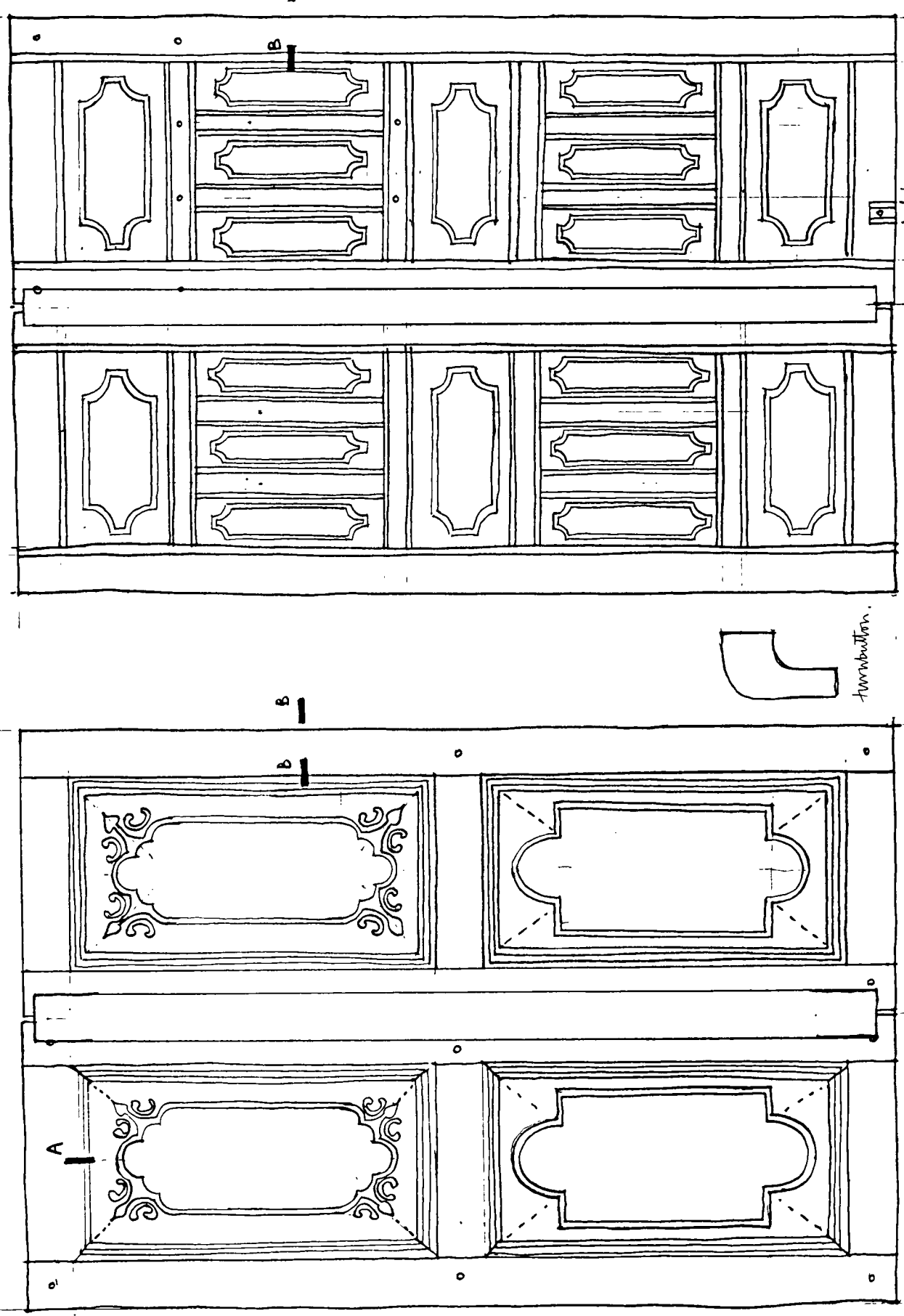
SECTION A-A



1:7.5 ELEVATION

SECTION A

SECTION B-B



SHISA HOUSE - CHILDRENS APARTMENT
INTERNAL SHUTTERS

Figure 6.6



Fig. 6.7 Suq roof or awning support: this allows ventilation of the space below the roof across the street.

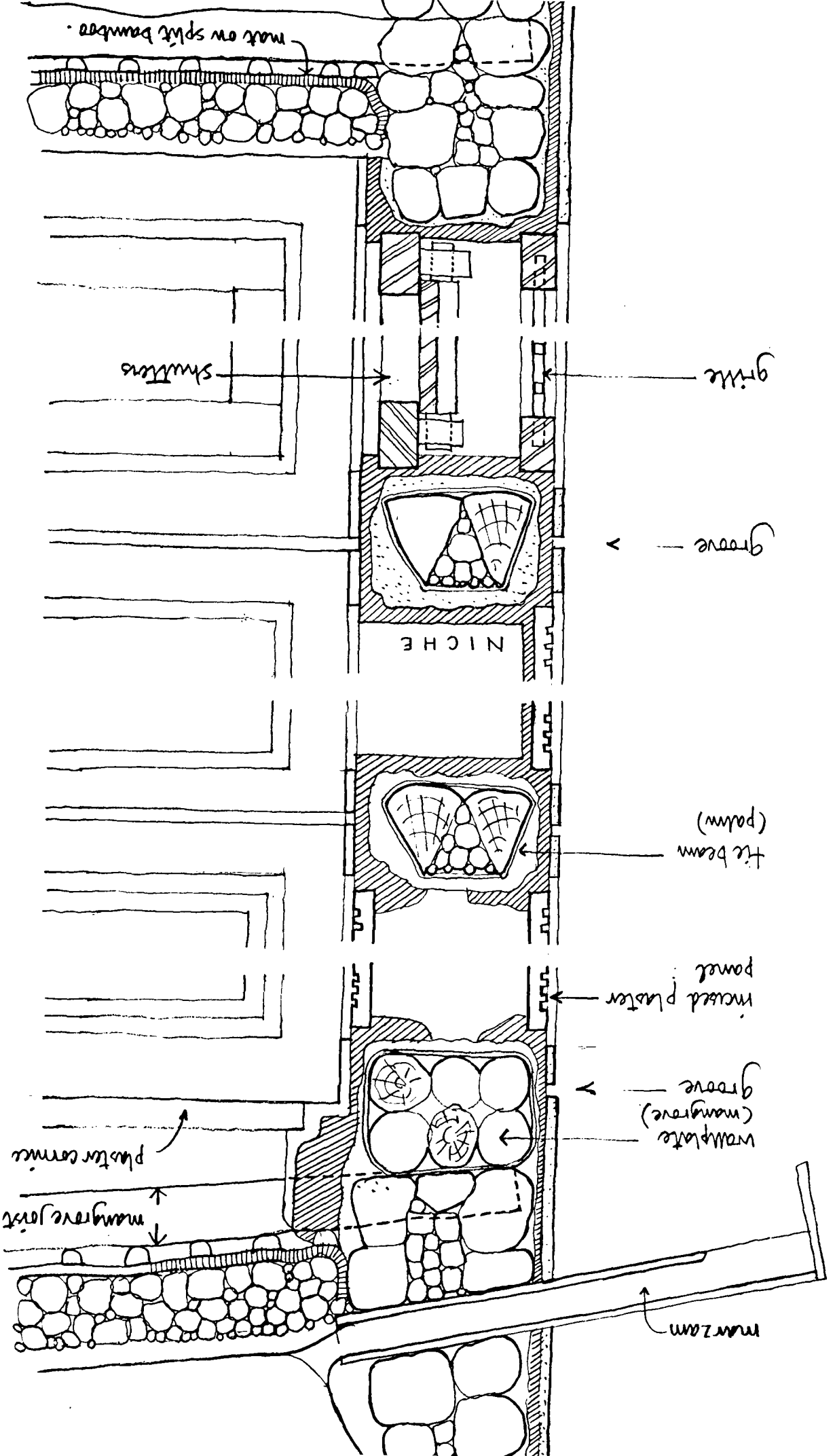


Figure 6.8.

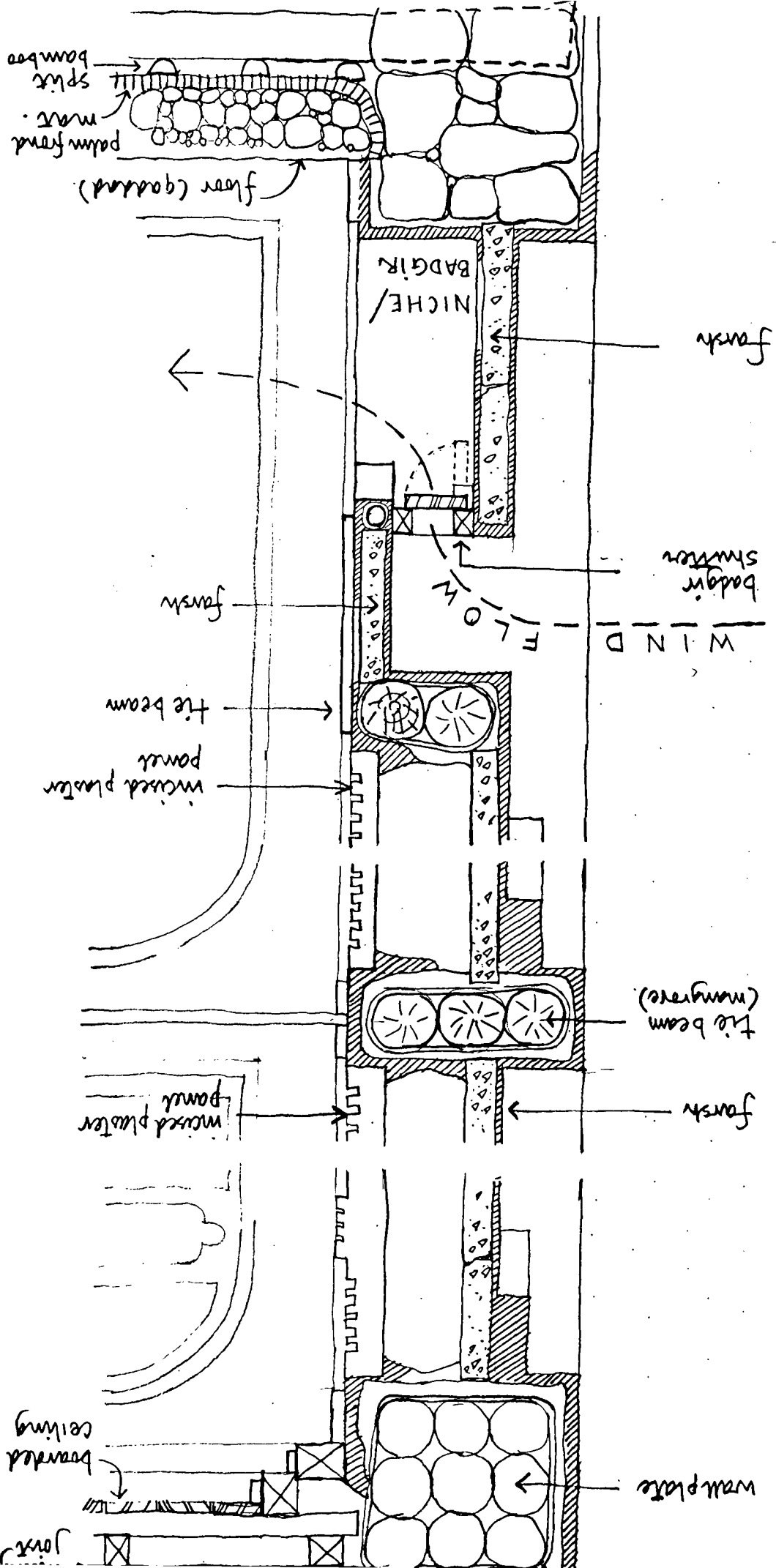
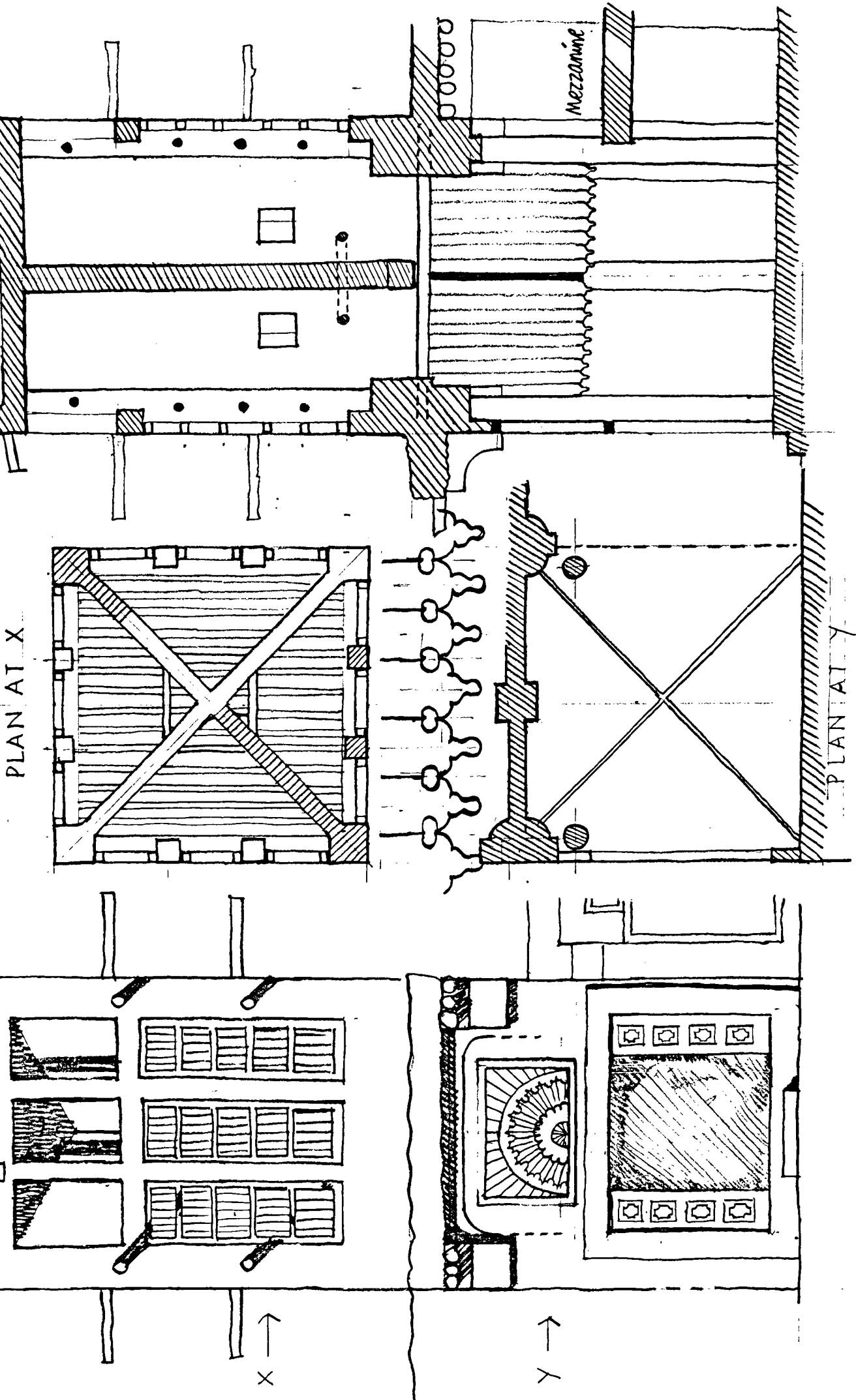


Figure 6.10



AN EXAMPLE OF A WINDTOWER - ROAD 1125

Figure 6.11.

HOUSE	NO OF APARTMENTS			BADGIRS (ROW)		
	CORRECT (E-W)	WRONG (N-S)	FACE NORTH	FACE SOUTH	NONE	
SH ABDULLAH	1	4	-	-	✓	
SH ISA (A) (B)	2	3	-	-	✓	
SH HAMAD (A) (B)	1	-	-	1	-	
SH SALMAN	1	1	-	1	-	
SEYADI	-	1	-	-	✓	
SHIRAWI	2	2	1	-	-	
MATTAR A.	3	1	2	1	-	
FAKHROO	4	2	-	-	✓	
MATTAR S.	2	-	2	-	-	
SUFI	1	-	1	-	-	
Overall Total	17	16	6	4	-	
Total for Early Transitional Period	2	10	-	-	-	
Total for Middle Late Period.	15	6	-	-	-	

Fig 6.12

ORIENTATIONS
OF APARTMENTS
at First Floor.

Chapter 7

DESCRIPTION OF BUILDINGS.



Chapter 7

DESCRIPTION OF BUILDINGS

1. Introduction

The purpose of this chapter is to describe twelve houses in considerable detail (Part 1) and thirty two buildings (three mosques and twenty-nine houses) in a brief and partial way (Part 2). Buildings in the Suq are tackled in the next chapter. Many matters of detail or interpretation concerning certain buildings have been discussed already in chapters 4 to 6, and are not repeated here.

Location of buildings is shown in figure 7.1. The code numbers used on this drawing are listed here.

Part One

Early Period

1. Sh. Salman house

Transitional Period

2. Sh. Isa house

3. Sh. Abdullah house

4. Sh. Hamad house

5. Sh. Mohammed house

Middle Period

6. Seyadi house

7. Y.A. Fakhroo house

8. Salman Mattar house

9. Ahmed Mattar house

10. Shirawi house

11. Jalahma house

Late Period

12. Sufi House

Part Two

Transitional Period

13. Sh Ali bin Mohammed house

14. House in lane 1140

15. Sh Ibrahim house

Middle Period

16. House in lane 835 (north end)

17. House in lane 1139

18. House in street 826

19. House in lane 835 (south end)

20. House in lane 918

21. House in street 1120

22. House in lane 913

23. House in lane 932

24. Mosque in Road 1439

25. Seyadi Mosque

26. Y.b.Y. Fakhroo house

27. Jalahma houses (lanes 1624 and 1622)

Late Period

28. Sh Abdulllah house (Airport Road)

29. Mosque in Sh Khalifa Avenue

30. House in Khalifa Road

31. House in lane 911 (Western End)

32. Sh Ali House

33. House in Street 914

34. House in lane 911 (Eastern End)
35. Building at Steeshan
36. House in lane 1421
37. House in Road No. 3
38. House in Sh Isa Road
39. House in Road 1630
40. House in Sh Isa Road (bin Shiddah)
41. House in Sh Isa Road (al Bana'in)
42. House in Sh Isa Rd/Lane 1401
43. House in Lane 1136
44. Malik House.

The buildings are now described in this sequence.

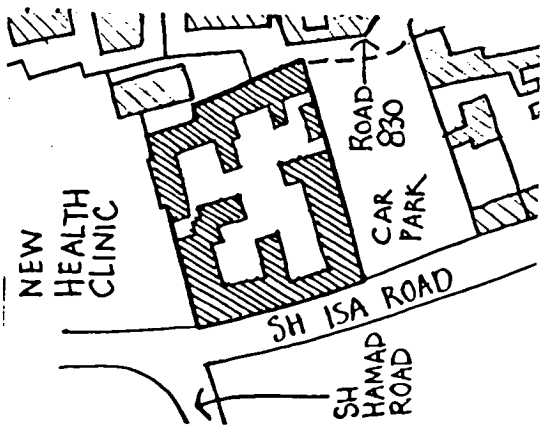
2. Detailed Account of Twelve Houses

2.1. Twelve houses are tackled in the approximate order of construction of the major (or most interesting) part of the house.

2.2. Sheikh Salman's House

Sheikh Salman's house (so-called) was built for Sh. Abdullah bin Ahmed (son of Ahmed al Fatih) and he was on the throne from 1794 to 1825 (1). It was afterwards occupied by his brother. In an earlier chapter, I suggested that although the house may have been commenced in the 1790s, the important early rooms - the majlis for instance - might have been built in the 1820s after the return from Zubara. There is no firm evidence on this. The floor plan is given in figs. 7.2 and 7.3 and a birds-eye-view in chapter 4. It is located on the east side of Sh. Isa Road opposite the intersection with Sh. Hamed Road. It consists of two courtyards: a family court accessed from a visitors' court. However, there is also an elder son's area, which may have been walled off from the visitors' court at one time (2). At the far end of this court are livestock area and storage buildings. Probably this originally had access from the road to the rear (3). The stairs from the Visitors' or Men's Court lead to a terrace and thence to the majlis (located over the entrance door and passageway). The stair from the family court leads to another terrace accessing the Sheikh's apartments.

The main door is a typical early door now much restored (fig 7.4). There is an L-shaped entrance passage passing below three pointed arches: a door-keeper's room to the left. One enters the court at its south-west corner. To the right is the men's liwan. It has two bays with pointed arches recessed in a rectangular frame. There is an unusual small high level void also pointed and framed. The rooms behind the liwan and elsewhere could hardly be plainer, darker or less inviting. One gets a clear picture of how poverty-stricken even a Ruler was at this stage, and it forms a datum against which the progress of the next century can be measured. Refer to fig. 7.5.



The staircase passes under a pointed arch. It has a badgir from the liwan. Left of the staircase at roof level are two privies above a cesspit. The terrace is two bays wide (6,200m). A not unimpressive view is presented of the majlis, the long elevation of which faces down the terrace. This arrangement (i.e. majlis terrace set across an apartment and liwan below) was apparently a standard form. It is found at the Sh. Mohammed house and Sh. Abdullah house.

The majlis is a small, low structure. There are two horizontal zig-zag mouldings below a 3-step merlon row. Below these are two horizontal decorative friezes at door-head height and window-head height. There are three niches between the friezes which suggests there may have been a liwan (now lost). The door has a semi-circular tympanum. There is a frieze around door and tympanum. There is also a door-head frieze with a flower pattern. There is a multifoil moulding outside the tympanum frieze. Internally, the elevations reflect the external pattern. In addition there are short vertical friezes on either side of each niche. Shutters on the road side are solid, but elsewhere there are tenoned grilles only (4). The room has a heavy quality (romanesque in feeling, one might say). Refer to figs. 7.4 and 7.7.

Between the two courts is the only interesting ground floor room: it has a door into each court and was probably the Sheikh's apartment. The hammam screen has a zig-zag crenellation with a decoration of segmented circles. The walls of the room have two horizontal grooves. There is a rhythmic arrangement of recessed and incised panels as well as windows. Note, however, that the windows are small and few; also the panels are dominated by the large areas of blank wall. The whole does not really cohere - much less come alive as a total composition. Between the courts is a major doorway, (now altered but apparently on the model of major street doorways). See figs 7.4 and 7.6. In the family court are two columns carrying the terrace above. It seems that these were added later when the Sheikh's apartments at first floor were built.

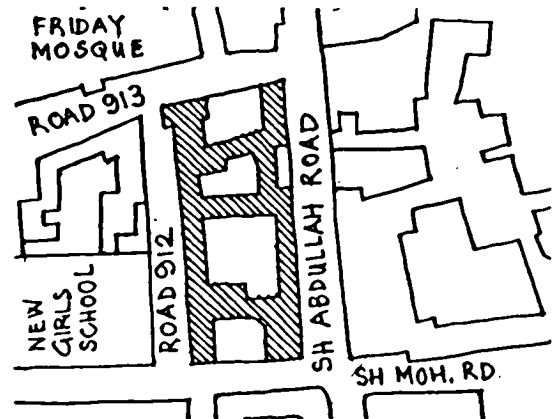
Ascending the family stairs, one comes to a second terrace. To the left is a Middle Period apartment (probably for unmarried women) which is very plain. To the right are two

apartments in an "L" configuration built early in the Middle Period - perhaps about 1890. There is a liwan. It has one large semicircular arch (springing at about 1.600m) with a rebate moulding. There are ten merlons above. There is a privy built in the liwan left of the door. This spoils the effect. The flank walls have segmental arches with rectangular decorative panels inset below. The panels have tiny three-step crenellations. The elevation to the apartment within the liwan is fine. There are three bays with a central door. Above this is a horizontal groove. Above the groove are (from the top) semicircular decorative panels and then rectangular decorative panels of the same width. Below the groove are a niche and then the window. The internal elevation scheme corresponds except that there are two more grooves located between rows. There are seven bays on the long walls with the same vertical organisation. There is a simple two-step cornice. The windows are low, of course, and have solid shutters inside and fretted screens externally (5). These cast beautiful shadows on the floor and produce tantalisingly partial glimpses of the street life outside. A door occupies one bay and leads into the adjoining apartment. This has the same internal elevation arrangement, except that where windows are not possible (being adjacent to other property), they are replaced by shallow recesses. There are no badgirs in either apartment. This fact - taken together with the lowness of the windows - suggests an early date in the Middle Period - before some of its characteristic features had fully emerged.

Both major apartments figure on the road elevation, which has piers expressed on the ground storey (although the recesses are very shallow and this is probably invented by the restorers). It is an impressive sight: see fig. 7.5.

2.3. Sh. Isa House

In an earlier chapter I suggested this house was initiated around 1840. The period of political turbulence lasted until 1869, after which further work would have occurred. Most of the ground level rooms and the children's apartment are probably Early Period work. The Sheikh's apartment and eldest son's apartment appear to be Transitional Period and both the main majlis and the wind tower are Middle Period - respectively 1900 (perhaps) and 1932



similar but the proportions are better. There are two horizontal mouldings which help structure the design. See fig. 7.17.

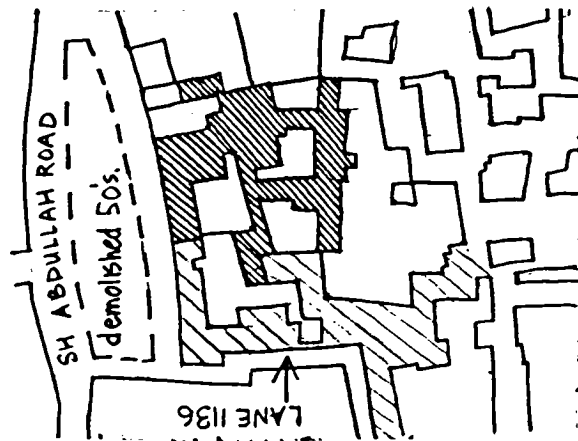
To conclude, one may say that the main interest of this house lies not in the quality of the architecture or craftsmanship as such but rather in the completeness and scope of the layout. Except for the children's room at first floor, one can find more distinguished examples of each period or feature in other houses. (Other exceptions to this general rule must be the archivolt friezes). Nowhere else can one find such a large, complex and complete nineteenth century house plan. It is a cause for regret, (as Lewcock has pointed out,) that the artefacts of daily life are being removed - privies, kitchens and so on - because they are of no artistic interest, because such details would help one to envision the nature of life as it was lived in such an establishment (10).

2.4. Sheikh Abdullah House

Abdullah was a son of Isa and we may date the earliest parts around 1880 (11). It is a Transitional Period work, but the north-west apartment is a Middle Period "Arcade Style" structure and the Western apartment is in the "Perpendicular" Style.

The site is densely developed but has arisen incrementally: accordingly it is complex but informal: see fig. 7.18 and 19. The visitors' courtyard is now cluttered with shacks and much altered: the western court is largely rebuilt. As a result, one can only hypothesize about the function of each court or apartment. One enters from Sh. Abdullah Road, that is, from the north. The main door is typical, (but now disused). In the north west corner of the Visitors' Court is the majlis (?) with access staircase now altered. It has six bays and one tie beam above the low-level windows. The arches are two sets of pointed, trefoil and hipped ogee arches. See fig. 7.21

On the southern side is a two bay liwan with a small void at high level (rather like Sh. Salman House). Behind is the Sheikh's room (?) which has a fine rear door into the private court: see fig. 7.20. The Private Court (?) is reached through a tunnel to the right of the liwan. From this stairs lead up to the roof terrace linking to the Sheikh's



(6). But nothing is static: extant rooms are always modified later. For example the roof and shutters in the children's apartment are late - perhaps also 1900 - and I would guess the Sheikh's ground floor apartment was modified to its present form around 1870. The windows in the apartments of the Sheikh, the guests and the girls were modified with iron bars in this century. A liwan in the servants' court and several first floor structures have been removed since 1950, (judging from aerial photographs). There are many more instances of change. It is clear that this house - like the other nineteenth century houses - is a palimpsest. To that extent, I think the implication by Hardy-Guilbert and Lalande (7) of the homogeneity of the house is misleading.

The floor plans are given in figs. 7.8 and 7.9. There are four courtyards and the house fills its own block (that is, it is surrounded by roads).

The visitors' and men's court has its own street doorway with an L-shaped entrance passage, (al dihriz). There is a business majlis, two men's rooms and two adjacent liwans. An open passage leads to animal stalls, and a kitchen, and thence into the servants' court. See fig. 7.12.

The liwans have pointed arches recessed in rectangular frames. Internally the spandrels are decorated with plain recessed panels which have polylobed heads. The north liwan archivolt has a polylobe decoration.

The staircases lead to terraces outside the visitors' apartment and the main majlis. The visitors' staircase is walled in and has a fine double door.

The majlis is in the "Smooth Style" (five by three bays). Externally there are tall windows (with iron bars or louvres) and fanlights with trefoil panels above. On the road side are three badgirs but also built-in cupboards in two bays at each end. Internally there is a horizontal groove and rectangular incised panels. The shutters and cupboards have porcelain handles, steel locks and beading to a floral design of cast plaster of Paris. This suggests a date after trade (and hence imports) had started to soar. The fanlights are as design "B" in figure 4.63.

The Servants' Court has a staircase which allows direct service of majlis, visitors' and girls' apartments.

The Women's Court has its own street door. It is the largest court. There are three polylobed arches to the street door, kitchen (and hence servants' court) and the passageway into the Sheikh's private court. The wind tower and adjacent family room were added by Sheikha Aisha according to Hardy-Guilbert (8). One stair leads to a terrace to the rear of the Sheikh's apartment. The other stair leads to a terrace accessing the girls', children's and Sheikh's apartments. There is also a staircase from the Sheikh's private quarters. Perhaps one stair was used by servants and women, whereas the other would be used by members of the Sheikh's immediate family. See figure 7.13.

The eldest son's apartment has two columns carrying a central beam. It is thus two bays wide. There are double pointed voids at high level with central stub columns. The north window facing the terrace is a fine composition: there is a pointed archivolt frieze set within a rectangular frame: see figure 7.14.

The Sheikh's apartment has a liwan on the long side. There are three doors with large rectangular panels above. The internal elevation (fig. 7.15) is rather strange. Within each large panel is a zig-zag moulding between decorative brackets at apparently random intervals. There is a small incised decorative panel above a large one. This composition looks as if it arose from a modification of an original structure. The side elevation of the liwan has dual pointed voids with central octagonal column. The column corners are rebated. There is a square capital with a zig-zag decoration (which remind one of guttae). The elevation of the apartment (facing the liwan) has a very elaborate decorative composition. There are three bays with pointed polylobed blind arches and pilaster friezes. In the tympana are pairs of incised panels. The central door has double incised frieze around it. The side bays have low niches with vertical friezes on either side, and a frieze horizontally at door head height. The effect is agitated and unconvincing. One could regard it as a "dry run" for the Sh. Hamad majlis where similar themes are worked out with elegance and conviction.

The children's majlis is the oldest room and best design at first floor. It follows on from the Sh. Salman majlis design. There are four low windows on the long walls. The solids dominate the windows. Above are horizontal friezes with vertical links framing four niches. A zig-zag moulding and small incised panels complete the composition. The roof was renewed in this century and decorative plaster brackets support the square section joists. The Middle Period shutters are recorded in fig. 6.6. The room is a well proportioned, calm reassuring place - solid and simple but also elegant, the only complete success in the house. The liwan is very fine. It has a large pointed arch let into a rectangular frame. At the top of the frame are the familiar decorative brackets and zig-zag mould. The archivolt frieze is superb: see fig. 7.16. There are incised decorative panels in the spandrel. The merlons are obviously a much later design. The liwan sides have a pointed void at high level. Between two horizontal friezes is a plaster grille: these are the only such grilles now extant, but it is clear from old photographs that there were once far more: (they have been replaced by incised panels below the pointed voids in the other apartments)(9).

The passage from the Women's Court to the Sheikh's Private Court has a double polylobed archivolt to the entrance arch. After that there is a series of three decorated archways, each one quite different but together forming a delightful sequence: see fig. 7.13.

To the left of the Private Court is a two bay liwan with an octagonal column, square capital and two arches (with polylobed archivolt friezes) in frames. There is a passage to the small court with a staircase serving the Sheikh's and children's apartments at first floor.

The family majlis has a double bay with a central octagonal column. The teak beam which it supports has the cornice moulding applied to both sides. The walls have a simple arrangement - two rows of niches and three rows of incised panels (circles, rectangles and circles with alternate small rectangles). The plain solids dominate the voids (i.e. niches and panels). The generally orthogonal arrangement breaks down in detail haphazardly. The overall effect lacks flair. It seems heavy and not very competent. The children's room is

apartments and the Girls' apartment (?). There is also a short flight of stairs from this court to a mezzanine apartment possibly for children or young men.

The Sheikh's apartment is the real glory of the house. It is three by five bays, and the outside is typical of the period: i.e. 3-step merlons; zig-zag moulding; three rows of panels (with horizontal grooves) lined up with low level windows. These have lovely wrought iron grilles: see fig. 7.20. The interior is a surprise and contains many unique features: see fig. 7.22. Above the shuttered windows are niches framed by horizontal friezes with vertical linking friezes. Above this is a spoked semicircle moulding and then a groove. There is then a row of incised panels - rectangular ones over the windows and circular ones on the piers. Above a second groove is another row of panels. Square incised panels are over the windows. Recessed panels (with inset circular heads) are over the piers. Between the two are incised decorative themes which I will call jug, pitcher and rose-water sprinkler. They are arranged on a symmetrical system. Above this is a small zig-zag. The cornice cove is decorated with quatrefoils and rectangles with trefoil ends. The end walls do not have circular panels but instead there are incised volutes with foliage. This moulding occurs in Middle Period work (such as the Tijjar Road Khan and the Seyadi House). One has the feeling that the plasterwork was modified around 1920. This room is rich and startling. The complex scheme is carried off with consistency and sureness of touch. It is one of the most significant achievements of Bahraini culture and its obscurity and dereliction are shameful.

To the right of the Visitors' Court one would walk below a bridge (now lost) to enter the Men's Court (?). From this a flight of steps leads to the mezzanine room, to an upper liwan overlooking the court, and onto the roof terrace connecting (via bridges) to the Sheikh's apartment and Men's apartment (?). The Men's apartment is Perpendicular style with a pendulum clock motif on the aedicule of the main door: see fig. 7.22. The other apartments are rather plain Pier Style, with round arches to the bays.

To the left of the Visitors' Court one walks under the terrace into the Eldest Son's court (?) surrounded by single storey buildings.

One can walk from the private court at ground level through an archway into the Servants' court (?). This was close to the stairway to the Sheikh's, Girls' and Majlis apartments, which would facilitate service. The animal stalls were adjacent.

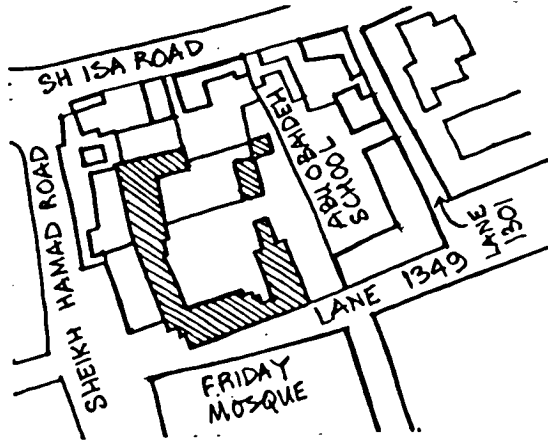
The roof terrace system apparently linked (at one time) to both the west and east where apartments now function as separate dwellings. The most interesting one is a long noble Perpendicular style majlis with volute merlons; (see fig. 7.23).

One is impressed by the deliberation with which the terraced system was put together. At ground level one can see long colonades (or their sad remains) supporting terraces - along one side of the servants' court, for example: see fig. 7.23.

2.5. Sheikh Hamad House

Much of the original house has been lost due to the widening of Sheikh Hamad Road (around 1960) and the construction of Abu Obaideh Boys' School (in the late 1940s). The only useful record is the 1950 aerial photograph which shows a major courtyard and two minor courtyards to the north. The original main doorway is in Muharraq museum. An informant told me that the present Malik house majlis was originally an extension of this house, involving a bridge across road 1349 from the school site (12). Apparently there was a courtyard on the school site also. To the east (towards Sh. Salman House) was a subsidiary court and an access way up to 1980. The position in 1950 is shown in fig. 4.5 and the current floor plans in figs. 7.24 and 25.

The extant courtyard was divided by a wall (the remains of which still exist). East of this was the Sheikh's private court (13) with access from Sh. Isa Road (now obscured). On the south side is a fine three bay majlis. It is a freestanding one-storey structure, which is very unusual. There are pointed arches in rectangular frames. The centre bay is wider and contains a doorway with frieze surround. It would appear that the side bays held big farsh panels (now more or less collapsed). The side and rear elevations had a tie beam with niches below and recessed panels above: see fig. 7.27. To the north are the Sheikh's apartments (14). The range is two bays deep with some rooms gaining access from the lost northern courtyard. The Sheikh's first floor room and liwan are set across the ground



floor rooms. Beneath the liwan is a family room of a conventional type. For the end wall elevation see fig. 7.27. There is a cornice standing forward by 10cm with small consoles at about 0.900m centres. There is a zig-zag moulding between the consoles. There are four horizontal grooves separating each row of panels. The top row has a complex rhythm - A BC ABA CB A - where (A) is a plain panel with an inset semicircular head; (B) is a small rectangular decorative plaster panel and (C) is a square plain panel. Below this are three decorative panels in the form of squares with quadrants removed at corners. Separating them are two large rectangular plain panels. The bottom row comprises three decorative panels with multifoil heads at both sides and the centre. They are separated by rectangular niches. This row has a decorative frieze top and bottom and a vertical frieze separating each element. The plain panels are not in fact recessed behind the plane of the wall, but are surrounded by a groove. The structure of this design is rather complex and agitated. In the north-east corner of the court is a circular staircase built by the traditional method - an amazingly complicated and surely unique feature. The risers are concave arcs, so a rather pleasing "spiral turbine" effect results. At the top of the stairs on the right is a small liwan of two semicircular arches in frames, bearing on a central round column with a square capital: see fig. 7.28.

To the left is the Sheikh's liwan seen across a wide terrace. It is a magnificent design - all the more remarkable because the sense of grandeur and gravitas is achieved in such a small building. Below three step merlons and a big zig-zag are four bays, (one obscured somewhat by a privy).

Each bay is headed by a void comprising a pointed arch with a zig-zag moulding around it. Below the void is a rectangular decorative plaster panel. Between each pair of arches is a vertical plaster projecting about 5cms. with a decorative frieze in it. The eight spandrels carry small roundels. The vertical pilasters broaden out at the level of the arch springing to receive the arch frieze. There are larger decorative plaster panels set in the lower pilaster, which line through with the panels below the voids. The motif here is, of course, basically that found in most liwans and in the Seyadi House small apartment,

for example. It is a classic theme. Below this there are four tall voids down to floor level. The second void from the left has a decorative plaster frieze around it. Within the voids are decorated timber architraves of a later date. I think there were doors here. Internally the liwan is equally magnificent. The pointed arches are recessed behind pilasters with roundels in the spandrels and infill panels below arch springing, all as externally. Below (on the short elevations) are a niche and then an internally shuttered window. They are both surrounded on all sides by a grid of decorative friezes: see fig. 7.27. The doorway voids to the majlis and the terrace are surrounded by friezes too. There is a group of three parallel vertical friezes between the voids. Above the doors are two rows of panels with horizontal friezes between them. Both levels are the same. The panels above the doors are rectangular and above the piers they are square. There is a double cornice above - a loop moulding with zig-zag moulding below.

In the majlis there are three bays. At the top are three small decorative panels (one above each bay) and two plain panels with round heads, (one above each pier). Below this are a decorative panel, a niche and a window in each bay. The niche and windows are surrounded on all sides by a grid of decorative friezes.

For the external elevation (facing the courtyard), see fig. 7.28. The wide centre pier indicates the wall between liwan and room. There are five horizontal grooves which run the whole elevation length: these unify the facade. On the majlis half of the building there are three bays. The arrangement (from the top) is: vertical decorative panel; two horizontal panels; window. The windows have superb wrought iron grilles. The liwan half of the elevation also has three bays comprising (from the top) pointed void with decorative panel below (now fallen out); decorative panel; window. The rear elevation of the majlis has four bays with the same arrangement as the side elevation. However the piers are much wider. As a result, this elevation has more squat proportions: see fig. 7.28.

I now turn to consider the Women's courtyard which lies west of the dividing wall. The Sheikh's apartments are obviously Transitional Period, and the ground level rooms and

liwans in this courtyard are of the same date (15). The first floor apartments are Middle Period, however.

The main entrance is from Lane 1349, and the doorway is superb (although typical); see fig. 7.26. There is a circular arch within a pointed arch. The elevation includes the two first floor apartments with roof badgirs linking them together: the impression from the street is superb - see fig 7.29. There is the usual L-shaped entrance passage emerging below a pointed arch into one corner of the court.

To the right are the remains of a liwan, which has pointed arches (with decorated polylobed archivolts) in rectangular frames. The room behind the liwan has recessed panels with polylobed heads. It is all rather like the liwans in Sh. Isa House. This suggests a similar date. This range is now mostly ruined but at one time there were certainly stairs leading to the Women's apartment (?) which is located in the south-west corner. This is early Middle Period in the Arcade Style, five by three bays, and unusually tall. There are three step merlons and a tall cornice. Each bay has a trefoil incised decorative panel at the top and a plain farch panel below. Then there is a tie beam (incorporating badgirs) and low windows. The centre bay projects and includes a tall doorway with a frieze surround and two small incised panels (trefoil and rectangle) above.

To the right of the entrance passage is a plain modern liwan. To the left stairs ascend to the children's apartment (?). This I would designate early Perpendicular Style, but it has low windows and merlons of an unusual design: see figure 7.26 and 29. This room is six by three bays, with two quadrants and a trefoil arch at the head of each bay. Quadrants are also found at S. Mattar House, but the combination with trefoil seems to be unique.

This apartment has something in common with the Sheikh's apartment at Sh. Salman House, and the eastern apartment at S. Mattar House. They are all Middle Period, but predate the advent of coping and the fanlight window - perhaps around 1890.

On the north side of the court is a range of buildings in complete ruins. It is clear from the remains (and also from the 1951 aerial photographs) that there was a large apartment at first floor. A staircase leads up to this on the right hand side. This is immediately

to the rear of the Sheikh's apartment but there is no rear door to that room. Next to this stair is a ground level passageway with a large doorway linking doubtless to the lost northern courtyard.

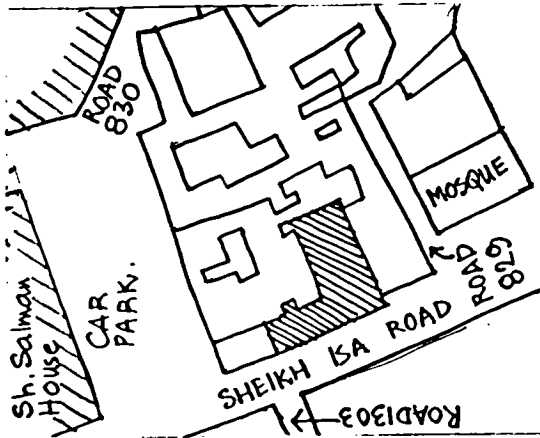
To sum up this house, I would suggest that its architectural quality much surpasses that of Sh. Isa House (although the layout is not so impressive or coherent). The great glory is the Sheikh's room and liwan, and that must surely be the peak of nineteenth century Bahraini cultural achievement in building (or any other sphere). That it should have been so neglected for so long is a matter for deep regret.

There is unusually an old photograph (from the 1930s) of the former main entrancé facing west along Sh. Hamed Road (16). This was demolished when the street was widened. See fig. 7.30. The main doorway (preserved in Muharrag museum) has various carvings, mainly from the Koran, but also celebrating the construction of the house: see fig. 7.31. They record the names of building workers (17).

2.6. Sh. Abdullah bin Mohammed House

This is situated on the Sh. Isa Road about a hundred metres south of Sh. Salman House. It is a small but very beautiful late Transitional Period House (1880) built by a Said Yassim (from Al Hayayik) for Sh. Abdullah, who was a son of Sh. Mohammed bin Khalifah (18). See fig. 7.32 for floor plans.

There is a typical main doorway, L-shaped passage (with doorkeeper's room to the left - exactly as at Sh. Salman House) and one enters the courtyard at the corner. To the left is a two bay liwan with a living room behind. On the far side of the liwan a flight of stairs leads to a roof terrace. There is only one apartment at first floor. It is set across the rooms below - a typical arrangement of the period. There are three step merlons and a fairly low cornice. Four grooves divide the facade horizontally into three rows of panels. There are four low windows. Above the windows are incised panels: (one square panel above two rectangular ones.) Between windows are tall recessed panels with pointed heads. Above these are three small recessed panels, (round-headed, octagonal and square). Incised panels therefore alternate with recessed panels.



Internally the elevations are similar in spirit. The windows have shutters and tenoned grilles (to the same design as the Sh. Salman majlis). There is a rosanna (i.e. niche) above each window and a small recessed panel between them. On the row above there are no recessed panels (unlike the external elevation just described). On the top row all panels are incised (19). See fig. 7.34.

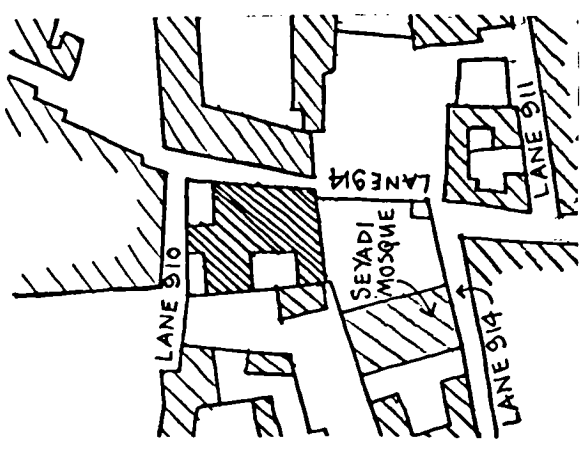
The elevation to the street and the end elevation follow the same system as the terrace elevation except that there are no recessed panels in the top three rows. Also the second groove is omitted, which improves the balance of the design.

This design seems almost perfect. It has a very delicate but rich quality. The design is clearly and systematically structured, which allows complexity without agitation or confusion. The hand of a confident, but modest master is obvious. It is regrettable that (even as I write), a demolition contract is being prepared pursuant to a road-widening scheme which even the Chief Highway Engineer condemns as pointless.

2.7. Seyadi House

The majlis of this house was built by Ahmed Jassim Seyadi (who died in 1972) in about 1921, and is without doubt the finest work of architecture in Muharraq. The majlis woodwork was built by carpenters from Shiraz whose leader is remembered now not by name but by virtue of his one eye. The masons were Ibrahim Al Humeili (from Hayayik) and Yusuf Al Ramul (from Al bin Ali firaj). The house is much older, however, and was once a good deal more extensive than now (20).

My informant stated that a bridge crossed from the majlis terrace northwards over Lane 910 to several apartments on the other side of the road. Also he stated, (and it is clear from adjacent ruins), that there was an apartment to the west of the entrance courtyard. A large wall has been recently built across this court so that one is unaware of this. All this can be seen from the 1950 aerial photographs in terms of general building mass, which I have interpreted in fig. 4.7. The ground floor apartments and the smaller first floor room are Transitional Period and resemble the Sh. Hamad House Sheikh's liwan. My informants stated they were built about 1850. The addition of the enormous majlis seventy



years later necessitated many modifications which produced a very tight, dense, complicated house quite unlike any other. See fig 7.35 and 36 for extant floor plans.

The main entrance was obviously built at the same time as the majlis by the Persian carpenters imported by Seyadi. The door and canopy are sumptuous. The canopy is in three tiers stepping out of the wall. Each tier is supported by timber rails built into the wall. The rails are linked by vertical brackets. The rails and brackets support horizontal and vertical teak panels (which have fretwork decoration). They are themselves carved. Above the door is a semi-circular fanlight with iron bars radiating from the centre. The teak spandrels are decorated with fretted flowers. The architrave is rich and complex. It is based upon a round pole with zig-zag moulding on either side. The door post is richly carved with a weave motif, spiral grooves and other designs. It is topped by a stylised lily flower. The doors are panelled: see figs. 7.38 and 39. This door was a prototype which changed the approach to door design in the next twenty years(21).

Passing through the door, one is faced by a passage about 3 metres wide and ten metres long. It leads into a small courtyard at the far end. The passage is open at both ends but is covered by a roof terrace probably added in 1921. However walls come down to about 2.5 metres above ground at both ends - see fig. 7.40. The walls are pierced by decorative panels. There is a nice ambiguity: is this enclosed or open? Is it a room?

To the right is a living room. The door into it has an ingenious adjustable louvre. The wall to the passage has pointed windows at high level with heavy hood mouldings above. This is also found on the first floor apartment elevations and is common in Sheikh Isa House. Internally this room has three rows of flush decorative plaster panels above a row of niches. The three piers have a stencilled "volute" decoration which reoccurs in the visitors' court liwan, the mezzanine living room and also in the majlis as an incised pattern.

The glory of this room is, however, its ceiling: see fig 7.37 and 7.40. This is a tacked lath ceiling with a heavy cornice. The pattern comprises squares linked at their corners by diagonal crosses. The squares are thus separated by elongated lozenges. Each square

and lozenge has a central panel painted a different colour. The colours are very bright and the effect is almost gaudy. The soffit of the cornice carried a geometric frieze also created from timber laths and bold colour. The outside cornice edge does not follow the wall. It is displaced at two diagonally opposite corners by about 250mm. The gap tapers on all four sides to nothing, and is left as white plaster.

Passing on to the courtyard, one is struck by its small size and also by the height of the majlis, which towers above one. Ahead is an apartment; the most noteworthy features are the carved doors and shutters. See fig. 4.51. These are closely related in style to the main door. Again one can see how they were copied and much debased all over Bahrain in the following years.

To the left is a low liwan with a taller (Mens'?) apartment behind. This room is clearly Transitional Period. It has the familiar horizontal friezes framing niches, and two rows of decorative panels: see figure 7.41. The men's liwan leads (at its left hand end) into a second liwan. This fronts a small courtyard. On the left of this court is a windowless (men's) room which also has a door to the entrance passageway.

From the Visitors' or Entrance court, a flight of stairs leads up to a very low mezzanine room. This is situated above the liwan: refer to the section (fig. 7.42). The stairs lead further on to a landing: to the left is the (Children's?) apartment. The entrance door faces one in the middle of a three bay end elevation. This has three recesses with pointed arches, heavy hood moulds and decorative panels below. Internally these panels are treated by the "arch and frame" motif - they are recessed into a rectangular frame. The side elevations internally remind one of Sh. Abdullah house. Above the windows are incised panels, (a square above two rectangles,) and on the piers are recessed panels. The ceiling is tacked lath geometry as described before and was doubtless a later addition. See fig. 7.41.

The stairway continues in the same direction up to a roof terrace about 0.800m above the floor level of this apartment. This terrace covers the entrance passageway and adjacent room. It looks like a late addition - probably a method of increasing summer-time sleeping

capacity pro-rata to the built accommodation. A short flight in the opposite direction leads from the landing to majlis level. There is a balcony in front of the majlis and a terrace on the northern side, (which overlooks the men's court). This system of stairways, terraces and voids is impressive. The stairs are very narrow and there is a rather pleasant sense of vertigo. The complexity of the different levels creates fascinating glimpses between intensely articulated "heres" and "theres". Finally, steps, balustrades and badgirs display some very crisp cubist detailing: see fig. 7.37.

My informant stated that the majlis entrance balcony originally had incised panels between posts and not badgirs as now. He also confirmed (what seems obvious, namely) 'that the side terrace wall did not originally have a row of three step merlons.

The majlis is built in (what I have called) the "Smooth Style". One is first struck by its great size. The main majlis internally measures 6 x 6.8m. It is about 6.500m high. The timbers for this must have been very costly, and nowhere else in Muharrag does one find such a large room until the 1950s (22). There are two smaller rooms west of the majlis: a private room and (via a tiny spiral staircase) a wives' room above it (i.e. as a mezzanine). This necessitates an internal wall

The external majlis elevations are refined, delicate and serene, but seem also a little effeminate. The south elevation is the most impressive. It is seen across the courtyard of the adjacent mosque. It is about 8.000m wide and 13,000m high above ground level. There is no structural expression and no windows are evident. There is little to give one a clue about internal function or construction. The facade is a smooth skin decorated by incised plaster panels in six bays. Vertically there are six elements per bay. The top four are rectangular panels separated by grooves. Then comes a semi-circular panel above a large vertical panel. The right hand bay at this level has a window with a fine wooden screen (detailed in fig. 4.51).

There is a high parapet with "spade" crenellations. Not the least striking features are the round corners with a radius of roughly 350mm. At crenellation level on the corners is a round tube with a zig-zag top. This device poetically suggests that the building corners

are held just as fingers hold the corners of a "cats cradle", pulling outwards so that the skin wrapping around the building is held taut and smooth. The horizontal grooves at the corners centre on five symbolic panels. These panels are in a vertical line at each corner, and may be described as follows (from top to bottom), a lozenge; a circle containing a moon and a star; a quatrefoil; an axe-head shape; and a figure with three cusps. Below this, is a semi-circular panel containing a herringbone pattern. See figs. 7.42 and 43.

The colour of the plaster is very pale brown now, and this is set back around panels to reveal the dark brown clay layer below. Likewise the grooves and symbolic corner panels are created by exposure of the underlying clay layer.

Passing now to the interior of the main majlis, I describe first the right-hand wall (which is an internal partition, of course).

The right hand bay has a small spiral staircase behind it. There is a wider pier in the centre which divides the elevation in two groups of three bays each. There is a decorative plaster frieze at 2.700m above the floor. Above this there is a single large panel divided into five parts of equal width as follows (from the top): a small incised plaster panel; a large pierced decorative panel with a large scale pattern (which permits observers in the mezzanine annexe to look down); a very small incised panel; an incised plaque with trefoil ends (or cusped ends in the centre two bays); finally a decorative unpierced panel of the same size as the topmost panel. On the four narrower piers are five small roundels with incised decoration which line up horizontally with the panel sequence just described. The wider centre pier has three large roundels and the volute decoration (referred to earlier) incised in the plaster. This decorative element establishes the centre line of the room.

The arrangement in front of the staircase is similar to the other bays except that double shutters replace the second and third panels. The pale surface plaster coat is cut back about 30mm from the edge of each bay, and this shows up as a dark line unifying the six groups of panels into a single macropanel. See fig 7.40.

Below the frieze are six panelled doors with semi-circular fanlights above. There are wooden doors flush with both sides of this wall. The semi-circular lights contain

elaborate stained glass. Below the doors is an upstand beam which constitutes a large threshold. The thresholds are cased in timber and patterned with small beads. See fig. 7.45. Between the doors at about seven feet are recessed panels with lamp hangers in their centres.

The other three walls are similar in character: see fig. 7.44. They have a second horizontal plaster frieze about two-thirds way up the wall. Above and below this frieze are large panels containing three elements each: top and bottom an incised plaster panel and in the middle a narrow plaque. The upper row of plaques have rounded ends. In the lower row, cusped ends alternate with trefoil ends. The main door (in the centre of the shorter wall) is interesting. It breaks into the frieze - in other words it is higher than the windows. There is a stained glass fanlight. The frame carries a loop moulding: see fig. 7.45. The double doors have three glass marquetry panels and the doorframe contains glass marquetry. The marquetry background is blue painted wood, and the pattern is a floral design (mainly in mirror glass). This is covered with glass, and held by fine beads. (The floral design resembles that in the main doorway spandrel panels.) The head of the door frame is a re-entrant ogee (terminating in a small flower), but the doors themselves are rectangular. The overall effect is delicate, refined and altogether delightful. See fig. 4.50

Below the lower frieze are panelled shutters with pierced plaster screens behind (flush with the outside wall surface). There is an upstand beam below the windows (encased in tacked lath patterned timber).

The tacked lath ceiling design is the same as that described earlier. Here however there are two small recesses in the centre of the ceiling. In the middle of each is a hook used presumably for hanging large oil lamps.

Through the doors on the right is a small annexe room. This is the same length as the majlis and about 3m wide. It was used as a private room for sleeping and also business matters. There is a large iron safe under the spiral staircase. The ceiling is covered in mirror glass. It is divided into large mirror panels by timber members which are painted

red. The room is surrounded by doors on the same pattern as the majlis. On the longer wall these enclose cupboards. On the short external wall the doors cover pierced timber screens.

They afford views over the adjacent street. All the doors have mirror glass panels. All doors open into the width of the wall: thus, when open, they line the reveals of the void. Faced with mirror panels they create specular reflections upon the internal surfaces of the room. This concern with mirrors and screens seems to be an extension of the Islamic - particularly the Persian - concern with the artistic use of light. In this room, the architraves are surrounded by narrow 5cm glass marquetry panels in a simple geometric pattern. Also some of the fanlight glazing bars have fine grooves with mirror inset. See fig. 4.50.

One reaches the women's room by means of the spiral staircase. This is very narrow. The steps are about 400mm wide. The upper room has a boarded ceiling with a three tier cornice. Each tier has a different fretwork pattern on its vertical side. The cornice cuts each corner at 45 degrees with plain soffits: see fig. 7.44. The ceiling is patterned with a series of rococo shapes in fretted timber similar to that found in the majlis of the Mattar House.

The pierced screens overlooking the majlis are lined on this side by double shutters opening into the wall depth. The internal shutters on the outside walls rise from ground level. At this level there is a solid panel externally. Above this is a pierced plaster panel. Therefore this is actually a badgir (but does not have the appearance of one). Climbing down the staircase one catches an unobstructed glimpse down into the majlis.

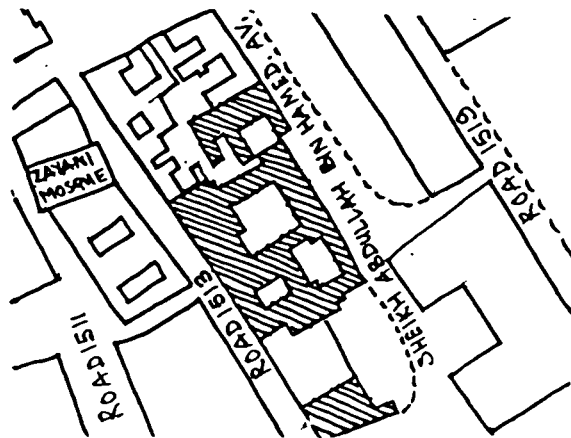
How can one sum up this magnificent piece of architecture? Coming to it from the general run of Bahraini architecture, it is extraordinarily impressive. The superiority of Persian craftsmanship is demonstrated amply. The builders were Bahrainis, however, although the carpenters were Persian (23). So to what extent is it a Bahraini house? Its conception - the idea of the wall as a veil or curtain which I stated in an earlier chapter - seems more Persian than Bahraini. The delicacy and perfection of the craftsmanship creates an

atmosphere unique in Bahrain. Perhaps the intellectual force of the Persians had a major effect on the local masons so that a fusion or fertilisation occurred between two traditions. Clearly this building was a seminal influence in several respects on the following decades. Perhaps therefore it would be reasonable to see the Seyadi Majlis as a case study in cultural diffusion.

2.8. Fakhroo House

This may be called the Yusuf Abdulrahman Fakhroo House to distinguish it from the Yusuf bin Yusuf Fakhroo House which is mentioned later. It is situated on the south side of Road 1513 in the Al Zayaninah firaj. This is a merchants' house, like the Seyadi House, but it is far more spread out (with bigger courtyards and less complex massing). This was possible because the site is on reclaimed land next to the sea, whereas the Seyadi House arose from a process of intensification of use in an already crowded central district. It is virtually all Middle Period work having been begun about 1905 (24). In recent times, the main courtyard has been extensively rebuilt and is occupied by the family. Most of the old house remains, however, although partly ruined. In fig. 4.8 I have reconstructed the building form in the 1940s from the aerial photograph, whereas the plans show the present position. See figs. 7.46 and 47 for the floor plans.

Nowadays one enters the main courtyard (formerly the women's courtyard) from both streets. Nothing of historical note remains at ground level, although two apartments at first floor have been heavily renovated. A passageway leads to the male servants' court (on the left), and the animal and storage courts (on the right). In the south-east corner of the male servants' court is a tall portico which has a roof terrace over. One tall column supports the roof with the aid of a diagonal strut: (see fig. 7.48). Behind this is a kitchen which also has a doorway into the main courtyard. The court is surrounded by unlit rooms. In the north west corner is a long flight of timber stairs constructed in the European manner: see fig. 6.2. (This is, of course, an innovation, as Bahraini stairs were normally constructed from plaster and stone on mangrove poles.) This staircase is on the left of a portico which also contains a large grindstone. There is a massive palm tree which



completely fills the court. When I first visited the house there was an old African servant cooking an elaborate meal on the earth floor of the court, and one felt in touch with the earlier era. This court is as high in places as it is wide. The walls at ground floor are plain except for trefoil incised panels over doors on the west side. North of this court, and accessed from the same entrance passage are two service courts used for animals and storage. The rooms north of the servants' court have no apertures on this side (25).

The animal courts are surrounded by high colonnades which support roof terraces. The stone is not plastered and so the effect is cyclopean. The columns are about 4.00 metres high and are tied by mangrove poles at 3.00 metres.

I now pass to the upper storey. Ascending the staircase on the south of the Women's court, there is a five bay "Smooth Style" apartment to the left (east) which reminds one of the Sh. Isa majlis. It has trefoil incised panels over tall fanlight windows and corner three-step merlons. This was the Fourth Son's apartment. To the right is the Second Son's apartment, a six bay Perpendicular style apartment, with cornice, trefoil arches in the upper panel, and fretted timber screens to the windows. Internally there is a stained glass window design which closely resembles work in the Seyadi majlis: see fig. 7.52. Also there is a mirror-faced teak cupboard with a drawer below - a very European thing but it contrives to look local enough. The mirror has a bevelled edge and a re-entrant ogee head. The aerial photograph shows a building annexed to this one (located over the portico mentioned above). All trace of this is lost. The roof terrace leads north. A liwan (now blocked up) faces one.

To the left (west) is the Head Man's apartment. There is a fence and door leading to a terrace in front of the apartment. One can then enter the room or, alternatively, turn right (north) and descend wooden steps (about 1 metre descent) to the side liwan of the Daughters' room (26). This is 6 bays long. Above the tall windows (with fanlights) are square recessed panels which contain two incised decorative panels (an oval and a trefoil).

See fig. 7.50.

The internal elevations are as follows. There are large roundels between fanlights. Above this is a horizontal groove. Rectangular panels and semi-circular panels line through with the windows. There are large roundels between the semi-circular panels (echoing the lower roundels), and small roundels between the rectangular panels. There are two cupboards in window voids where the kitchen annexe was added.

The side liwan has a light timber roof sloping at about 10 degrees and supported from stone columns. The north elevation fronts this liwan as well as the end liwan, and unifies the two into one design. This consists of four arches in two pairs. There are no columns, capitals or other architectural elements.

The Head Man's apartment is the finest room in the house. The liwan is at the western end. The staircase from the entrance court leads into the liwan, but now it is blocked up. There are ten bays including three wide ones to the liwan.

The liwan was apparently modified soon after construction; a hammam was created by enclosing the west bay of the liwan and doors and screens were introduced into the remaining two bays, so that it becomes in effect a separate room. Space no longer flows through from the roof terraces on either side (which is a pity). As to elevations, there is one tie beam near the top. The panels created have trefoils inset. In the liwan, there are two decorative panels below each trefoil. There are tall windows filling the lower panels. They have stained glass in the semi-circular heads and fine fretted timber screens externally in four horizontal panels: (see fig. 7.51). The stained glass patterns are similar to the floral designs in the Seyadi majlis. There is another design also, however, which recurs in several houses (of the same period) at the southern end of Boo Maher Road: see fig. 7.52. The semi-circle is segmented and each segment has one foil. The space outside the foil is bisected again. There are two such ranks.

Internally there is a bold and simple projecting cornice with triangular corners. The windows are recessed within the rectangular panels i.e. the tie-beam is expressed internally. Above this are rectangular and trefoil incised panels in each bay with no horizontal groove.

The ironmongery is imported: hinges, door and drawer handles are familiar from Victorian and Edwardian buildings in England. The Fakhroo, being a merchant family, were doubtless well placed to obtain such prestigious luxuries from Bombay or elsewhere (perhaps Karachi). Apart from the main house there are two other buildings to be described. Firstly, there is a house (to the east) which was originally part of the Fakhroo house, and was occupied by the third son. Secondly, there is a "Ghurfa al Bahriya" (27) at the west end of the site. West of the storage and animal court is a large garden area about 50 metres long and 15 metres wide walled in and now full of detritus and mature palm trees. There are a few remains of a roof-level walkway which connected to the Ghurfa al Bahriya. It stood on the waterfront in 1930 (before land reclamation occurred). Below the Ghurfa were two swimming pools. The water came from underground wells, and fed the pools, the garden and an adjacent jetty (through a pipeline). Ships would load up with water here, which Fakhroo gave as a free public service. Some of it was shipped to Qatar and sold. In the garden were almond and apple trees as well as palms and vegetables.

The waterfront elevation (i.e. facing west) has a liwan of four bays. The inner three columns are square and have half round pilasters attached, with rectangular capitals above. They are all square at ground level. There are at first floor wooden railings and a simple timber board screen at the top. The parapet is coped and marzams are above the three inner columns. The side elevation is in two parts: two side-bays of the liwan and three bays of the room in a typical Perpendicular manner. These are unified by the cornice and coping above and also by a full length timber balcony (28). See fig. 7.52.

To the east is the third son's apartment. It comprises one courtyard which was originally part of the main house. There was originally one apartment at first floor, later extended by a side apartment. A liwan was added, but it looks as if the design was modified during its realisation. To allow passage from one roof terrace to the other, it then became necessary to build a balcony. A straight flight of stairs ascends from the courtyard. The liwan has three bays with large semi-circular arches set within rectangular frames. The arches rest on circular columns. There is a tie-beam resting on the capitals, with

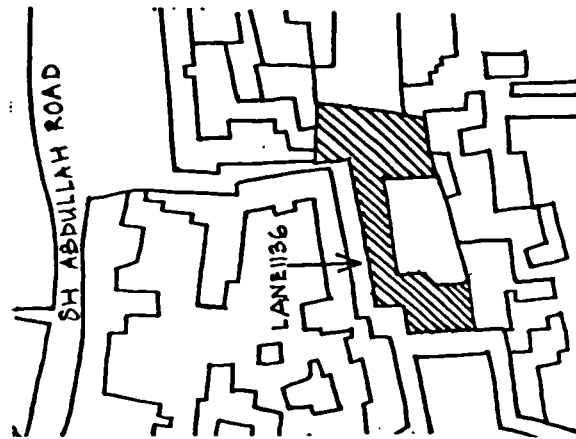
posts in the centre of each bay. The side elevation (fig. 7.49) has three bays above window level, but only two window bays. The main apartment has six bays in the "Smooth style" with semi-circular and rectangular incised panels above fanlight windows set in rectangular panels. The end elevation has badgirs, not windows. Liwan and room are unified by a slightly projecting parapet. The annexed room is in a plain perpendicular style. Internally the ceilings are boarded, with some pleasant fretwork such as a perimeter frieze: see fig. 7.53.

To sum up the Fakhroo House, I think one of the most significant lessons concerns evolution, growth and expansion. Although put together piecemeal, the common visual vocabulary and simple formal theme (i.e. the courtyard/terrace system) guarantee an almost automatic visual unity. This case also demonstrated how a house can respond to the change in family needs and structure. The westwards growth enabled the eastern court to split off as a separate unit, and the original function of the courts changed as new possibilities were created.

2.9. Salman Mattar House

This was built in 1927 by Musa bin Hamed and Ahmed bin Thalf who were reputed to be the best masons at that time (29). It is one of the finest Perpendicular style houses in Muharraq. It is located in the Sh. Abdullah firaj on Lane 1135 adjacent to Sh. Abdullah House and opposite Sh. Ali House. These, together with lesser houses nearby make a particularly fine group. Adjacent houses were demolished a few years ago, but the overall massing in 1950 is shown in fig. 4.6. The floor plans as now existing are shown in fig. 7.54. The house consists of one courtyard built up on three sides with a main entrance at the western end.

However, there is another major entrance at the eastern end. There are at ground level two apartments with a portico between them. The street door opens into the portico. There is a staircase leading to an older apartment at first floor, from which one apparently gained access to the roof terrace system of the main house. A door from the portico leads into the main courtyard. This was a separate territory, although I could find no information on



There is a horizontal groove above fanlight level. Above this each bay has a large recessed panel which is roughly square with a round head. It incorporates a semi-circular incised panel at the top and a rectangular one at the bottom. In the middle are two narrow rectangular plaques with trefoil ends. Below the groove is a row of semi-circular incised panels on the north wall. These echo the fanlights on the other walls, thereby establishing a unity around the room which many apartments of this period lack. On the north wall bottom register are badgirs which read as nichés. The shutters are not visible (unless one crouches down and looks for them). The design has a square frame (i.e. a rebate) and the niche has hipped round corners at the top.

One can walk out at the east end onto a broad terrace. (There are two structural bays below.) A small apartment (children's room?) is next to the main apartment. It has a very similar external design, but it has five bays and the central door has an ogee arch in the panel above. Internally it is simpler (see fig. 7.58). The bay design is (from the top): semi-circular panels (with petalled roundels between); rectangular panel, groove, niche, plain dado. The windows have an unusual fanlight which I have only seen in the Malik majlis: see fig. 7.57. There are small trefoil leaves between each radial. On the south side of this terrace are indications of another apartment now completely gone. From here there are some very fine views of first floor rooms and terraces in other houses - Sh. Ali house to the north and Sh. Abdulliah House to the east. One can either walk north to the apartment I described first, or descend a flight of stairs and enter the courtyard again at its east end.

The elevation to the street corresponds closely to the courtyard elevation: see fig. 7.59. Solid panels replace windows, and room badgirs (below the arch head of the main panel) line through with terrace badgirs. The western door is good (see figure 7.59). The door is set in the usual rectangular field recessed into the aedicule. In the top corners are quadrants bearing incised roundels. A semi-circular panel above the door bears a trefoil incised panel.

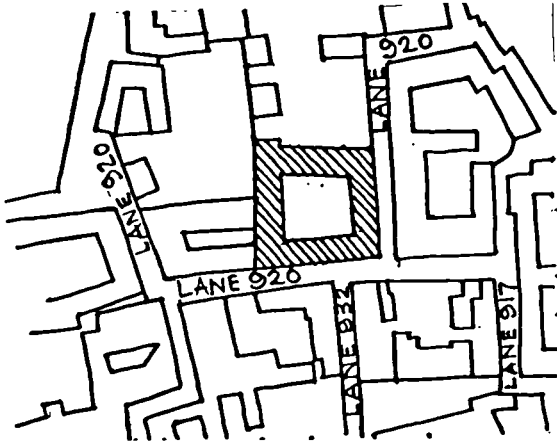
2.10 Ahmed Mattar House

This house (in Al Shaikh Abdullah firaj) is perhaps the apogee of the Perpendicular style. It has a quality of perfection due to the absolute consistency and clarity with which the architectural language is applied. For floor plans see fig. 7.60.

It was built about 1929 by Musa bin Hamad and Ahmed bin Thaif (30). Only one courtyard now exists, the adjacent one having been largely rebuilt. The main door is plain but impressive. There is a projecting cornice. Within a flat aedicule there is a quadrant moulding with a rectangular capital (at door-head height) and a cove moulding above it. Within that is a pointed arch sitting on quadrants. There is a small window above the door. One enters from Lane 920 into the south west corner of the courtyard. To the right is a raised liwan approached by three steps.

The liwan has three bays with pointed arches in frames and square pilasters and capitals attached to the piers. Roof terrace fence posts occur above the liwan piers. There is no incised plasterwork, and here one feels that such decoration would ruin the effect. The two-storey elevations have one tie beam at each level (apart from cornice beams). The first floor upper panels have decorative trefoil arches, but at ground level the arches occur only over doorways. Windows at first floor have framed shutters internally and iron bar screens outside, with stained glass fanlights above. All three apartments have farsh coping. The single storey elevations have a variety of bay widths and designs: (windows with badgirs; narrow doors, wide doors; badgirs). Refer to fig. 7.63. In the three corners of the site (other than the entrance corner) are staircases to the roof, with L-shaped passages leading from the courtyard. It is clear that the eastern apartment, (being the largest) was the Head Man's room. The owner was unable to define the functions of the other apartments, and stated that their use was fluid and evolved quite rapidly.

The design of the apartments are very similar. Each has a small attached privy. There are room badgirs on outside walls. Piers and tie beam are expressed and there are no incised panels. Ceilings are boarded with superb fretwork mainly in black, red and blue on pale



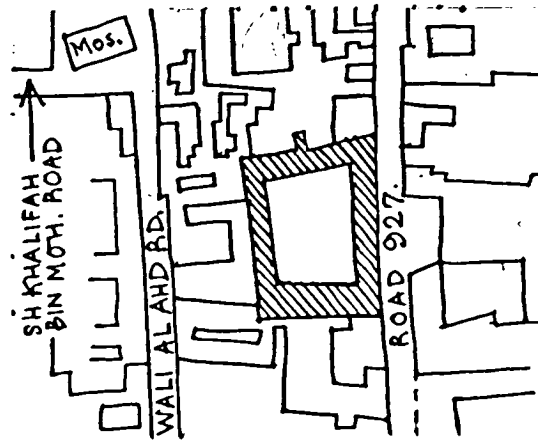
brown background. The cornice has timber fretwork, and cuts off the corners of the room where the roof bracing occurs. For one example see fig. 7.64. There is a large roundel in the middle of the ceiling. At its centre is a nine-cusped circle surrounded by nine heart motifs. From these radiate paired curlicues. Left and right of the roundel are moon and star motifs. Outside the roundel, paired curlicues connect to a large black fretwork form at either end of the room. The outer edge of each is a perfectly straight line. The form comes to a fine point at either end, and this just touches the angled corner of the ceiling. The ceilings make a considerable impact. This is enhanced by the absence of the usual plasterwork decoration and by the contrast between the delicacy of the ceiling and the sparse, tough expression of orthogonal structure.

The street elevations echo the court elevations: see fig. 7.62. There are differences, of course. The fanlights are replaced by blind arches. Badgir slots occur just below these arches, and roof badgirs line through with room badgirs. The design of the different parts of a facade is rigorously coordinated - all horizontals line through and so on.

One part of the second courtyard remains intact, namely a first floor apartment. This is of virtually identical design (except that hipped ogees replace trefoils in the top panels). There is one noteworthy feature, however. The site corner is not quite a right angle, and so the apartment cantilevers slightly: see fig. 7.62. There is a tapering cavetto terminating in a bold decorative bracket under the corner pier, (which is chamfered above). It is beautifully handled.

2.11 Shirawi House

This large - or at least, extensive - house was built around 1890 or 1900 in the Middle Period "Arcade Style": that is no cornice beams are expressed; arch extrados is in the same plane as pier and beam (31). It does not have the same architectural stature as the Mattar Houses, for example, but nonetheless it displays many interesting characteristics of form and layout. It is located on the north side of Road 927 in the firaj of Sh. Abdullah. When built it was on the coastline, the site having been partly reclaimed. See figs. 7.65 and 66 for floor plans.



There is one very large courtyard with L-shaped first floor apartments at each corner. The terraces and stairs are in the middle of each side. The plan is therefore broadly symmetrical. The roof apartments hold or strengthen the corners of the court (so to speak) and this gives some feeling of conviction and power to the ensemble. On the other hand, informal variety characterises the detail. Almost every bay in the courtyard is treated differently, but overall unity is preserved, (more or less) by the terrace level cornice running around the entire court, and also by a common vocabulary of detailing. One enters through a simplified version of the Transitional Period door (see fig. 7.69) via a straight passageway into the courtyard at its south-east corner. To the left are stairs to the majlis terrace, and beyond that a three bay liwan with pointed arches in recessed rectangular panels. The rear and sides of the liwan have piers and two tie beams expressed. There are trefoil heads to each bay, and also badgirs in the lowest panels.

See fig. 7.68.

Doorways to ground level apartments are set in projecting bays with semi-circular and rectangular incised panels over. Windows are generally low and flat headed with iron bar grilles. In the middle of the west range is a passage to (what was originally) a waterfront door. It has a very striking design - perhaps unique in Muharraq: a hipped ogee is carried down to form a horizontal cusp on each side of the opening; see fig. 7.69. Next to this is a stairway leading to the rear of the two western apartments.

In the middle of the north range is the staircase leading to the rear of the north-eastern apartment. This has now been restored and incorporated into a new house standing in the north-east corner of the courtyard.

Most of the ground floor apartments are ruinous or at least decayed, but the north range apartment is still in good condition. It is typical: the bay arrangement (from the top) is semi-circular incised panel; rectangular panel; groove; niche; and plain dado. The cornice is angled at the corners and the triangular soffit has an incised roundel with "horn" motifs on each side: see fig. 7.70. The most interesting and unusual thing about this room is the hammam wall. The door is off-centre and surrounded by a simple rectangular

aedicule with projecting squares in the top corners. There are grooves at dado height and also above the door. There are three small recessed rectangular panels with inset round heads. There is also crenellation now sadly decayed. A row of crosses in circles survives and I have suggested a possible reconstruction. Plaster is unsuited to such complex re-entrant shapes. There are traces which suggest that the incised portions were painted blue, green and other colours.

I now pass to the first floor. Externally the apartments are all similar but slightly different. The liwan is at right angles to the apartment thereby forming an L shape. In general terms each courtyard elevation has a semi-circular arch at the head of each bay, a tie beam and a window below it at floor level. In each case this formula is realised differently. The liwan fronts have large semi-circular arches recessed into rectangular frames and there were corner merlons but only a few survive. They are perhaps a unique design and look rather weird; see fig. 7.69. The north-west liwan arch rests on capitals which are chamfered on top of the inner edge. The plaster below is chamfered front and back. Internally each liwan bay has (from the top) trefoil incised panel; incised panel with concave quatrefoil ends; niche; window; see fig. 7.69.

The eastern range has a mezzanine room on either side of the staircase and accessed from the landing. These rooms (which can be found in some other houses of the time) were sometimes used for keeping chickens, for storage or for accomodating servants. (They were known as al Khingiah) (32).

The house had a major extension or sequence of extensions to the west around 1920 (33). First floor liwans were added to the west side of the two western apartments, and the adjacent terrace was similarly extended. This created a covered passage at ground level. This extension is an absolutely plain colonnade, with no capitals, cornices, brackets and so forth. It is braced near the top by mangrove poles. There are louvre screens for privacy: see fig. 7.71. From the extended terrace a short flight of steps leads up to the liwan of an adjacent house built in order to accomodate relatives of the family. This is not in good condition and is blocked up, but even so the elevation of the west end is not without

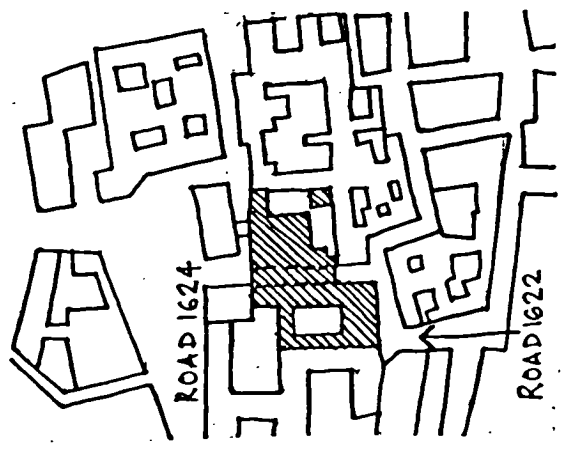
interest: see fig. 7.70. The central bay was the room and the side bays were liwans. There is no coping. Octagonal columns have square capitals and bases. There is a smaller square "sub-capital" (for want of a proper term). The corner pier is wider, having a square pilaster attached to the octagon.

The road (south) elevation is not unexpected. Generally blank panels and badgirs substitute for windows, although three small louvre panels were put into the western room when the liwan was added. At ground level there is an impressive row of twelve recessed bays with trefoil heads. Each bay has a badgir at the bottom and each badgir has a cover. The roof badgir posts above follow a different rhythm.

2.12 Al-Jalahma House

This is a Middle Period house of no great architectural quality, but it has an interesting plan and reveals clearly points about the incremental process of development. It is the house of the head man of the Jalahma clan in the eponymous firaj on Abu Maher island. The most obvious feature is the square majlis or "hathiz" at first floor surrounded by a liwan on all four sides. This was a later addition to two earlier properties (34). They were located on either side of a lane leading to the waterfront (as it was at that time). To the west was a fairly typical house with one court surrounded by accommodation on four sides. In the middle of the east side was a stairway leading to a roof terrace. On the south and west sides apartments were accessed by a balcony now more or less collapsed. There is now a fine wrought-iron grille covering the window next to the stairs: see fig. 7.74. The form of the property to the east is no longer clear, but it was probably a single-storey L-shaped house on the west and north sides of the land.

The majlis was added around 1915 or 1920. It covers the path (now Lane 1622) and is mainly situated over the eastern plot but gains its main access from the western plot: see figs. 7.72 and 73 for plans. The room in the north-east corner of this house was appropriated as a passageway from the entrance door to the staircase. Part of the roof terrace was appropriated to provide access to the majlis. At the head of the staircase one door leads to the roof terrace of the original house and one to the majlis.



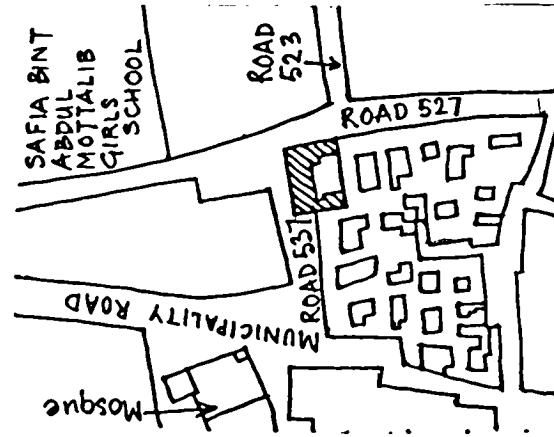
The liwan west of the majlis is located directly above the street. A private staircase leads from the south liwan to the courtyard of the eastern house. In the south-east corner is a small room three metres square which closes the end of the south and east liwans. There is a bridge over the street to the north linking to a later two storey house which provided a kitchen. The food supply came this way. The area beneath the east liwan comprises living quarters with a doorway which has carved panels: see fig. 7.75. The area beneath the majlis could only be used for storage.

The liwans have four bays and five columns. There is neither coping nor merlons nor any moulding: it is absolutely plain. There are louvred panels 1½ metres high between columns on the street (north) side. On the east side each bay is divided by two stone piers with a badgir in the centre and plain panels either side. This arrangement is 1.8 metres high. The majlis itself is 6 by 6 bays with tall fanlight windows which can function also as doors.

To approach the majlis is quite dramatic. One can see the liwan from the street, of course (fig. 7.74). One plunges into the darkness of the passageway, through the massive doorway and is guided only by the faint light filtering down the staircase at the far end. One emerges again into bright sunlight. Passing through a narrow door, a man of the time would be intrigued by the extroverted plan, with the majlis behind several outward-facing liwans. This was an innovatory concept and surely connotes a new cultural impulse (35).

2.12 Sufi House

This is perhaps the finest Late Period house in Muharrag from an architectural point of view. Ahmed Sufi was a builder (36). He built this for himself in 1935 but never lived in it: he emigrated to the mainland and the house has been rented out ever since. It is located in Al Mirri firaj. This is part of the area north of Wali-al Abd Road developed in the 1920s. Is evidence of the Western public works mentality starting to be clear in the wide straight streets? One can stand well back from this house and so the surrounding space (having an orthogonal and intellectual feeling) alters one's perception and may have modified the mason's intentions.



It is a small house, having only one courtyard and one first floor apartment: see fig. 7.76. One enters through an unremarkable main door from Street 324. The accommodation is ranged around three sides of the court. The staircase is to the left. At first floor level is a small terrace and then a dihriz, an apartment, a liwan and a terrace in that sequence. The liwan gives onto the roof terrace on the far side of the court. The two terraces are connected by a long balcony down the side of the rooms. This is very impressive: see fig. 7.78. The fretwork is more elaborate and extensive than that seen in earlier periods, although the motifs employed are not new: they can be found in window screens and roof decoration produced in earlier years. The fondness for really rich balconies seems to be a 30's phenomenon. The Bahrain Hotel in Al Khalifa Road, Manama is a splendid example of a two tier balcony using almost exactly the same fretwork design as the Sufi House. The liwan has a pair of unusual brackets made up mainly of straight lines: see fig. 7.79. The street elevations are rather fine. There is coping with large volute merlons at each corner. There are three panels per bay. For the liwan and dihriz the top panel has a recessed trefoil arch with a plain zig-zag panel below the void: see fig. 7.78. For the main apartment there are solid panels with elaborate decorative arches comprising on each side a concave arc between hipped convex arcs. This degree of elaboration in decorative arches seems to be a period characteristic. In the centre row of panels are small twin casement louvered windows. These are recessed: they rest on a flush beam. Below this is a small plain panel recessed behind the beam. The tie beam under this panel is slender. The lowest panels are solid with elaborate decorative arches (the sides of which are brought down on either side of the piers).

The left hand corner of the main elevation is chamfered with three incised symbols. The badgirs to the terrace are elaborate. The posts are topped by low pyramids. The upper panels slope up to the centre point and are coped like a pediment. The lower panels have the same decorative arch design as the other bays.

To sum up, this house shares many of the basic characteristics of the Middle Period. However, the perpendicular stress is lost. There are windows facing the street. There are

no room badgirs and no tall windows and no stained glass fanlights. Nevertheless, the orthogonal expression of structure framing a systematic arrangement of panels is carried to a new height of linguistic clarity.

3. Descriptive Accounts of Selected Features from Thirty Five Buildings

3.1. This section covers a few features from several buildings which attracted (or which were drawn to) my attention. I have put them roughly in chronological order. The locations are shown in fig. 7.1.

3.2. Transitional Period

(a) Sh. Ali bin Mohammed House in Sh. Mohammed Road

Two courtyards now remain. There are two fine doorways: see fig. 7.80. Entrance passages are L-shaped and emerge into the courtyard below a pointed arch. A ground floor apartment doorway has two rows of panels and two grooves above. Over the door is a wide rectangular incised panel surmounted by a narrow one. Left and right are square recessed panels surmounted by panels with pointed arches. A first floor room of the Middle Period has an unusual glazed light between the fanlight and door. The glazing bars made a criss-cross pattern. The majlis side elevations have five bays with pointed arches. The windows are forward of the panels above and there is a badgir between them. This is unusual - another case is the south-west apartment of Sh. Hamad House. The badgirs have horizontal shutters. They would be effective when the window shutters were closed on the windward side. The end elevation has one row of three rectangular incised panels and a narrow central panel above this.

(b) House in Lane 140

Only one apartment at first floor remains. The street elevation has five bays in the arcade style with pointed arches and three step merlons: see fig. 7.81. The short elevation faces a small roof terrace. The door is a later insertion and the original entrance was at the other end. There are fine wrought iron grilles. The two rows of plaster panels are the same width.

(c) Sh. Ibrahim House in Sh. Abdullah Road

There is a fine main door (but little else): see fig. 7.82. The round panels have "petals" surrounding them like a daisy. On the tympanum the two side panels (which take up the

line of both arch and central panel) are a little unusual, but are also found at Sh. Salman House.

3.3. Middle Period

(a) House in Lane 835, (North End)

This is an "Arcade" style house. The apartment over the main door has six bays with unusual hipped pointed arches: see fig. 7.82. To the right of the doorway is the only curved badgir I have seen in Muharraq. There is a very plain wind tower.

(b) House in Street 350

This small Arcade style house has an interesting first floor apartment. There are five bays with badgirs and trefoil heads. There are unique corner merlons. The feature of interest is the liwan elevation. The whole is recessed within a rectangular frame. There is a central stub column with two badgirs below incised plaster panels which have a zig-zag upper edge. The void has a pointed arch: see fig. 7.83.

(c) House in Road 826

This is a large house (with some Late Period additions, most obviously the external staircase). It has characteristic ground level courtyard elevations: doors are in slightly projecting equidistant bays and windows are arranged in repetitive rhythm (as at Shirawi and Mattar houses). The northern apartment at first floor has unusual internal elevations with two arch types in each upper panel. There is either a trefoil or a hipped ogee below a flattened circular arch: see fig. 7.87. This is reminiscent of the Seyadi Mosque.

(d) House in Road 835, (South End)

There is a delightful small apartment with five bays and alternate trefoil and circular heads below a cornice. Corner merlons have small balls on top, which is uncommon: see fig 7.84.

(e) House in Lane 918

This is a Middle Period Perpendicular style majlis at first floor built on Transitional Period ground level rooms. There is a main entrance typical of the period: see fig. 7.86. At first floor level, each upper panel has a trefoil arch (below the cornice beam) and a

moon and star incised motif. The main interest is the unique painted ceiling in the majlis which has several very unusual motifs, such as the sun and the cock with lucerne in its beak. The colours are very rich, deep and glowing in quality; a deep blue ground contrasts with brilliant red and orange: see fig. 7.85.

(f) House in Street 1120

This is a fine large Perpendicular style house. The majlis street elevation has trefoil arches on the badgir panel, which is uncommon. The bays are uncommonly tall. The main doorway has a hipped ogee set within the outer frame and a cavetto pediment - a simple but pleasing design. Again the perpendicular stress is very obvious. The totally plain lower storey gives the first floor a floating, remote feeling. See fig. 7.87.

(g) House in Lane 913

This house has a superb main facade and entrance doorway. Refer to fig. 7.88. It appears to be a Middle Period Smooth style house but this results from a major restoration undertaken in 1921 (AH 1339) according to the doorway inscription. This is a poem which may be translated as follows:

"Renovated on the 20th of Safar, recording and pronouncing the excellence of the owner in a good year thus I begin saying live long in it with but little misfortune."(37)

The 20th of Safar has religious significance for the Shias, but as the house was built for a Khalifa Sheikh, this is likely to be just a coincidence (38). There are bold volute merlons at each corner. There are six bays comprising a semi-circular incised panel and three rectangular panels below, all in line with a low window which has louvre shutters. The main door has a pointed arch in a rectangular panel recessed within the aedicule: there are round pilasters on either side, and fine crenellation across the top.

(h) House in Lane 932

This is ruined but is worth mentioning as it closely resembles the previous house and there are so few cases of the style. See fig. 7.88. There are seven bays each of one semi-circular decorative panel, two rectangular ones and a window below.

(i) Mosque (Road 1347)

This is a very small mosque much disfigured recently, but it has a fine little minaret: see fig. 7.92.

(j) Seyadi Mosque (Road 905)

This is undoubtedly the best - and the only really good - mosque left in Muharraq. There is a similar design at Halat an Naim which is being badly cared for. The minaret is about ten metres - a plain needle with no balcony. The gateway is comparatively new - perhaps around 1955, as a photograph of 1950 exists which shows an older gateway (39). Nonetheless it is a most accomplished design. There is a seven bay portico of timber with slender octagonal tapered columns (40). The brackets create the form of a pointed arch, and there is a panelled timber cornice. The end bays of the portico have nesting niches, so to speak - a trefoil arch within a pointed arch within a flat arch with hipped round corners. The wall of the prayer hall has pointed arches which echo the arch form made by the column brackets.

This creates good townscape. The interplay between the minaret "needle"; the captured volume of the portico; the mosque courtyard; the house majlis looming over it; and the narrow streets which approach this, creates several superb effects.

The original foundation was about 1865 but this building dates from 1910 or thereabouts the client being Mohammed Jassim Seyadi (41). Refer to figs. 7.89 and 7.92.

(k) Yusef bin Yusef Fakhroo House, Wali-al-Ahd Road

This is a large and fine house similar (from an architectural standpoint) to the Shirawi House; in other words, it is mostly in the "Arcade Style". There are two courtyards. When I visited the house, a very aged couple were living in the north-east apartment. One had a rare glimpse of the old lifestyle. This apartment has a fine interior. There is a groove over the windows, then a rectangular incised panel and then an unusual but graceful panel - an ogee trefoil. There is a fine semi-circular liwan arch. At the rear is a second liwan added later: it has no arch and is not rendered. From the terrace the staircase lower flight projects into the courtyard.

The south-eastern apartment (next to the road) is in the Perpendicular manner, but with no fanlights. The upper panels have trefoils. The liwan is on stanchions and a cast iron joist is revealed supporting the terrace. The liwan has a flat arch with a flush bracket and a recessed second bracket below it. The south-western apartment is in the Arcade style and has a simple but pleasant interior. See fig 7.93.

There are semi-circular panels over the windows and room badgirs.

The main door has an unusual brass knocker incorporating a moon motif (42).

(1) Jalahma Houses (Roads 1624 and 1622)

There is a multifoil arch over a doorway, which closes a vista down an alleyway. Another house belonging to this clan has a liwan on the long side of the upper apartment. It has four semi-circular arches (in rectangular frames) resting on rectangular capitals and round columns. The liwan sides have two trefoil arches recessed in rectangular frames: see figures 7.94 and 7.99. The detailing is very stylish.

3.4 Late Period Buildings

(a) Sh. Abdullah House at corner of Sh. Khalifa Road and Airport Road

There are two rows of panels over the windows, having inset trefoils and semi-circular arches. Low flat-headed windows (with louver shutters) alternate with flat panels which have small clerestories. There is a parapet in which farsh panels alternate with louver panels. The best thing about the house is the doorway: see fig. 7.95 (43). The aedicule is a round pilaster on either side, supporting a plain cornice and coping. Within this is a bold ovolo moulding with a cavetto on either side. The architrave is decorated with foliage and curlicues. Across the top are four rows of carved muqarnas. Each door has tacked decoration forming a panel with curlicues and foliage at the top. For the elevation refer to fig. 7.87.

(b) Mosque (Building 341) in Sh. Khalifa bin Mohammed Avenue

This has a doorway typical of the Late period, with ovolo, astragal and cavetto mouldings inside the outer frame. There is a cornice. Note the plaster balustrade which is typical of the period: See fig. 7.96

(c) House in Khalifa Road

This is a large Late Period house. It has lost much of the stylistic vigour of the Middle Period: see fig. 7.96. The mashrabiya is typical of the Late Period, with five louver panels between frame posts.

(d) House in Lane 911 (Western End)

Above the majlis door of this small Late Period house is an unusual decorative panel. Left and right are pendulum clock motifs standing at 20 minutes past 10. Above a central incised panel is a complex recessed panel topped by foliage and a hipped ogee arch. Over this are two roundels linked by an arc. See fig. 7.85.

(e) Sheikh Ali House, Sh. Abdullah Road

This is arranged around one large court and a small visitors' court. There is a corner apartment at first floor in an L-shape with a liwan on both sides, which is not common. There are unusual corner merlons: see fig. 7.97. Another feature is a mashrabiya accessed from the apartment.

The privy remains completely undamaged, and is the only one I found. The Visitors' court has a typical Late period rectilinear feeling - there are no arch motifs at all. This seems to be a subdivision of the Late period - there are a number of similar very small houses of the late 1930s and 1940s still extant. This style translated very directly into reinforced concrete - it has a very modernist quality.

(f) House in Street 914

This is adjacent to the Seyadi House. Over the door is an inscription (mentioned in Chapter 5). There are high level badgirs in rooms (an unusual innovation), presumably to remove hot air accumulating near the ceiling. The parapet and coping steps down the facade at one point. To the right of the door the lower panel at first floor is flush but elsewhere (above and below), the piers are expressed. This extends the vocabulary of visual possibilities. See fig. 7.83.

(g) House in Lane 911 (Eastern End)

The roof has a parapet wall with hipped ogee arches and coping. There are upper panels with trefoils in the normal way, so the double row of panels stress the perpendicular quality. The liwan is marked by a wider pier except at parapet level, where the adjacent panels are wider. The liwan end has a boarded timber screen fretted in a floral design. See fig. 7.98.

(h) Building in Sh. Isa Road (Steeshan Area)

This terminates a view northwards down the road. A vegetable market occurred around here - the area is known as Steeshan i.e. bus station from the villages. There is a long mashrabiya wrapping around two sides of the building, (including the liwan). The parapet badgir posts are topped by pyramids - a typical Late period feature. See fig. 7.99.

(i) House in Lane 1421

This house has a wind tower with interesting brackets and an incised cornice decoration which is typical of the period. See fig. 7.99.

(j) House in Road No. 3 (Abdur Rahman Al Fadh1 Road)

This is now demolished. There was a fine doorway with a large fanlight of iron bars. The outer and intermediate frames had trefoil edges. In the spandrels were "spade" motif panels (probably unique, but unfortunately decayed when I saw them). There was a "scales" motif between them. Pendulum clock motifs are on the aedicule. See fig. 7.100. Inside there are archivolt friezes over the doors; see fig. 7.101.

(k) House in Sh. Isa Road

There are interesting high level niches around a ground floor room. Each niche has a round panel in the middle and a pentagon star in each corner. The wall between niches is decorated with a characteristic Shia motif - a six pointed cross with dots in the segments. There are also "droplets" left and right and semicircles top and bottom. Decoration was incised in situ. See fig. 7.100.

(l) House in Road 1630

This house has brackets in the two bottom corners of the liwan voids as well as the top corners: see fig. 7.100. The door has a triple lotus leaf motif on either side at the bottom of the ovolo moulding. This is decorated with incised lines both parallel and zig-zag. It was a passing fashion seen mainly in Manama.

(m) House in Sh. Isa Road

This house has a typical late period arrangement with a small mashrabiya above the door: see fig. 7.101.

(n) House in Sh. Isa Road

This single storey house has a fine and unusual doorway: see fig. 7.95. There is a fanlight over the door (half the door width). Each spandrel has a lion in the Qajar style. There are six small panels with trefoils below the coping and two panels (one above the other) on either side of the door. The upper panel has a hipped ogee and the lower a round arch (44). Window fanlights are a late period type more common in Al Awadiyyah than Al Muharaq: see chapter 4 for all fanlights. Behind is an earlier structure with another type of fanlight.

(o) House at Corner of Sh. Isa Road and Lane No. 1401

This late period house has four features of note. There are square windows over the fanlights (where one would expect to find a farsh panel. These are divided into nine by nine (that is, eighty-one) panes with multi-coloured glass: see fig. 7.83. There are such windows in Manama houses.

Between apartments there is a liwan with complex arrangement of three badgirs below two farsh panels which have a central column. There is a void above the panels with a mangrove pole tie and two brackets. See fig. 7.102. The main door (fig. 7.99) is reminiscent of the Khalaf House (in Manama). It is very mannered. Instead of a decorative arch intrados there are two bracket-like sections interrupted by a central window. The usual rectangular masonry aedicule is chamfered. The architrave is carved with zig-zag and sawtooth motifs.

(p) House in Lane 1136

This Late period house has a flat arch with one central cusp, which is probably unique. See fig. 102.

(q) Malik House, Road 1349

My informant suggests this house was connected by a bridge to Sh. Hamed House prior to the construction of the adjacent Obaidah Boys' School in the 1940s, and functioned as the main majlis for a time (45).

The main doorway of this Late period house stands at a road intersection and faces down the street. It is an impressive marker. There is a square window and large fanlight above the door. The fanlight has radial iron bars. There are incised plaster panels in a "double fish" shape in the spandrels. Above this are four recessed panels with a double oval incised panel on each. This is most unusual. Left and right are round pilasters running the full height. A tall, soaring effect is achieved. The door to the majlis (at ground floor) from the courtyard has carved panels in the form of stylised lilies. The architrave has barleysugar, sawtooth, zig-zag and foliage motifs. Refer to figs. 7.100 and 7.102.

CHAPTER SEVEN : FOOTNOTES

- (1) According to Sheikh Khalifa bin Abdullab. Dates from RUMAIHI (1976)
- (2) The designation of rooms are my own, but they seem logical e.g. majlis accessed from entrance court.
- (3) This can be inferred from the 1951 aerial photograph.
- (4) Detailed drawings of these grilles are included in Chapter 4.
- (5) Screen designs are given in Chapter 4.
- (6) Date given by HARDY-GUILBERT and LALANDE page 96.
- (7) See HARDY-GUILBERT and LALANDE (1981). The dates given here to different parts of the house are my guesses based on comparison with other houses and with overall dating framework proposed in Chapter 5. The uses of rooms are given by Hardy-Guilbert and Lalande.
- (8) HARDY-GUILBERT and LALANDE (1981). See page 96.
- (9) The old photographs are given in HARDY-GUILBERT and LALANDE. Op cit.
- (10) Refer to LEWCOCK (undated). Page 21.
- (11) See Al NABHAN (1923) chronicle which gives dates of Sh. Abdullah and states Isa built it for him. I discuss the dating in Chapter 5, section 3.
- (12) This was told to me by Hakim Malik and his brother.

- (13) This is conjecture. It is reasonable to suppose the lost court with a door facing down Sh. Hamad Road (see fig 7.30) was the entrance court. The court which accesses the Sheikh's apartment would probably be the private court.
- (14) Assumption based on popular reputation and evident magnificence.
- (15) See Chapter 5, section 3 - Al NARHAN (1923) says that Isa built it for his son. Given Hamad's dates, this suggests construction around 1880 of the Sheikh's room and all ground floor rooms (i.e. Transitional Style as defined in Chapter 5.)
- (16) Found in the Government Report 1926-35, India Office Records and Library.
- (17) The translation given in fig. 7.31 was attempted at my prompting by Khalid Janahi.
- (18) The owner of the house (who still lived there in 1983 but left soon after) Sheikh Khalifa al Khalifa told me this (including the date).
- (19) There is a photograph of a similar room (also without incised plaster friezes) in BENT (1900), Chapter 3, which was taken in 1889. This was Sh. Saba's House at Rifa'a.
- (20) My informant was Hassan Abdullah Seyadi, whom I met in the family business majlis in Tijjar Road. He checked the points with his relations who were also present. They thought a Said Jassim had also worked on it - perhaps the same man who worked on Sh. Abdullah bin Moh. House. A junior assistant mason was said to be Salman Sakran, who was still alive in 1983, although he was an old man and too ill to meet me. He had originally lived in Al Hayayik and still lived there in 1983.

(21) LEWCOCK and FREETH (1978) Chapter 6 contains several interesting comments on door design. The central post resembles many in Bushire. The panelling could be European in inspiration (Lewcock argues) via the European "factories" in the Gulf.

(22) However, the Political Agent could procure 20ft. chandel poles for the new Agency building in 1901, but his estimates shew how expensive they were. Also his roof sagged badly. See India Office Records File R/15/2/52:(3/1).

(23) There are similar nineteenth century examples of woodwork in Persian towns, such as Kashan and Mahan. See HUTT A and HARROW L (1978) Volume 2, plates 75 and 144.

(24) My informant was Rashid Fakhroo. The mason was Musa bin Hamad (who subsequently worked on the Mattar buildings). It looks to me however, as if the Head Man's apartment, the second son's apartment and the "Ghurfa al Babriya" were built later than 1905. I would argue this on stylistic grounds - see Chapter 5. It suggests that the western third of the house was a later phase.

(25) According to Rashid Fakhroo this court was used as the majlis until the Ghurfa al Bayriya was built.

(26) This change in terrace level also occurs between the apartments of the second and fourth eldest sons. It supports my hypothesis about a distinct later phase: (see note 24.)

(27) That is, a majlis overlooking the sea, used for receiving male guests and as a guest house for important visitors.

(28) This resembles the Mattar shop/apartment buildings in the Suq - see Chapter 8. This would suggest a similar date perhaps around 1930.

(29) My informants were Yusuf and Mohammed Mattar. They could not recall the original uses of the rooms. There are interesting general insights in the correspondence between the Mattar family at this time and the Political Agent on file R/15/2/1938 (India Office Records and Library).

(30) Again my informants were Yusuf and Mohammed Mattar.

(31) I have no information on this house. The main door appears to be late "Transitional Period". The low windows suggest an early date in the Middle Period. However, the doors at ground level are like those in the Mattar House. Perhaps they were added later as modifications - in the 1920s, when the western addition was made.

(32) This was pointed out by Khalid Engineer. The term is also discussed in ORAIFI (1978).

(33) This is based on its similarity to the Jalahma House for which an informant gave me dates.

(34) My informant here was Mariam al Jalahma. The "hathiz" was used for gatherings of the extended family, she said.

(35) LEWCOCK and FREETH (1978) page 32 suggests a European inspiration - the veranda of Portugal disseminated by colonialists. The arrival of the Agent in 1900 may have been the starting point.

(36) My informant was Yusef Abdullah who had lived near the house all his life and saw it being built. He had been a building worker.

(37) Ahmed al Jowder made the translation for me.

(38) According to Ahmed al Jowder.

(39) In the collection of the Department of Heritage, Manama.

(40) WARREN and FETHI (1992) page 32 suggests the timber colonnade is a Mesopotamian (latterly Iraqi) feature and not a Persian feature. Yet one recalls the Chihul Sutun at Ispahan.

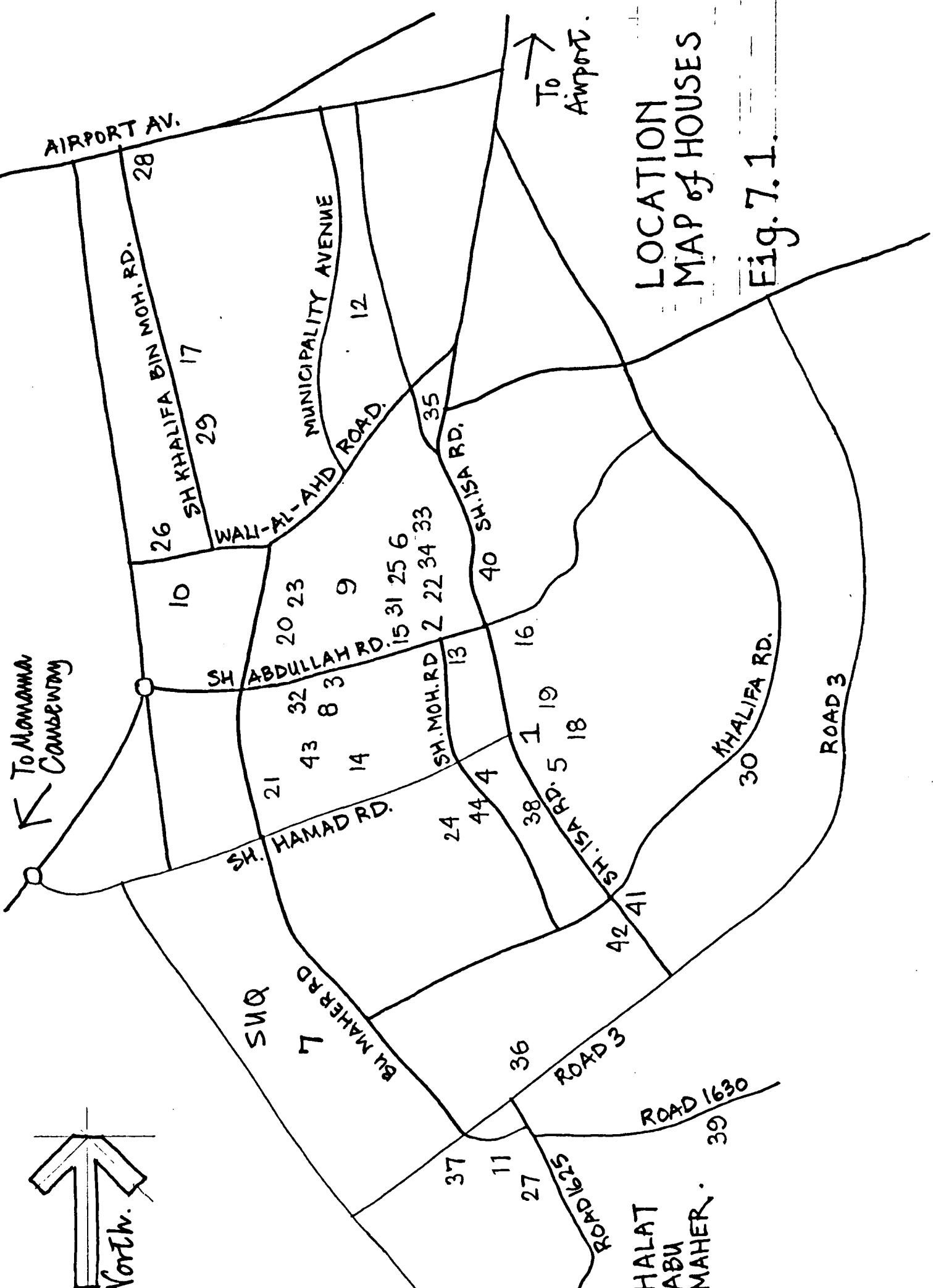
(41) My informant here was Hassan Abdullah Seyadi (but the date which he suggested seems too early in my opinion).

(42) WARREN and FETHI (1982) pages 146-7 have drawings of very similar knockers. Apparently they were common in Baghdad (but may have been imported?).

(43) LEWCOCK and FREETH (1978) Chapter 6 is relevant. They say the rows of muqarnas carving above doors is an essentially Bushiri feature. See page 38.

(44) The curvilinear timber beading resembles closely doors illustrated in LEWCOCK and FREETH (1978) page 95 and WARREN and FETHI (1982) pages 50, 130 and 179. This is attributed to Turkish influence (channelled here via Baghdad presumably).

(45) See footnote 12.

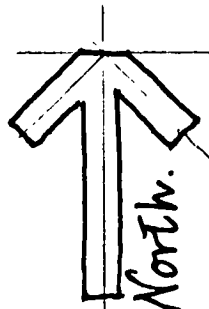


LOCATION
MAP OF HOUSES

Fig. 7.1.

To MOMAMMA
CAMPBENTWY

To
Airport.



HALAT
ABU
MAHER.

SH SALMAN HOUSE - GROUND FL

SHEIKH ISA ROAD

Main entrance

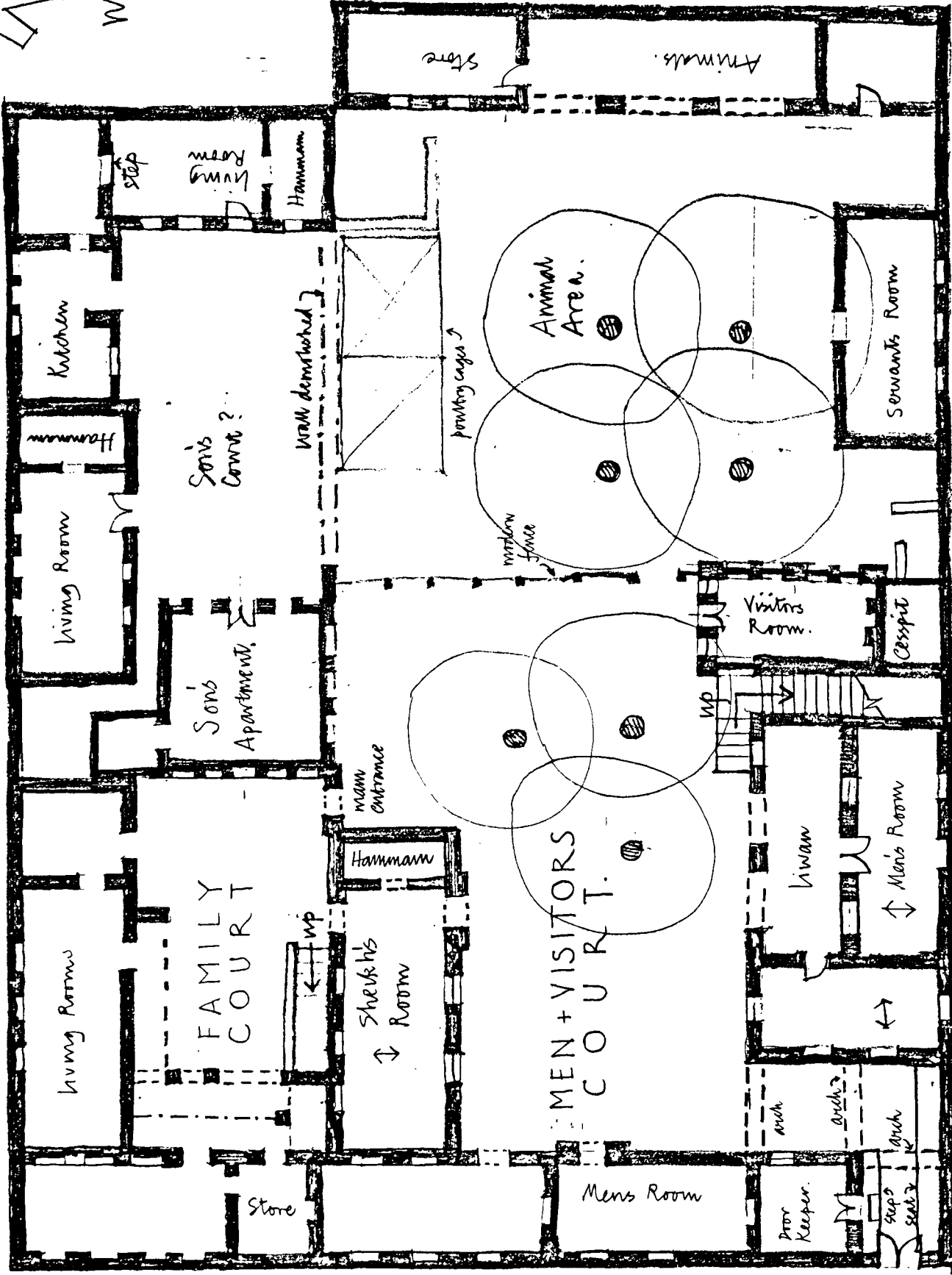
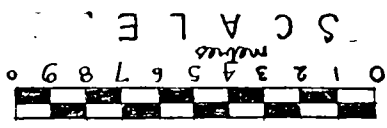
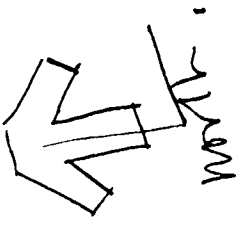


Figure 7.2

SECTION X-X

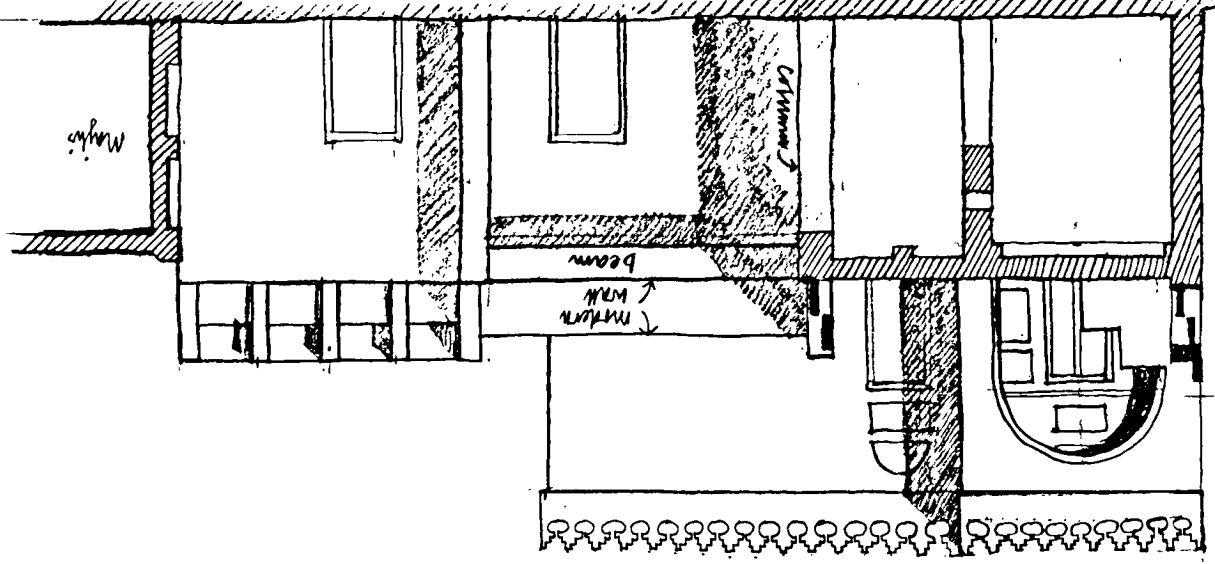
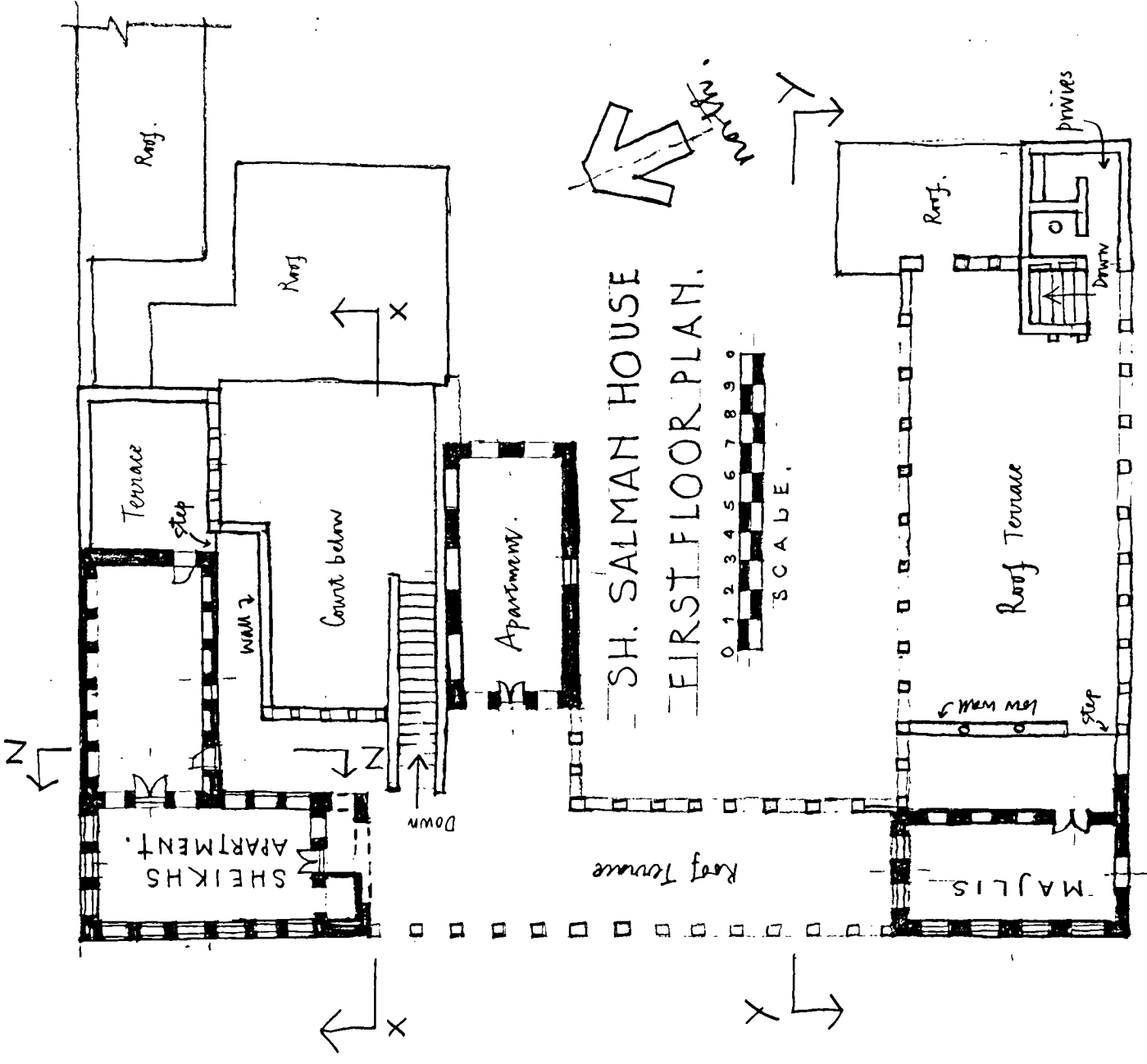
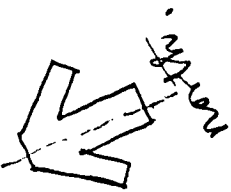
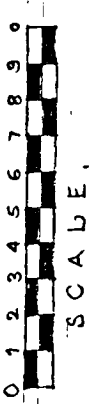


Fig 7.3.



SH. SALMAN HOUSE
FIRST FLOOR PLAN.



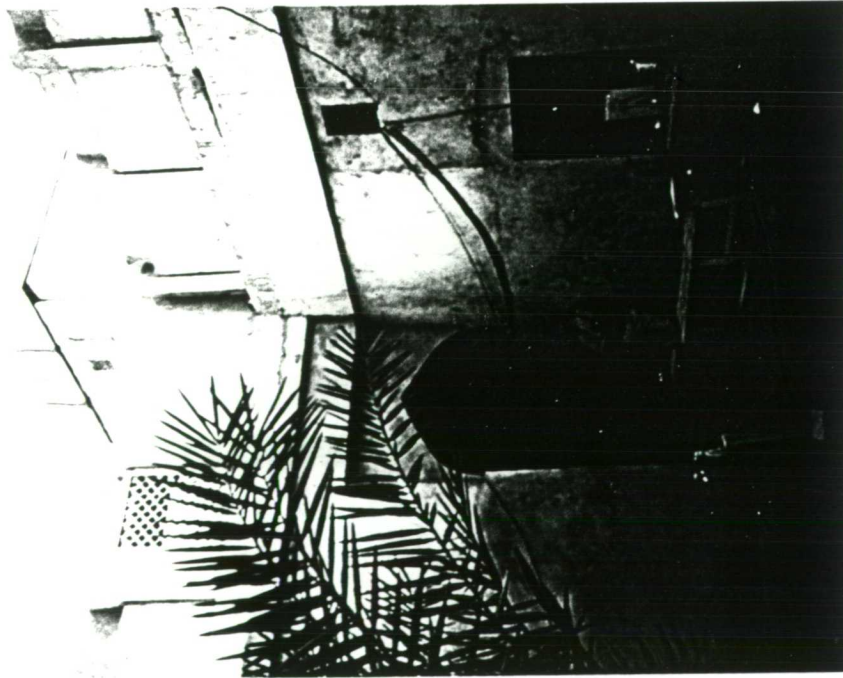


Fig. 7.4(A) Sheikh Salman House. View into south-west corner of Entrance or Men's Courtyard. The majlis can be seen at first floor level. The passage leads to the main street doorway.



Fig. 7.4(B) Sheikh Salman House. View of the liwan on the Entrance Courtyard. The staircase leads up to the roof terrace accessing the majlis.

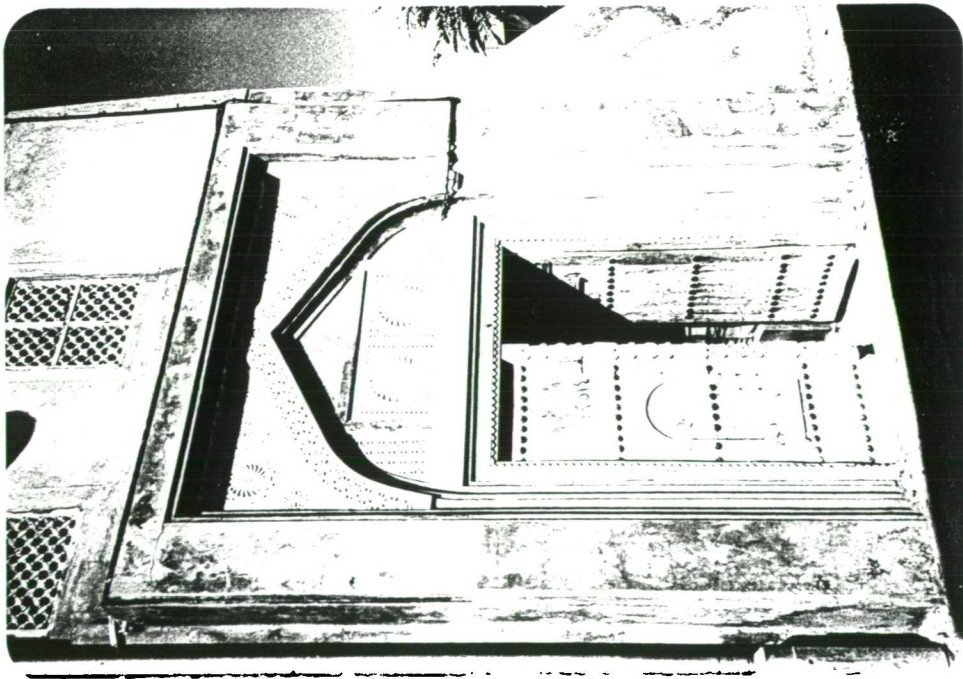


Fig. 7.4(C) Sheikh Salman House. Main doorway from Sheikh Isa Road. The plasterwork has been restored recently. The majlis window screening can be seen at the top of the photograph.

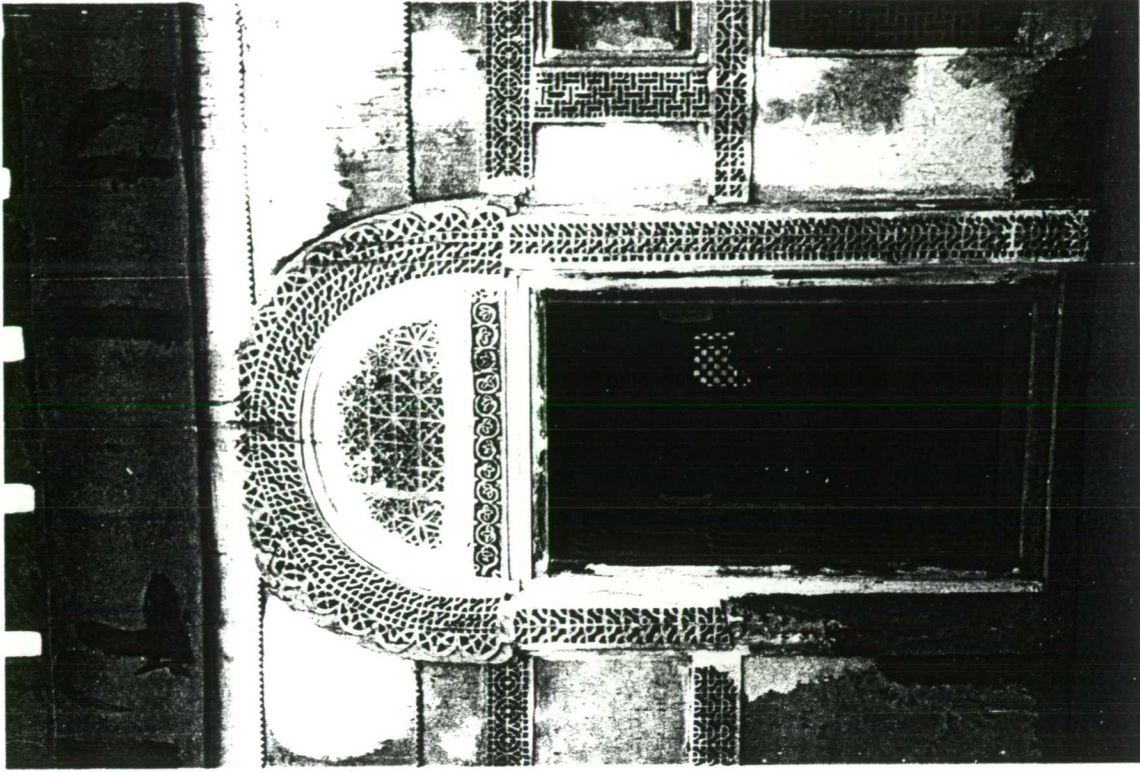


Fig. 7.4(D) Sheikh Salman House - detail of entrance door to majlis.

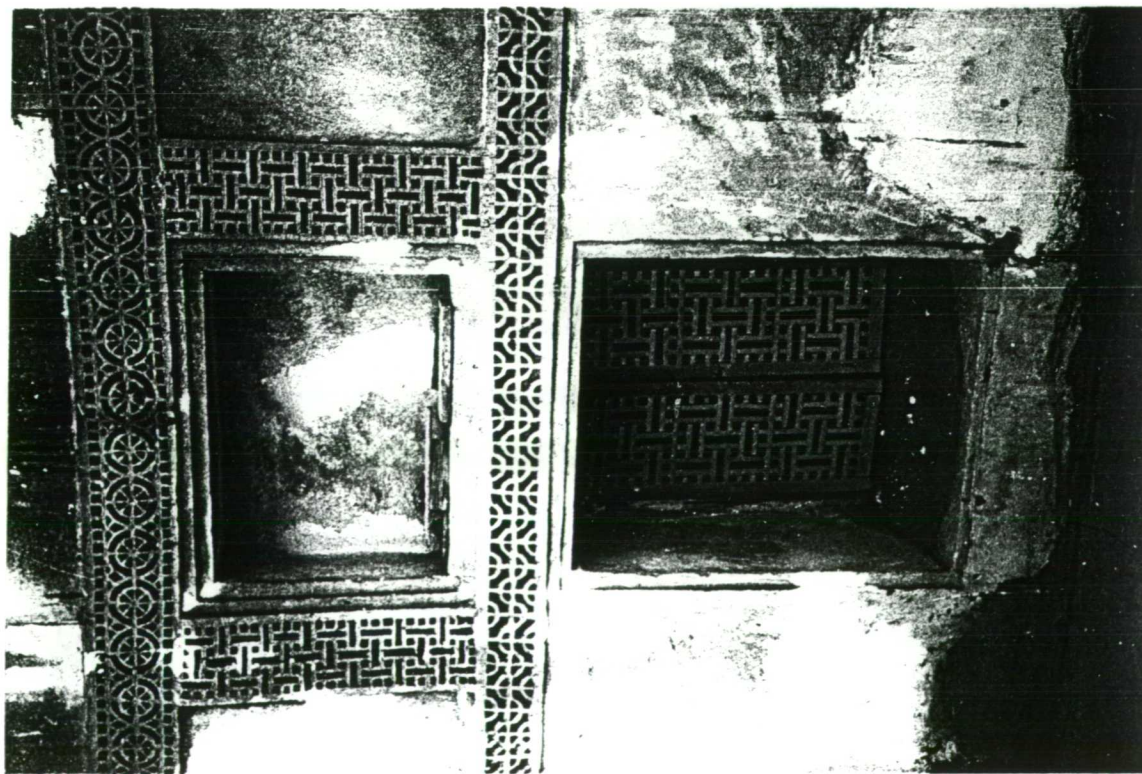


Fig. 7.4(E) Sheikh Salman House - Majlis. Detail of window (showing screen) and niche above.

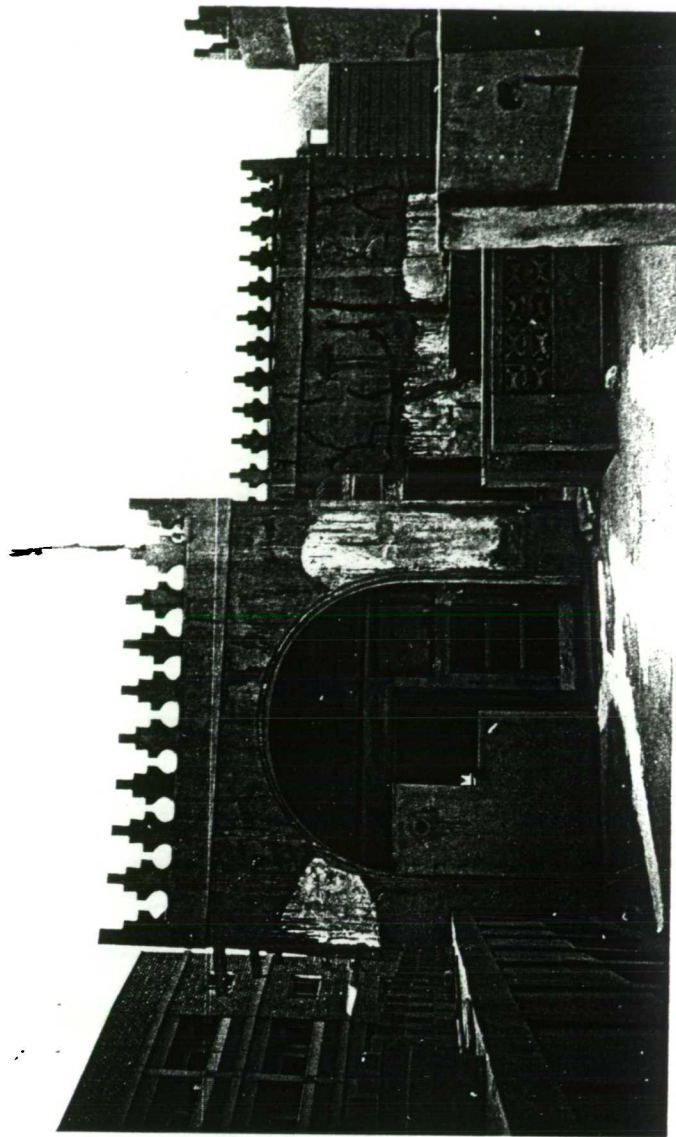
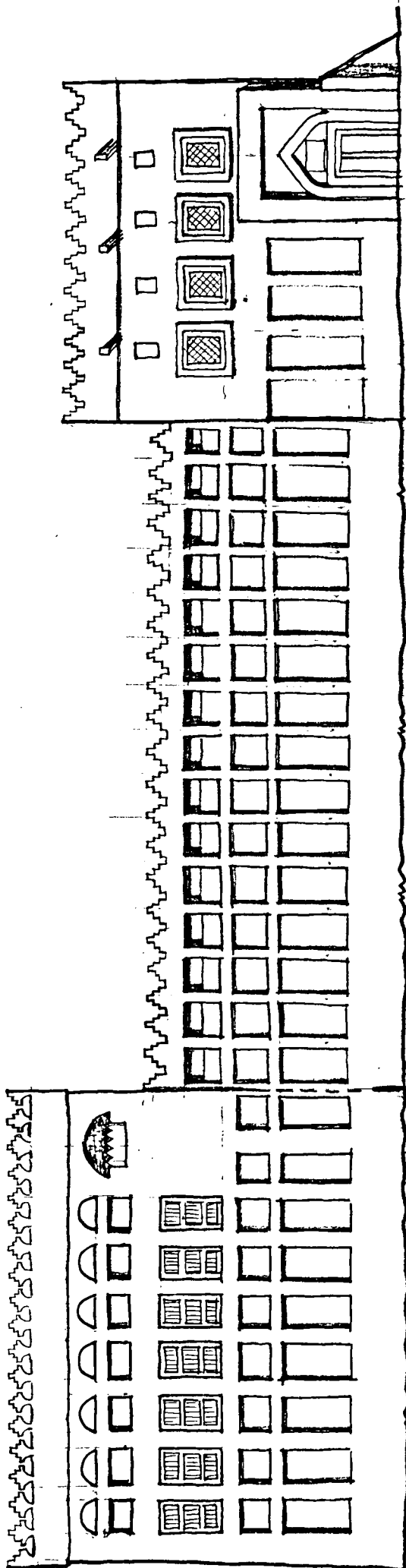


Fig. 7.4(F) Sheikh Salman House: Sheikh's Apartment. Southern elevation showing liwan viewed from the roof terrace.

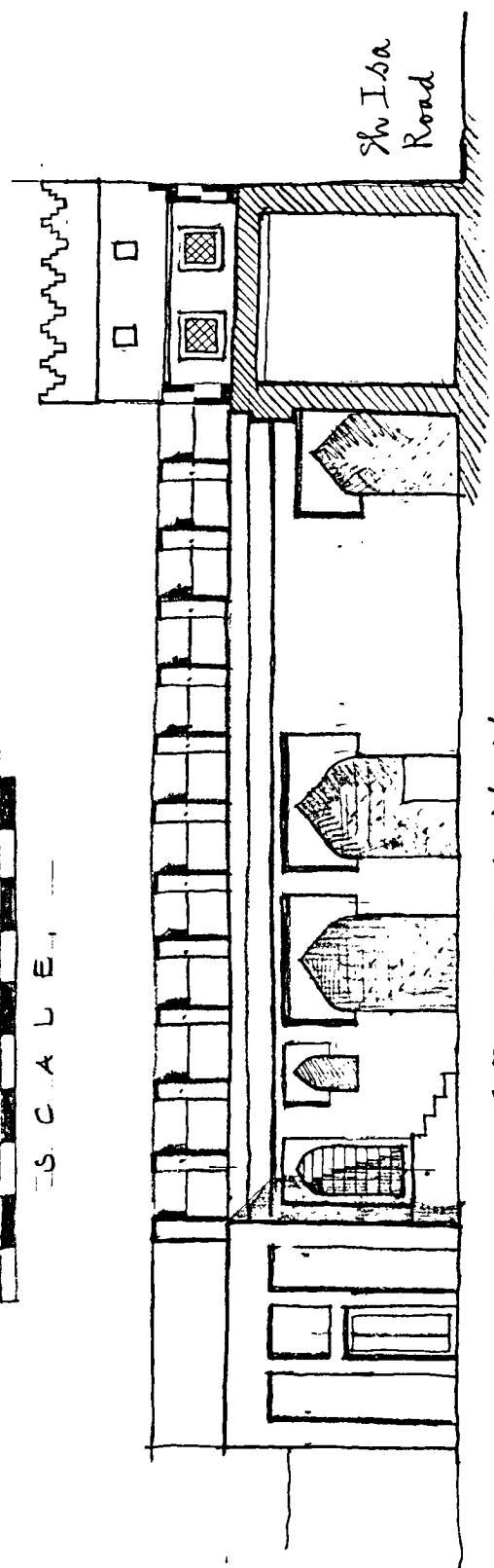


ELEVATION TO SH ISA ROAD

SH SALMAN HOUSE.



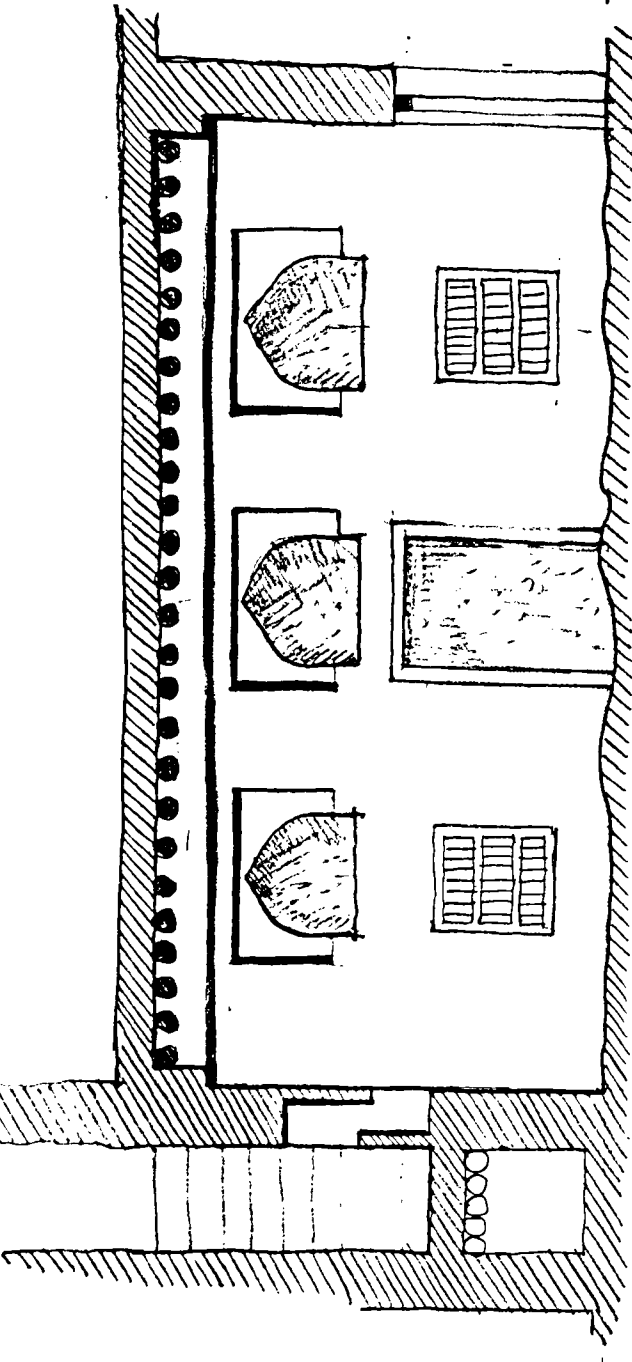
SCALE



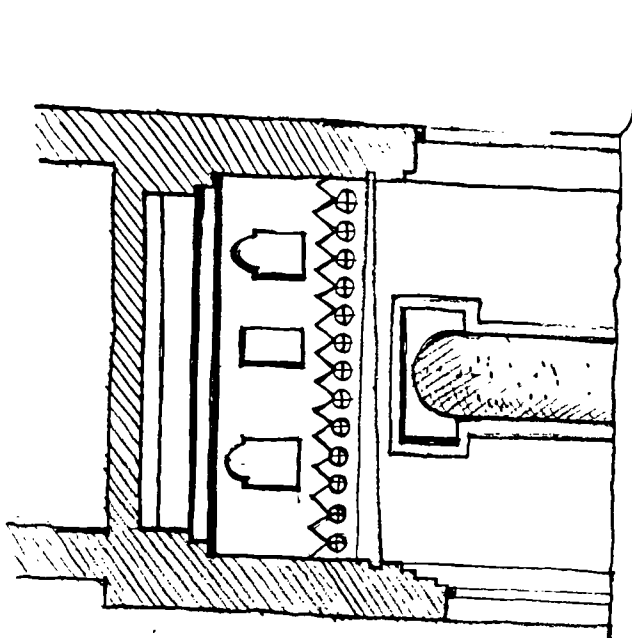
Sh Isa Road

SECTION Y-Y

Figure 7.5.

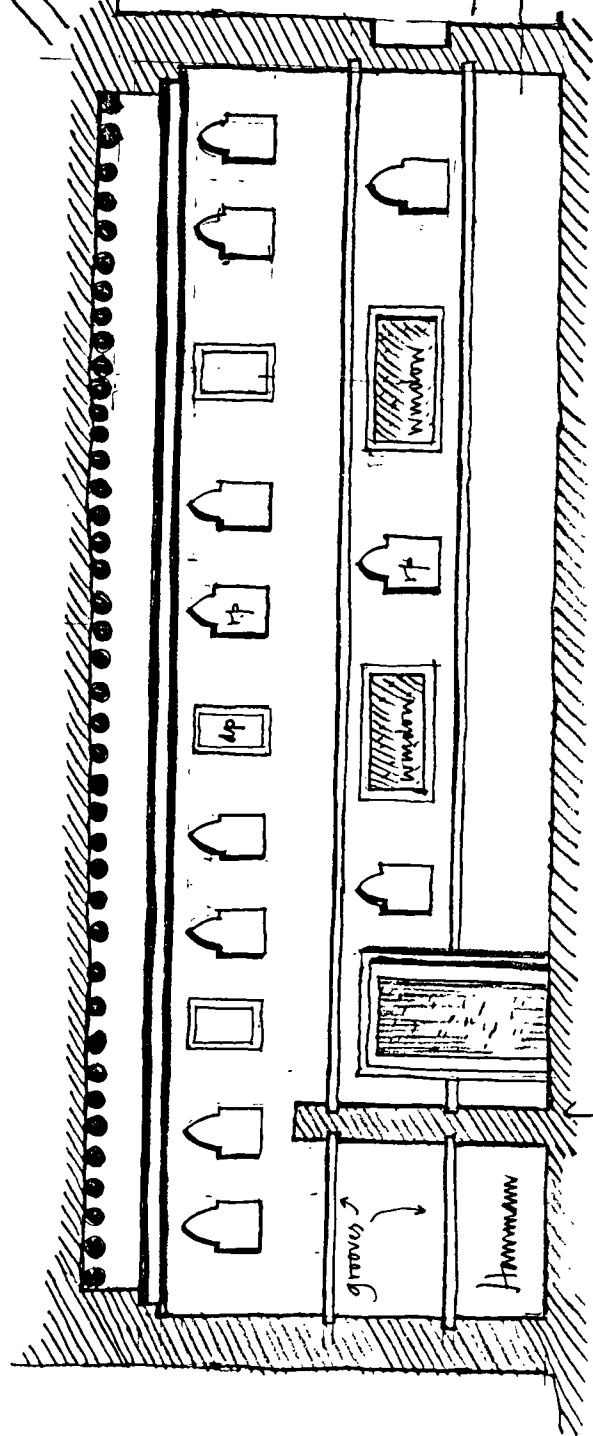


BACK ELEVATION OF G F LIWAN



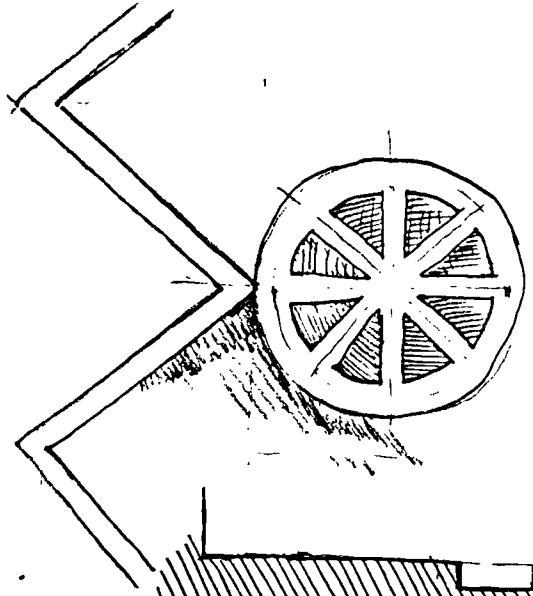
ELEVATION OF HAMMAM SCREEN

SH. SALMAN GROUND FLOOR ROOMS.



Hammam Screen

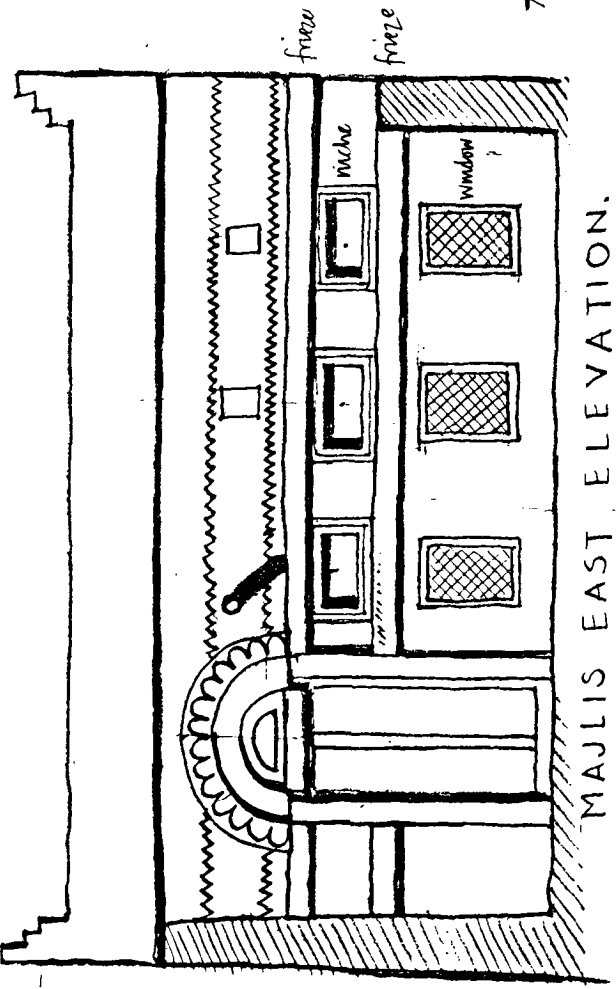
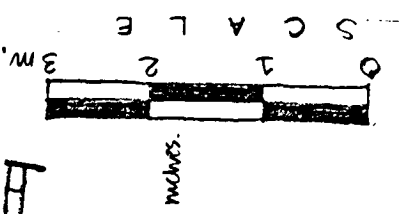
SHEIKH'S ROOM INTERIOR ELEVATION



CRENELLATION

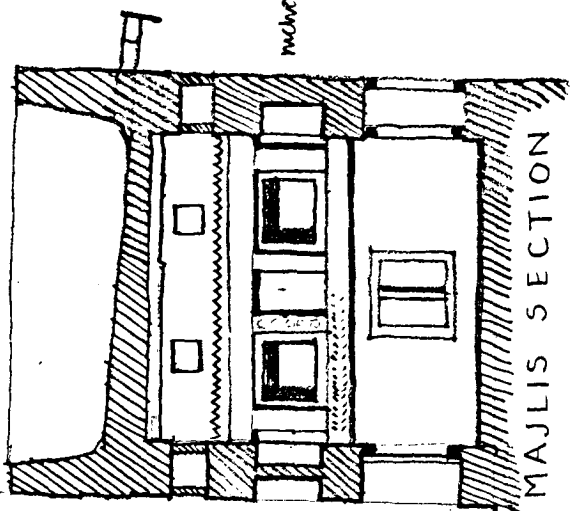
Figure 7.6.

Figure 7.7.



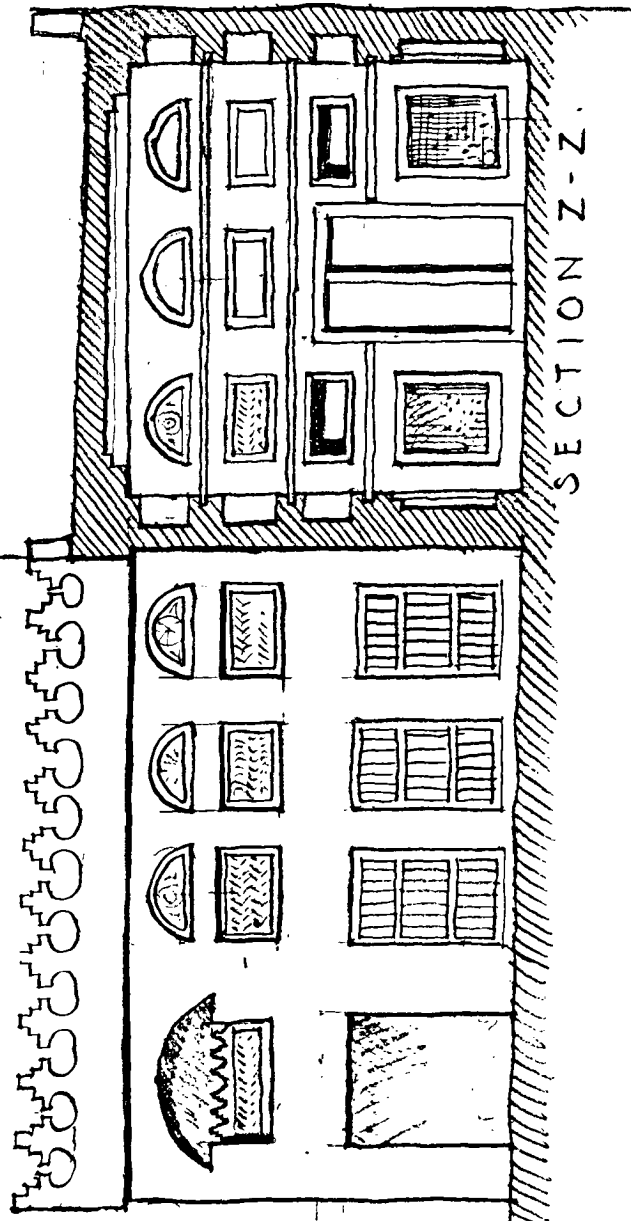
MAJLIS EAST ELEVATION.

MAJLIS DOOR
HEAD FRIEZE

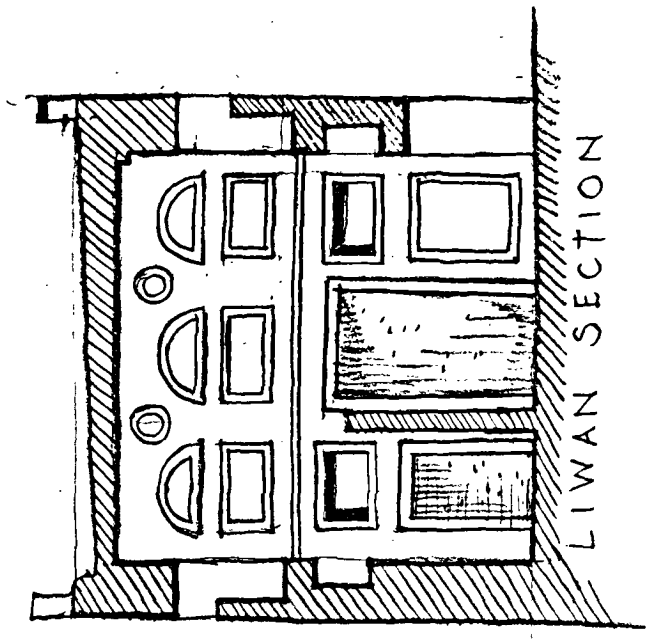


MAJLIS SECTION

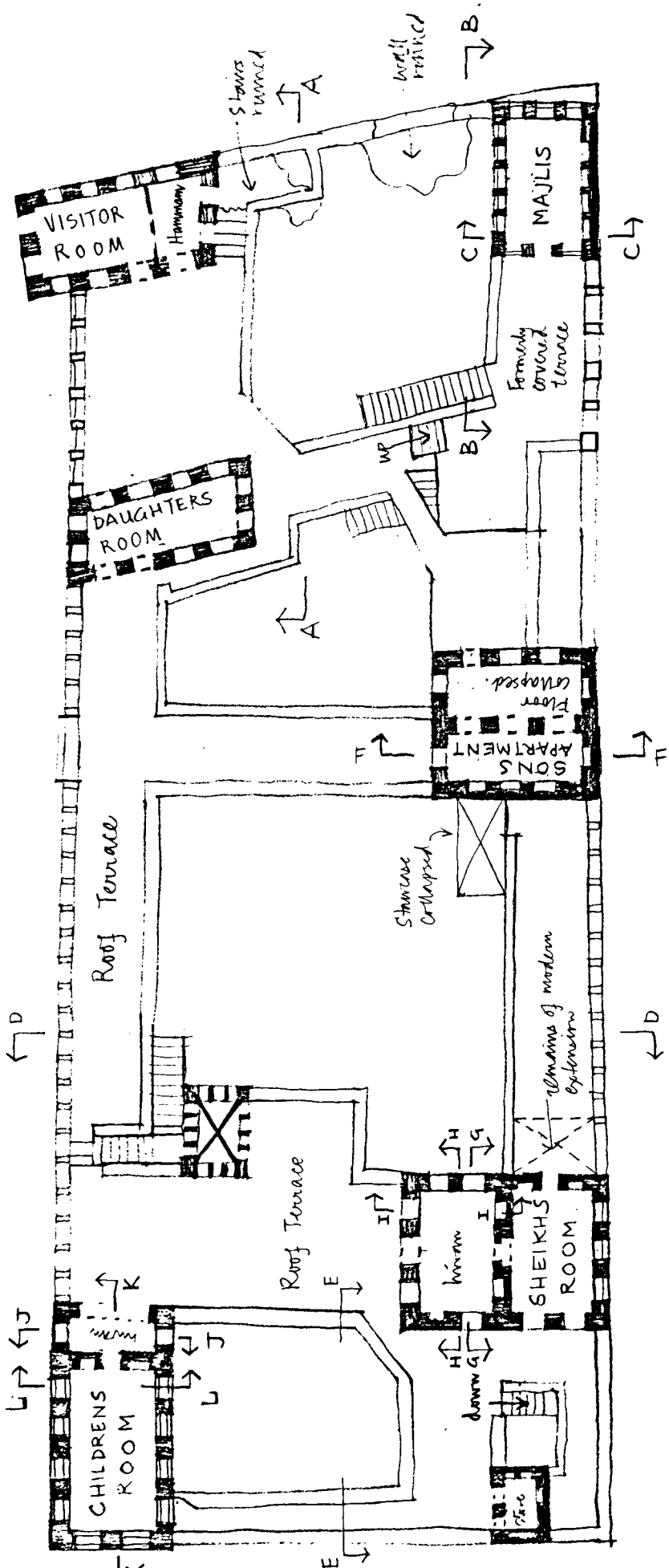
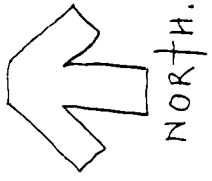
SH SALMAN-FIRST
FLOOR ROOMS.



SECTION Z-Z.



LIWAN SECTION



SH ISA HOUSE - FIRST FLOOR PLAN.

Figure 7.9.



Fig. 7.10(B) Sheikh Isa House: Visitors' Courtyard. View of majlis at first floor and liwan below.

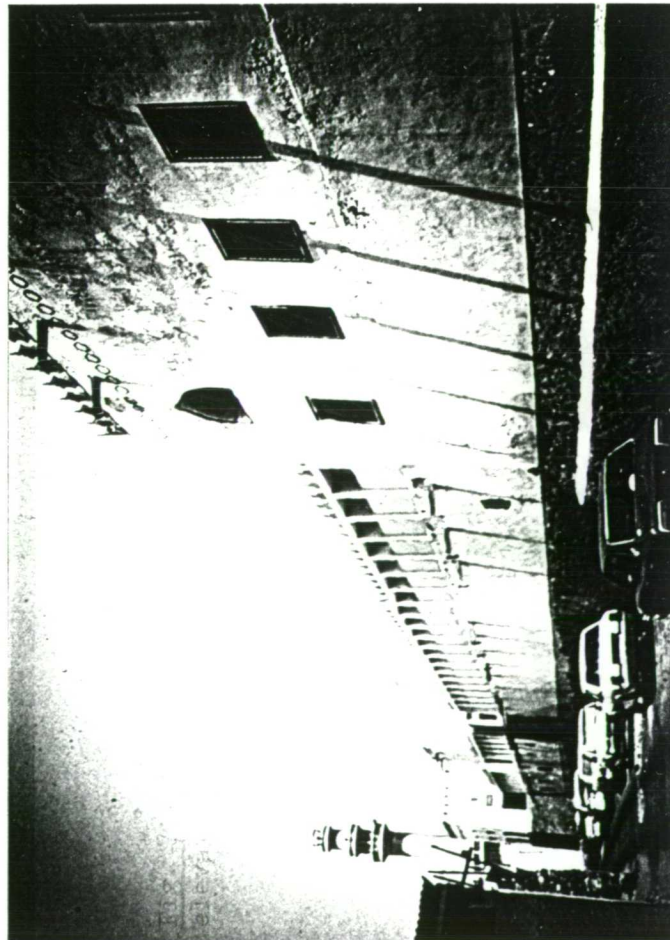


Fig. 7.10(A) Sheikh Isa House: view of northern elevation. Chlidrens Apartment is on the right.

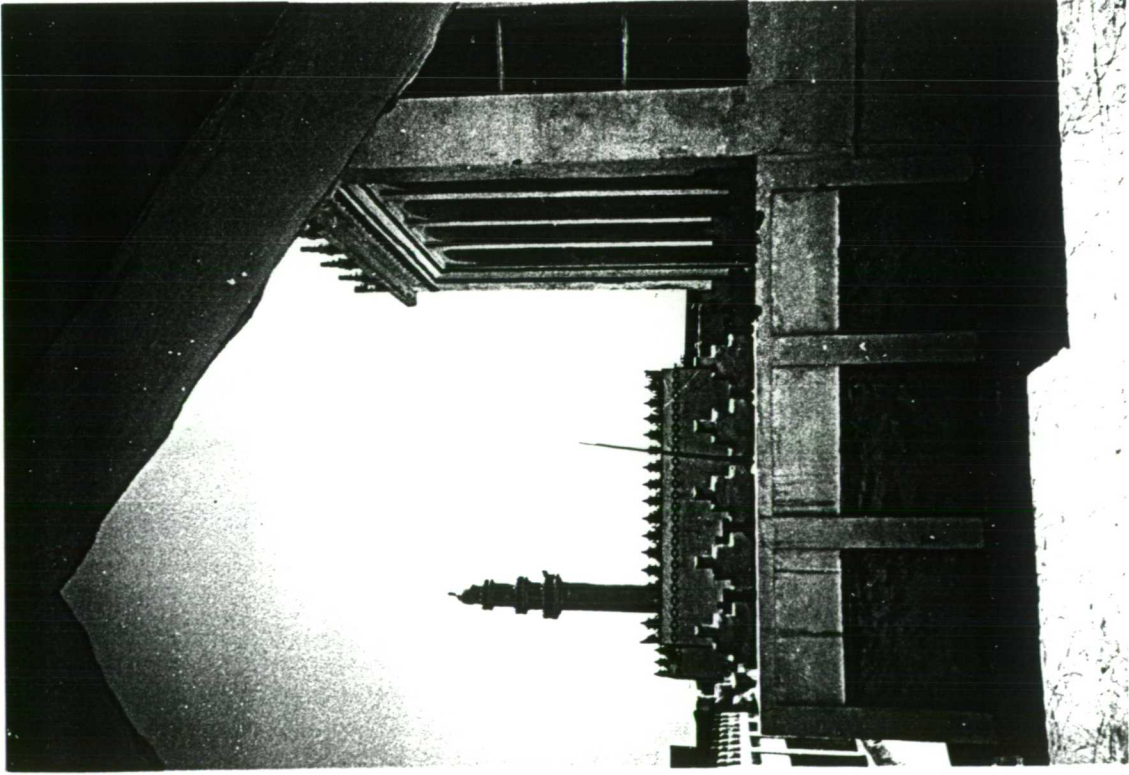


Fig. 7.10(C) Sheikh Isa House. View from the Childrens liwan, with the Wind Tower on the right.

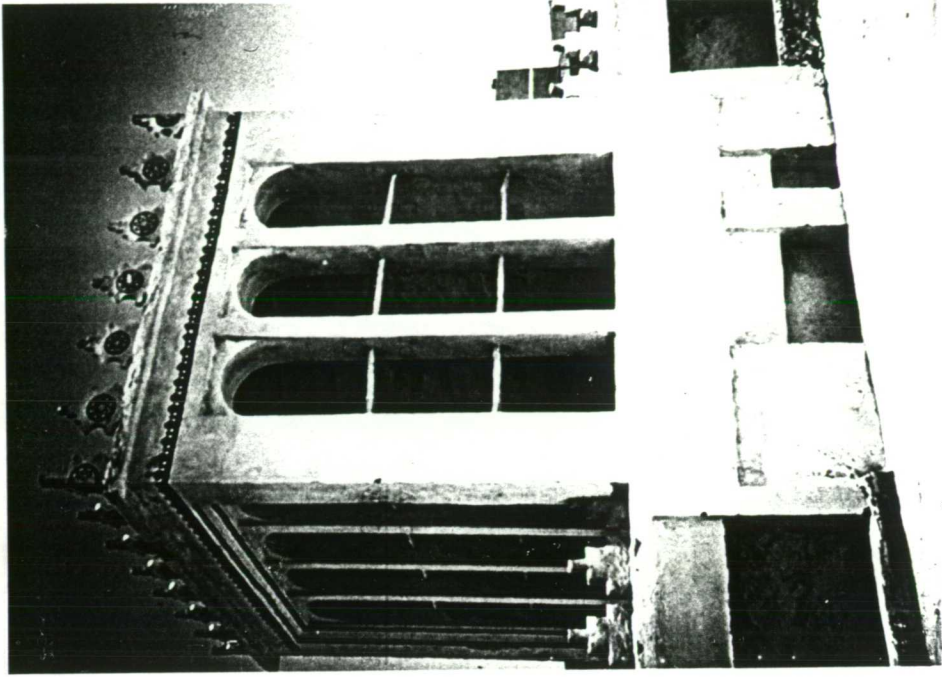


Fig. 7.10(D) Sheikh Isa House: Windtower, west elevation viewed from the adjacent roof terrace.

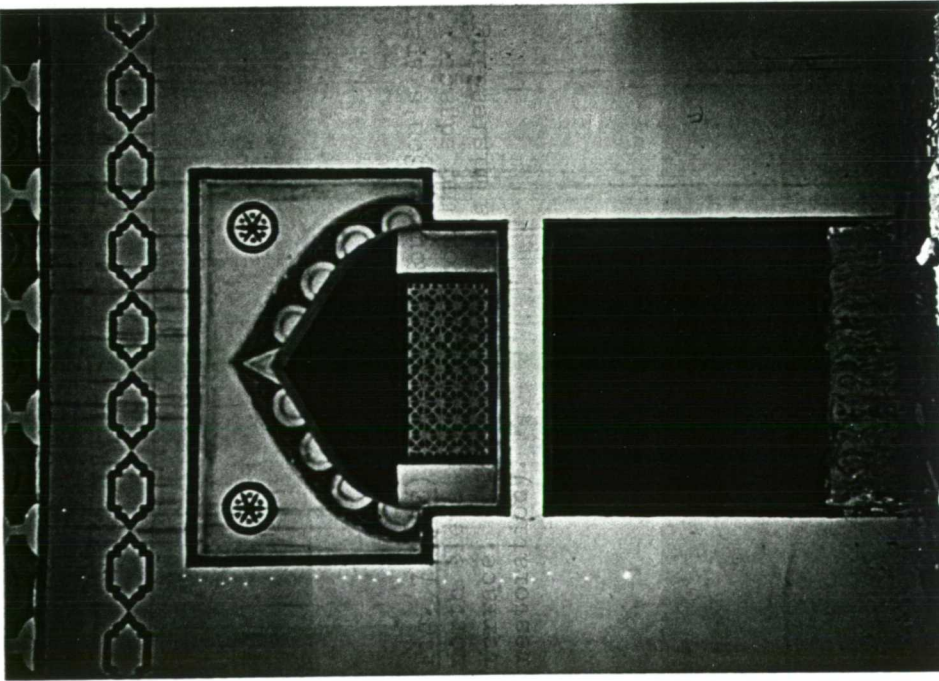


Fig. 7.10(E) Sheikh Isa House: Son's Apartment,
north elevation viewed from the adjacent roof
terrace. (This is probably a misleading
restoration).

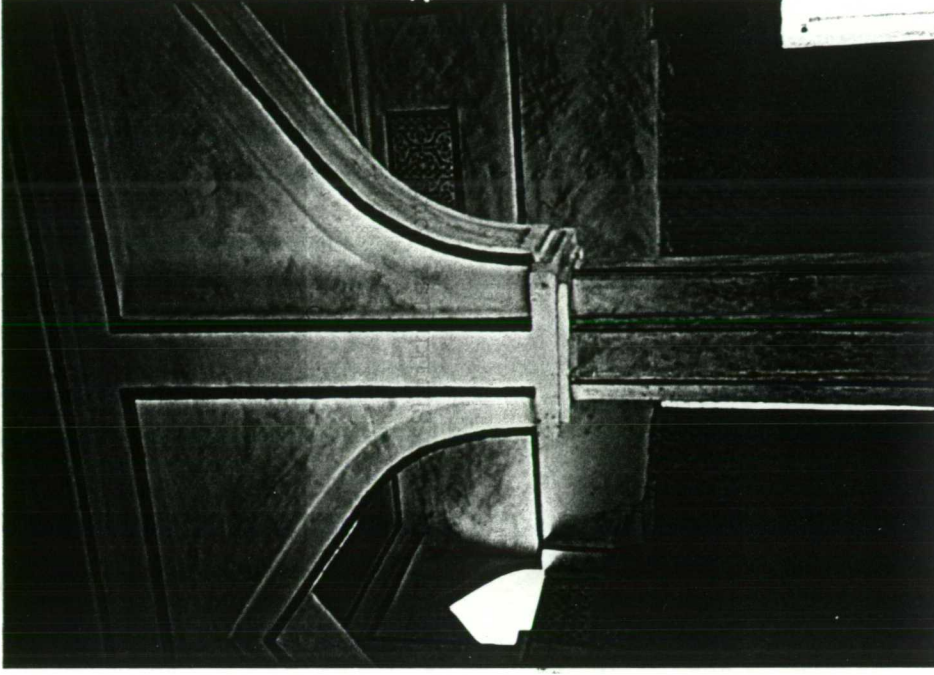


Fig. 7.10(F) Sheikh Isa House: Son's Apartment,
central column.

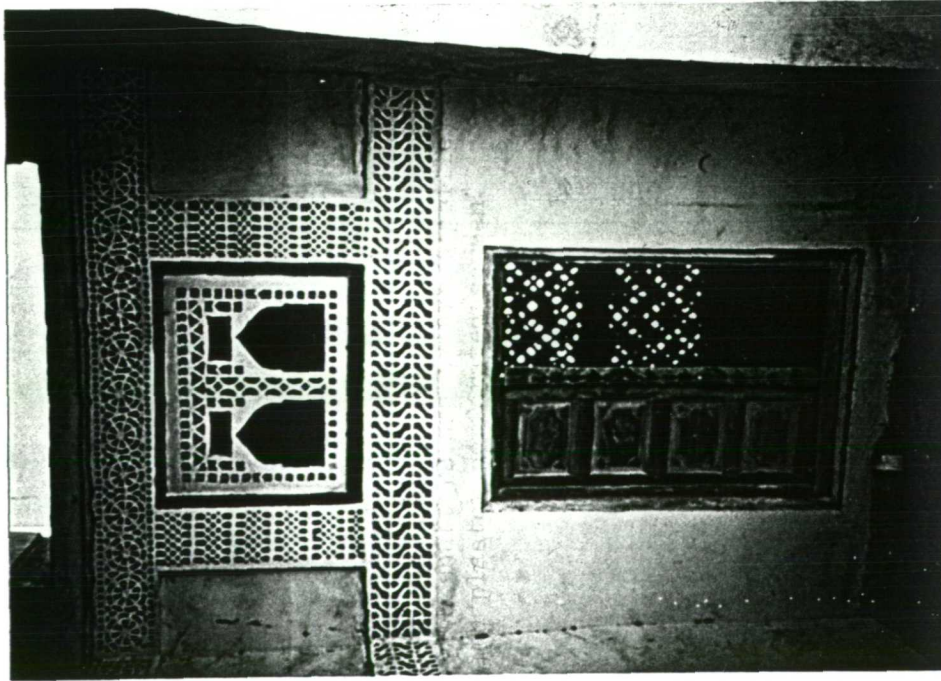


Fig. 7.10(G) Sheikh Isa House, Childrens Apartment. North wall of liwan shewing window (with shutters and external grille) and niche with plaster perforated screen.

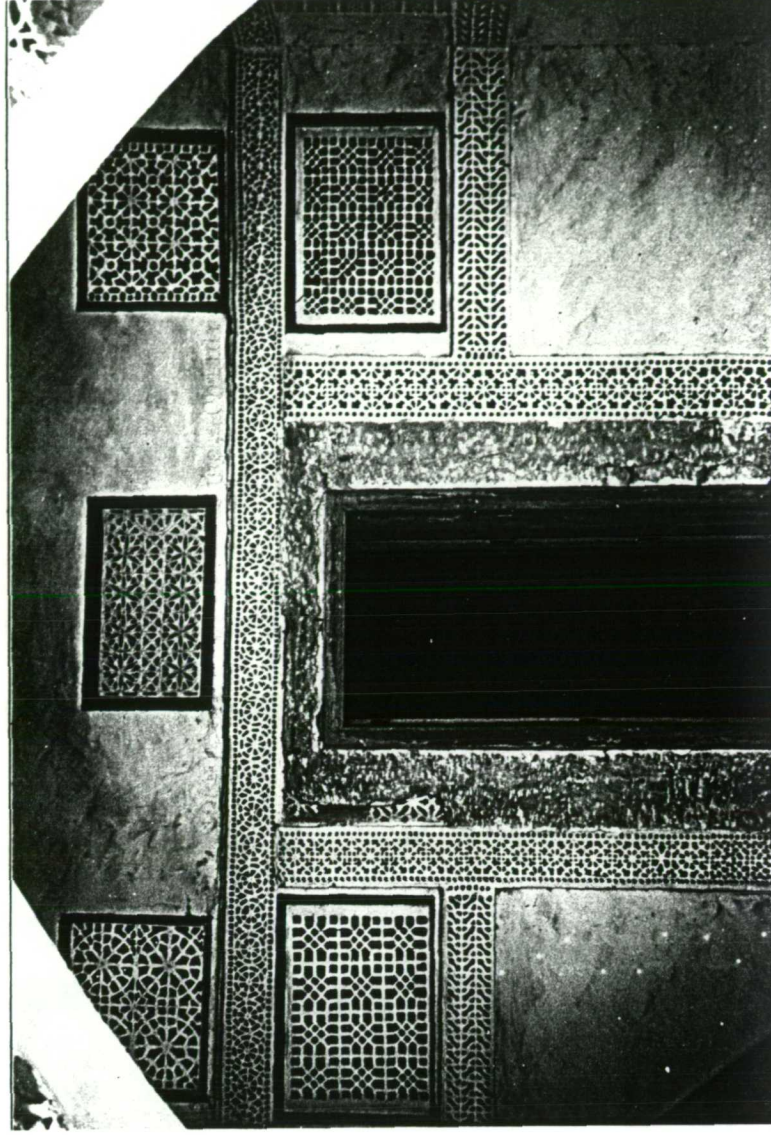


Fig. 7.10(H) Sheikh Isa House, Childrens Apartment. Detail of east elevation shewing liwan arch and apartment door within.

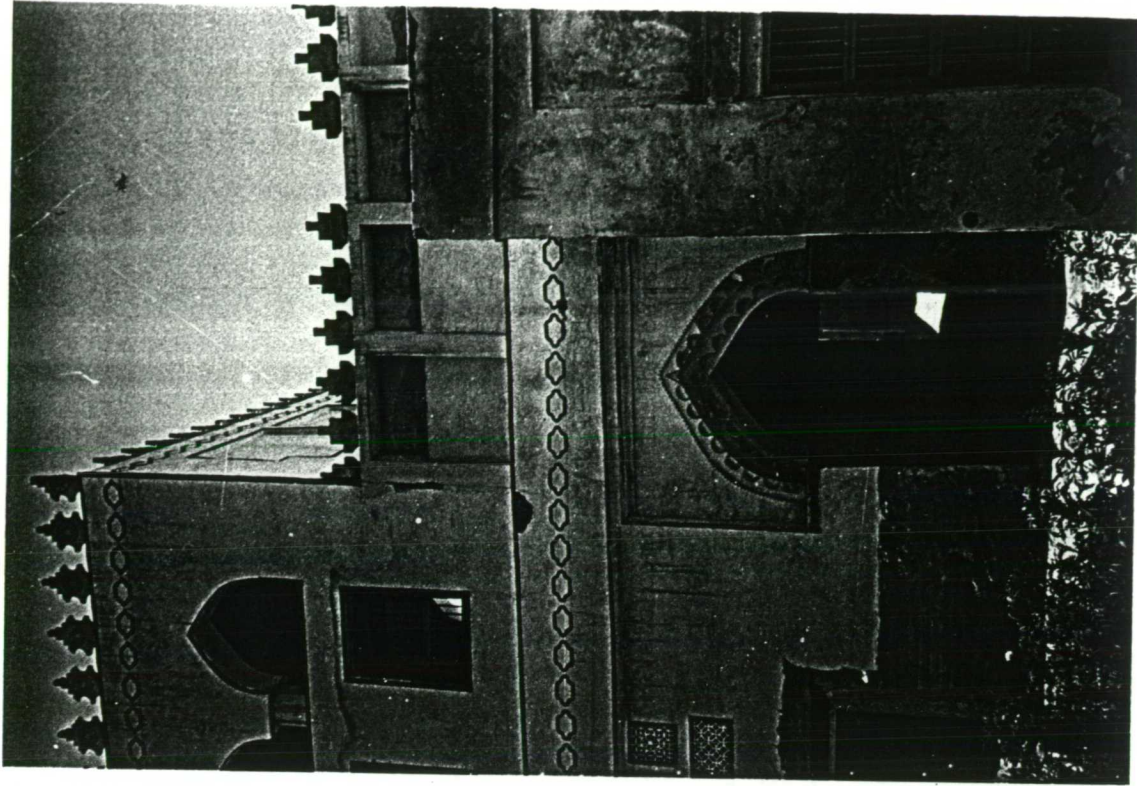


Fig. 7.10(J) Sheikh Isa House. View in the Womens Courtyard looking west. The passage to the private court is in the centre.

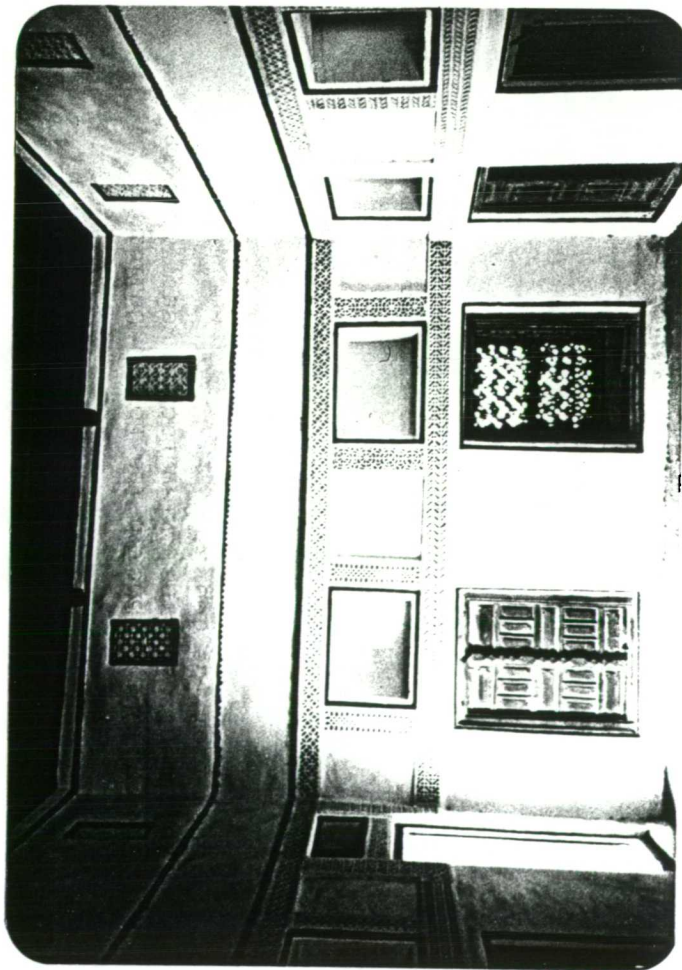


Fig. 7.10(I) Sheikh Isa House, Childrens Apartment. Internal view facing west, that is, away from the door.

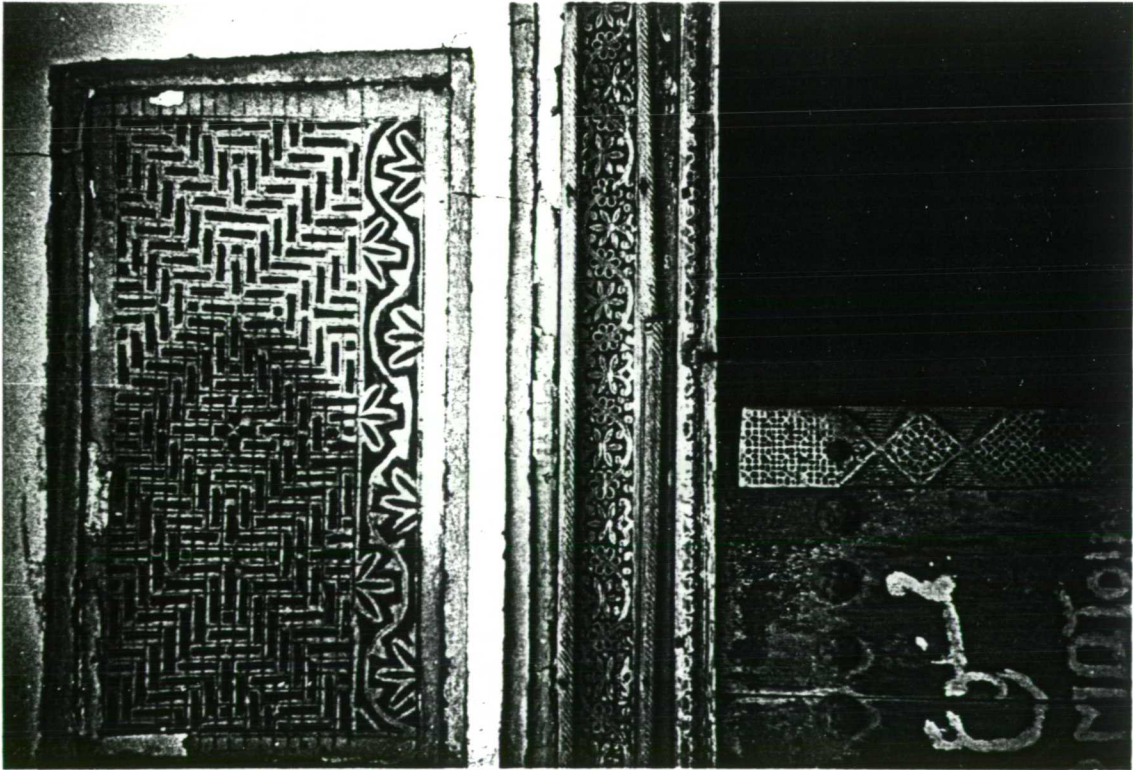
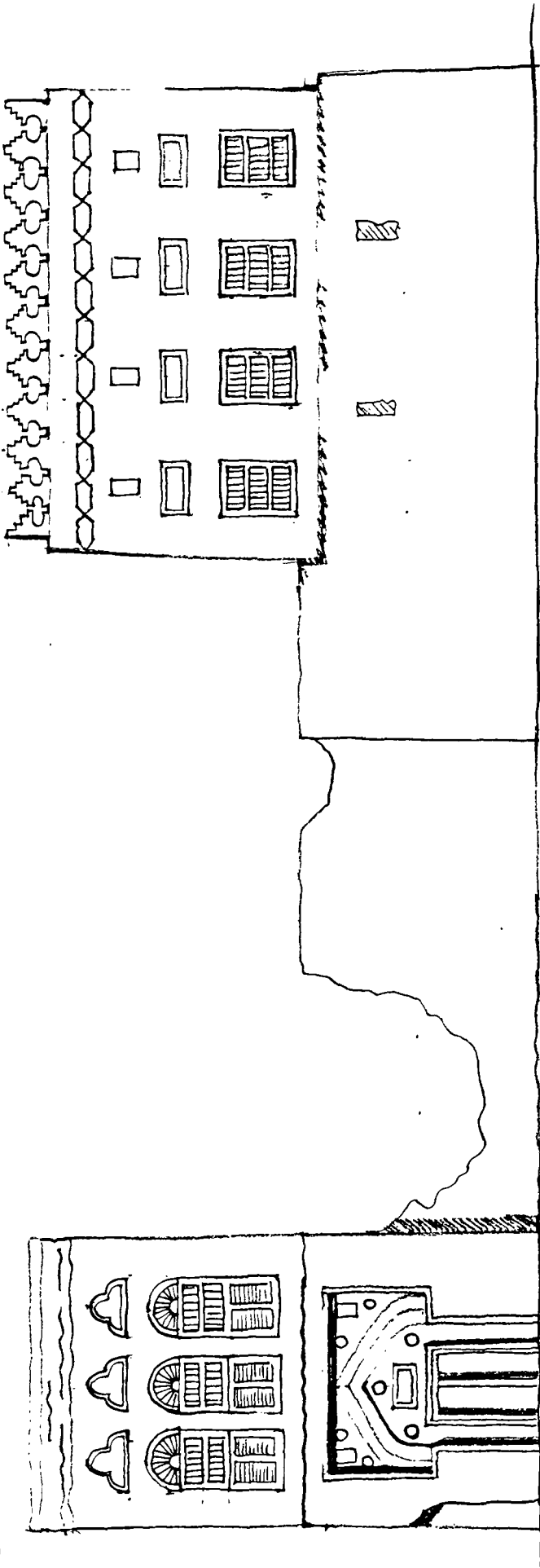
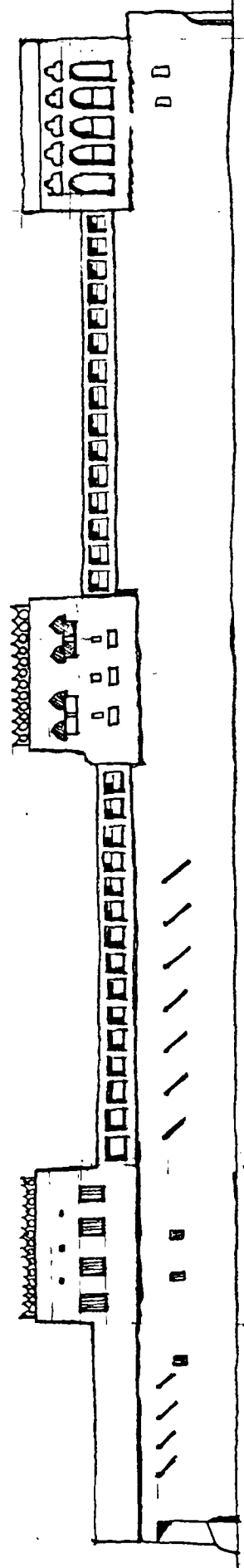


Fig. 7.10(K) Sheikh Isa House. Doorway to Womens Court from the street.



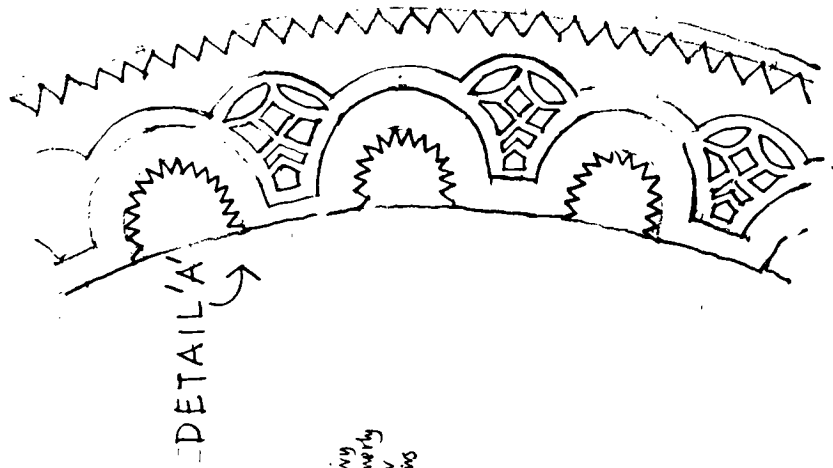
EAST ELEVATION
SH ISA HOUSE - STREET ELEVATIONS.



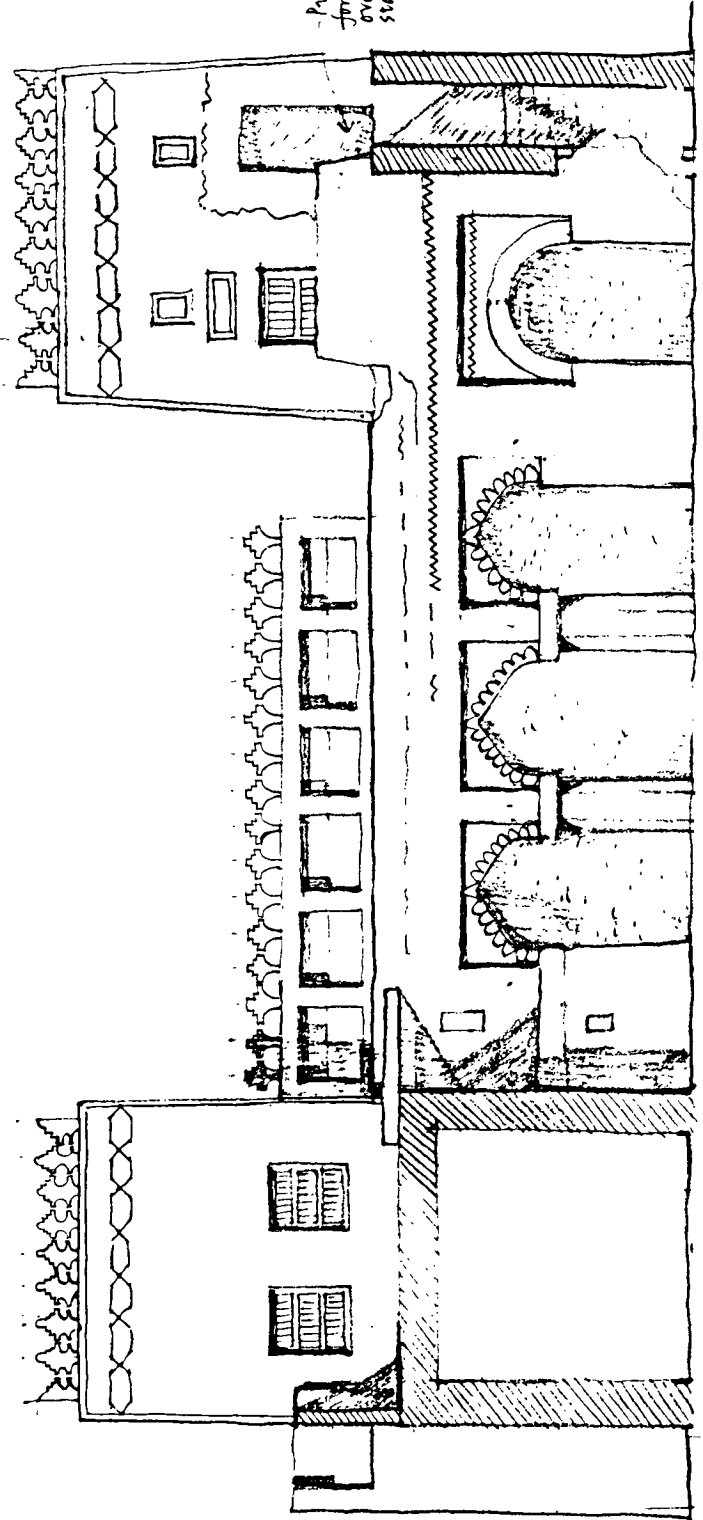
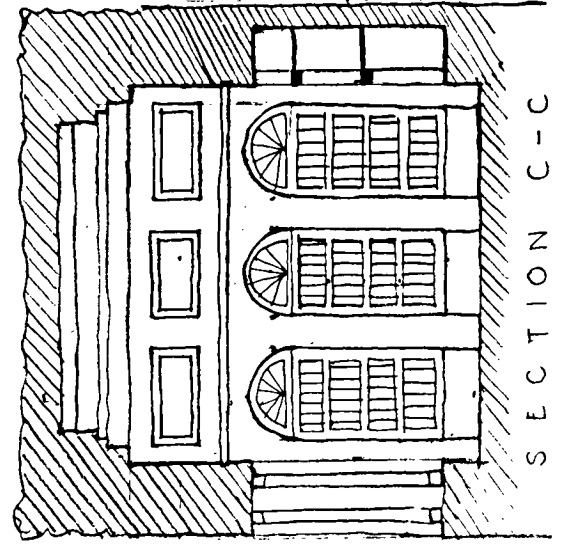
SOUTH ELEVATION.

Figure 7.11 .

Figure 7.12.



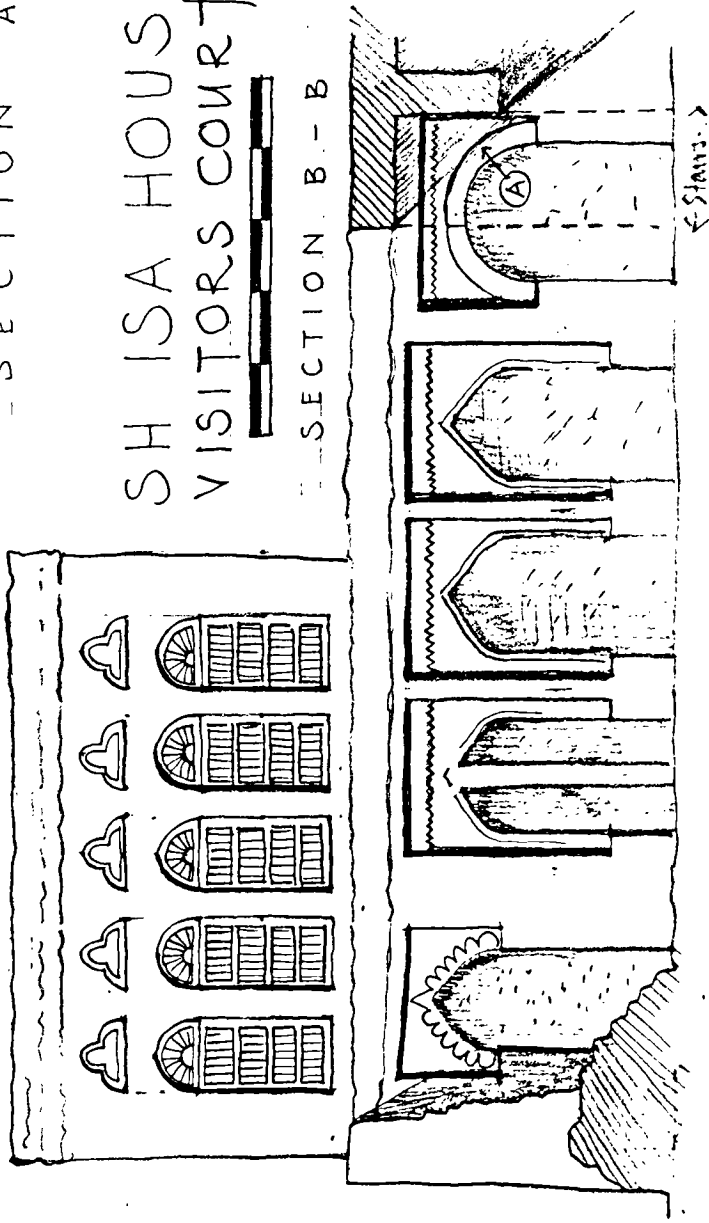
Painting formerly over STAIRS



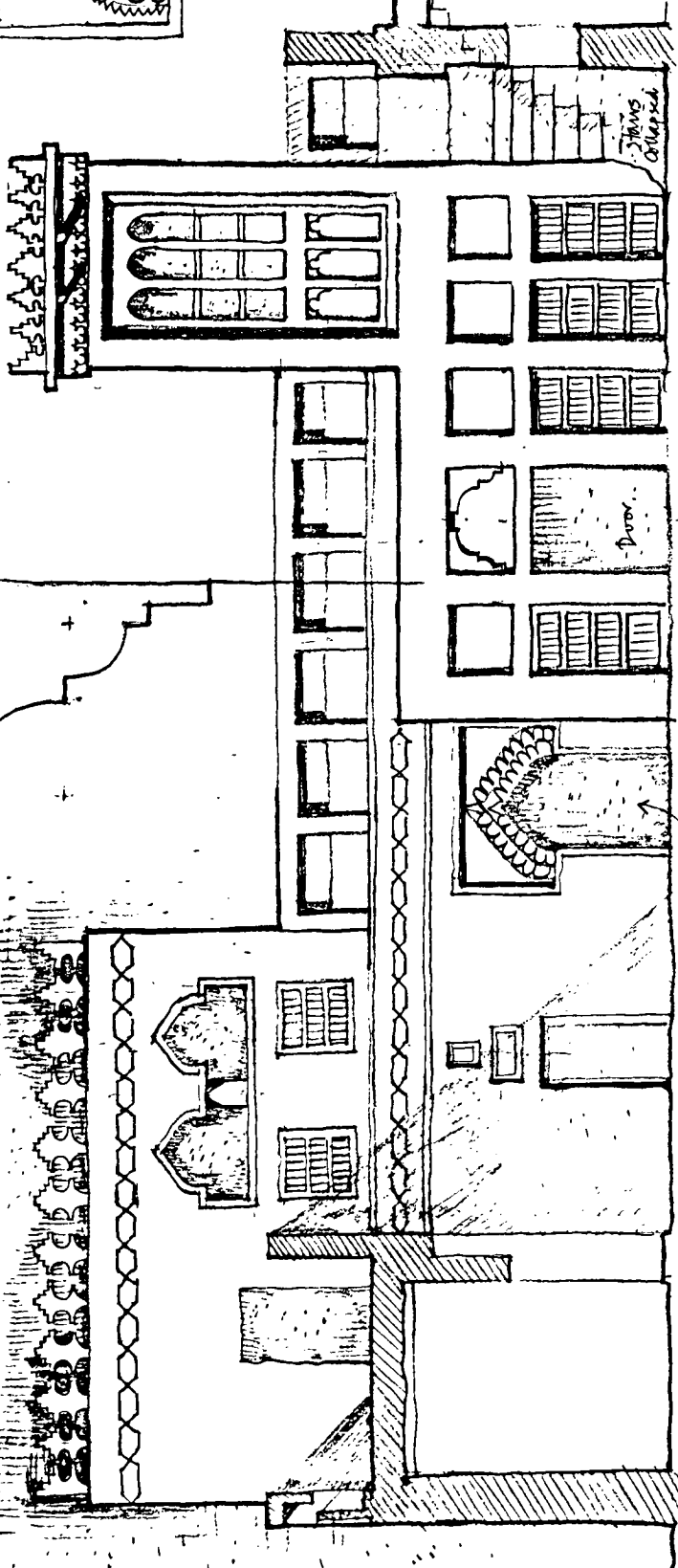
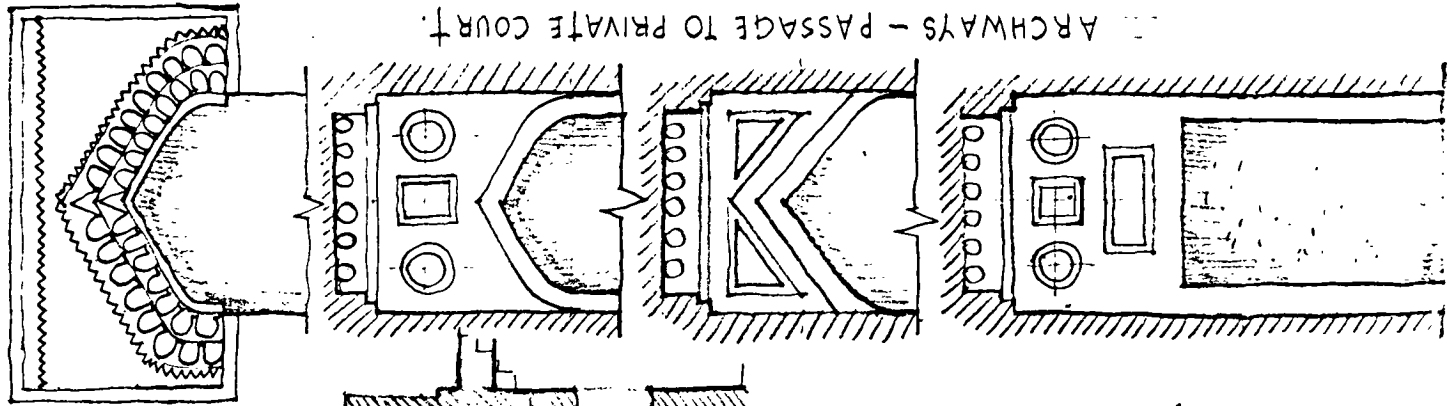
SH ISA HOUSE VISITORS COURT.



SECTION B-B



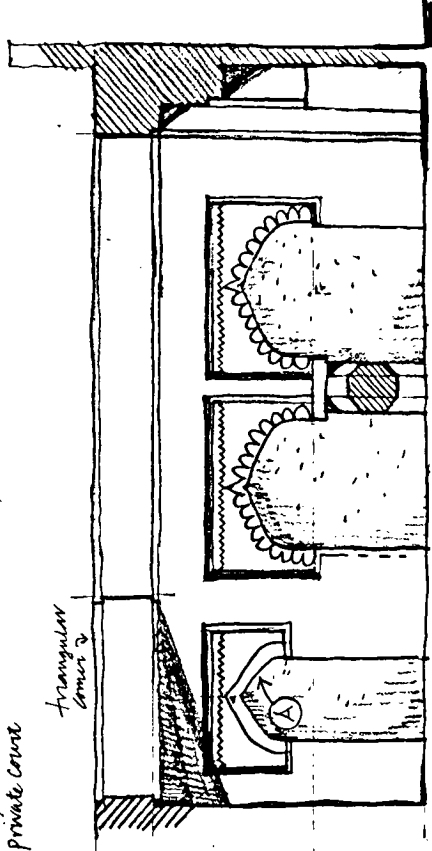
ARCHWAYS - PASSAGE TO PRIVATE COURT.



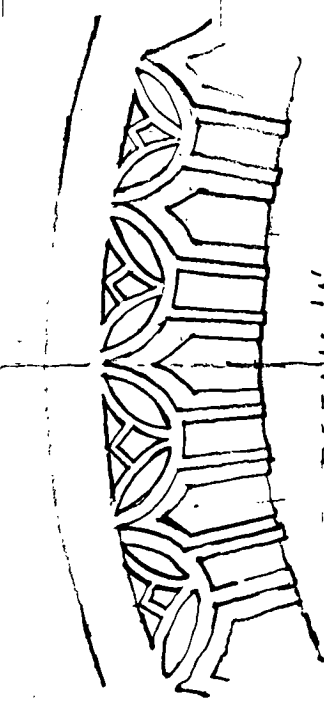
SECTION D-D

passage to private court

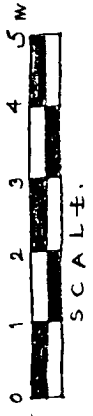
triangular corner



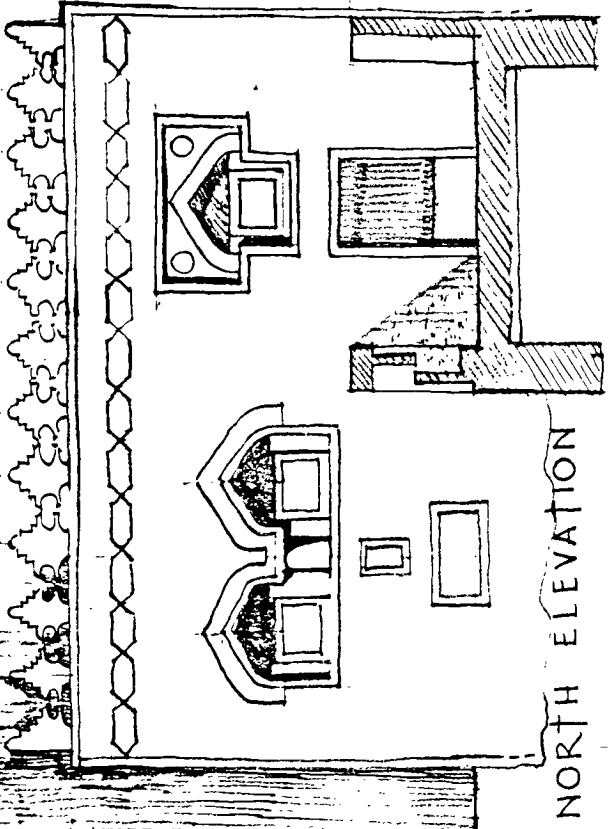
SECTION E-E



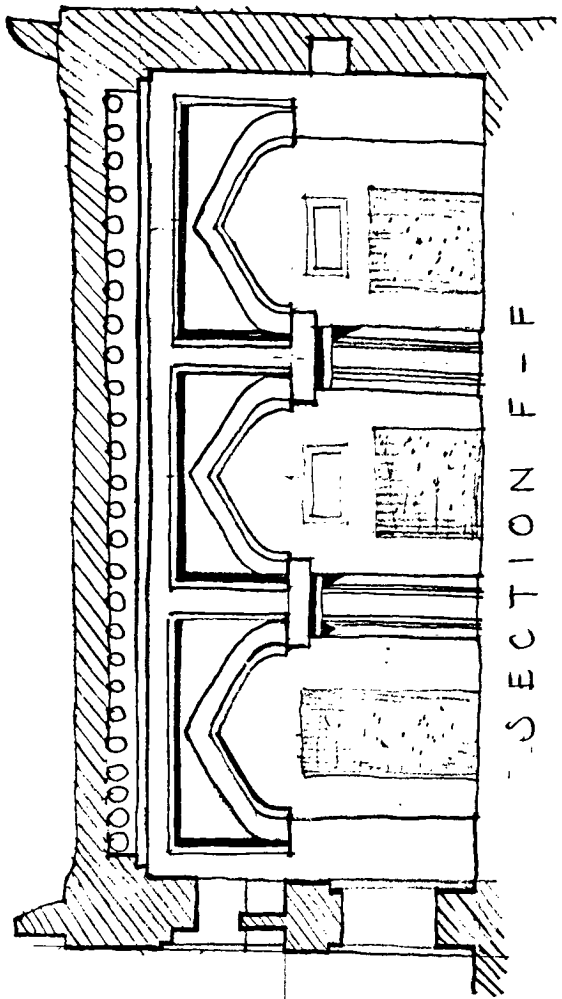
DETAIL 'A'



SHEIKH ISA HOUSE. Fig 7.13.

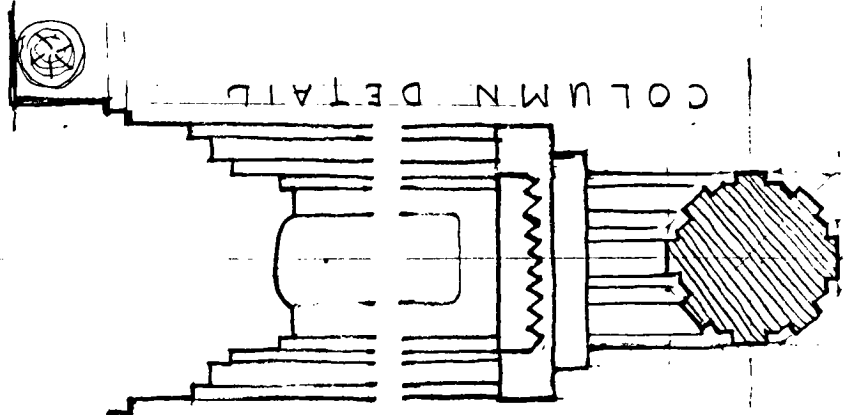


NORTH ELEVATION

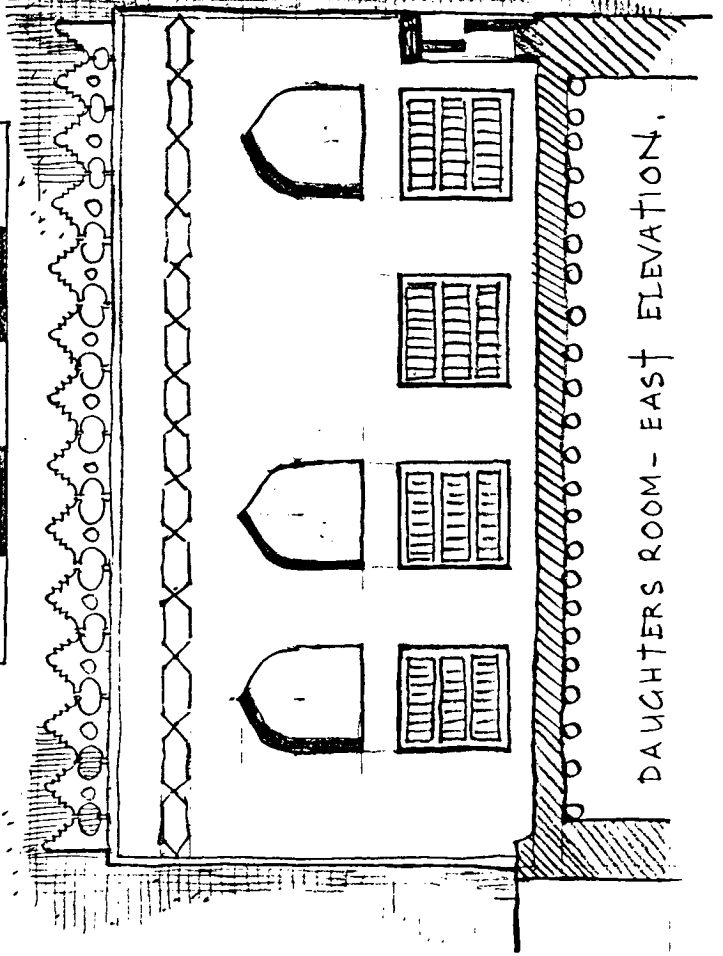


SECTION F - F

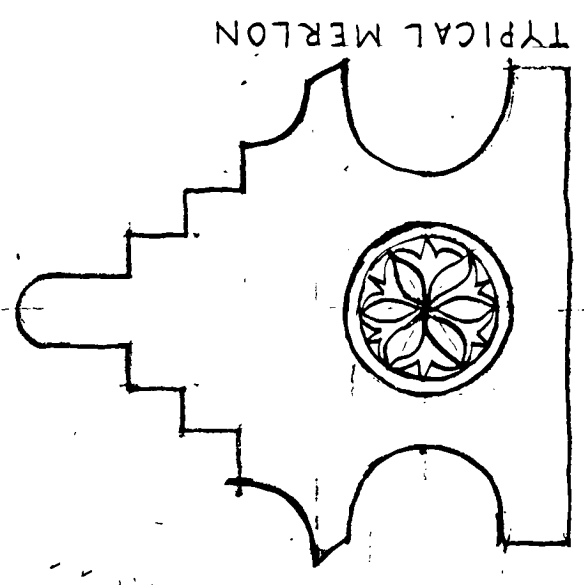
SH. ISA HOUSE - SON'S APARTMENT



COLUMN DETAIL

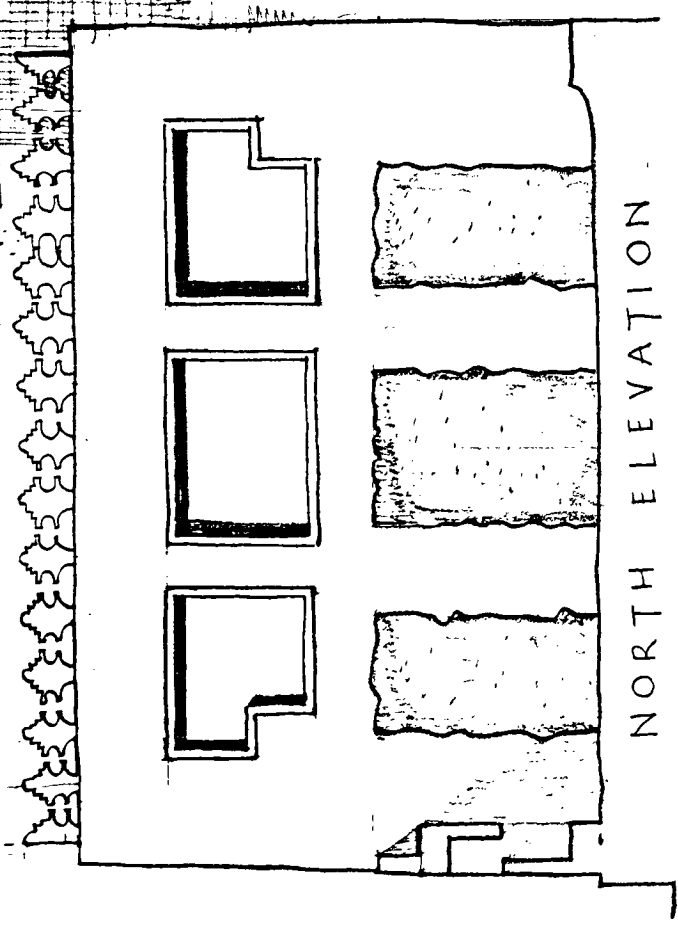


DAUGHTERS ROOM - EAST ELEVATION.

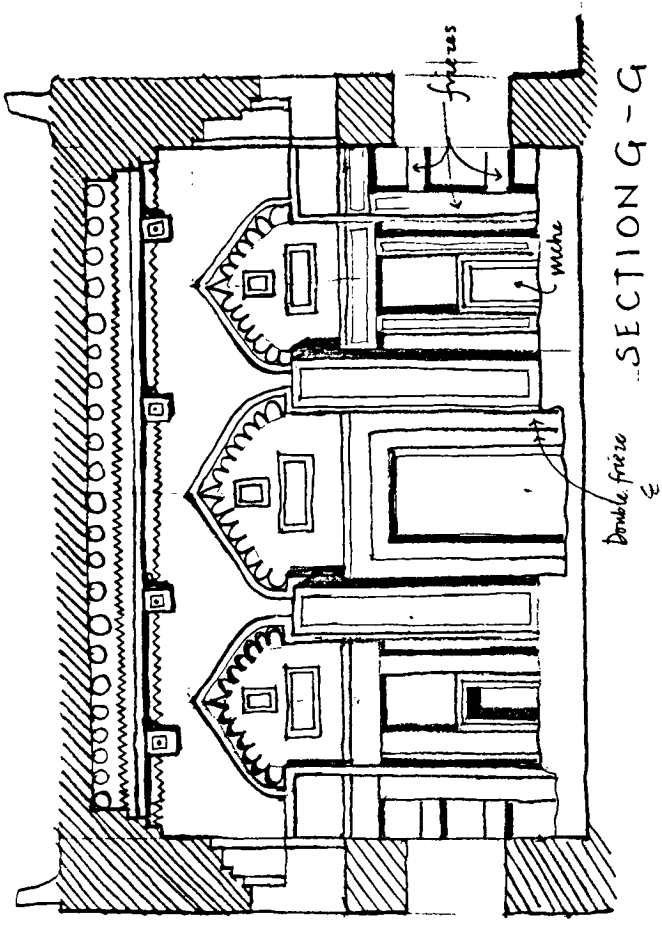


TYPICAL MERLON

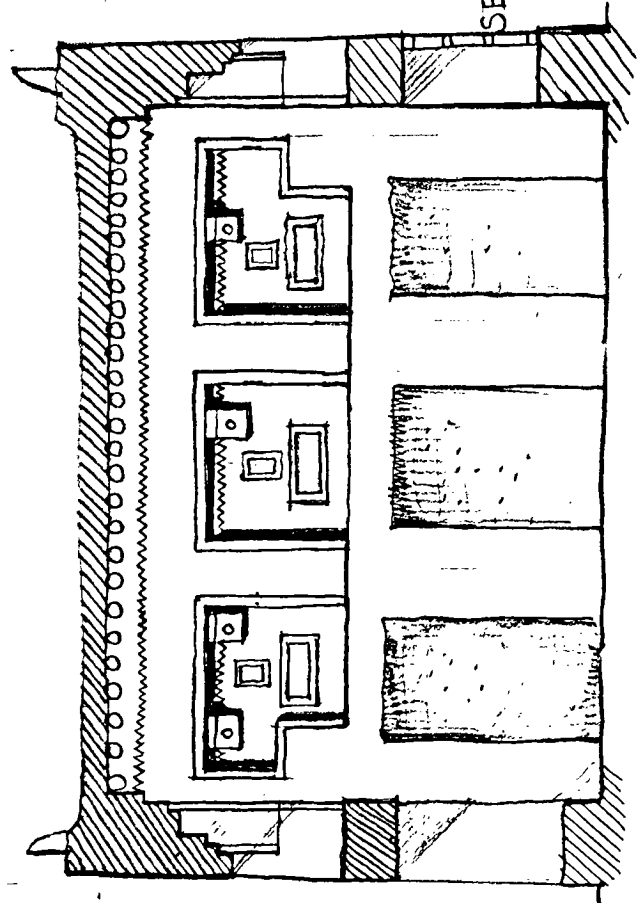
Figure 7.14.



NORTH ELEVATION

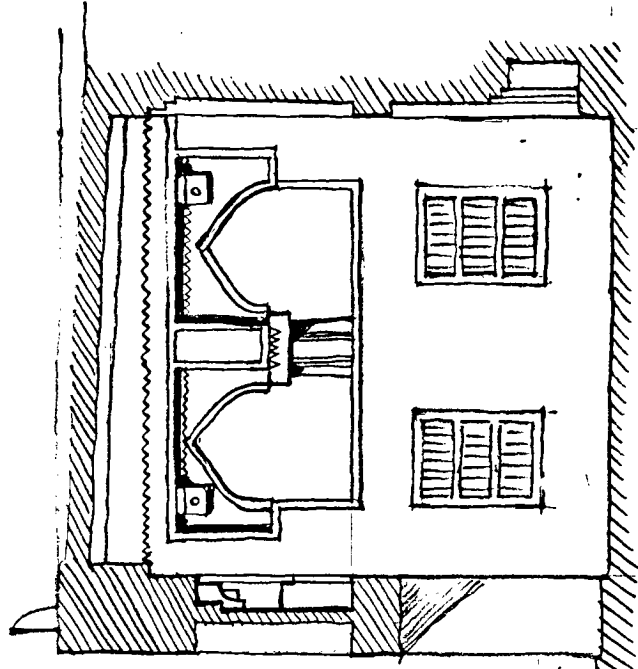


SECTION G-G



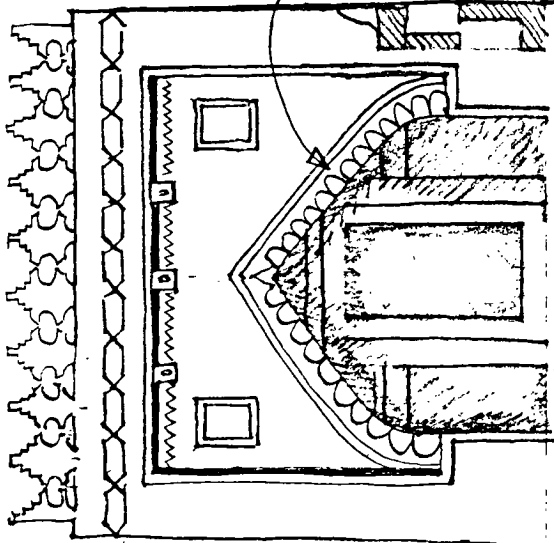
SECTION H-H

SECTION I-I

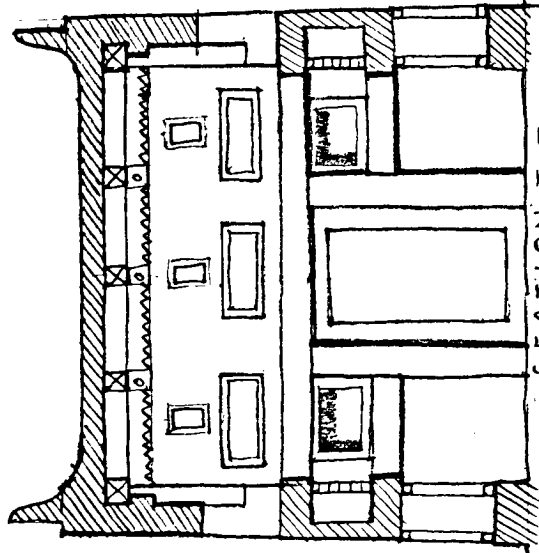


SH ISA HOUSE - SHEIKHS APARTMENT

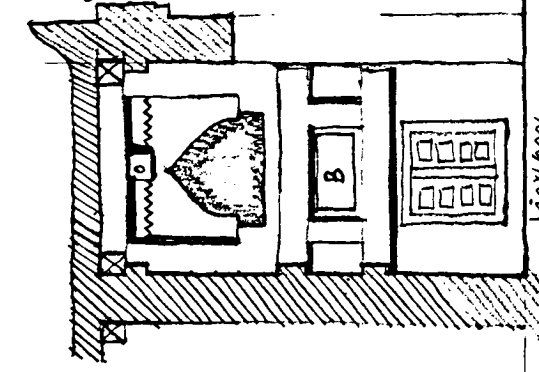
Figure 7.15



ENTRANCE ELEVATION



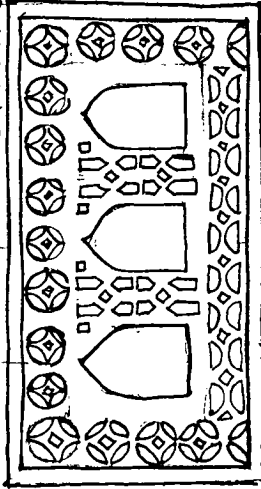
SECTION J-J



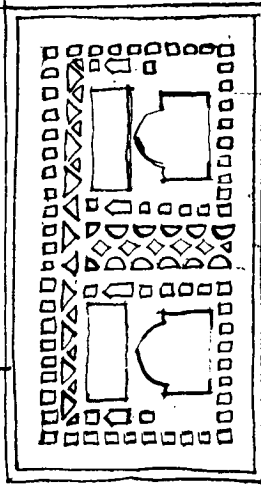
SECTION K-K



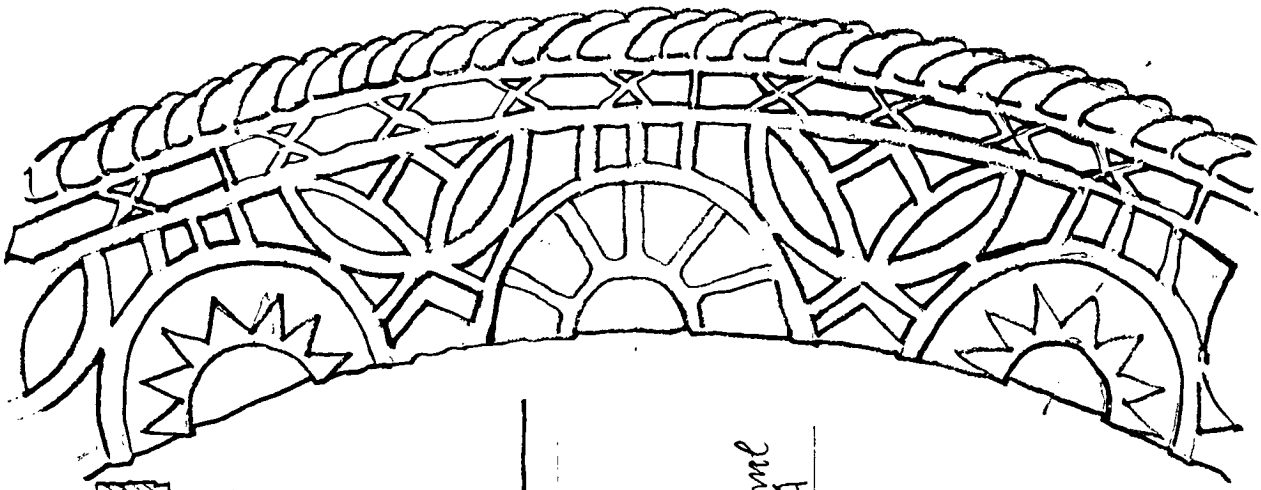
SECTION L-L



Panel B



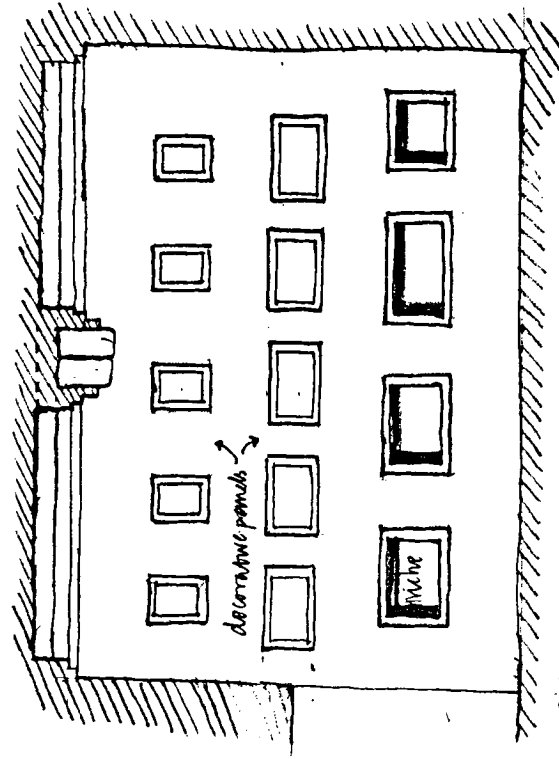
Panel A



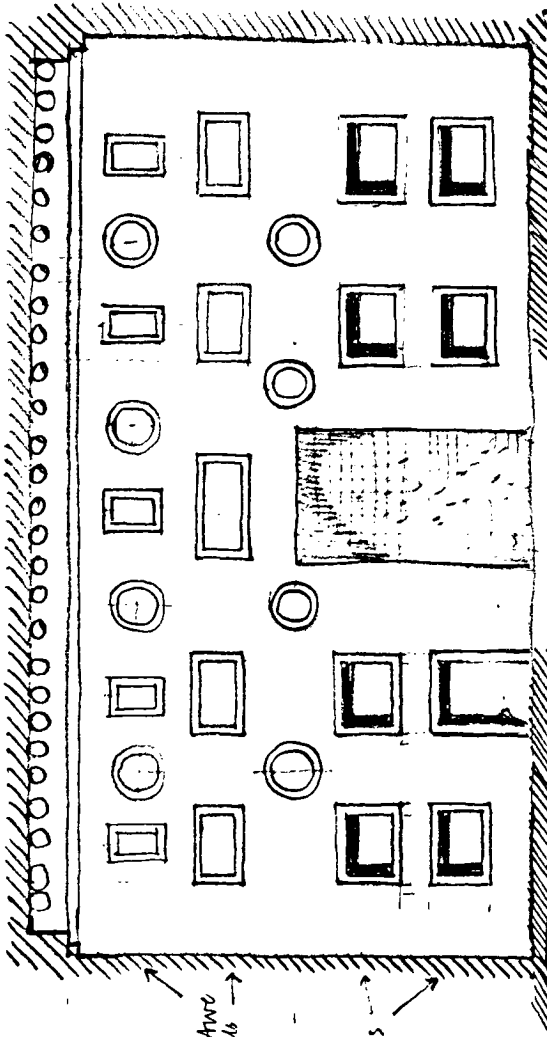
MOULDING ON LIWAN ARCH. Figure 7.16.

SH. ISA HOUSE - CHILDRENS' APARTMENT.

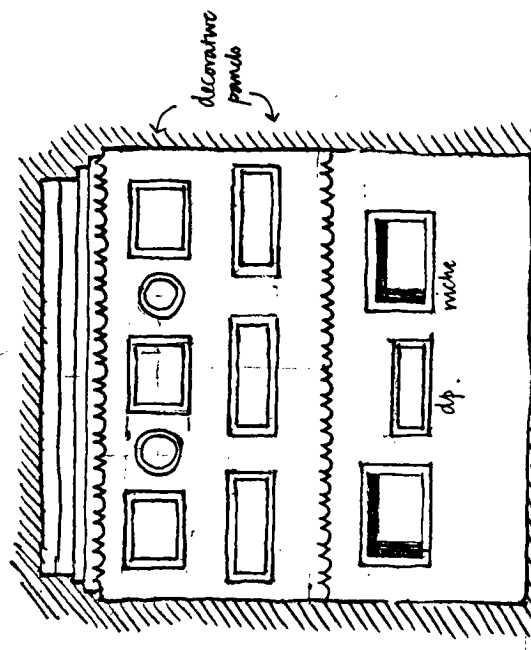
SOUTH WALL



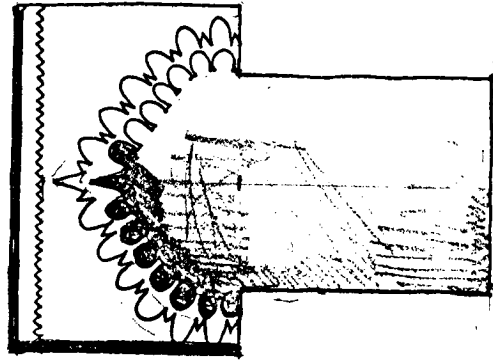
WEST WALL



SHEIKH ISA HOUSE

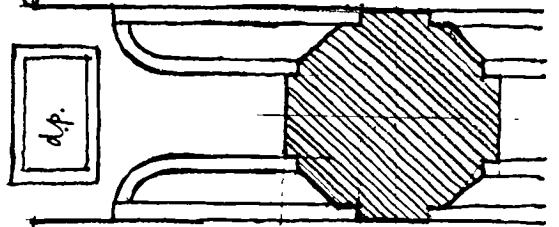


SHEIKH ROOM (G.F.) WEST WALL



ENTRANCE DOORWAY FROM WOMEN'S COURT

COLUMN DETAIL



FAMILY MAJLIS

Figure 7.17.

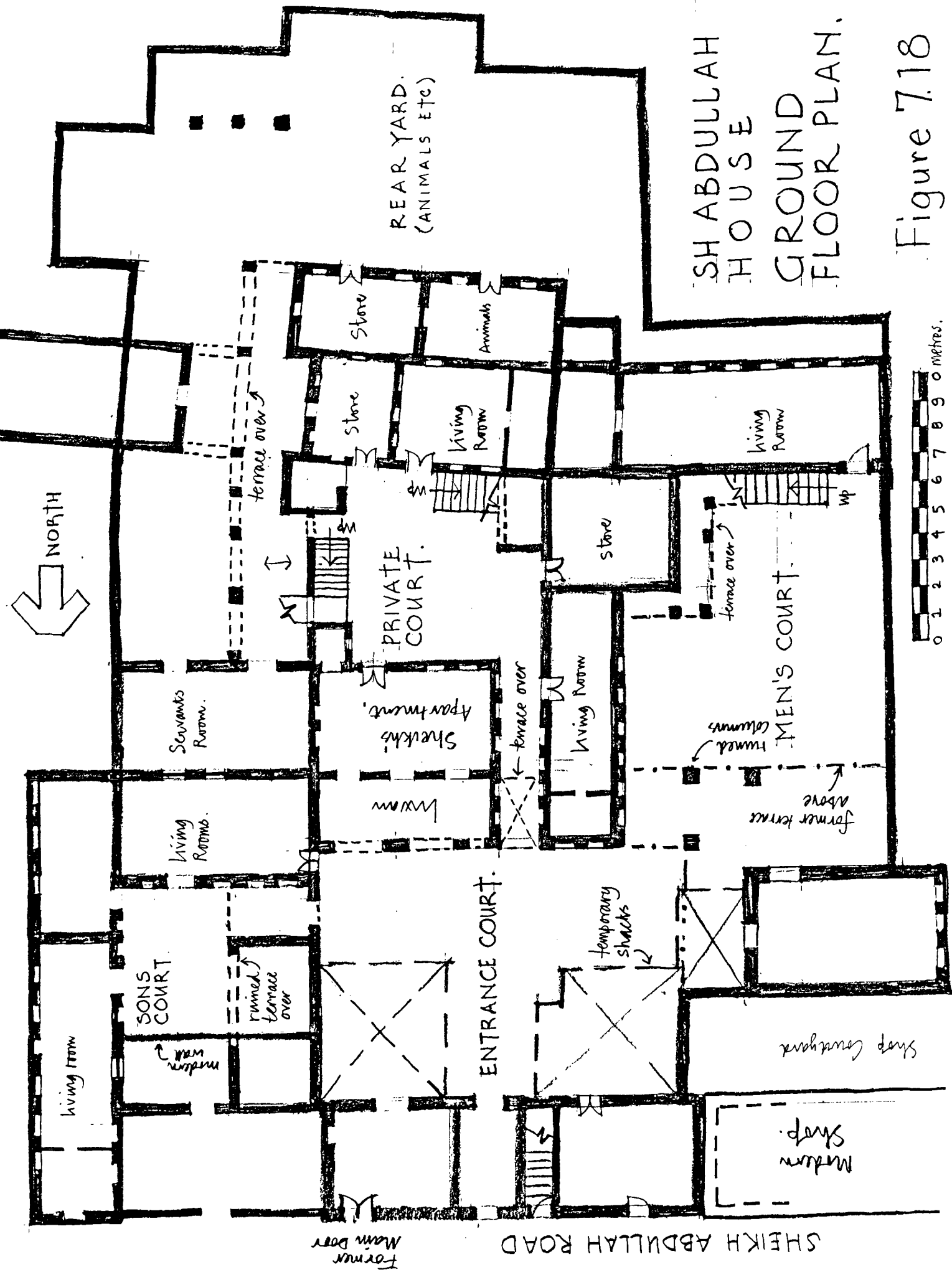


Figure 7.18

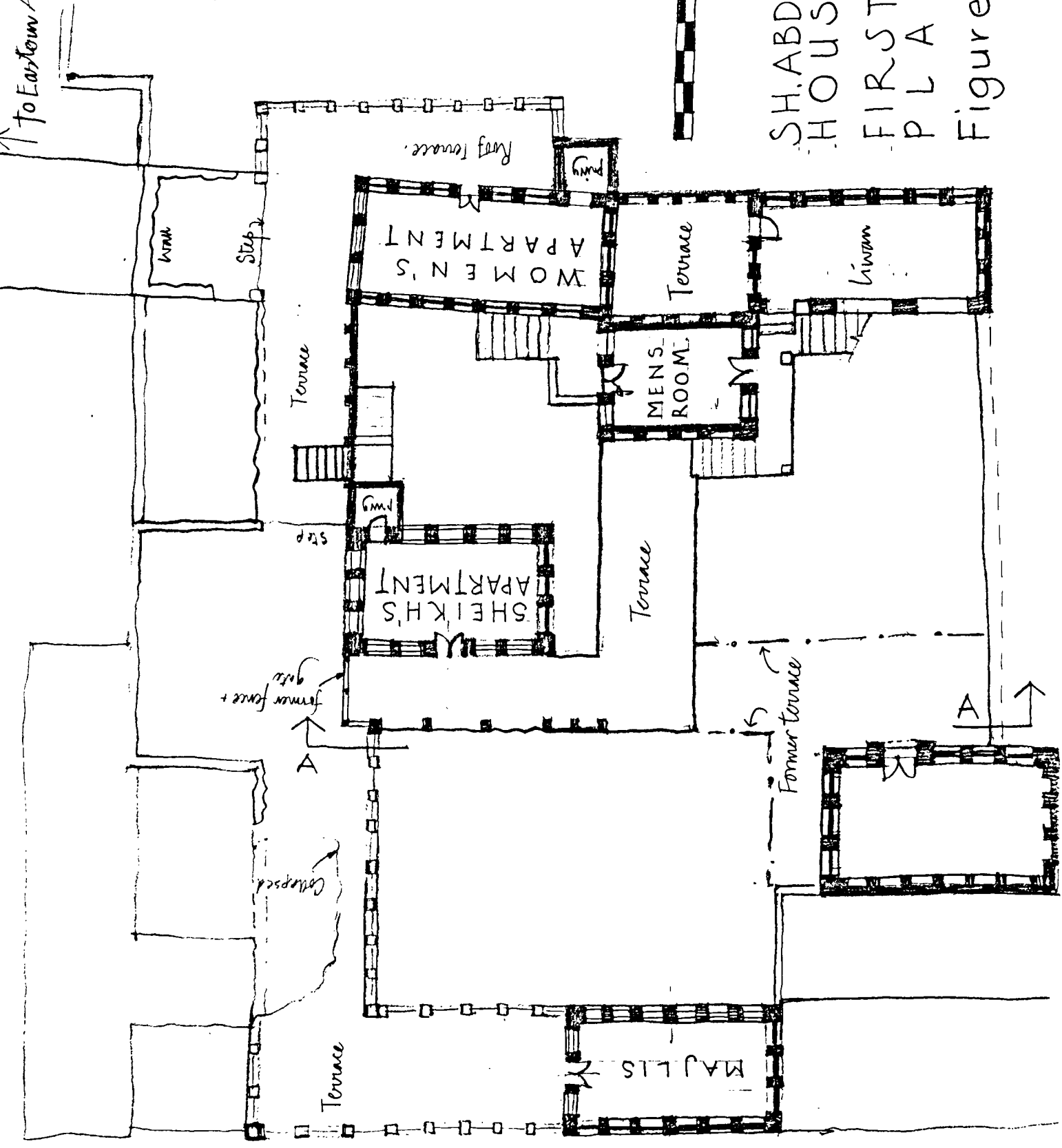
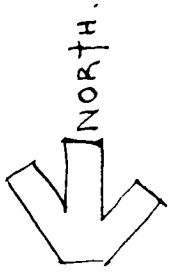
0 1 2 3 4 5 6 7 8 9 0 metres.

SH ABDULLAH
HOUSE
GROUND
FLOOR PLAN.

SHEIKH ABDULLAH ROAD

Former
Main Door

To Eastern Apartment,



SH. ABDULLAH
HOUSE.
FIRST FLOOR
PLAN
Figure 7.19.

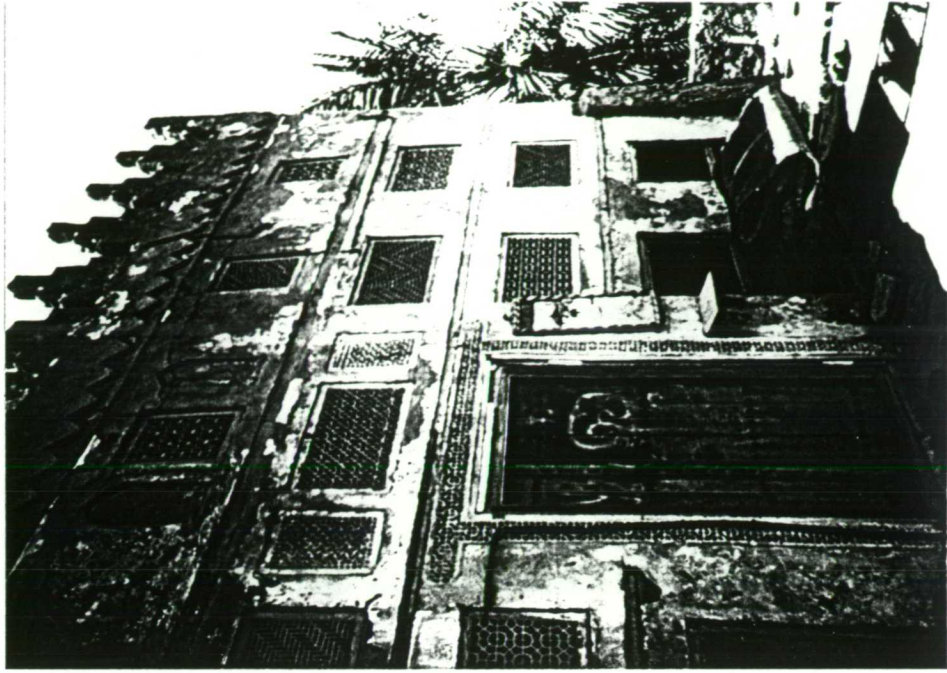


Fig. 7.20(B) Sheikh Abdullah House. Sheikh's Apartment, north elevation.

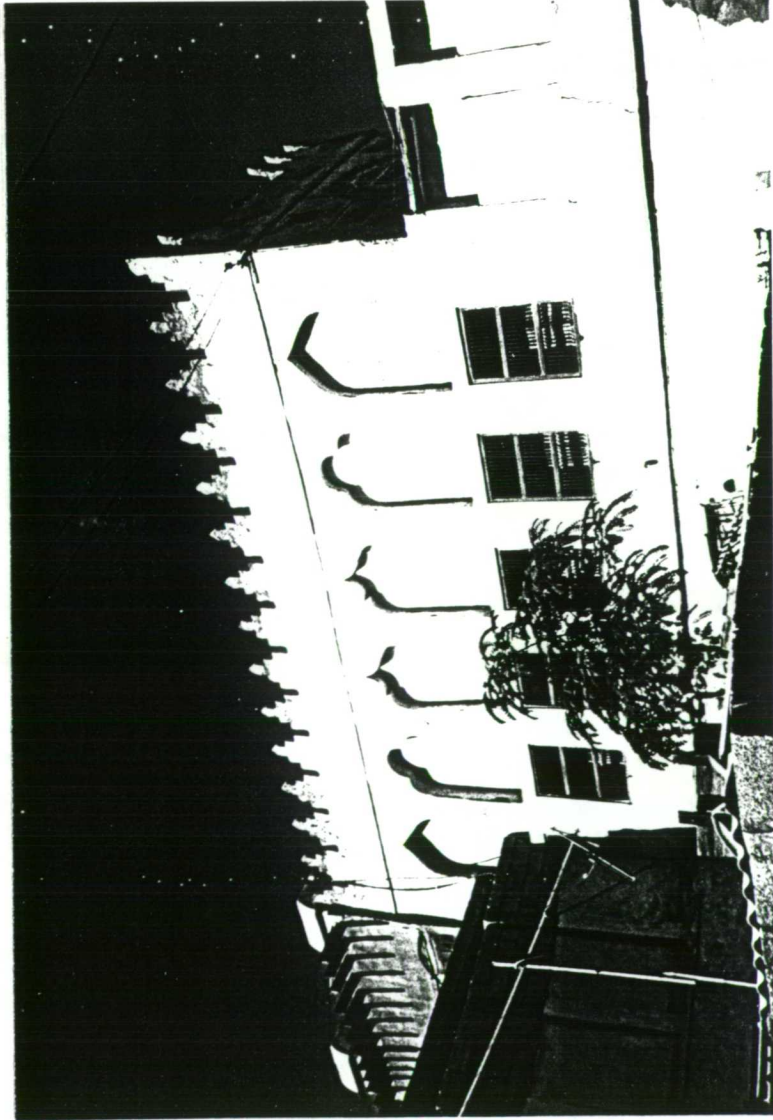


Fig. 7.20(A) Sheikh Abdullah House. View of majlis from the south. The Mens or Entrance Courtyard is below.

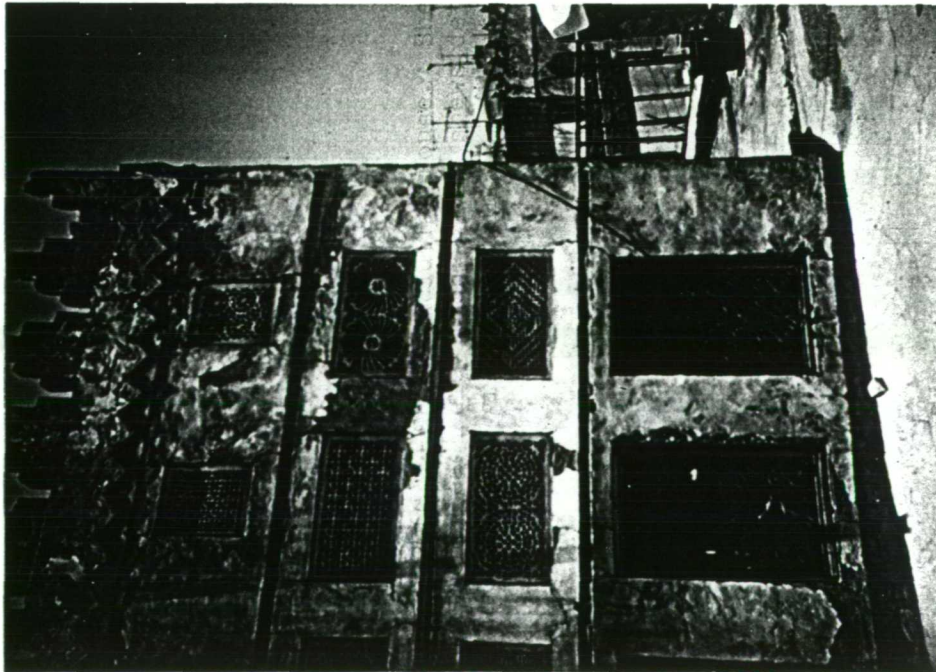


Fig. 7.20(C) Sheikh Abdullah House. Sheikh's Apartment, east elevation. This shows details of wrought-iron grilles and incised plasterwork.

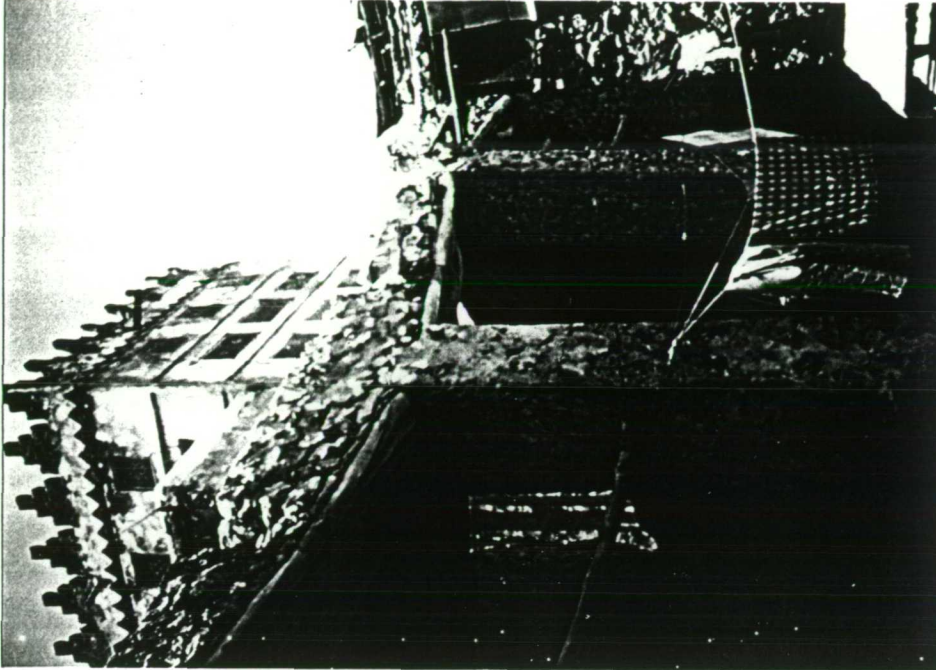


Fig. 7.20(D) Sheikh Abdullah House. Colonnade east of the Private Court. The roof terrace (next to the Womens Apartment) can be seen above, with the south and east facades of the Sheikh's Apartment beyond.

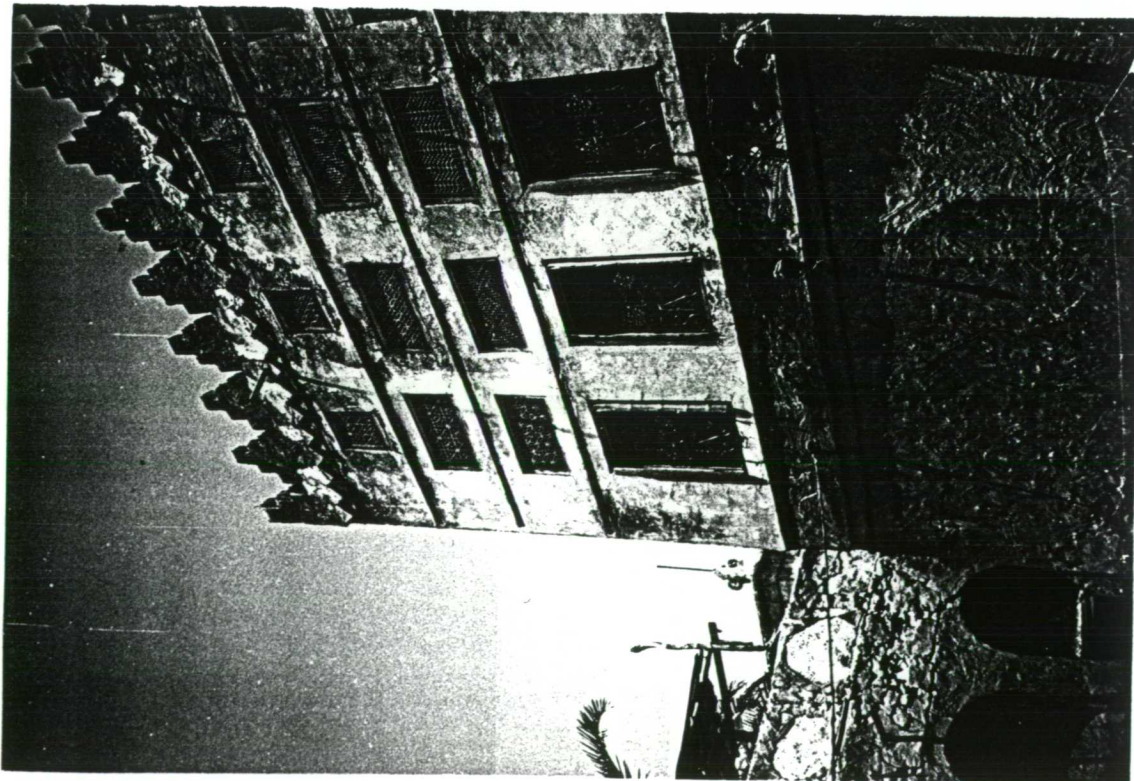
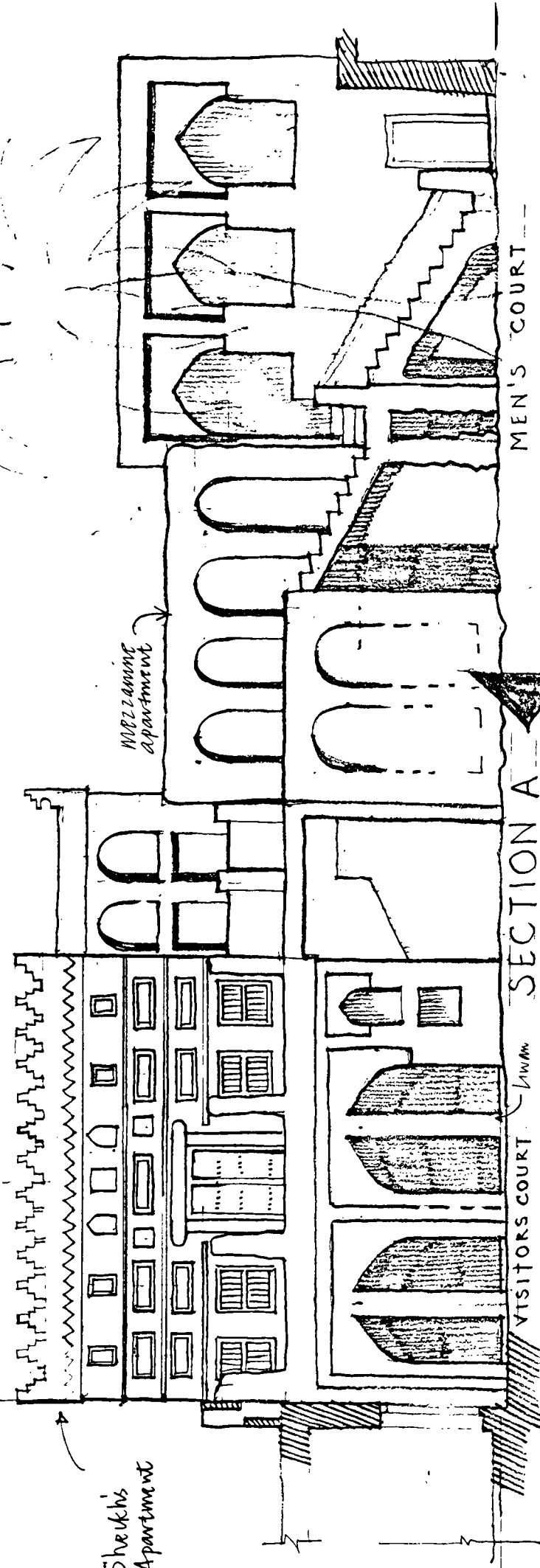


Fig. 7.20(E) Sheikh Abdulllah House, Sheikh's Apartment. South elevation viewed from the Private Court. The passageway to the Entrance Courtyard passes along the left-hand side of the apartment.



Fig. 7.20(F) Sheikh Abdulllah House. View facing east in the Private Courtyard. The doorway to the ground level room (below the Sheikh's Apartment) is on the left. The staircase from the courtyard to the roof terrace is shown. Note the most unusual dome.



MEN'S COURT

SECTION A

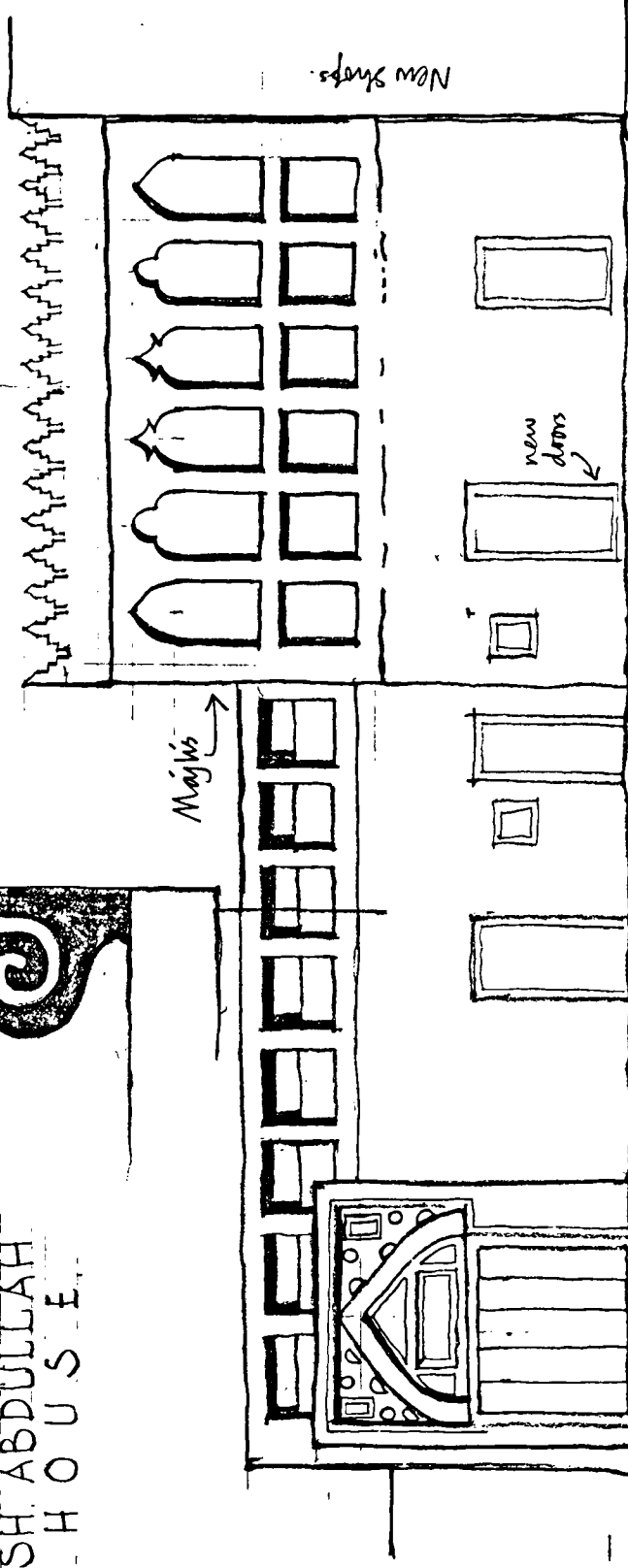
VISITORS COURT

SH. ABDULLAH HOUSE

Majlis

Morzanne Apartment

Sheikh's Apartment



New Shops

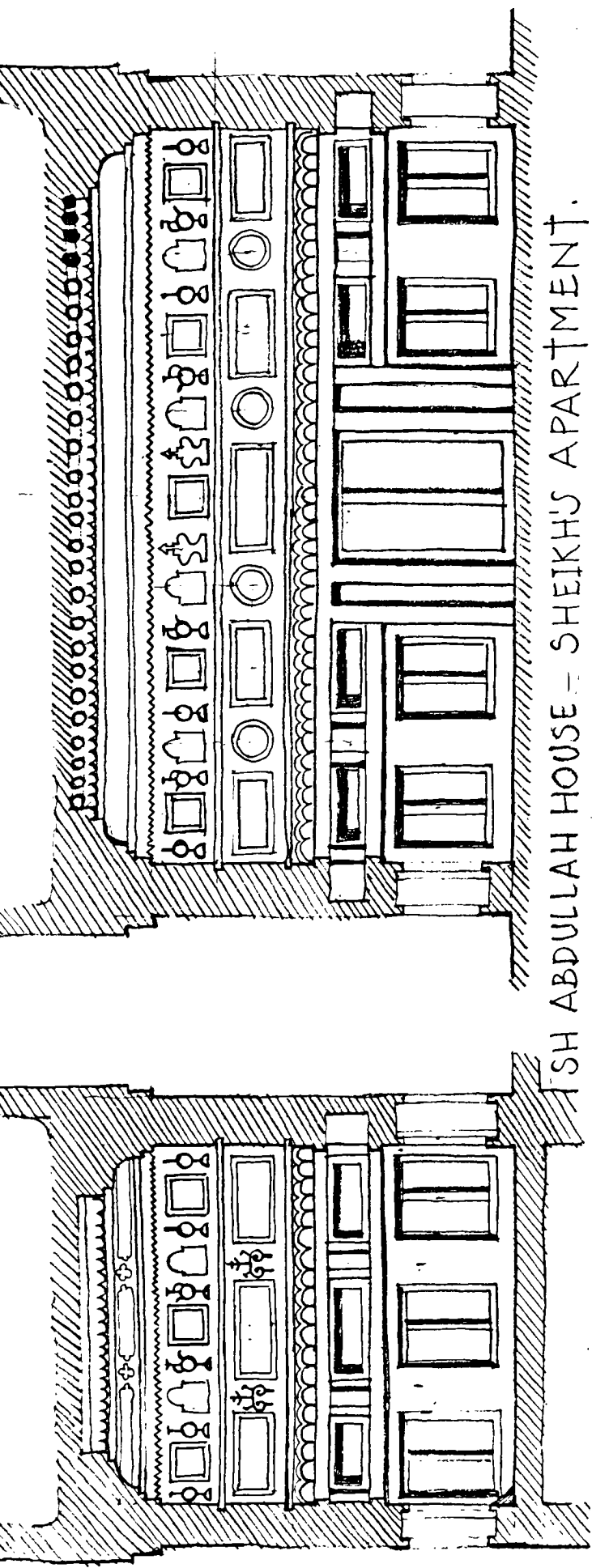
new doors

WROTE IRON GRILLES TO MAJLIS END WALL

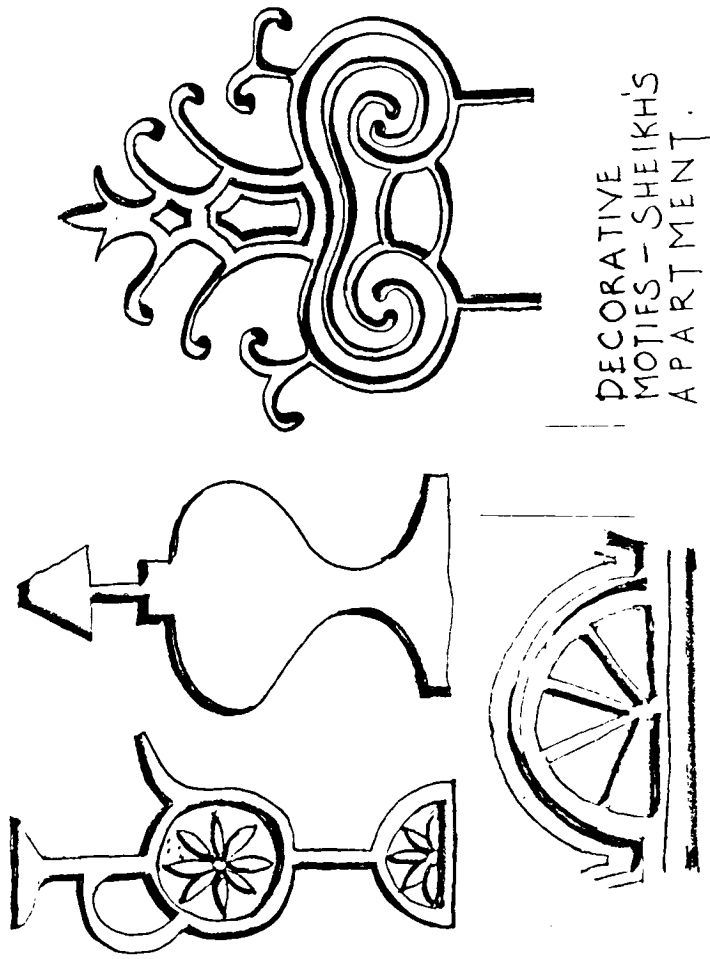
Formerly Main Door

NORTH ELEVATION

Fig 7.21.



SH ABDULLAH HOUSE - SHEIKHS APARTMENT.



DECORATIVE MOTIFS - SHEIKH'S APARTMENT.

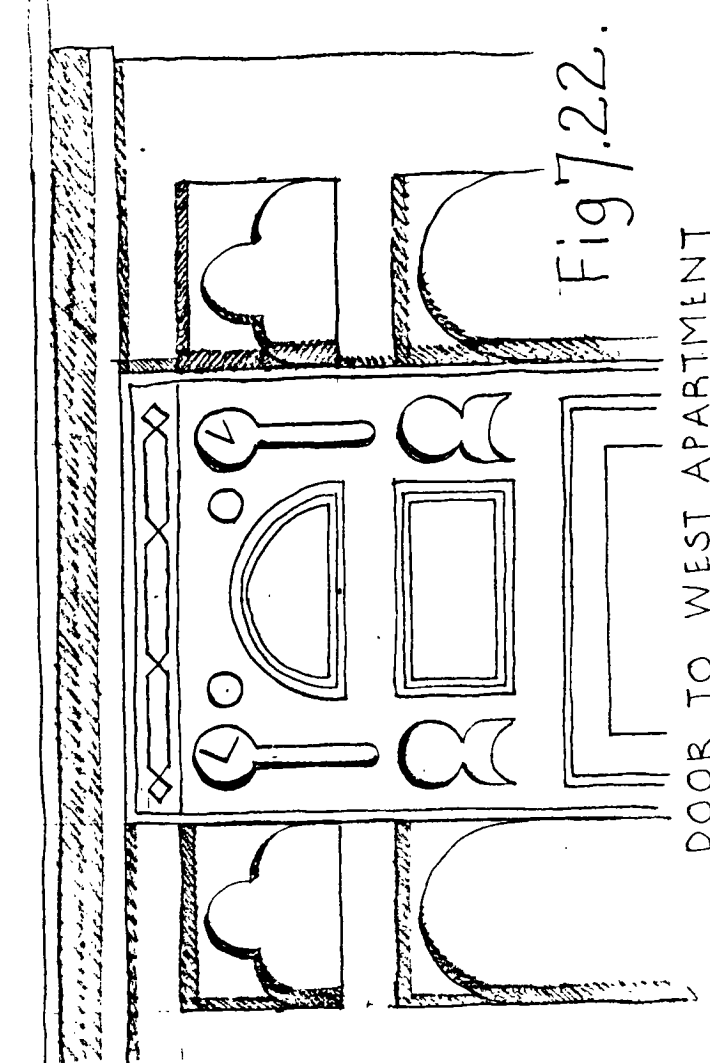


Fig 7.22.

DOOR TO WEST APARTMENT

SHEIKHS APARTMENT
EAST ELEVATION

with iron
grilles

SH. ABDULLAH
HOUSE,

MERLON

EAST ELEVATION

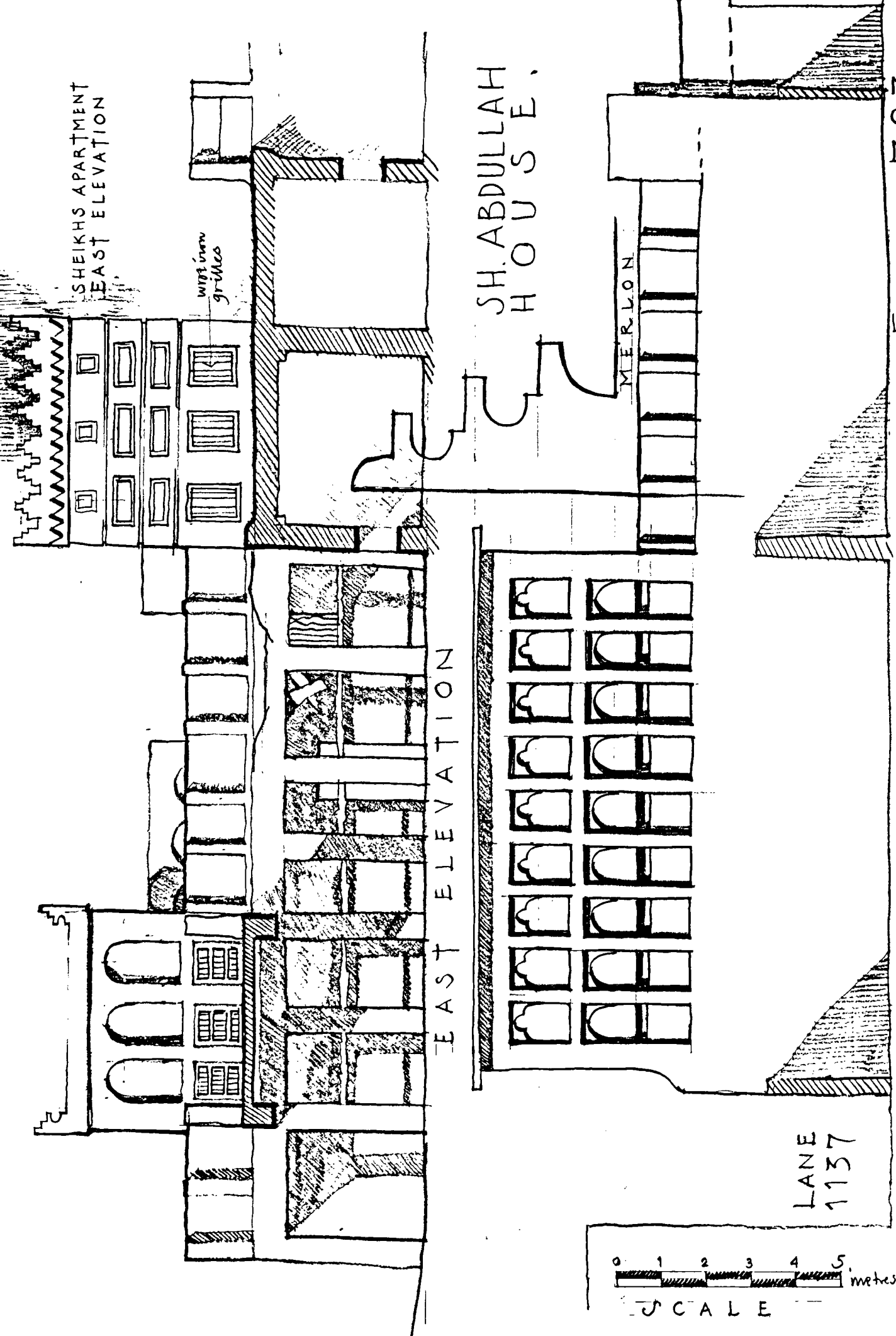
LANE
1137

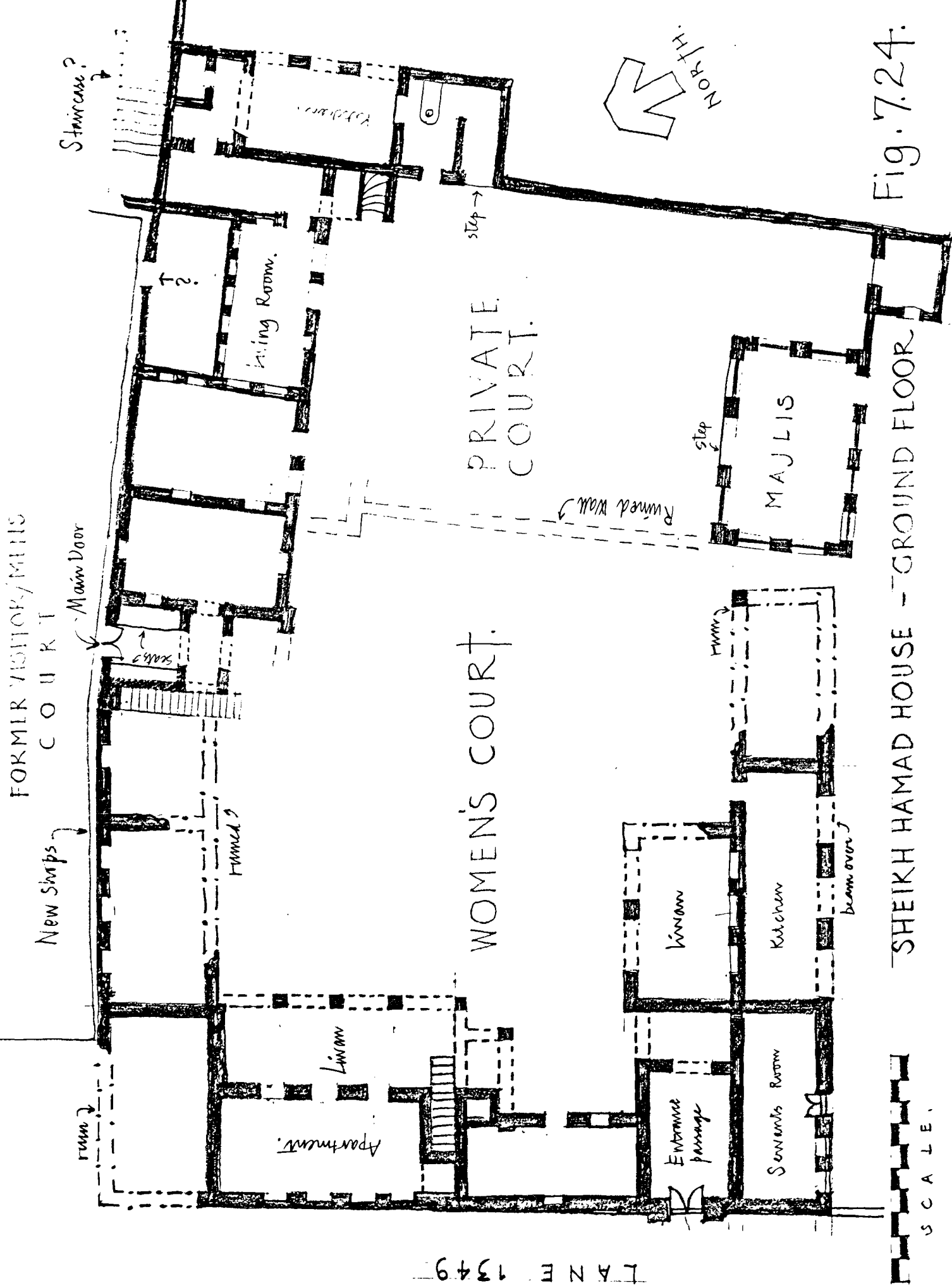
0 1 2 3 4 5 metres.

SCALE

EASTERN APARTMENT - NORTH ELEVATION

Figure 7.23.



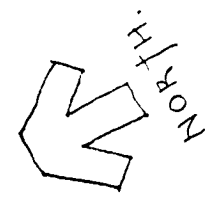


L A N E 1349

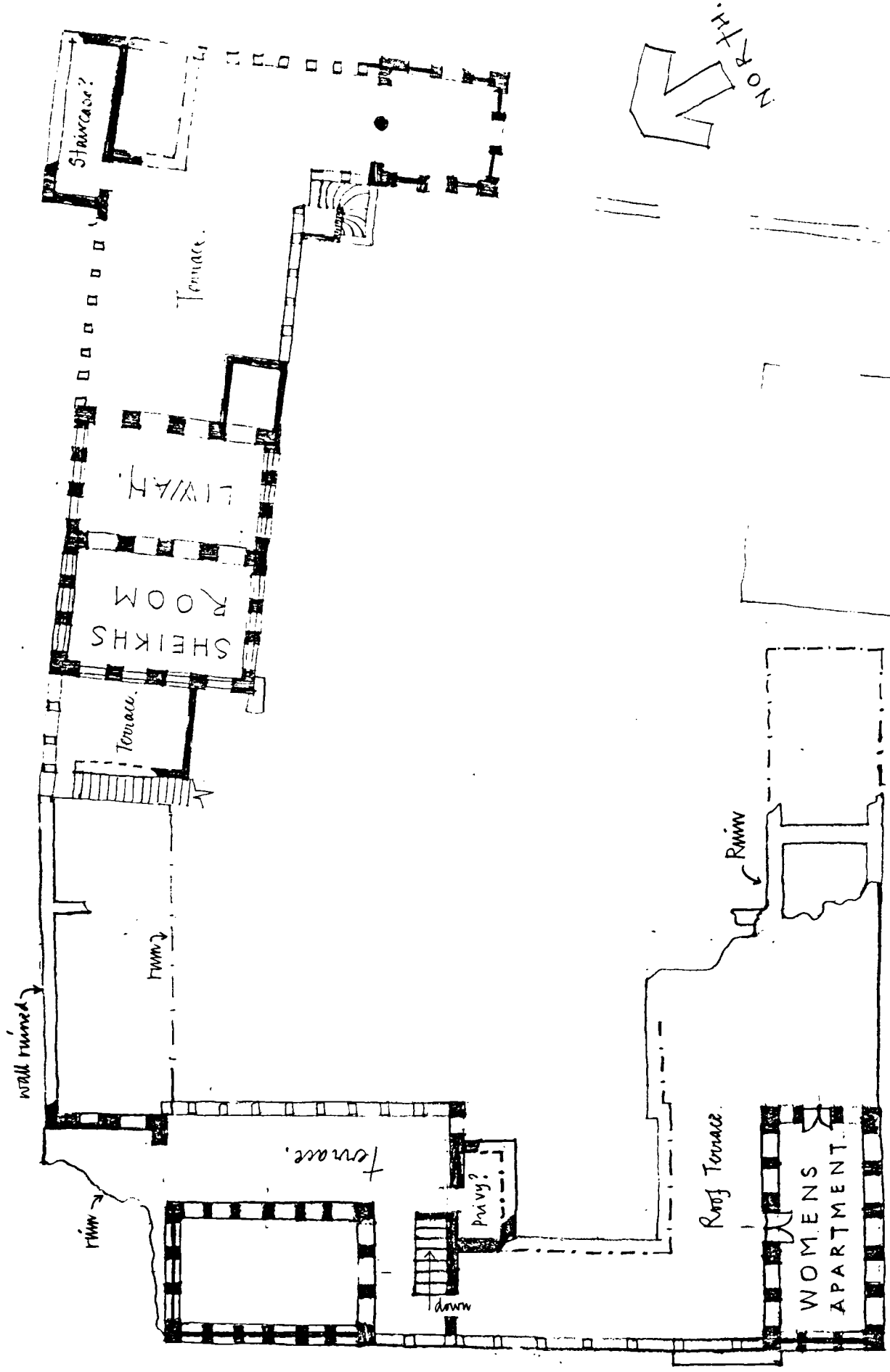
S C A L E

Fig. 7.24:

SHEIKH HAMAD HOUSE - GROUND FLOOR



L A N E 1 3 4 9 .



SHEIKH HAMAD HOUSE
FIRST FLOOR

Fig 7.25.

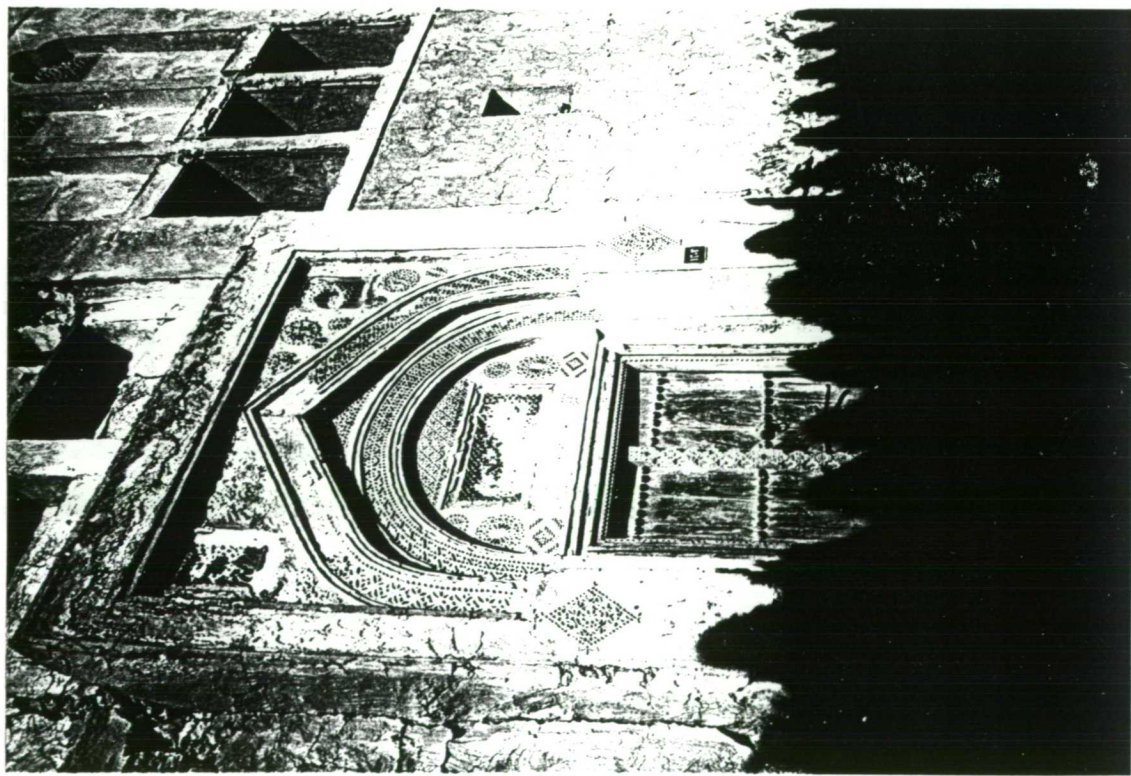


Fig. 7.26(A) Sheikh Hamad House. Main entrance door from lane 1349.

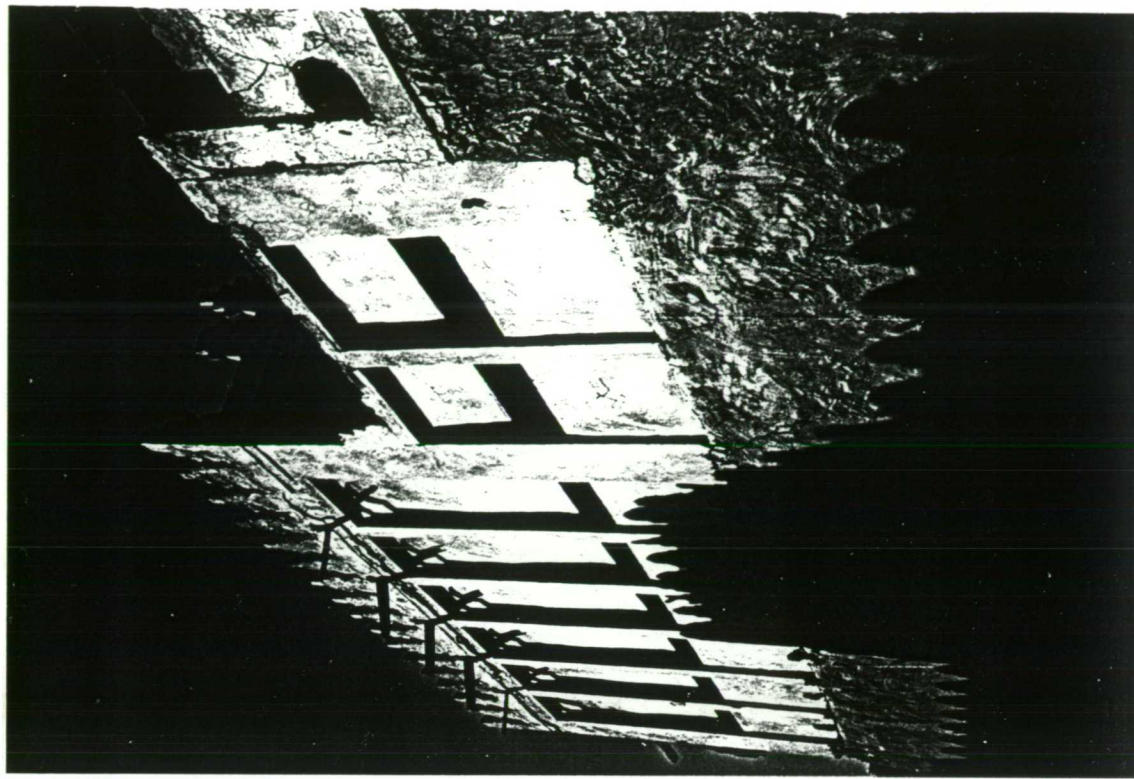


Fig. 7.26(B) Sheikh Hamad House. View of western apartment from lane 1349.

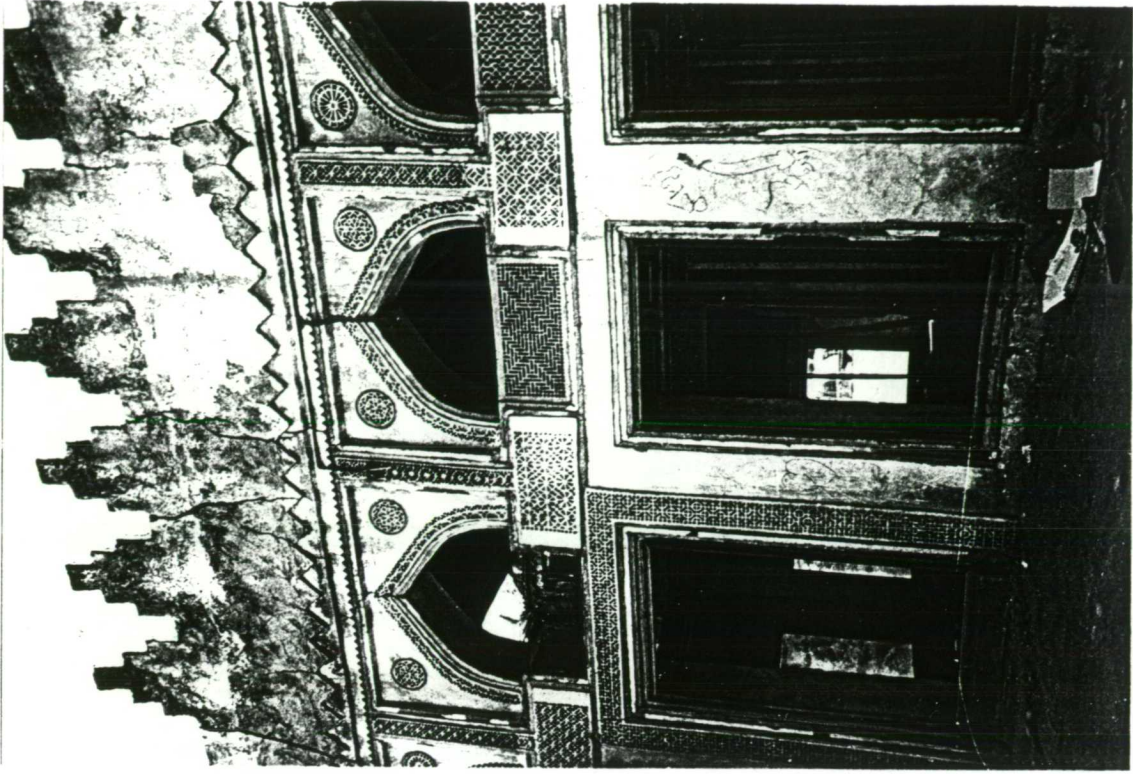


Fig. 7.26(D) Sheikh Hamad House. Sheikh's Apartment eastern elevation. Detail of two central bays.

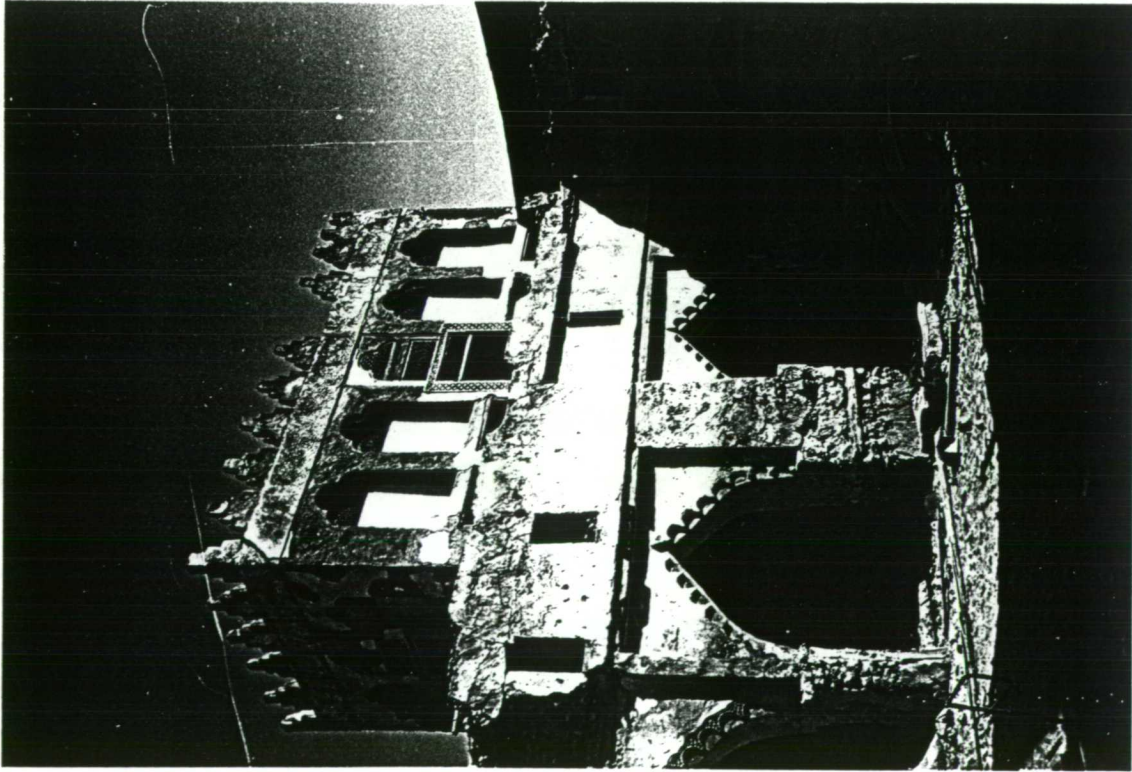


Fig. 7.26(C) Sheik Hamad House. View from the roof terrace (next to the Sheikh's apartment) across to the southern (Women's?) apartment.

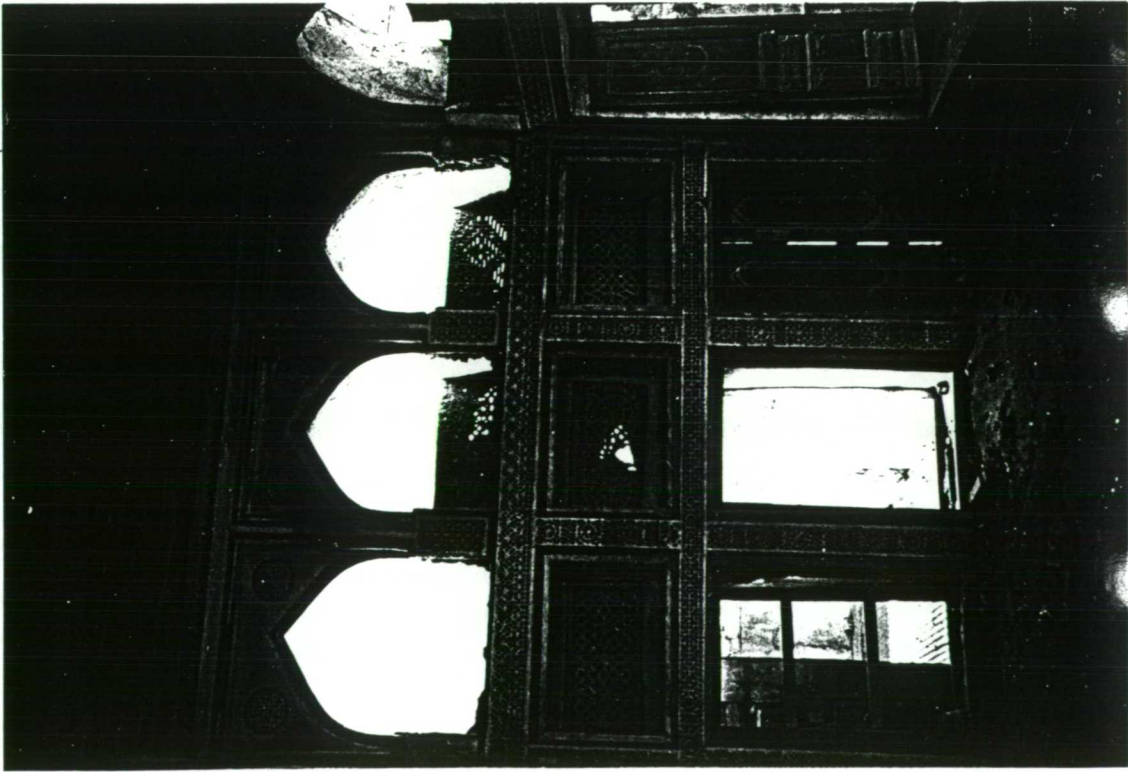


Fig. 7.26(E) Sheikh Hamad House. Sheikh's Apartment, southern wall.

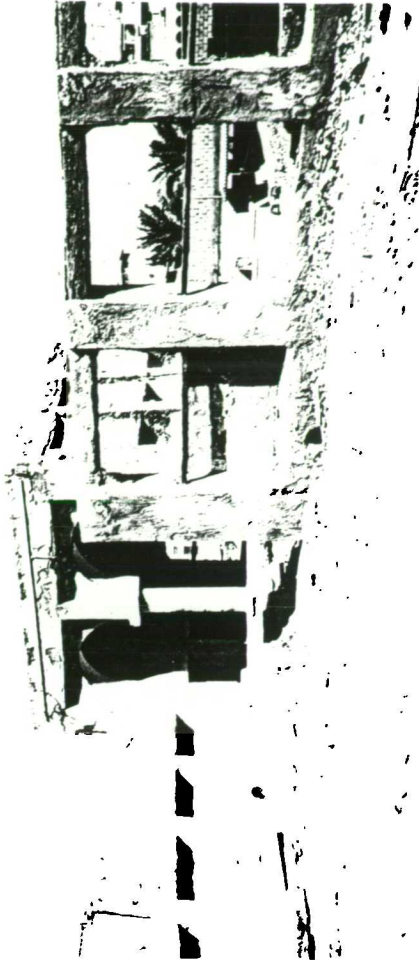
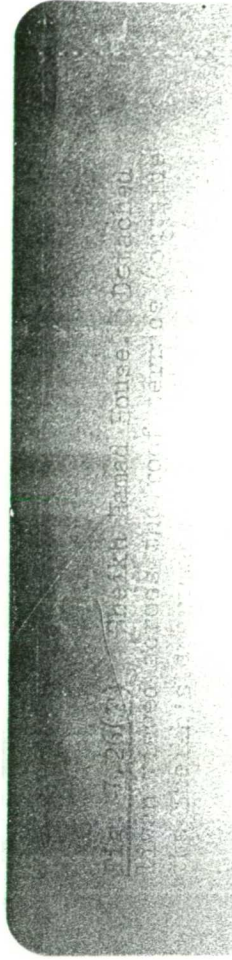


Fig. 7.26(F) Sheikh Hamad House. Detached liwan viewed across the roof terrace (outside the Sheikh's apartment).

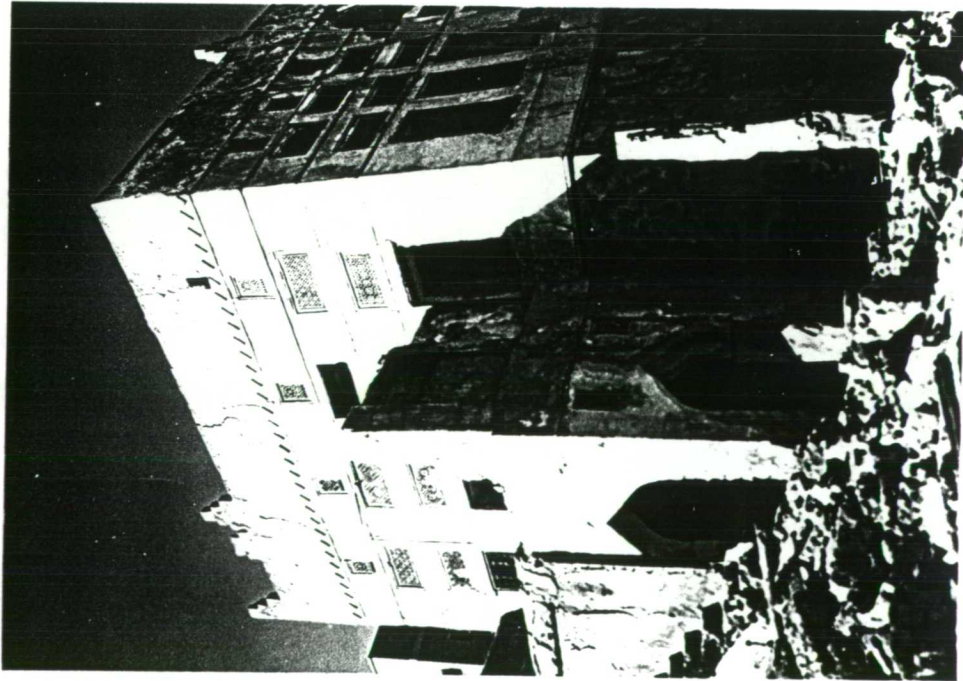
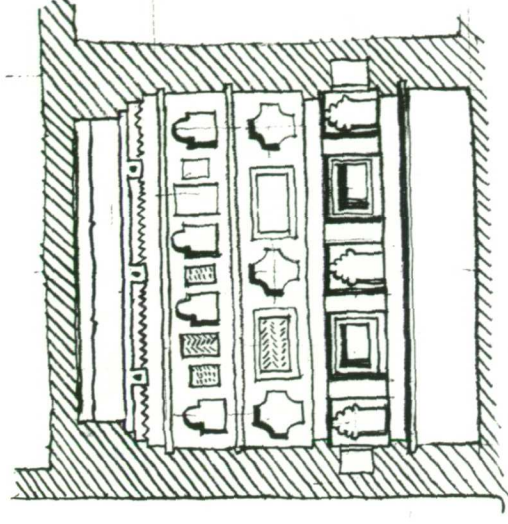
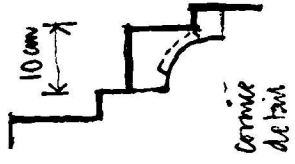
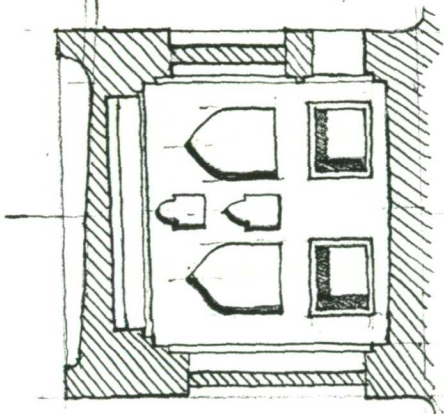


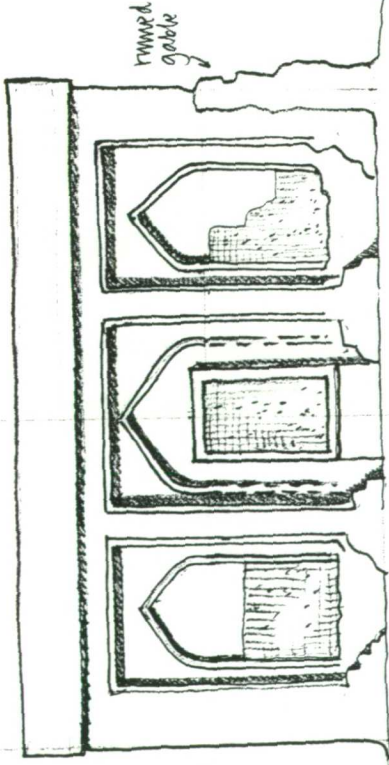
Fig. 7.26(G) Sheikh Hamad House. Sheikh's Apartment. Western elevation, showing the porch leading to the passage into the entrance courtyard (which was demolished in the 1950s).



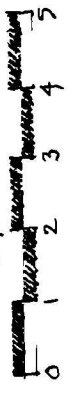
END ELEVATION OF GROUND FLOOR APARTMENT



MAJLIS - INTERNAL END ELEVATION.

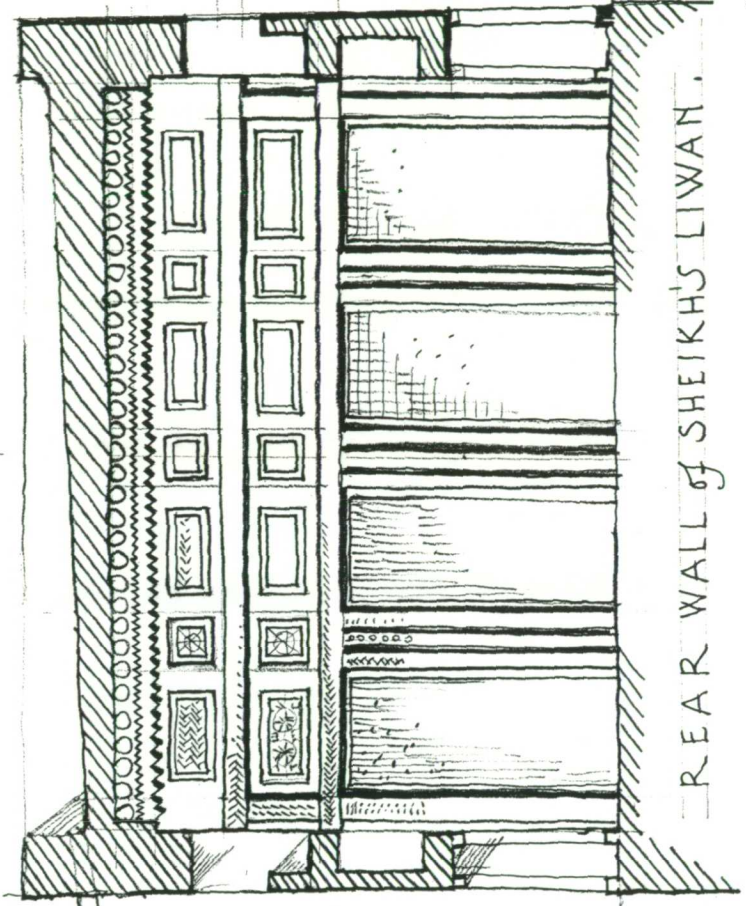


GROUND LEVEL MAJLIS - NORTH ELEVATION.

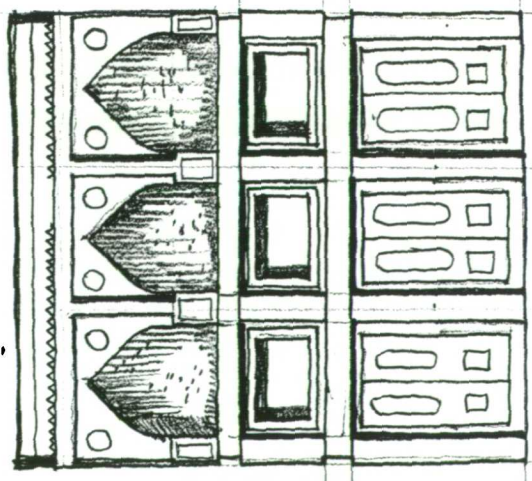


SH. HAMAD HOUSE.

SHEIKH'S APARTMENT & G F MAJLIS



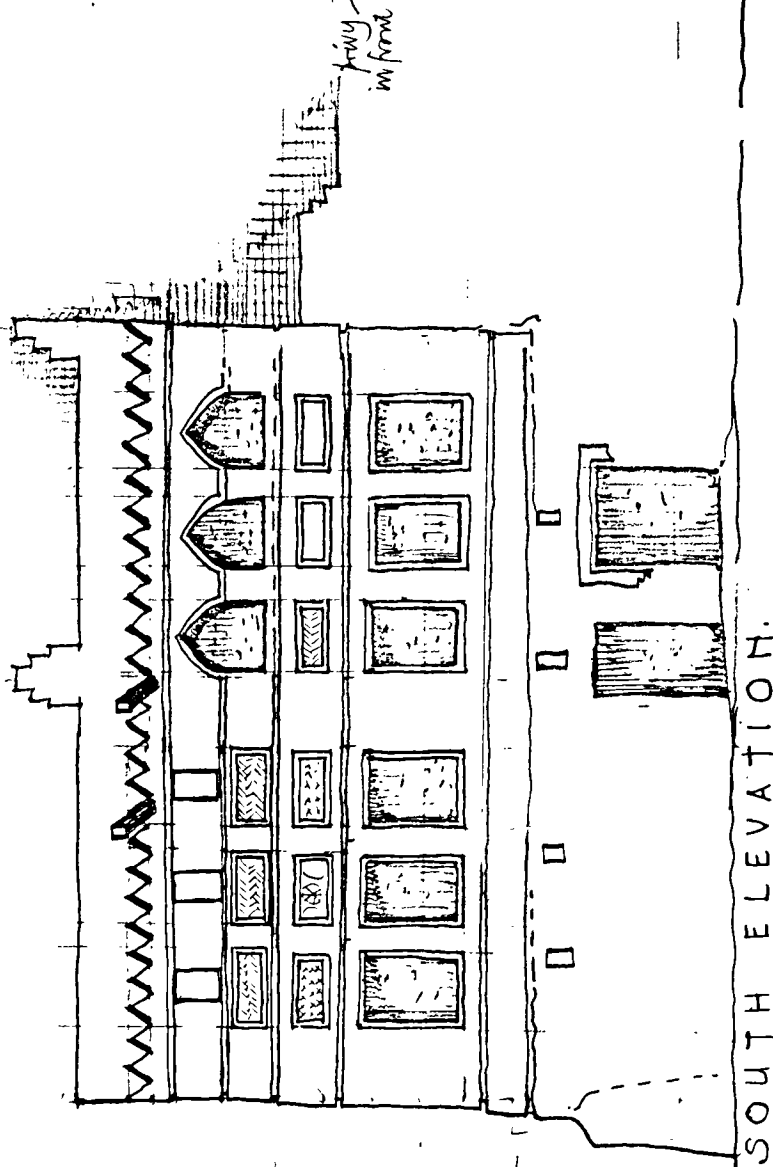
REAR WALL OF SHEIKH'S LIWAN.



SIDE WALL OF LIWAN.

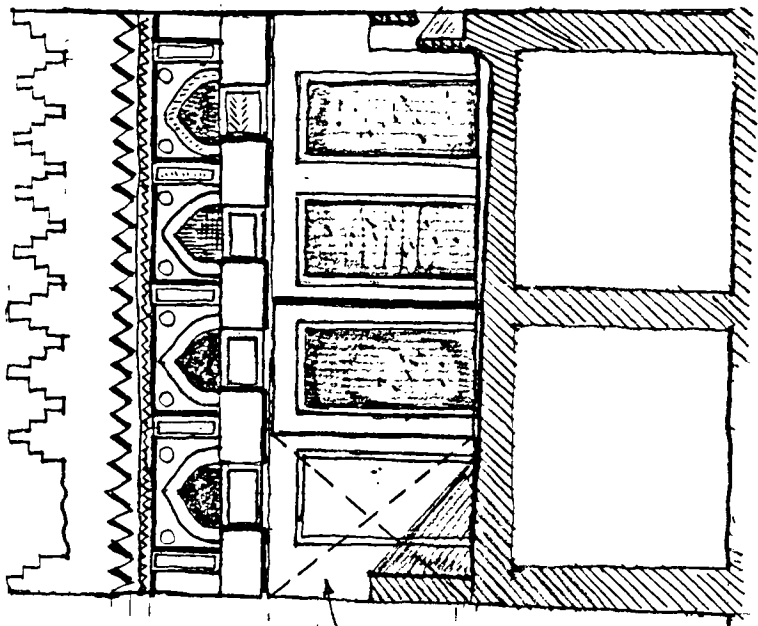


Fig. 7.27.

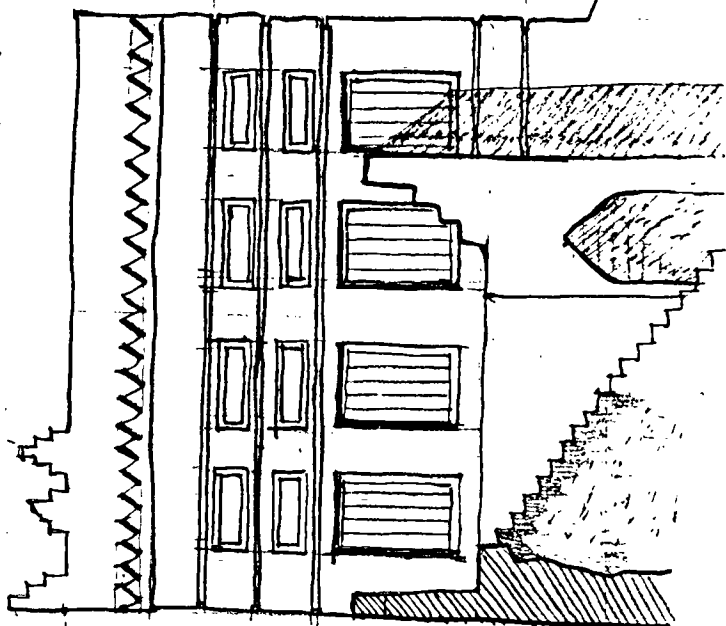


SOUTH ELEVATION.

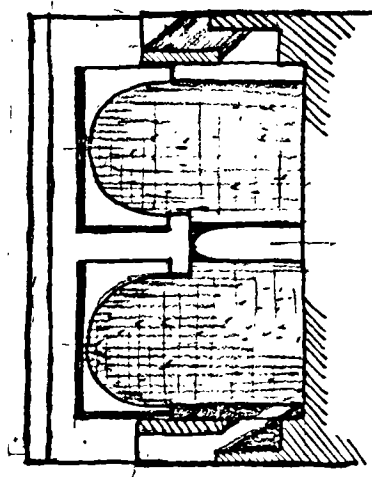
SH. HAMAD HOUSE - SHEIKH'S APARTMENT.



EAST ELEVATION.



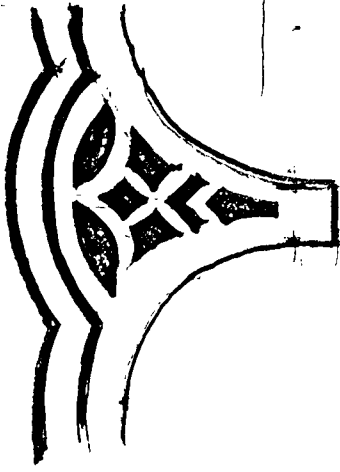
WEST ELEVATION



NORTH ELEVATION.
SMALL MAJLIS.

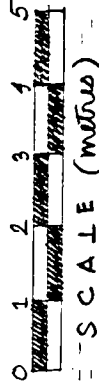
Fig 7.28.

LIWAN ARCH DETAIL



EAST ELEVATION

SH. HAMAD HOUSE



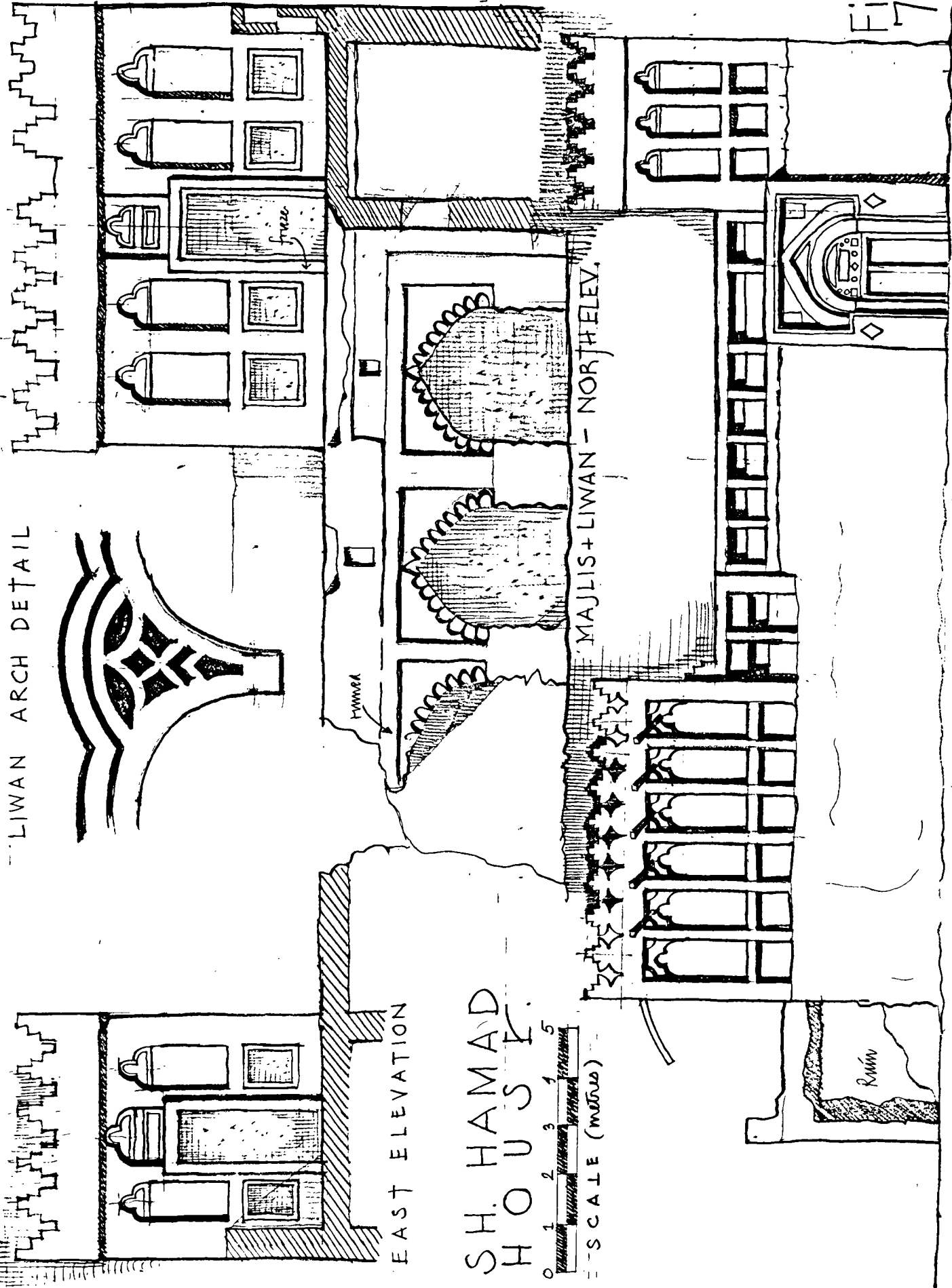
MAJLIS + LIWAN - NORTH ELEV.

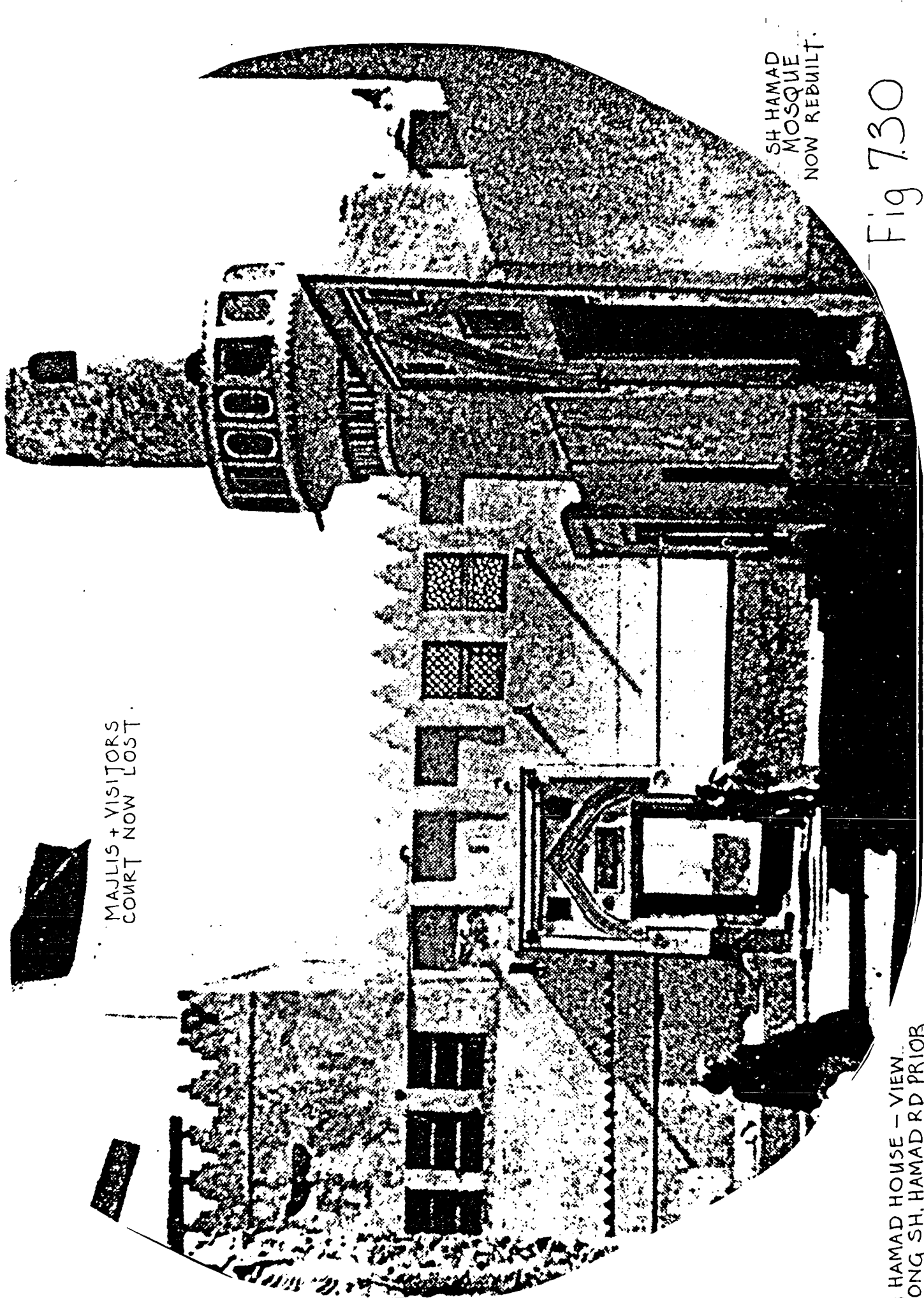
PIVOT

RAMIN

WEST ELEVATION (TO LANE 1349).

Fig. 29.



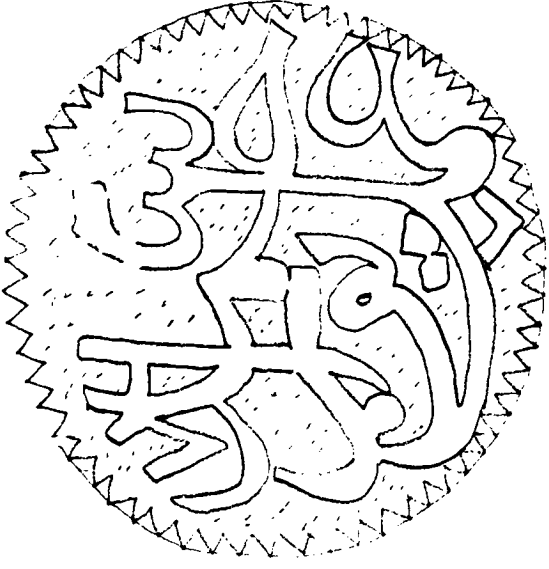


MAJLIS + VISITORS
COURT NOW LOST.

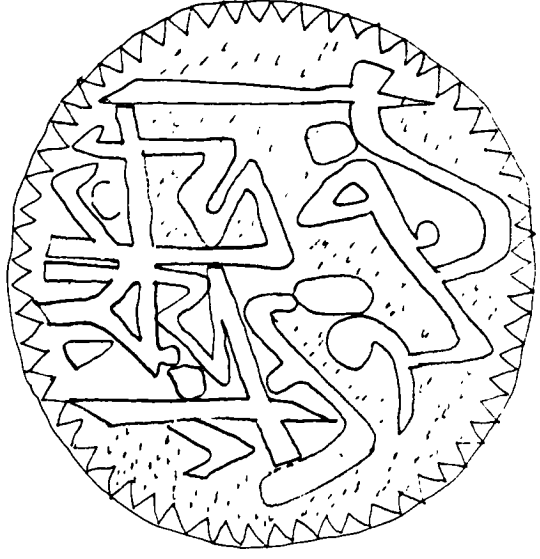
SH HAMAD
MOSQUE
NOW REBUILT.

Fig 7.30

SH HAMAD HOUSE - VIEW
ALONG SH. HAMAD RD PRIOR
TO WIDENING (c. 1935)

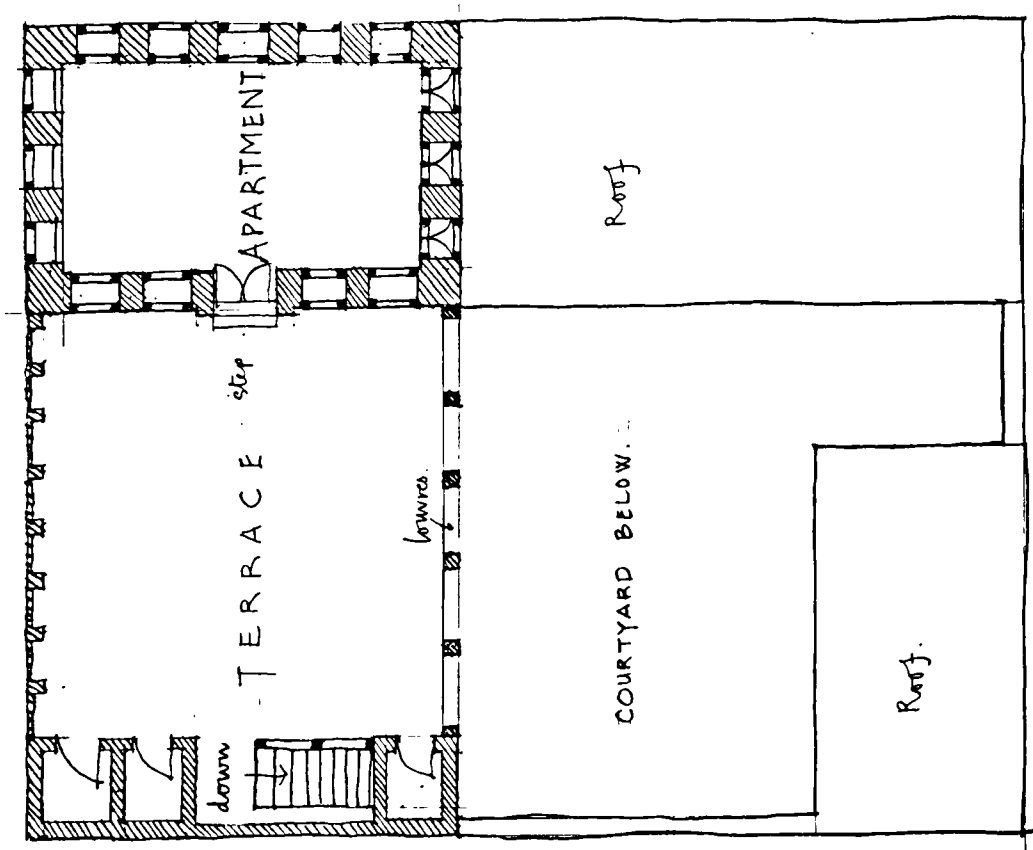


TRANSLATION: "THE WORK OF AYUB HAMAD"

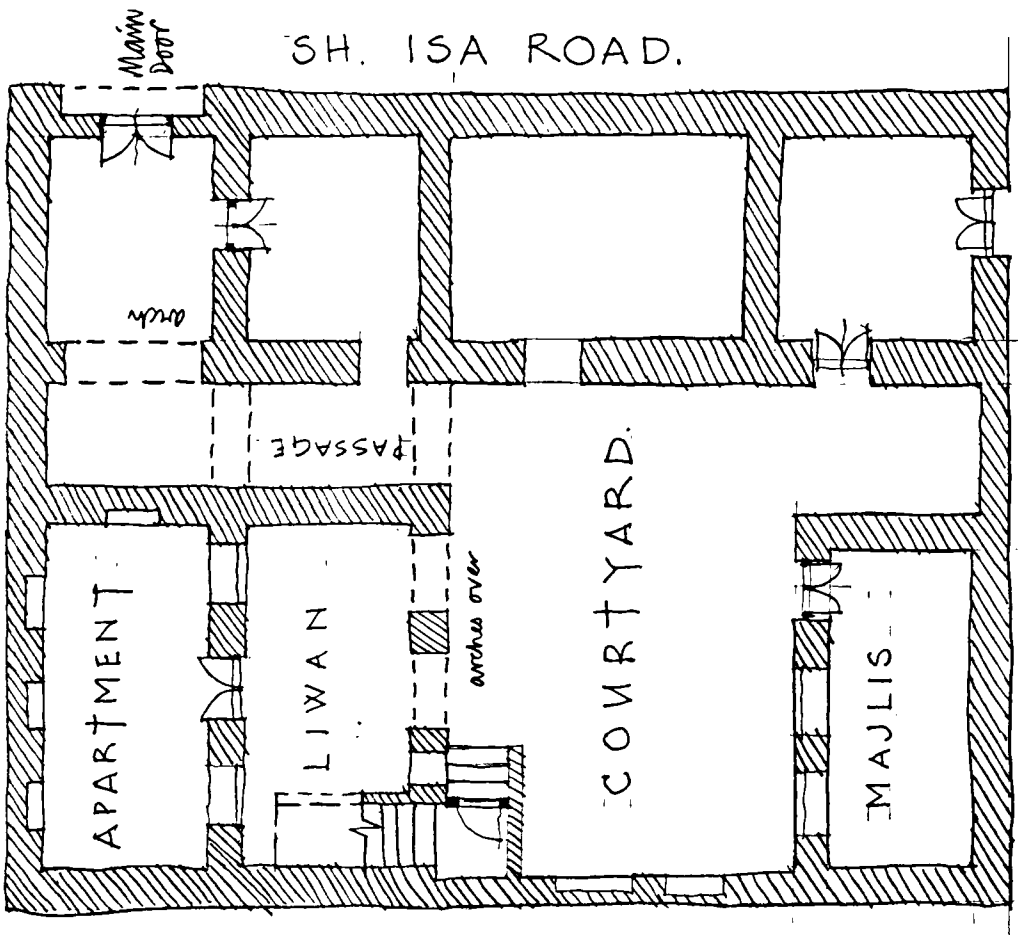


TRANSLATION: "ALI RAHMAN MUSA AL BAHALI"
ROUNDELS ON SHAMAD HOUSE DOOR

Fig 7.31



FIRST FLOOR PLAN
 SH ABDULLAH BIN MOHAMMED
 HOUSE.



GROUND FLOOR PLAN.
 NORTH

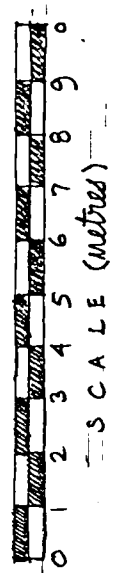


Figure 7.32.

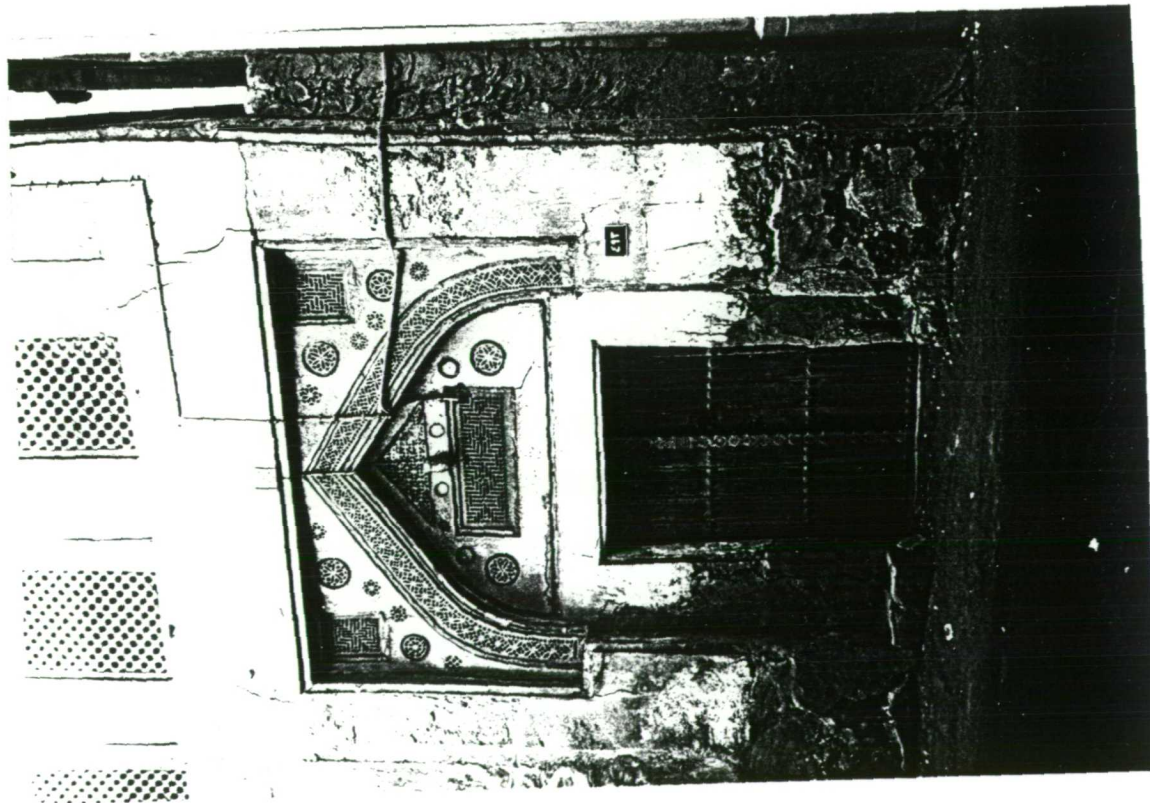


Fig. 7.33(C) Sheikh Abdullah bin Mohammed House.
Main entrance doorway.

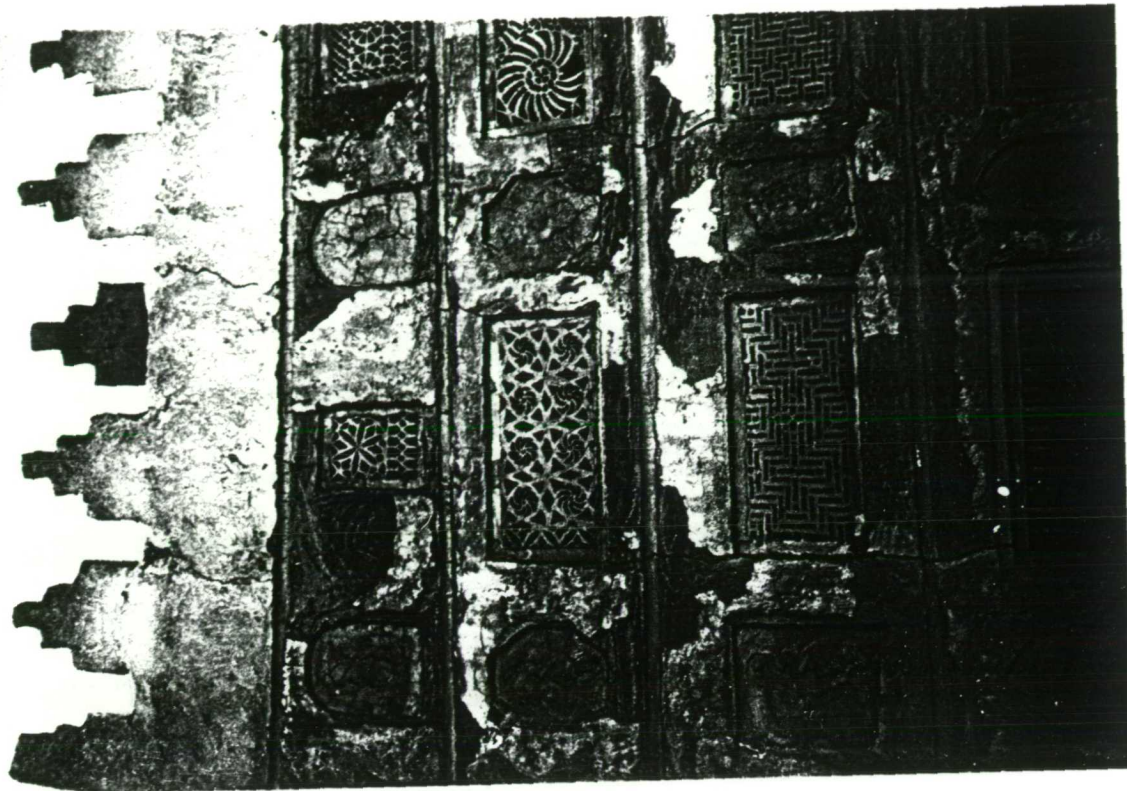


Fig. 7.33(D) Sheikh Abdullah bin Mohammed House.
Detail of east elevation.

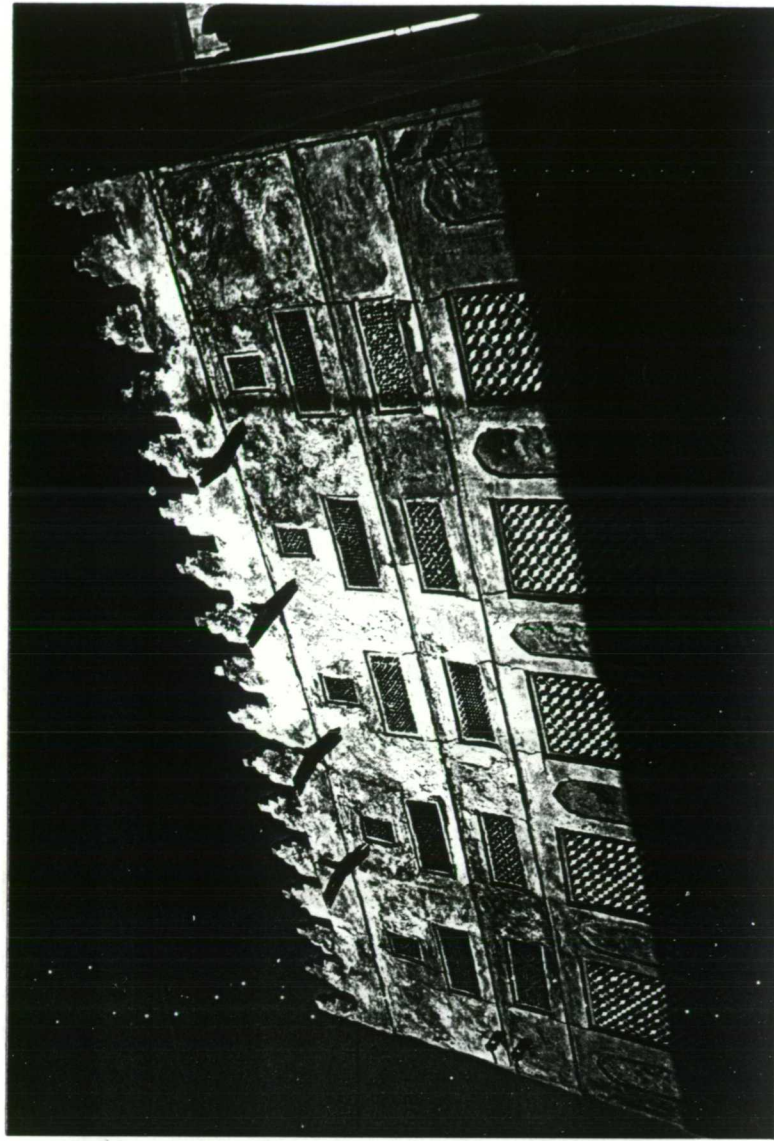


Fig. 7.33(B) Sheikh Abdullah bin Mohammed House.
West elevation of the apartment viewed from the
road.

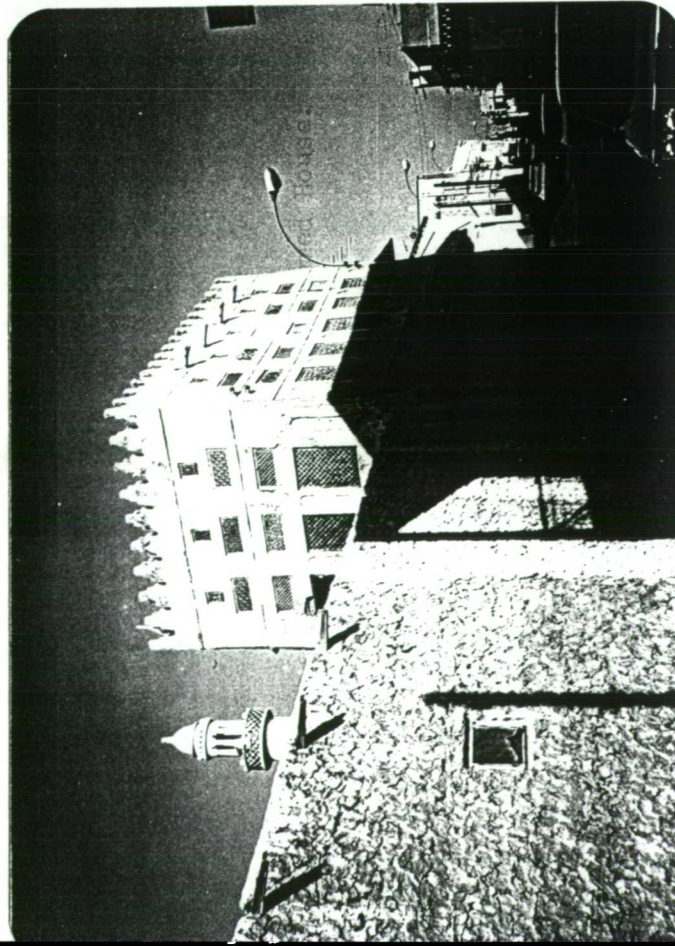


Fig. 7.33(A) Sheikh Abdullah bin Mohammed House.
View from the north along Sheikh Isa Road.

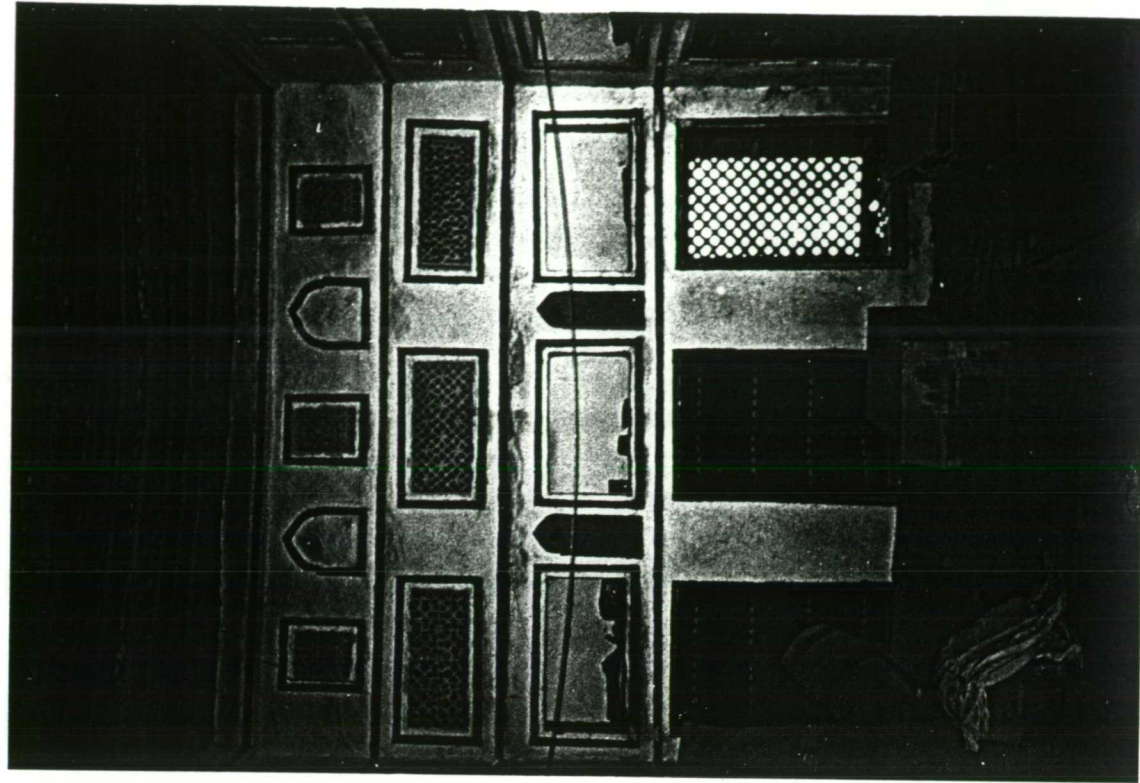


Fig. 7.33(F) Sheikh Abdullah bin Mohammed House.
Apartment. Internal view of south wall.

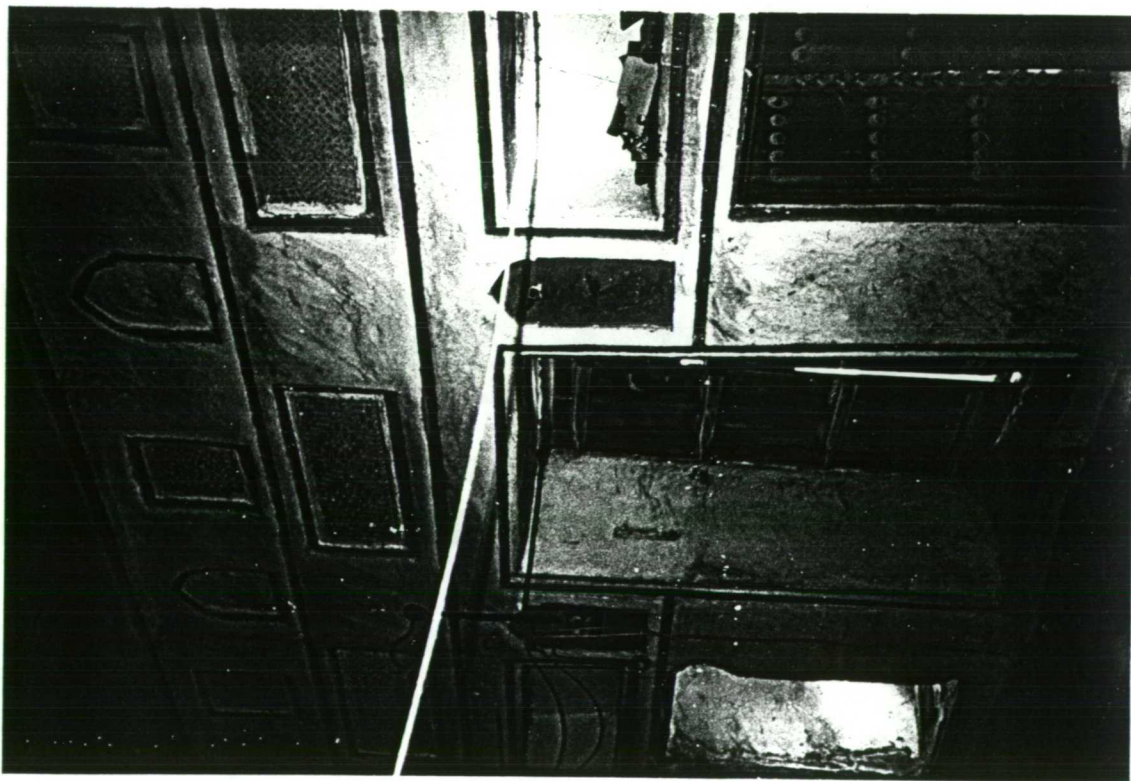
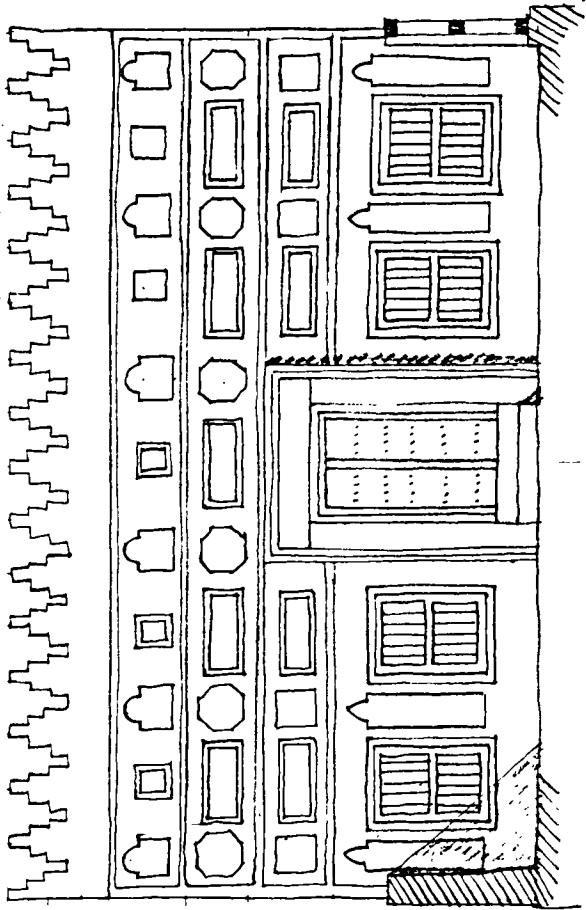
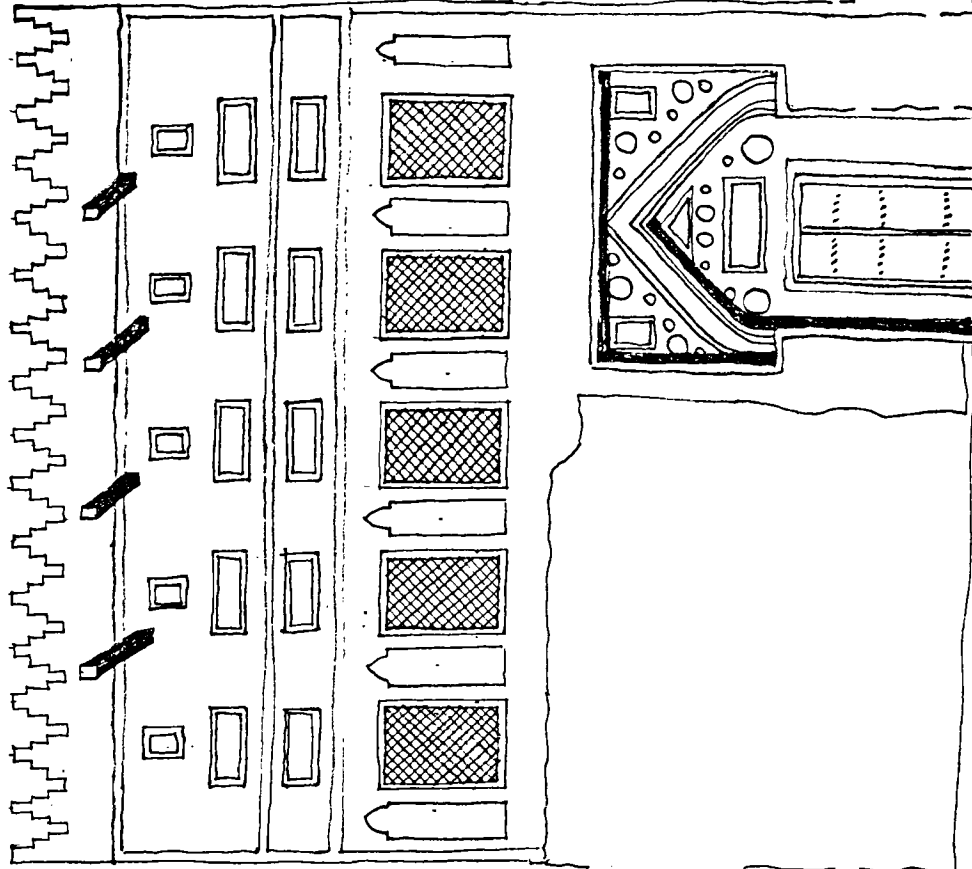


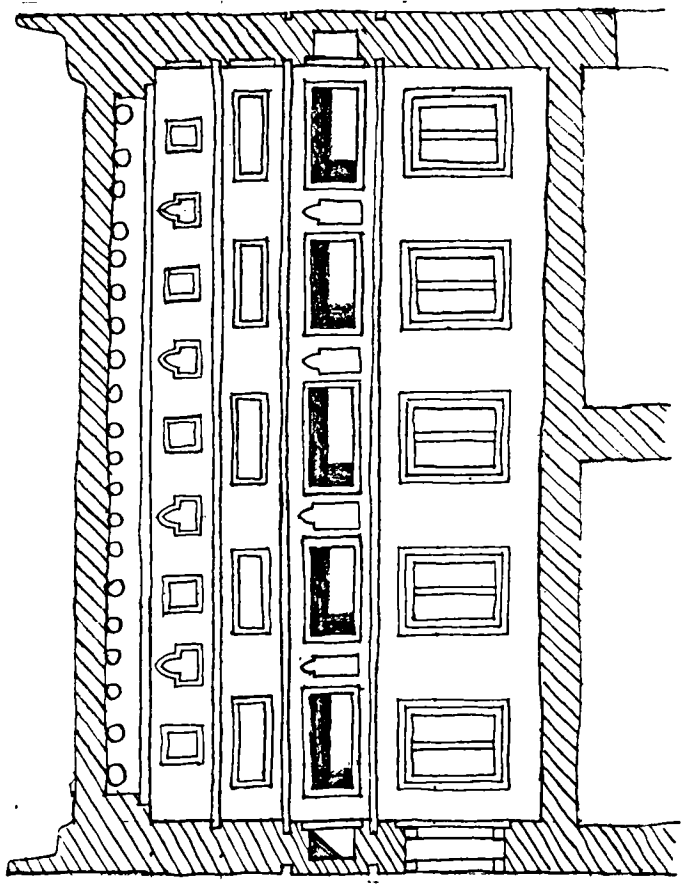
Fig. 7.33(E) Sheikh Abdullah bin Mohammed House.
Internal view of East wall of apartment.



ELEVATION TO ROOF TERRACE



ELEVATION TO SH. ISA ROAD.

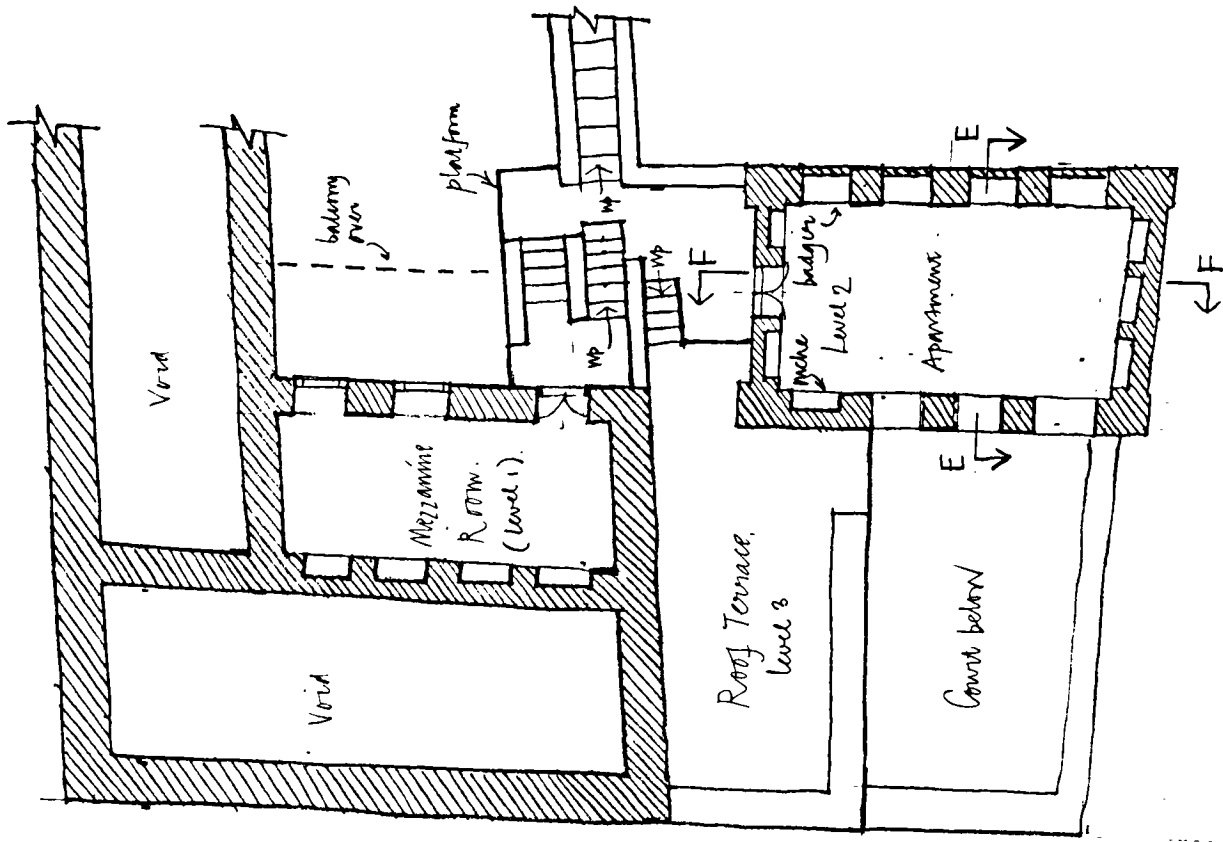
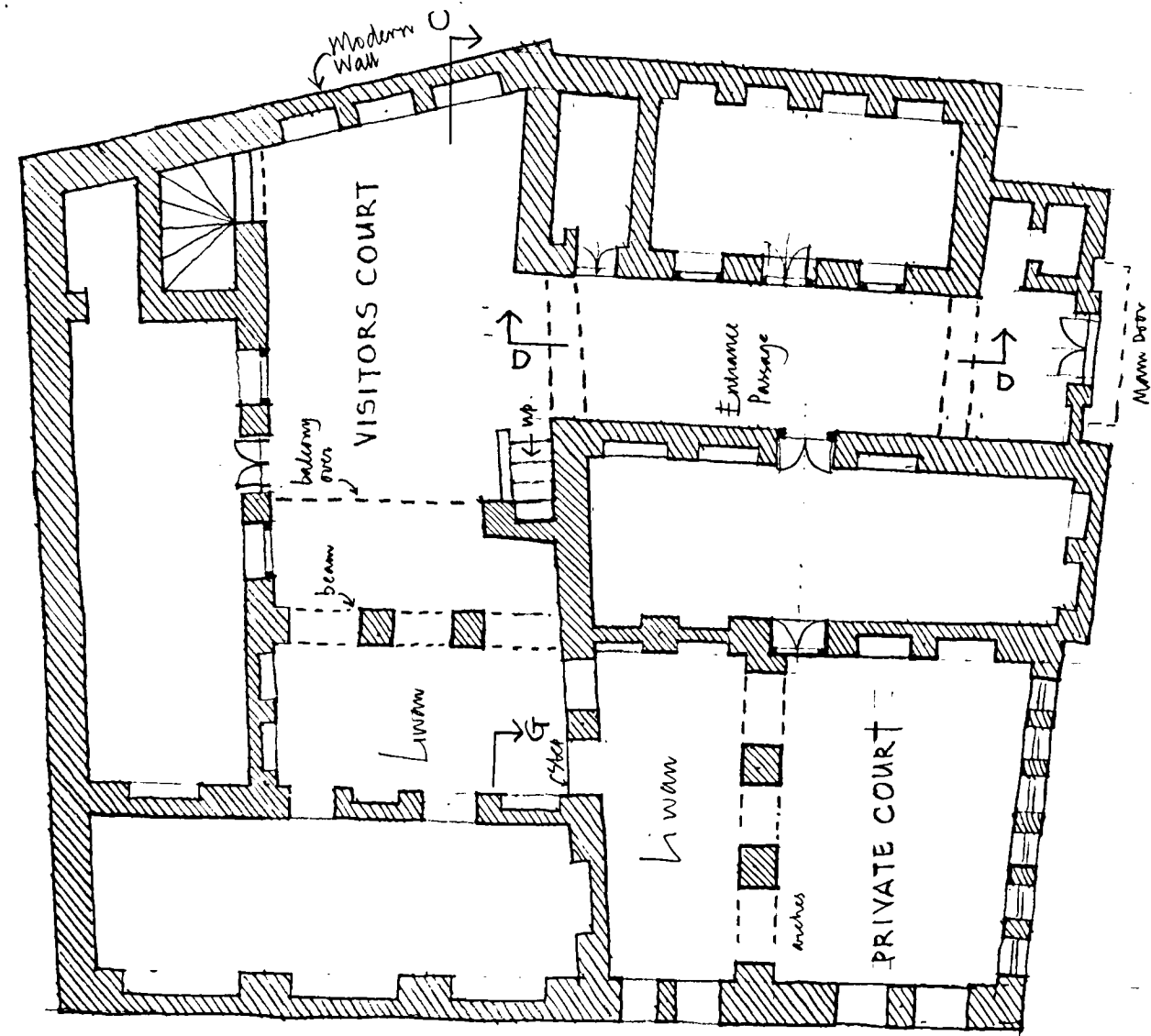


SH ABDULLAH BIN MOHAMMED
HOUSE



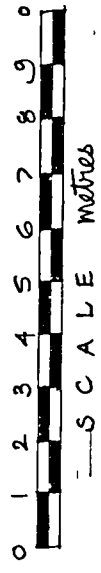
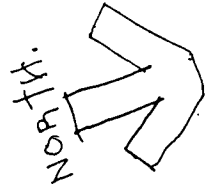
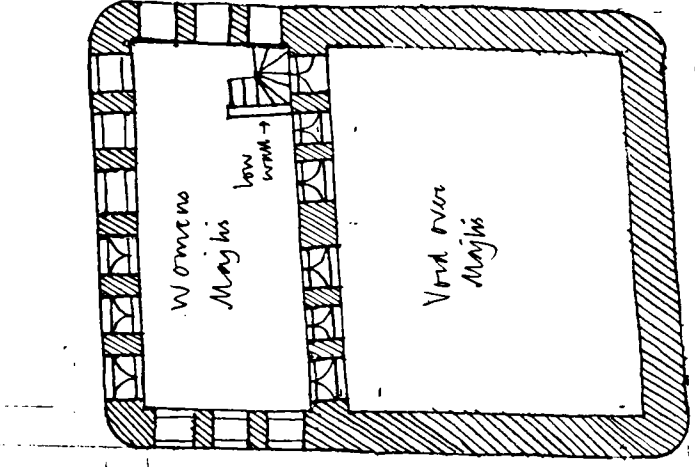
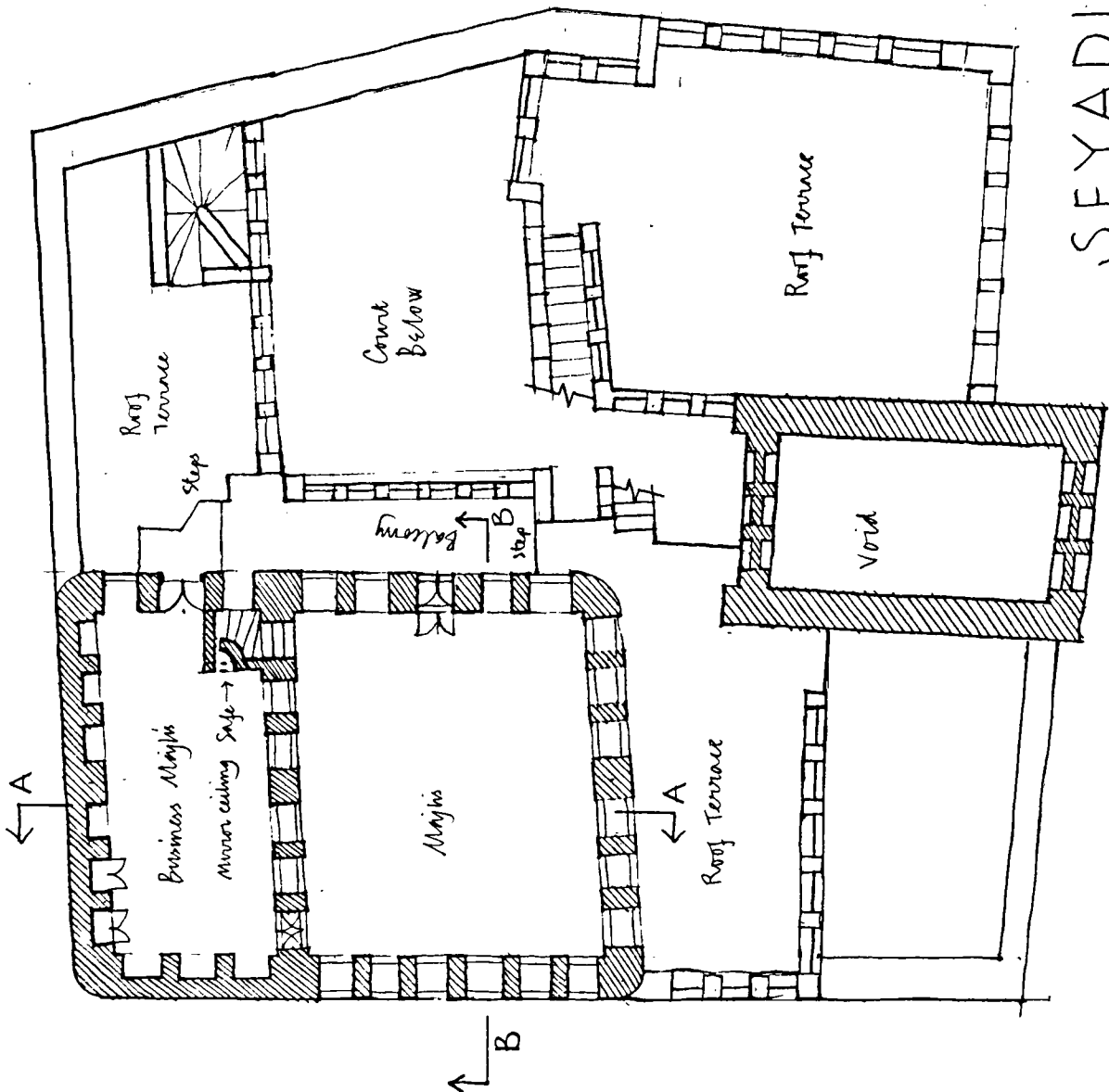
Fig 7.34.

SEYADI HOUSE



GROUND LEVEL scale 1:100

LEVELS 1, 2 & 3. Fig 7.35.



SEYADI HOUSE.

LEVELS 4 (MAJLIS) & 5

LEVEL 6

Fig 7.36.

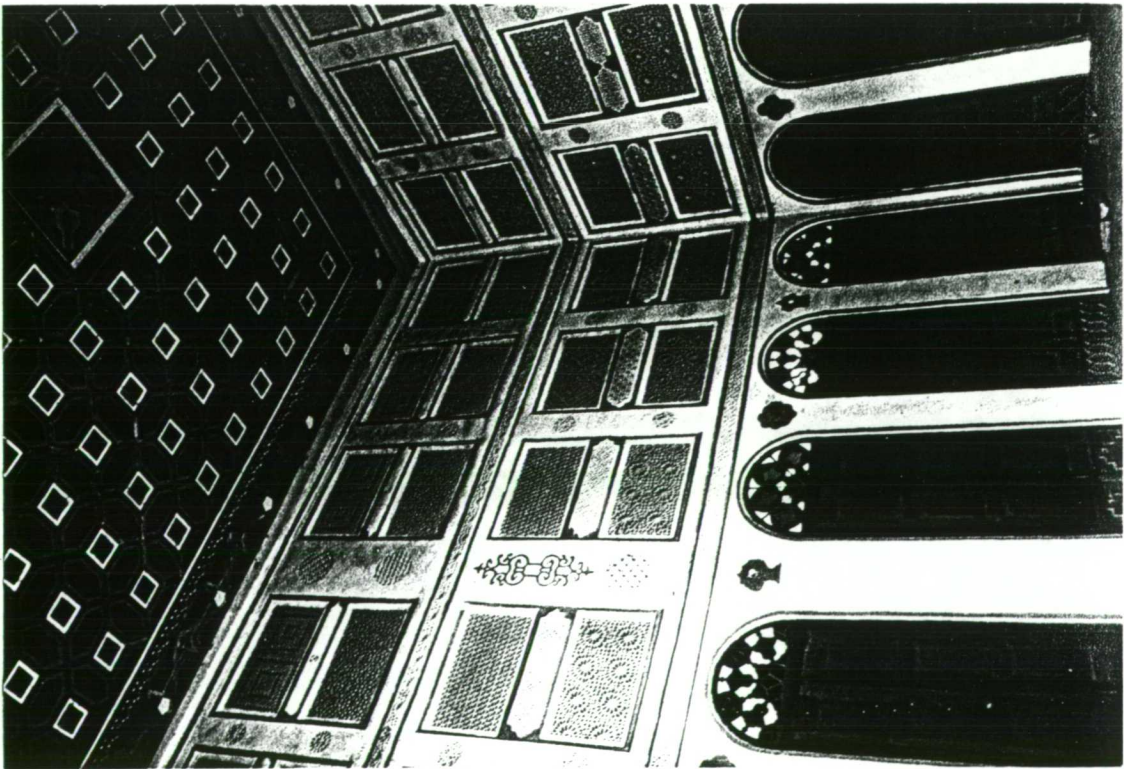


Fig. 7.37(A) Seyyedi House. Main majlis interior view.

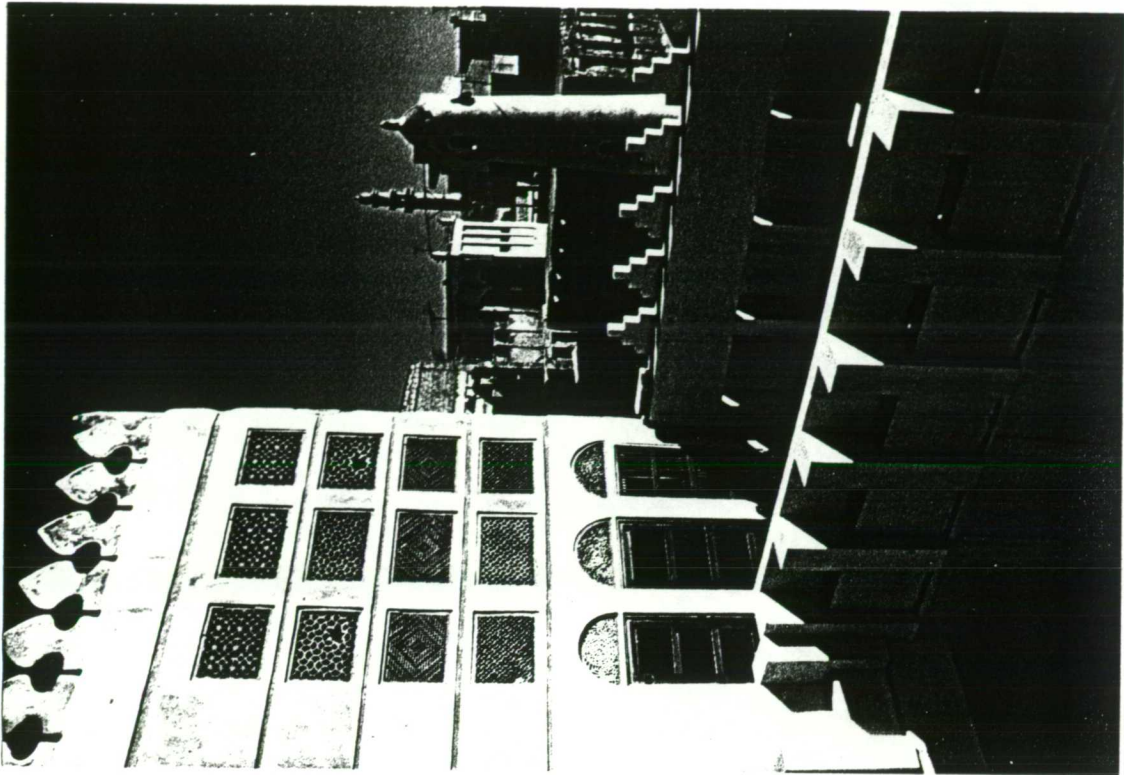


Fig. 7.37(B) Seyyedi House. Majlis seen from the east. The minaret of the Seyyedi Mosque can be seen in the background.

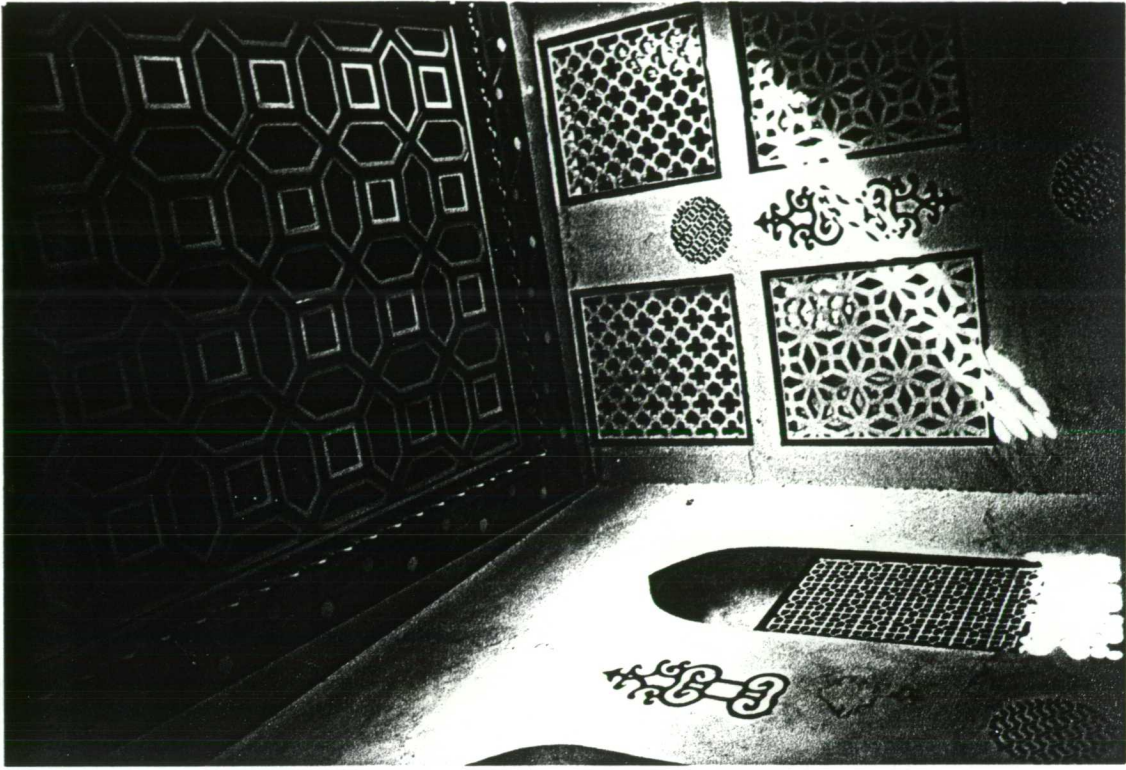


Fig. 7.37(D) Seyadi House. Ground Floor Room showing tacked-lath ceiling. The plaster panels are recent.

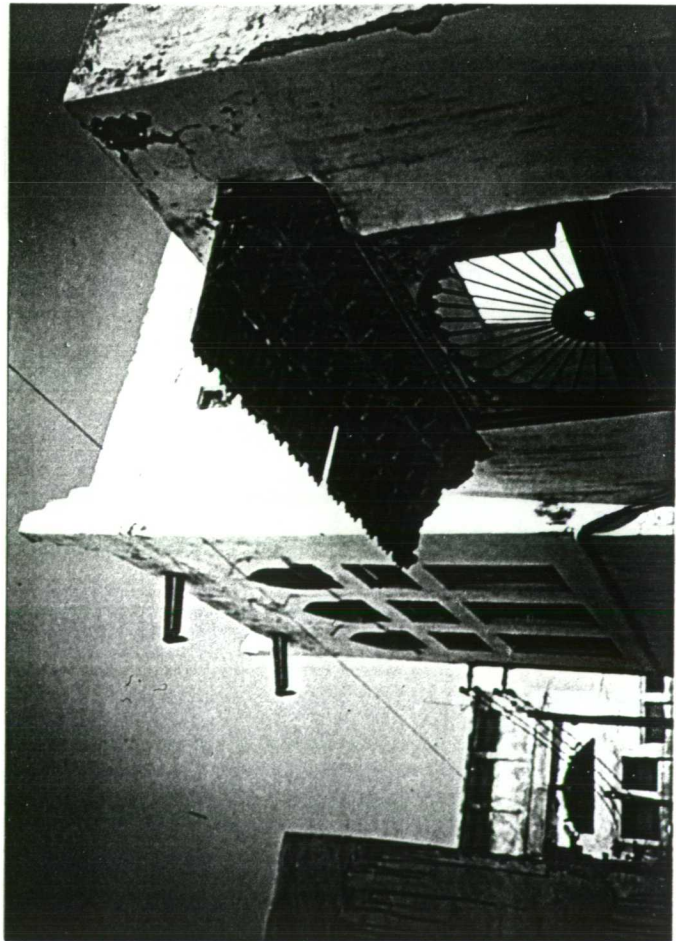


Fig. 7.37(C) Seyadi House. East elevation. The fanlight and canopy to the main entrance door are on the right. The childrens apartment is seen beyond this.

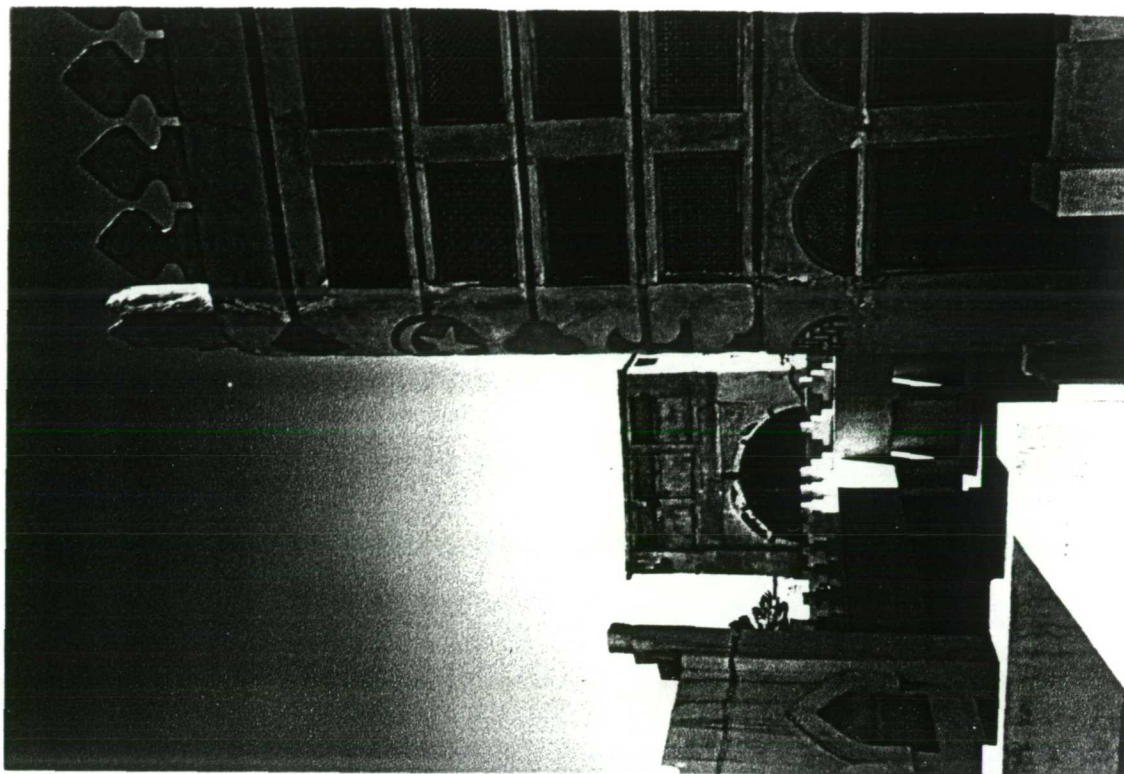


Fig. 7.37(F) Seyadi House. View from the external staircase looking back at the majlis (seen on the right). The childrens apartment is on the left. In the centre in the distance is the liwan of the next house which lies across the street.

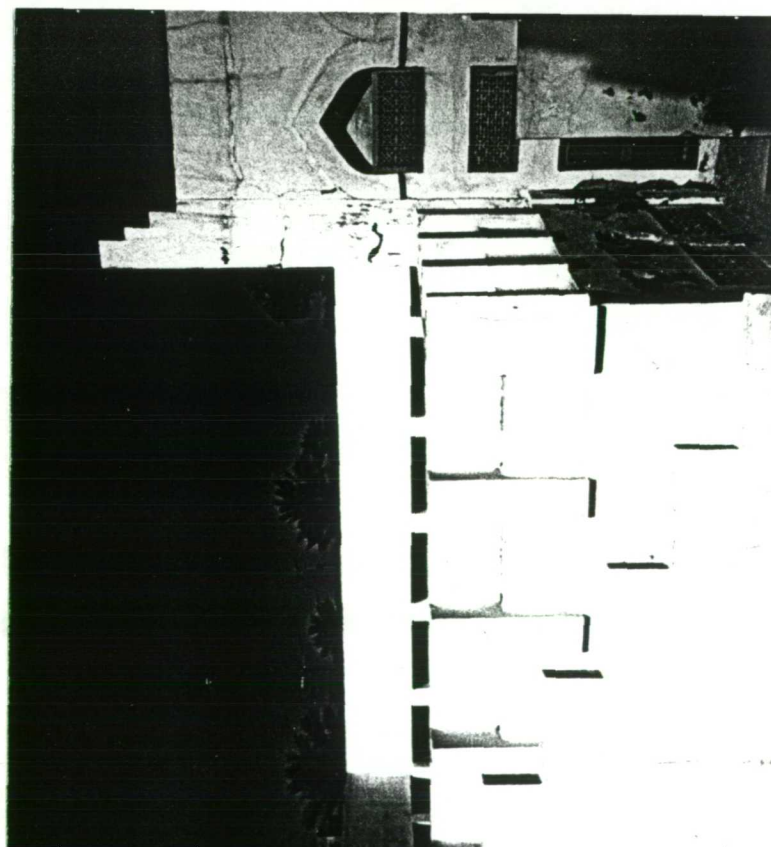


Fig. 7.37(E) Seyadi House. View from the majlis terrace. The childrens apartment (?) is on the right. The staircase is seen ascending towards the left.

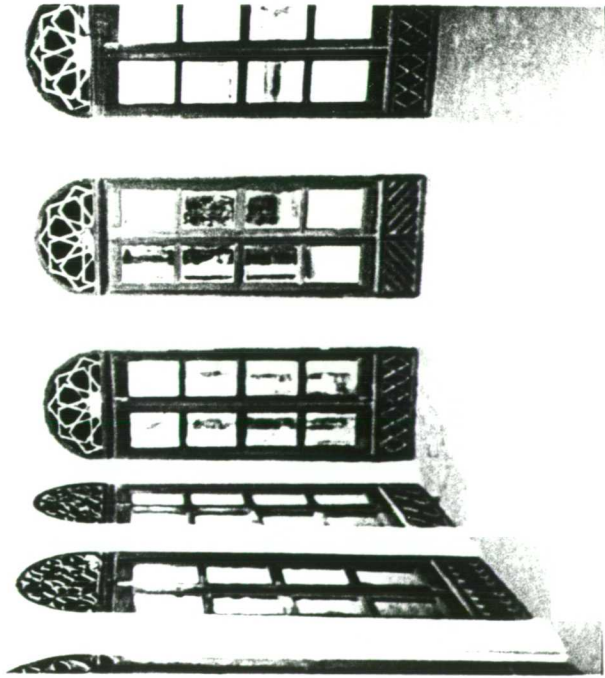
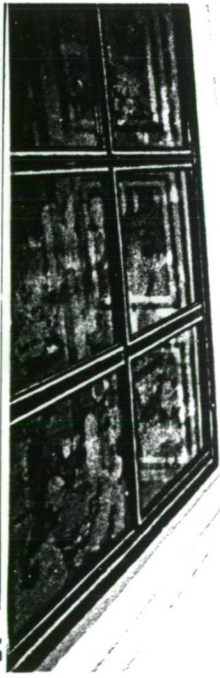
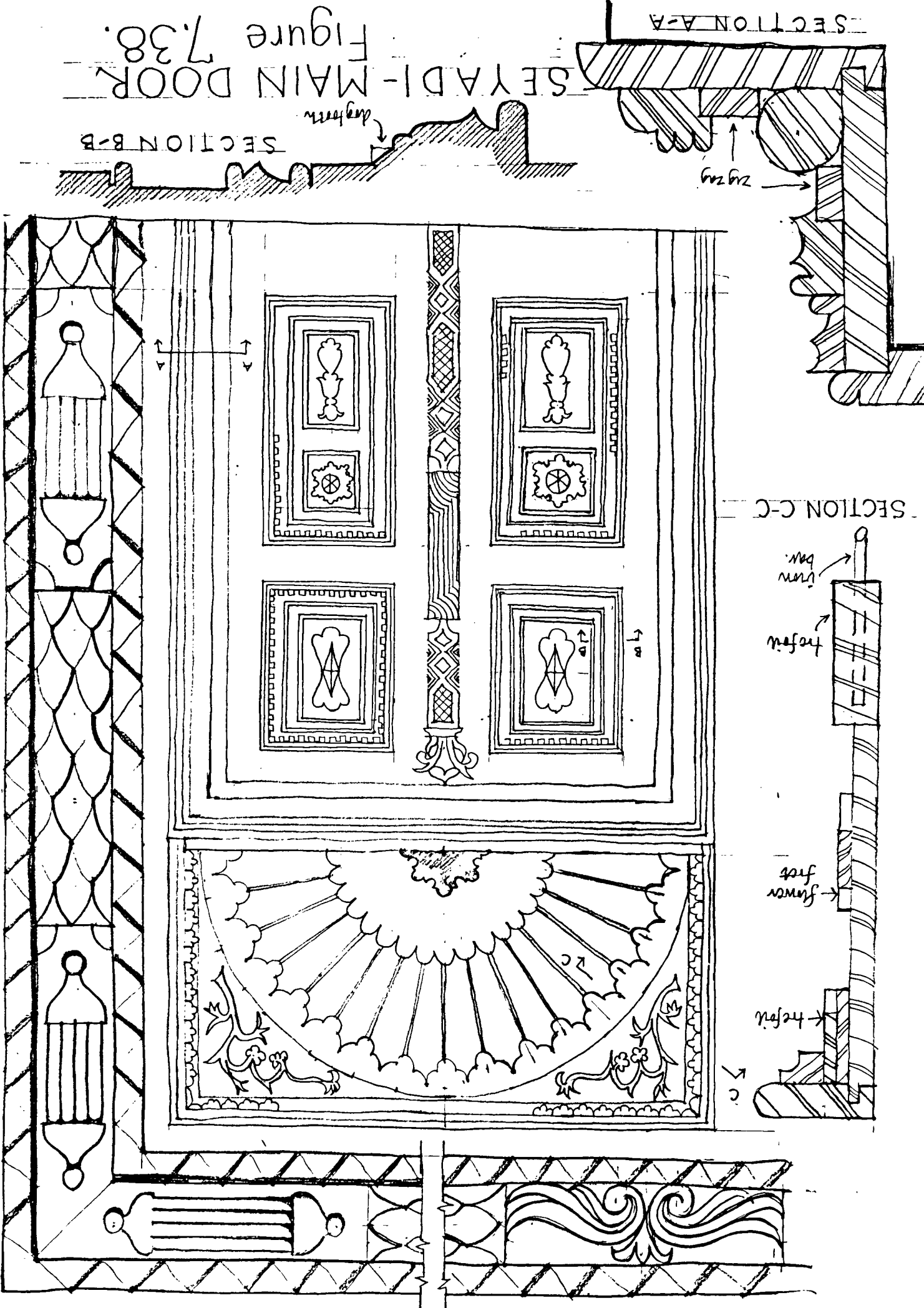
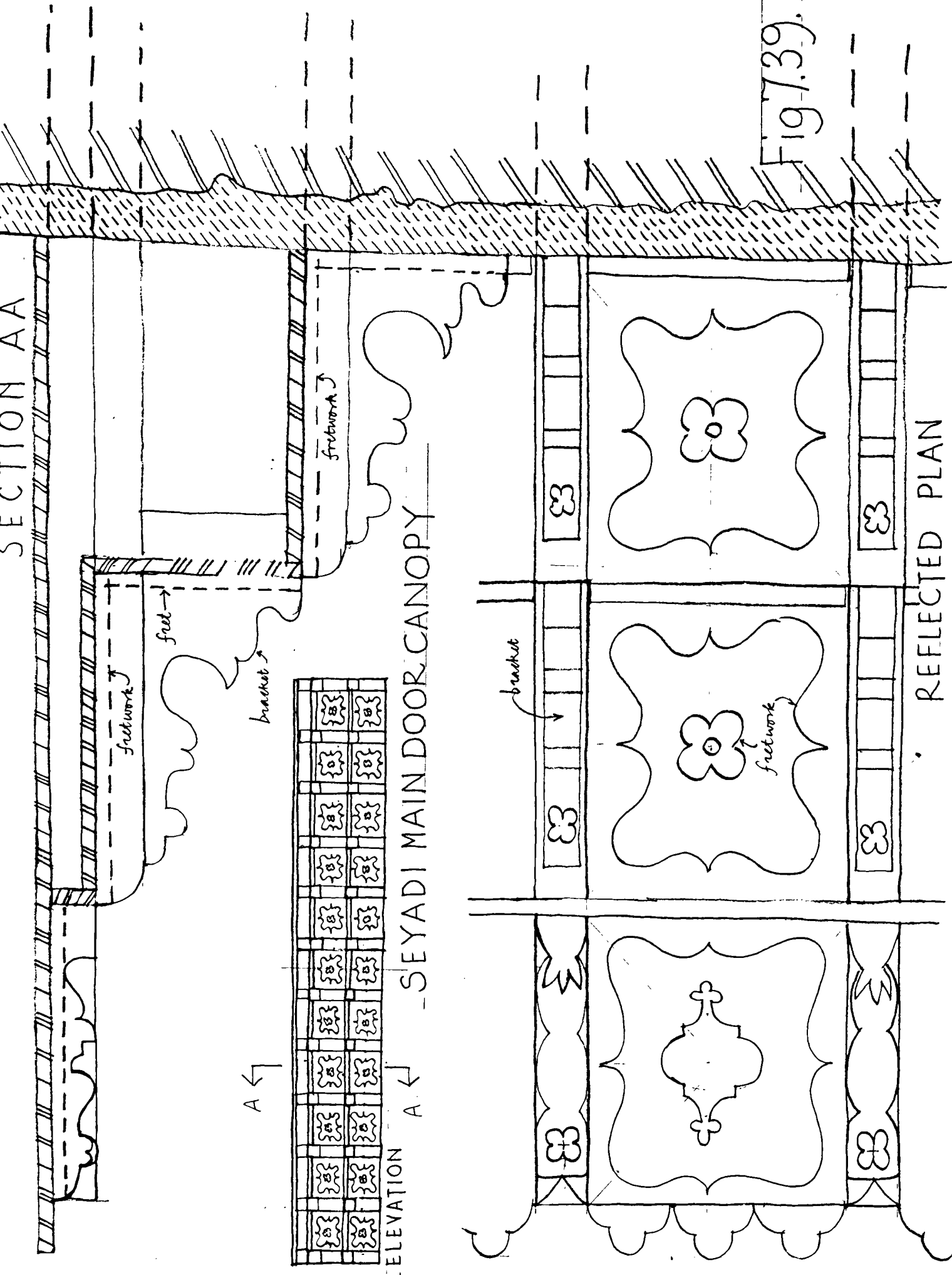


Fig. 7.37(G) Seyadi House. The head man's room. Interior view shewing mirror ceiling. Doors to the main room (on the left) and window shutters are identical and mirror-glazed.

SEYADI-MAIN DOOR
Figure 7.38.

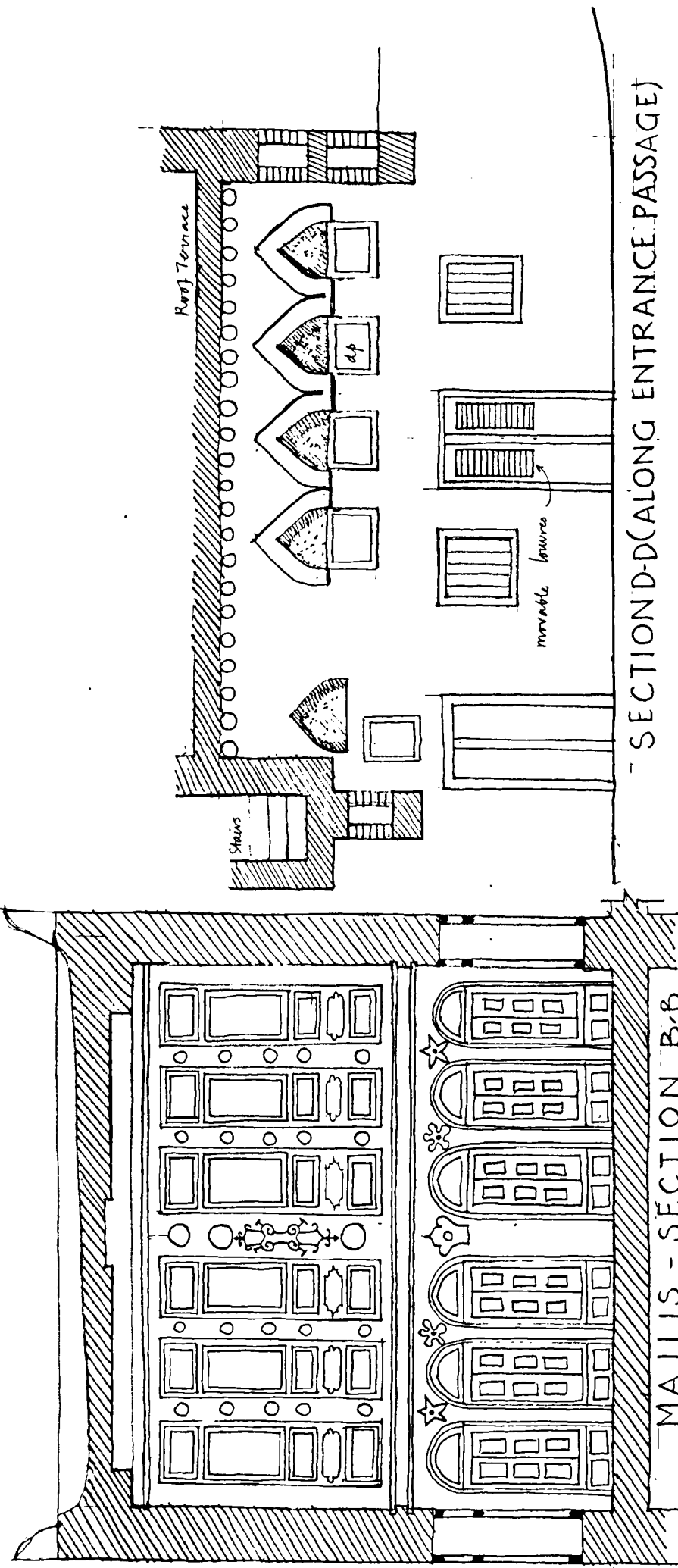


SECTION AA

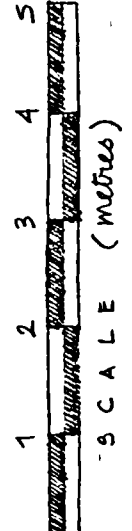
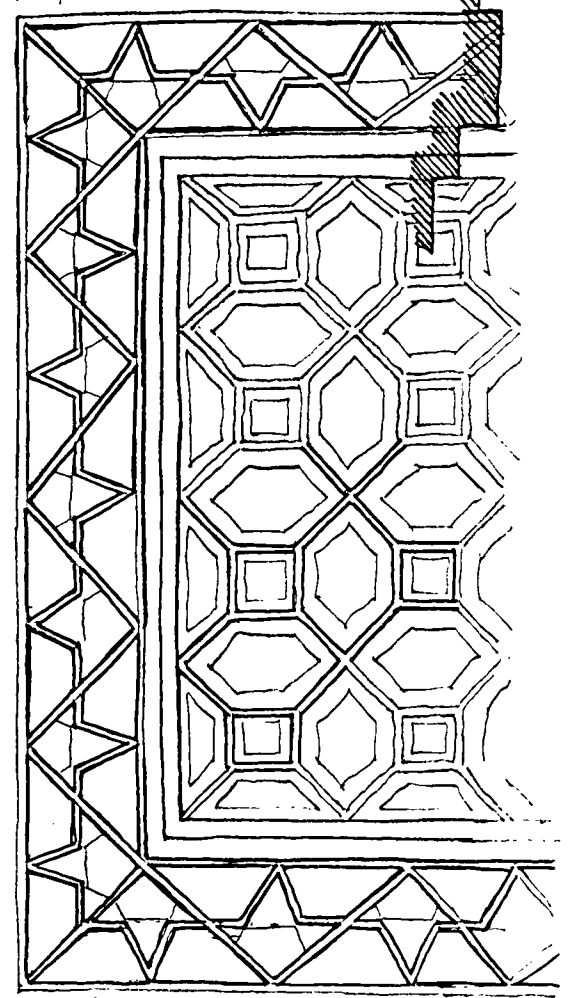


ELEVATION A ← SEYADI MAIN DOOR CANOPY

Fig. 139.



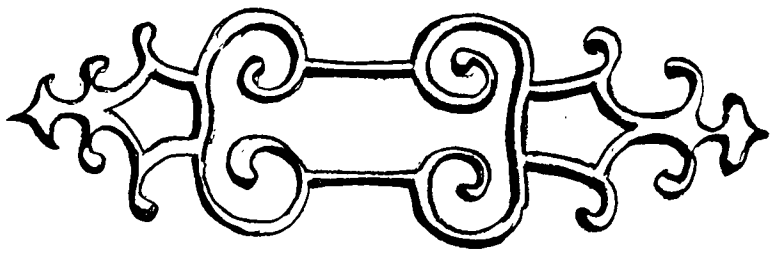
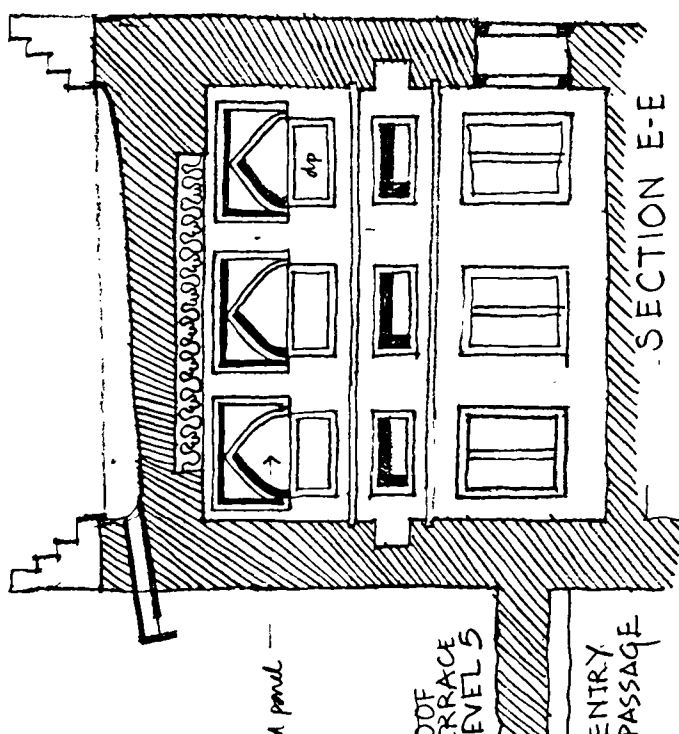
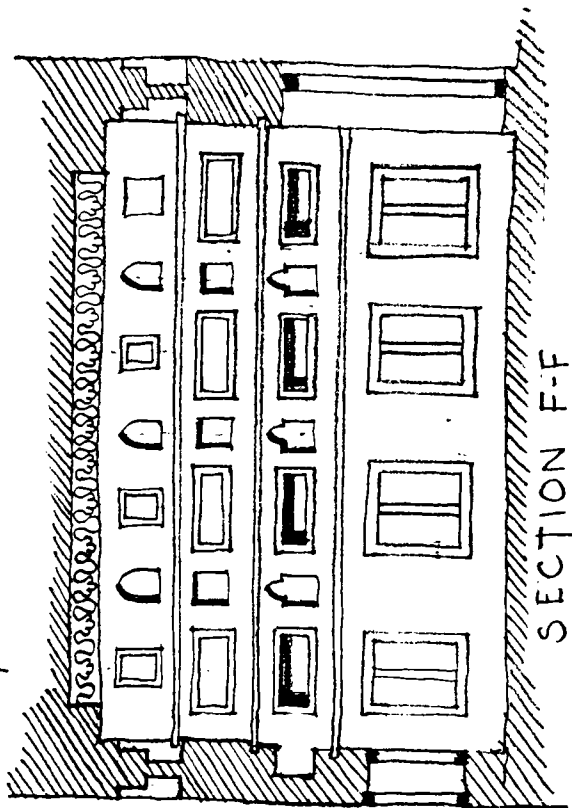
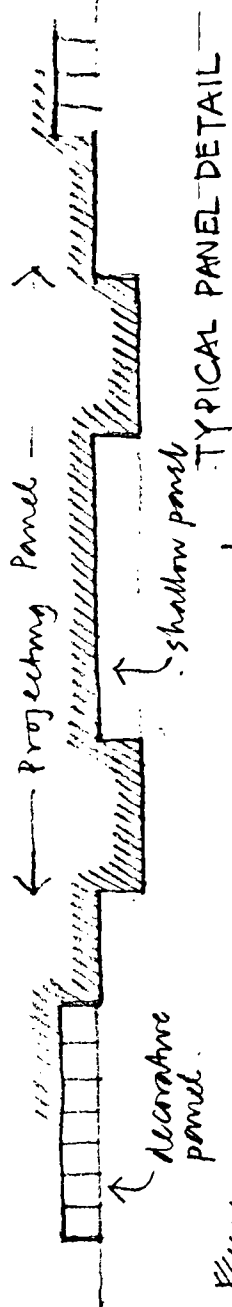
CEILING
DETAIL
LACED - LATH
DECORATION.



SEYADI
HOUSE.

Figure 7.40.

Section
2 (Vertical)



TYPICAL MOTIF - G.F. APARTMENTS

SEYADI HOUSE - CHILDREN'S APARTMENT.

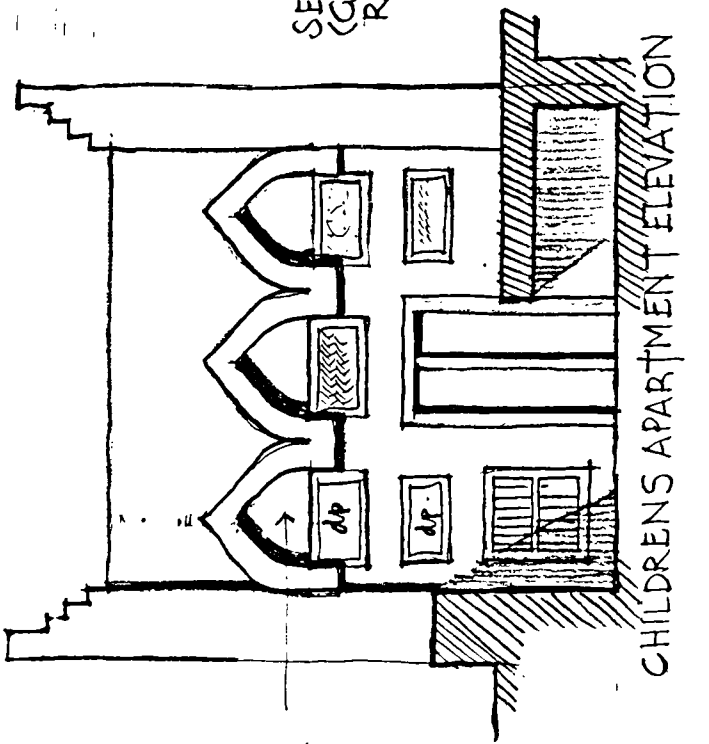
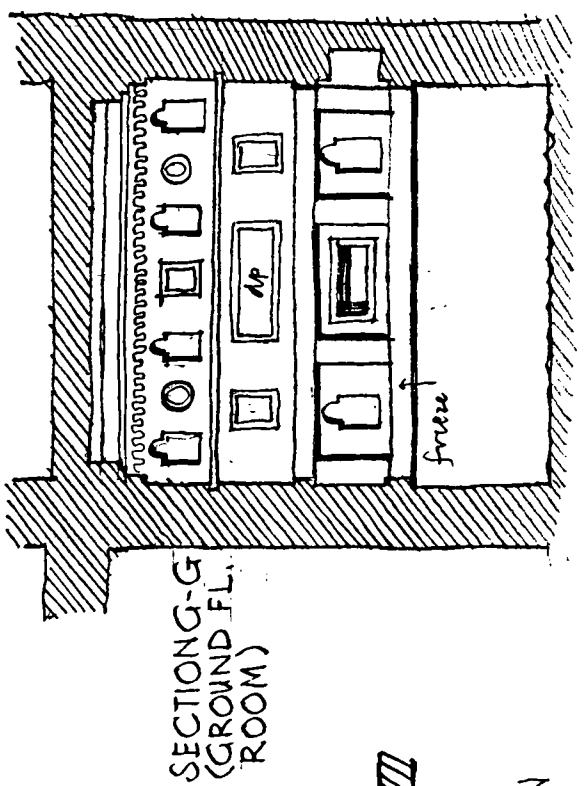


Figure 7.41.

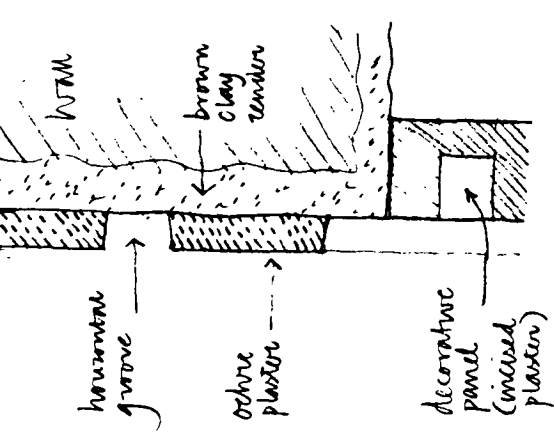
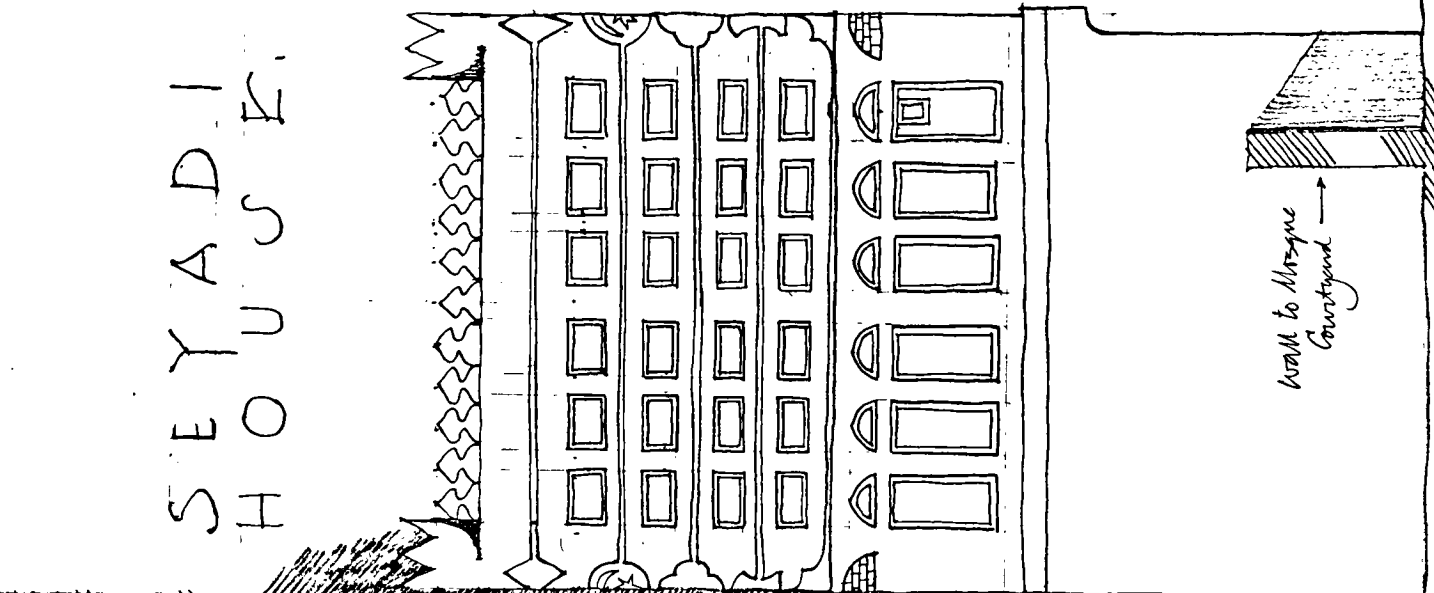


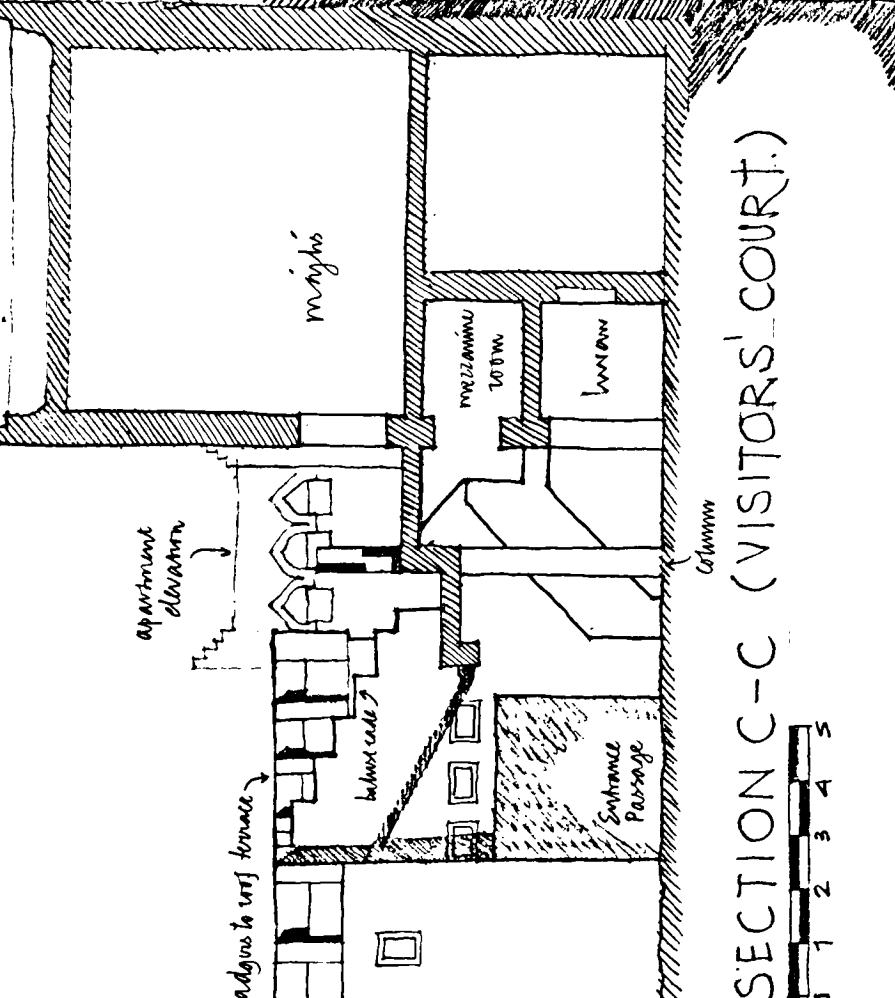
Fig. 7.42

SEYADI
HOUSES

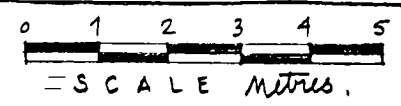
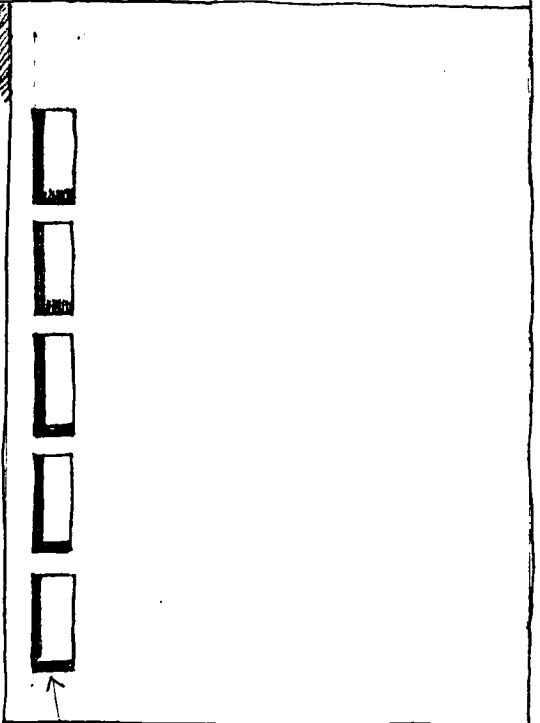


Lane 914.

SOUTH ELEVATION



SECTION C-C (VISITORS' COURT.)



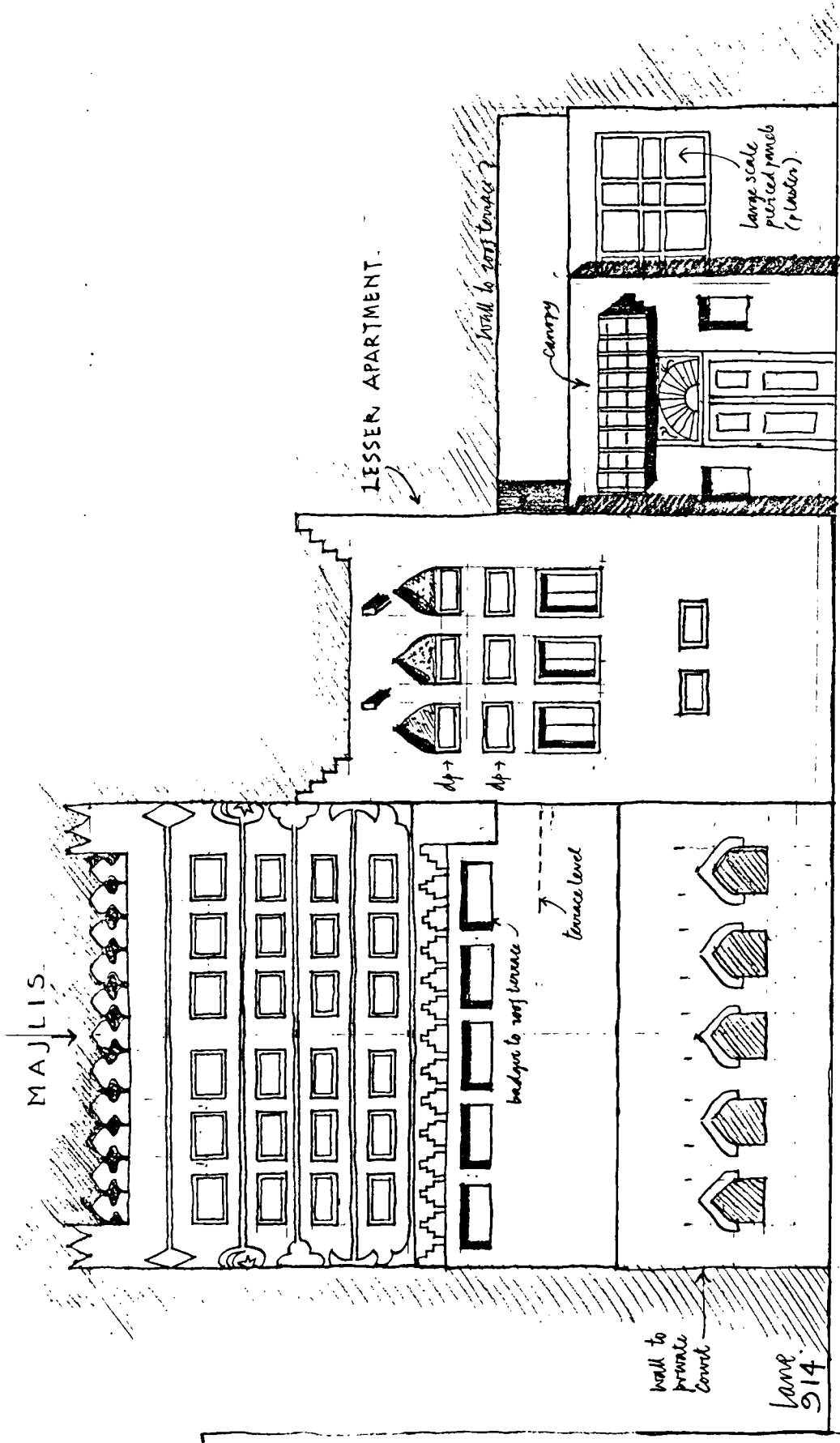
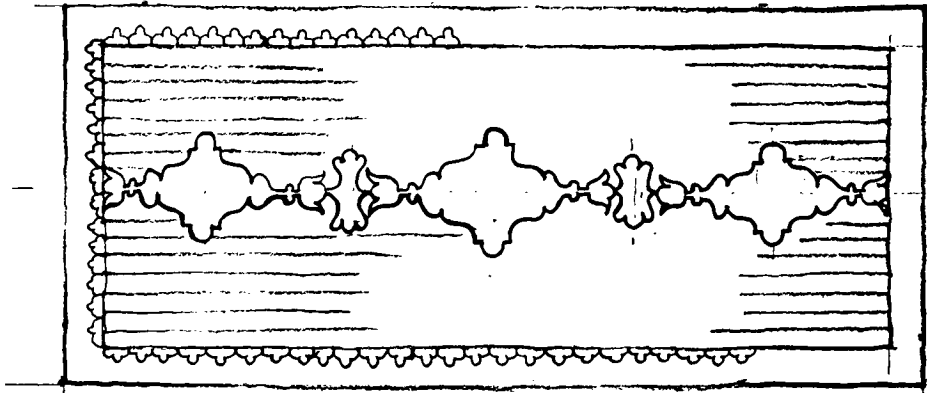


Figure 7.43.

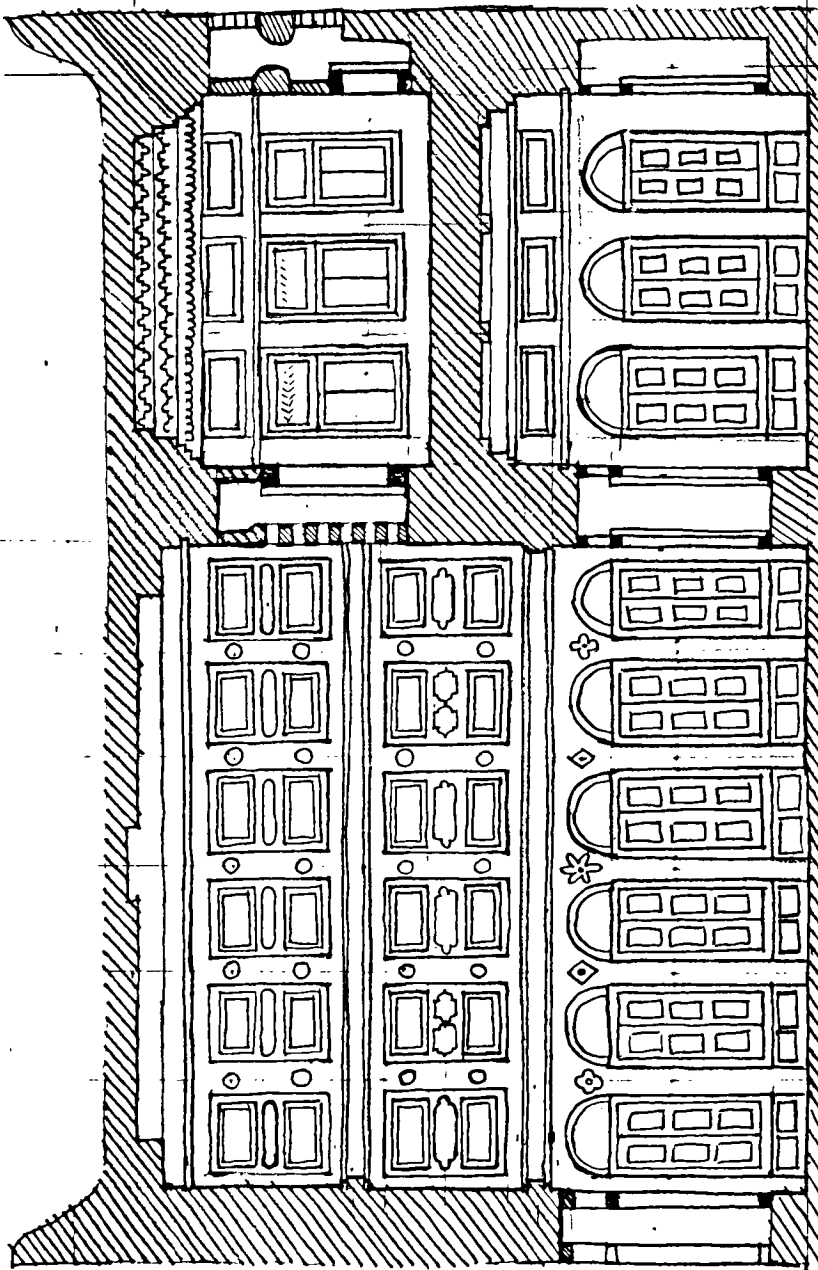
NORTH ELEVATION - SEYADI HOUSE

SEYADI HOUSE

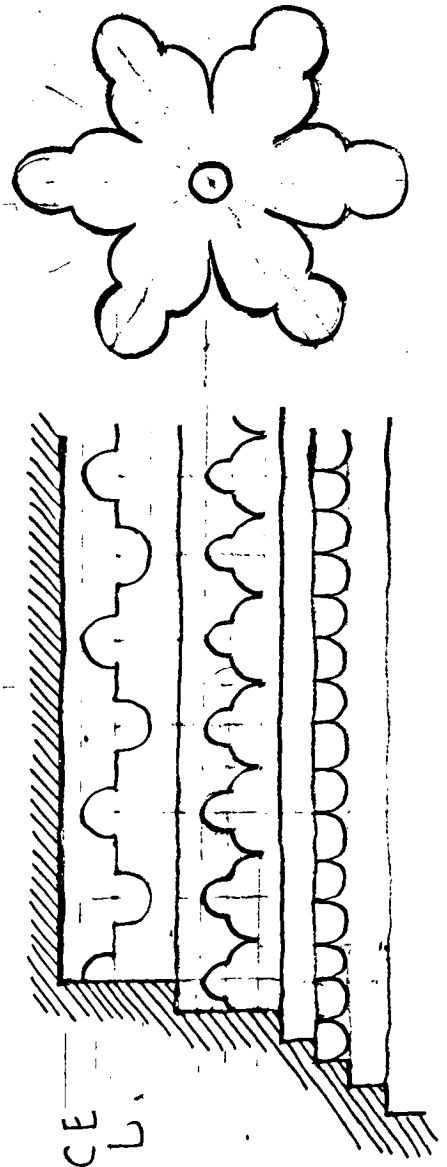


CEILING IN WIVES
MAJLIS

lamp pole

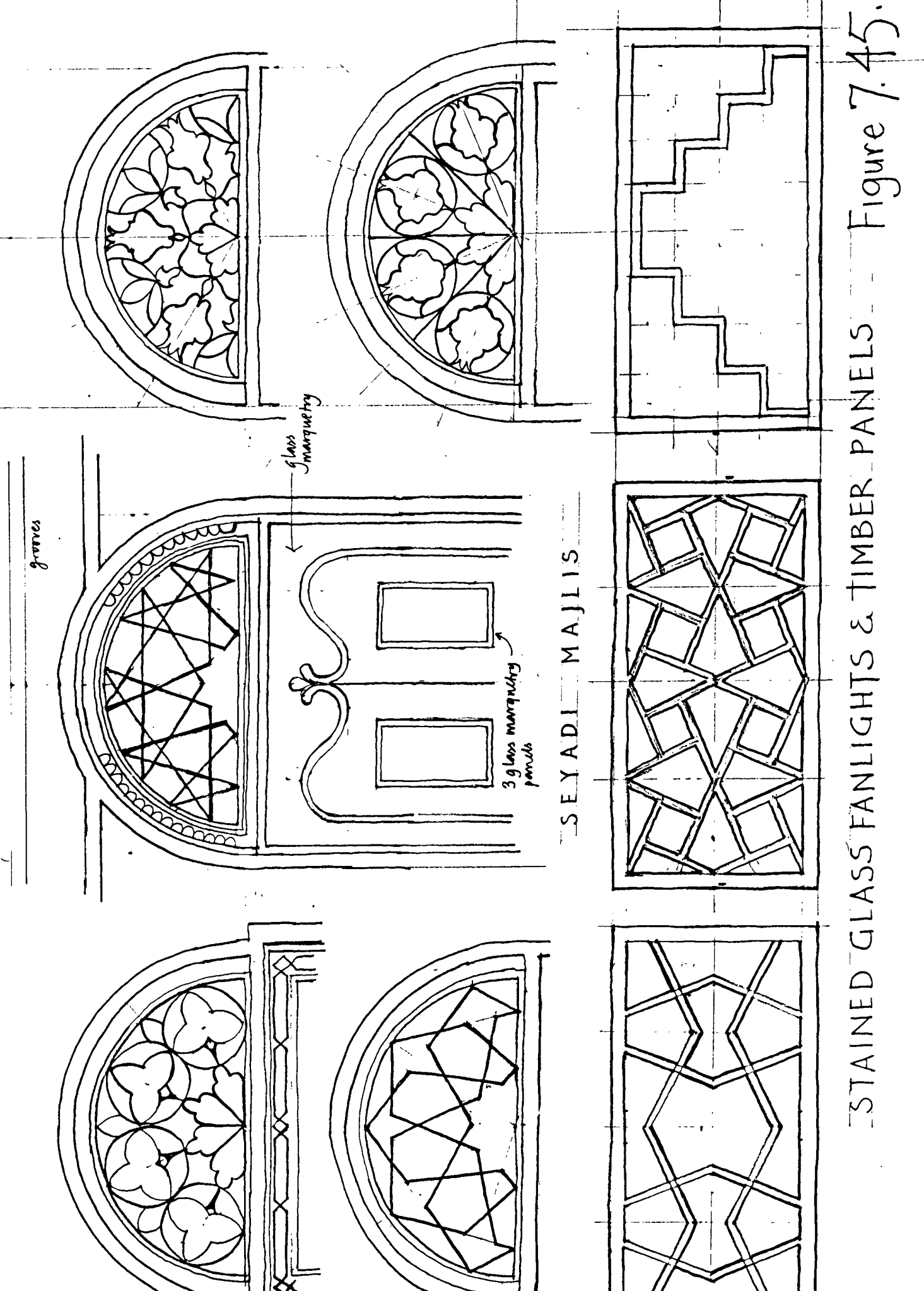


SECTION A-A (MAJLIS)



CORNICE
DETAIL

Figure 7.44



STAINED GLASS FANLIGHTS & TIMBER PANELS - Figure 7.45.



STREET 1511

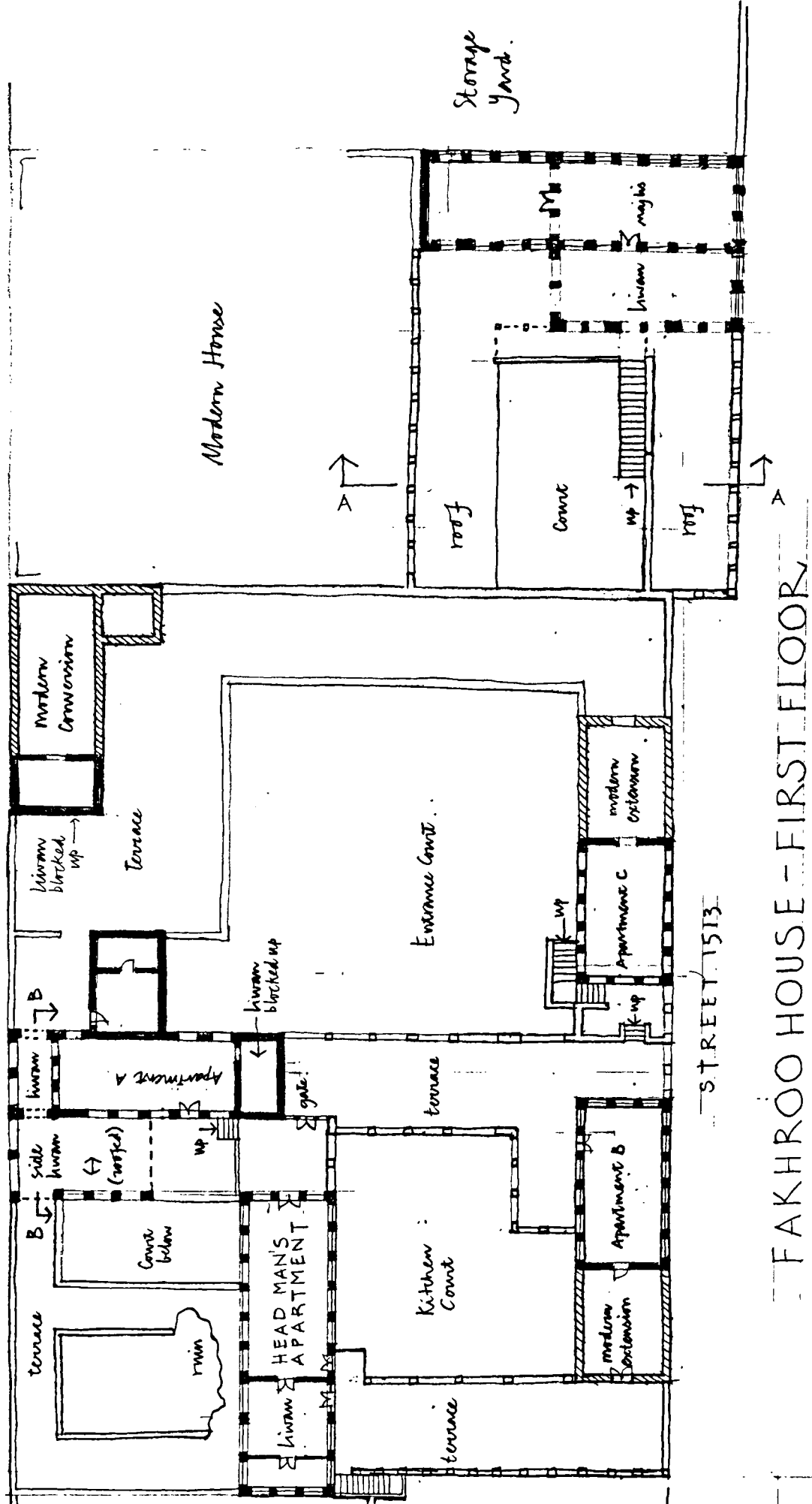


Figure 7.46

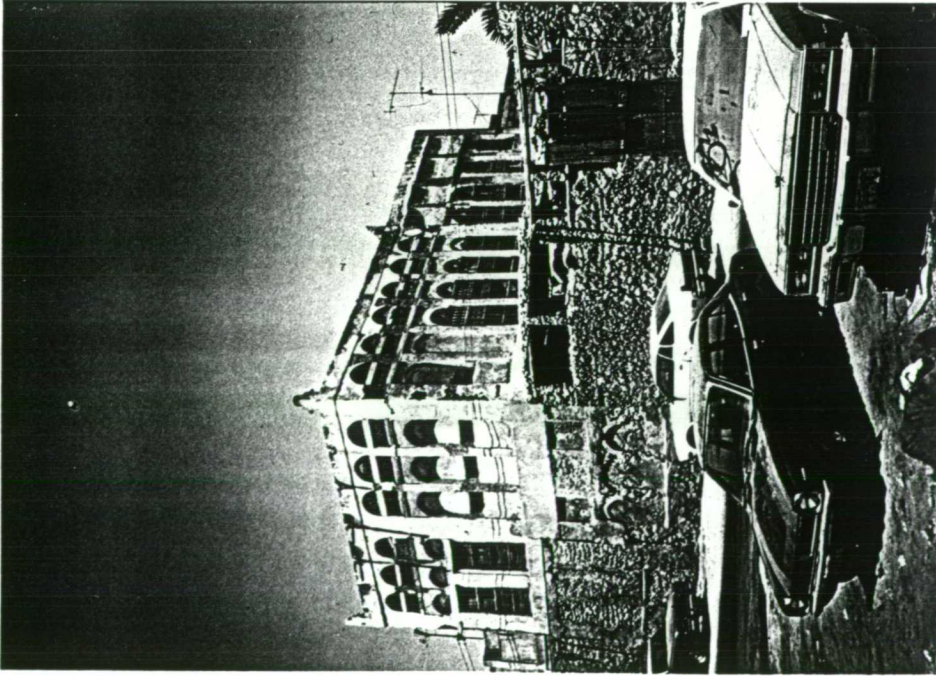


Fig. 7.48(A) Fakhroo Eouse. View from the road (to the south) of the Third Son's Apartment.

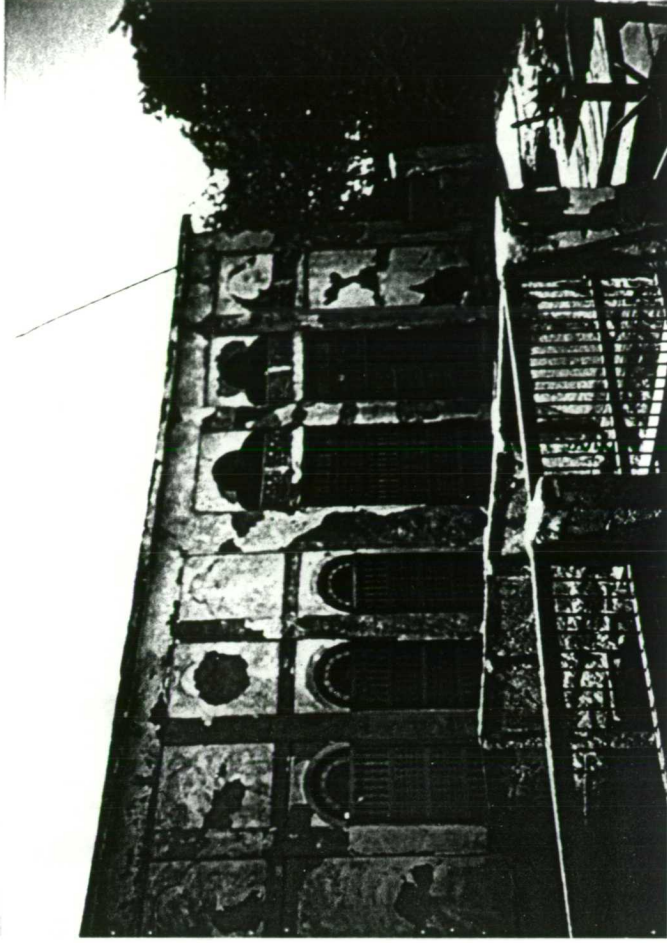


Fig. 7.48(B) Fakhroo Eouse. Head Man's Apartment, north elevation, with the liwan (subsequently enclosed) on the right.

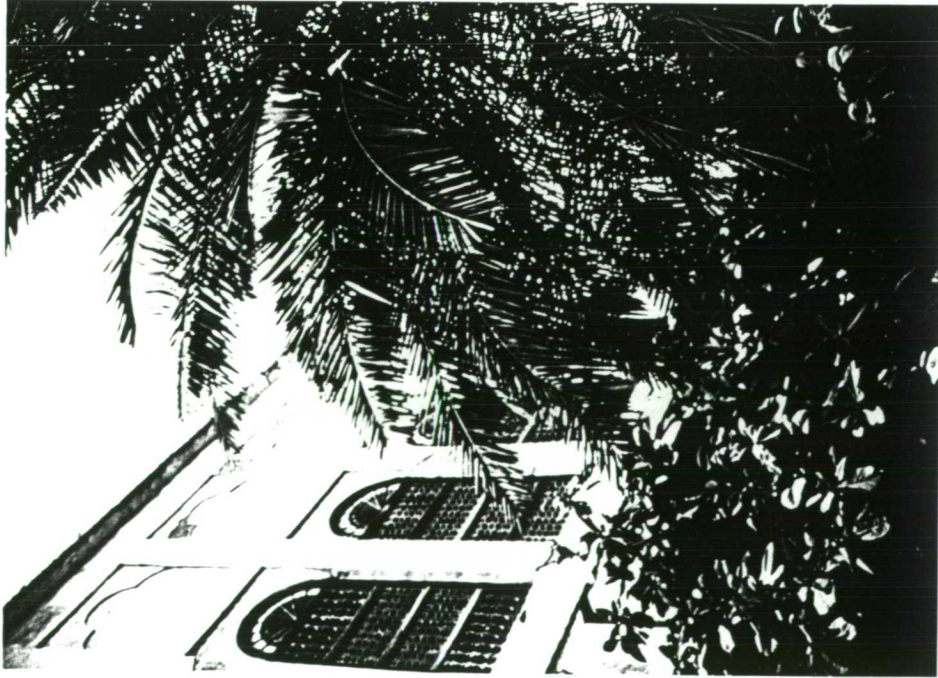


Fig. 7.48(C) Fakhroo House. Head Man's Apartment. South elevation viewed at ground level from the male servants court.

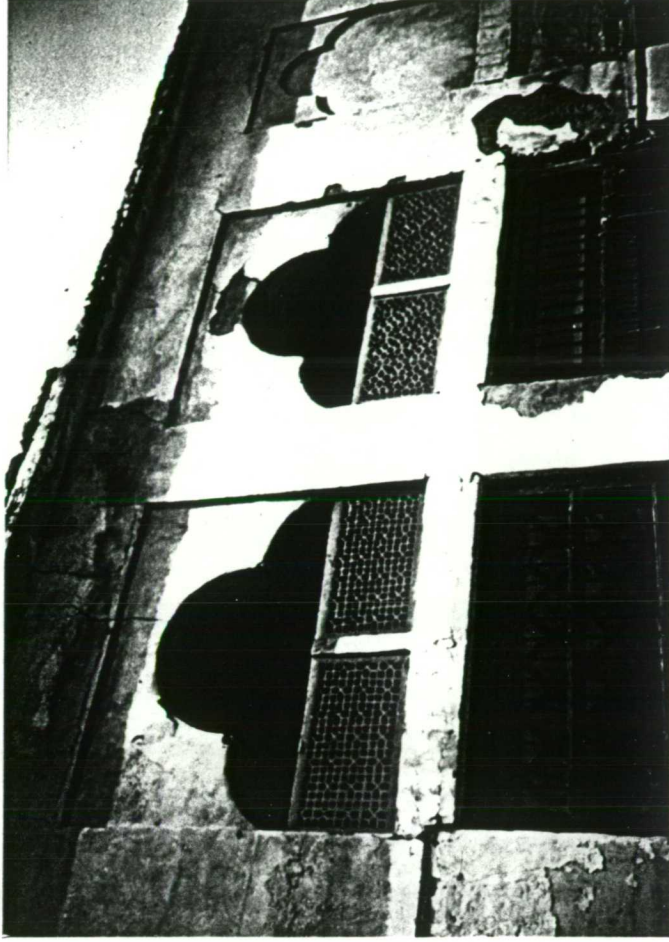


Fig. 7.48(D) Fakhroo House. Head Man's Apartment, south elevation. Detail of liwan, upper register showing trefoils and carved plaster panels below.

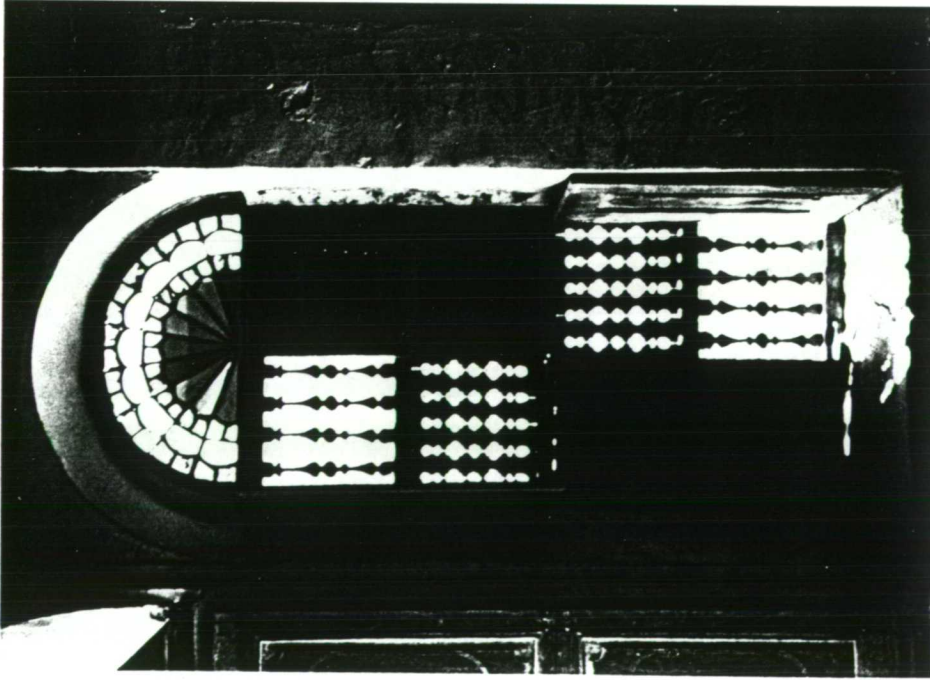


Fig. 7.48(E) Fakhroo House. Head Man's Apartment, detail of typical window viewed from inside and showing shutters, external screen and fanlight

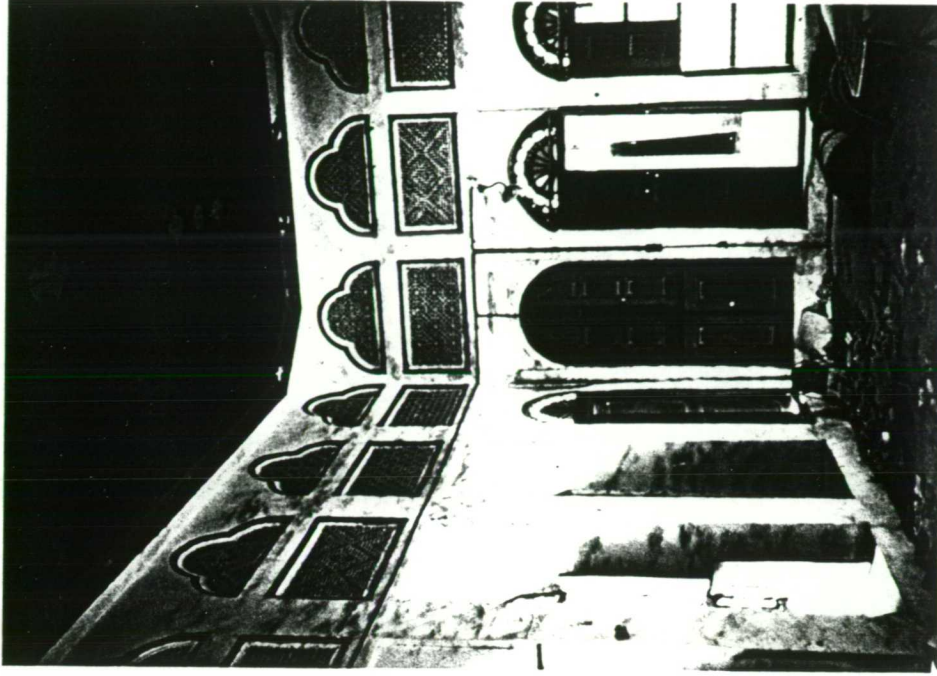


Fig. 7.48(F) Fakhroo House. Head Man's Apartment. Interior view looking towards the east wall.

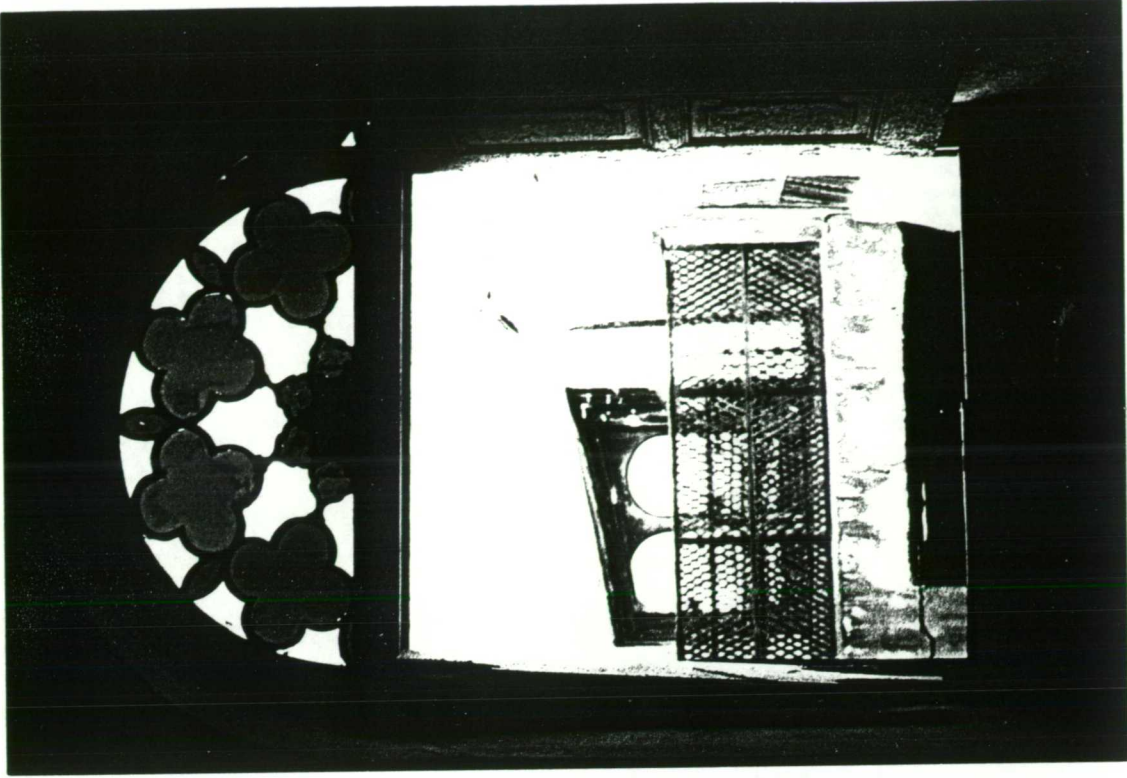


Fig. 7.48(H) Fakhroo House. View from the Second Eldest Sons Apartment through a window. In the distance is the Daughters Room (to the right) and the Side Liwan can be seen on the left.

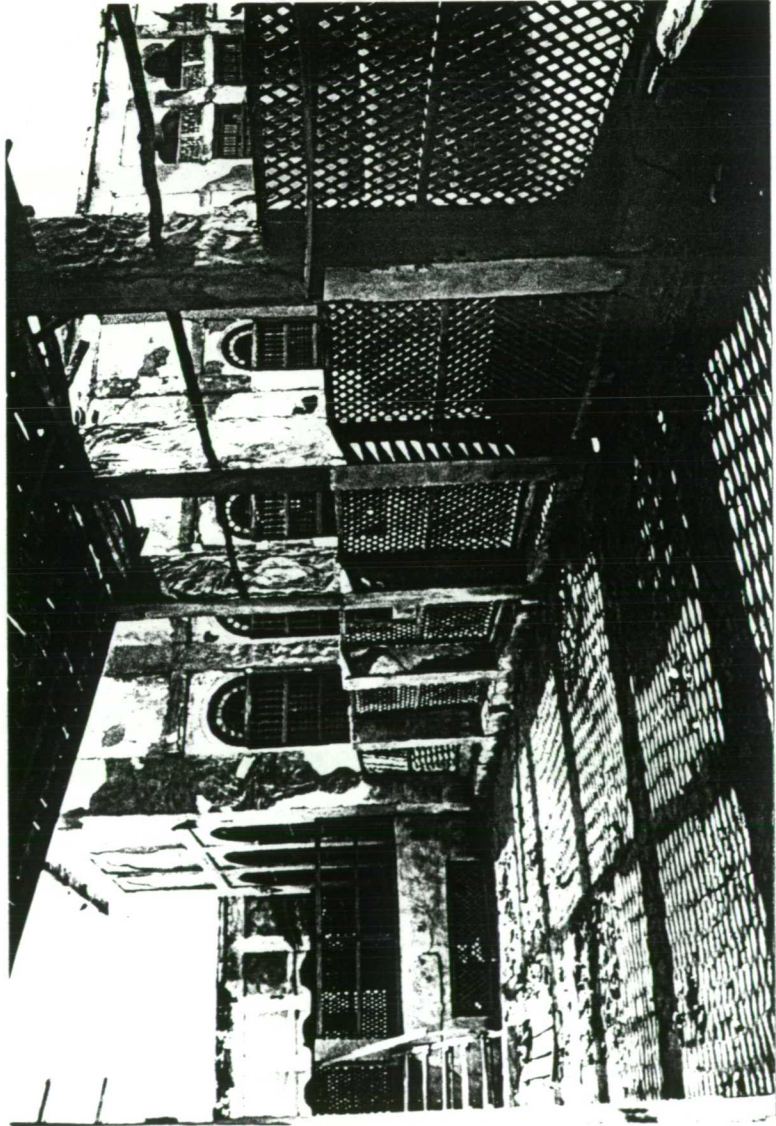


Fig. 7.48(G) Fakhroo House. View from under the "side liwan" looking towards the Head Man's Apartment in the middle distance. The Son's apartment is on the left.

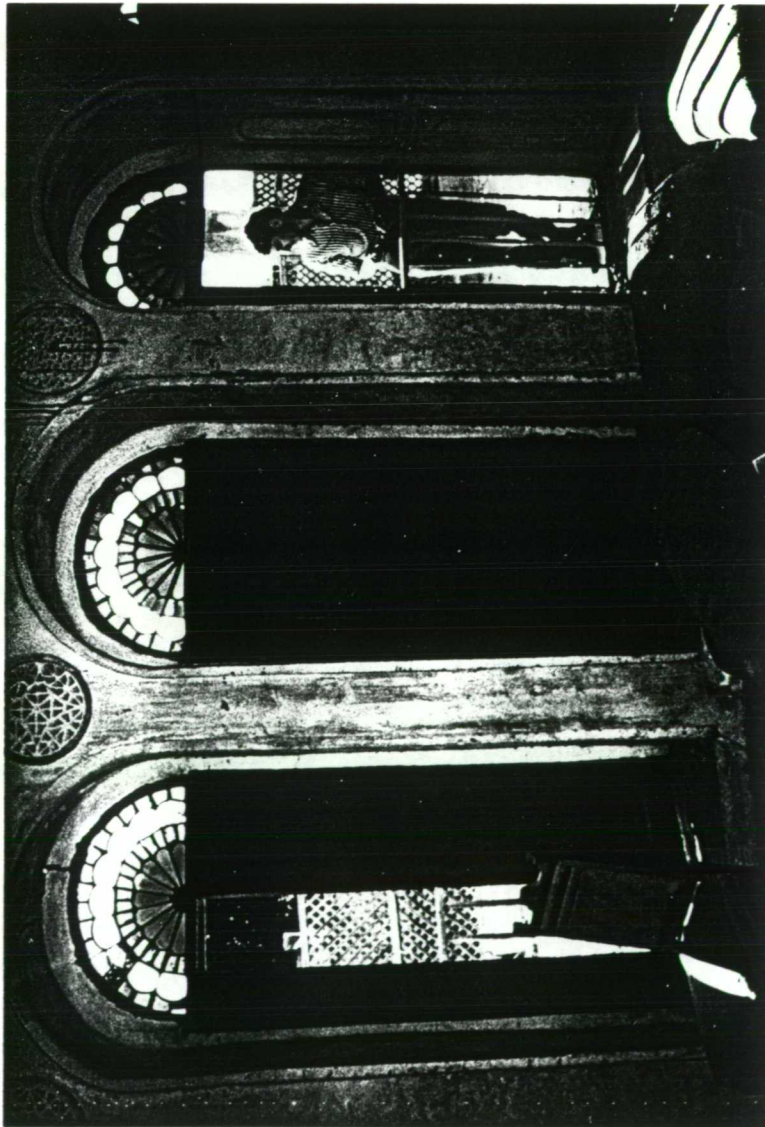
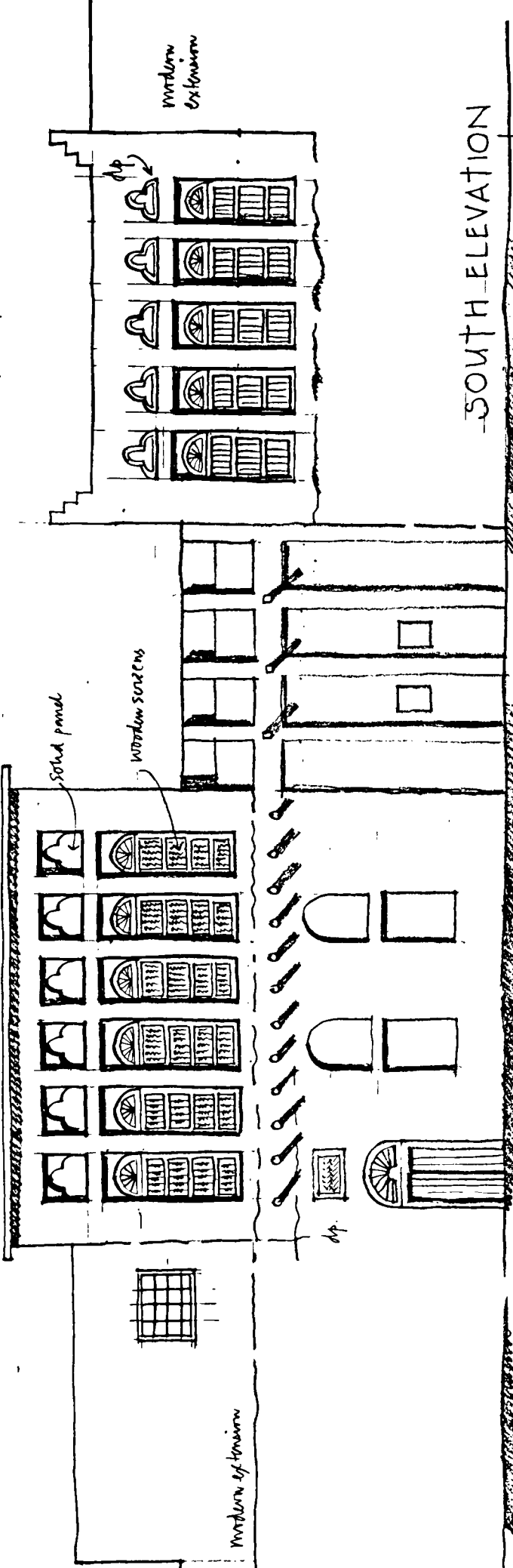


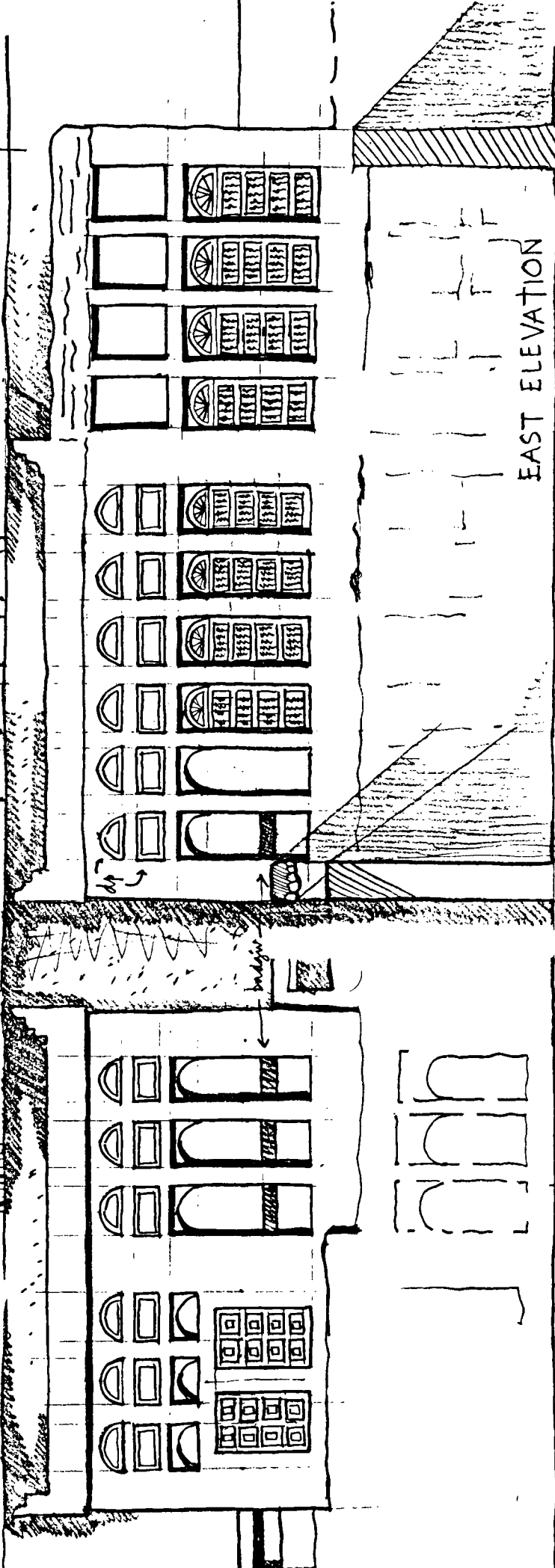
Fig. 7.48(I) Fakhroo House. Daughters Apartment. Internal view of west wall.

APARTMENT C

APARTMENT B



SOUTH ELEVATION

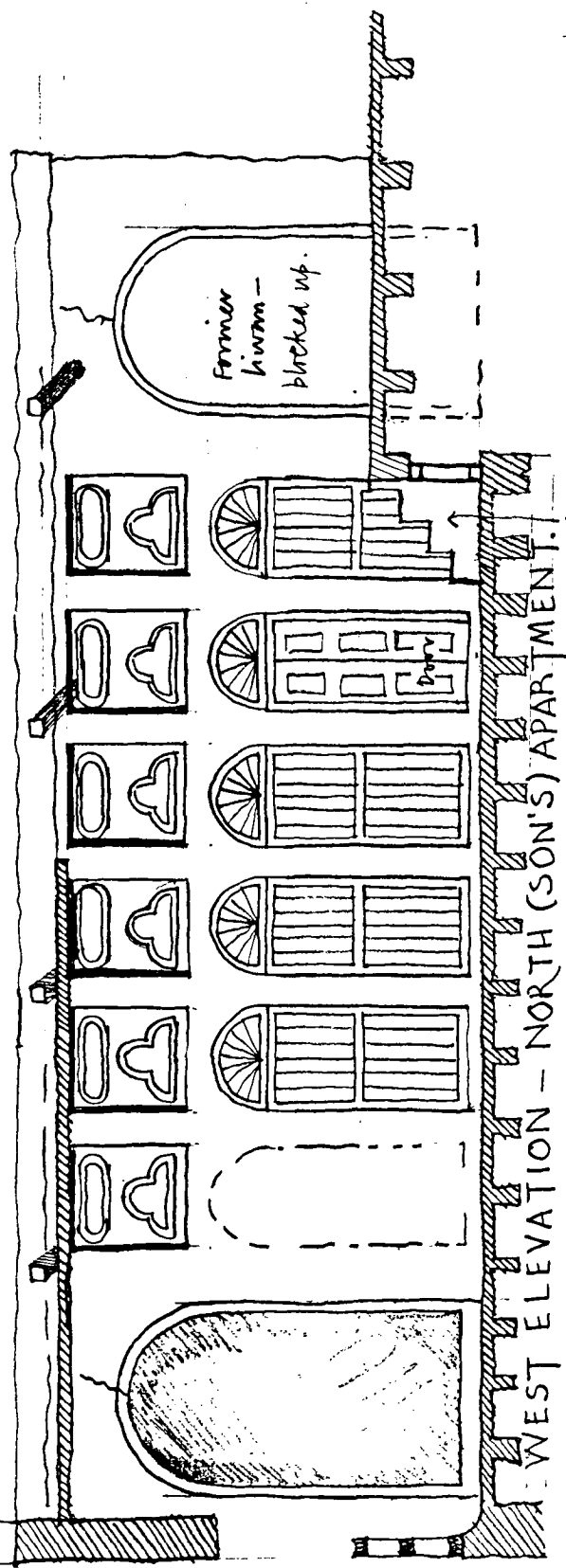
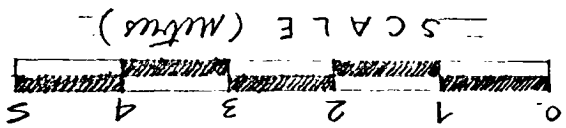


EAST ELEVATION

SOUTH ELEVATION - EAST COURT.

FAKHROO HOUSE

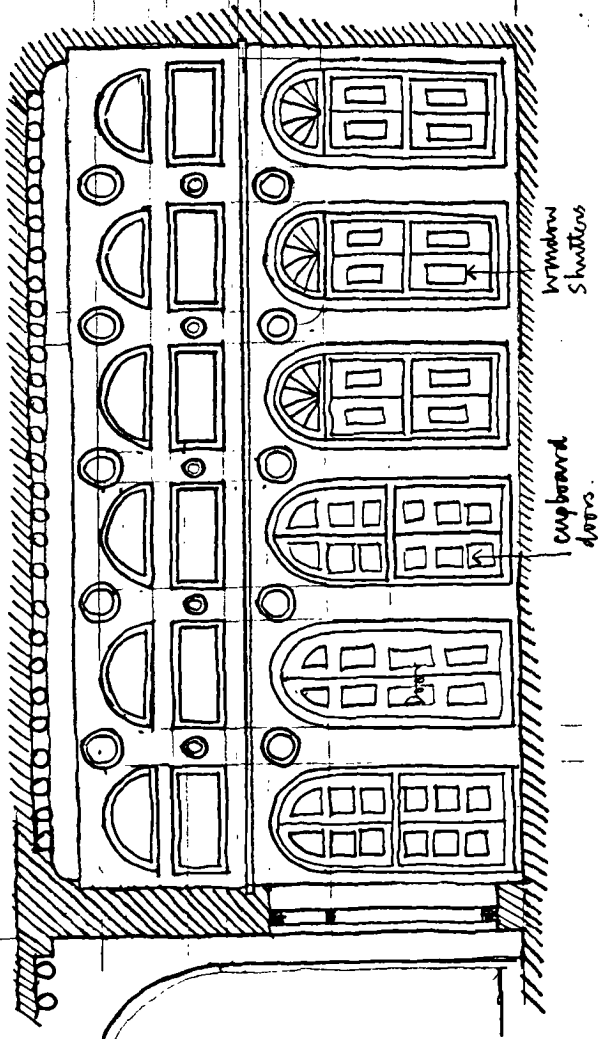
Figure 7.49.



WEST ELEVATION - NORTH (SON'S) APARTMENT.

FAKHROO HOUSE.

SECTION - SON'S APARTMENT.



SECTION - HEAD MAN'S APARTMENT.

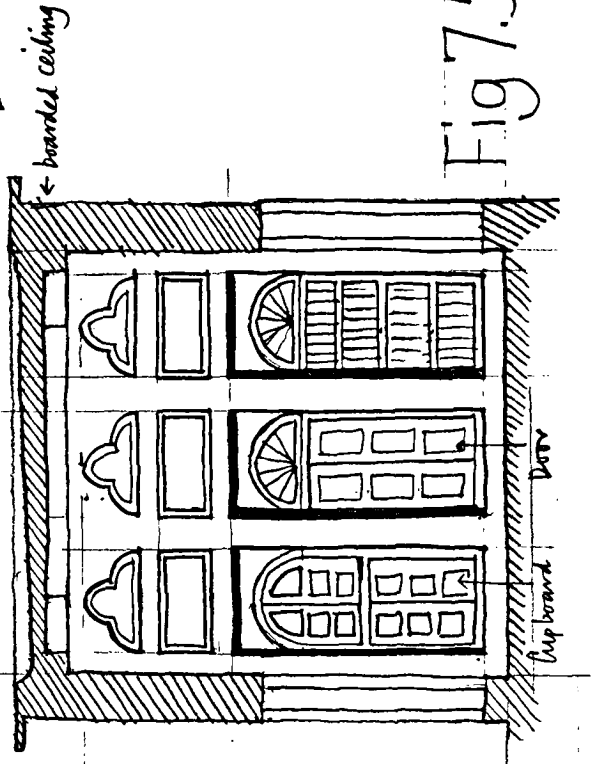
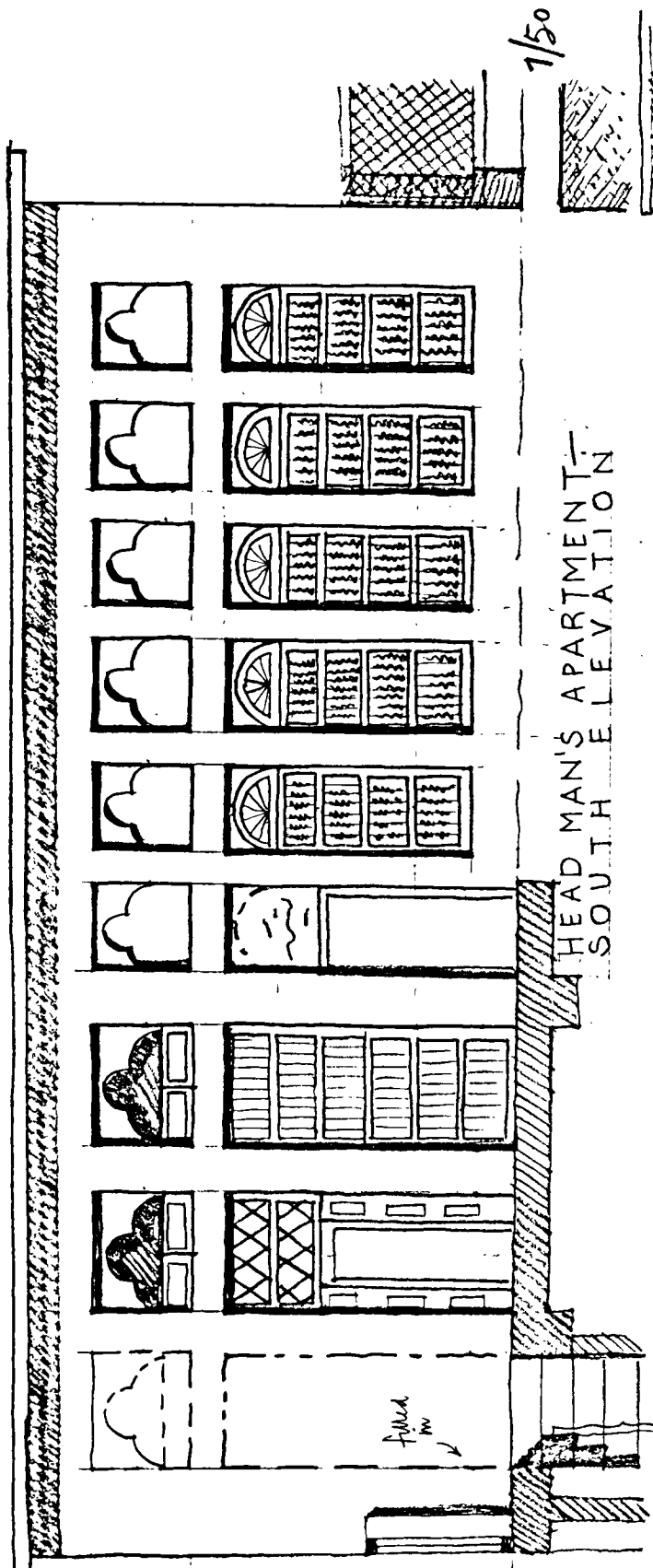


Fig 750.



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HEAD MAN'S APARTMENT - SOUTH ELEVATION

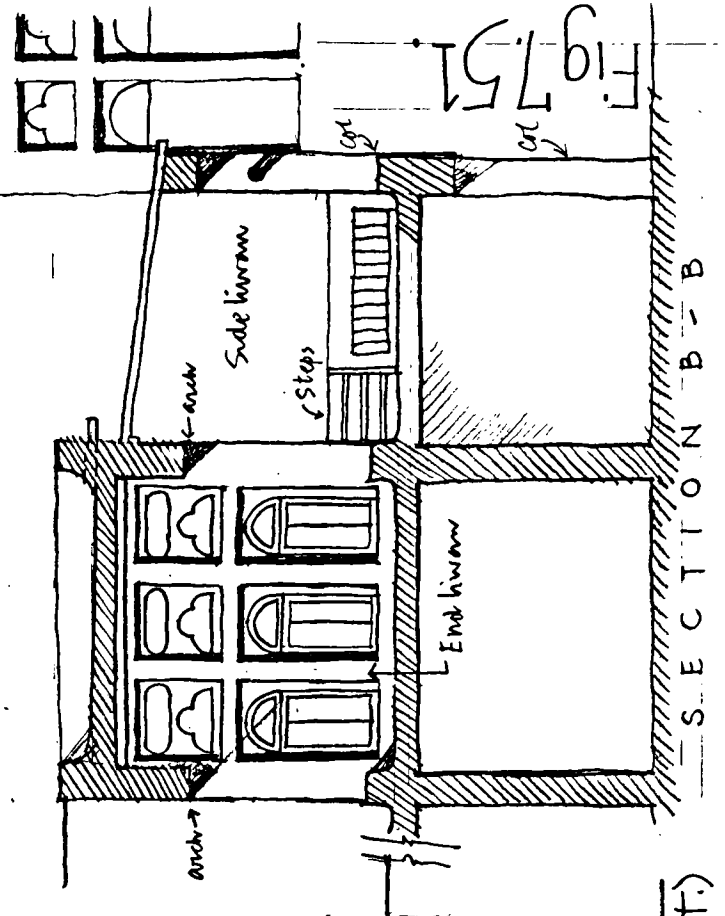
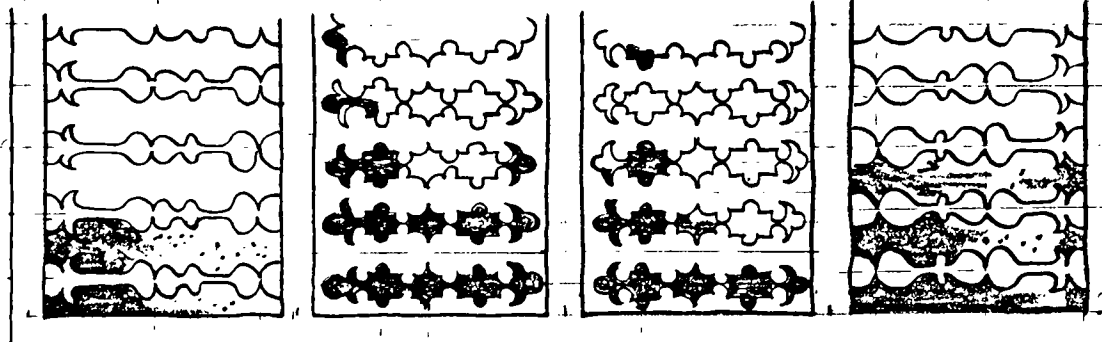


Fig 751

SECTION B - B

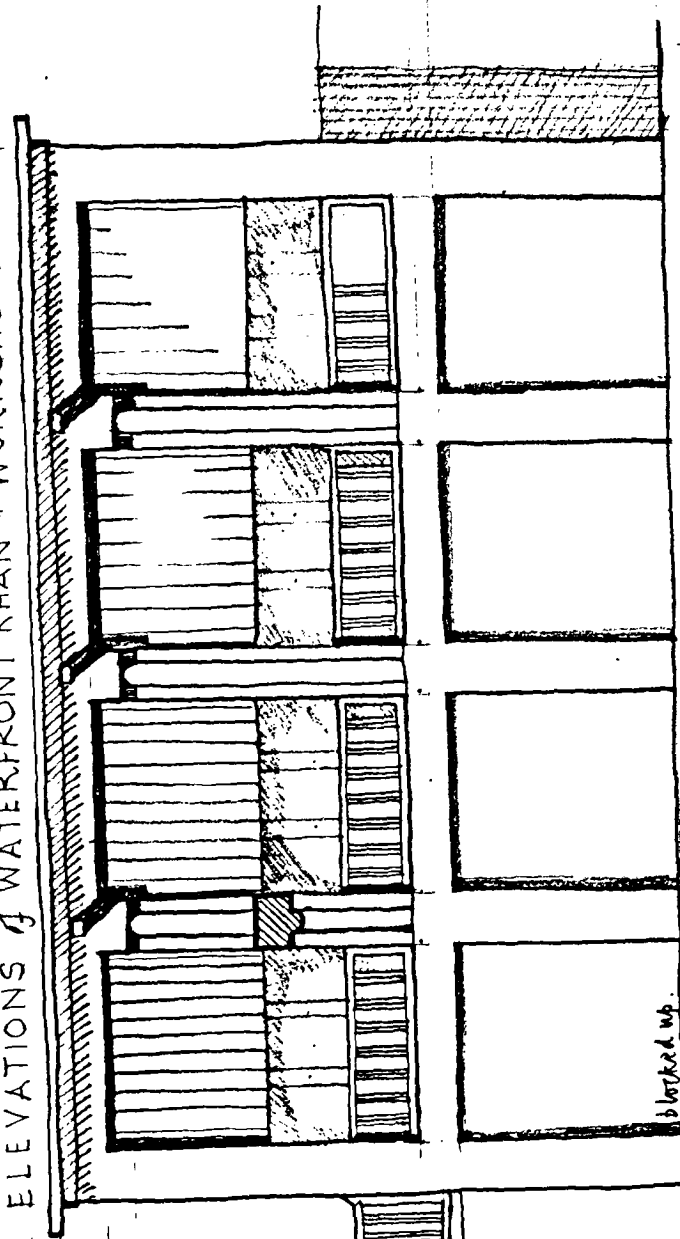
NORTH ELEVATION (SONS APARTMENT)



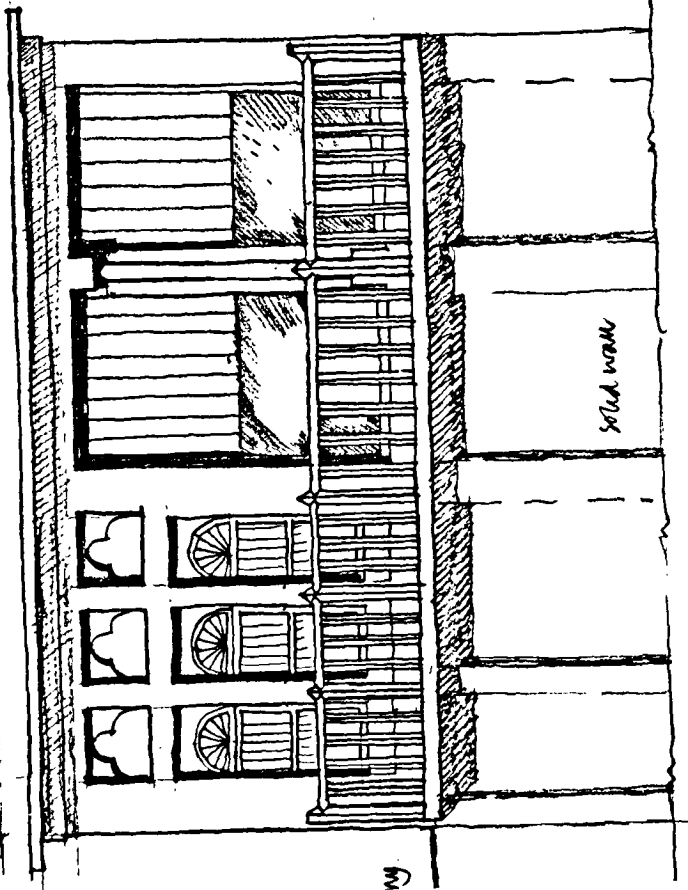
WINDOW SCREEN HEAD MAN'S ROOM.

FAKHROO HOUSE

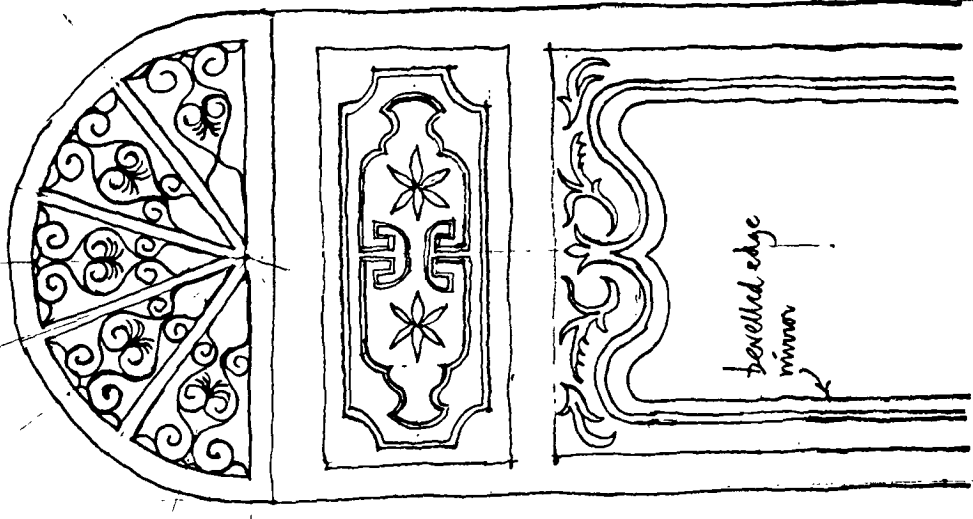
ELEVATIONS of WATERFRONT KHAN + WORKSHOPS



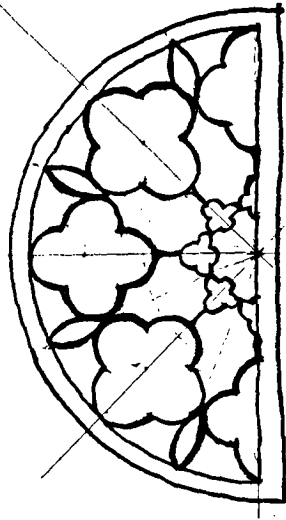
blotted up.



solid wall



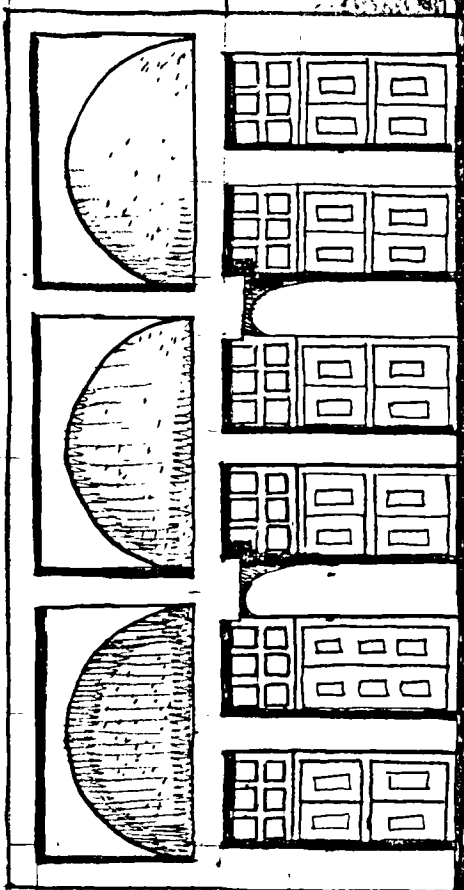
bevelled edge
mirror



FANLIGHT & MIRROR from APARTMENT B

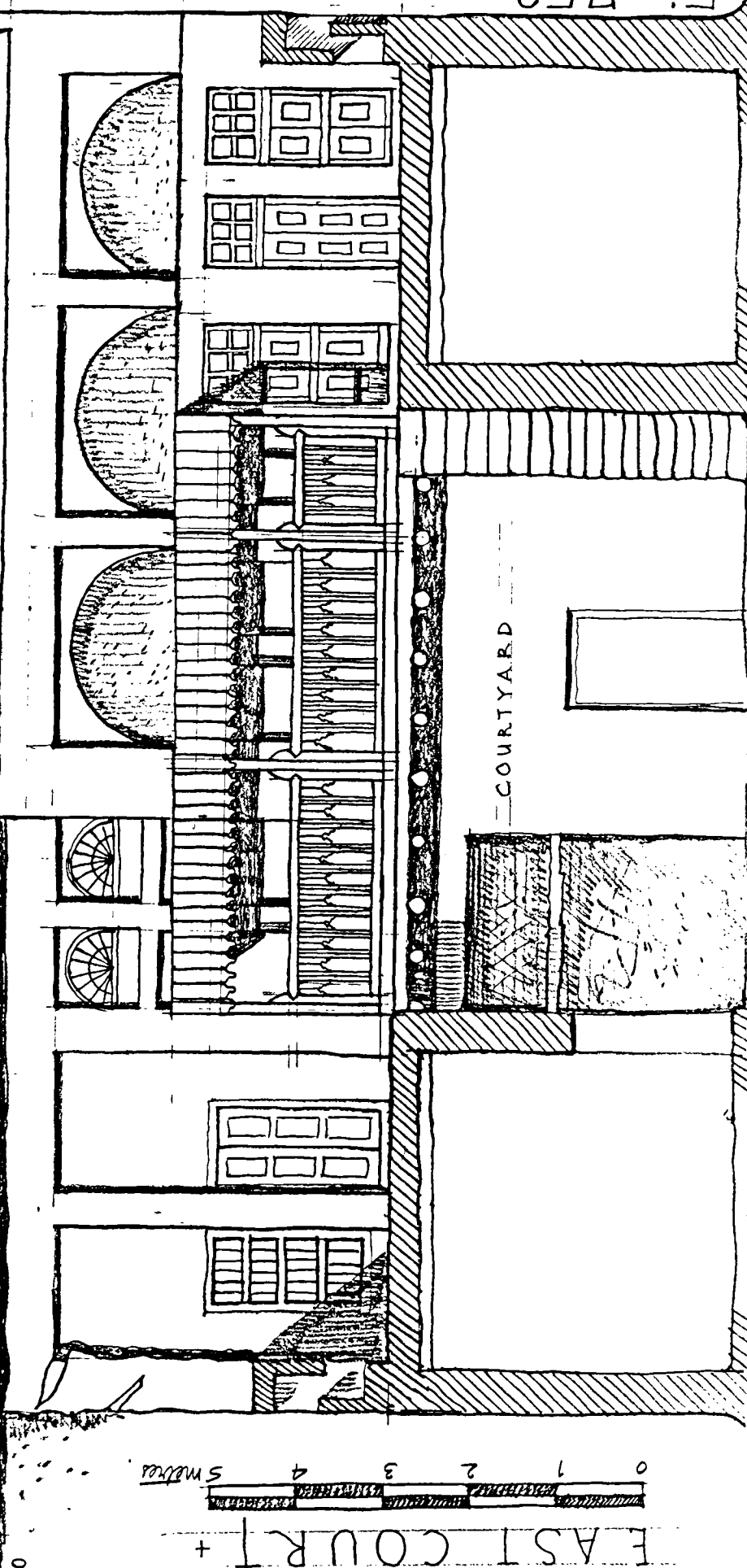
FAKHROO HOUSE: Fig. 752.

INTERIOR ELEVATION OF LIWAN

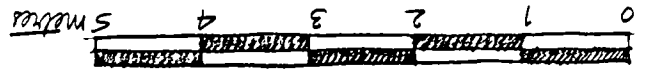


Ceiling frieze (on soffit)
in liwan

SECTION A - A



FAKHROO HOUSE + EAST COURT

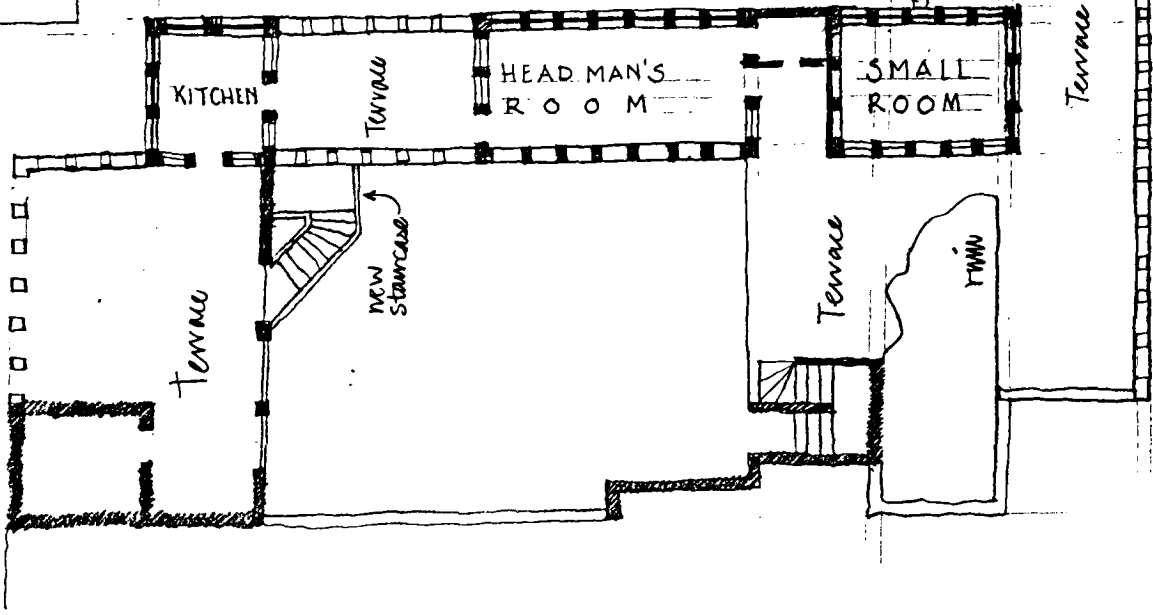


1/50

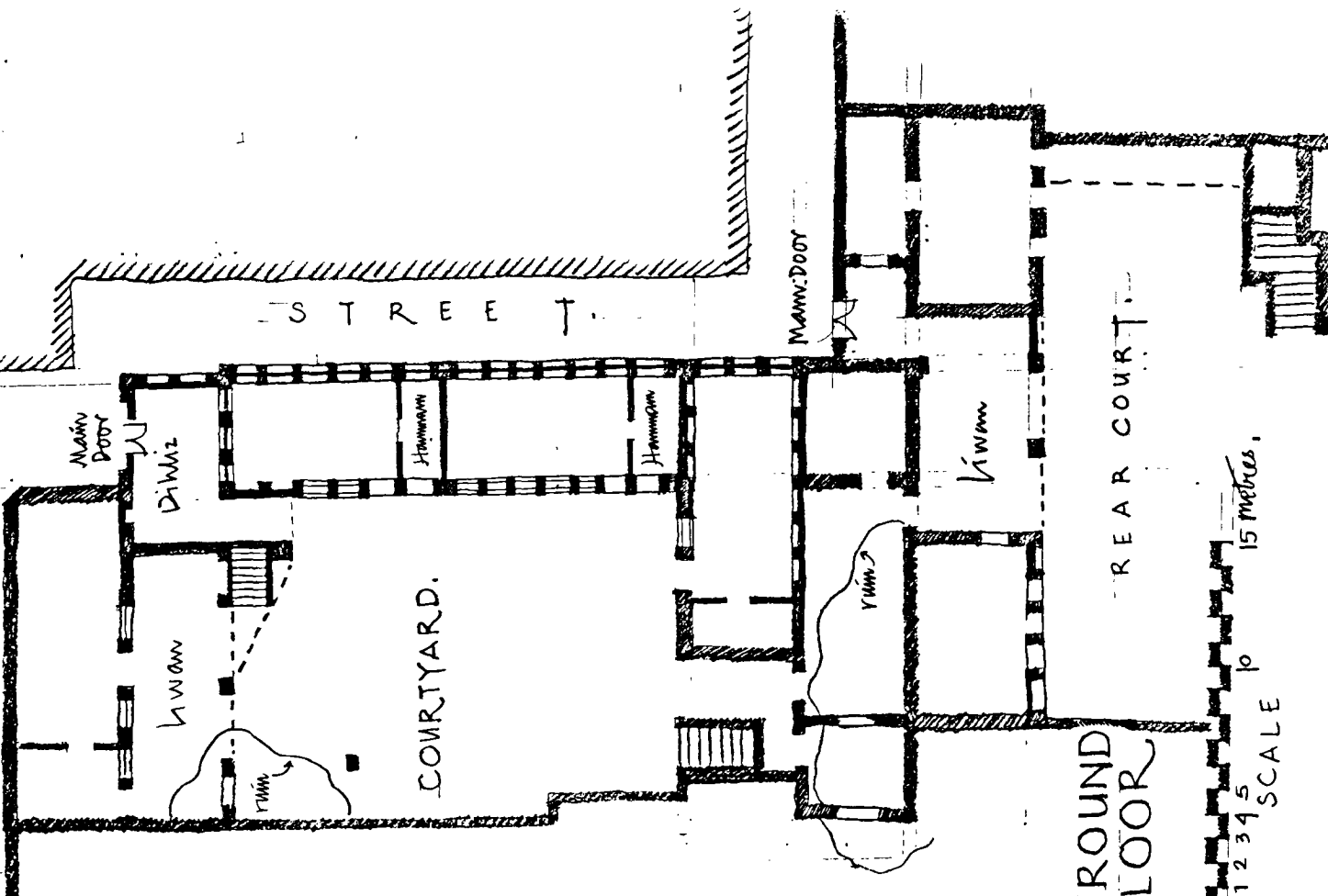


NORTH.

Fig 754



FIRST FLOOR
SALMAN MATTAR HOUSE.



GROUND FLOOR

1 2 3 4 5
SCALE 15 METERS.

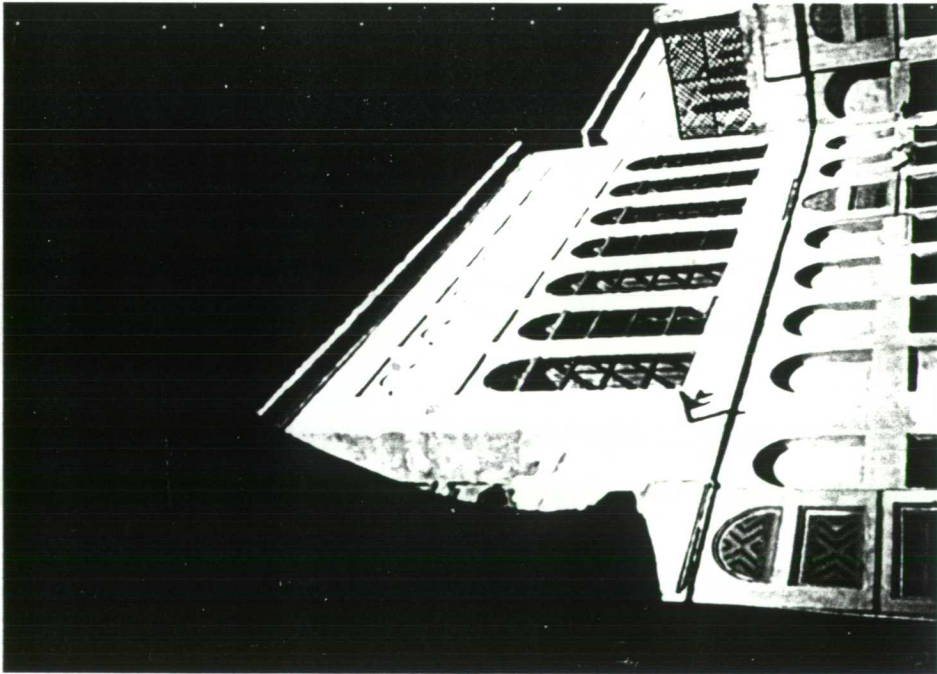


Fig. 7.55(A) Salman Mattar House. Courtyard. South elevation of main wing, with the Head Man's apartment above. The arch of the liwan is in the foreground.

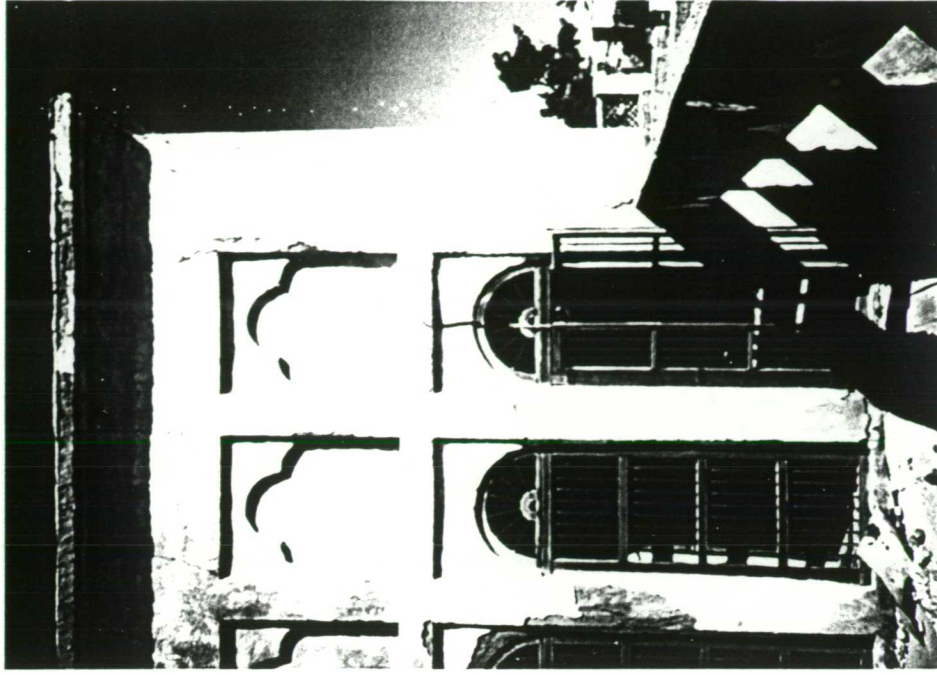


Fig. 7.55(B) Salman Mattar House. Main Apartment. West elevation seen from the roof terrace.

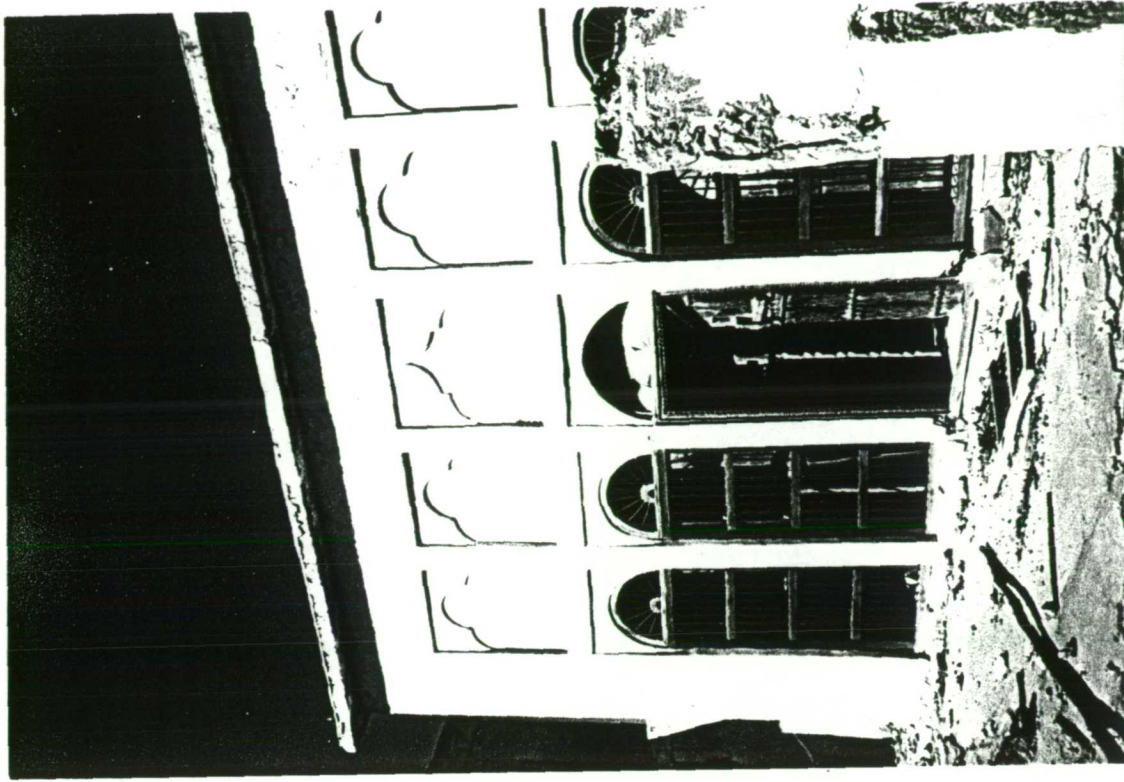


Fig. 7.55 (D) Salman Mattar House. Small Apartment, south elevation.

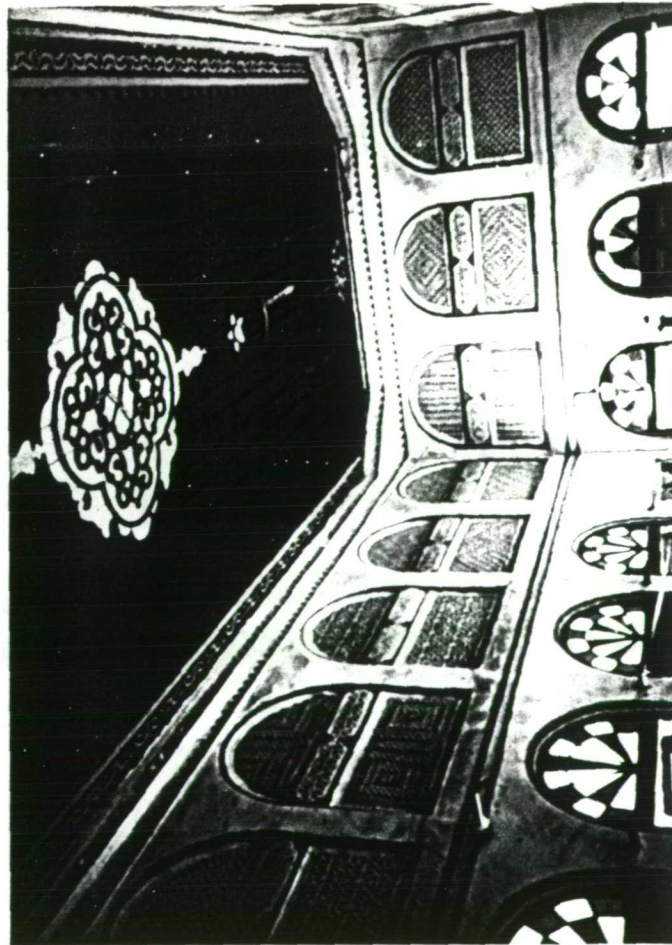


Fig. 7.55 (C) Salman Mattar House. Main Apartment. Interior view of south and west walls showing fanlights, upper register (plaster carved panels) and ceiling.

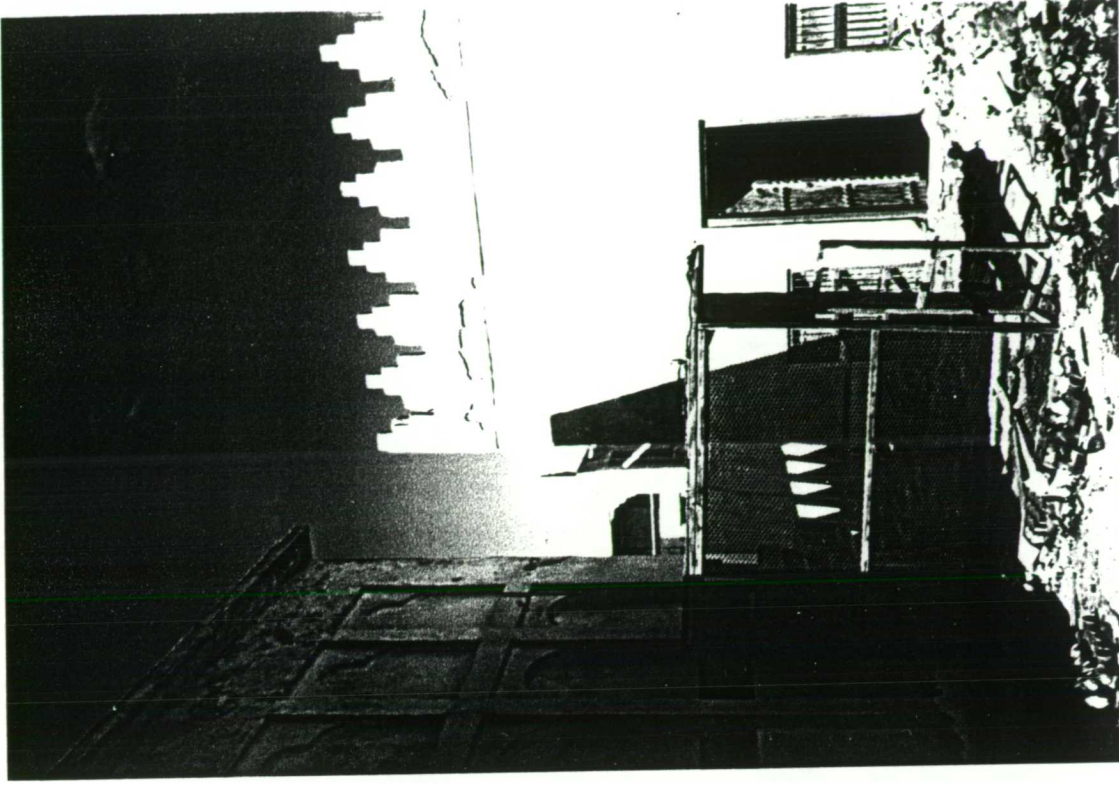


Fig. 7.55(F) Salman Mattar House. East Apartment, south elevation viewed from the roof terrace. The Small Apartment is to the left. In the distance is the liwan of Sheikh Ali House, which is across the street.

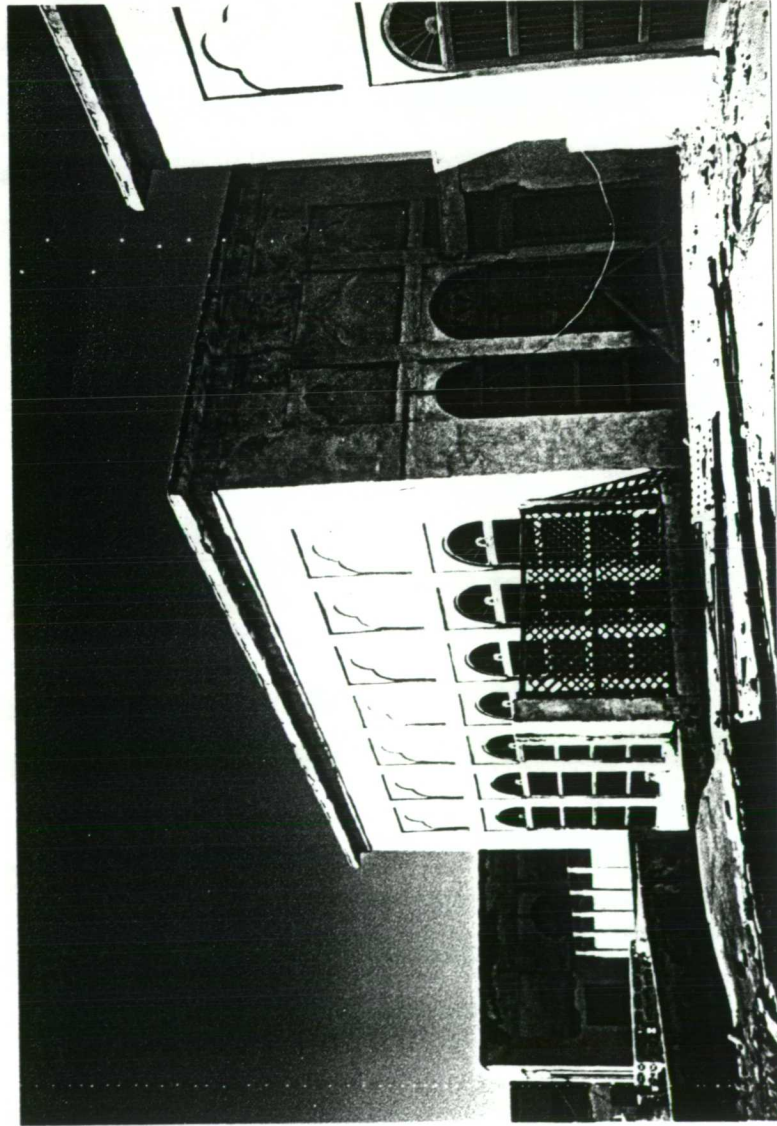
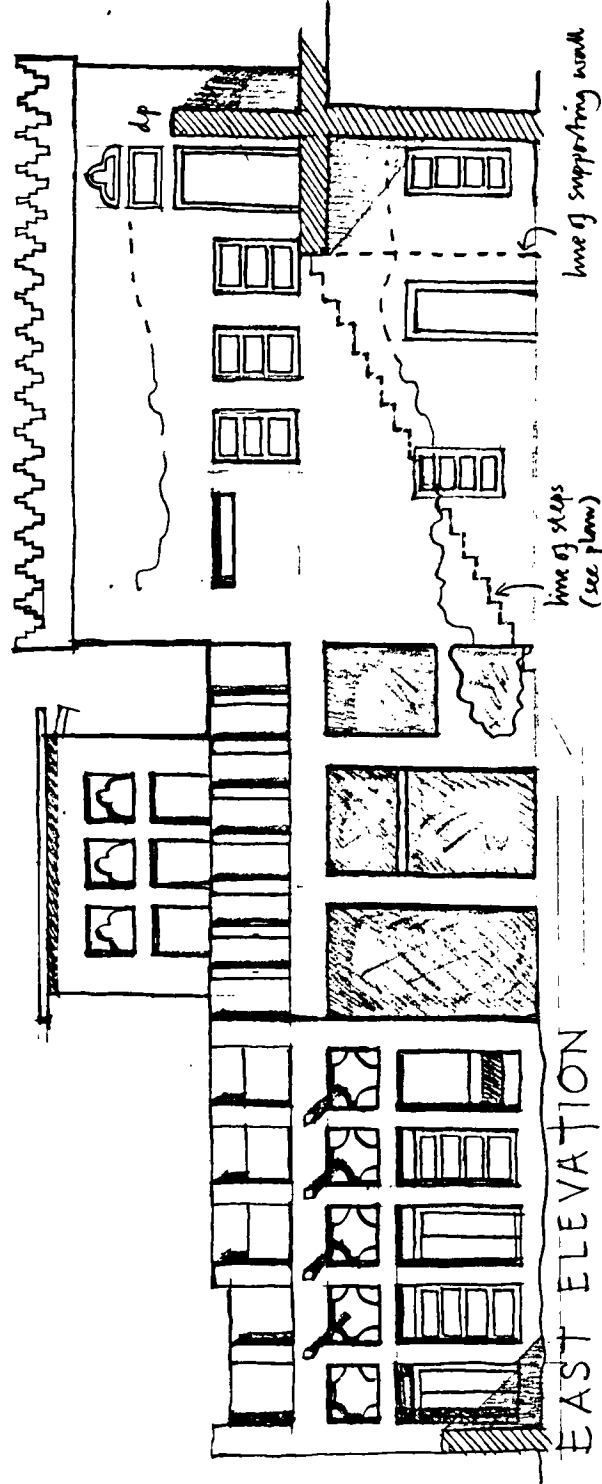
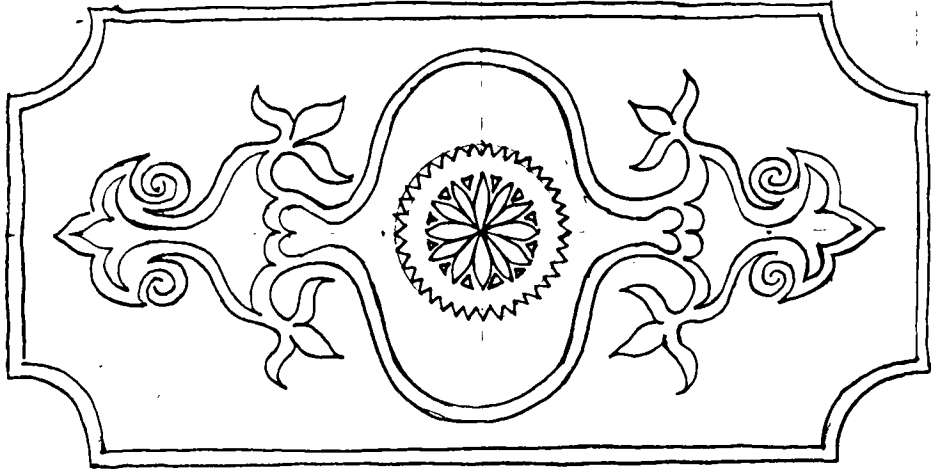
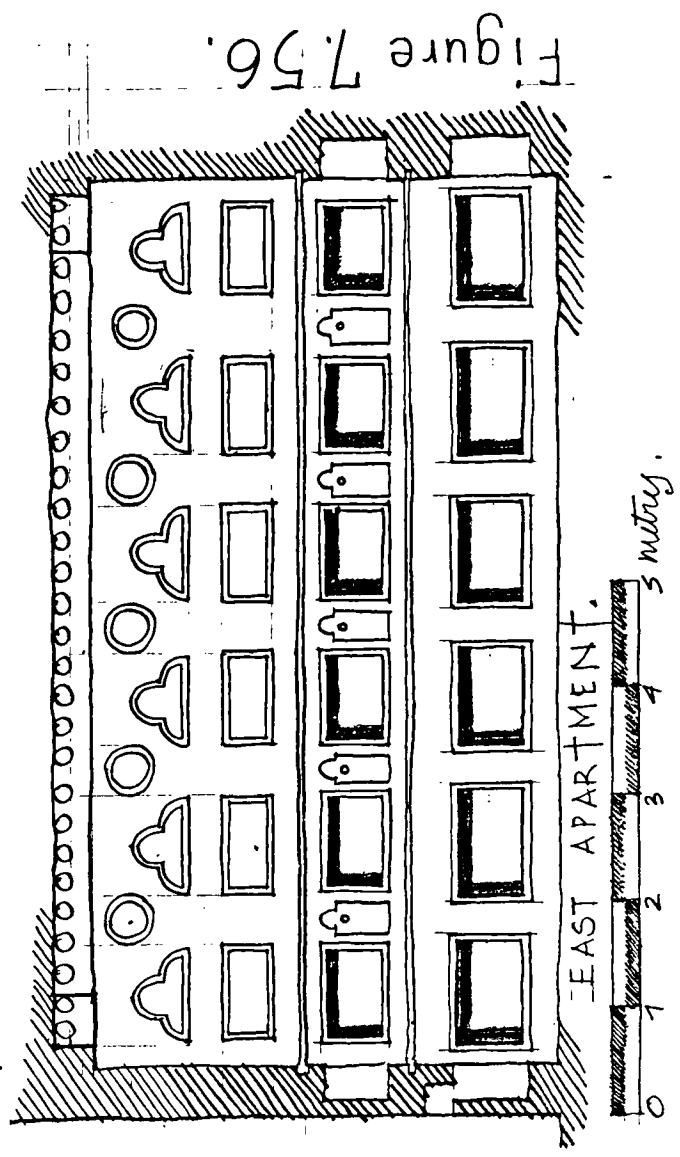


Fig. 7.55(E) Salman Mattar House. South elevation of Head Mans Apartment seen from the roof terrace outside the Small Apartment (which can be seen on the extreme right of the photograph).



SALMAN MATTAR HOUSE.

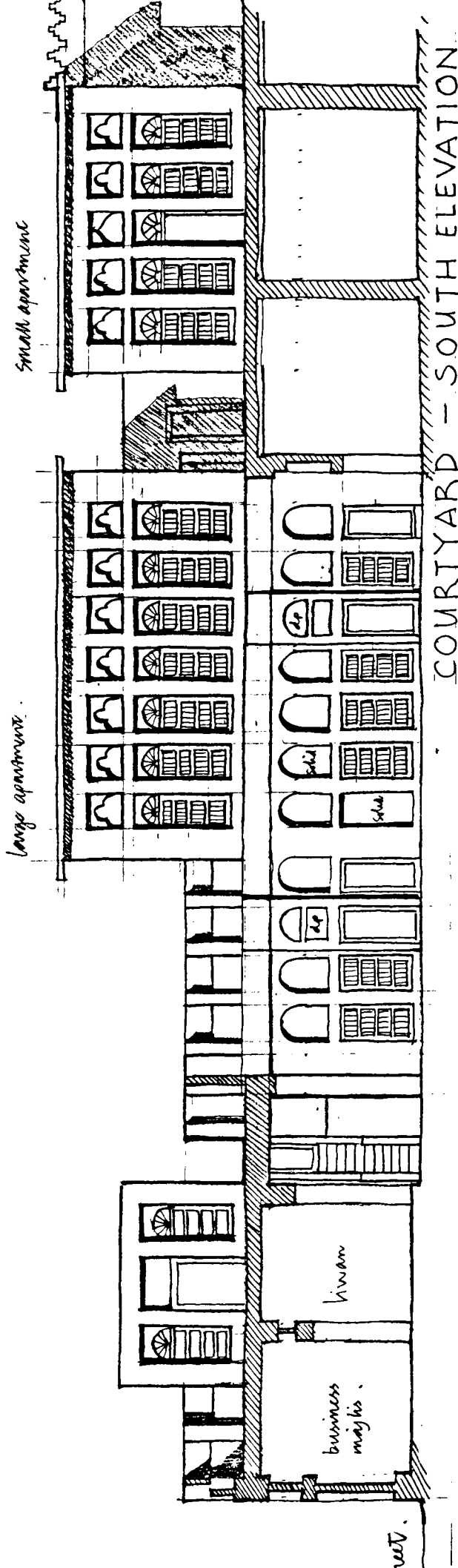
EAST ELEVATION



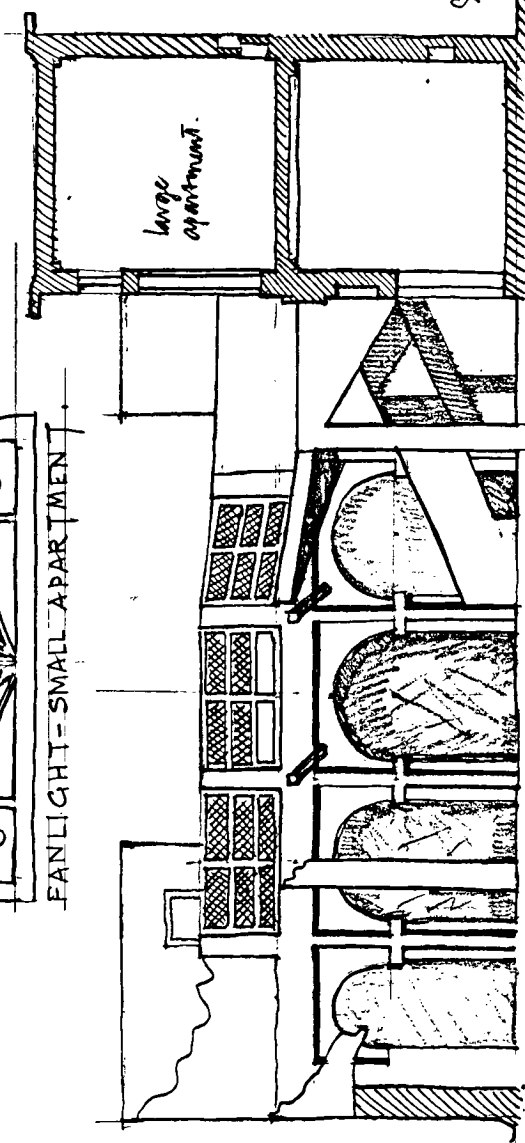
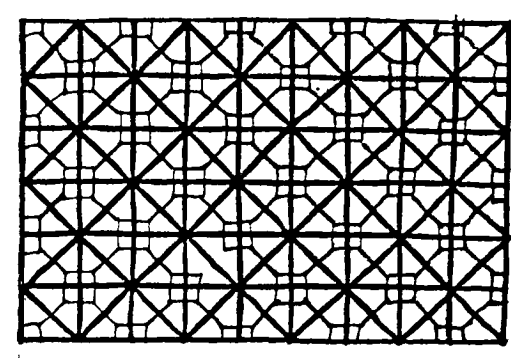
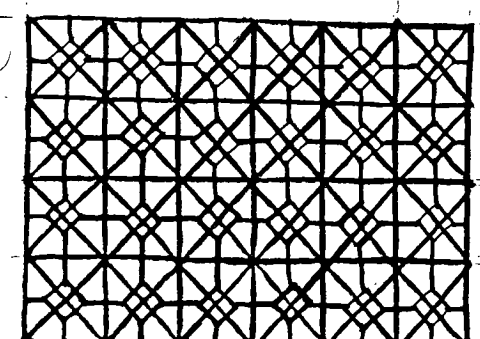
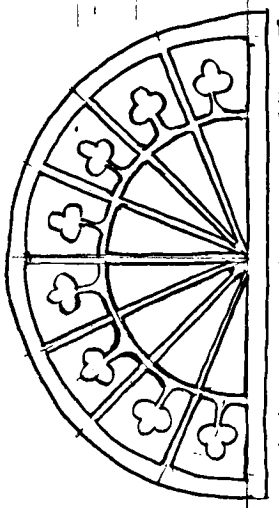
DOOR PANEL - EAST APARTMENT

EAST APARTMENT.

Figure 7.56.



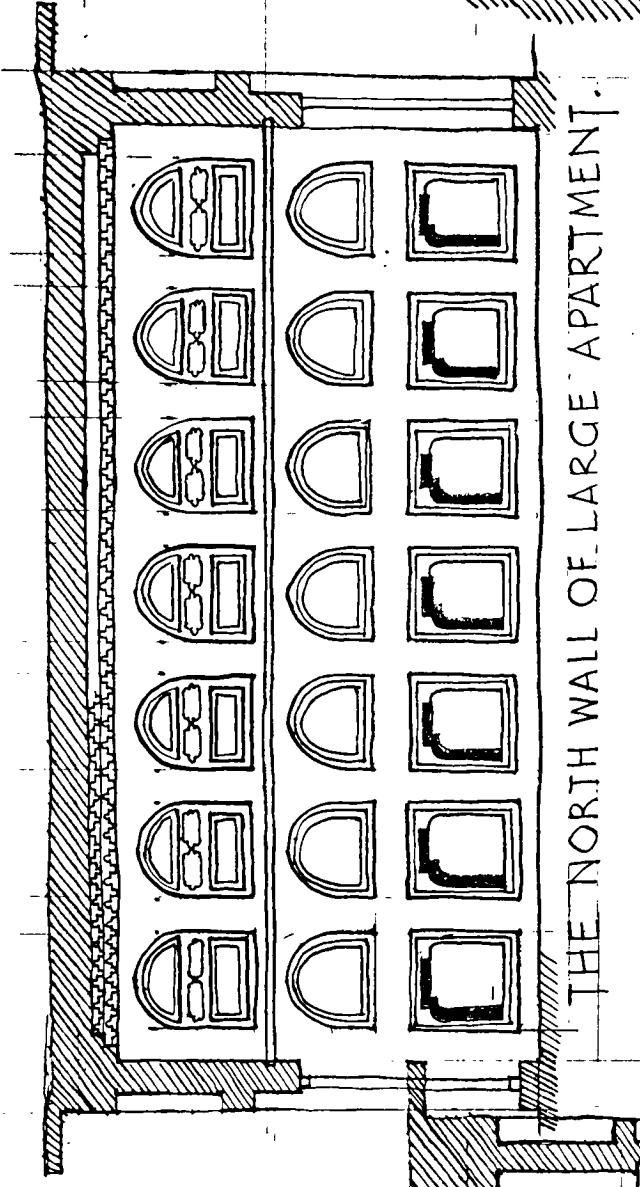
SALMAN
MATTAR
HOUSE.



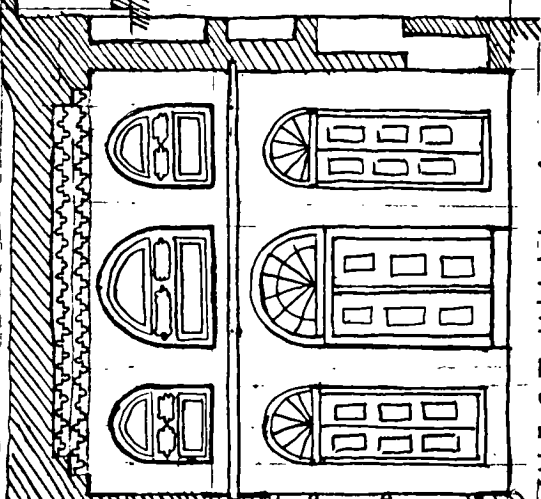
COURTYARD SECTION FACING WEST.



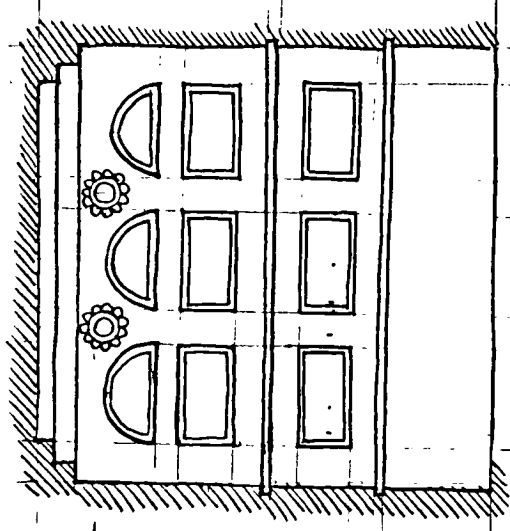
Fig 7.57.



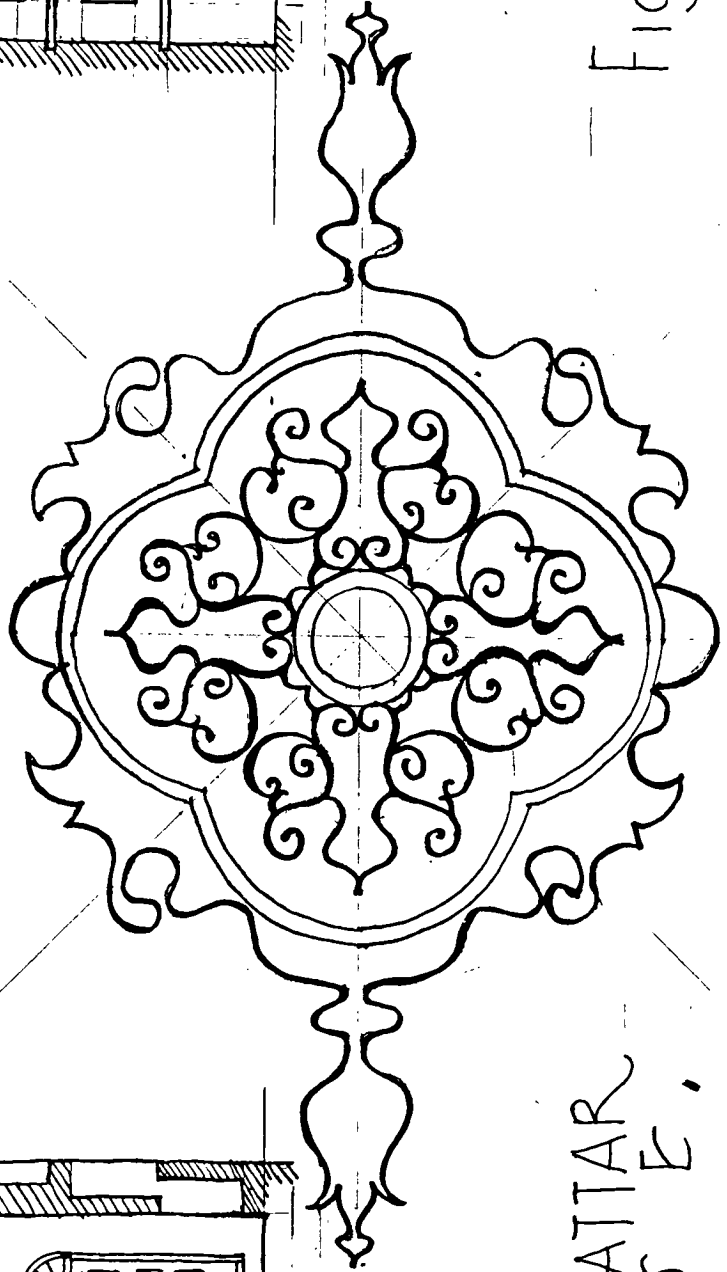
THE NORTH WALL OF LARGE APARTMENT.



WEST WALL OF LARGE APARTMENT.



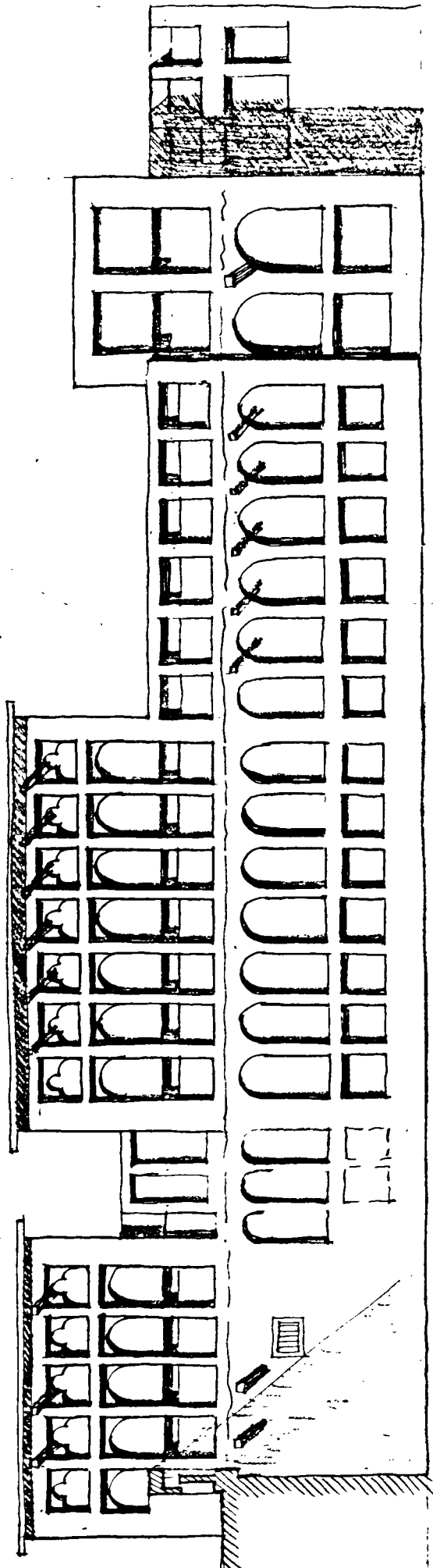
WEST WALL - SMALL APARTMENT



CEILING - FRETWORK

SALMAN MATTAR
HOUS E.

Figure 758.



NORTH ELEVATION.
SALMAN MATJAR HOUSE.

MAIN DOORWAY.

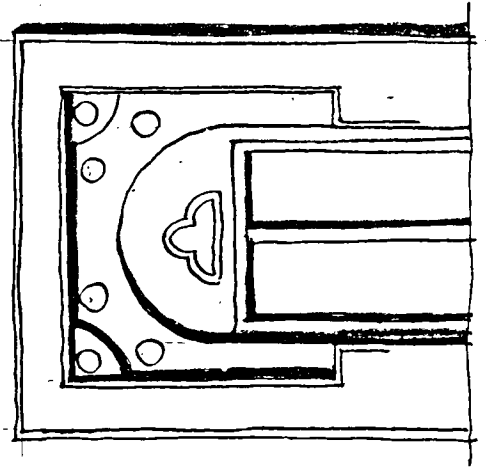


Figure 7.59.

MATTAR HOUSE

FIRST FLOOR GROUND FLOOR

↑↑

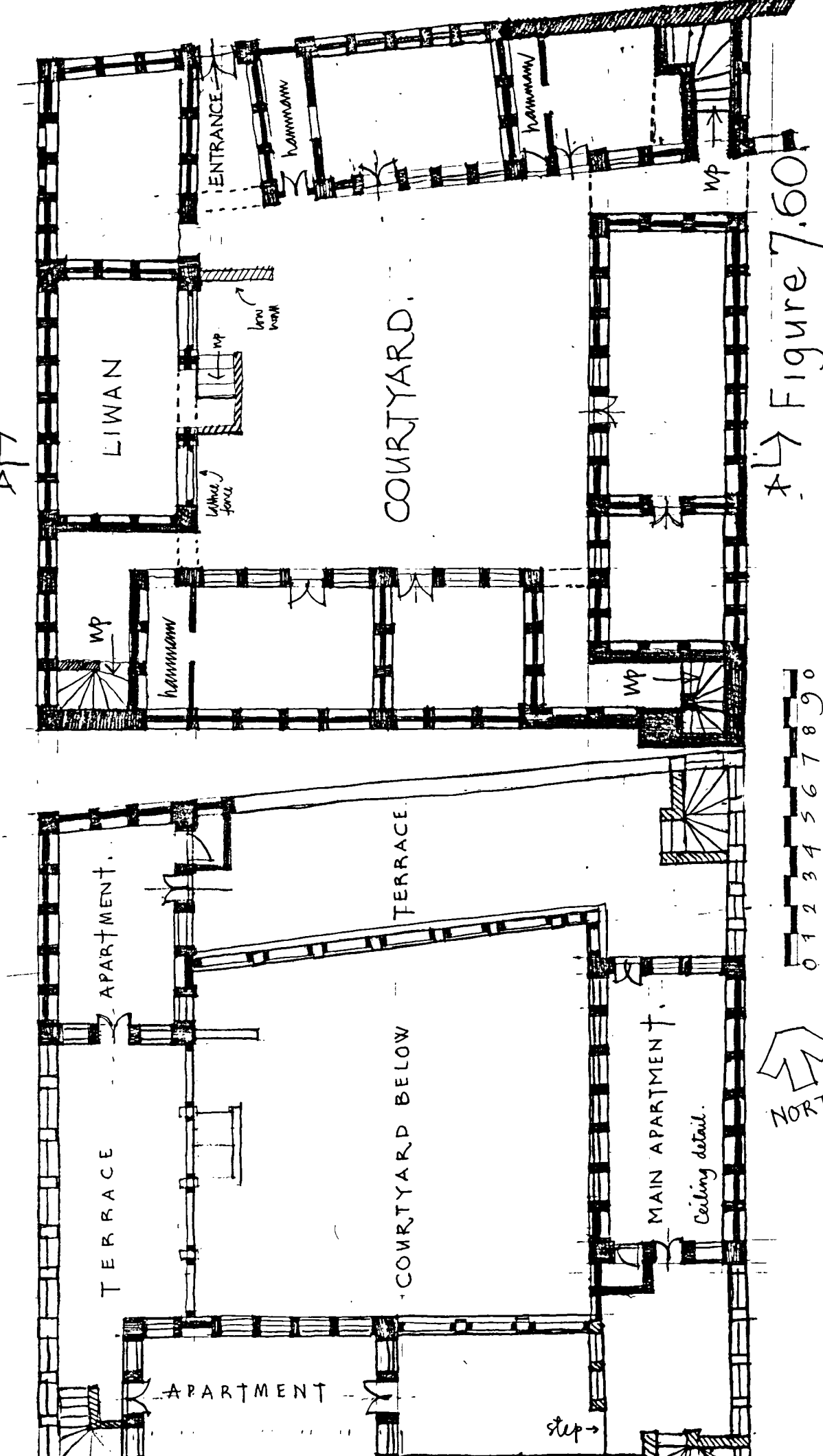


Figure 7.60

0 1 2 3 4 5 6 7 8 9 0





Fig. 7.61(A) Ahmed Mattar House. View of Main Entrance door from street.



Fig. 7.61(B) Ahmed Mattar House. View of Main Apartment from the courtyard.

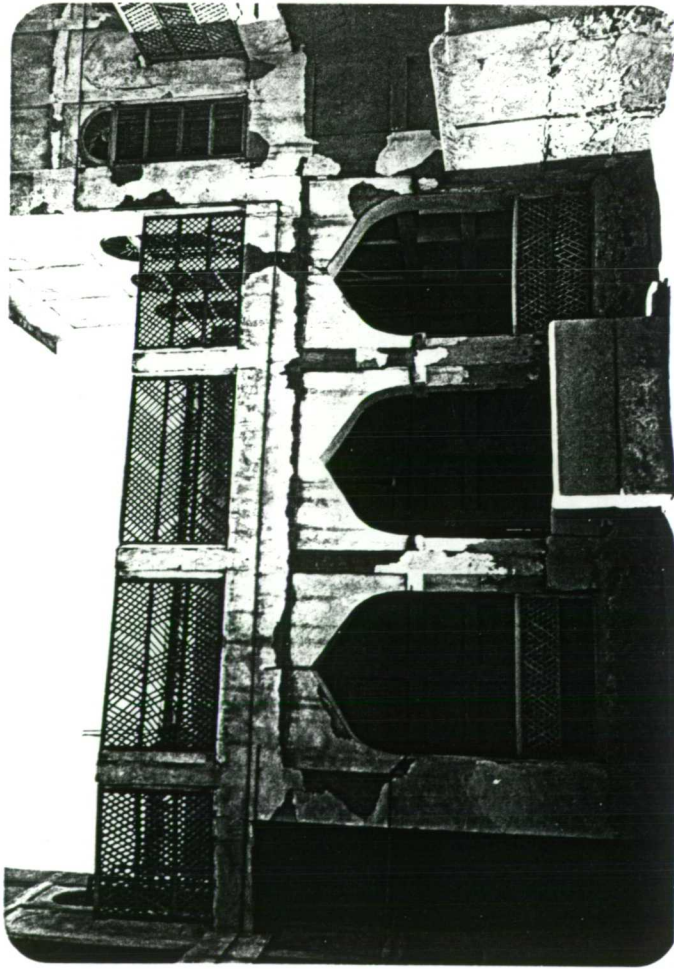
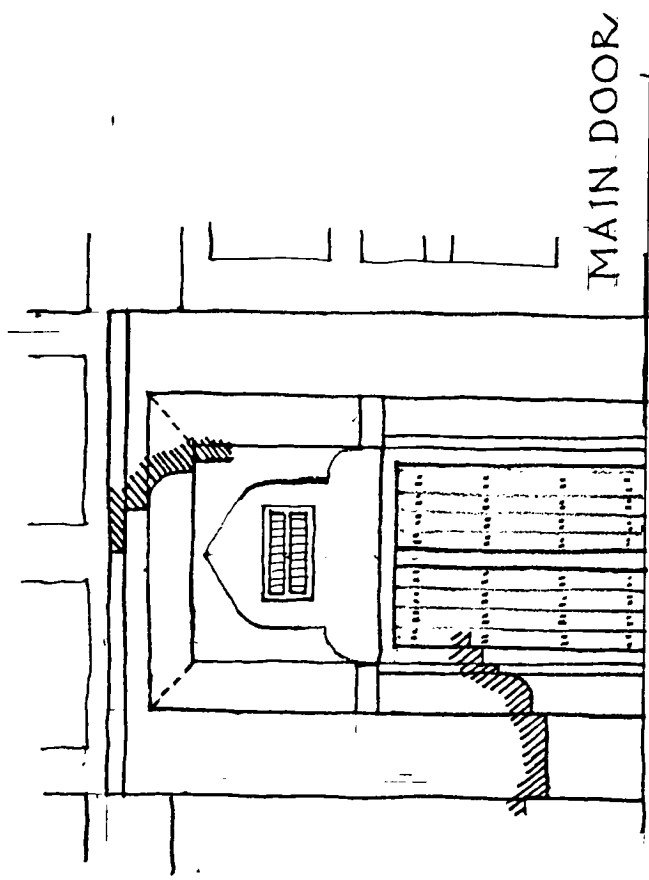
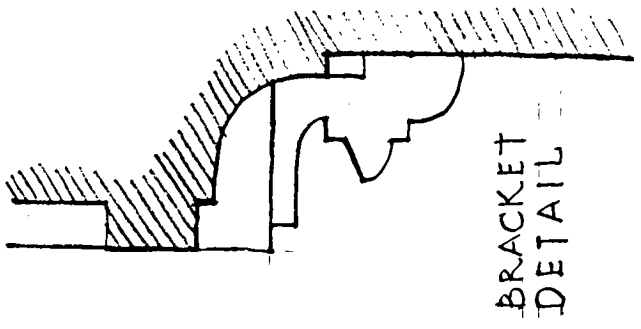
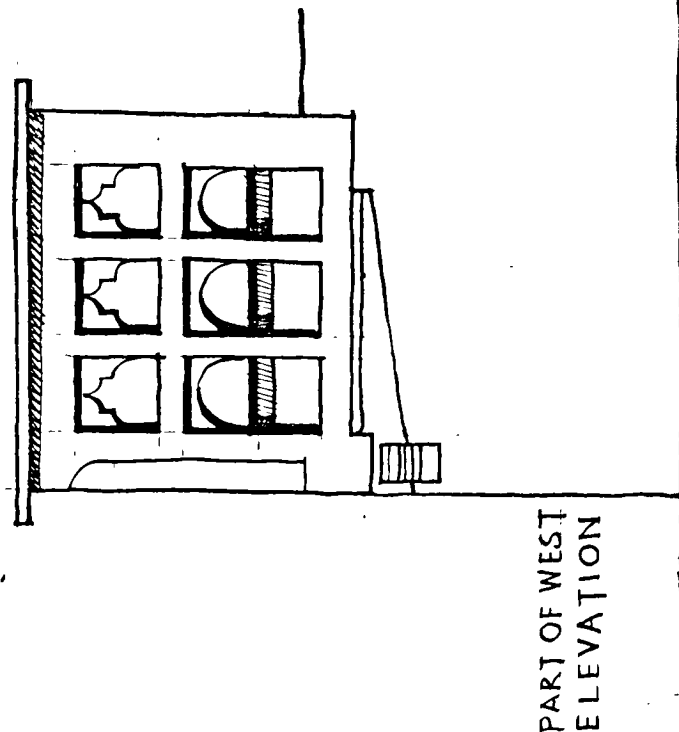


Fig. 7.61(C) Ahmed Mattar House. Ground level liwan seen from the courtyard.



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AHMED
MATTAR HSE.

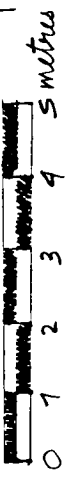
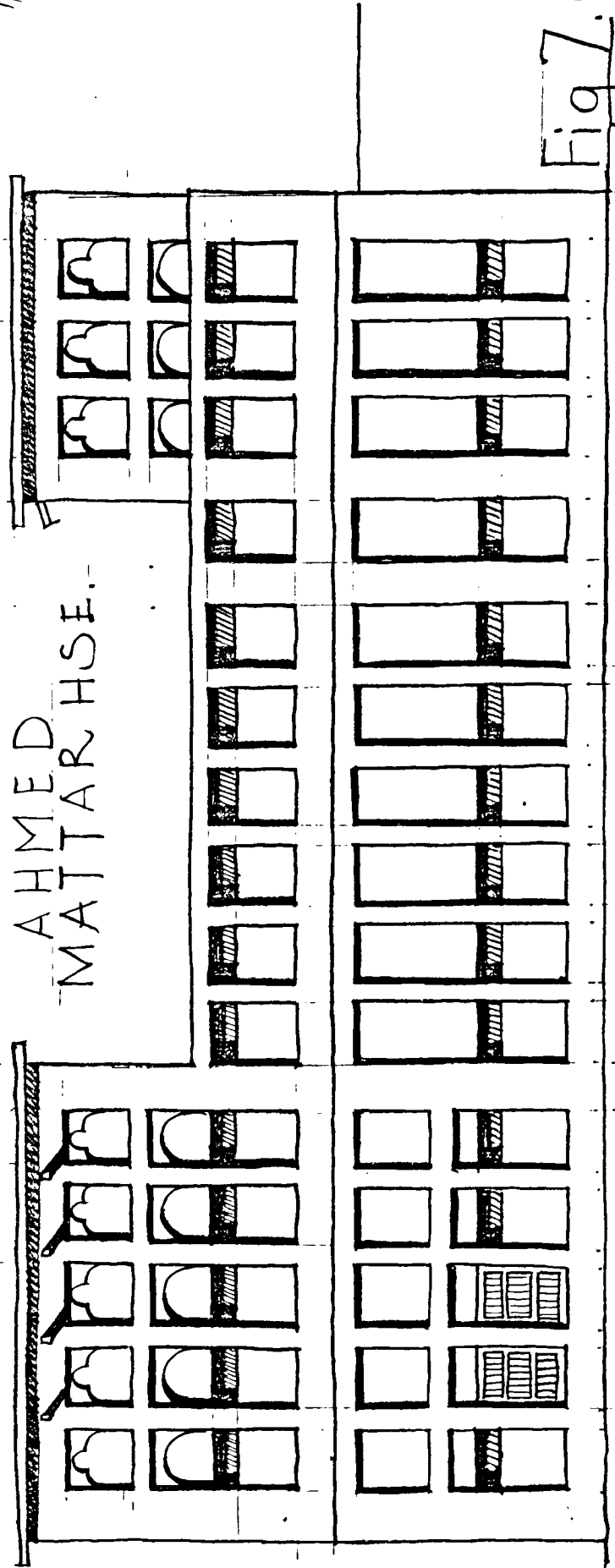
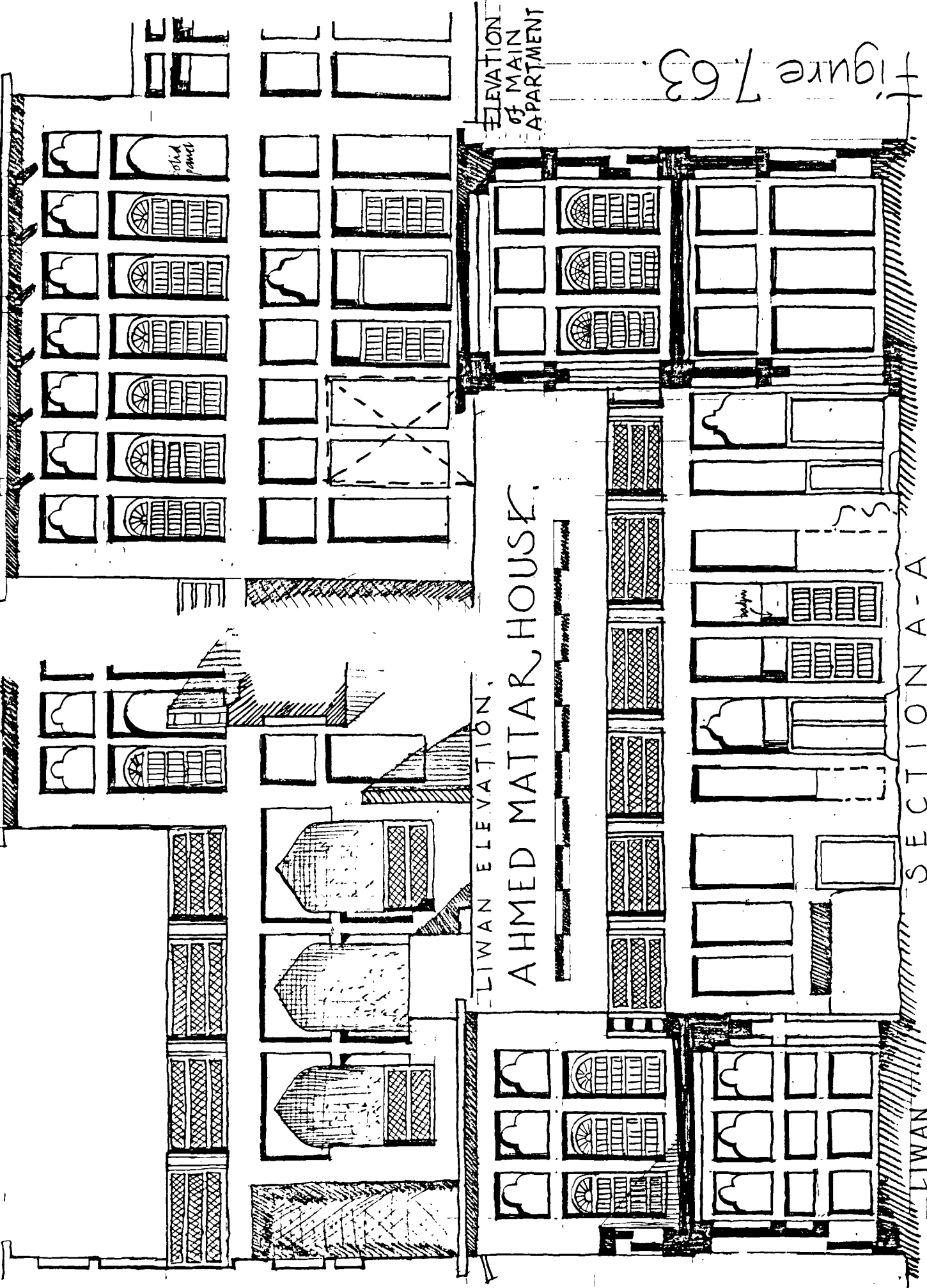


Fig 7.62.

Figure 763

ELEVATION
OF MAIN
APARTMENT



LIWAN ELEVATION.

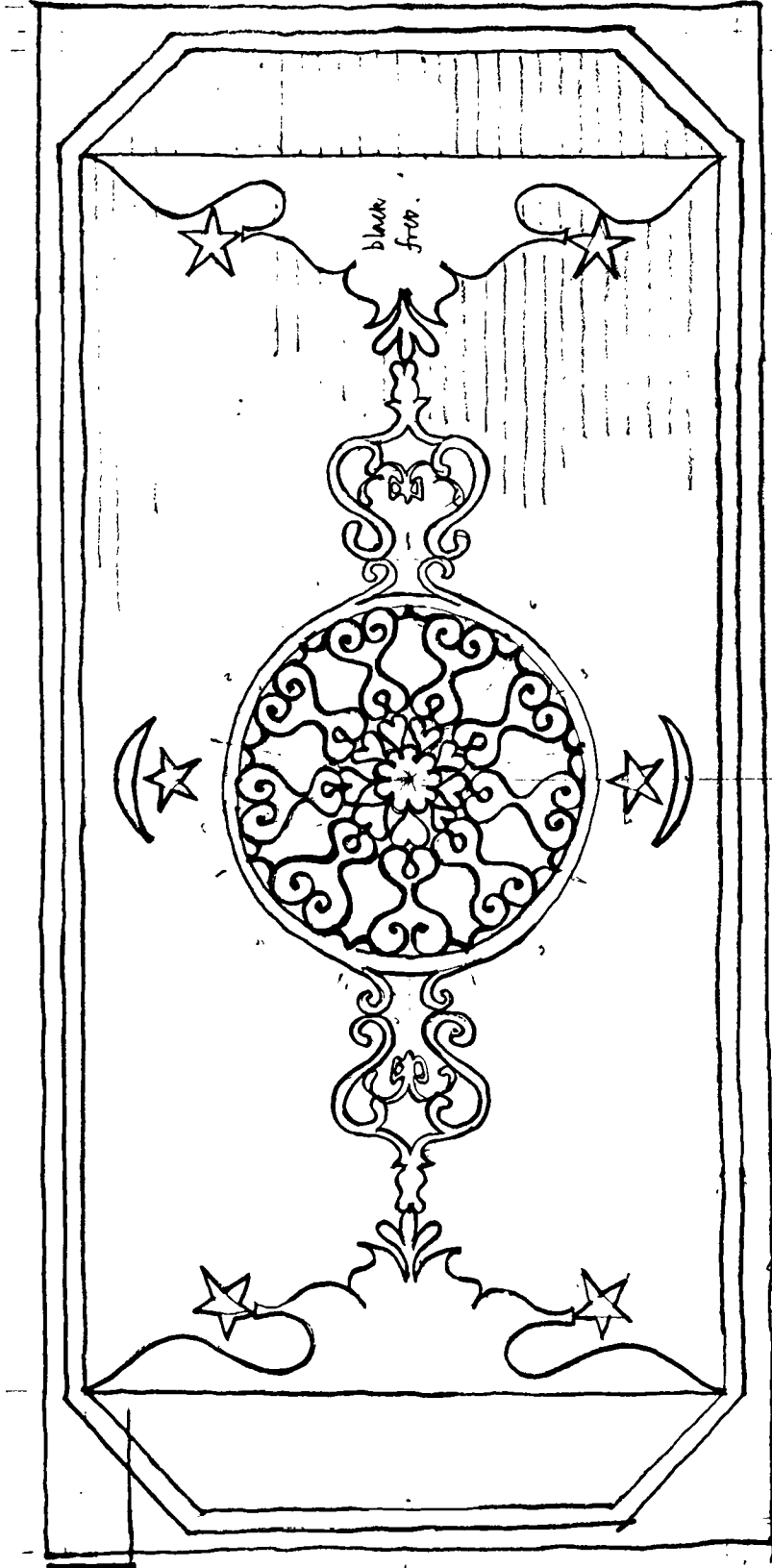
AHMED MATTAR HOUSE.

SECTION A-A

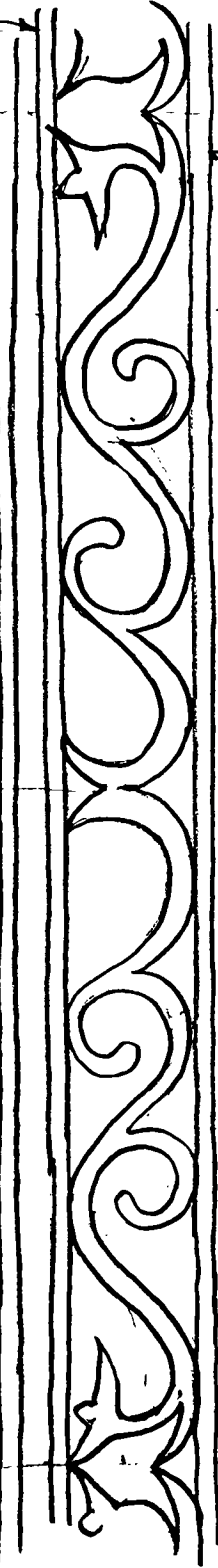
LIWAN

MATTAR HOUSE.

Mayhis Ceiling.



brown boards · black lead & brown bead



brown bead

red.

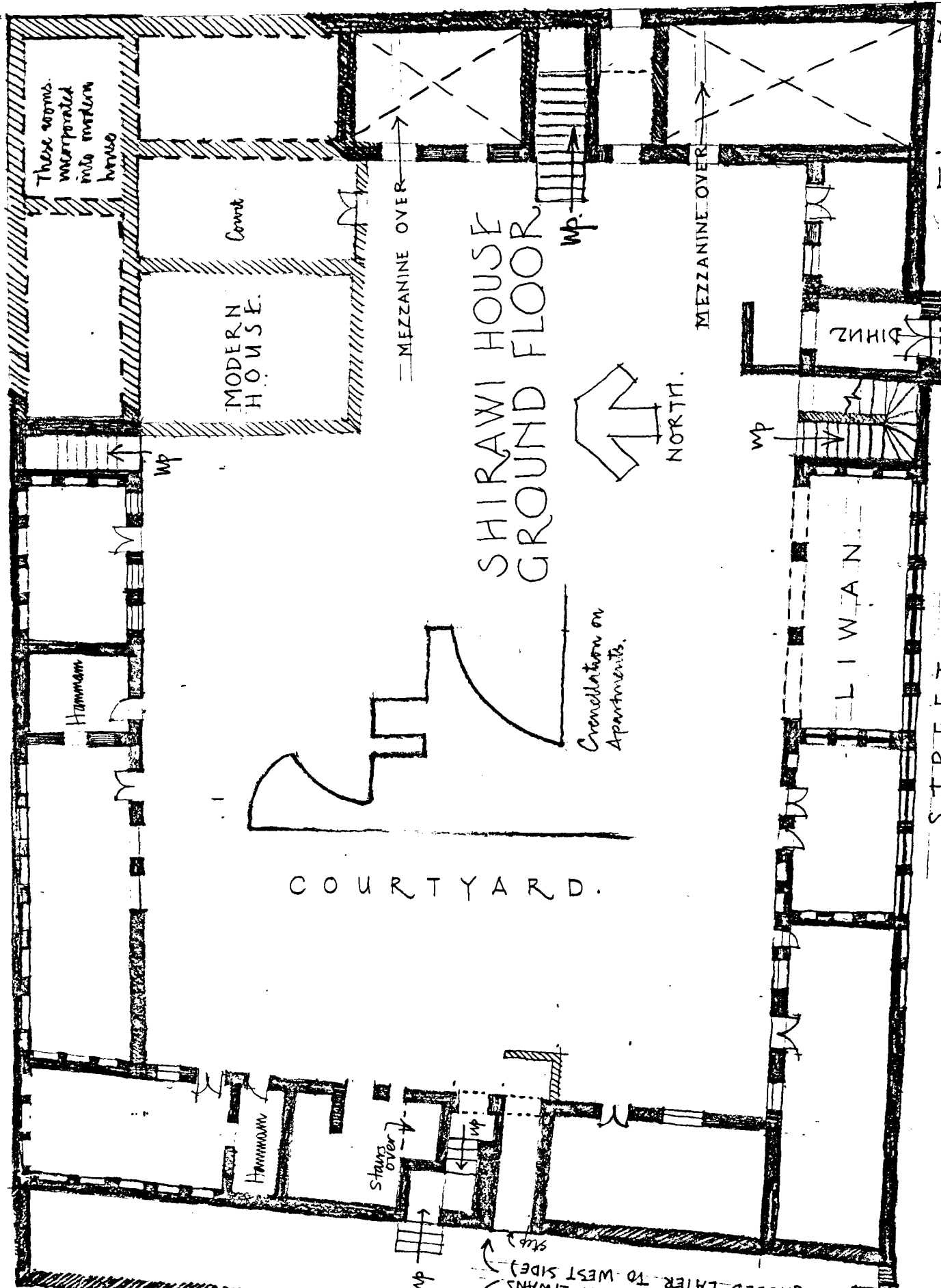
cornice

Frieze.

Figure 7.64.

4 in
1932

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



These rooms incorporated into modern house

MODERN HOUSE.

Courtyard

SHIRAWI HOUSE
GROUND FLOOR



MEZZANINE OVER

MEZZANINE OVER

DISHAZ

MAIN DOOR

LIWAN

STREET

COURTYARD.

Circulation on Apartments.

stairs over

CHANGED LATER TO WEST SIDE FROM LIWANS (STEP)

Figure 7.65

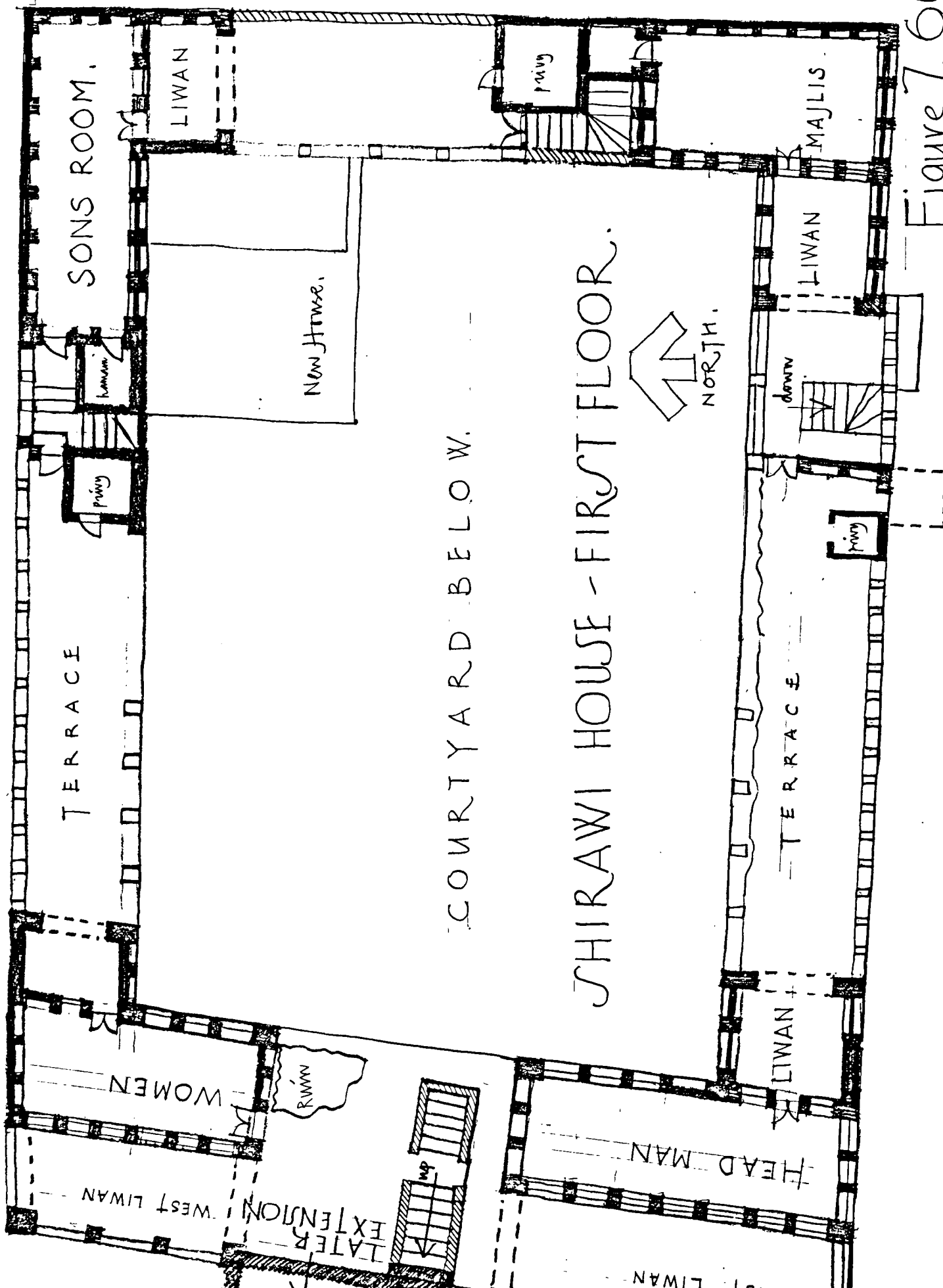


Figure 7.66.

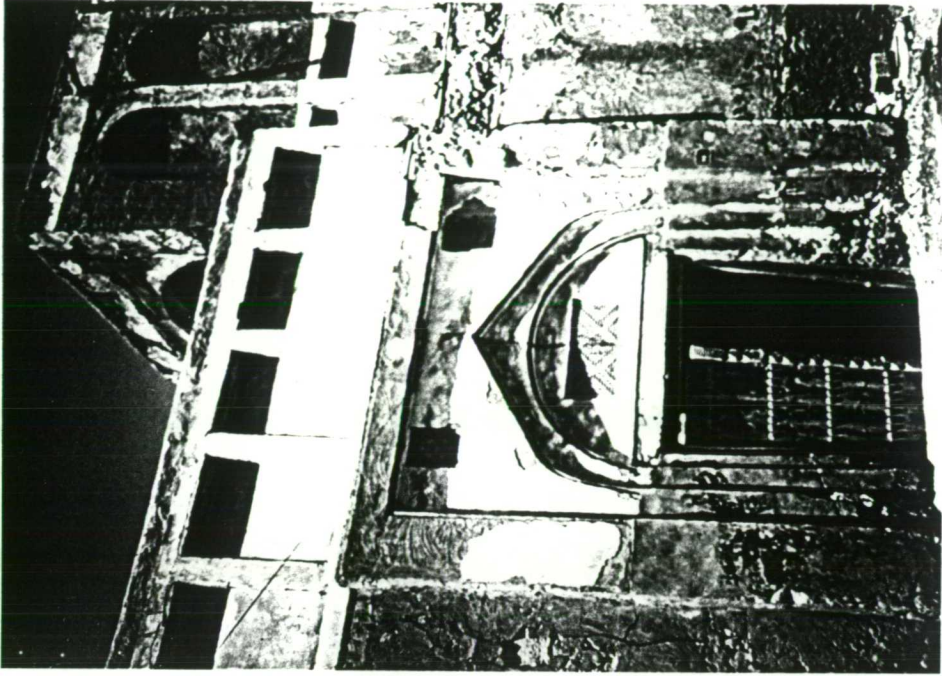


Fig. 7.67(B) Shirawi House. Main street entrance. The liwan of the majlis can be seen above.

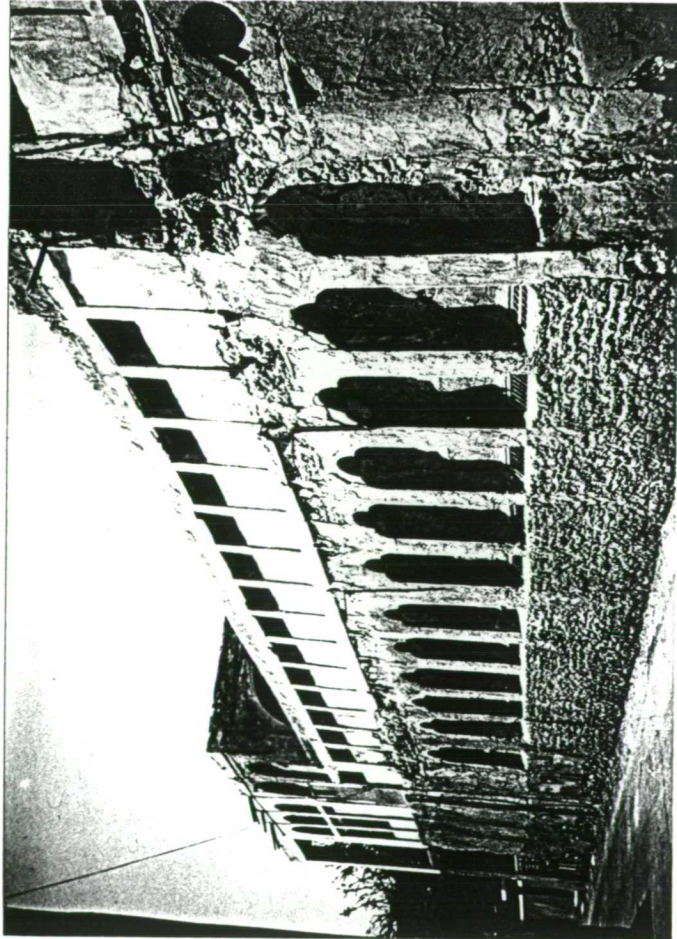


Fig. 7.67(A) Shirawi House. South elevation facing the street.

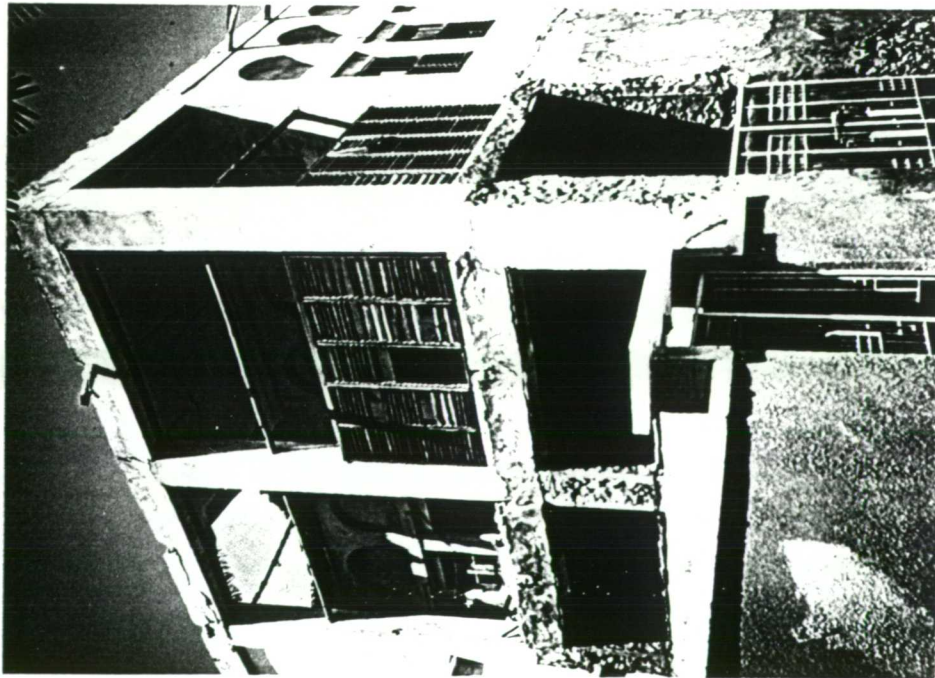
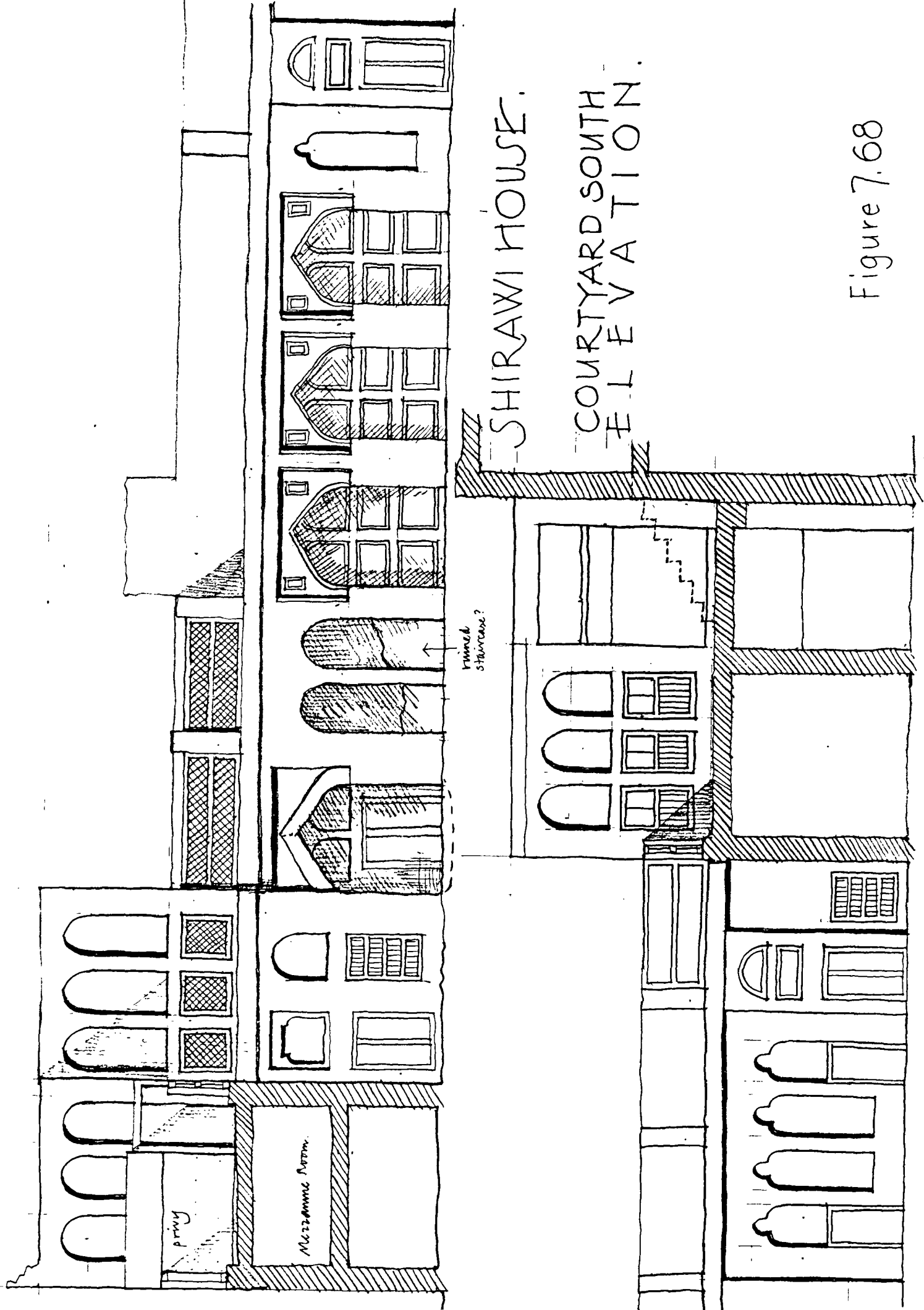


Fig. 7.67(C) Shirawi House. View of the eastern elevation seen from the street. It shows the liwan which was a later addition.



SHIRAWI HOUSE.

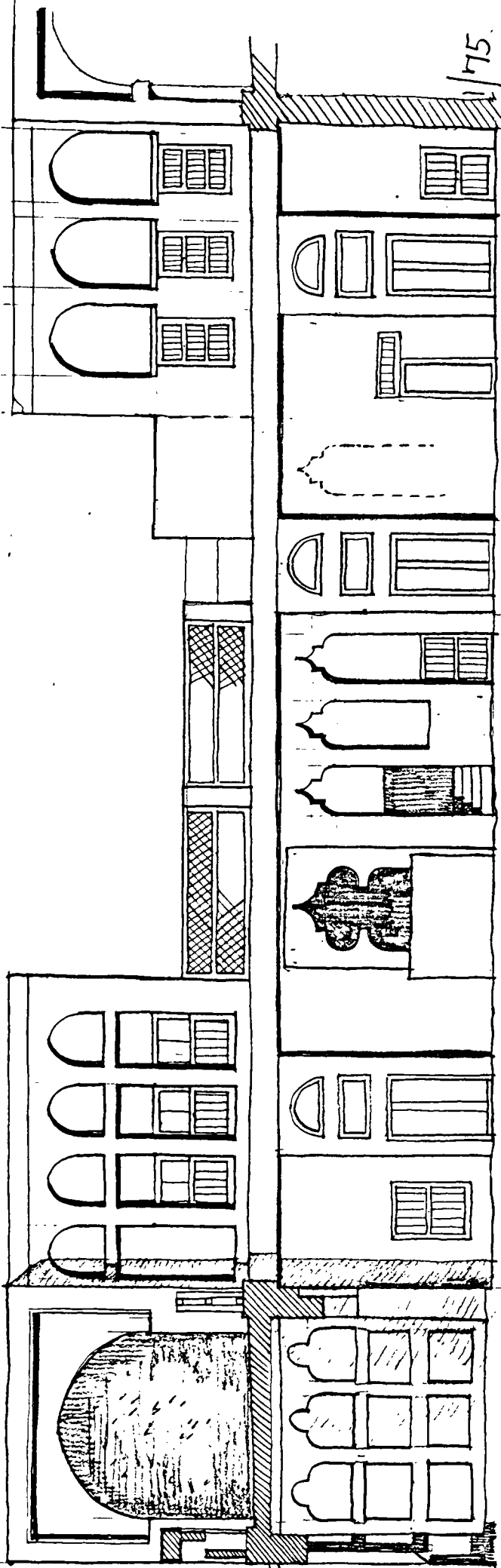
COURTYARD SOUTH
ELEVATION.

priny

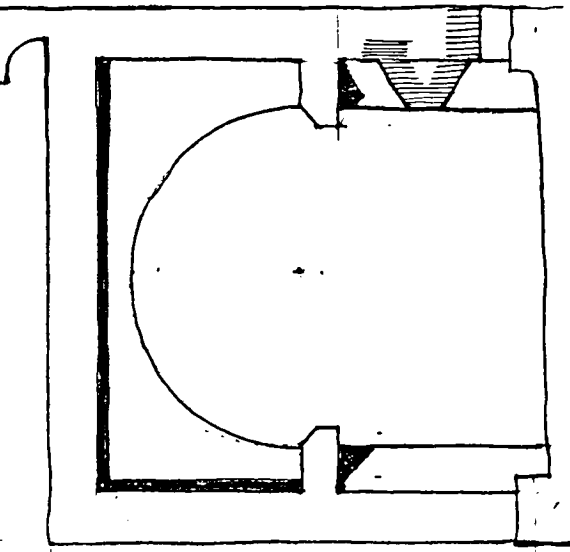
Musammac Room.

rinned
staircase?

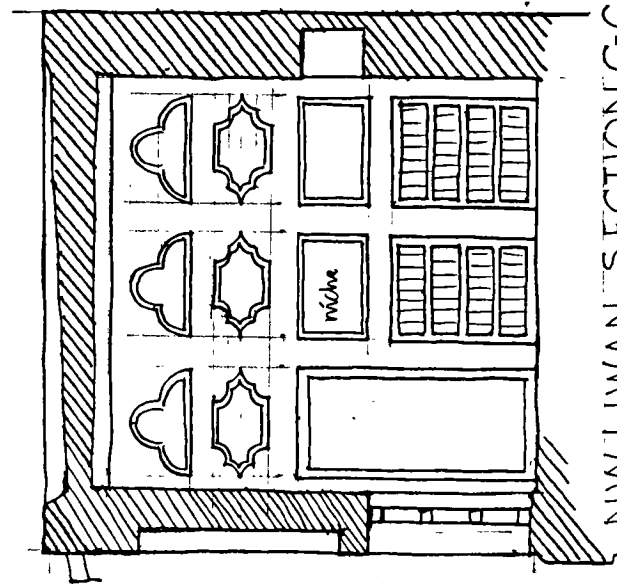
Figure 7.68



COURTYARD SECTION B-B



N.W. LIWAN

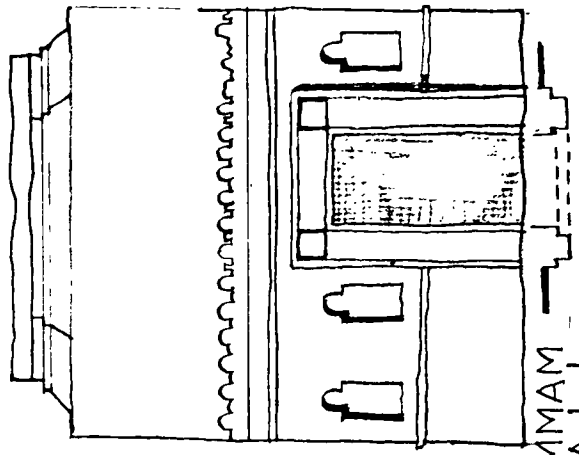


N.W. LIWAN SECTION C-C

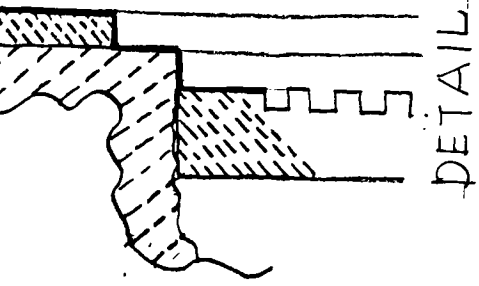
SHIRAWI
HOUSE.
COURT WEST
ELEVATION.

Figure 7.69

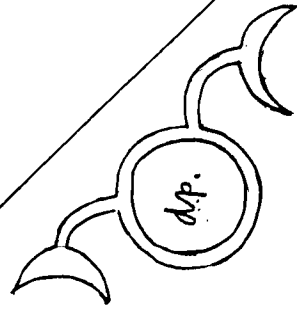
1/50



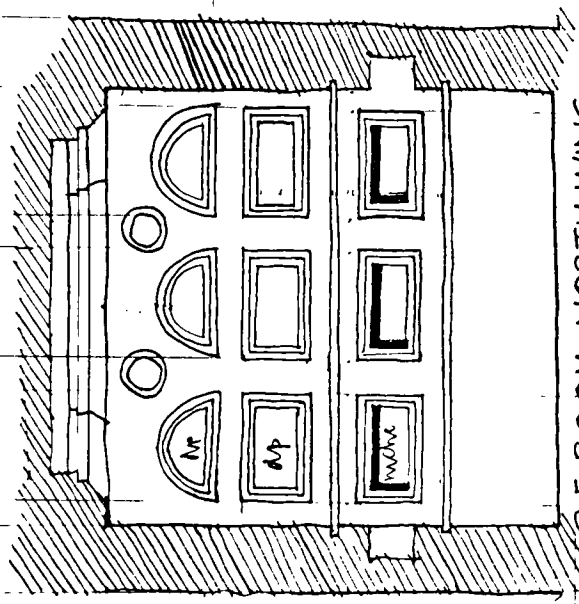
HAMMAM WALL



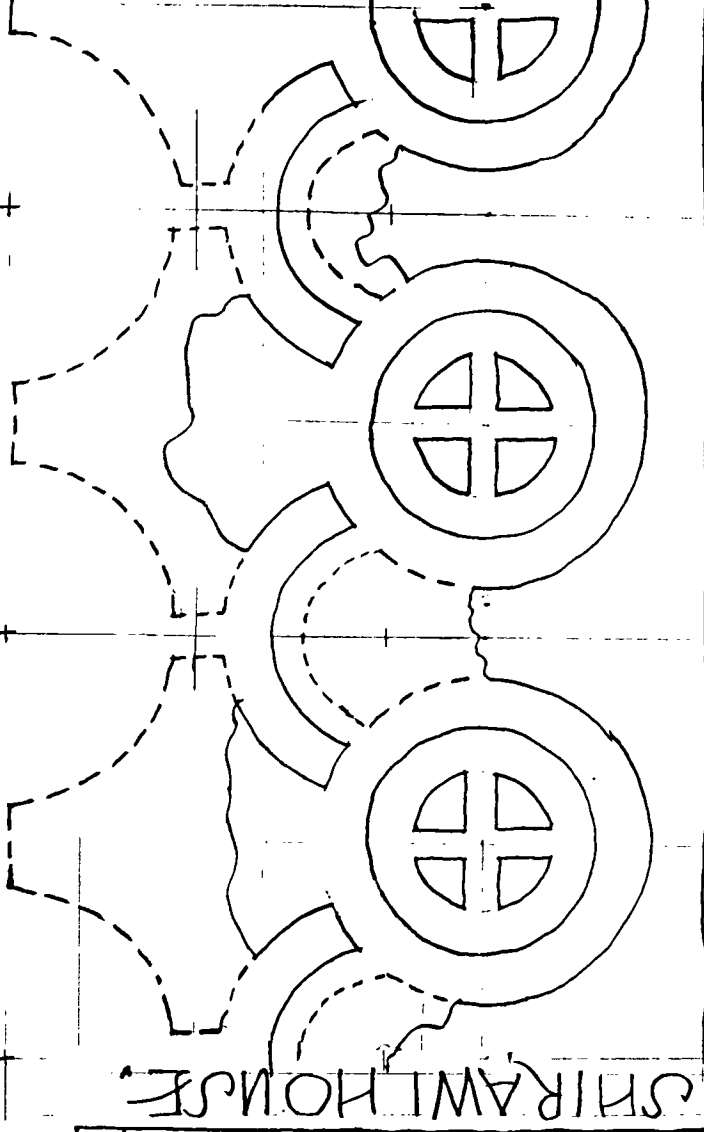
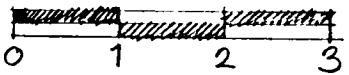
DETAIL



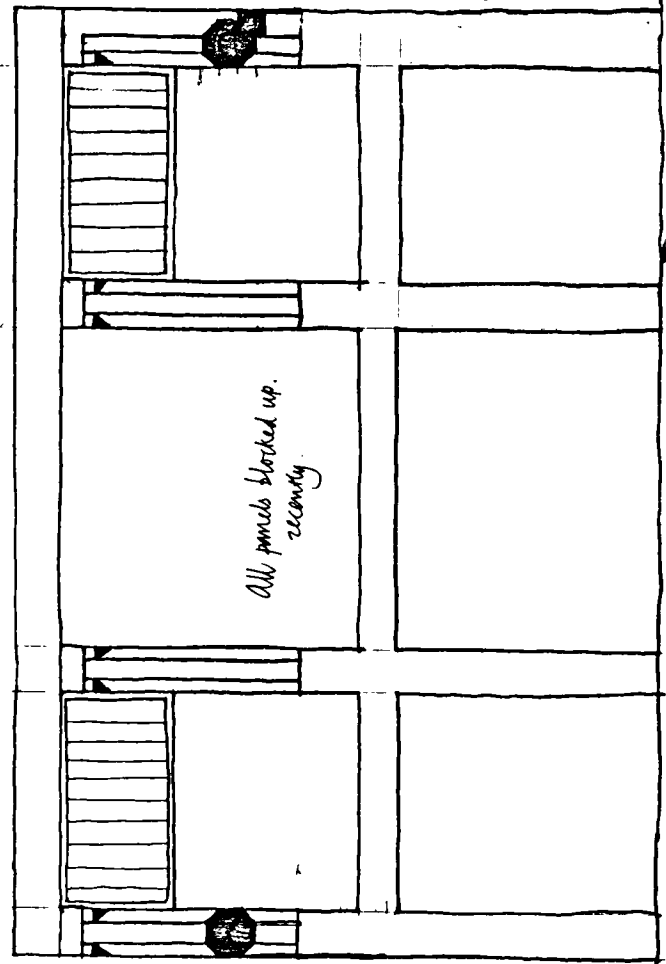
CORNICE SOFFIT AT CORNERS.



G.F ROOM-NORTH WING END WALL ELEVATION.



HAMMAM WALL CRENELLATION DETAIL

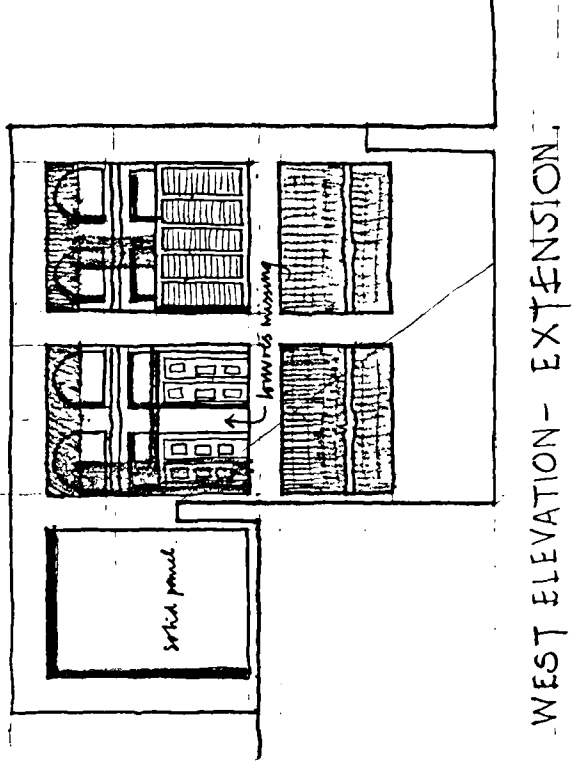
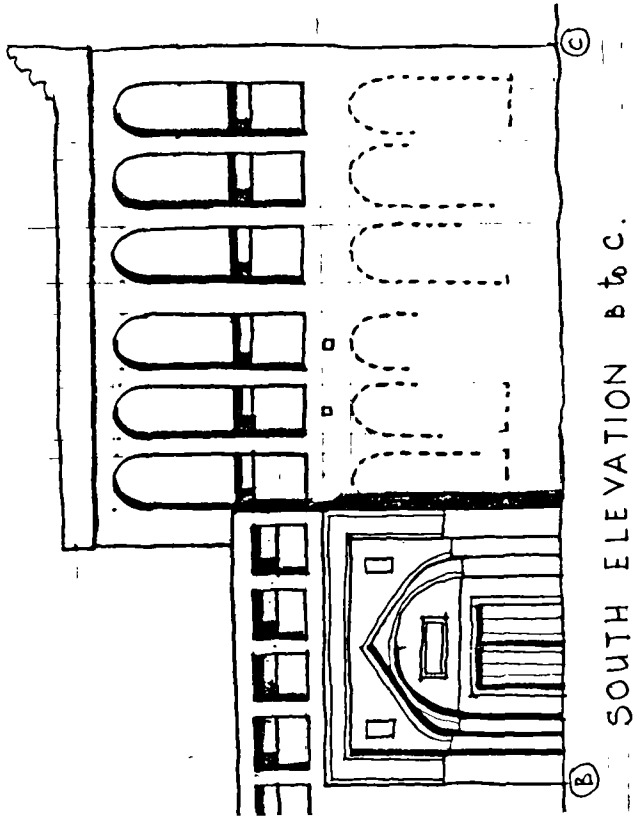
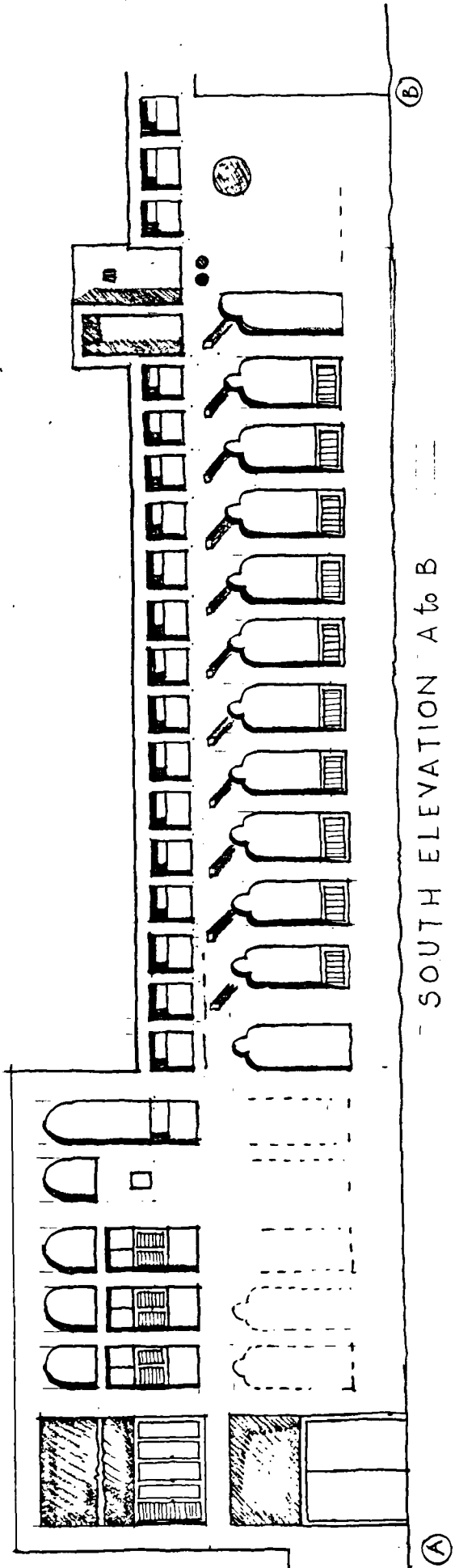


EXTENSION - WEST ELEVATION

All panels blocked up. secondly.

SHIRAWI HOUSE

Fig 7.70.



SHIRAWI HOUSE.

Figure 7.71.

MODERN HOUSE + SHOP.

STREET.

broken up

beam over

HUNNAMA

COURTYARD.

balcony over

LIWAN

PASSAGEWAY.

COVERED LANE

LIVING ROOM

KITCHEN

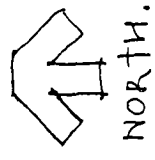
STORAGE.

COURTYARD

modern walls

2m

MAJLIS



SCALE (metres)

JALAMAH HOUSE.
GROUND FLOOR.

Fig 7.72.

JALAHMEH HOUSE - FIRST FLOOR.

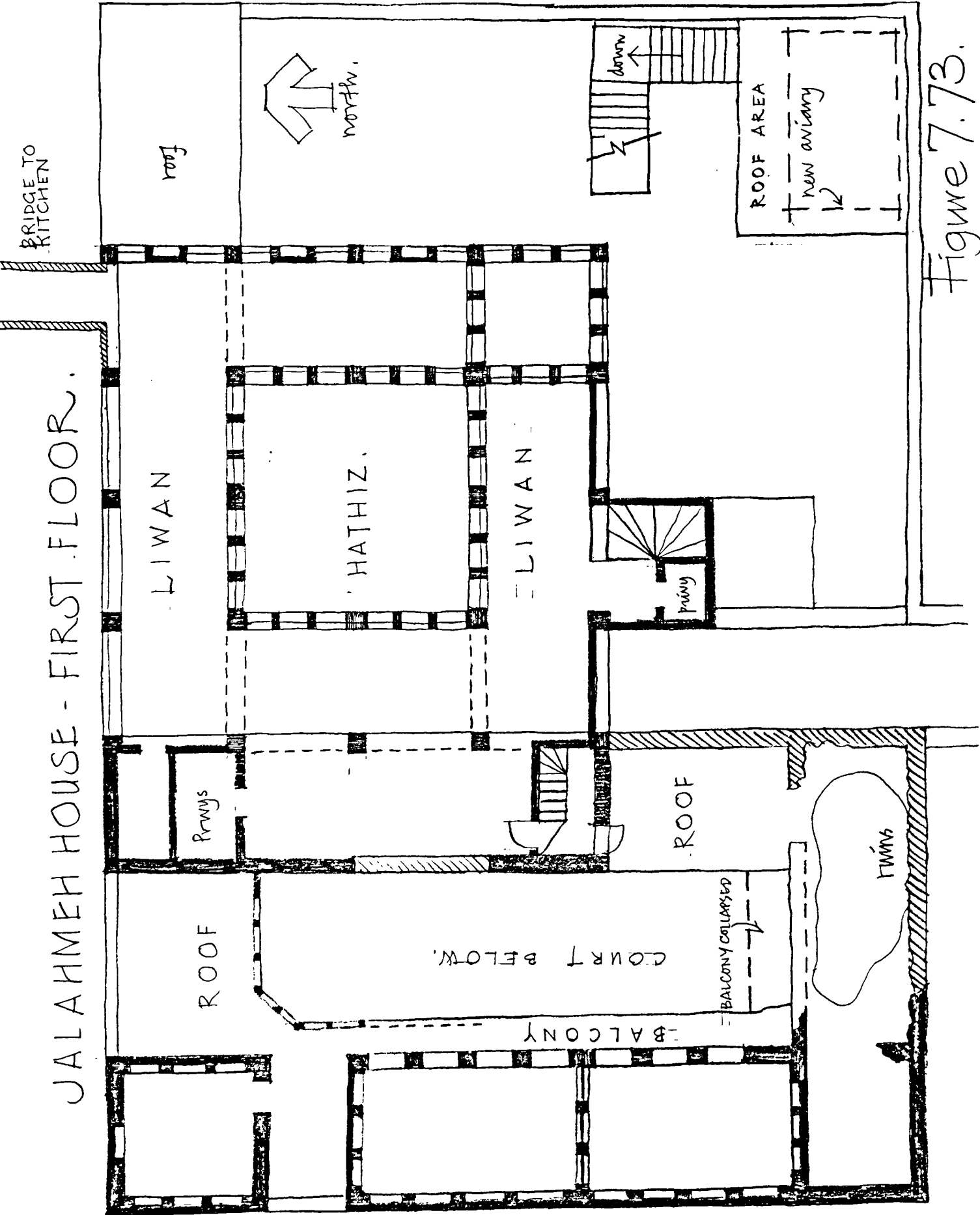


Figure 7.73.

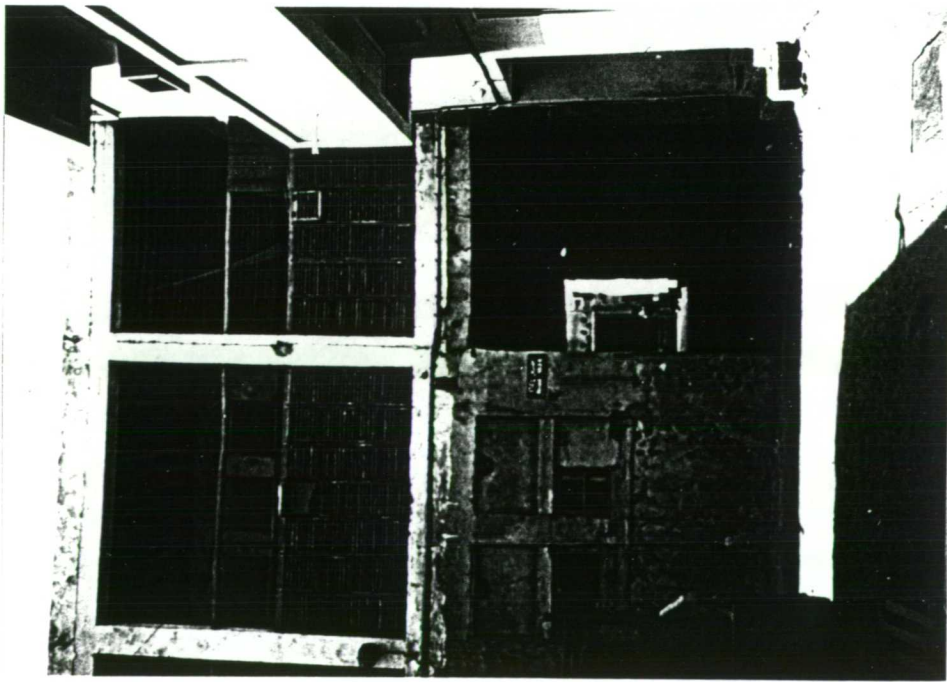


Fig. 7.74(A) Al Jalahma House. View from the north showing how Lane 1622 passes below the house. The liwan is over. There is a modern building to the right.

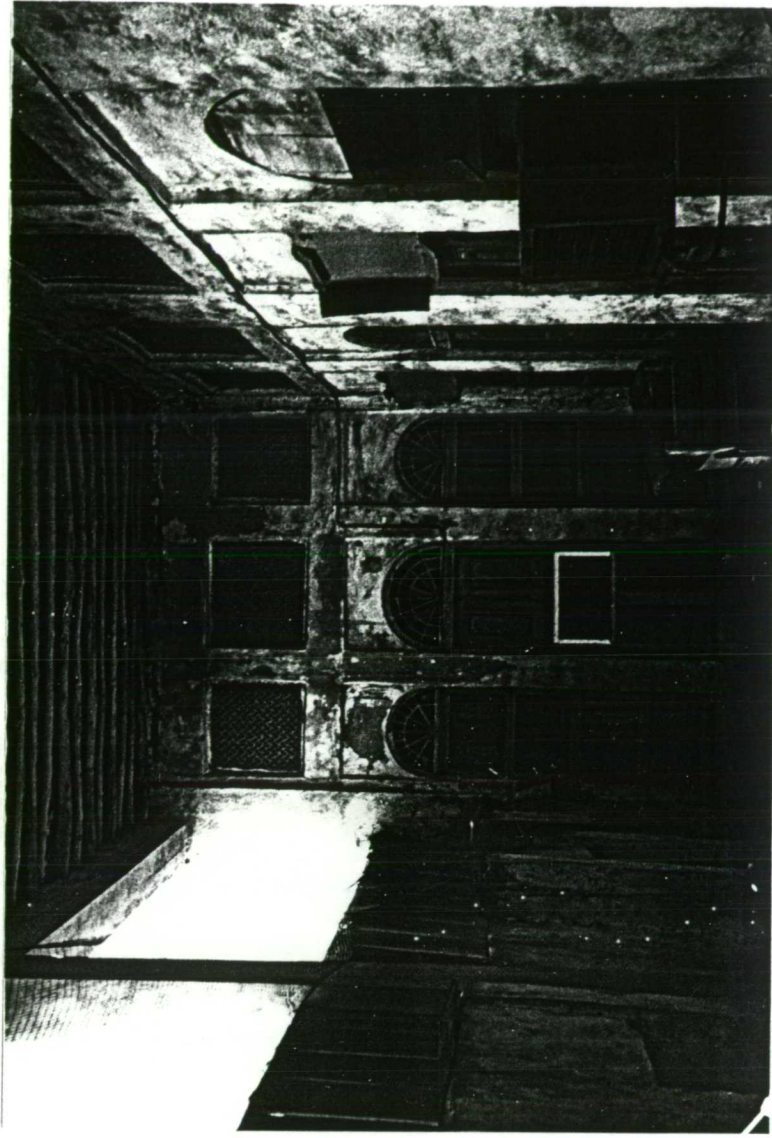


Fig. 7.74(B) Al Jalahma House. View along the liwan on the south side of the house at first floor level.

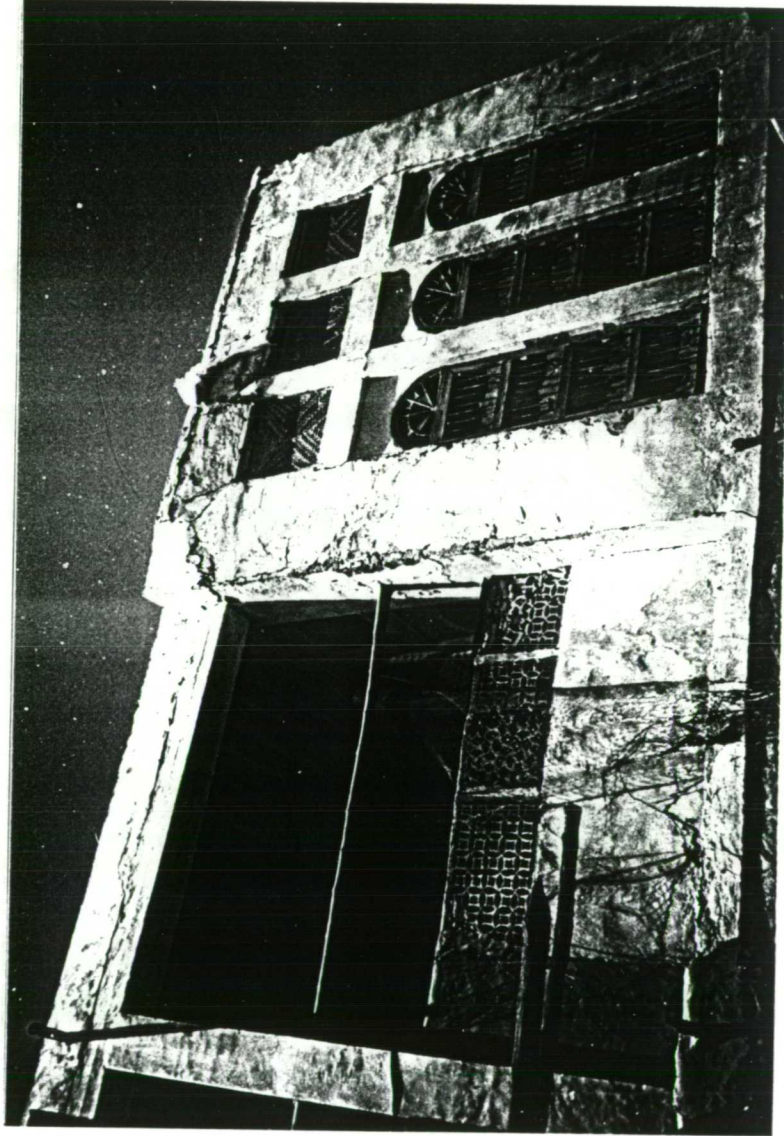
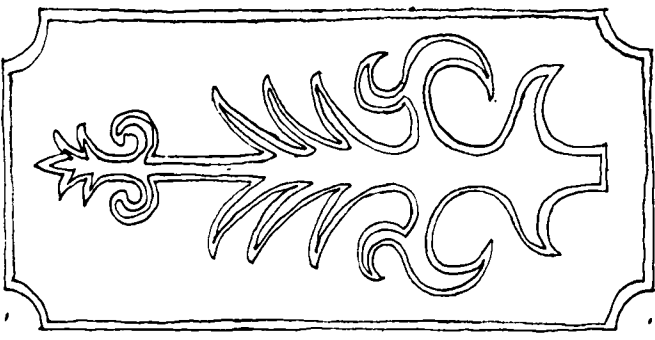
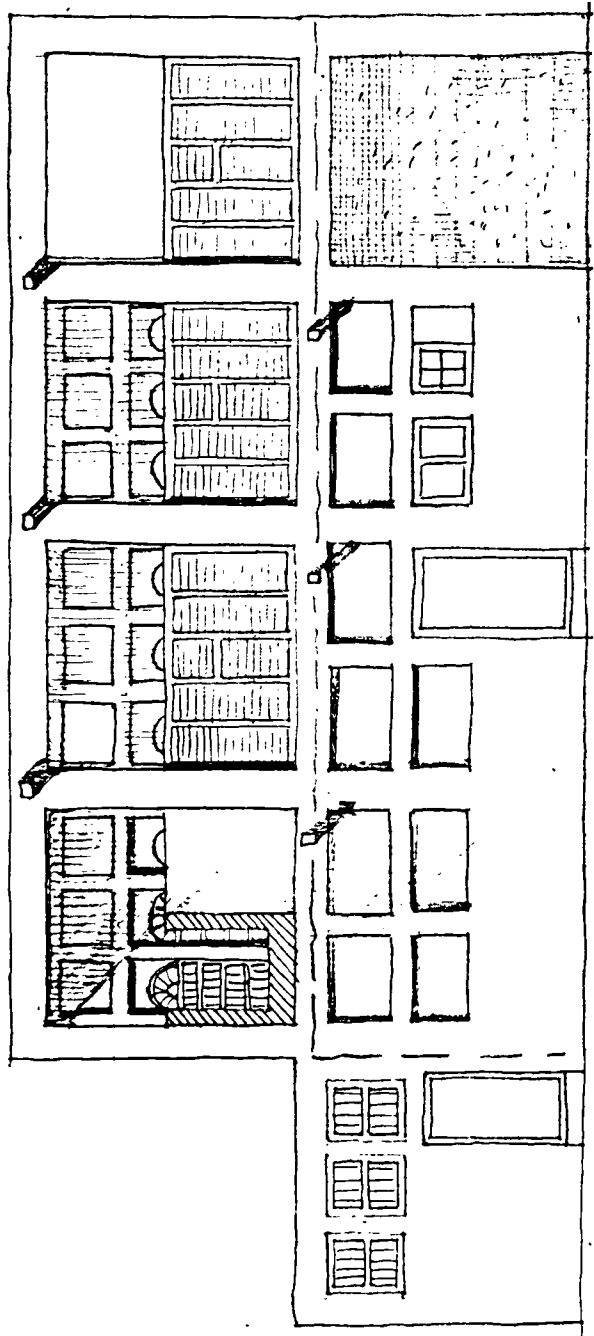


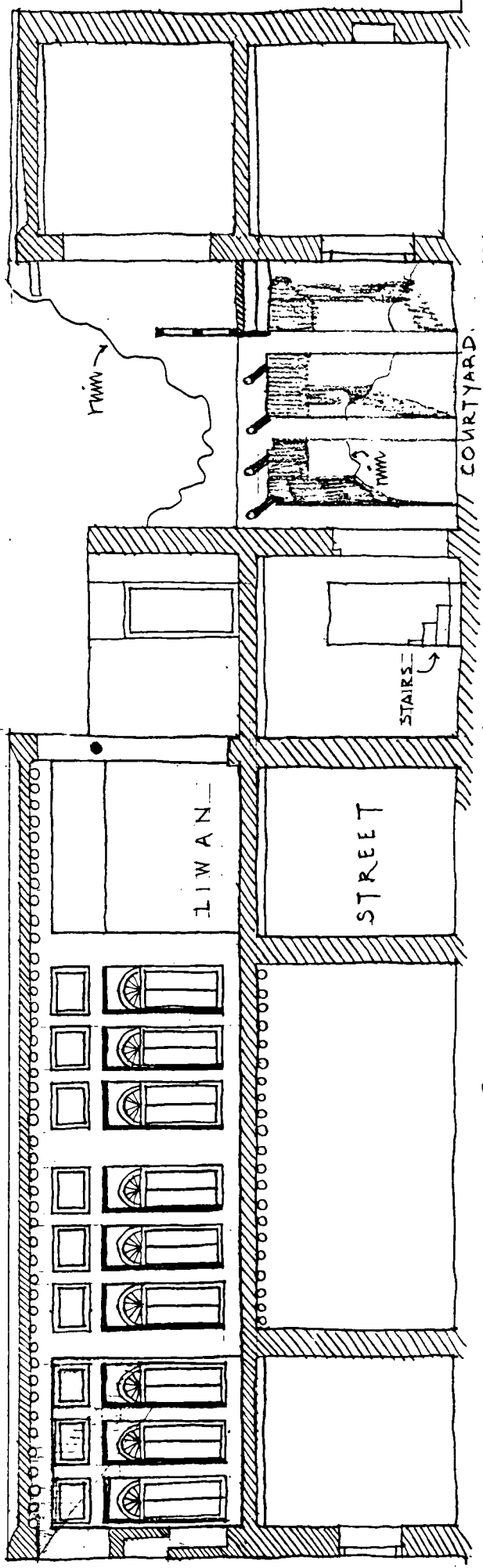
Fig. 7.74(C) Al Jalahma House. View from the south of small apartment (and adjacent bay of the liwan) taken from the ground level court.



JALAHMA HOUSE -
DOOR PANEL.



NORTH ELEVATION
JALAHMA HOUSE.

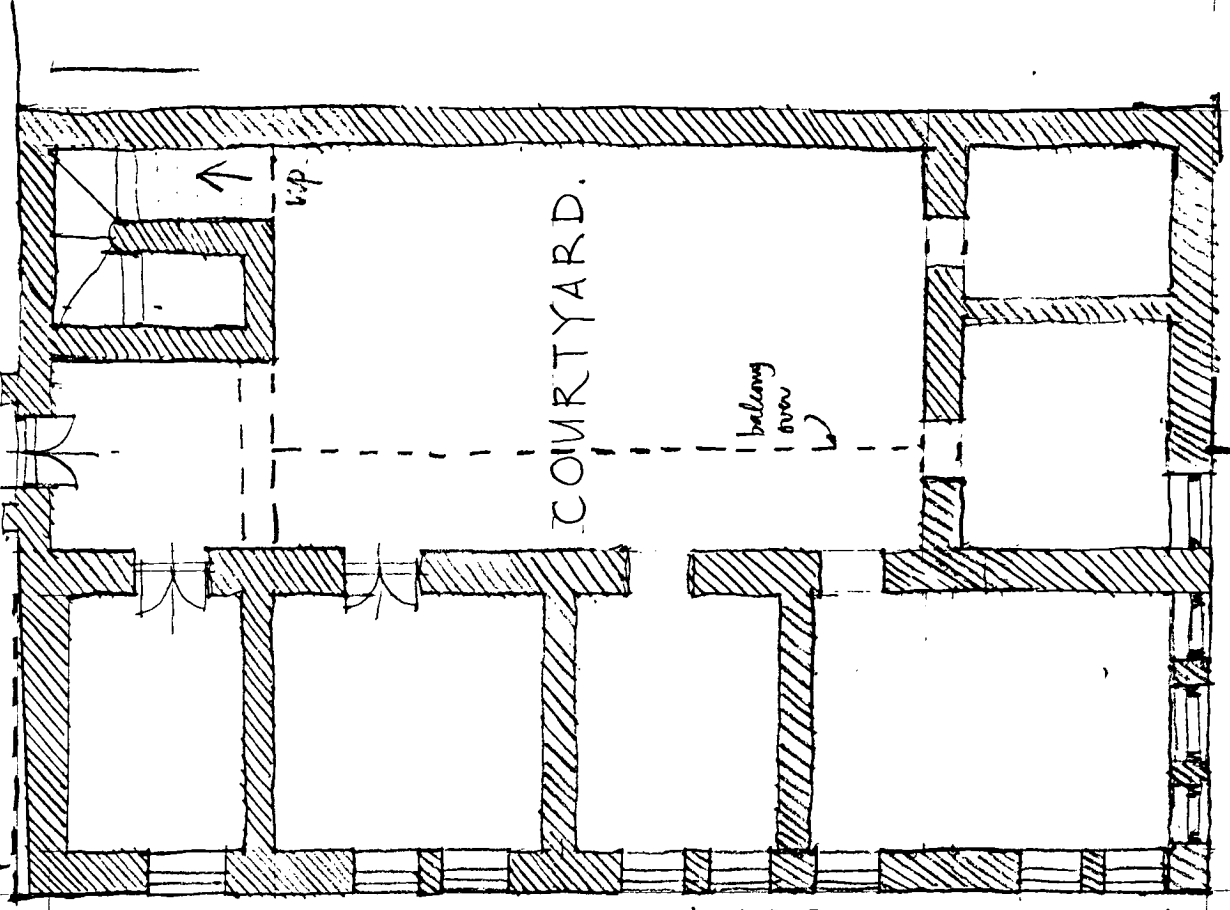


SECTION A-A

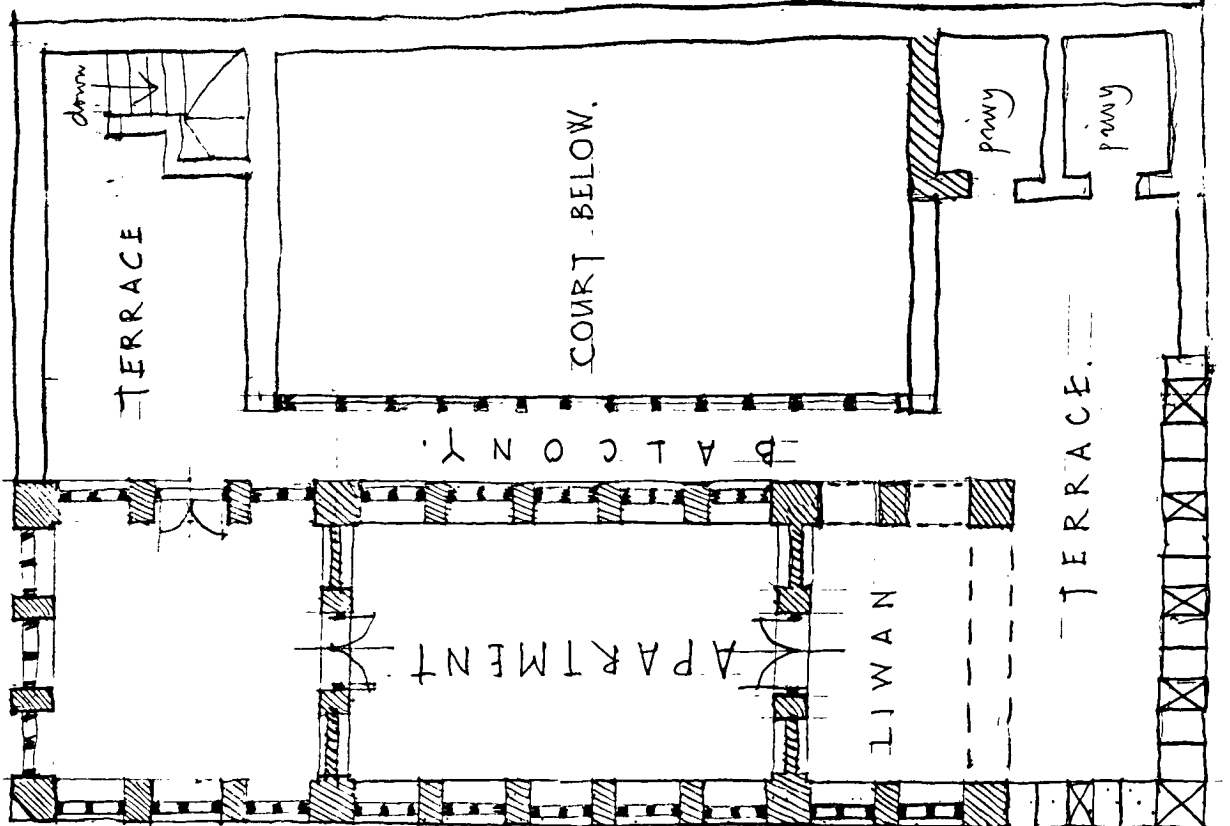
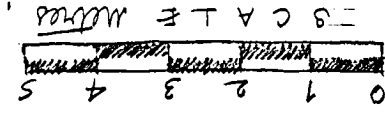
Fig. 775.

STREET

Upper floor
Controlled out



GROUND FLOOR



FIRST FLOOR

Figure 7.76.

SUFI HOUSE

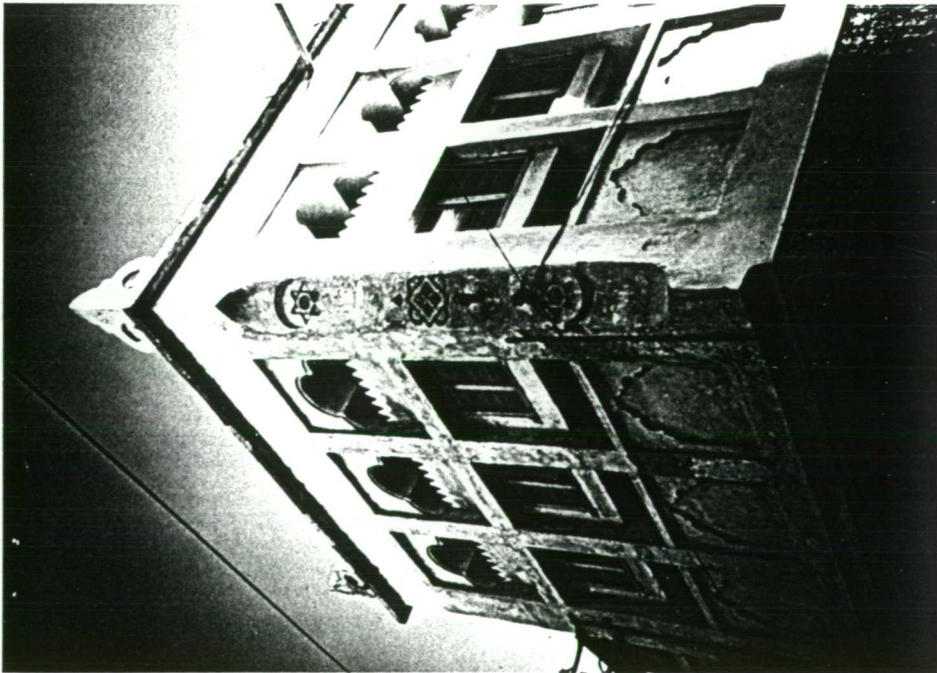
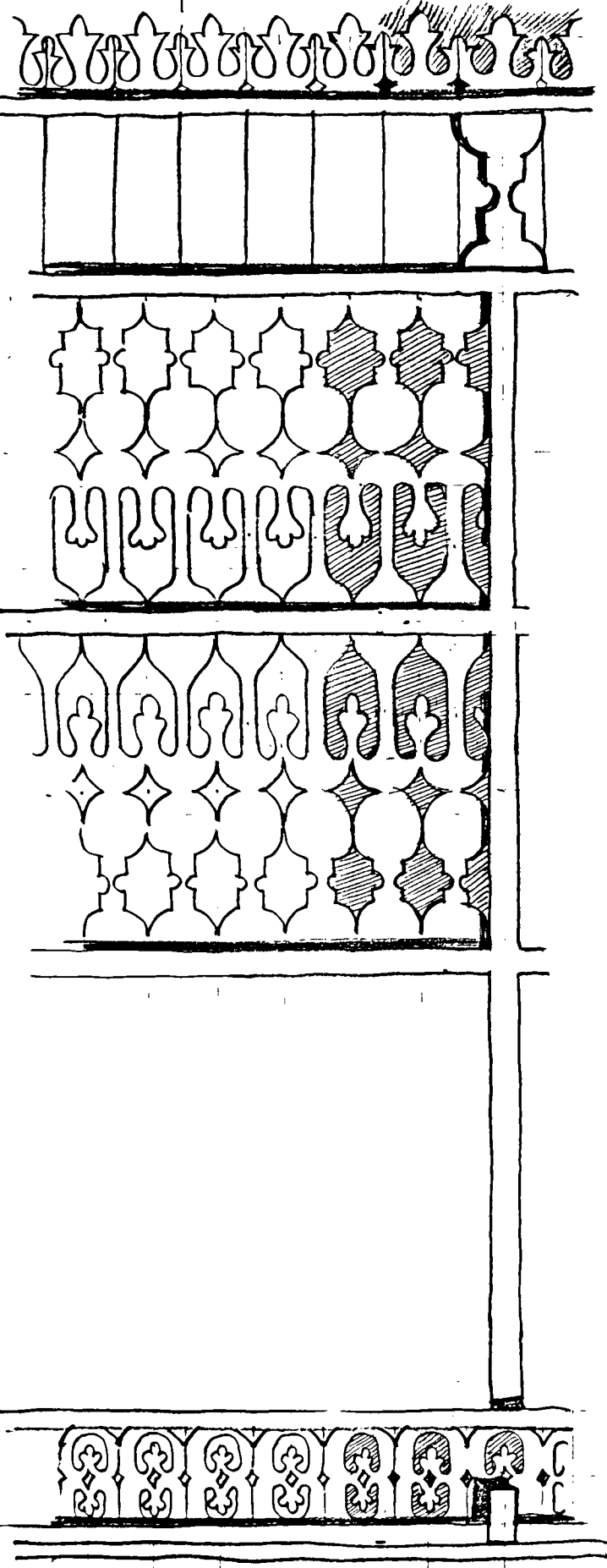


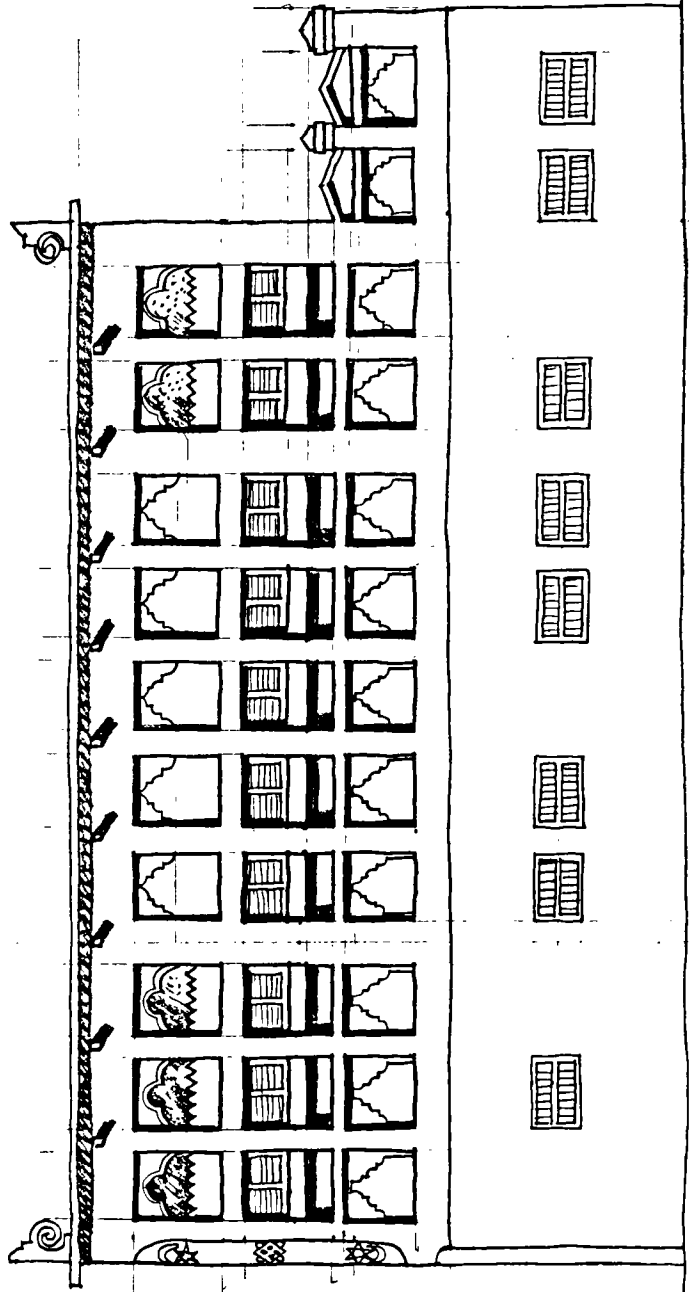
Fig. 7.77(A) Sufi House, east elevation. The end of the north elevation is to the right of the picture.

Fig 200 of one bay

BALCONY
DETAIL

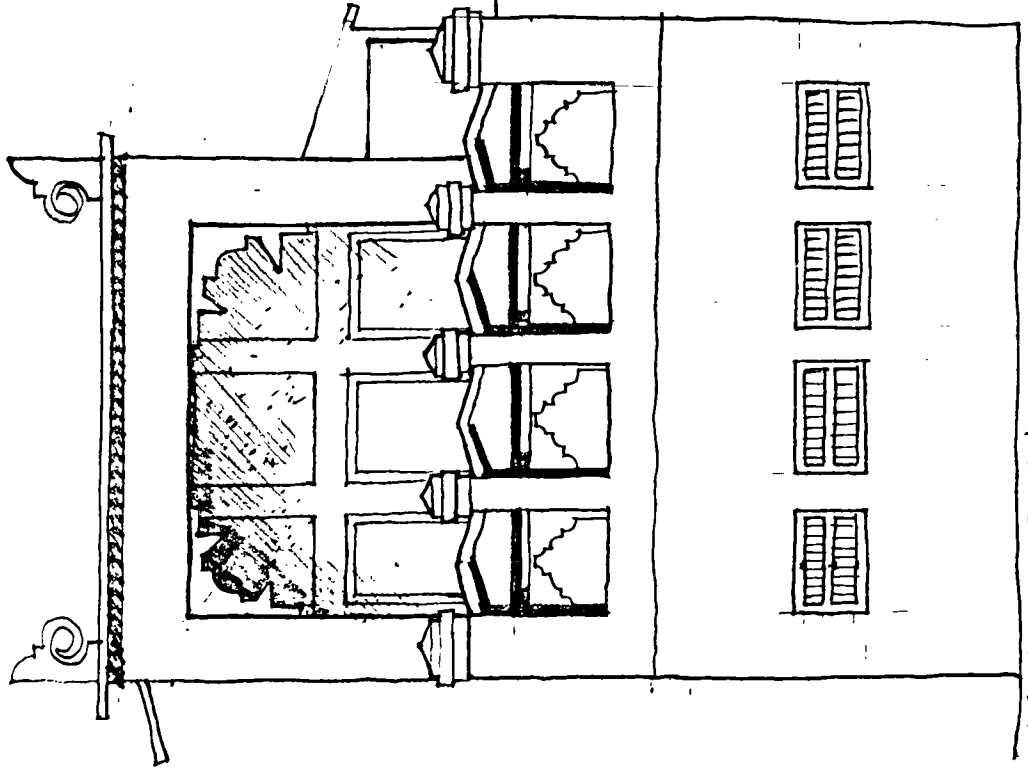
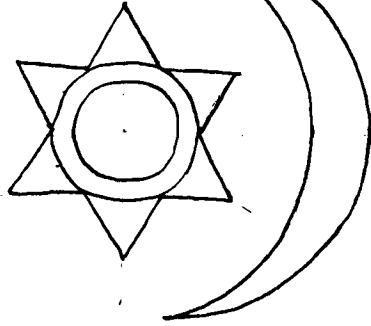
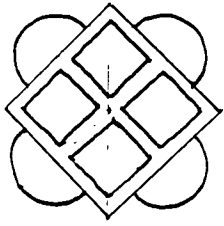


SUF
HOUSE



NORTH ELEVATION

Fig 7.78.



WEST-ELEVATION SUFI HOUSE (c.1935) EAST ELEVATION

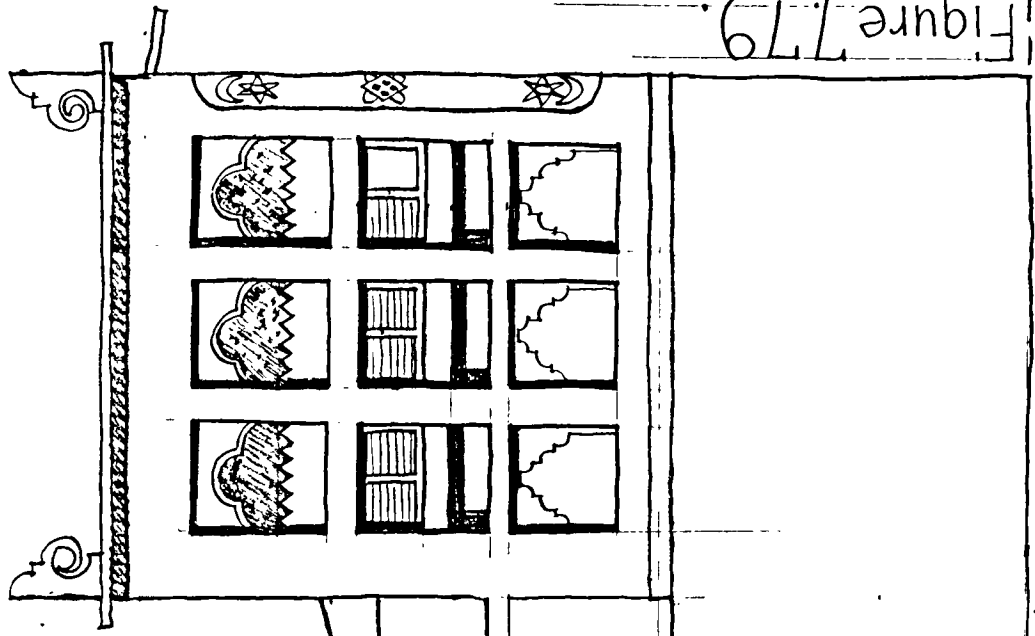


Figure 779.

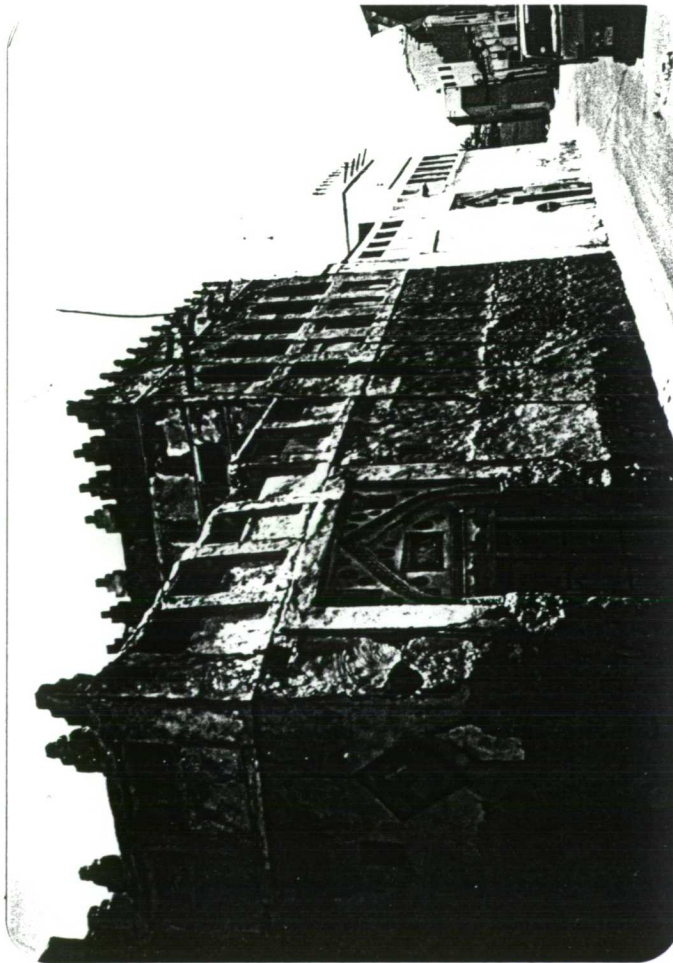


Fig. 7.80(A) Sheikh Ali bin Mohammed House.
View from the street.

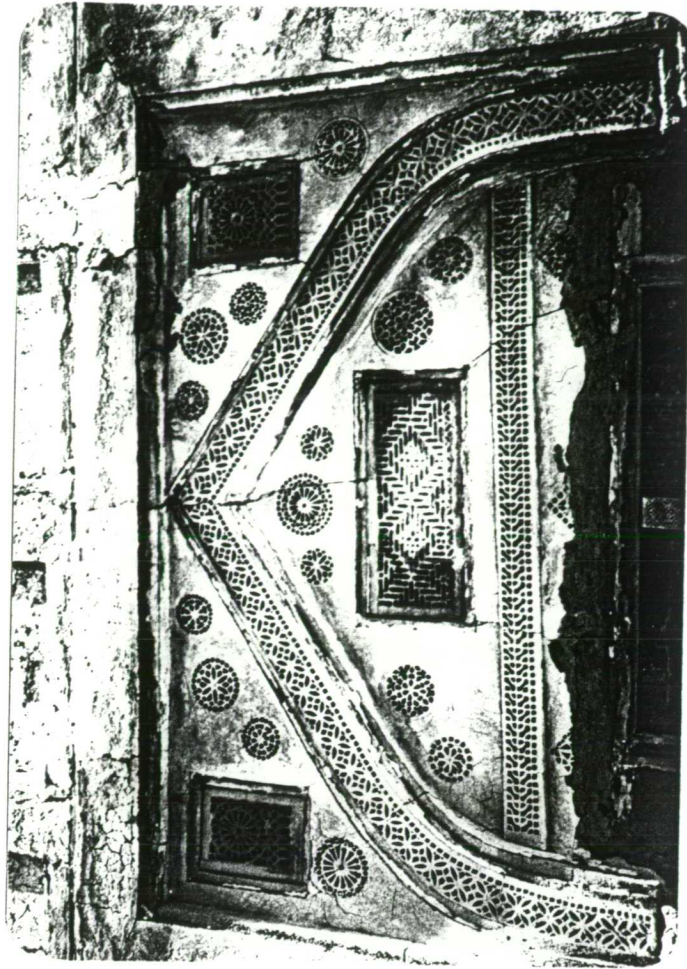


Fig. 7.80(B) Sheikh Ali bin Mohammed House.
Tympanum etc. above the western entrance
doorway from the street.

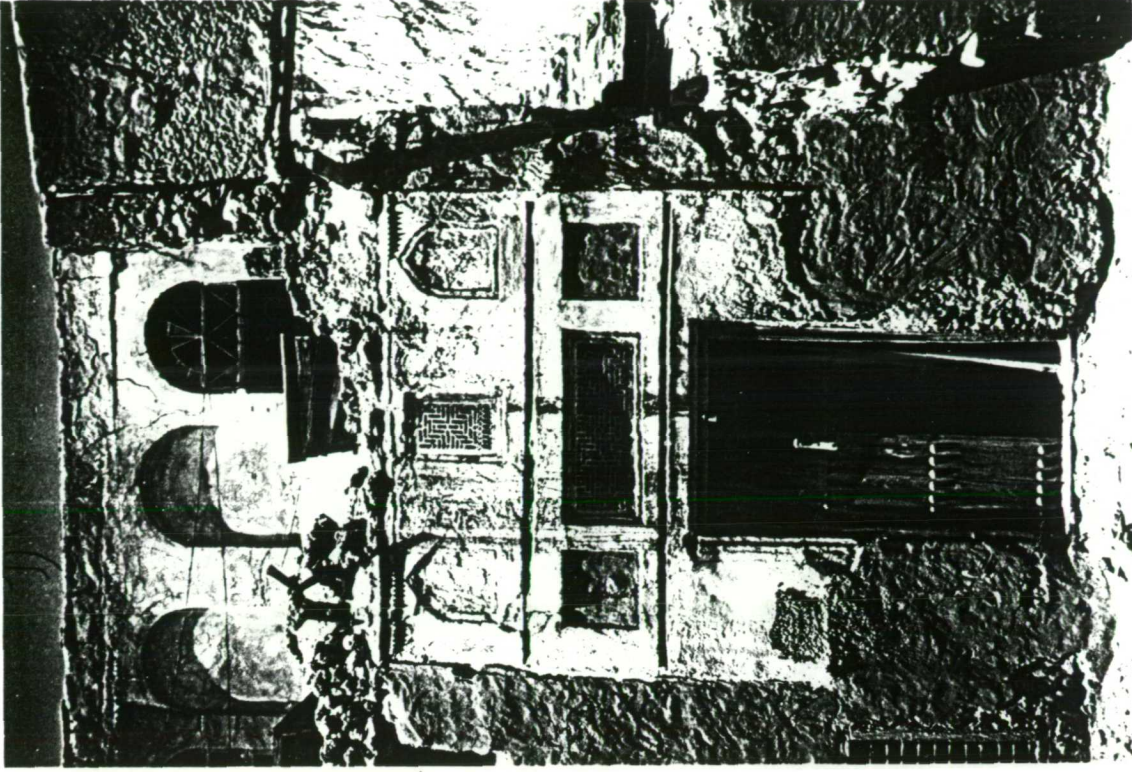


Fig. 7.80(D) Sheikh Ali bin Mohammed House. Door to a ground floor room with elevation of first floor apartment in the background.

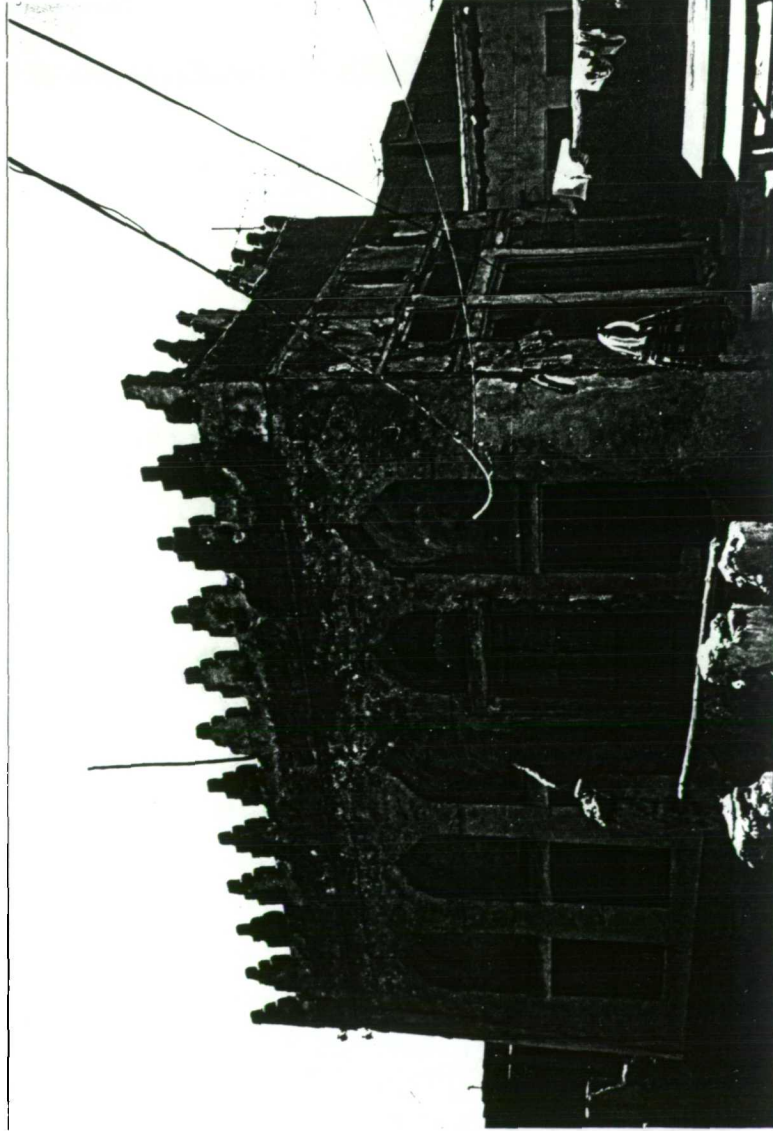


Fig. 7.80(C) Sheikh Ali bin Mohammed House. Western apartment seen from the north - that is, across one of the courtyards.

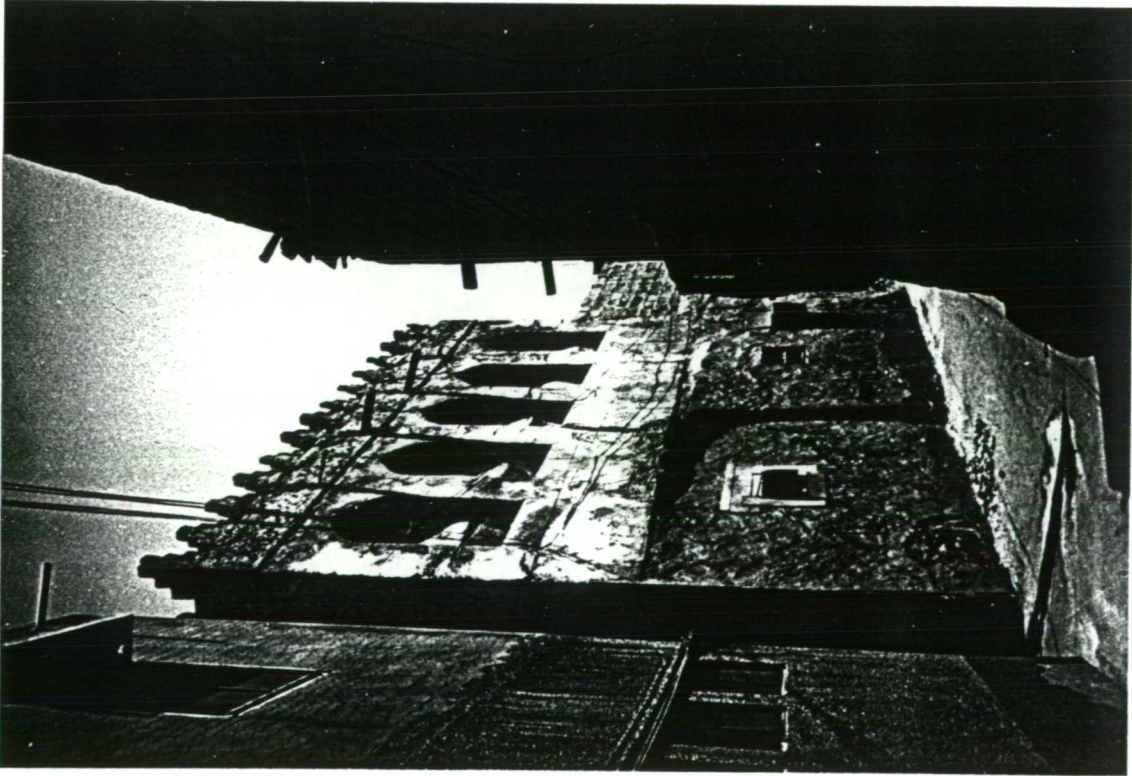


Fig. 7.81(A) House in Lane 1140. Elevation to street showing five bays with pointed arches.

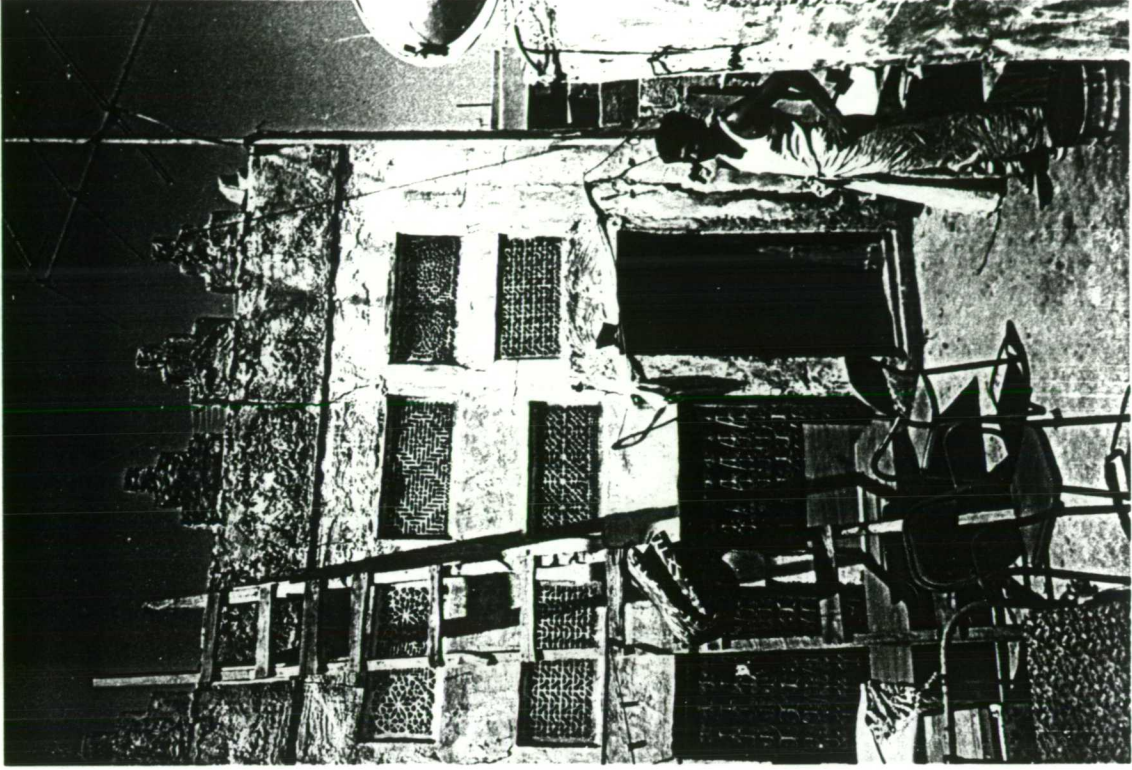


Fig. 7.81(B) House in Lane 1140. Elevation of apartment to roof terrace showing wrought-iron screen.

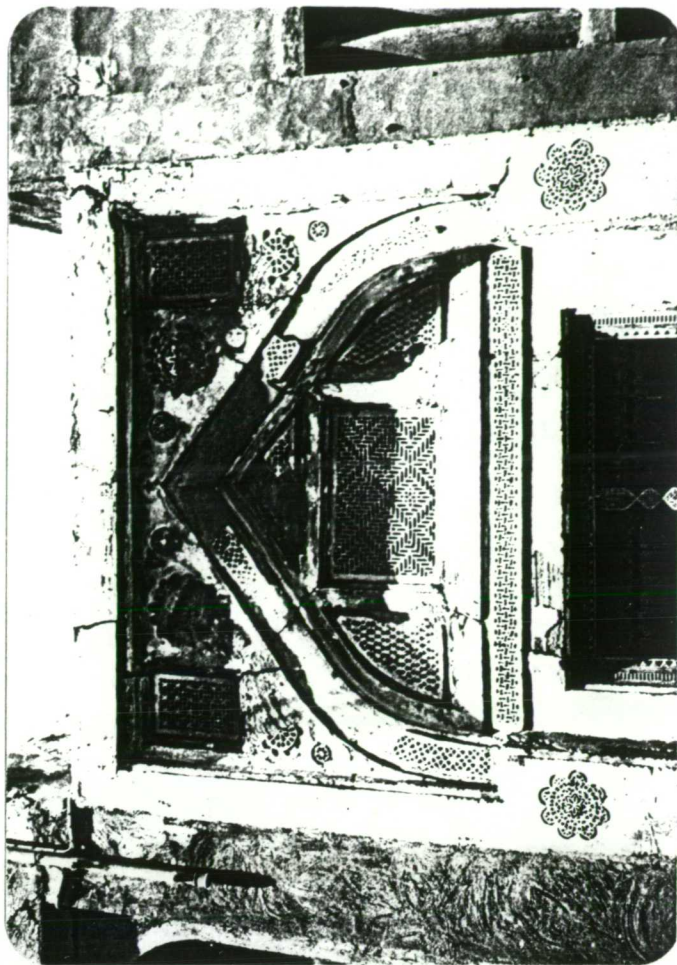


Fig. 7.81(C) House in Lane1140. Interior view of apartment. The house is currently occupied by Indian labourers.

Fig. 7.82(A) Sheikh Ibrahim House. Main doorway to Sheikh Isa Road: detail of tympanum.

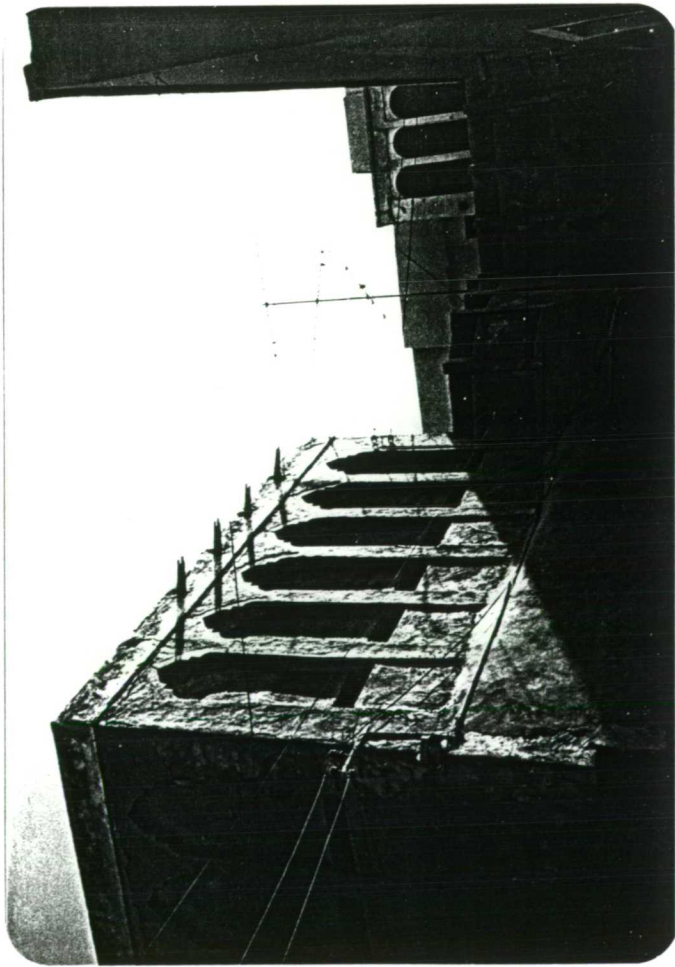
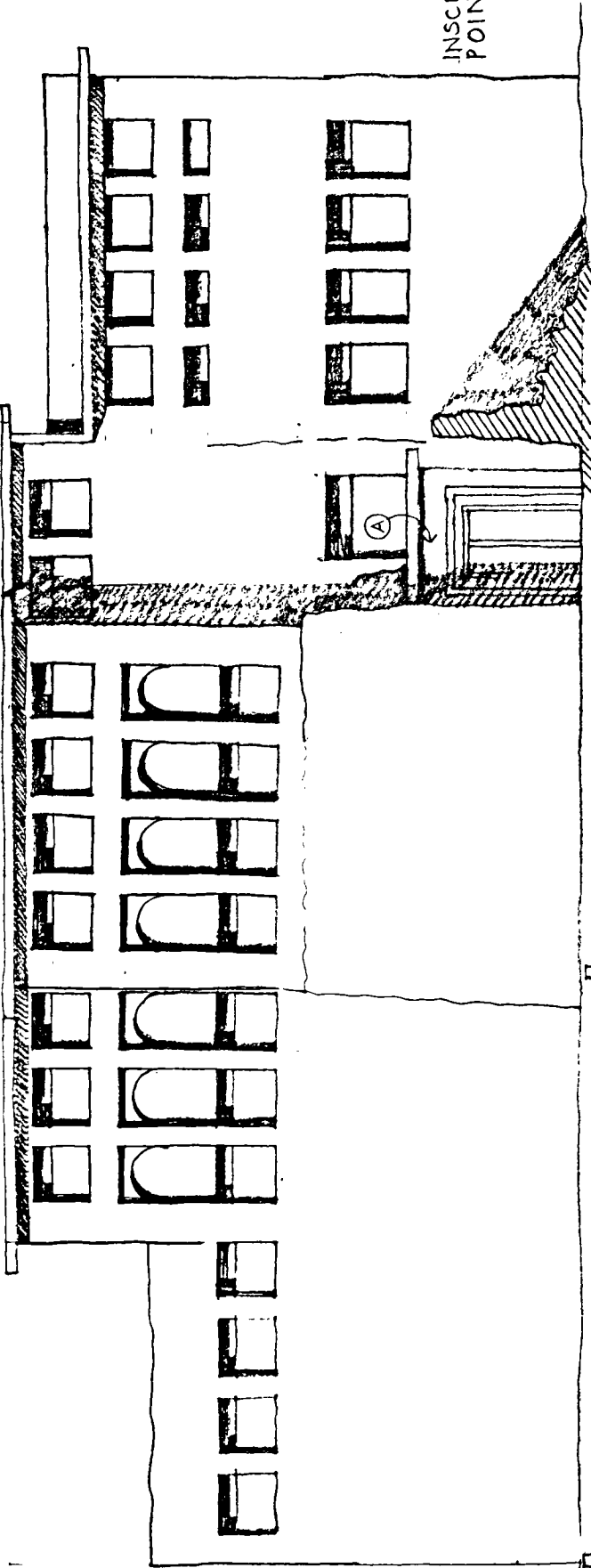


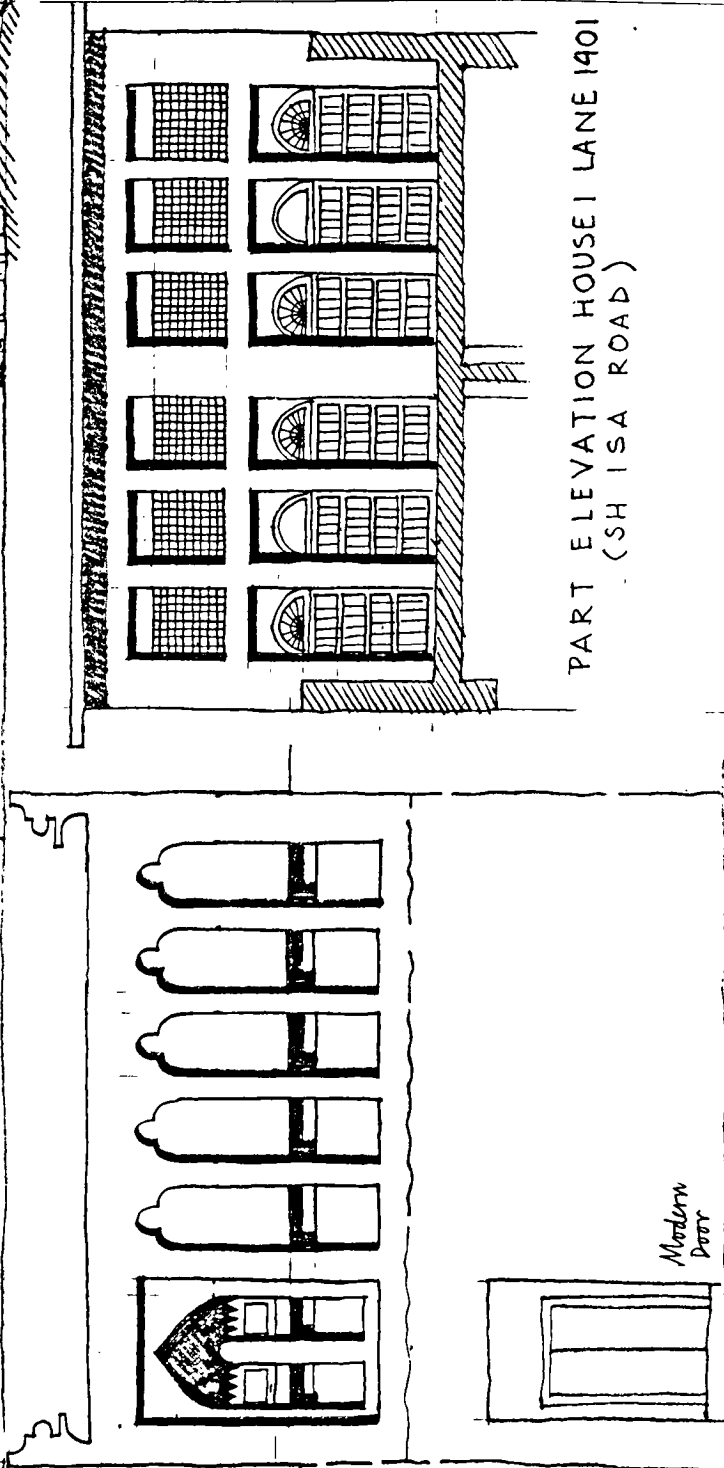
Fig. 7.82(B) House in Lane 835. Part of elevation to the street.

HOUSE EAST OF SEYADI MOSQUE - WEST ELEVATION.
(ROAD 914)



INSCRIPTION AT
POINT 'A'.

VARIOUS
HOUSES.



PART ELEVATION HOUSE I LANE 1401
(SH ISA ROAD)

Modern
Door

HOUSE IN STREET 1339

Fig 7.83

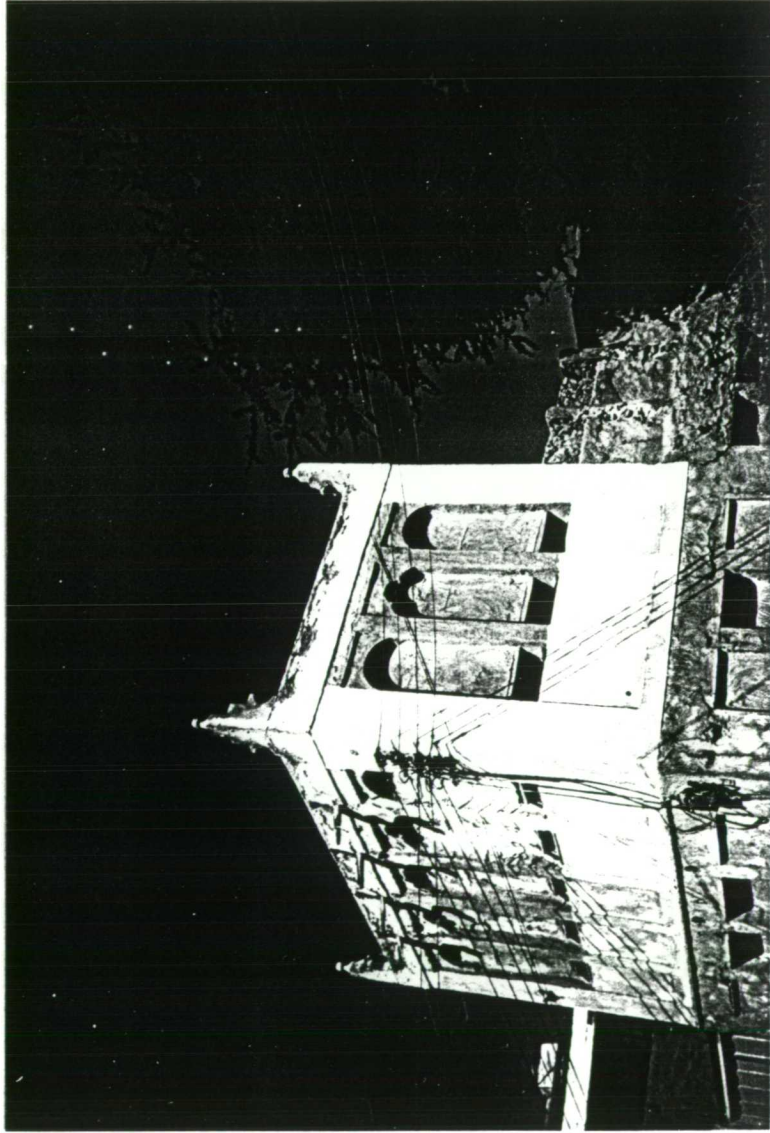
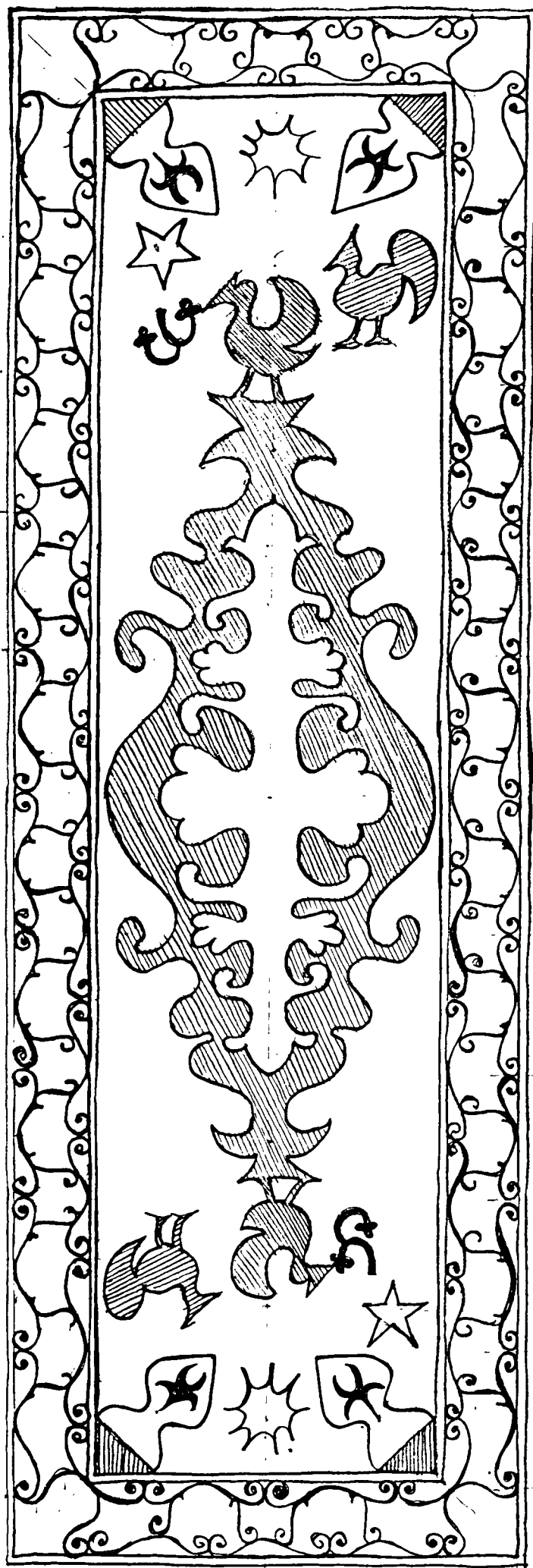
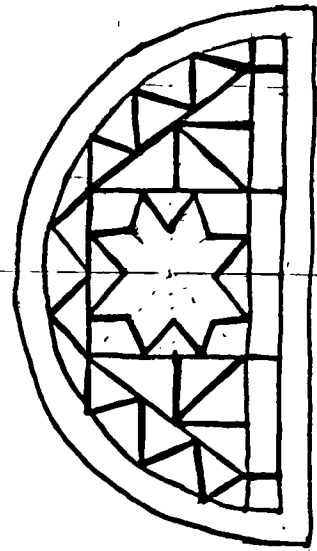


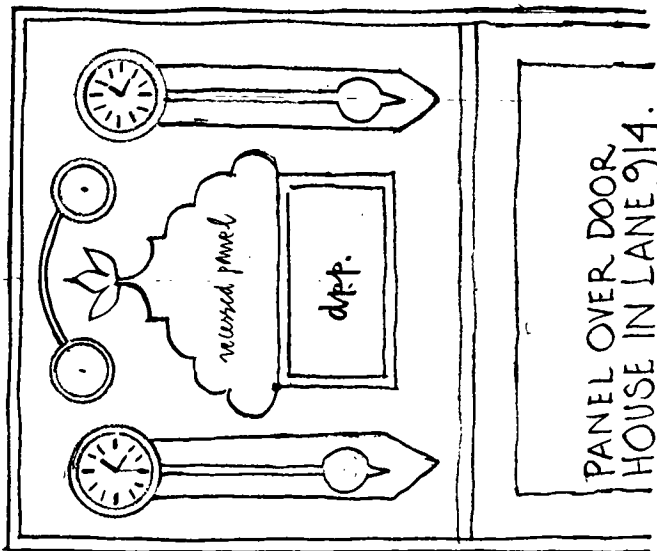
Fig. 7.84 House in Road 835. View of the first floor apartment from the road. The corner merlons are unusual.



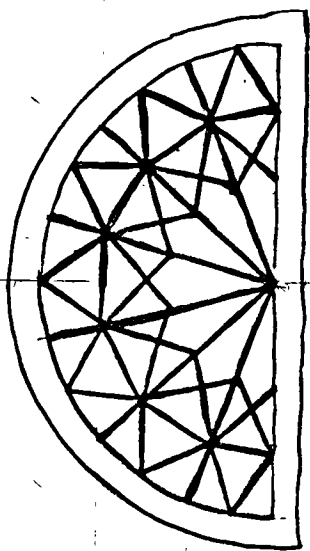
PAINED CEILING - MAJLIS - HOUSE IN ROAD 918



FROM HOUSE 605 - SH ISA ROAD.



PANEL OVER DOOR,
HOUSE IN LANE 914.



FROM HOUSE N°1 LANE 1401

Figure 7.85.

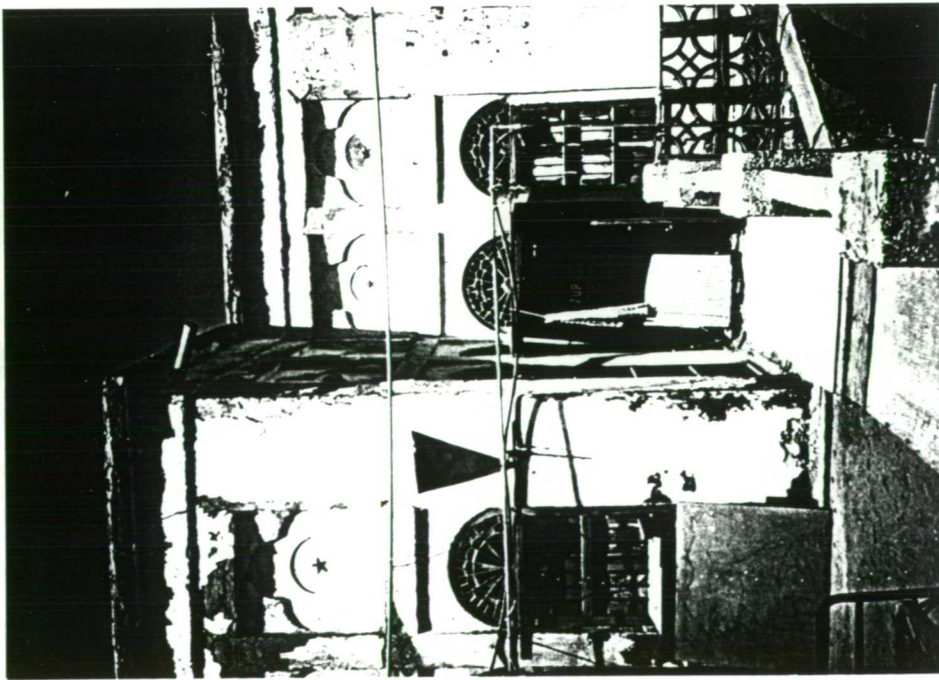


Fig. 7.86(A) House in Lane 918. Elevation of first floor apartment showing moon and star motif.

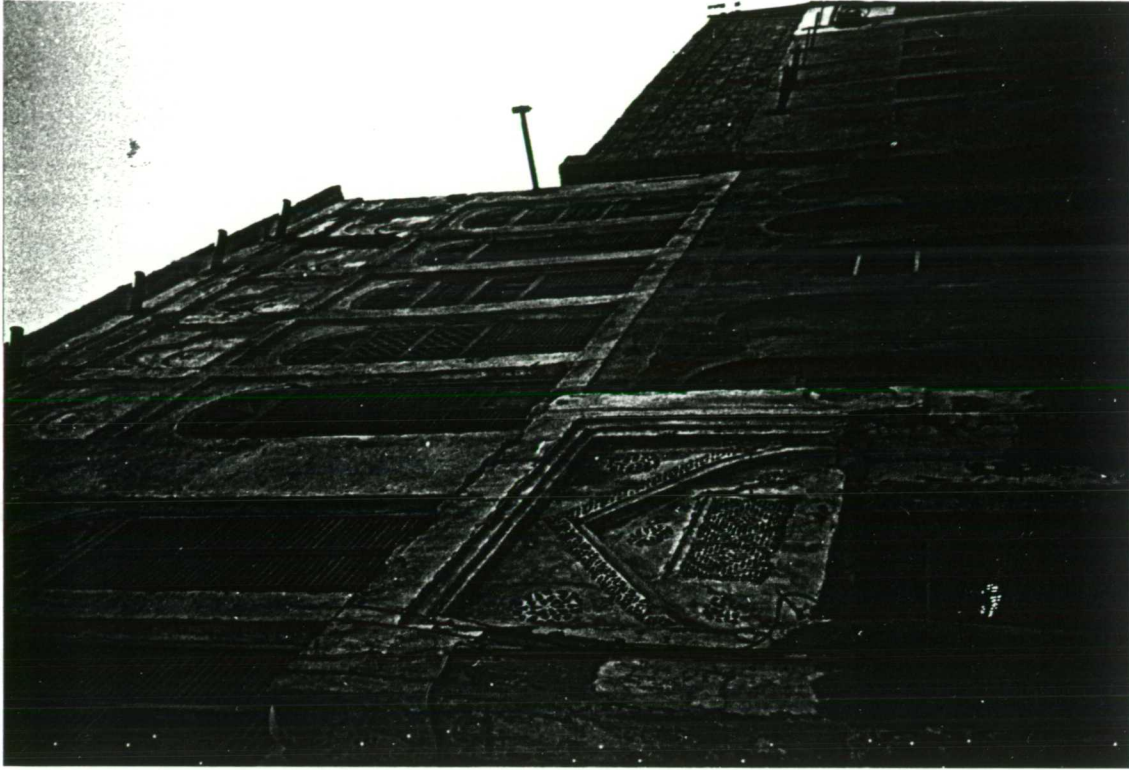
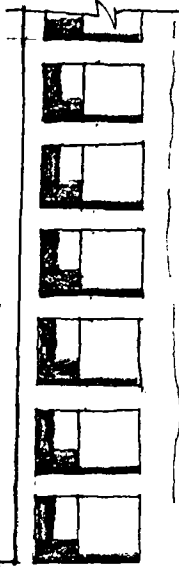
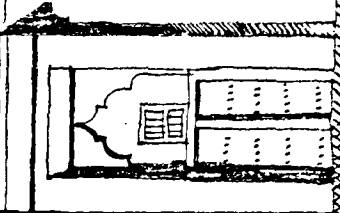


Fig. 7.86(B) House in Lane 918. Elevation facing the street showing Main Entrance door. The upper and lower stories are of different periods.

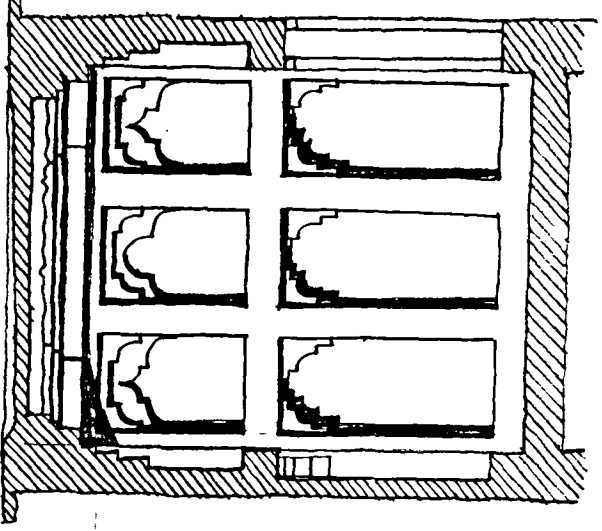
HOUSE IN LANE 1120



MAIN DOOR HEAD DETAIL



HOUSE IN LANE 826



VARIOUS HOUSES

HOUSE AT CORNER AIRPORT RD + SH KHALIFA RD (SH ABDULLAH HOUSE)

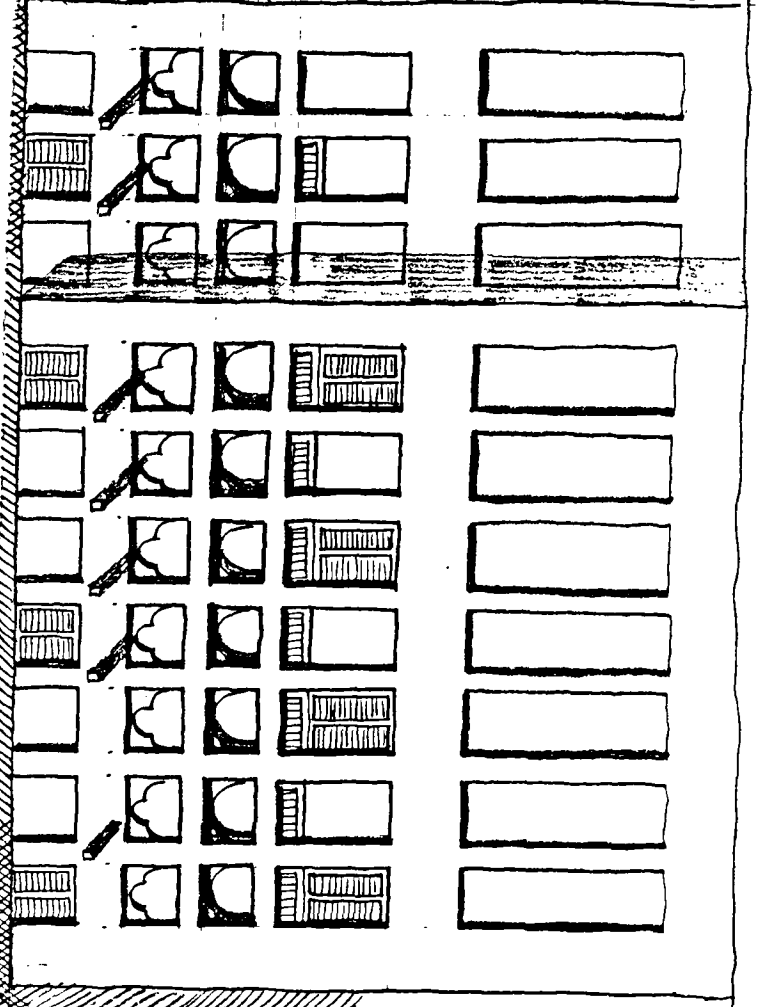


Fig 7.87.

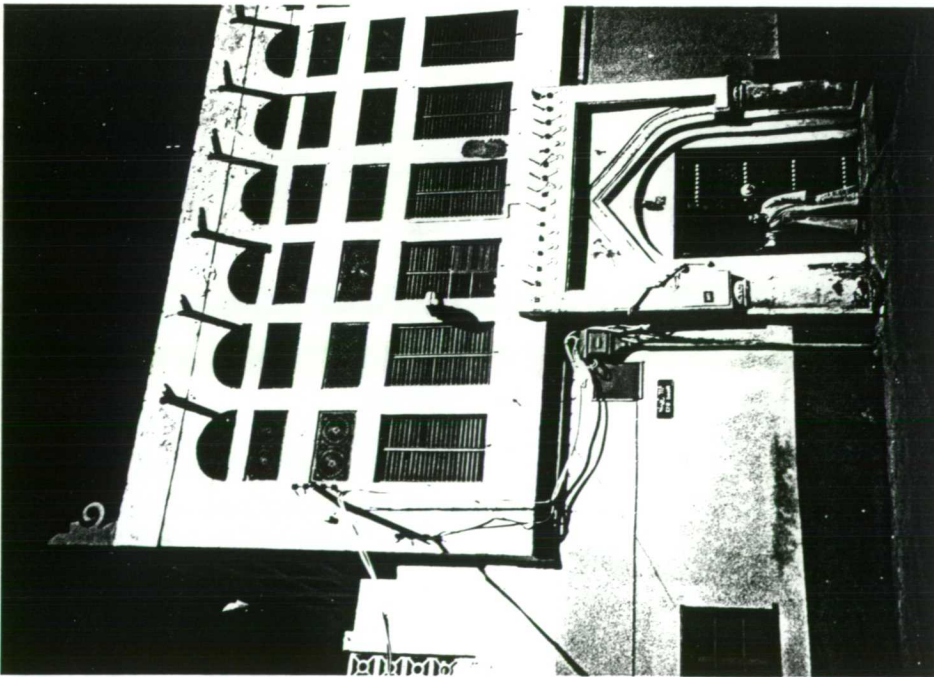


Fig. 7.88(A) House in Lane 913. South elevation which terminates the view along Lane 913.

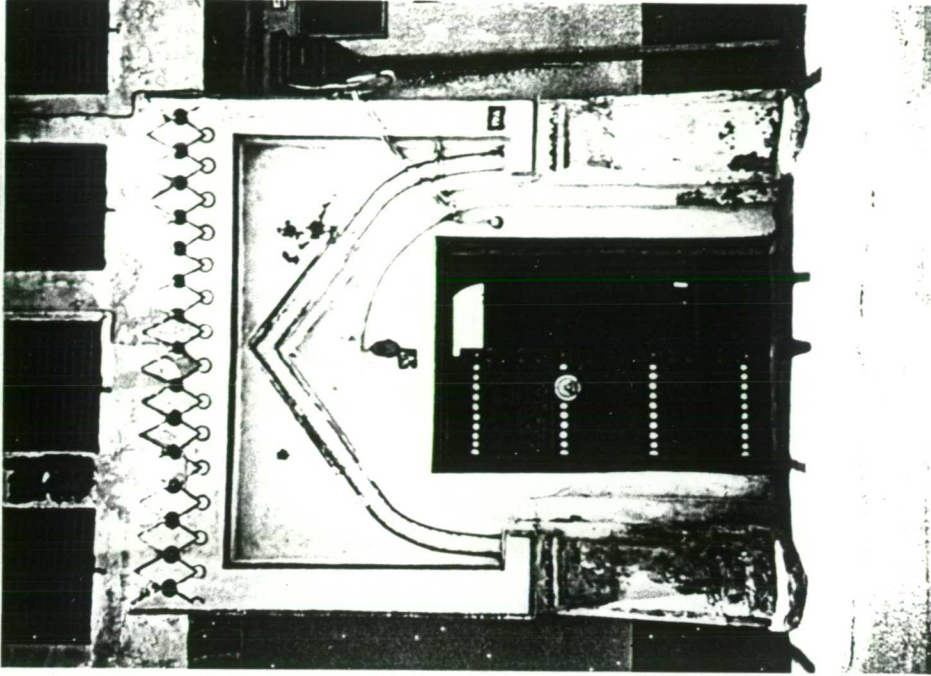


Fig. 7.88(B) House in Lane 913. Main Doorway.

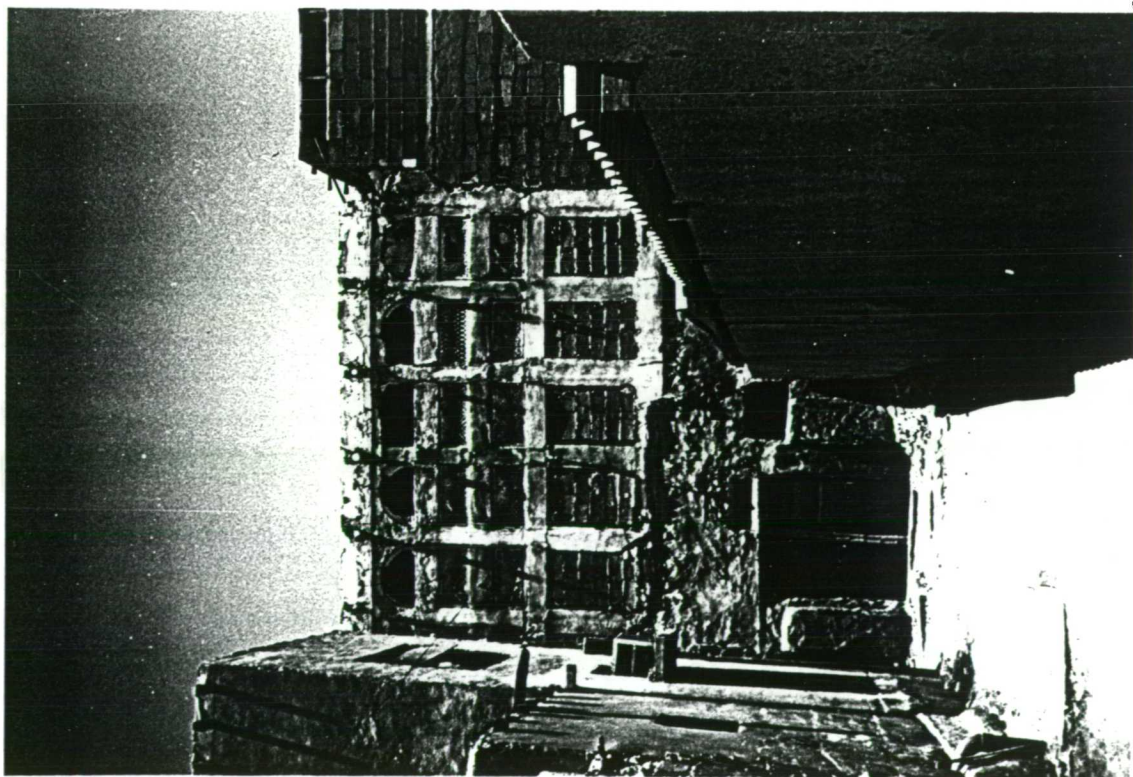
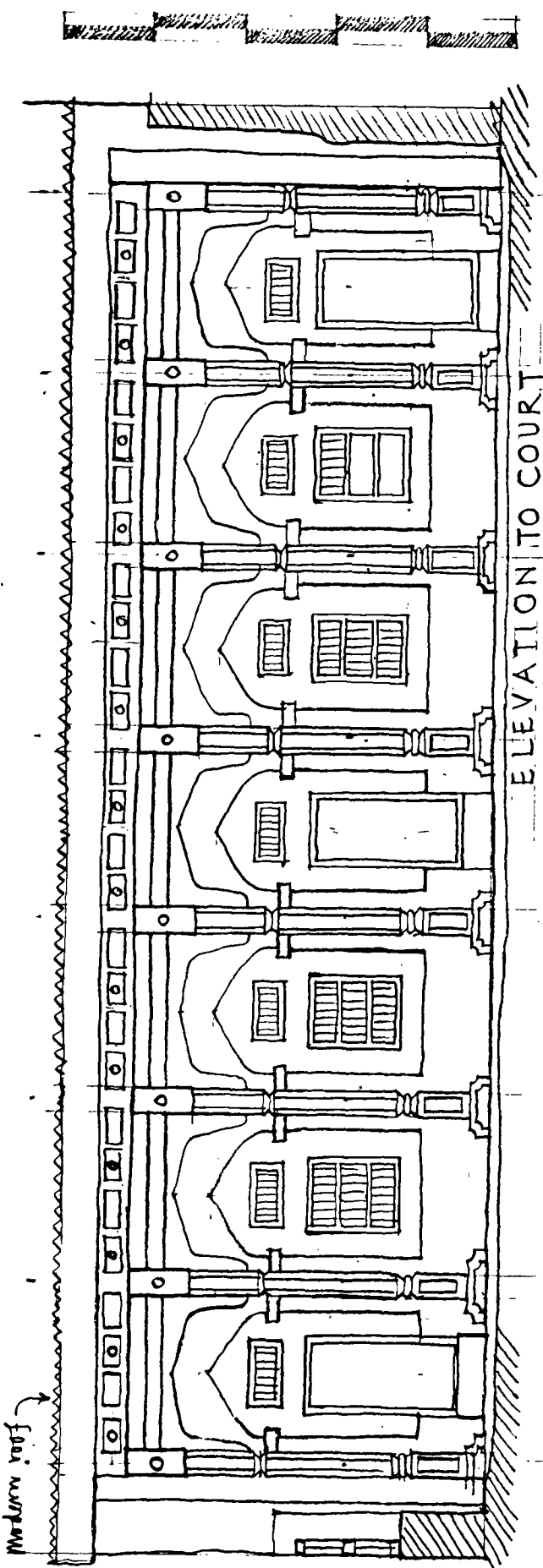
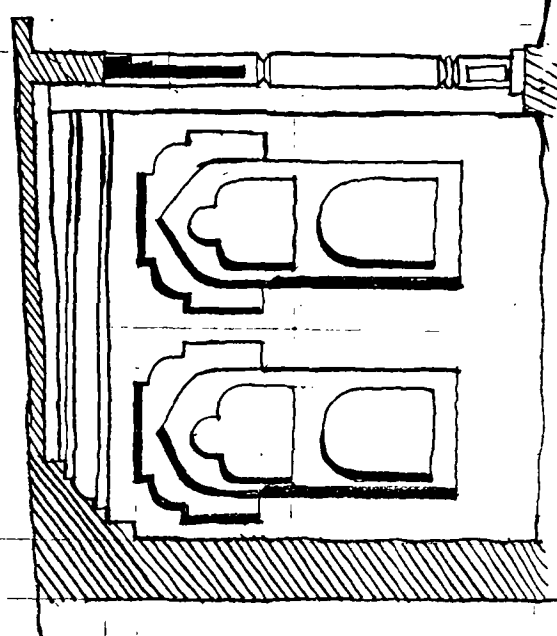


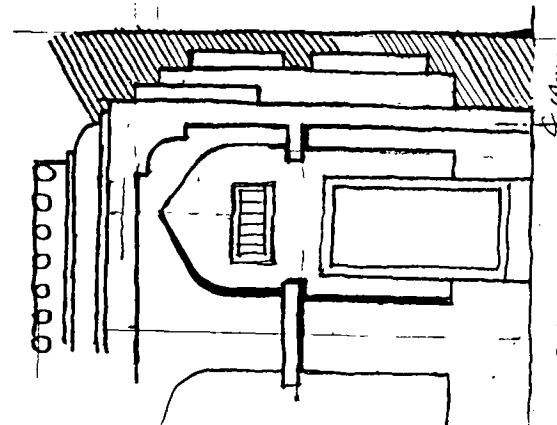
Fig. 7.88(C) House in lane 932. View of main apartment from the street. It is ruined.



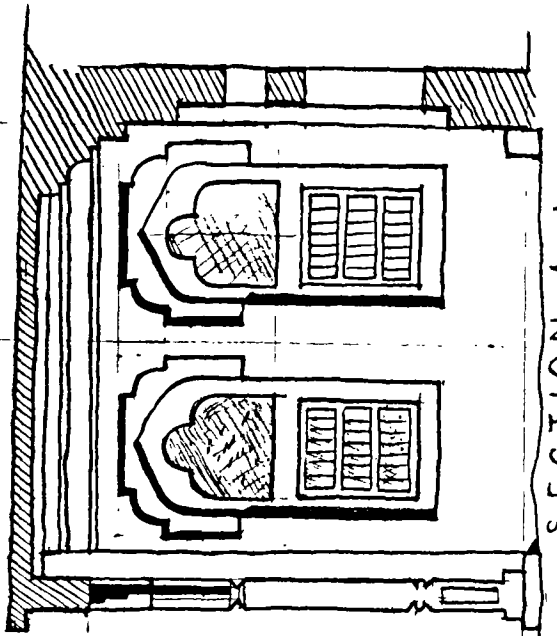
ELEVATION TO COURT
SEYADI MOSQUE.



SECTION C-C

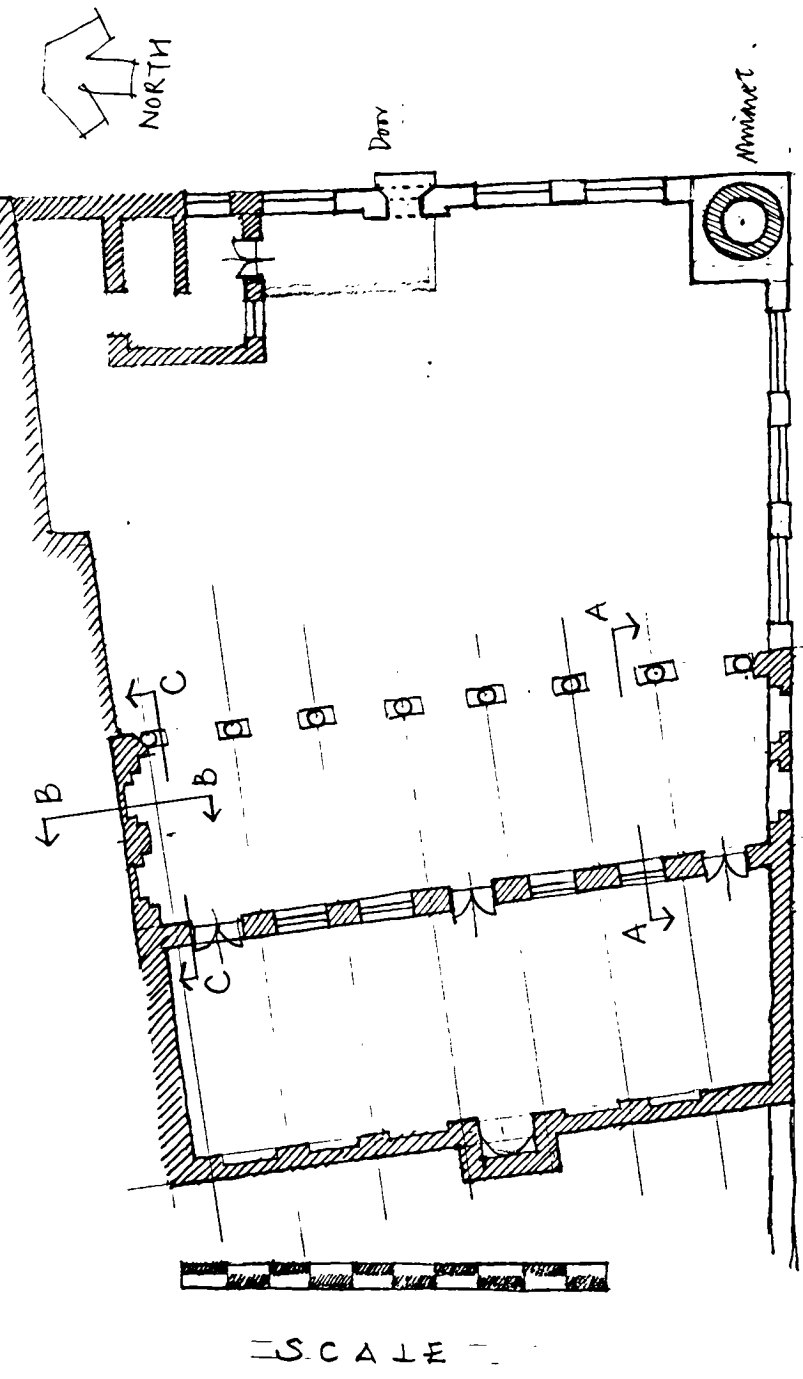


SECTION B



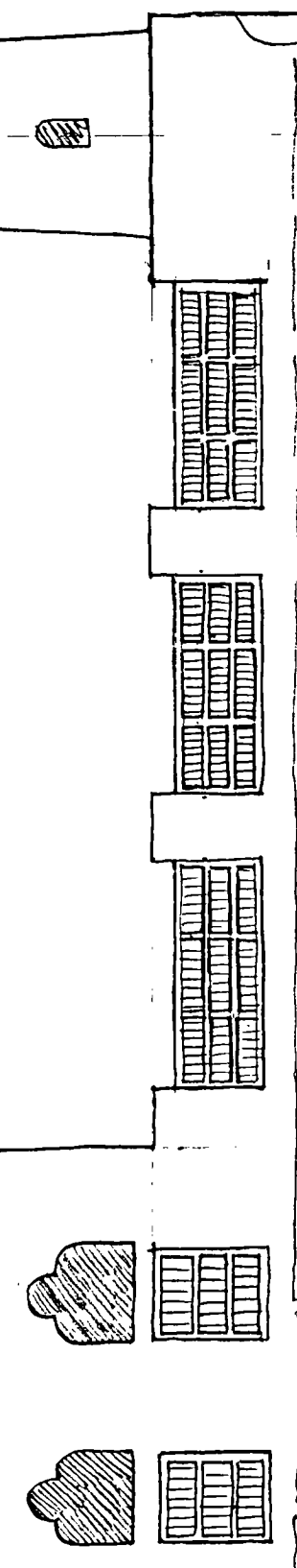
SECTION A-A

Figure 7.89.



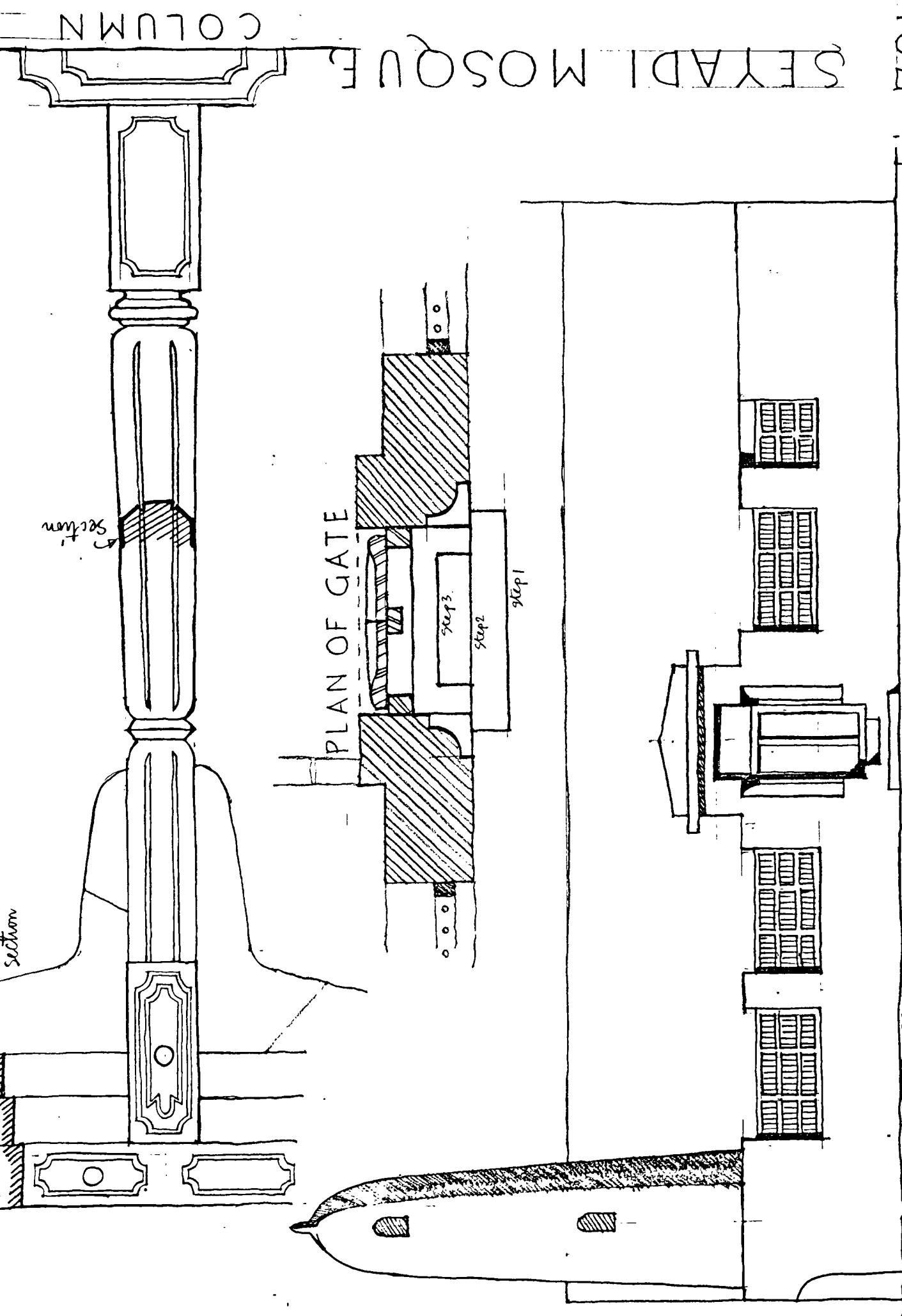
SEYADI MOSQUE.

From north



SOUTH ELEVATION

Figure 7.90



COLUMN

SEYADI MOSQUE

PLAN OF GATE

section

section

step 3

step 2

step 1

ELEVATION TO ROAD

Fig. 7.91.



Fig. 7.92(A) Seyadi Mosque. View of colonnade.

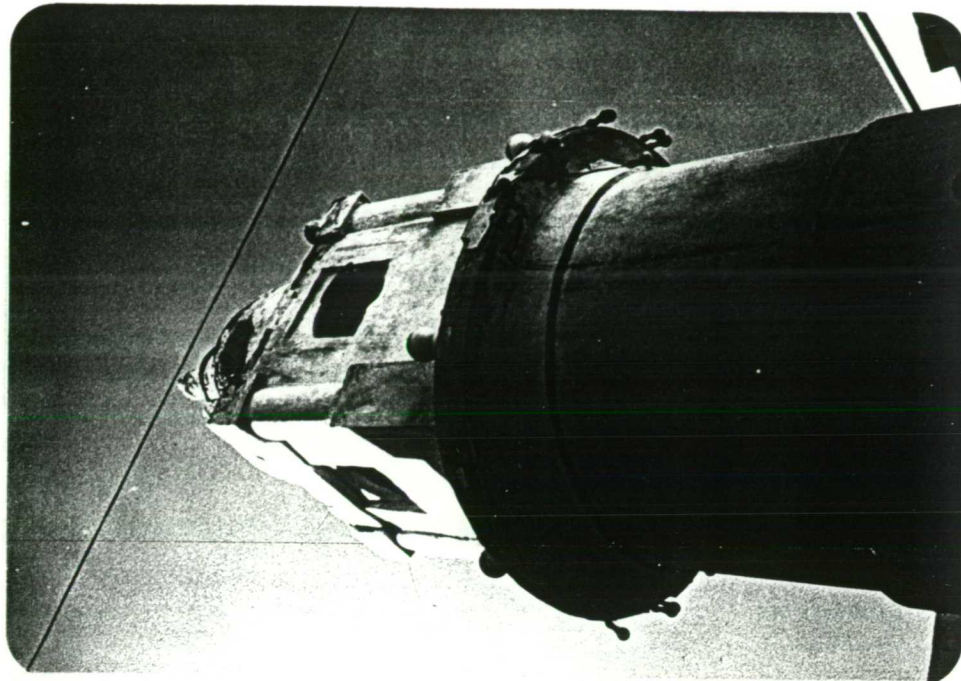


Fig. 7.92(B) Small Mosque in Road 1439: detail of minaret.

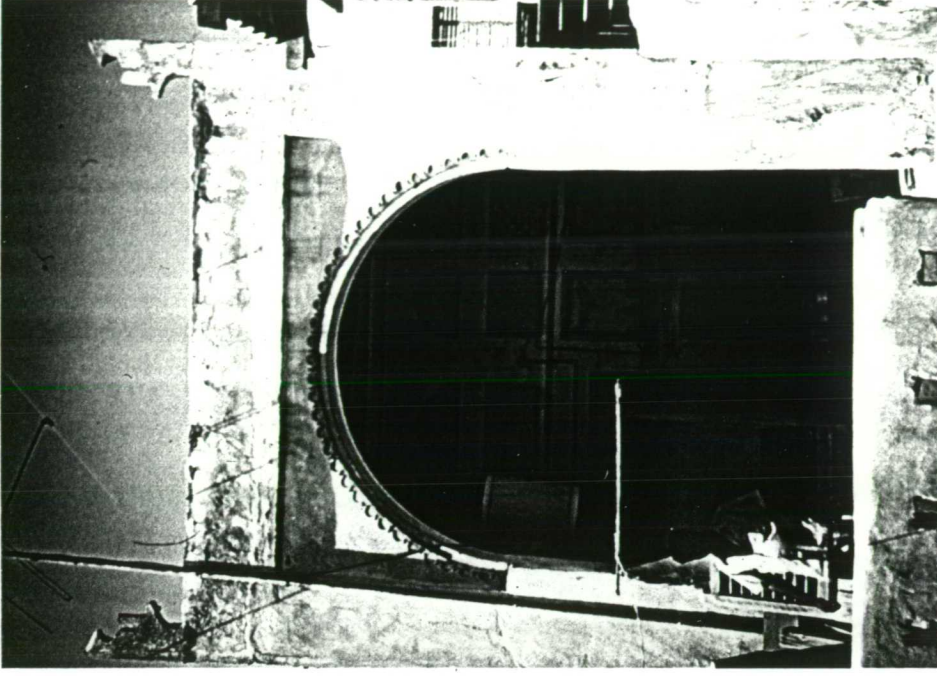


Fig. 7.93(B) Yusef bin Yusef Fakhroo House.
North-east apartment arched liwan viewed from
the roof terrace.

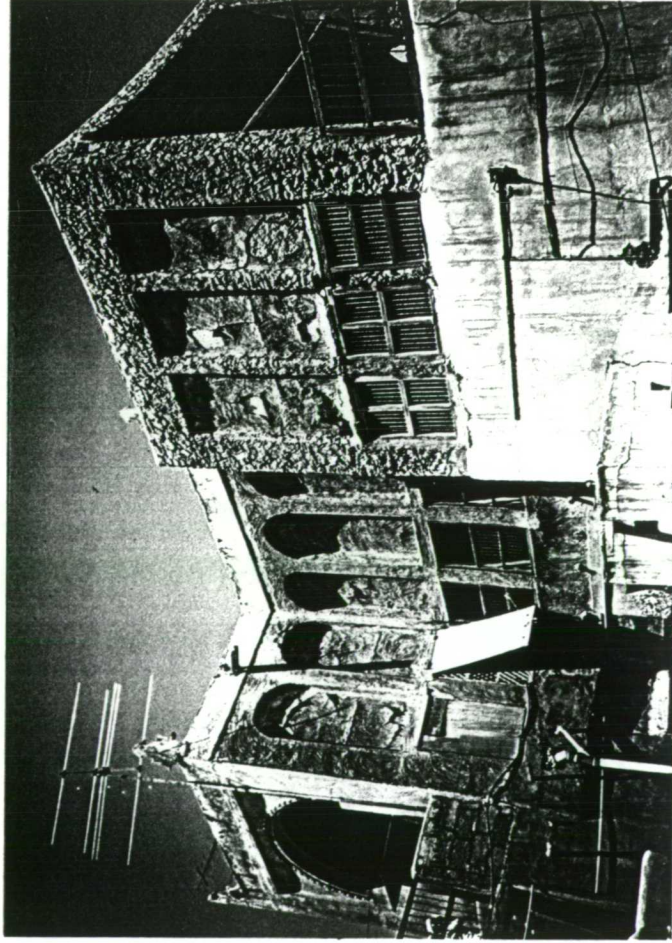


Fig. 7.93(A) Yusef bin Yusef Fakhroo House.
View of north-east apartment from the courtyard.



Fig. 7.93(C) Yusef bin Yusef Fakhroo House. Interior of north-east apartment. An interesting and very rare case of a traditional room still occupied.

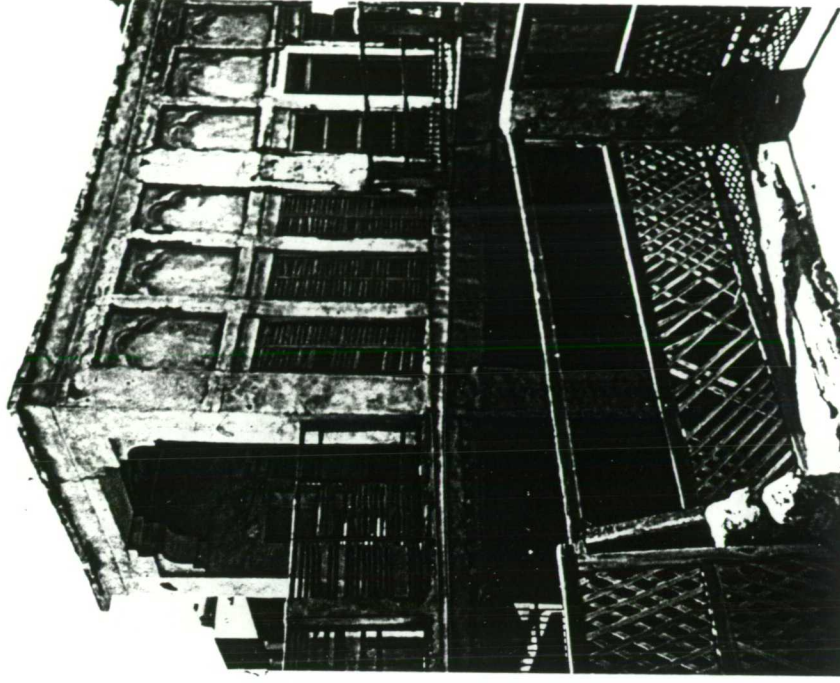


Fig. 7.93(D) Yusef bin Yusef Fakhroo House. South eastern apartment viewed from across the courtyard.

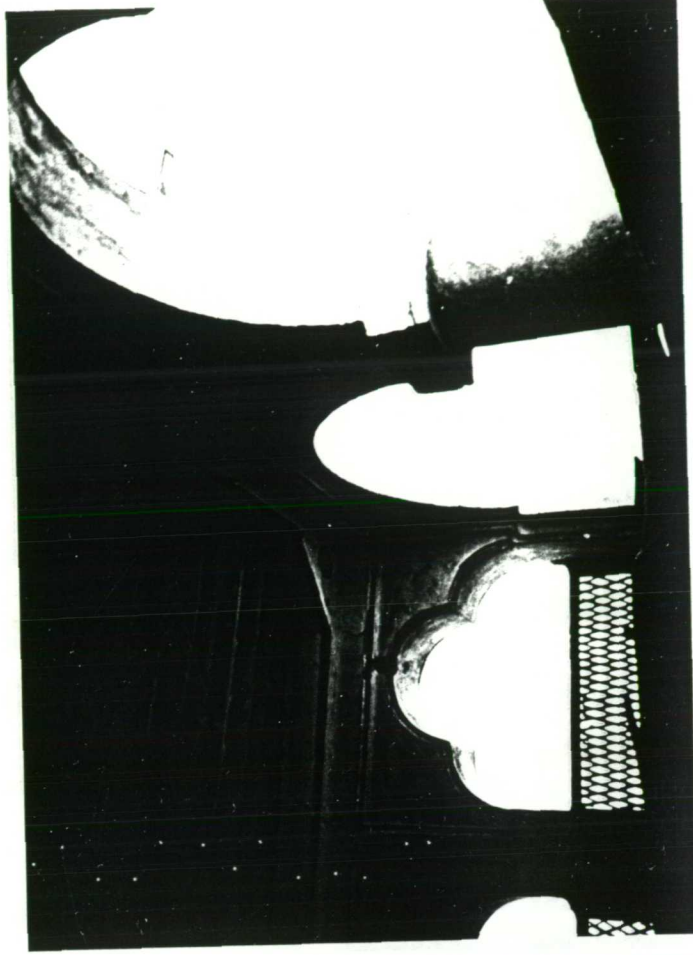


Fig. 7.94(B) Al Jalahma Houses (on Roads 1624 and 1622). View of liwan arches (semicircular and trefoil).

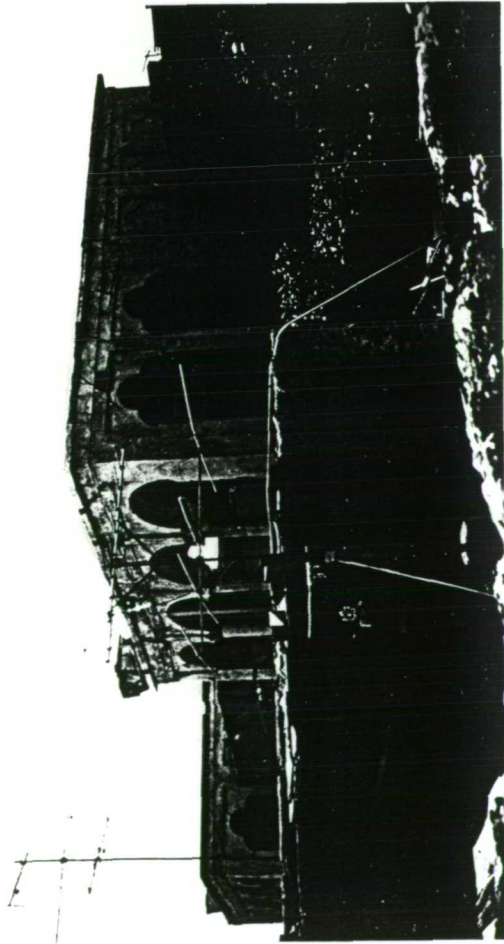
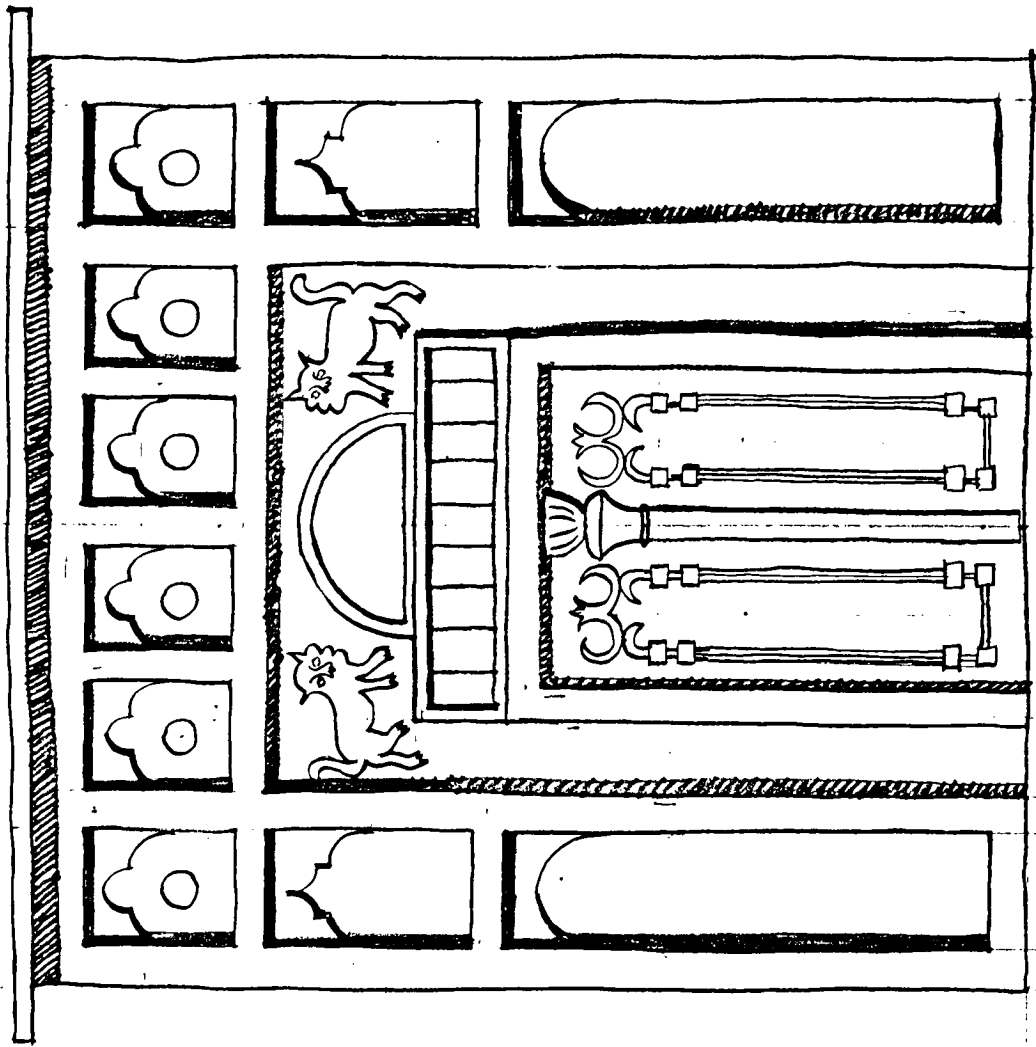
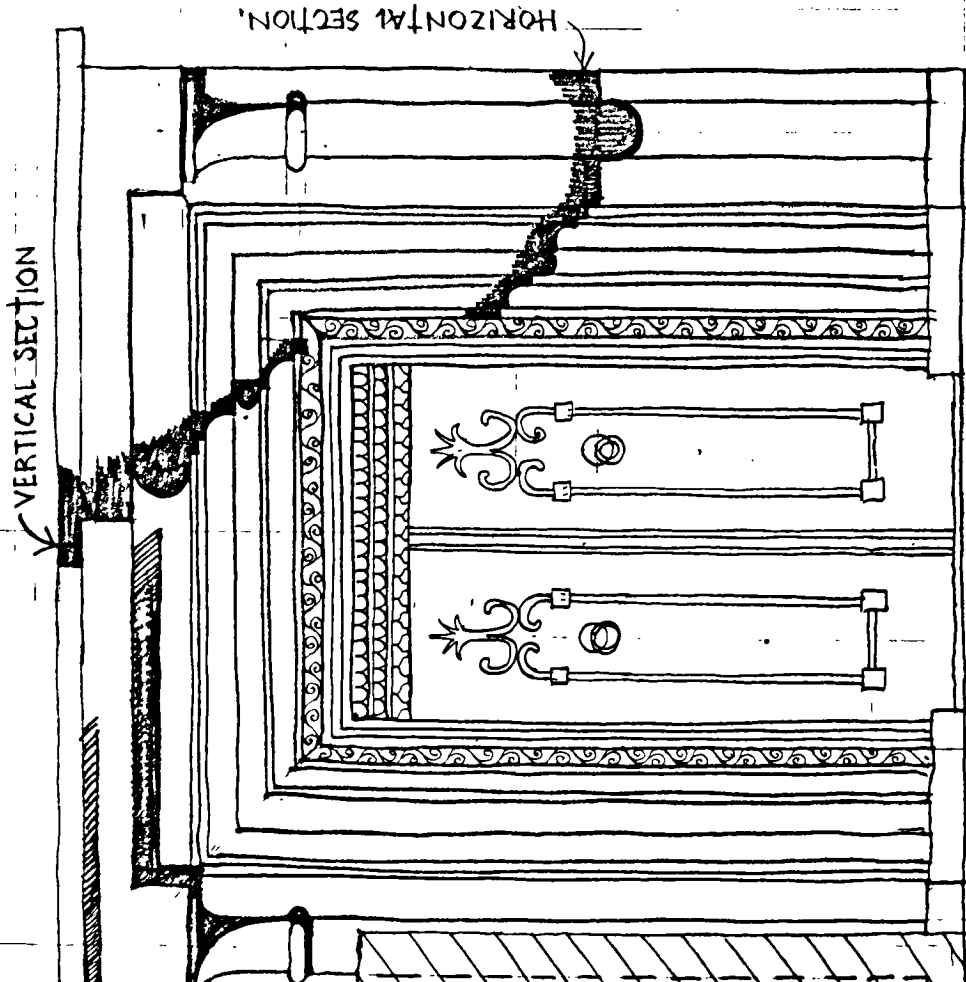


Fig. 7.94(A) Al Jalahma Houses (on Roads 1624 and 1622). This is a view from the north from the roof of another house of the same family, shewing a first floor apartment. The liwan seen here is detailed in the next photograph.



MAIN DOOR - HOUSE 605 SHILSA ROAD.



MAIN DOOR - SH. ABDULLAH'S HOUSE - AIRPORT RD.

LATE PERIOD DOORS.

Figure 7.95.

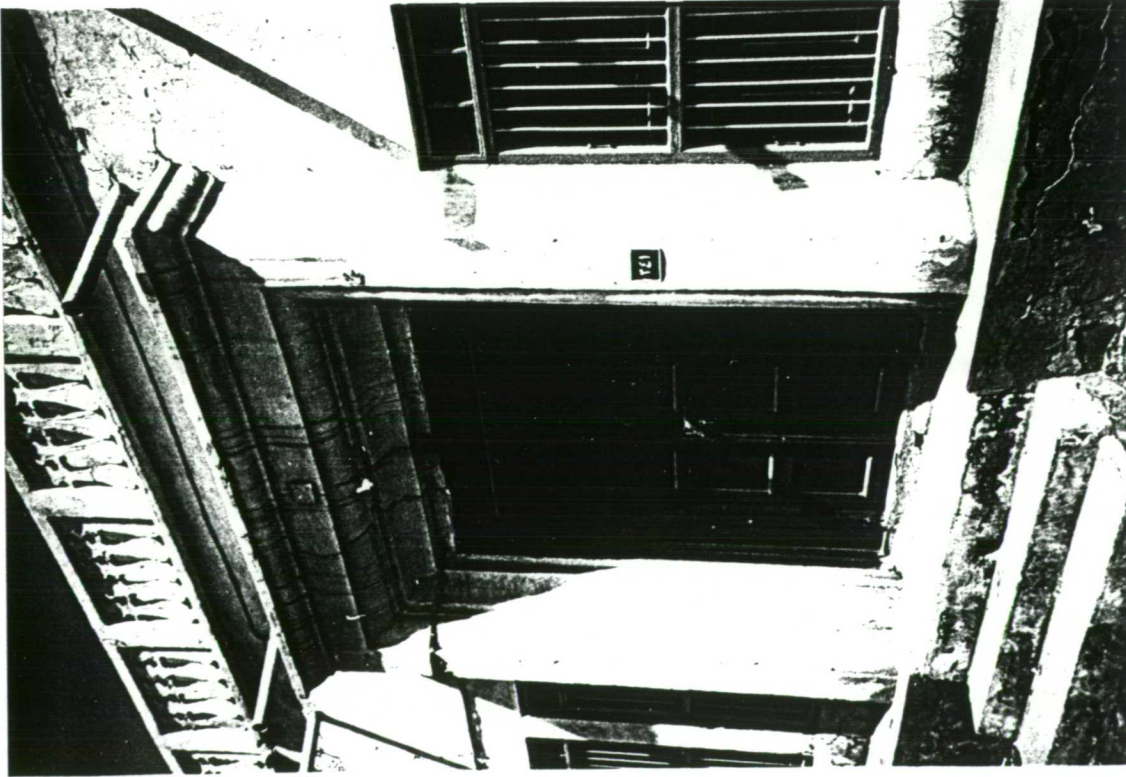


Fig. 7.96(A) Mosque in Sheikh Khalifa bin Mohammed Avenue. The main entrance doorway.

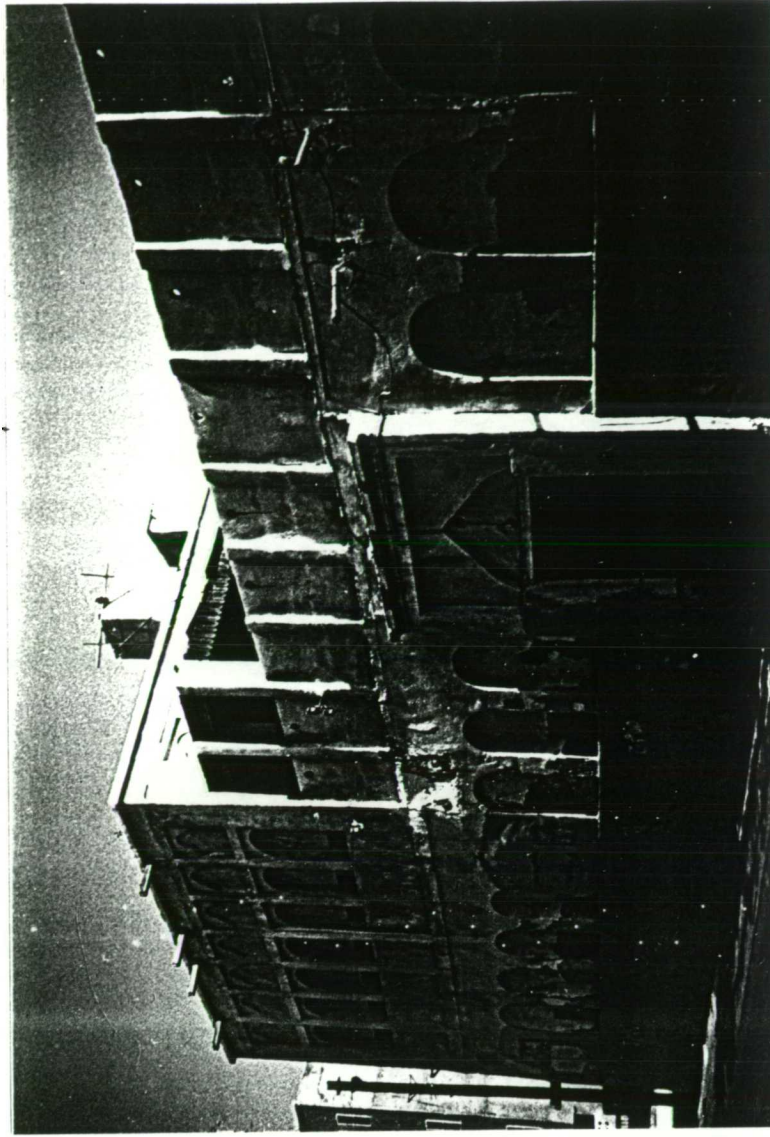


Fig. 7.96(B) House in Al Khalifa Road. General view from the road.

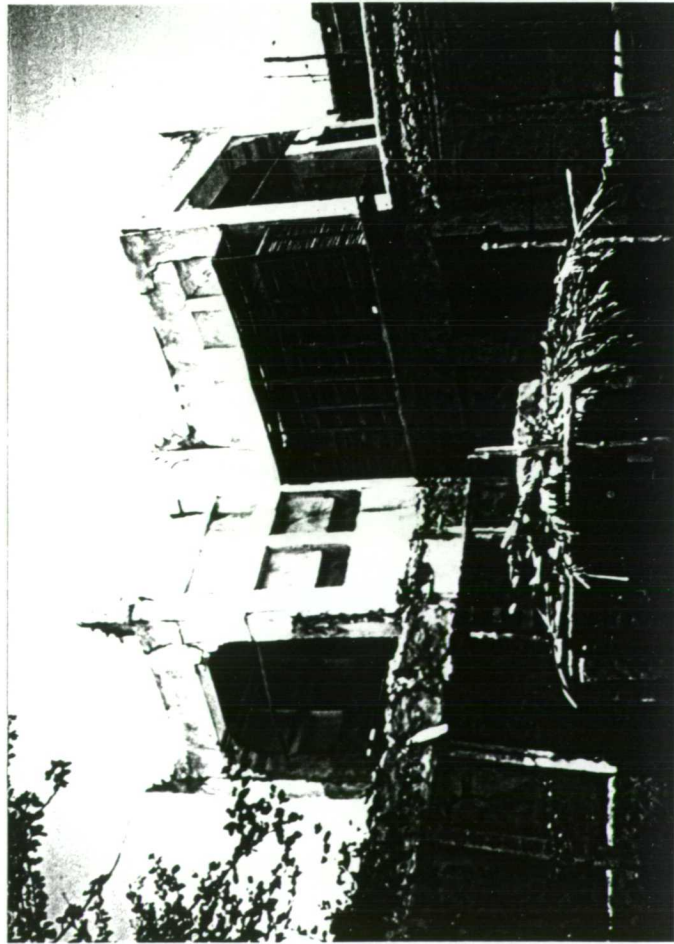


Fig. 7.97(A) Sheikh Ali House. View from
Courtyard of corner L-shaped apartment. Note
the mashrabiya.

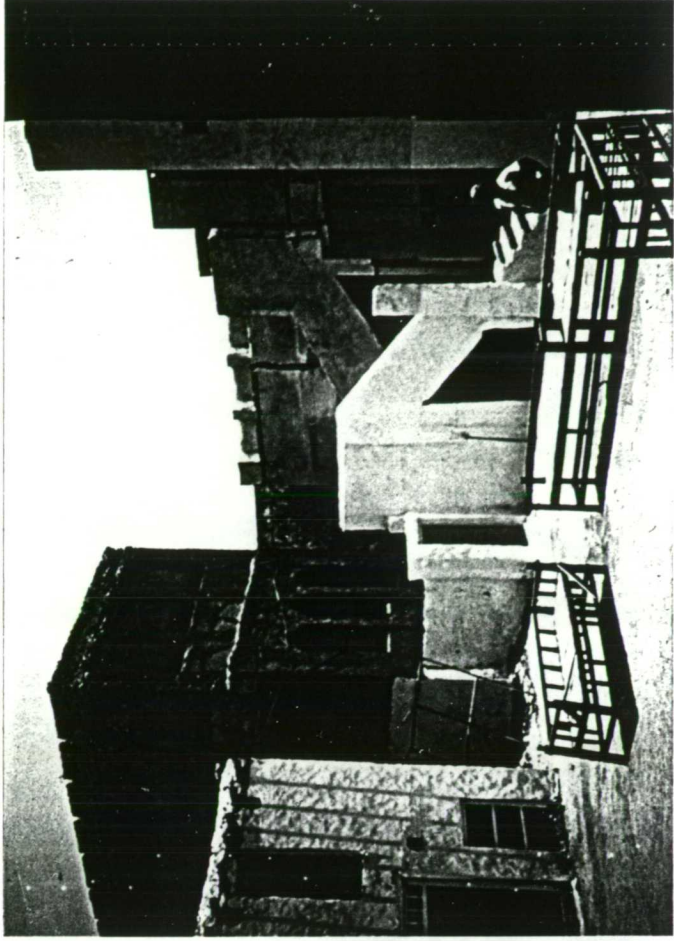


Fig. 7.97(B) Sheikh Ali House. Entrance
Courtyard with staircase.

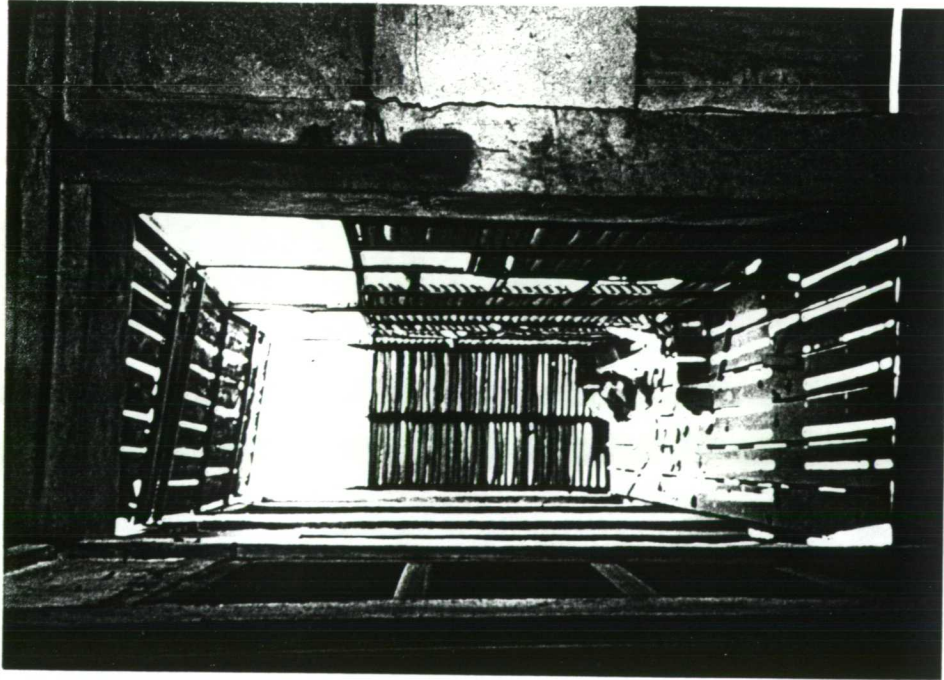
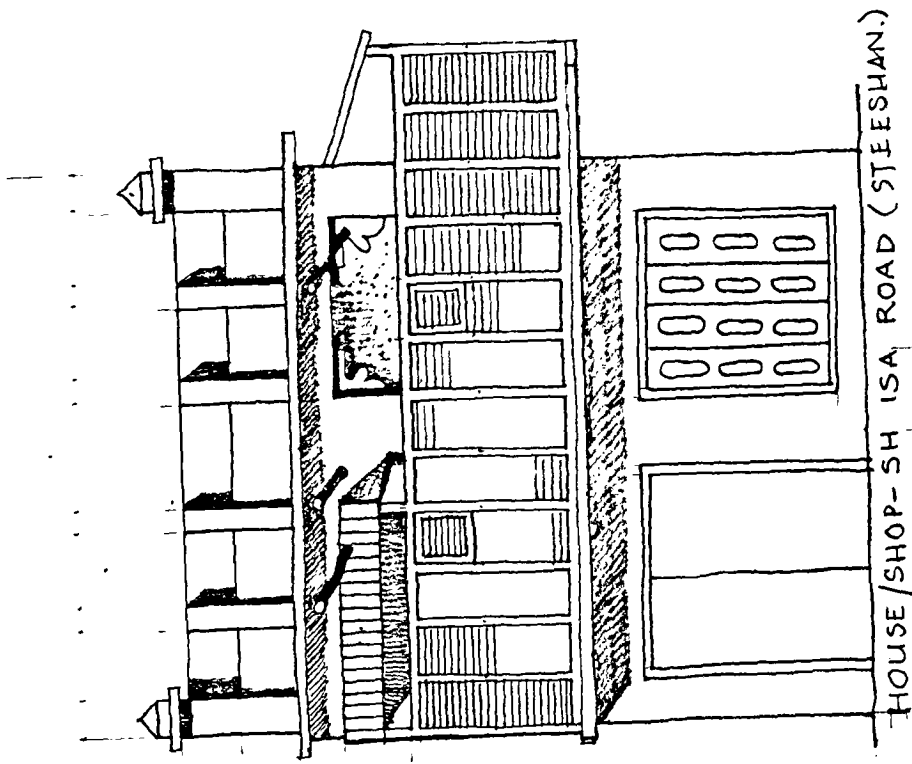
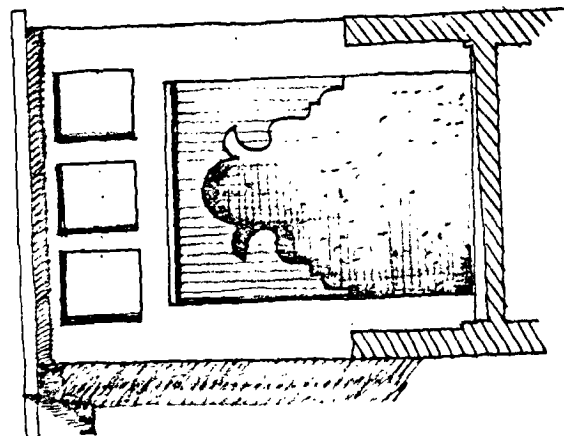
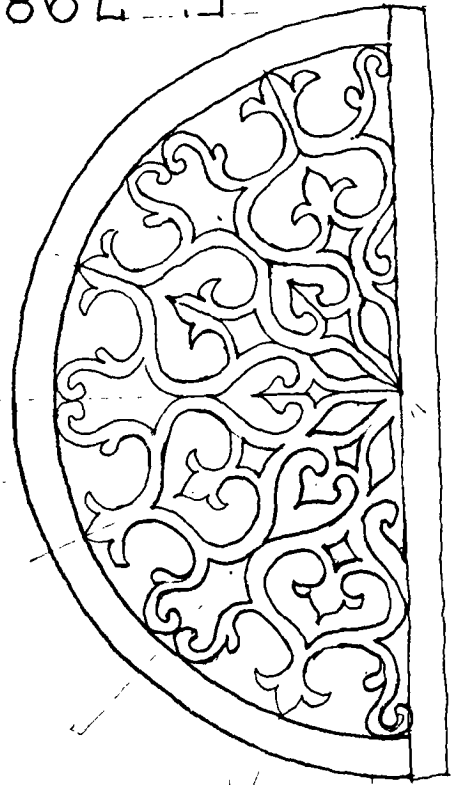


Fig. 7.97(C) Sheikh Ali House. View into mashrabiya from the adjacent apartment.

Fig 7.98.

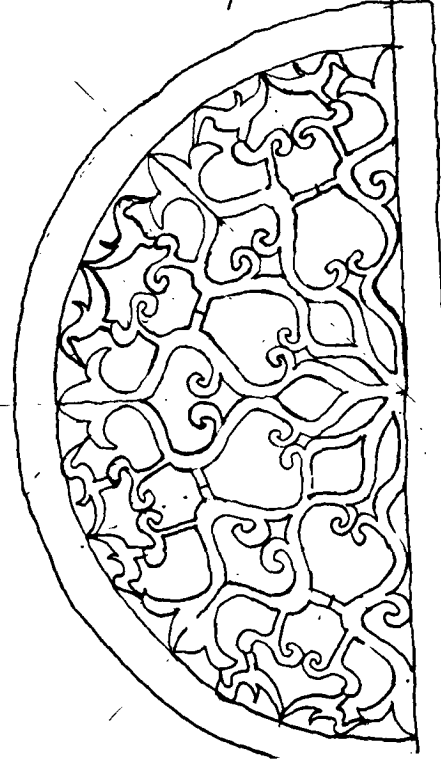
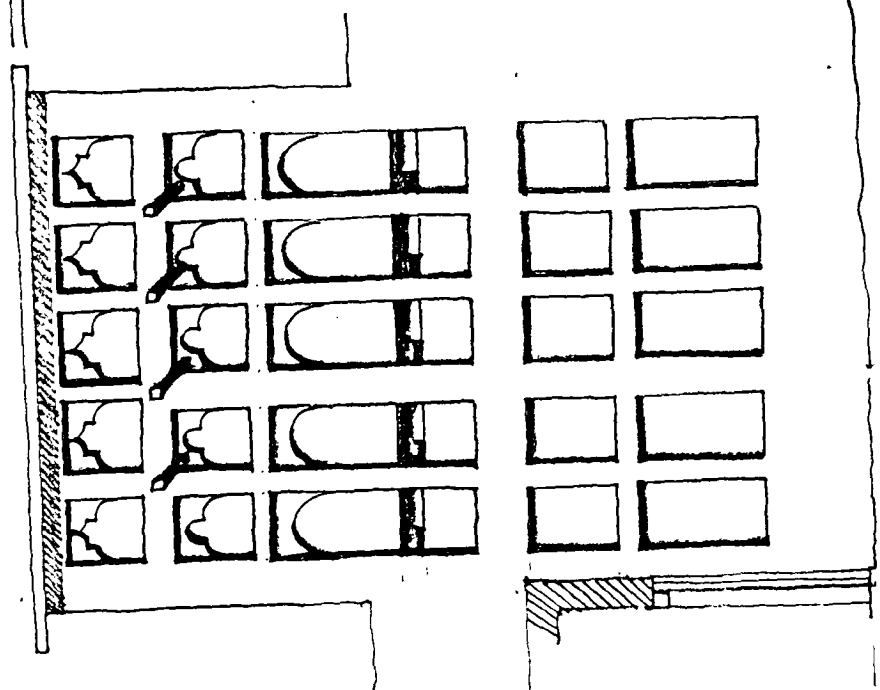
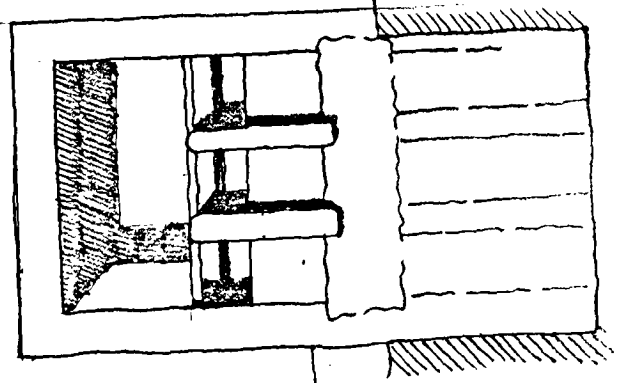


HOUSE / SHOP - SH ISA ROAD (STEESHAN.)

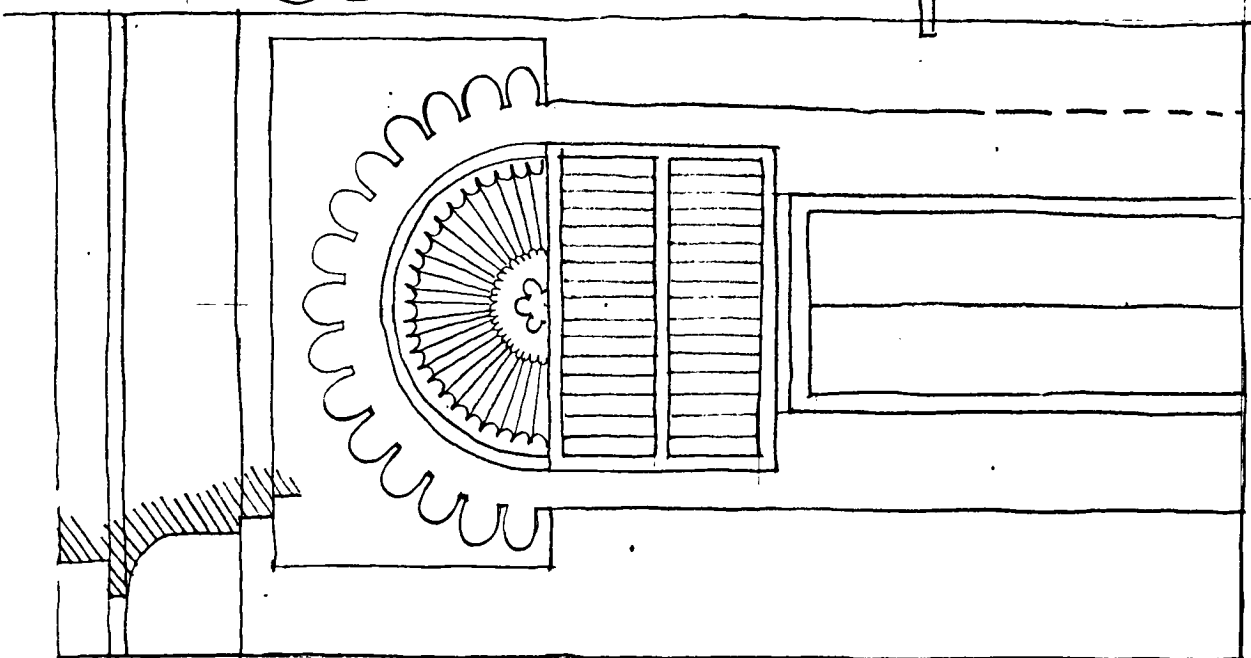


LIWAN + STREET ELEVATION - HOUSE IN LANE N° 914.

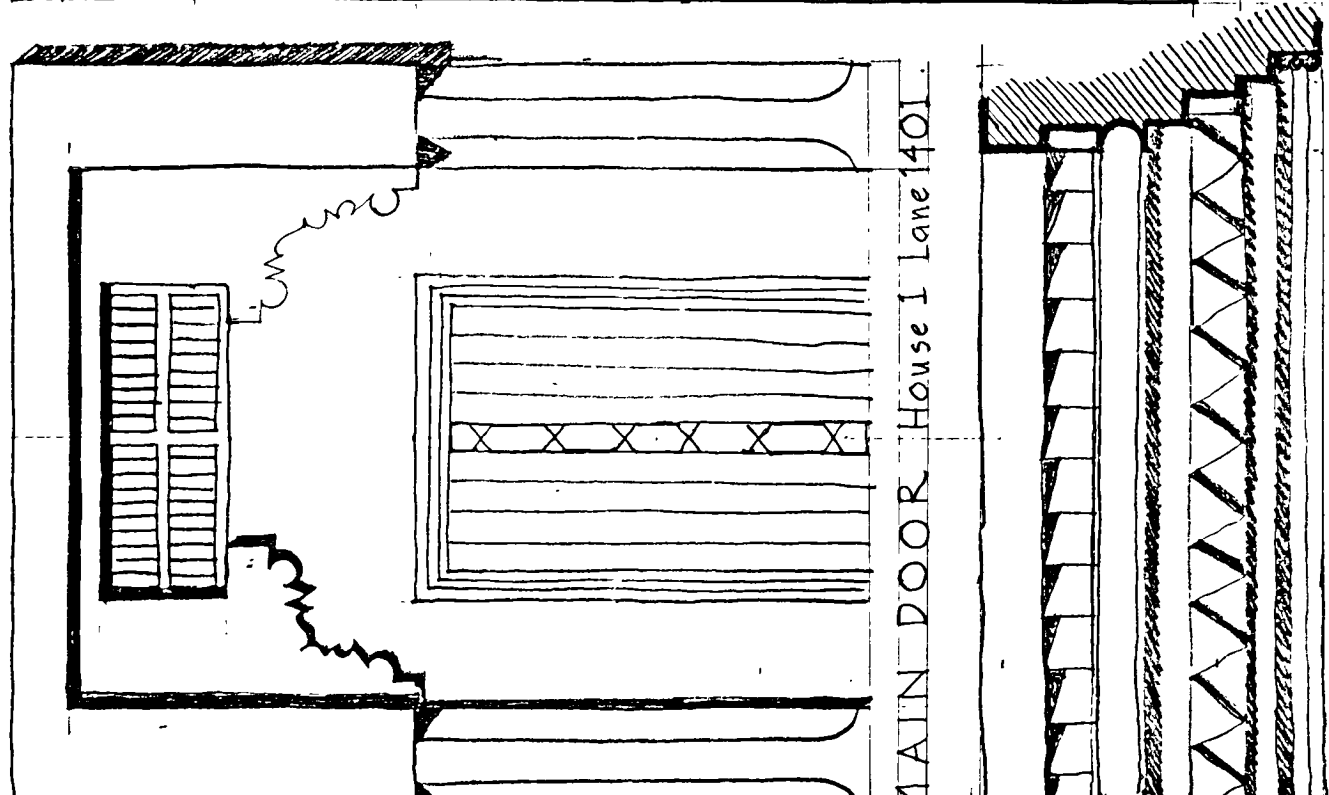
HOUSE IN LANE 914.



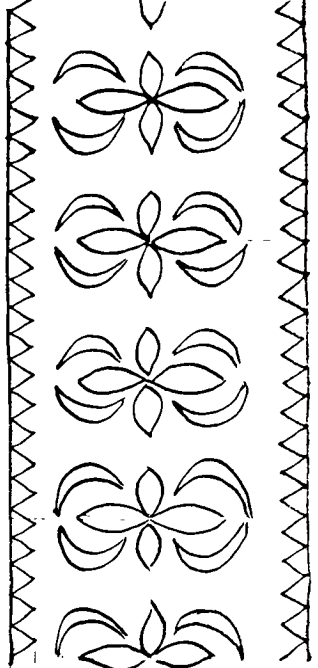
NO FANLIGHTS FROM HOUSE IN SH ISA ROAD.



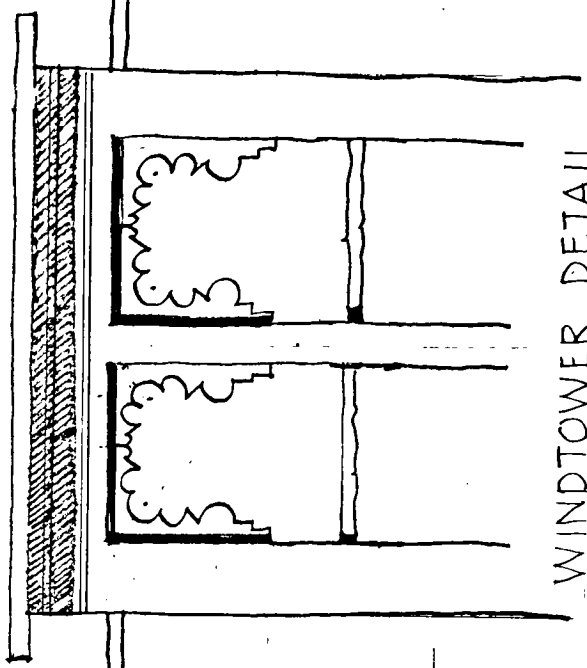
DOORWAY - JALAHMA HOUSE
 VARIOUS DETAILS.
 Figure 7.99



MAIN DOOR House 1 Lane 1401.

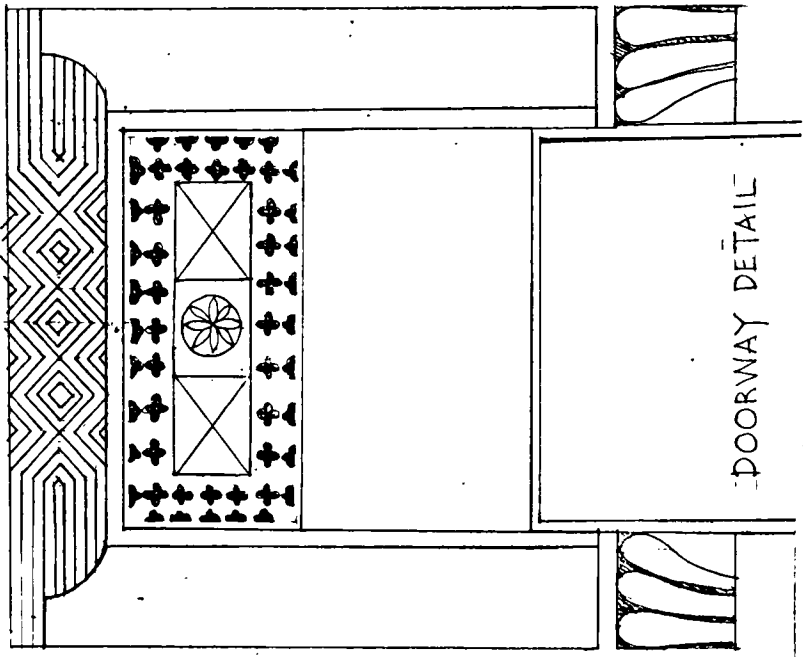


INCISED FRIEZE - CORNICE
 of WINDTOWER & HOUSE (below)

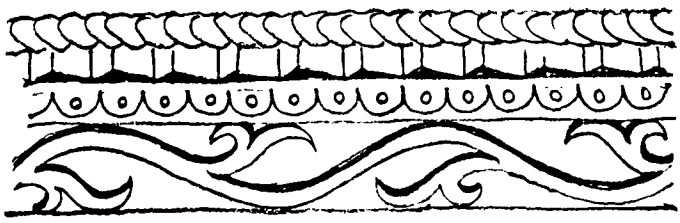


WINDTOWER DETAIL
 - HOUSE No. 623 LANE 1421

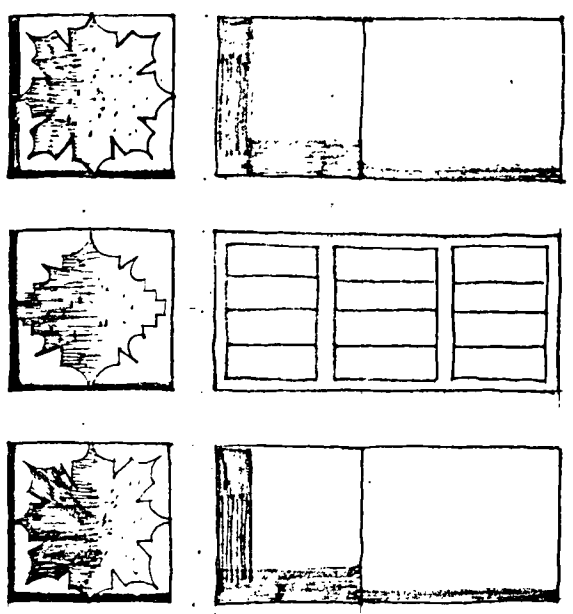
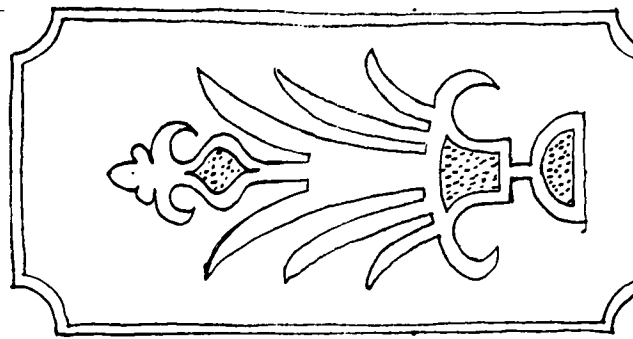
HOUSE IN ROAD 1630
LIWAN BAY DETAIL



DOORWAY DETAIL



MALIK HOUSE - DOOR PANEL +
ARCHITRAVE



HOUSE IN ABDURRAHMAN AL FADHL RD. demol 1984

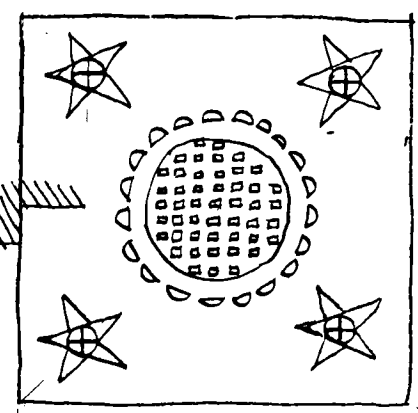
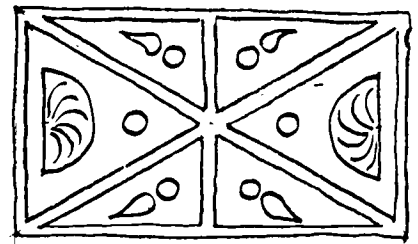
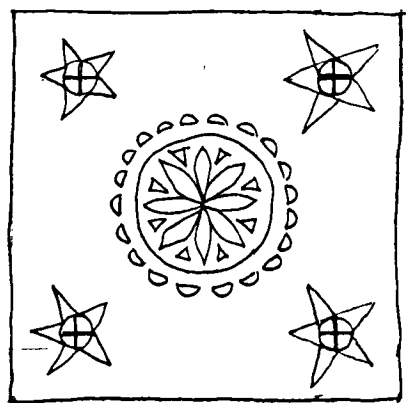
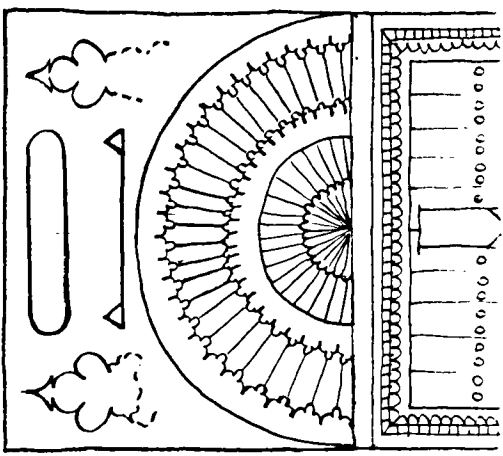
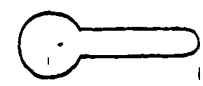
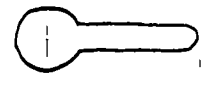
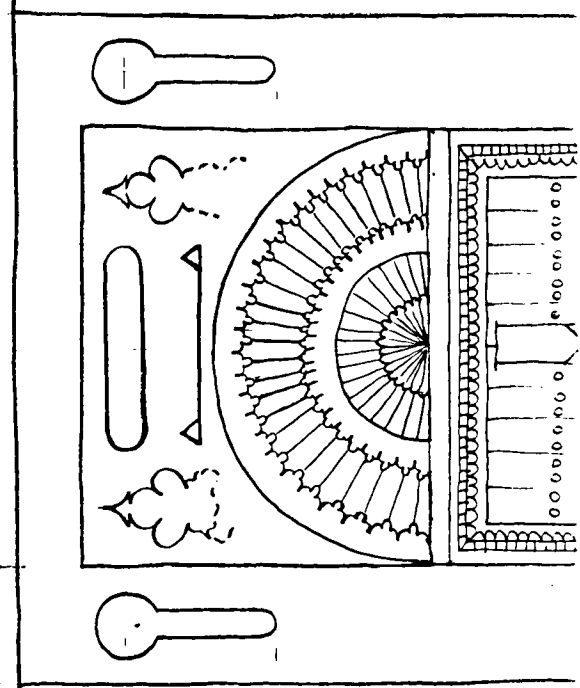


Figure 7.100

INCISED PLASTERWORK - HOUSE IN SH ISA RD Demol 1984.

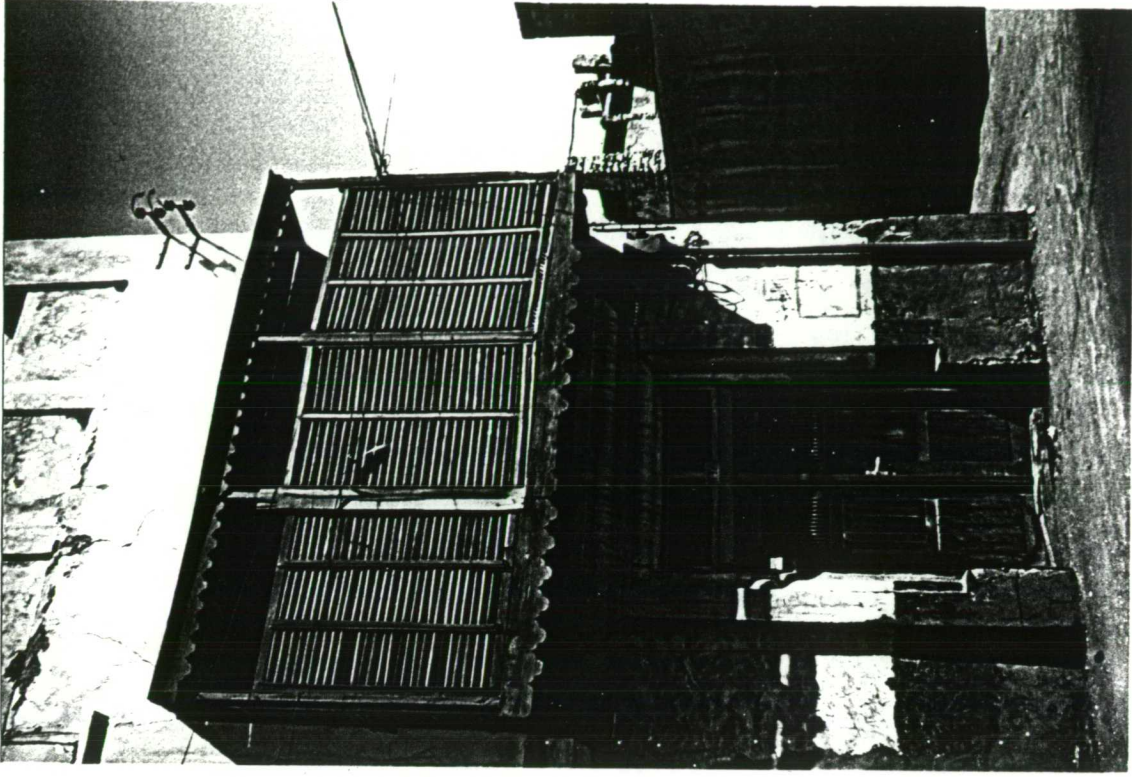


Fig. 7.101(B) House in Sheikh Isa Road, showing small mashrabiya over the main doorway.

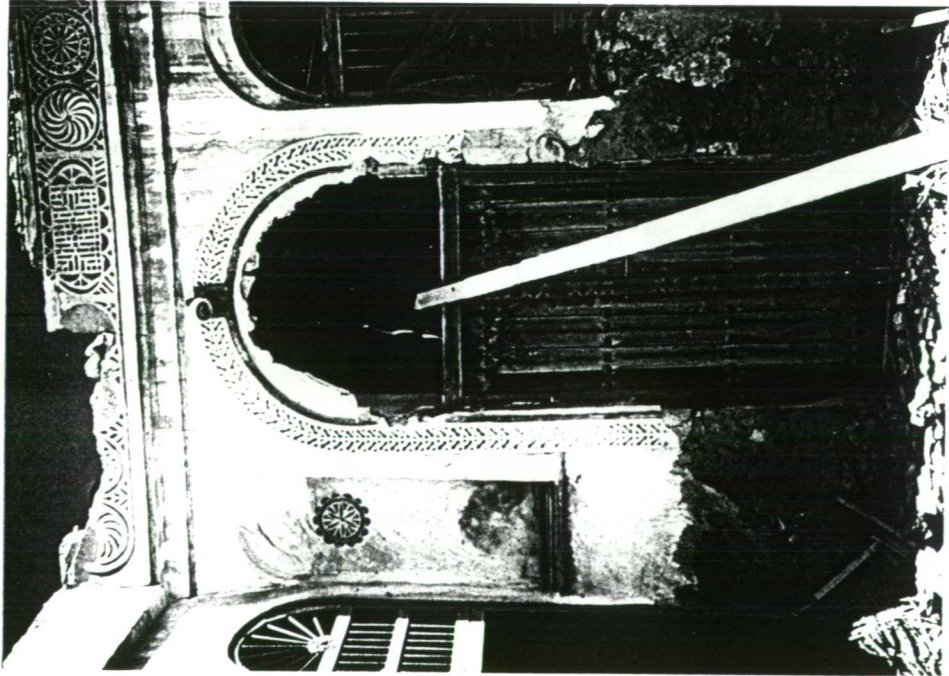


Fig. 7.101(A) House in Road no. 3. View of a doorway facing the internal court showing archivolt frieze over door and cornice frieze.

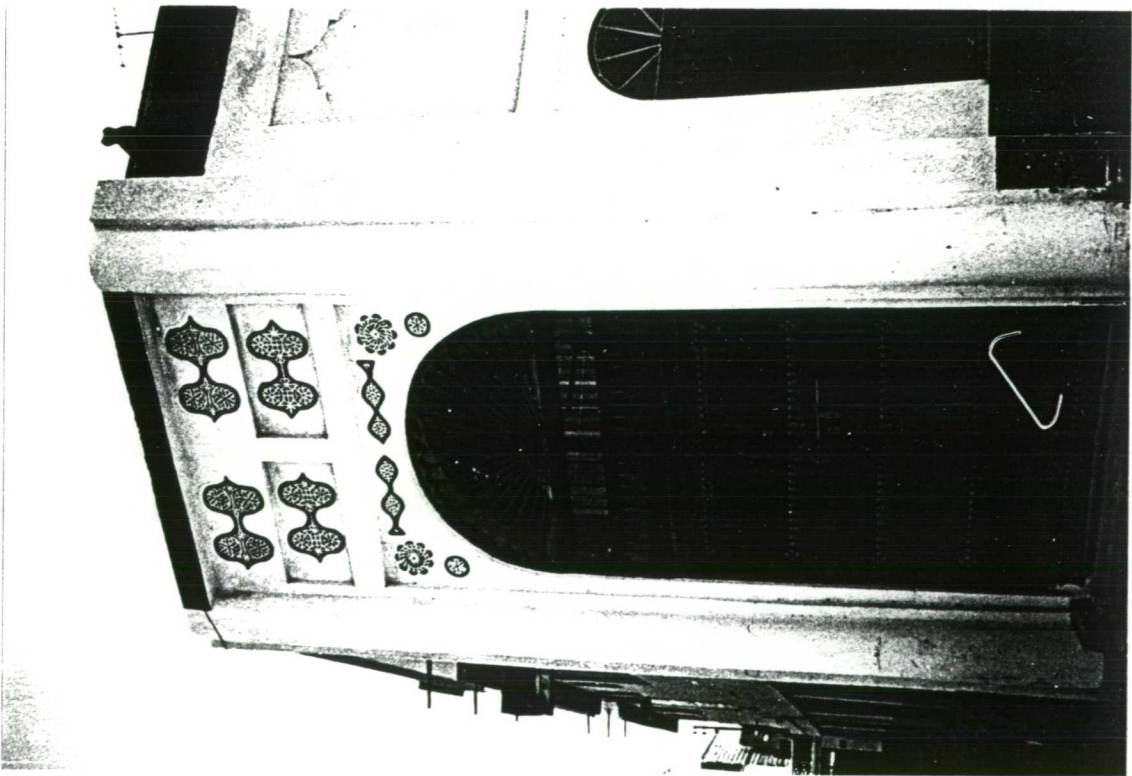


Fig. 102(A) Malik House. Main doorway to the street showing the unusual incised plaster decoration.

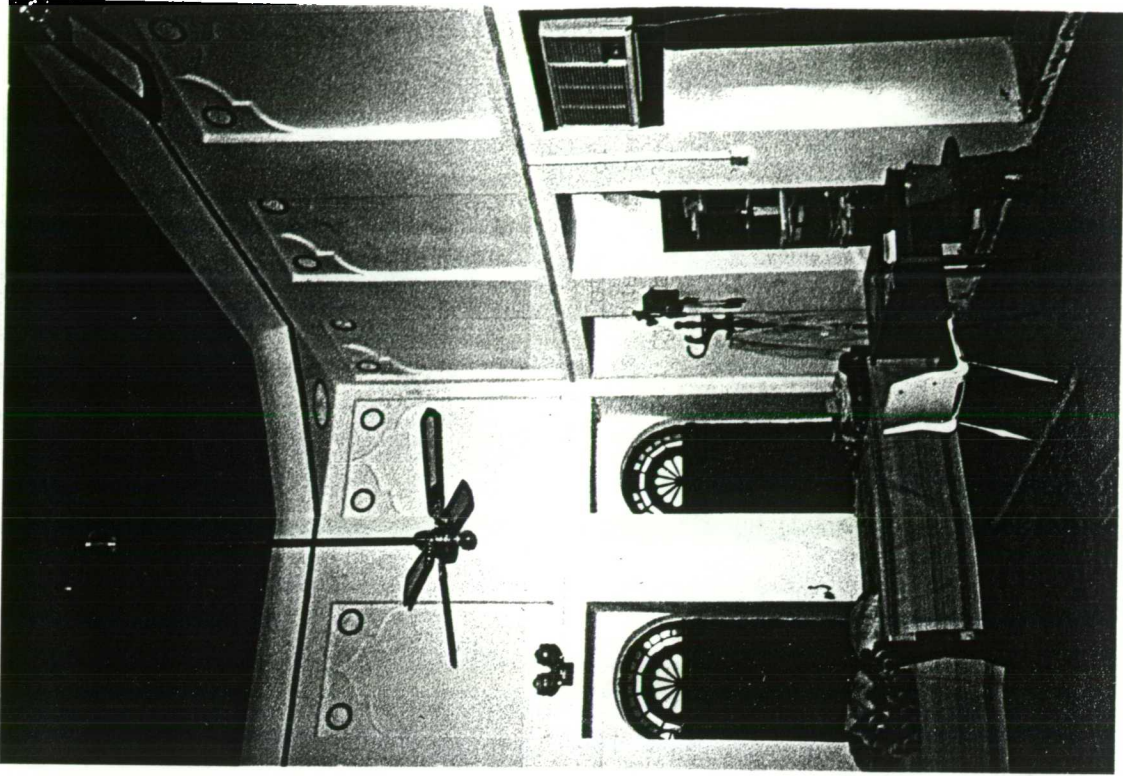


Fig. 102(B) Malik House. Interior of main apartment. Unusually this house has been restored and is inhabited by the family.

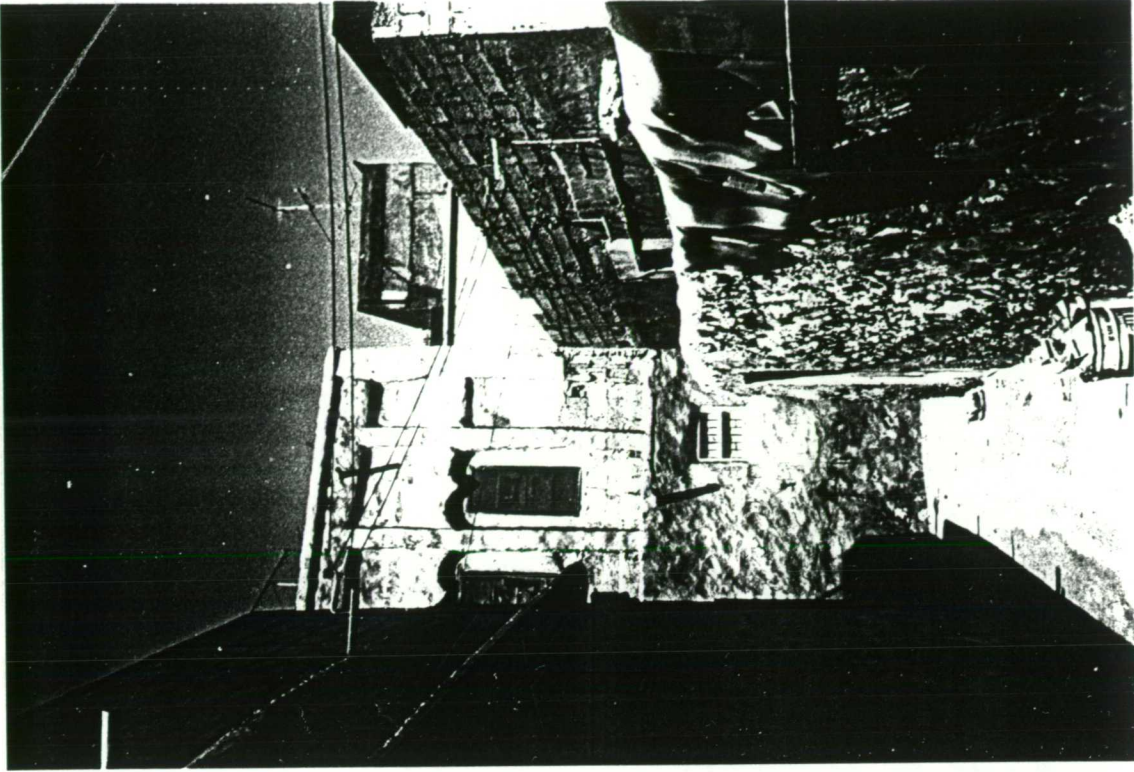


Fig. 7.102(D) House in Lane 1136. View of external elevation from adjacent street. Note the unusual cusped arches.

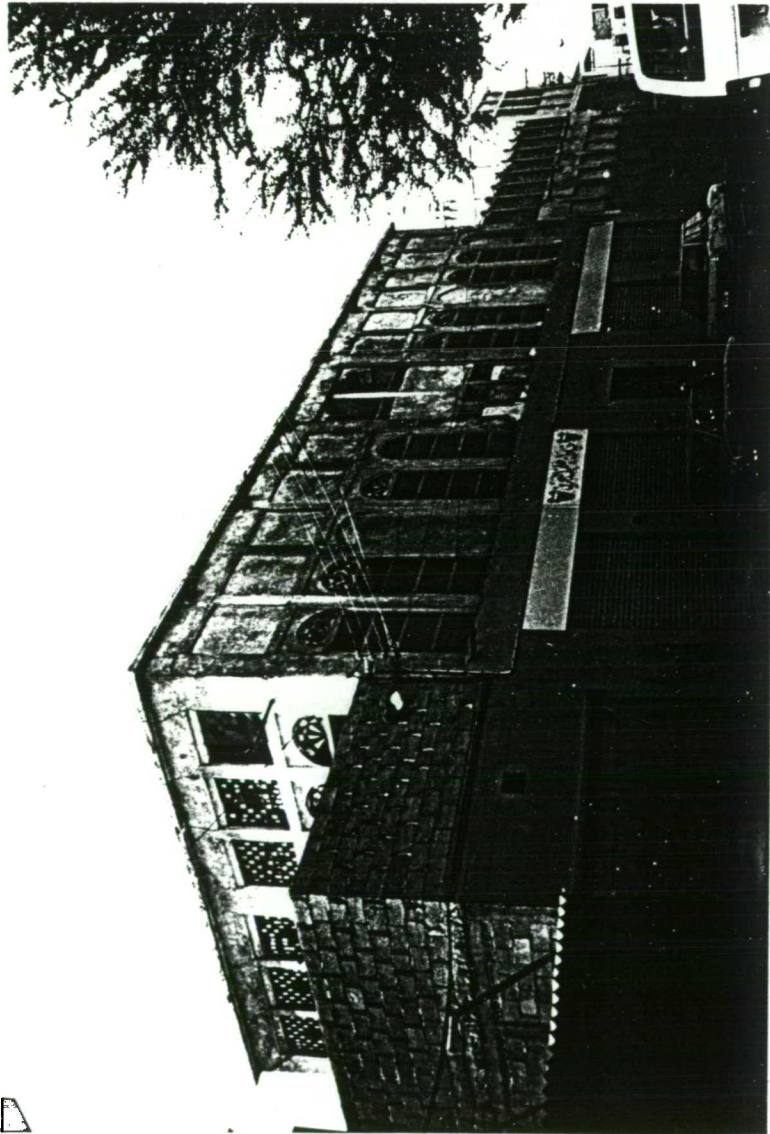


Fig. 7.102(C) House in Lane 1401. View of elevation to Sheikh Isa Road. There are two large apartments at first floor level with a liwan between them.

Chapter 8

THE SUQ.



Chapter 8

THE SUQ

1. Introduction

Surprisingly little has been written in English on the Islamic Suq from a sociological or economic standpoint and even less from an architectural standpoint (1). The deepest studies relate to particular cities (such as Fez, Sana'a, Seifou) or to Mediaeval history (2). There are several works in French but they concern in the main the Mahgreb, particularly Morocco (3). Also a few works make general surveys and draw synoptic conclusions which do not always (or even usually) apply to Al Muharraq (4). Several specific issues commonly emerge which may be listed: Suq government (legislation, administration, police); role of craft guilds or corporations; relation of guilds to Sufism and Sufi orders; social connotations of different occupations; relationship between certain families or tribes and certain types of occupation; the spatial patterning of the suq into districts devoted predominantly to certain trades or activities; the use of waqf endowments to establish various facilities, particularly funduqs, caravanserais and the like; the influence of religious institutions or economic activity via waqf endowments.

It may be helpful to clear some ground by making (mainly negative) statements with regard to some of these matters. I have talked to Ministry of Justice officials and several elderly merchants, and they have no knowledge of a suq statute or other legislation - if we except that relating to Pearl diving which is a separate matter (5) - nor of any guilds or similar institutions. Any major disputes would be presented to the Amir of Muharraq at his bench on Tijjar Road - as described in Chapter 2 - and be resolved according to custom or to Sharia law. The British administrators generally felt this was poor justice - with much bribing of witnesses and so forth and successive Political Agents received many complaints (6). However, my informants all commented that business was very honest in those days, so

that the need for courts and justice virtually never arose. It is also commonly stated by English people in conversation, letters to the newspapers and so on, that Bahrain was very honest thirty years ago. The picture is not entirely consistent.

A Majlis al Tijjar (Court of the Merchants) was established in the 1930s. It apparently evolved from the Court of Common Law (or Custom), the Majlis al 'Urf, which had been established by the Ruler a few years before in order to resolve trade disputes. The Merchants Court evolved by gradual reform until a Chamber of Commerce was set up in 1939. This could legislate and it also sought to advance and protect the general interests of traders as a group. No doubt they had some impact on Muharrag, but I gained the impression that these institutions were more concerned with the new fangled business life of Manama, and bypassed the old-fashioned ways of Muharrag trade.

A police force (Al Nartur) was created in the 1920s along modern lines and staffed mainly by Indians - particularly Baluchis. It policed Muharrag Suq. At certain times - particularly between noon and three o'clock - the shopkeepers and tradesmen went home but left their untended shops open. The guards were stationed at certain points in the street from which they could see a lot of premises - this was at intervals of about 70 to 100 metres. By all accounts, the problems came more from naughty boys than from hardened criminals (7).

Poorer people would pass their money to rich people for keeping. No papers would change hands - but a custom was for the rich man to give a hair from his beard as a receipt. This meant that should he cheat the poor man, then everyone would know he was not a "whole man": he had lost his honour with the hair from his beard (8). On the other hand, rich merchants were often so affeared of the Sheikhs that they sought the status of foreigners - by obtaining a British passport, for example in order to obtain legal protection from the British Political Agent (9). In some ways it was a very simple trusting honourable society. In other ways it was lawless and rapacious.

As for guilds, some authors - Chalmeta, for example - make sweeping statements that all Islamic cities had them. Probably this was true three centuries ago, and those suqs which

have operated continuously from then until our century, would have had guilds in the recent past. Unfortunately, Muharraq Suq is a late nineteenth century creation. Whatever suq institutions may have existed in the distant past were almost certainly destroyed long before this suq arose. It is the creation of a much weaker and less organised culture than Mediaeval Islam. Most trades were the province of Shia families - the Baharnah - who derived their name and allegiance from the trade. (Unlike the Utub, they could not trace family trees very far back - perhaps only three generations). Regulation, organisation and admission of new recruits (and so forth), rested informally in the hands of family leaders. Perhaps this was a partial substitute for a guild (10).

Virtually none of the Suq was built using Waqf endowments, except for the mosques, of course (11). Capital for khans was provided from the profits of merchants who built them for their own sailors and workpeople (many of whom were foreigners with no family home in Bahrain). There were, however, many properties given in Waqf, including many large Amarat. At least 20% of the suq is Waqf property (12). This probably contributes to the failure of the area to renew itself.

I have made four negative points here, from which one could conclude that this suq was a minor and apparently unsophisticated one. There was, however, a clear spatial pattern of activity zones, a correspondence between families (or nationalities) and occupations, and a simple hierarchy of occupations with regard to prestige and influence. These three points are analysed below.

2. General Structure

2.1. In this section I deal with three aspects of structure:

1. Building Types
2. Urban Form and Growth
3. Activities and Districts.

2.2. Three Main Building Types.

(a) Amarat

There are two types of Amara (retail warehouse). The linear plan type connected the sea shoreline to Road 1615 or Tijjar Road. The central plan type mainly lay between Roads 1615 and 1613 or lay along Road 1613. There were twenty two of the linear plan amarat and about 17 of the central plan type.

The "linear plan" amarat generally lay on the seashore and fronted onto Tijjar Road or Road 1613. A big merchant would travel to bring mangrove, bamboo, fishing equipment, clothes and so forth from Basra, Iran, India (Bombay and Karachi), Zanzibar and elsewhere. They would be unloaded directly from boats and stored in the Amara. A small office would front the street, from which these goods would be sold. These also fulfilled a social function. The merchant would meet his friends and entertain them to tea or coffee whilst discussing matters of mutual interest. The Amara were referred to by the merchant's name, such as Amara Fakhroo, Amara Adoy, Amara Ali Moosa and so forth.

The plans have much in common. There is a central walkway from street to shore closed by an impressive door at each end. The storage area is divided into two parts. At the eastern end are lock-up store rooms fully enclosed with double doors. At the western end is open warehousing. This is a large open area with a roof carried on columns (the bay size being 3 x 3 metres). The internal height is at least 6 metres and columns are braced by mangrove poles. The central corridor is not roofed, however.

The "central plan" type are essentially similar, but they are generally much smaller and one door is used to bring goods in and out.

(b) Khans and other living apartments.

The lodging or hostel (khan) was used for travellers as elsewhere in the Islamic world, but in Muharraq there were more migrant workers than travellers. They too were accommodated in the suq. Many of the pearl divers and other pearling industry workers were foreigners from Najd, Kuwait, Qatar, Oman, Persia and elsewhere. This was a seasonal occupation, lasting from early June to early October. In winter they went home. Also the merchants and shipowners would have to accommodate visiting sailors.

There are three types of Khan. The predominant type closely resembles the usual domestic first floor apartment. It is found above the amara on the street (or coast) frontage. It has a staircase with a separate street entrance to allow use when the Amara is closed. The roof would be covered with a light timber shade and used for sleeping.

Some rows of shops have long apartments at first floor, but this is not quite so common. Finally, there are three colonnaded structures on Road No. 1129 (the former waterfront). These were all built by Salman Mattar and all have living quarters with large liwans at first floor. They were used, however only by honoured guests - specifically the Advisor and the Political Agent on their visits to Muharraq every Thursday. The largest one - at the northern end - was lived in by Mattar himself. There was Muharraq's first hospital below(13).

Examples of all three types are illustrated below.

(c) Unit Shops and Workshops

Units of accommodation are rather loose-fit in the sense that they could be used as shop, workshops or storage depending on the property market, supply and demand and so forth, evolving over time (although there has been more stability than one might have expected - as I demonstrate in the next section). A unit is generally 3 metres wide: depth varies from 3 metres to about 10 or more, but 6 is about average. In round terms, a typical unit is 20 square metres. It may be about 3 metres from floor to ceiling raised by 500mm above street level, or internal height may be about 5 metres in which case there will be a mezzanine in the rear, accessed by ladder and used for storage. Usually there will be no

rear or side doors - all access (including service) being through the front door from the street. There is no shop window. The door is a multi-leaf (usually four leaf) folding door secured at night by padlock. Through the day it is folded away against the jambs on either side. The shopkeeper or craftsmen will sit in full view and direct - almost intimate - contact with the passer-by in the narrow street. Ventilation is provided by a grille (iron bars in timber frame) over the door. Such units occur mainly in three forms: (i) Lining the street frontage of amarat; (ii) as large back to back clusters in the Qayseriya - perhaps ten to twenty bays; (iii) rows of units along commercial streets - perhaps five or seven bays - with some other land use behind them (housing for example). Such units often have a first floor for storage or living.

Accommodated within a few units were coffee-houses. These were extremely important. They are slowly disappearing as the former suwaq goes to modern restaurants, night clubs (or retreats home to his modern companionate marriage?). There are now five old fashioned coffee houses, but my informants estimate there were at least twenty in the 1930s. A few of them would occupy the short cross alleys where they caught the breeze and caused less obstruction to pedestrian flow. High bench seats line the walls and a waiter brings tea, coffee and hubble-bubble pipes. Beverages will also be carried to nearby shops when hospitality is shown prior to a deal. The cultural and social importance of this institution cannot be overstated and one's attention is drawn to the exclusively male social function of the suq.

2.3 Urban Form and Growth

On the ground the suq is only occasionally impressive from an architectural viewpoint these days. However its plan form is very interesting. In fig. 8.1. I have attempted to reconstruct the plan in the 1940s from aerial photographs. It involved, of course, approximation by shrewd study of what remains: sagging roof timbers viewed from the air sometimes cause slight shadows which reveal the structural bays (main beams, walls etc.). Everything is informal in detail, but the underlying form is powerful. It arose organically from the circumstances of its origin and growth. In Chapter 3 I argued that it originated

on the coast nearest Manama because people congregated there for ferry-boats; because this coast was most accessible for merchants boats, and, most of all, because open land was available. However, this involved gradual reclamation from a very shallow sea. The coastal strip was also accessible by carts and donkeys bringing fish and vegetables from the villages on Al Muharraq island which would by-pass the narrow streets of the town. Bu Maher Road and Road 1123 therefore represent the historic shore (14).

The form arose from the constraint of the strip site forcing extreme linear extension before extension in depth. The growth started around the Sheikh Hamad Road because this was the natural entry point and link to the urban core. It stands now at the fulcrum of the plan. Here the boats from Manama landed. The Airport Road, essentially a by-pass, had been built in 1926 and soon afterwards the petrol filling station, municipality and bus station: the causeway (1936) ended at this point (15).

The Qayserah stands at the fulcrum and the two commercial streets extend north and south from it.

The lateral growth occurred in four phases (16). Originally the dwellings had approached the shore: barasti or small stone shelters were built in a line along the shore and a street formed in front of them. The more successful men would extend by increasing the height of the land by the metre necessary to keep dry. Thus Bu Maher Road/Road 1123 was established. Cross routes would link to the shore where boats beached. This process was then repeated along the new shoreline, and thus Tijjar Road/Road 1125 emerged. All the buildings were still Barastis or temporary structures by 1890 (17). The construction of the coastal amarats began then also by reclamation. The coastline moved out about 70 metres west of Road 1125 as the first generation of coastal amarats were built from 1890 to 1925. This line can be reconstructed by joining together the western doors of coeval property which stood of course, near to the waterline (18). This period was the start of the prosperity which - particularly after 1920 - allowed the conversion of barastis into stone buildings of quality. Although the first two phases laid down plan form the actual fabric was largely created in the third phase. The fourth phase from the late twenties

until 1940 - saw the further extension of the coastal amarat westwards. In particular, a new frontage to the Airport Road began to arise - entirely at the instigation of Salman Mattar. He built the three superb colonnaded structures described later. But the decline of Muharraaq set in too seriously to allow this frontage to build up. By 1950 only the Amarat Fakhroo, Al Doy and Bokhammas (apart from the three Amarat Mattar) had extended. The other land east of Airport Road was still covered by sea entering at high tide through conduits below the road. It is sad to record that much of this land is still undeveloped at the time of writing. (Further reclamataion to the west has been used for public housing schemes in the late 1970s and early 1980s.) See fig. 8.2.

2.4. Activities and Districts

The suq in the 1920s and 30s could be divided into various district or specialised suqs. Within these districts almost all unit accomodation would be devoted to one category of shop or workshop.

The boundaries (as recalled by informants) are given in figure 8.3. (19). The districts may be listed as a matrix, from north to south:

WEST OF TIJJAR RD. TIJJAR RD./RD. 1615 BOO MAHER RD./RD. 1613

	Sweets Bakeries and Groceries	
Amarat	Carpentry	Armourers and Goldsmiths (Bahraini)

The coastal Amarat may be listed as follows. The reference numbers given here refer to fig. 8.3.

(Sh. Abdullah Road)

1. Amara Jaffar Um Abbad
2. Amara Hassan Djezaiff
(lane 1129)
3. Amara Mattar
4. Amara Hajji Hophobi
(lane not numbered)
5. Amara bin Hindi
(lane 1124)
6. Amara Ibrahim Buhiji
(lane 1126)
7. Amara Ahmed Nass
8. Amara Mattar
(Road No. 1128)
9. Amara Mattar
10. Amara Fahad bin Jalal
(lane 1130)
11. Amara al Doy
(Sheikh Hamad Road)
12. Amara Sultan Abdul Rahman al Khalifa
(lane 1547)
13. Amara Ali Rashid Fakhroo
14. Amara Yusuf Abdulrahman Fakhroo
15. Amara Ali Moosa Al Amran (sold to Ibrahim al Doy)
16. Amara Ibrahim Bokhammal

17. Amara Al Mahmeed
(lane 1502)
18. Amara Abdul Khalil al Hassan
19. Amara Bokhammas (sold to Al Favez and then Zayani)
20. Not remembered
21. Not remembered
(Blacksmiths area)

There are eleven amarat between the two parallel roads and there were six east of Road 1613/Bu Maher Road, but all seventeen are (or were) very small compared to the coastal amarat.

The racial or family connections with craft and trade may be summarised as follows:

- (a) Groceries and Bakeries were mainly run by Iranians, who came particularly from the town of Qarash. They worked very long hours, involving shift work, and succeeded because Bahrainis would not work so hard. Most Arabs regarded such an occupation as beneath their dignity.
- (b) Sweetshops were also run by Qarashis or by Omanis, particularly the family Al Maskati (from Muscat).
- (c) Herbal medicines were made and sold by Yemenis. A family named Nasr from (what is now) Saudi Arabia sold oil.
- (d) A lot of goldsmiths were Indians: they worked in the area between Sh. Abdul Wahab Mosque and Mohammed Ibrahim Mosque on Boo Maher Road. The Bahraini goldsmiths also produced swords and daggers in a separate district north of bin Khatir Mosque.
- (e) Some Baharnah family names derived from trades were:
 - An Nabirah : well diggers
 - As Safafir : copper workers
 - As Saghab : goldsmiths
 - Al Haddad : blacksmiths

Al Najjar : carpenters

Al Galalif : boatbuilders

Some such trades people lived in specific districts, for example in the As Sagagh firaj, which is a subdivision of the Al bin Ali Firaj in the south east corner of old Muharraq. There is al Galalif Firaj at the east end of Bu Maher Island.

The Meat, Fish, Fruit and Vegetable Market was built in the 1940s by the Municipality (20). It was a western industrial shed constructed of steel and asbestos in 2 bays, with separate concrete stalls leased to individual traders. This was replaced on another site in 1978 and finally demolished in 1984. The grocery area south of Mohammed Ibrahim Mosque contained also a famous tinsmith, lock and safe maker called Hassan al Shaji, upon whom people called to solve technical problems which were unprecedented or baffled others. In the Barbers' area one family (bin Shams) were also famous as circumcisors.

The number of businesses of each type or in each district varied with time, but the following estimates may give some idea of general scale in 1930:

Grocery, Bakery and Sweets:

(a) Sh Abdullah Road area : 30

(b) Qayserah (west of Tijjar Road) : 70

(east of Tijjar Road) : 20

(c) Around Zayani Mosque : 35

Carpentry : 60

Goldsmiths

(a) Bahraini (north) : 30

(b) Indian (south) : 25

Diving, Fishing Gear and Ship Chandlery

(a) North of Sh Hamed Road : 30

(b) Tijjar Road : 30

Barbers

(a) Sh Hamed Road : 10

(b) Boo Maher Road : 10

Textiles and Tailors (Qayserah) : 70

Blacksmiths : 15

TOTAL : 435

This gives a total of 435 businesses, to which should be added a few to cover small trades such as shoemaking and medicine. Such businesses were, of course, very small. Many would involve one man. Some groceries would involve two or three men, particularly if shiftwork was involved. Craftsmen would have one or two (or occasionally more) apprentices. An average size might thus be two men (or less). We can see that around 900 men might be working in this way. Of these at least 300 would not be Bahraini.

2.5. Suq Structure Today

It is interesting to note how relatively stable this pattern has been. I surveyed the Suq in detail in 1984 prior to preparing a District Plan. The results are shown in fig. 8.4 in the form of a table. The plan shows the survey zone boundaries. Many activities have disappeared entirely (or largely) such as diving equipment shops and armourers. The reasons are obvious. But where a trade is still viable, it has continued to be located in the same general area. This applies to carpentry, metalwork, food, tailoring and the southern zone of goldsmiths.

3. Description of Twelve Suq Buildings

The location of these buildings is shown on fig. 8.5.

(a) Amara Mattar: (see figs. 8.6 to 8.8)

This connects lane 1125 to the coastline as it was around 1900. There are nineteen structural bays with a central corridor. At the west end the first bays comprise three shops facing the main suq road. The next eight bays are shops lining an alleyway. There is then the Amara east doorway. The last bay before the door has a raised roof with a clerestorey on three sides: the alleyway side is open. This is, in effect, a porch and gives a dignified transition or threshold from a public to a private realm. There are benches on either side of the door: thus shelter and rest are provided for persons waiting for the amara to open for business. As a generic form such porches are common in suq architecture through much of the Middle East. Beyond the door are four bays of store rooms, with lockable doors. The central corridor is covered and the first two bays have a clerestorey roof. Then there are four bays of open warehousing. The central corridor is not roofed for these bays. The last two bays have twin khan apartments at first floor either side of the central corridor, with a staircase outside the west doorway to allow access when the amara was closed. The apartments are in the "Arcade" Style. Remains suggest the roof was used for sleeping as part of the khan, because there are balustrade posts and light timber shading. The door itself has a pointed arch within a rectangular frame recessed into the projecting aedicule. The composition seen from the coast is more or less symmetrical (with the two apartments identically elevated), which gives it a pleasantly dignified appearance. The present owner stated its date as about 1890 A.D.

(b) Workshops and Small Amarat: (See fig. 8.9 and 8.10)

The site connects Road 1125 to 1123. There are here two separate developments. The northern site has four bays next to Road 1125, one of which is the porch to the doorway of the warehouse. The three bays have four-leaf folding doors, which are framed and the panels have oval grooves - a typical motif. Above is a clerestorey window of iron bars in

a wooden frame. The walls between bays project about 300mm. The roofing poles cantilever out about 300mm beyond this (as does the roof construction as a whole). The southern development has two bays with folding doors and the third bay accesses the second warehouse. The roof cantilevers here too but the roof poles are not exposed. There are amusing brackets. To the rear are five shop units facing onto Road 1123. However, there is a level difference of just over 1 metre. Floor level is constant (that is, dug into the slope), and so the shop floor is carried on short columns. The space underneath is used for storage.

(c) Shops, Road 1123: (See fig. 8.10 and 8.11)

This is on the site north of the bin Khatir Mosque. There are five units with one bay for a main door and for the staircase to the rooms above. Each unit has a four-leaf panelled folding door. Above each is a trefoil moulding (the whole door width). This simple device lends a grand scale to an otherwise commonplace elevation. The main door is recessed with a rectangular frame also containing a trefoil. The first floor is in the "Arcade Style". There are fifteen bays with round heads. Below this is either a window at floor level or a room badgir. There is a rhythm of windows (W) and badgirs (B), namely three groups of (B W B W B) but this is completely unrelated to the rhythm of the bays at ground level. There are clusters of floor poles projecting at ceiling level, from which canopies would be slung (in the past) across the street.

(d) Shops and Khan, Road 1123: (See fig. 8.12 and 8.13)

This occupies the site south of the bin Khatir Mosque, and can be seen clearly from Road 1128 (partly because it is on rising ground). Undoubtedly the finest khans are this one and the Tijjar Road Khan described below. There are three very tall units with void above the folding doors. The central bay has a semicircular arch recessed into a rectangular frame. It looks as if it was modified later (in order to insert a wider door below?). The piers were apparently made narrower for this purpose). The height is due to storage mezzanines over the rear half of each unit. Floor construction cantilevers about a metre over the road (doubtless to support street canopies). The first floor khan has six bays

with piers and a tie beam expressed. There are tall windows with fanlights, and a tall cornice with a row of merlons. Internally there are trefoil incised panels and a horizontal groove over the windows. Access to the khan is from the side street (No. 1120). A narrow stair leads to a roof terrace at the rear of the apartment. This terrace links onto the terrace system of the house behind. It is clear that this khan and shops were built by the same family (Al bin Khatir), and perhaps the khan was serviced from the house.

(e) Shops and Apartment, Road 1129 (South Site) (See fig. 8.13 and 8.14)

This is an example of the "Colonnade Style" with three apartments at first floor, with two side liwans between them and a five-bay front liwan overlooking the street. It was built by the Mattar family in about 1927 and set aside for the Balliose on his weekly visits (21). It fronts the Airport Road constructed at the behest of the British shortly before, and was thus a waterfront building until the 1950s.

The corner columns are square. The four intermediate columns are round; they have square capitals which are flush with the cornice and similarly flush square bases. There is farsh coping and a sun screen (of lath and plaster) in each bay. Columns have mangrove bracing poles about half way up. Each khan apartment is 3 x 5 bays. Tall windows have fanlights and plain panels above the tie-beam. The liwan end beams have fine brackets. Access is by an external staircase accessed from the sidé street. There was a ground level colonnade, but this was incorporated into the units.

(f) Shops and Apartment, Road 1129 (North Site): (See fig. 8.15)

This building is on the site immediately north of the scheme just described. The apartment was reserved by Mattar for the Advisor on his visits to Muharraq (22). Its form is very similar but it is almost a metre higher and two bays longer. Also there is a long liwan at the rear as well as that along the street frontage. There are four apartments - that is, three cross liwans. Access to the apartments is also by an external stair accessed from the side street.

The columns at first floor are octagonal, tapering at the top to a square section just below the capital. The bases are square and flush. The sun screens are timber boarded

frames and there is no separate bracing pole. The ground level colonnade has square columns and elaborate brackets in each bay.

The southern side elevation is also impressive. The liwan bays are left and right. The apartment has five tall windows with fanlights; piers and tie beams are expressed. There is also a balcony the full length of the apartment to a commonplace but pretty design. As usual, the timbers used are very slender, so that the effect is light and airy - contrasting nicely with the bold, strong structural expression behind it. The roof timbers and a cornice frieze are fretted. Between each post (below the rail) are little fretted brackets. The balcony ends have fretted arches. Unfortunately such a gossamer structure comes to grief easily and this - like most such in Muharrag - is falling to pieces.

(g) Hospital and Apartment, Road 1129: (See fig. 8.13)

Salman Mattar lived at the first floor for a time. Originally the ground floor was a hospital - the first in Muharrag. It was then converted to a social club. The masons for all three colonnaded buildings were Musa bin Hamed and Ahmed bin Thaif (23). This is very similar in concept to the last two schemes, and is also sited on the waterfront as established in the late 1920s. Unfortunately it has been extensively altered at ground level, but one can still appreciate the astonishingly tall round columns spreading out to a square below the capitals. There are two large apartments with a central cross liwan and also a peripheral liwan on four sides. The apartments have boarded ceilings with fretted ceiling decoration. The sun screens are timber boards with about a 500mm gap at the top; the top edge is delicately fretted which casts a lovely shadow. Undoubtedly this was the finest of the three waterfront khans. It is a great pity that only three were built before the traditional industry and culture disintegrated. One can only imagine what a noble sight a long avenue of colonnades stretching along the waterfront would have been.

(h) Windtower, Road 1125: (See figs. 6.11 and 8.16)

This is now a tea-house thronged all day by old men puffing on water pipes and sipping tea or coffee. Originally it was a shop (24). To the rear is a small (4 x 3m) extension with a mezzanine over. There is a four-leaf folding door with a splendid fanlight above. There

are radiating iron bars set in a semicircular timber frame (the inner edge fretted in trilobe decoration), which is itself set within a rectangular frame. Wall timbers project at the normal roof level to support a nib which is still partly used to carry a (very ramshackle) canopy over the street.

The tower itself is three bays square with one tie beam. Below the beam are five tier timber frames with iron bars. There are four other mangrove poles providing horizontal bracing between corners. The roof timbers of the adjacent extension carry through under the tower, and so one looks up through these poles into the tower space when sitting below. The diagonal cross-walls of the tower are extended down (to about 2.4m above floor level) in the form of a light boarded timber frame, with a decorated lower edge. This was added as an afterthought no doubt to bring the main breeze nearer the heads of the patrons. The drawing is in Chapter 6; (see fig. 6.11).

(i) Khan and Shops, Road 1339: (See fig. 8.17)

There are three units (3 bays deep) with iron-bar frames over four-leaf folding doors. A side stair leads in a straight flight to a small terrace above the rear bay. There are two apartments (side on to the road), with a liwan between them. The roof of an adjacent shop, now in ruins, was used as an extension for the purpose of sleeping and there is a ruined former privy on this terrace. The style is perpendicular in character with coping but there are no fanlights over the tall windows. Piers and a tie beam are expressed. The upper panels are plain. The primary piers (between shop bays) are 0.800m wide and the secondary piers at first floor (dividing the primary bay into three parts) are 0.300m wide. The elevation is very simple but beautifully structured in a cool, classical way.

(j) Shops and Amara, Tijjar Road and Lane 1551: (See figs. 8.18 to 8.21)

There are two schemes north and south of Lane 1551 (which itself connects Tijjar Road to the sea shore (as it then was). The southern scheme is the larger. It is known still as "Amara Ali Rashid Fakhroo". There is a central corridor connecting Tijjar Road to the old sea shore. There are fifteen bays, generally 2 storey. The East door bay (on Tijjar Road)

is carried up to clerestory level. The first bay is four shops facing onto Tijjar Road. One is used as the owners office (although this is just a ceremonial or social majlis since all trading has stopped and the place is becoming ruinous). The first four bays are store rooms with lockable doors. Then there is a big staircase to the storage rooms at first floor. On the north side the remaining bays are shops. The shops face outwards onto the lane. Between bay 9 and 10 is a narrow staircase leading to first floor from the lane. Bay 11 is now a Coffee House, but it is clear that originally it was an entrance to the Amara. The bay is carried up to clerestory height. The door has a large fanlight of iron bars with a void at clerestory level. Left of this entrance there is a first floor (where each bay has a window, framed by a rectangular panel either side). However, right of the entrance the shops are double height originally with mezzanines, but some alterations have occurred. Shops are raised above the road by two steps.

To the south of the central corridor is open warehousing. The last two south bays are fully enclosed, however, and the west door enters this room. It is worth observing that the shops have been much modified over the years at the rear. The structural framework is taken as fixed, and small short-life enclosures made within it. The warehousing and the corridor are both roofed by a clerestory roof which is about 0.800mm higher than the second floor roof.

The second development north of lane 1551 is identical in general concept although the details are quite different. Shops face onto lane 1551. To the rear is a central corridor with clerestory roof and one bay of warehousing is next to that. The doorway onto the lane is still operational and there is a door to the former sea front. The interiors of the amarat are rather impressive, with rows of tall columns, and brilliant sunlight flooding down from the clerestoreys.

(k) Amara Yusuf Abdul Rahman Fakhroo: (See fig. 8.22)

This stands on the site immediately south of the Amara just described. It is typical in general form, but there are no shops. The entrance from Tijjar Road is down a short alley. There is a fanlight with iron bars over the door. Right of the alleyway are storerooms and

on the Tijjar Road frontage is a windtower above the former office. It is not a good specimen - very plain and squat - but it is the only windtower remaining in the suq apart from the example described above. There are 27 bays. The first 12 bays are enclosed stores. As a curio I append a copy of the deed signed by Sir Charles Belgrave - as "C. Dalrymple Belgrave", a well known affectation of his.

(1) Khan on Tijjar Road: (See fig 8.24)

This is above a small amara the name of which I did not discover. It is the best Khan in the suq. Dramatically it is built over the central corridor. It is three by five bays (in the "Smooth Style") end on to the road. Each bay has semicircular and rectangular incised panels above a tall window with fanlight. The same treatment occurs internally too. The stained glass fanlights have lobes between the spokes and then two arcs linked by short radials. Between the rectangular panels are incised volute decorations similar to those in the Seyadi majlis. There is even a boarded ceiling with a cove moulding and fretted frieze. The roof on either side of the apartment was covered by a light roof at one time. There are remains of columns. On the north side there are remains of an engaging little arcade - 3 bays of trefoil arches recessed into rectangular frames and resting on round columns with square capitals and tall square bases.

On the door of one shop is a carved panel giving the date (1345 A.H.)

4. Conclusion

This suq has a very orderly layout in spite of the intricacy in detailed design. In several respects it seems very modern. Of course, business methods have changed greatly and the old methods no longer work. One physical consequence is that fewer shops and larger shops are required and the integration of manufacture and sale is no longer so practical. Also, parking and servicing requirements have arisen which did not previously exist.

However, this suq does resemble a modern "Shopping Centre" in some ways. There are narrow, (partly) traffic-free streets lined with continuous shopping frontage on both sides. There was a form of environmental conditioning., There was a logical flow from delivery through storage to retailing. There was an informal method of allocating business type to particular places. This was not the modern practice exactly, of course, but regarding the broad principle, one can draw a parallel with letting of units in modern centres. Finally, there was a parallel to "Centre Management" in the family organisation of each trade (25). The significance of all this can best be understood if one compares such a suq to the modern shopping provision in Muharraq and the rest of Bahrain. Modern shops tend to be spread out in a fairly random manner. They often appear in inexplicably obscure locations, quite isolated from the wider spatial pattern. They are usually located intermittently on wide heavily trafficked streets. There is no logic to the location and mix of different trades.

In fact modern shopping is not very convenient at all.

It is interesting to observe how the rise of a planning-oriented government bureaucracy and a highly educated professional elite, operating on the basis of a scientific ideology, has paralleled the disintegration of commercial areas into relative chaos.

This suq differs from those which one finds studied in the literature in one basic respect. The town existed before this suq arose in its present form. For this reason, it is physically peripheral. By contrast, it is usually observed how a suq is one of the most

fundamental elements structuring the city (26). This is so because trade becomes fundamental to the existence of the city very early in its development. This was not, the case here: Muharraq was small and poor, and the establishment of the suq coincided with the end of Muharraq's economic growth. In addition, of course, it was pre-eminently a port. The coastline (acting as a barrier) guarantees the peripheral position of a coastal suq.

CHAPTER EIGHT: FOOTNOTES

- (1) As regards architectural studies, Turkey is an exception to this pessimistic rule. See, for example, CEZAR M. (1983) and GURHAN C. (1976). Also on Sana'a there is LEWCOCK R. (1983).
- (2) For the cities mentioned, see respectively Le TOURNEAU R. (1949) DOSTAL W. (1983) and GEERTZ C. (1979).
- (3) Such as TROIN J.F. (1975).
- (4) Such as CHALMETA P. (1980) or LEWIS B. (1937).
- (5) RUMAIHI M.G. (1976) contains a brief description on the Sulfa Court or Diving Court and other legal processes.
- (6) India Office Records contain many files on this topic. The Government Reports for the 1920s and 30s give interesting summaries. The British officials are very critical also of the Government reforms. They felt the new system (run by Belgrave) was incompetently administered even in the 1930s, and pressed repeatedly for a proper legislative code.
- (7) This information came from Abdul Wahed and Hamza Mohammed, confirmed by Ahmed al Jowder.
- (8) Eid Bokhammas told me this. On the other hand, some writers claim the captains, pearl merchants and landlords were dishonest exploiters of the poor. For instance, see HARRISON P. (1924) Chapter 4.
- (9) This was done successfully by Salman Mattar, (Yusuf and Mohammed Mattar told me this). RUMAIHI M.G. (1976) catalogues the history of lawlessness. The Sheikh's tended to prey upon the Shia quite brutally. See Chapter 2.

- (10) The points concerning lack of guilds and the family based occupations were told to me by several people: Eid Bokhammas, Hamza Mohammed, Yusuf Mattar.
- (11) Eid and Yusuf Bokhammas told me this (confirmed by Khalid Engineer and S.N. al Suweydi).
- (12) Told to me by Sultan Nasr al Suweydi, who was a Director of the Waqf Department.
- (13) This information was given to me by Yusuf Mattar.
- (14) This is confirmed by the Hon. East India Co. Marine Service Survey (Brucks and Rogers map) of 1825. Refer to Chapter 3 Section 3. The edge of the natural (i.e. original) land and the land reclaimed by phases from the sea is indicated now by topography: the sudden steep rise in the ground immediately east of Road 1125/Tijjar Avenue.
- (15) The details may be found in the 1926-35 Government Report (India Office Records Library). See also File R/15/2/6/19 (New Sea Road).
- (16) This account of the growth process is my own hypothesis to explain for the known facts (particularly the dating of buildings).
- (17) According to Eid Bokhammas and Abdul Wahed.
- (18) This line is shown on figure 8.1.
- (19) Eid Bokhammas gave me the information in this section. To be fair, the quantitative data are only estimates based on failing memory. The numbers of businesses of each type do seem to correspond to the allocated area and I was unable to find anyone else with Mr. Bokhammas' detailed recall, although several specific points were confirmed by Hamza Mohammed and Mohammed Mohsin. The owners of Amarat could be checked in the Land Deed Registry

but the records from this time are totally disorganised and it would be a big task (for which I did not have time).

(20) See India Office Records Library Government Report (1926-1935) and File R/15/2/852/35/8 (Municipal Improvements).

(21) According to Yusuf Mattar. (N.B. Balliose. was the local name for the Political Agent.)

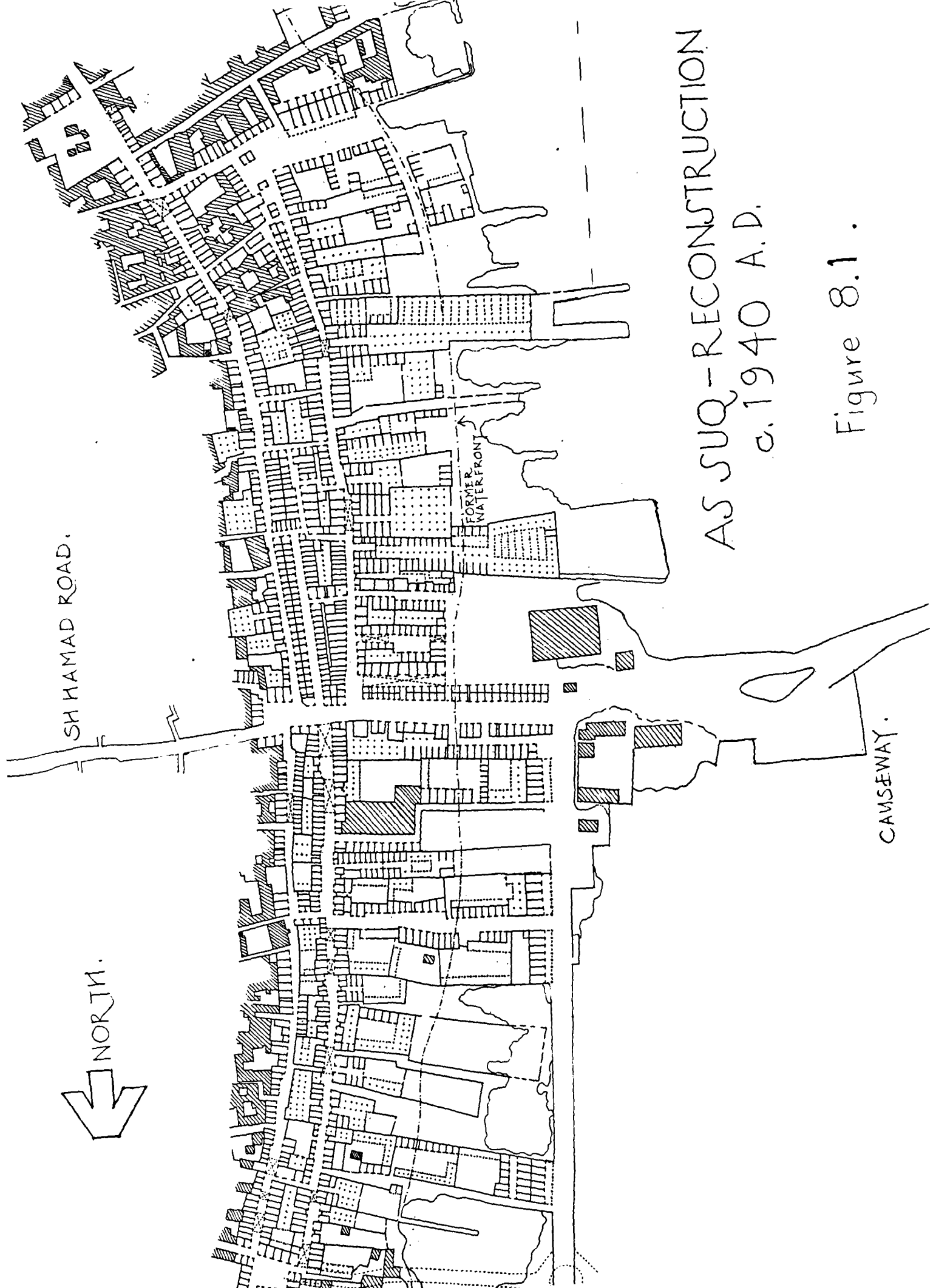
(22) According to Yusuf Mattar.

(23) Information from Yusuf and Mohammed Mattar. Musa and Ahmed also built the Salman Mattar and Ahmed Mattar Houses. Rashid Fakhroo told me that Musa built the Fakhroo House.

(24) According to Abdul Wahed. It was in this place that I was first privileged to meet him. He remembered it being built and estimated the date as 1925.

(25) I have not found any study on this comparison (between suq and western shopping centre). But see GEIST J.F. (1979) pages 40 to 46.

(26) A classic example of such a study is found in ARDALAN N. and BAKHTIAR L. (1973). This deals with Isfahan and treats the suq as the "primary movement system". See page 97.



NORTH.

SHAMAD ROAD.

FORMER WATERFRONT

CAUSEWAY.

AS SUQ - RECONSTRUCTION
c. 1940 A.D.

Figure 8.1.

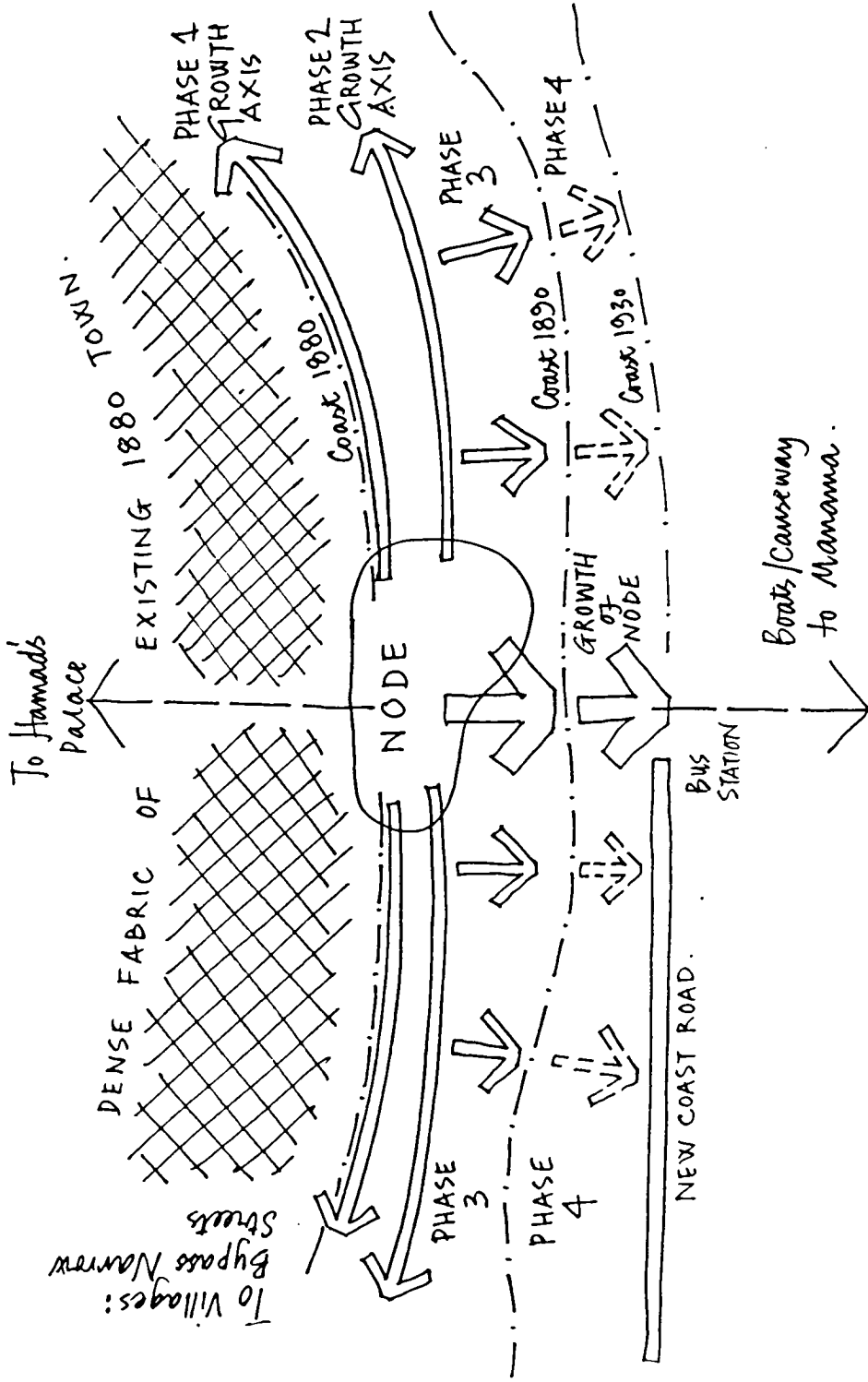
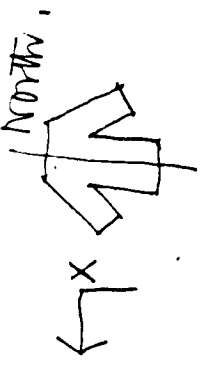
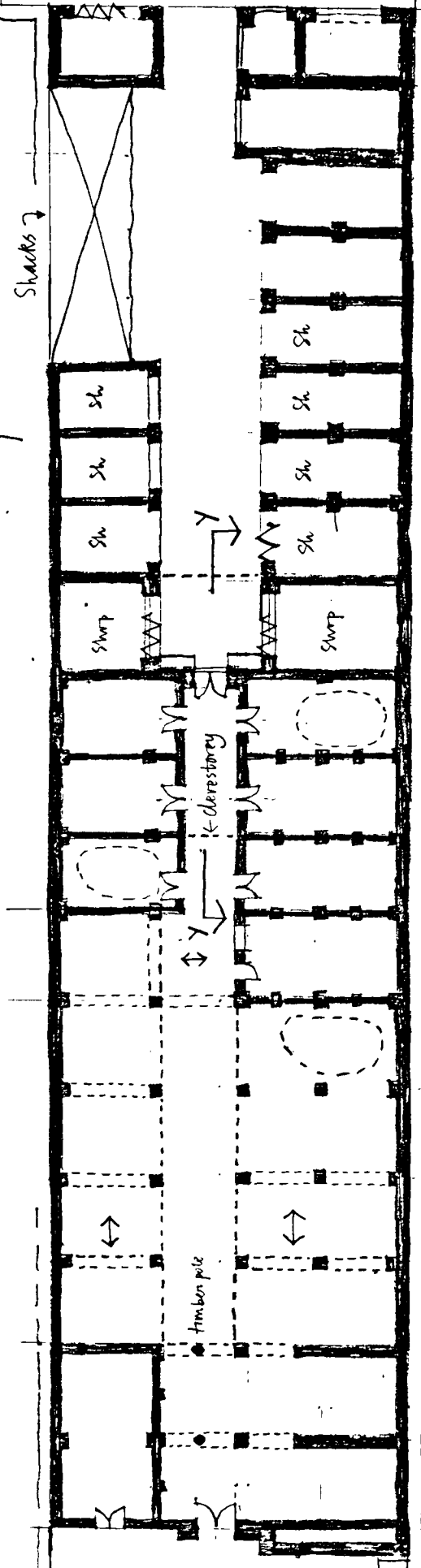


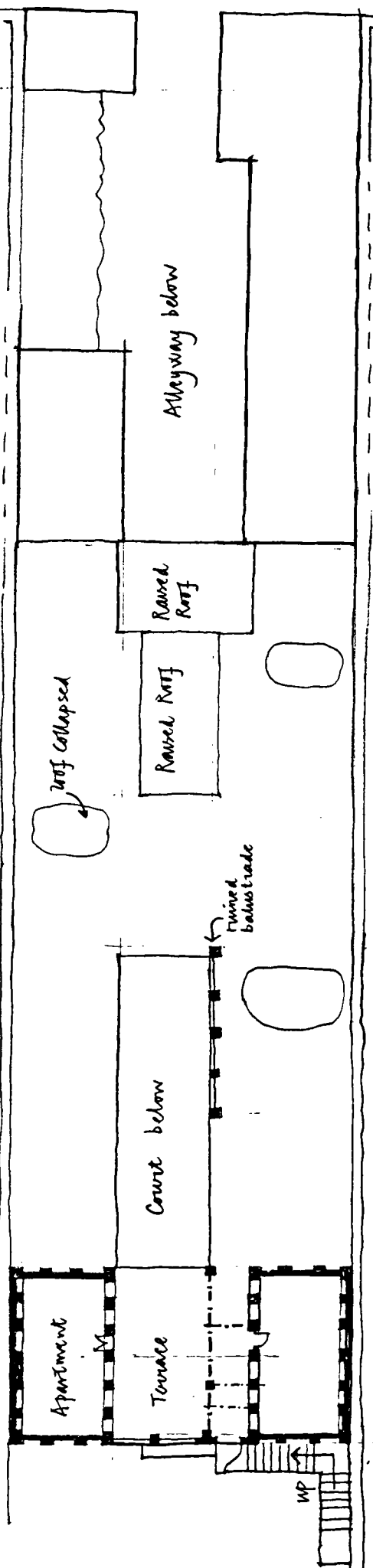
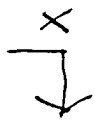
Fig 8.2
 SUQ GROWTH
 PROCESS
 DIAGRAM



Shacks



GROUND FLOOR PLAN



WAREHOUSE.
(AMARA MATTAR.)

FIRST FLOOR PLAN.

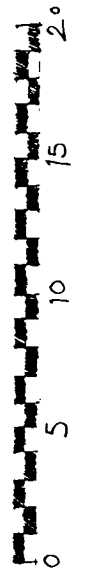
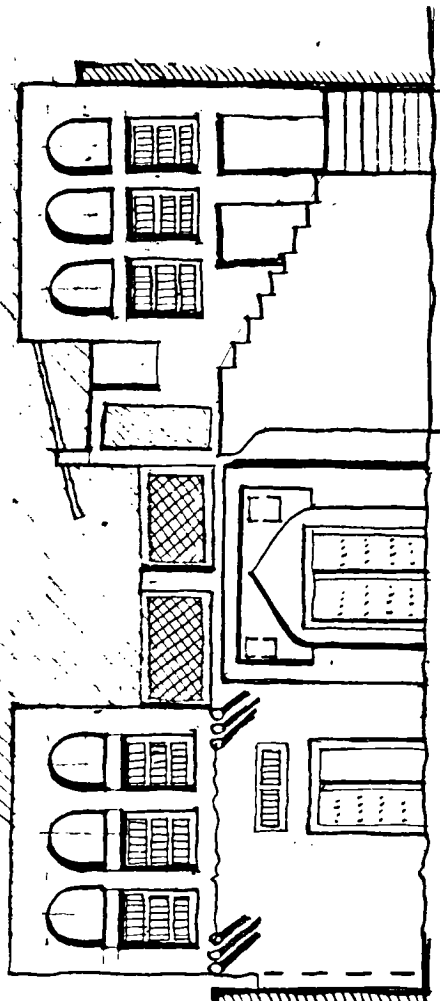
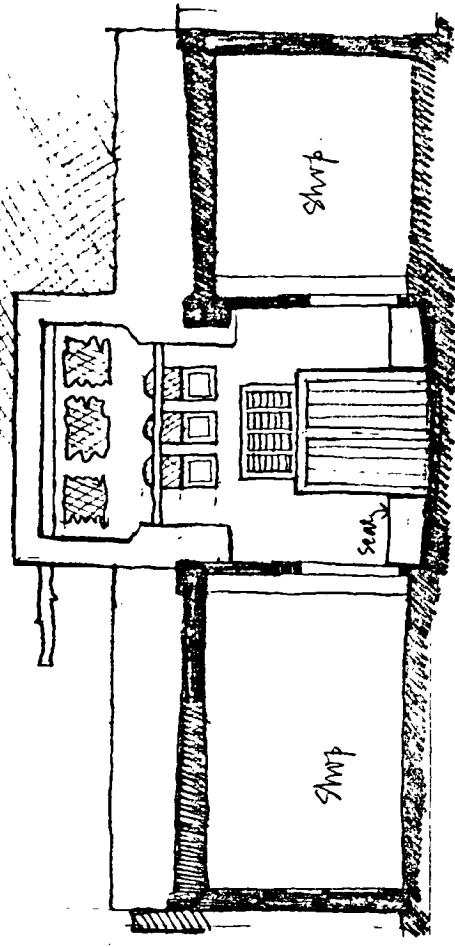


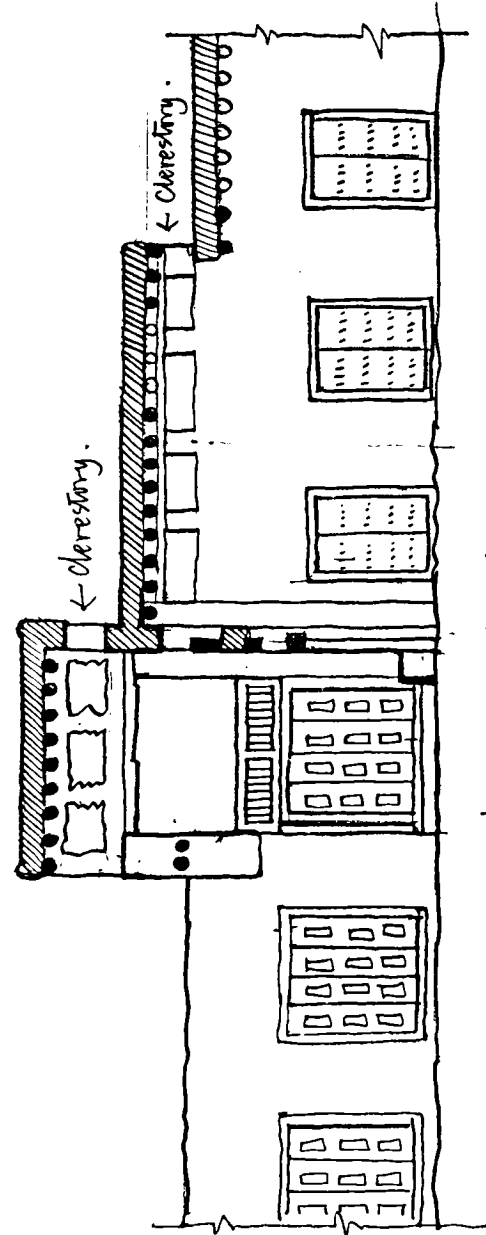
Figure 8.6.



WEST ELEVATION



SECTION X-X



SECTION Y-Y

WAREHOUSE +
APARTMENTS
BETWEEN ROADS 1125 & 1129

0 1 2 3 4 5 metres.

Figure 8.7.

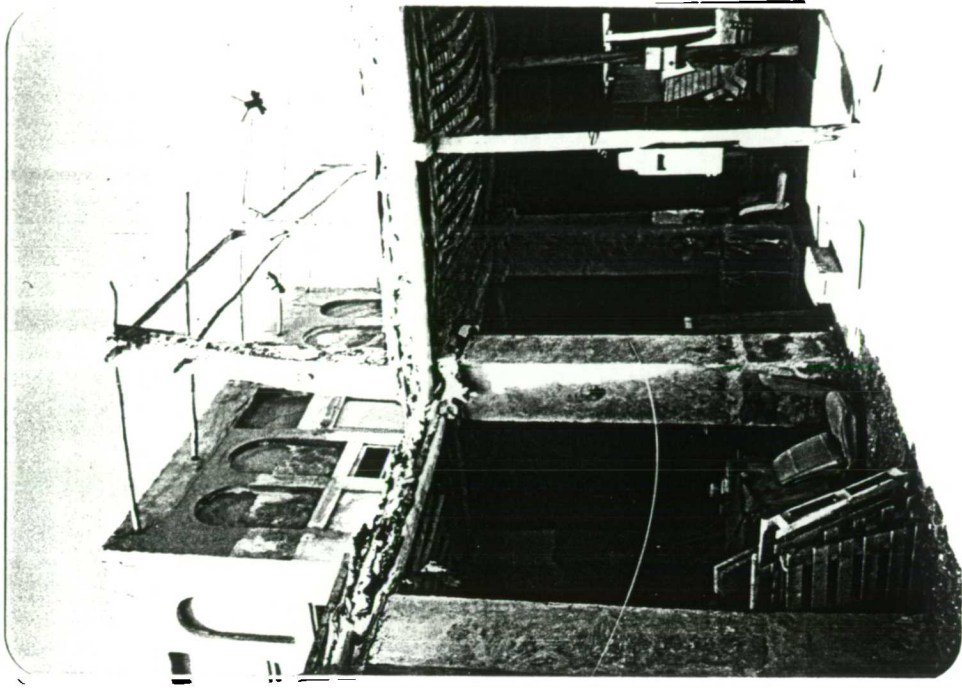


Fig. 8.8(B) Amara Mattar: detail of the southern khan (at first floor) seen from the courtyard.

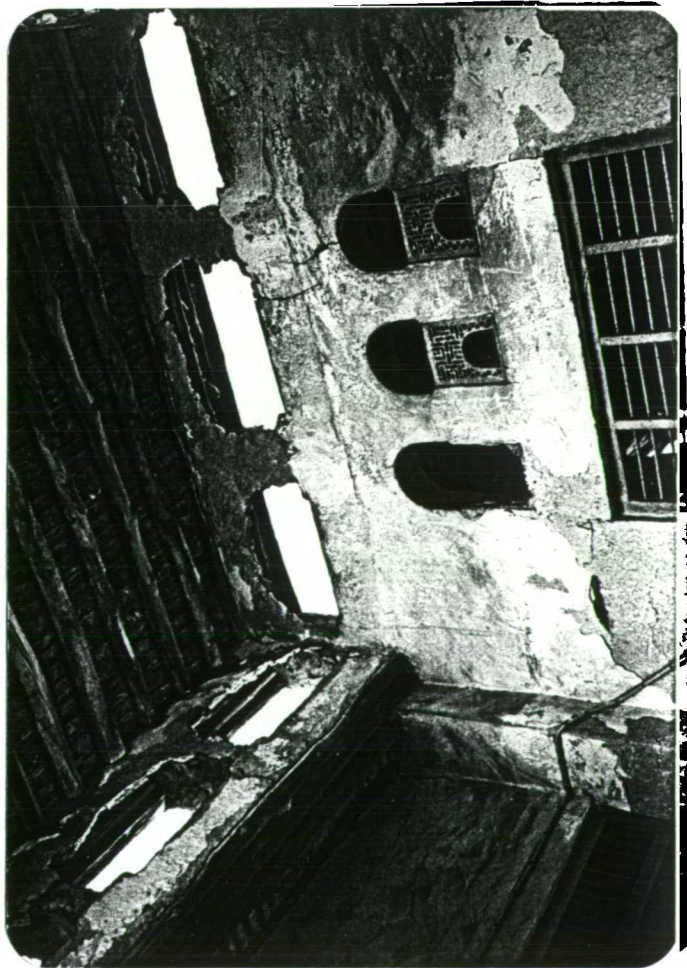


Fig. 8.8(A) Amara Mattar: detail of the roof of the porch at the eastern end.

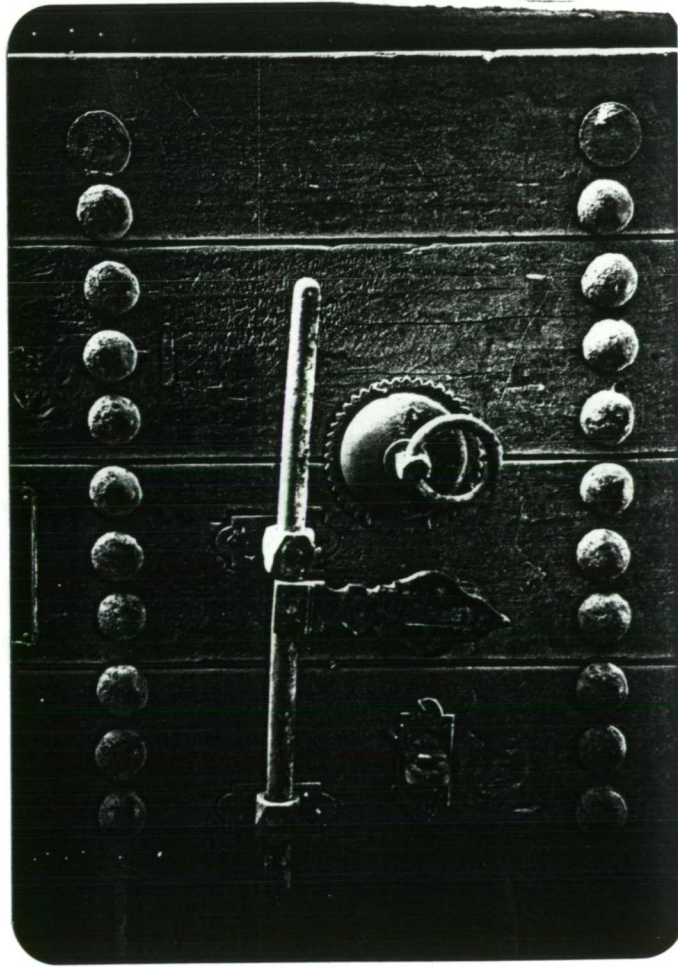
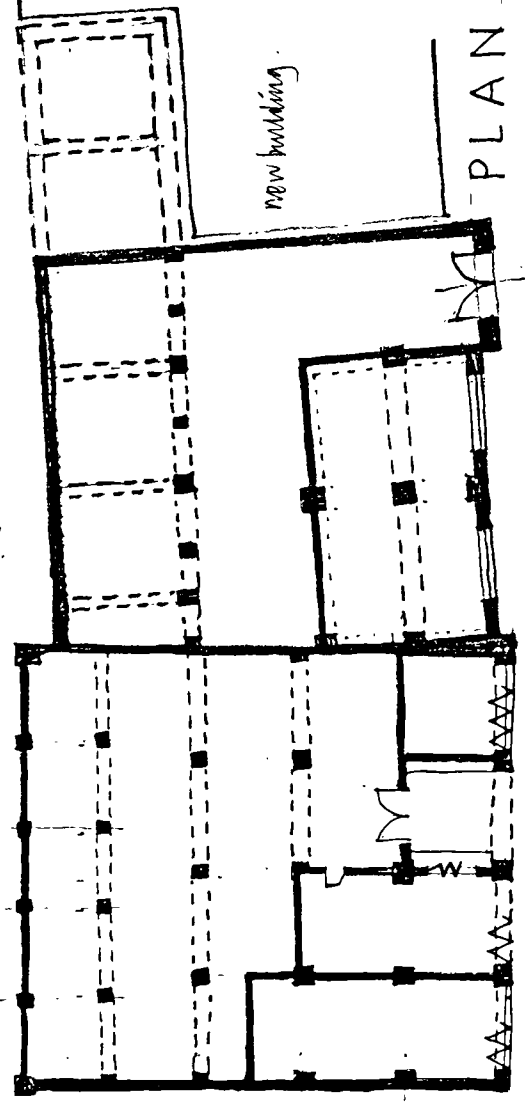


Fig. 8.8(C) Amara Mattar: detail of brass bolt
on door at east end.

Road 1123



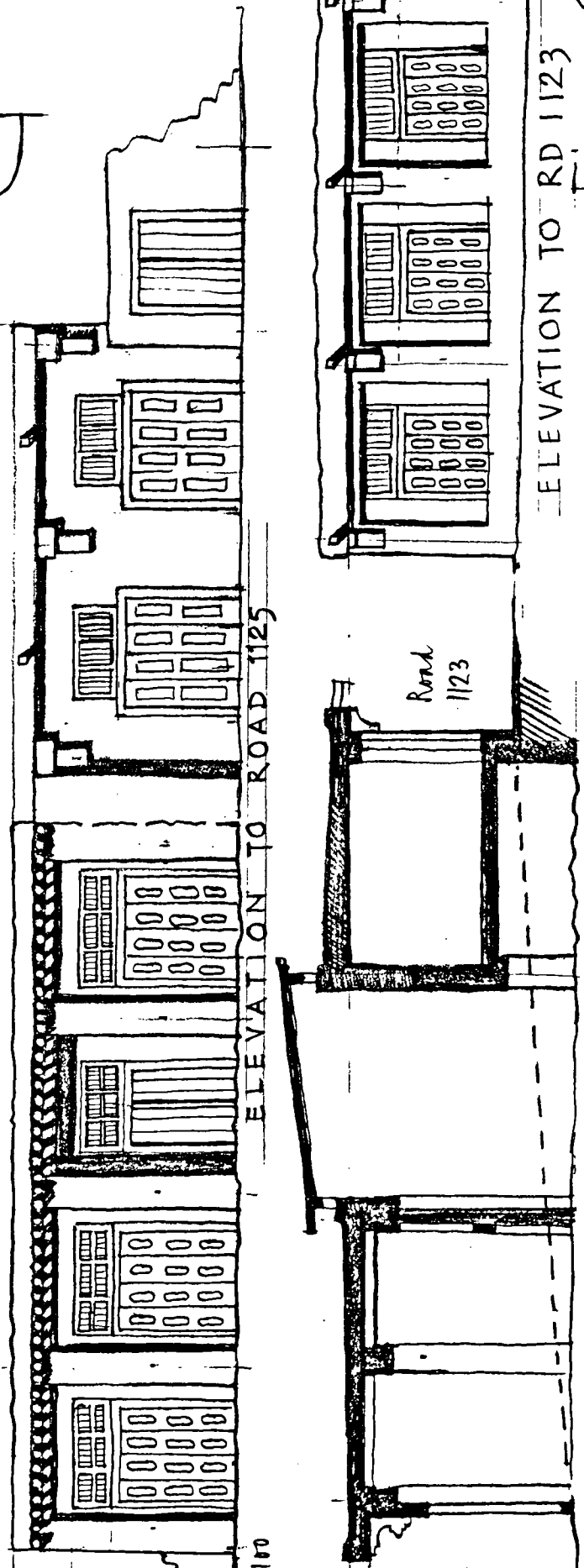
new building

PLAN

Road 1125

WORKSHOPS - RD 1125

1/200



ELEVATION TO ROAD 1125

ELEVATION TO RD 1123

CROSS-SECTION

1/100

Road 1125

BRACK #1

Figure 8.9.

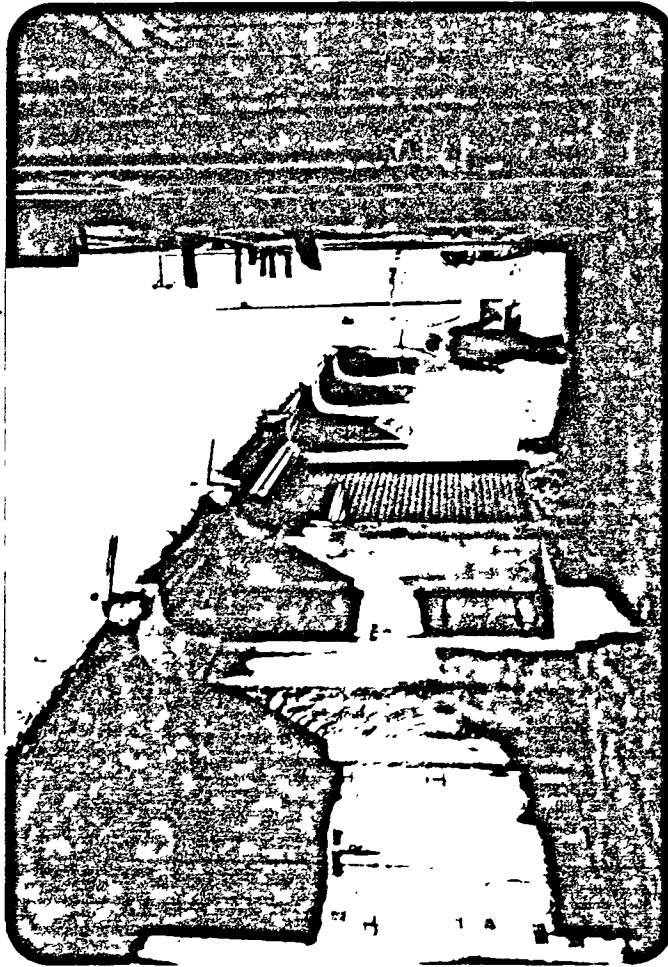
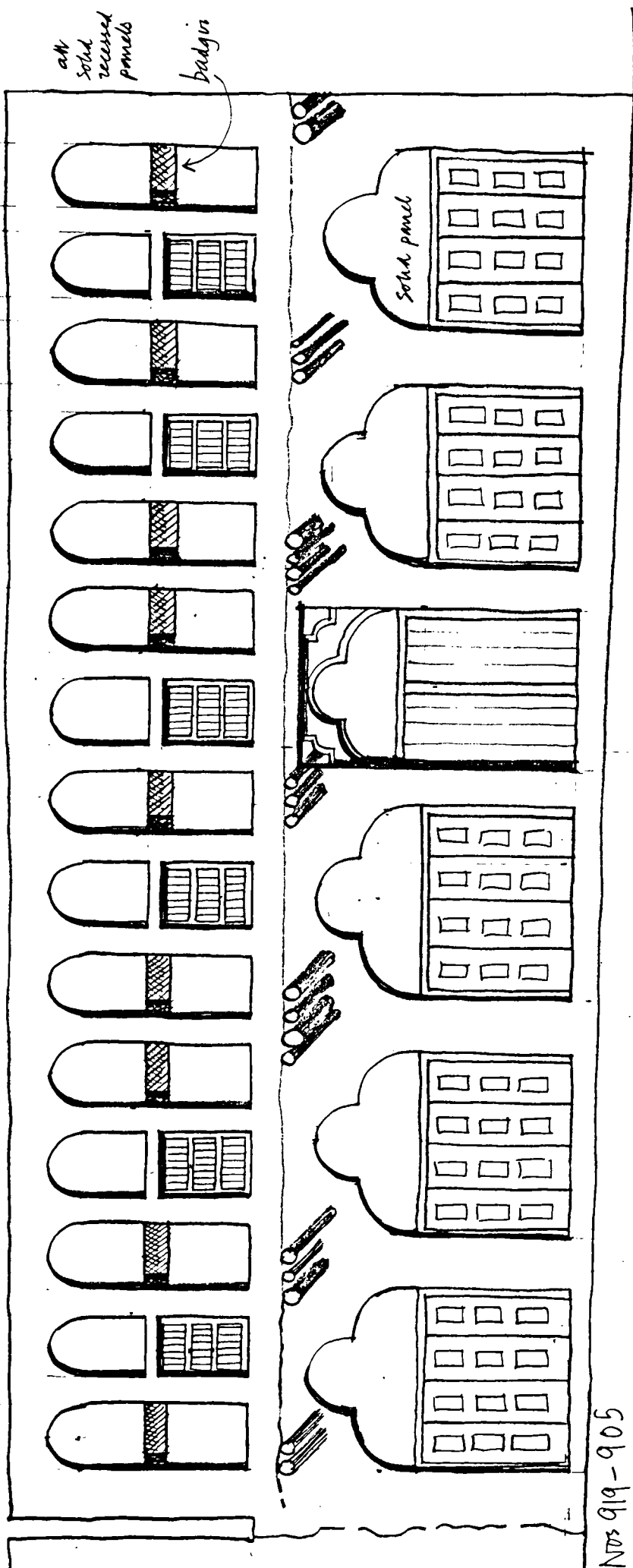


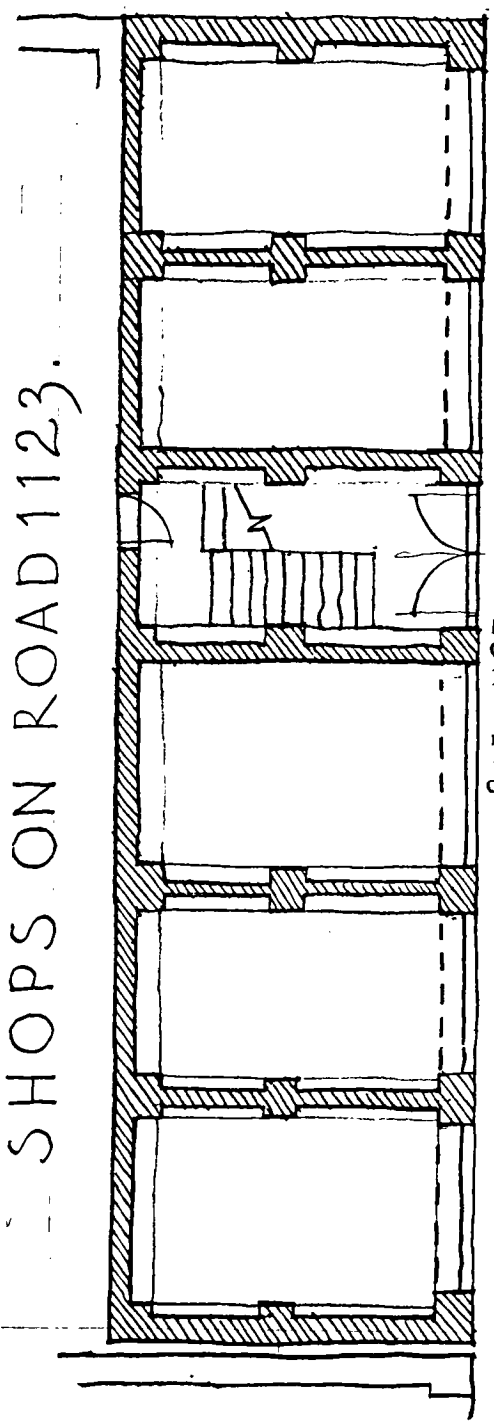
Fig. 8.10(A) Workshop shop accomodation between Rd. 1125 and Rd. 1123: View of shop units seen from Road 1123.

Fig. 8.10(B) View of Shops on Rd. 1123.



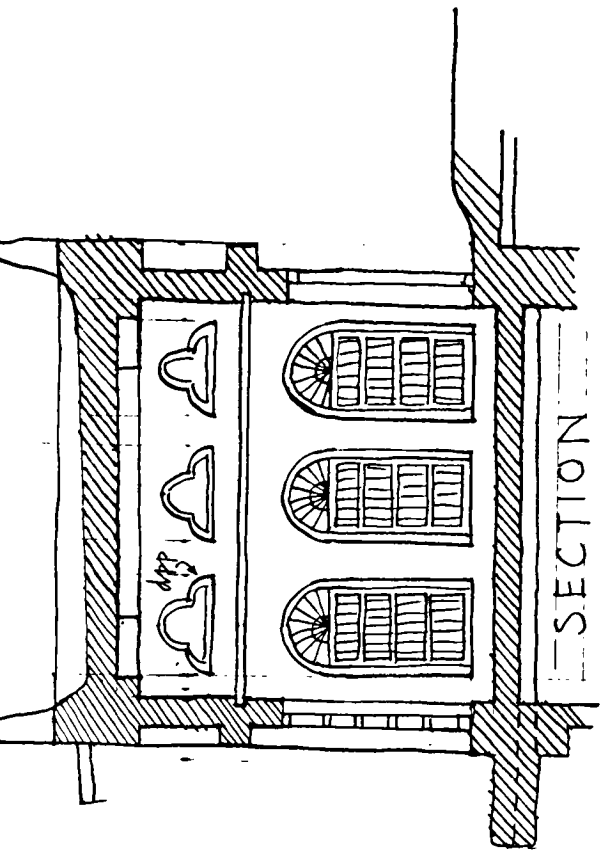
Nos 919-905

SHOPS ON ROAD 1123.

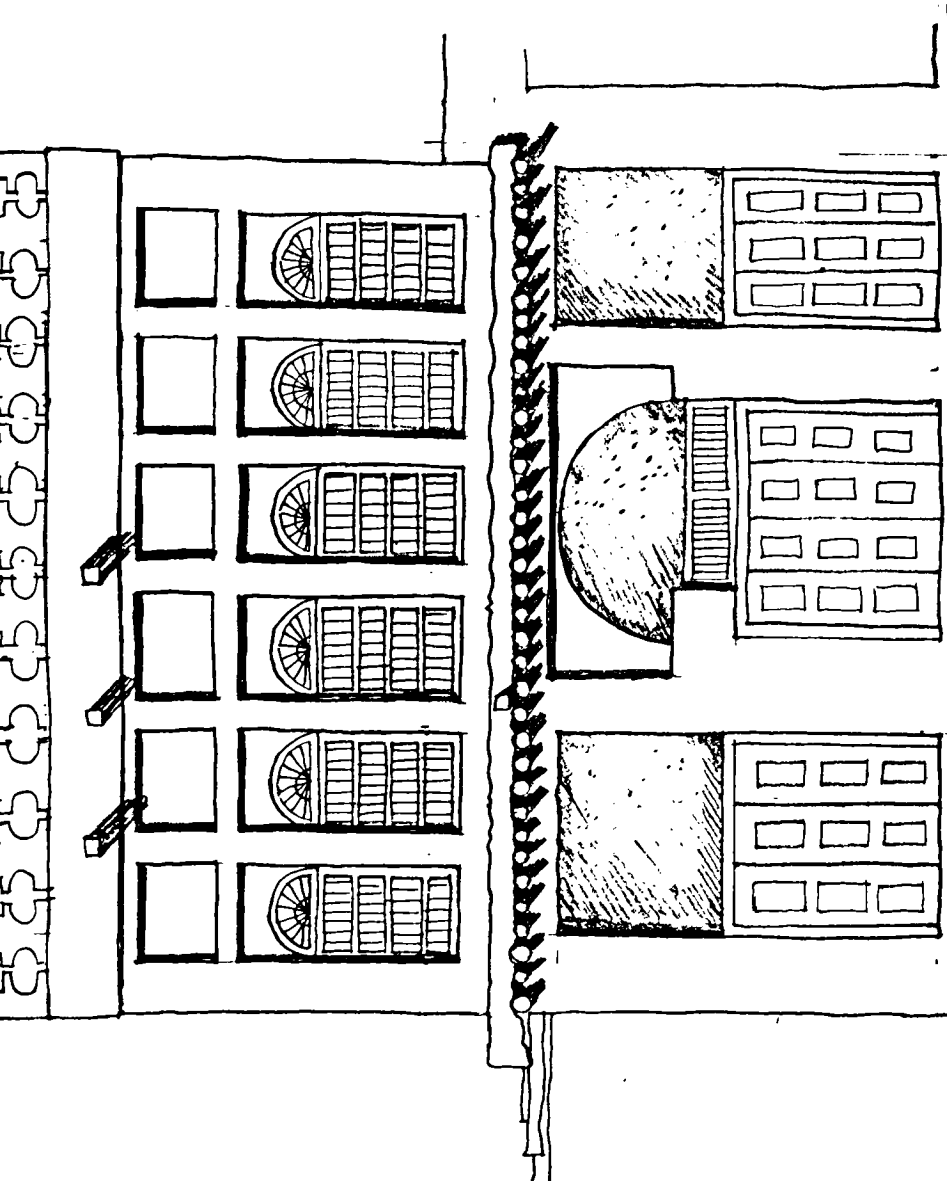


ROAD 1123

Figure 8.11.



SECTION

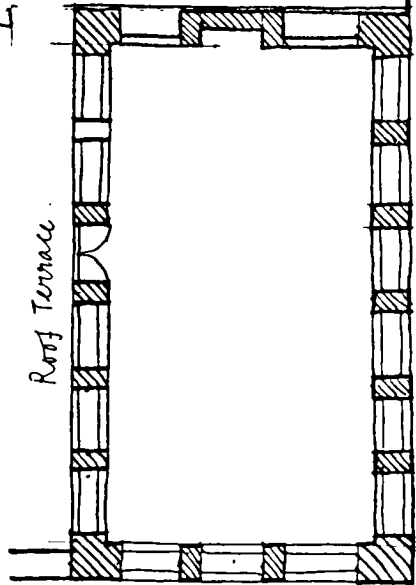


ELEVATION

SHOPS &
APARTMENT ON
ROAD 1123.

Road 1120

SCALE (metres)



PLAN AT 1ST FLOOR

PLAN AT GROUND FL

Figure 8.12.

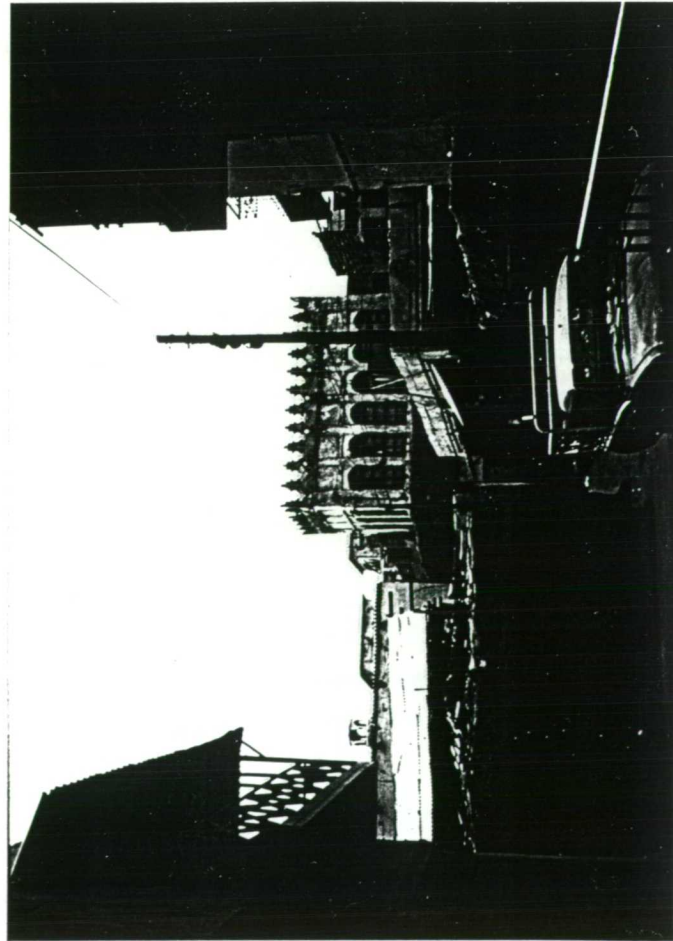


Fig. 8.13(A) Bin Khatir Shop and Khan viewed from Road 1128.

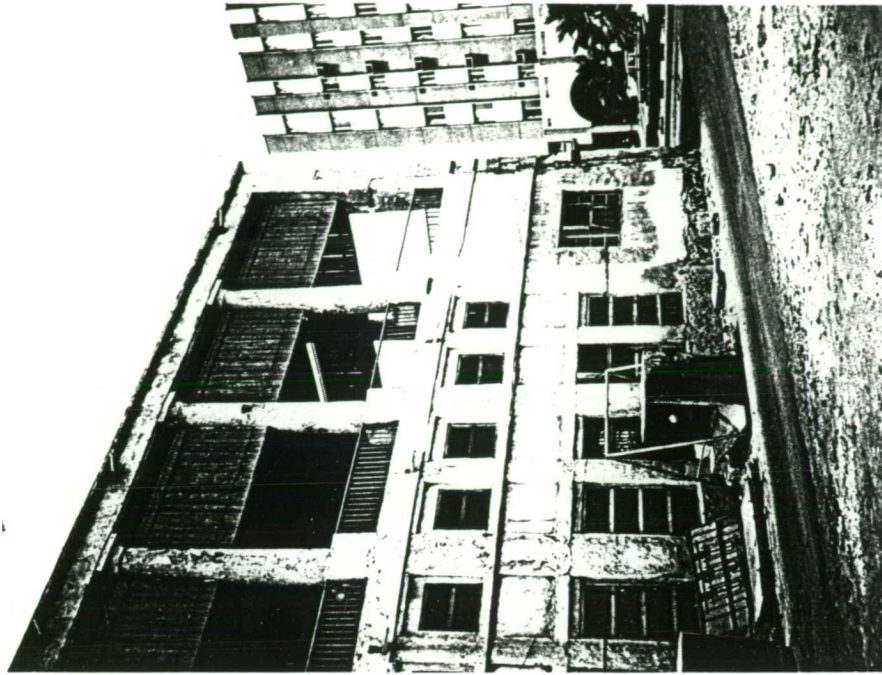
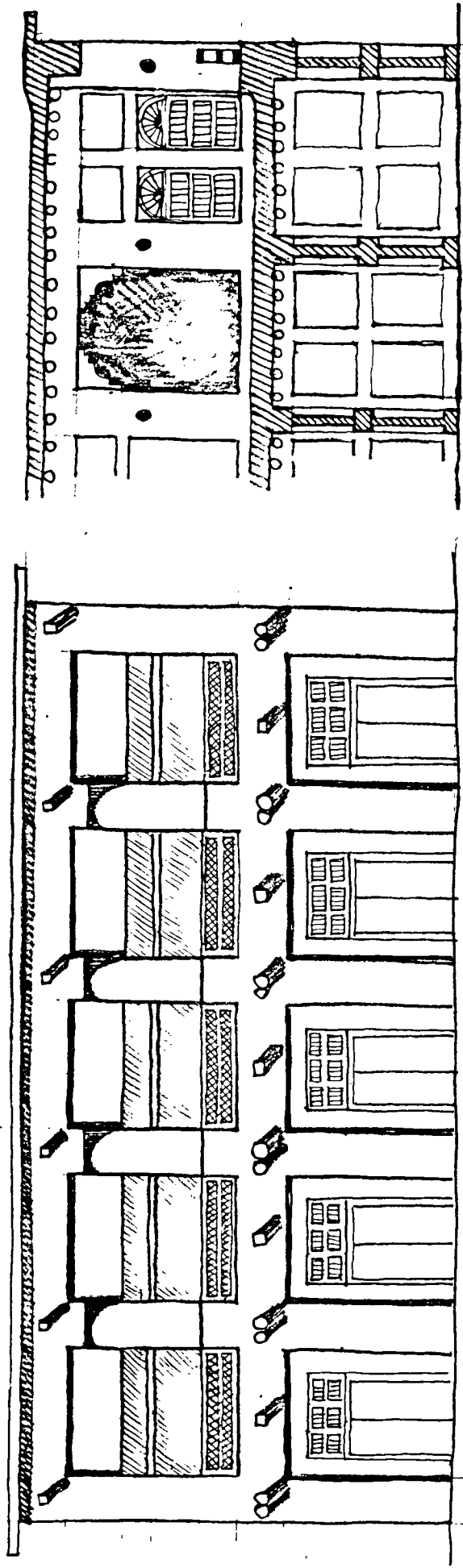
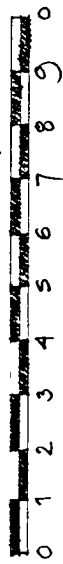


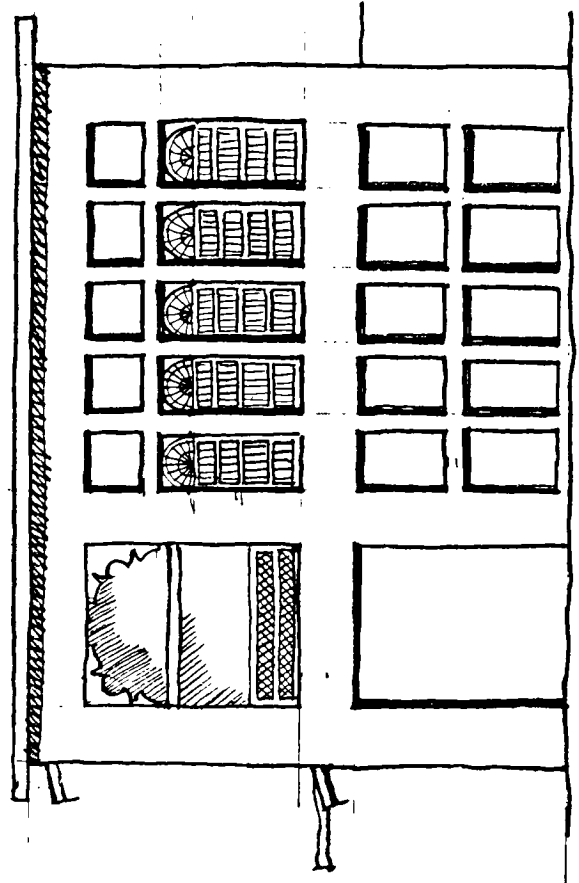
Fig. 8.13(B) Mattar Apartment and former hospital below. The lower storey has been greatly modified.



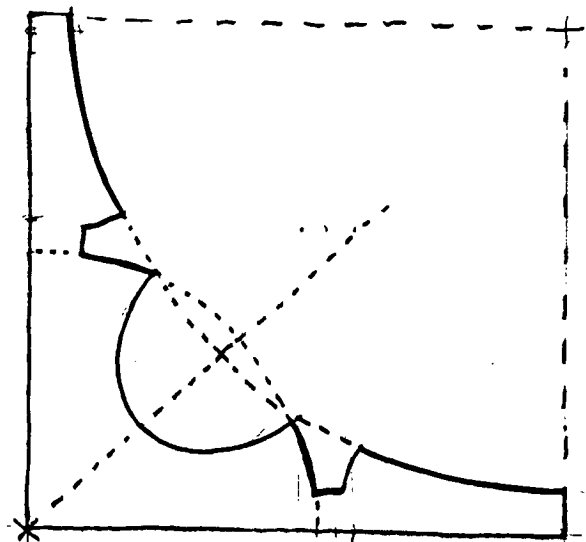
WEST ELEVATION.



SECTION (LONGITUDINAL)



SOUTH ELEVATION



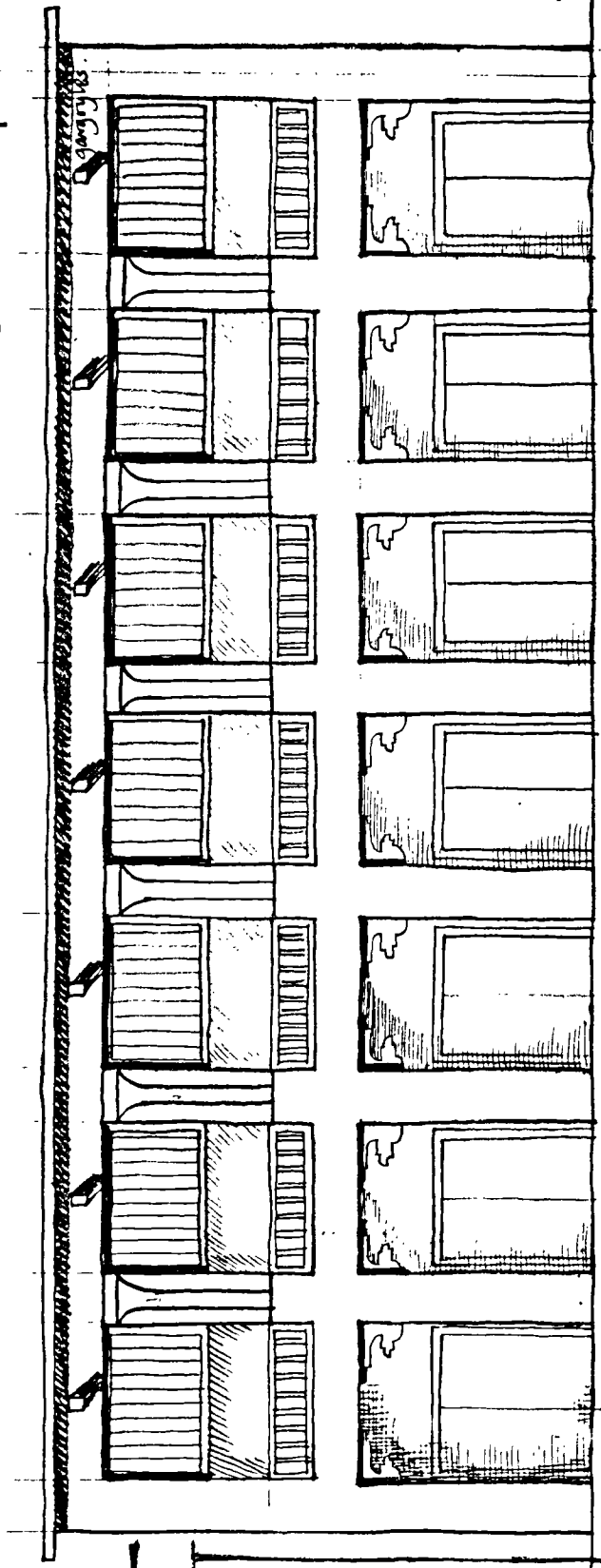
BRACKET.

WATERFRONT
WORKSHOPS +
APARTMENT

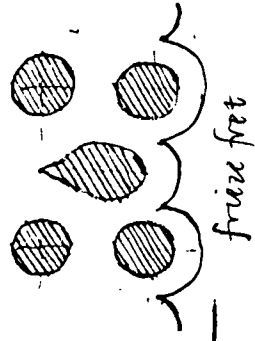
Figure 8.14

WATERFRONT WORKSHOPS + APARTMENT.

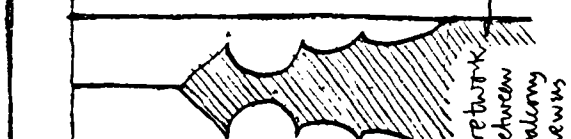
Roof fret.



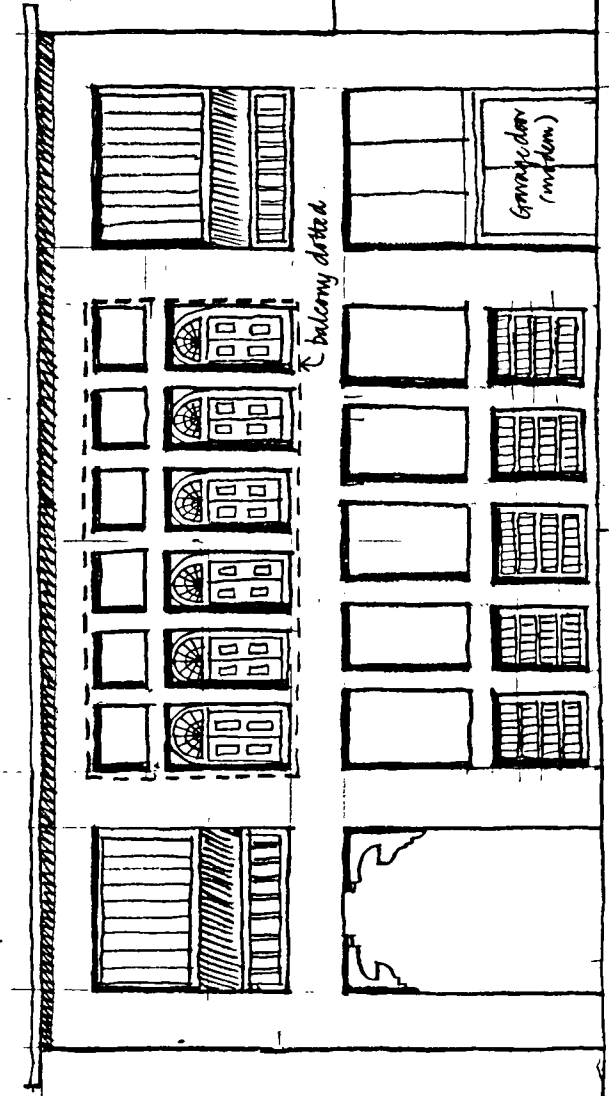
WEST ELEVATION



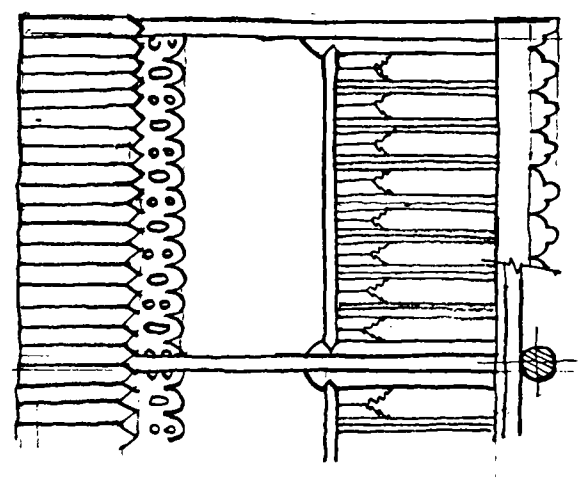
fret fret



return
between
balcony
eaves



SOUTH ELEVATION



BALCONY
SIDE ELEVATION.

Granular
(material)

balcony detail

Figure 8.15

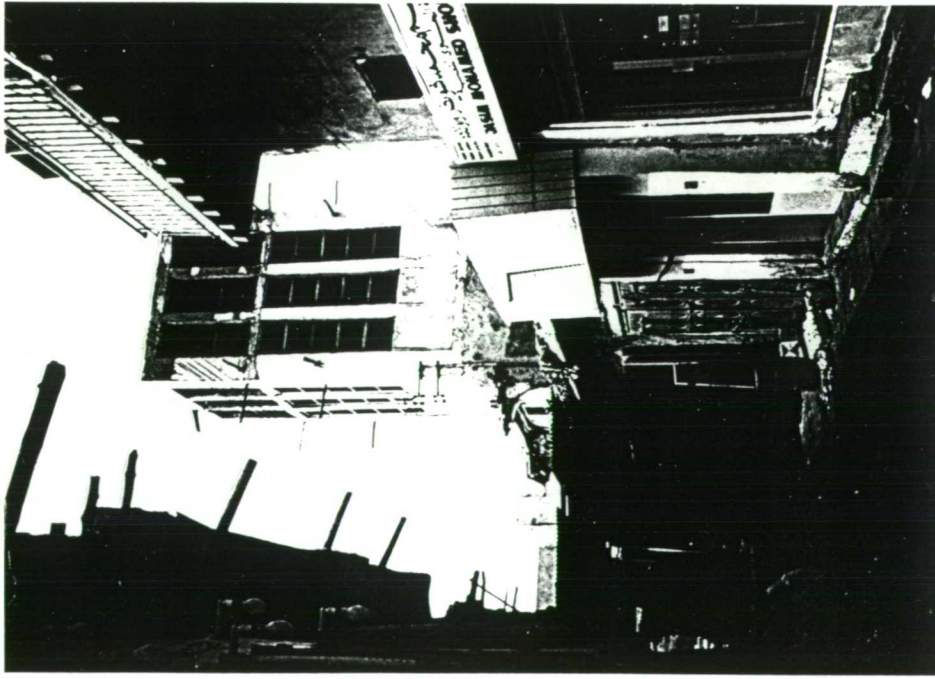
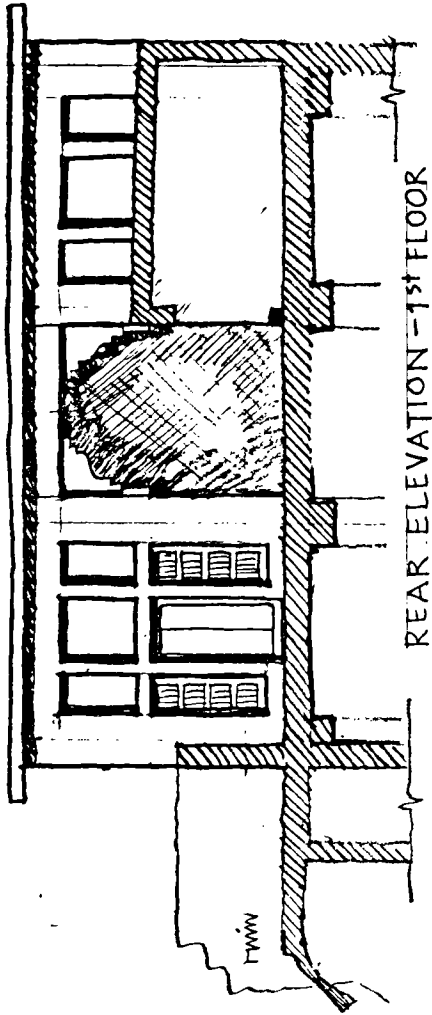
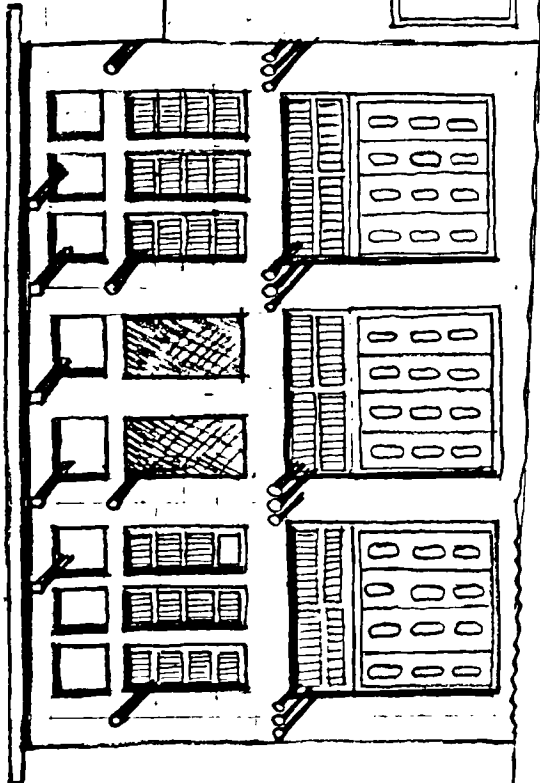
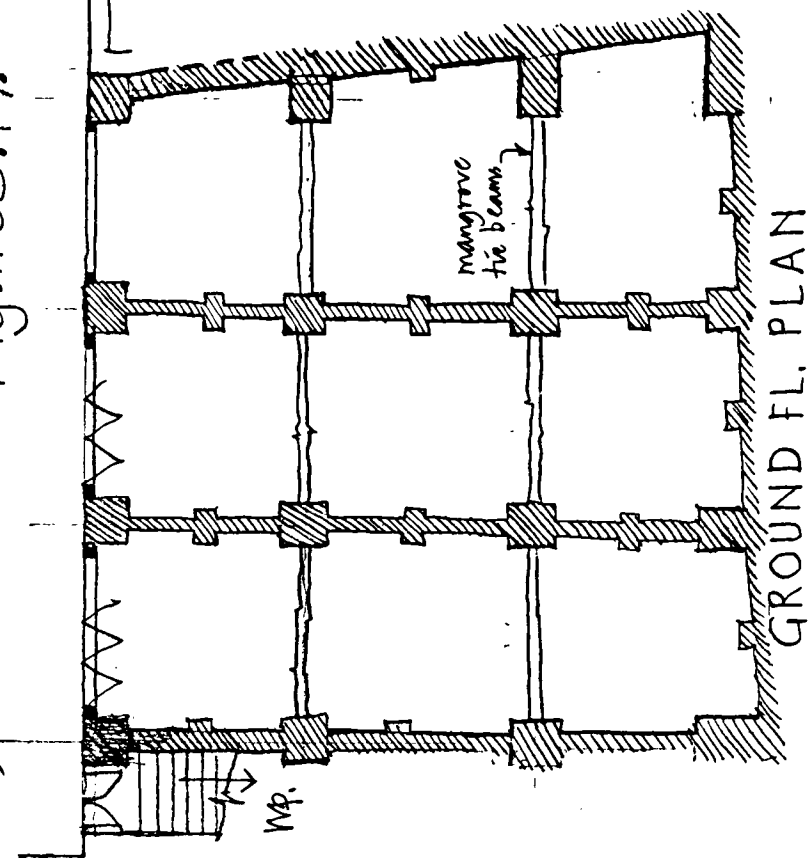
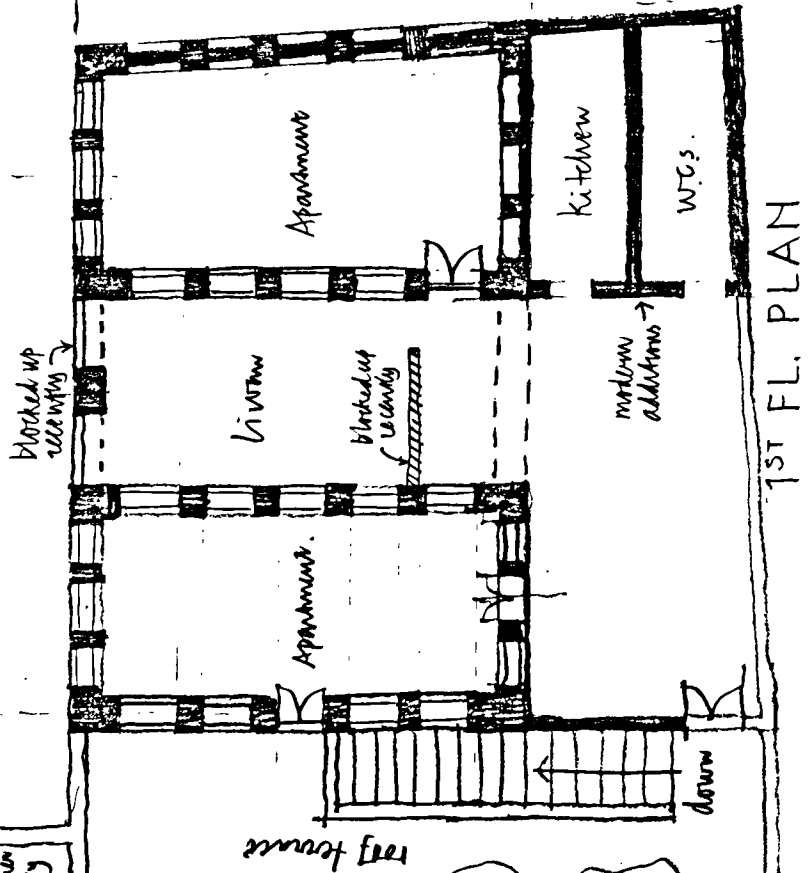


Fig. 8.16 Windtower on Road 1125.



WORKSHOPS - ROAD 1339.

Figure 8.17.



1ST FL. PLAN

GROUND FL. PLAN

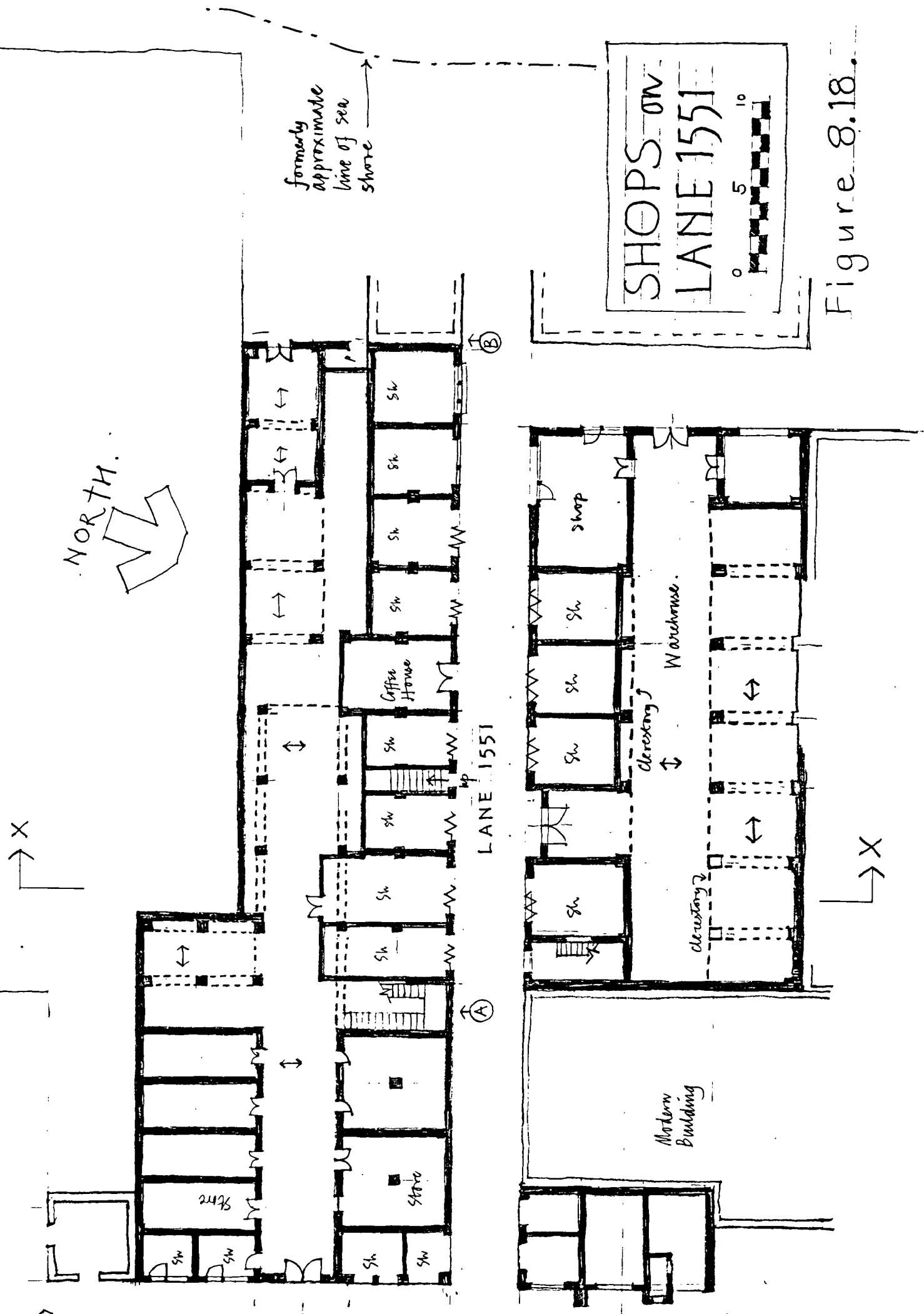
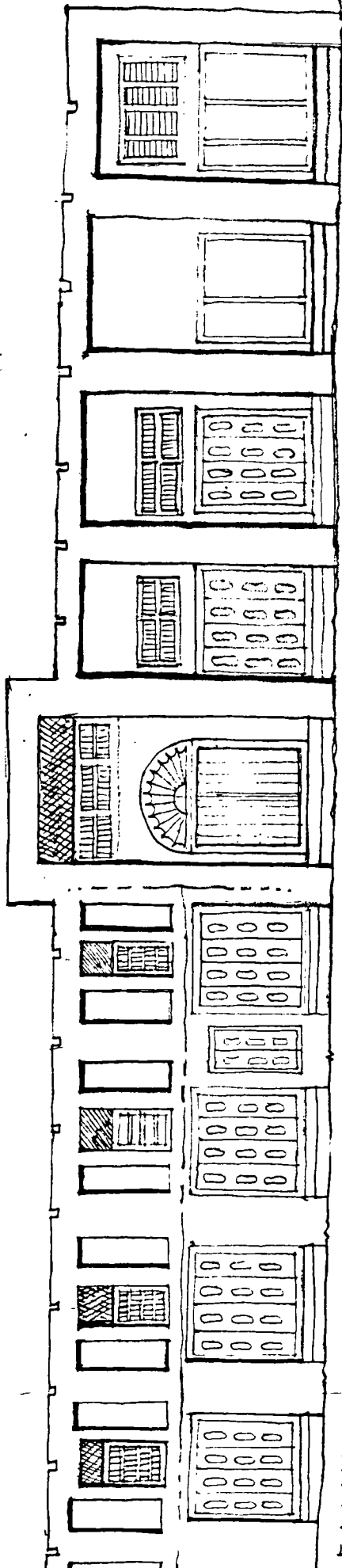


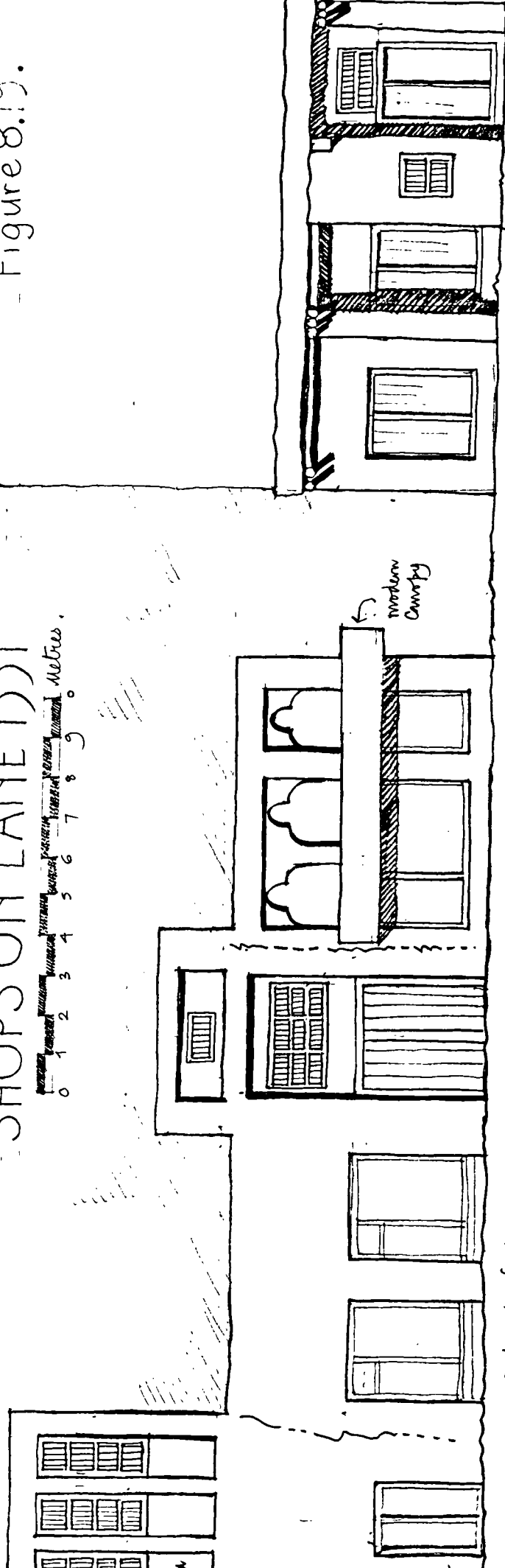
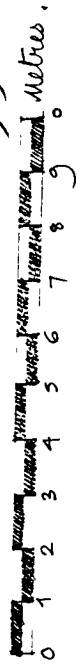
Figure 8.18.



ELEVATION A - B

SHOPS ON LANE 1551

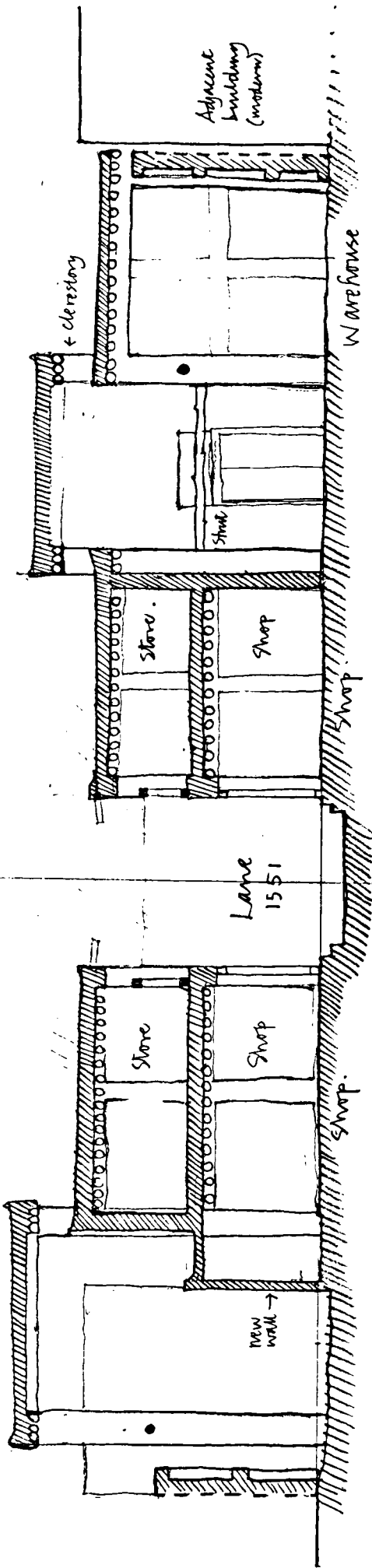
Figure 8.19.



ELEVATION C - D

modern canopy

modern shop fronts



SECTION X-X



SHOPS ON LANE 1551

Figure 8.20

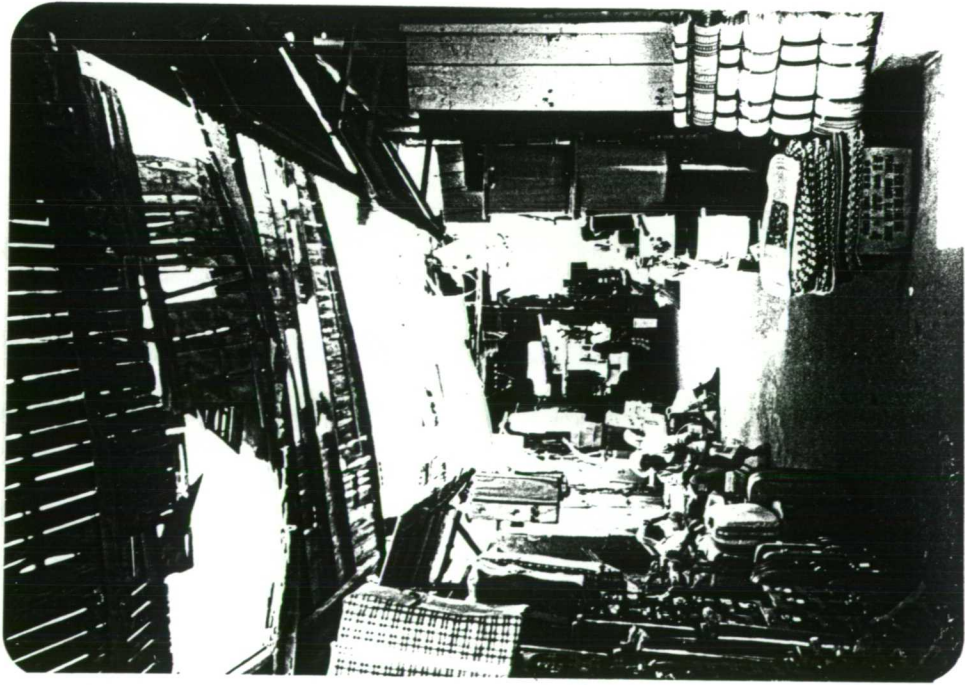


Fig. 8.21 Lane 1551: this is a typical street in the suq these days. The traders crowd their wares into the street. The canopy above is composed of odds and ends of timber and fabric.

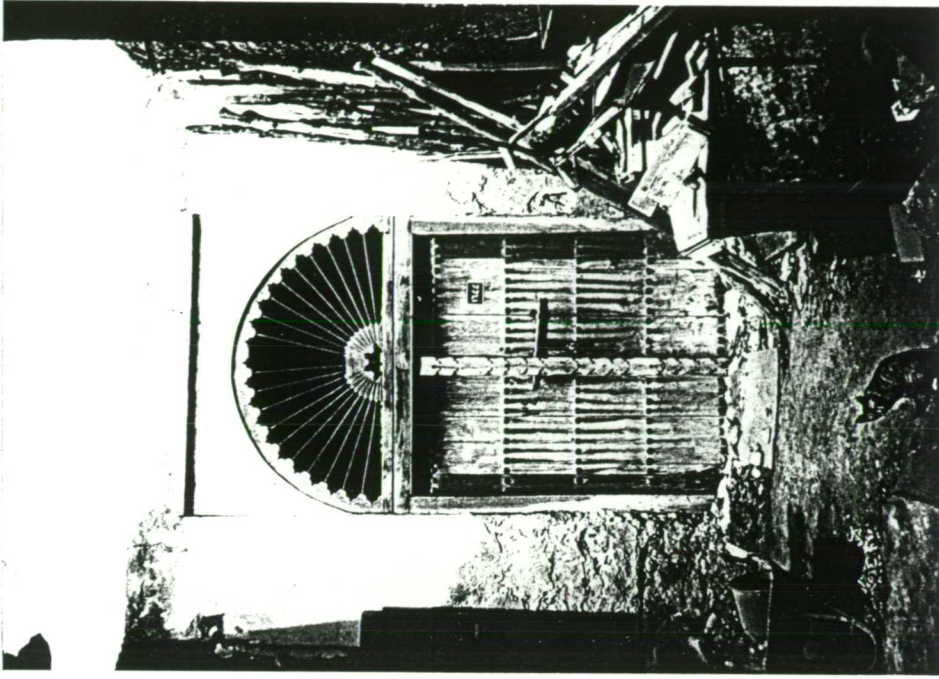


Fig. 8.22(B) Amara Yusuf Fakhroo. Main eastern door, showing a very typical fanlight incorporating iron rods.

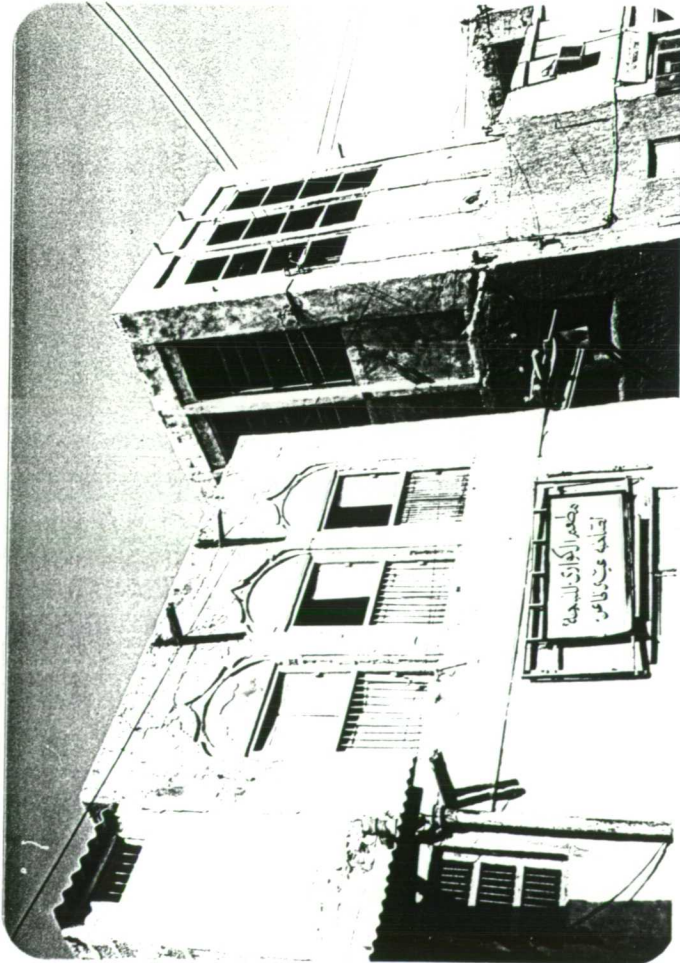


Fig. 8.22(A) Amara Yusuf Fakhroo. Windtower and khan on Tijjar Road. The approach to the main door is between them.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
حكومة البحرين



العدد سنة الف والستون وتسع وأربعين الطابع

لقد تجلت على أذكري هذه واجد عبد بن خليفة كرايم
الحاكم شرعي برشوبان سنة الف والستون وتسع وأربعين

من حكومة البحرين . بي دي بگريف
C. Dalrymple, Bahrain

وجرد الورقة . هوان الحاج يوسف بن عبد الرحمن قرو طام من حكومة البحرين فاعلمه تسبيل العمارة مع
قطعة الأرض التي تليها من الغرب . الكائن موقعا في طريق . الذي يوجد بها من أسوار عمارة ذلك الشيخ
عبد الرحمن بن عبد الصالح خليفة وأرض ذلك الشيخ محمد بن الشيخ عيسى بن خليفة والبحر ومن الغرب البحر ومن الجنوب
البحر وعمارة ورثة عيسى وبهاكم بياديه ومن الشرق الطريق النافذ . وهما ممتد ما مسورة بخارطة للورقة
يظهر هذه الورقة بما اشتملت عليه الخارطة . وبناء على طلب المارة توارثت الإطباوع أعلنت بذلك مدة
بداية شهر ومن بعد شهرها . المدة المذكورة تقدر بغير أية إحصاءات المارة الموصلة لعمارة المارة باسم فارسية
واعطيه هذه الورقة الملكية نظرا لانه قد ورد في تاريخه وهو المارة في سنة ١١٩٥
لما كان كرايم والذين لا يثبتون من كرايم في سنة ١١٩٥ . والذين يثابروا والتبع والذين
خارطة لعمارة مع قطعة الأرض التي تليها من الغرب الكائن موقعا في طريق الذين هما ملك الحاج عيسى بن عبد الرحمن كرايم
المستعيرين بالبحر . ميثاقه عيني في واحد في ..

عبد بن خليفة

عبد بن خليفة

من حكومة البحرين
C. Dalrymple, Bahrain

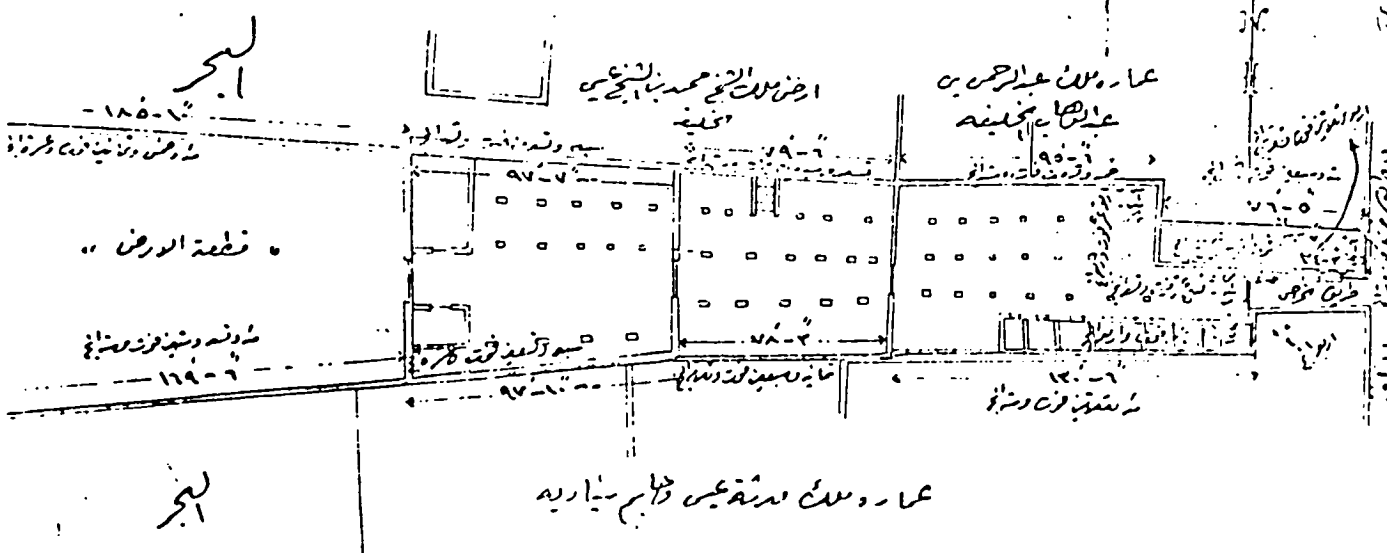
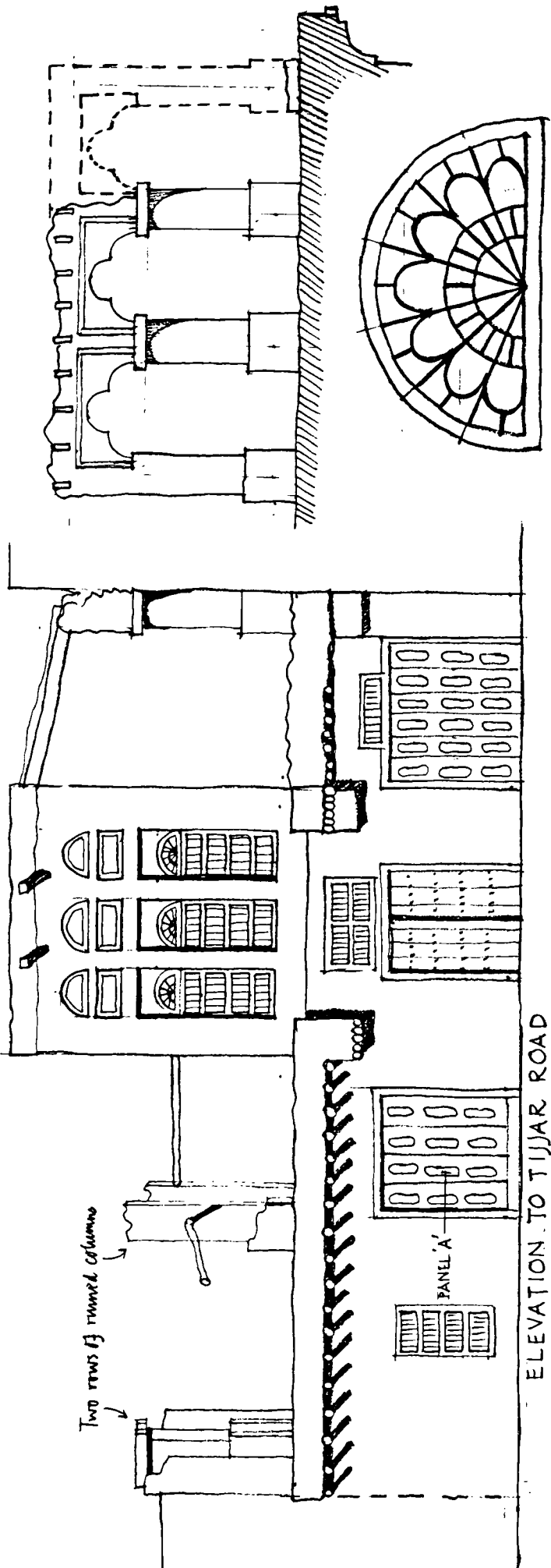


Fig 8.23 COPY OF DEED.



FOR INSCRIPTION ON PANEL "A" - SEE CHAPTER 5.

AMARA, SHOPS +
KHAN - TIJJAR RD.

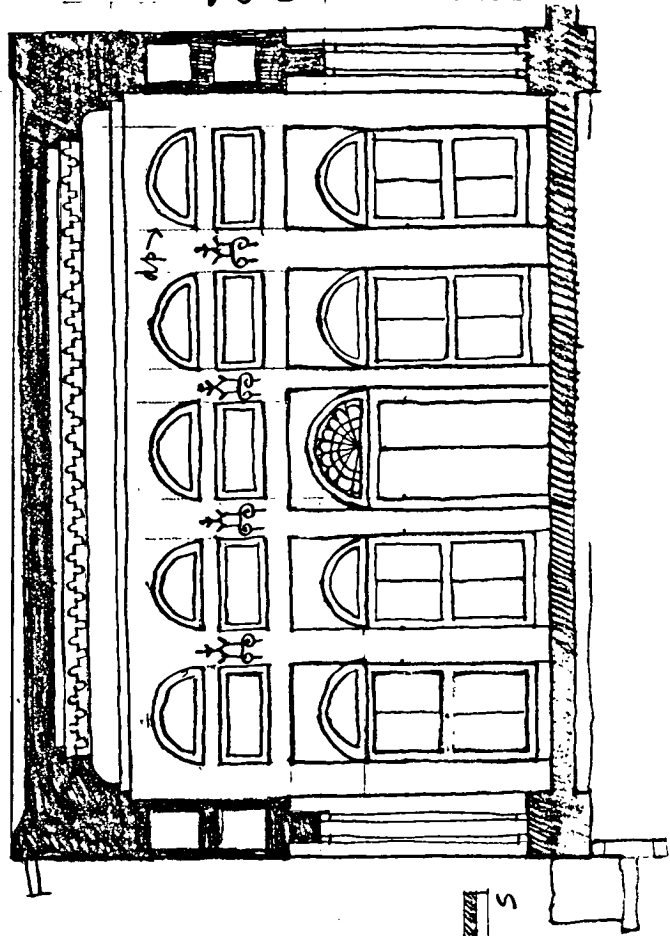


Figure 824.

Chapter 9

CONCLUSION.



Chapter 9

CONCLUSION: THE RELEVANCE OF HISTORIAL STUDIES TO FUTURE PLANS

1. Introduction.

The purpose of this chapter is to look to the future. It is suggested that the study of architecture and urbanism of the past has an important part to play in recovering and expressing cultural identity. Many regions of the world have faced a sort of architectural colonialism. Western modernism is the latest phase of this process. To establish authentic regional architecture requires the re-establishment of historical continuity on some level.

Finally the link between architecture, urbanism and the wider society is considered. If that society has itself lost its integrity, then is the search for a new urbanism automatically doomed?

2. The Past and the Future

What is the relationship of modernisation to traditional values in the mind of most Gulf Arabs? There are, I think, two conflicting responses, and von Grunebaum expresses it nicely:

"The individual and his society are divided against themselves, suffering from attraction and repulsion at the same time when confronted by the nonchalant aggression of the Western mentality." (1)

This attraction can be morbid - what Mikhail Nuaima called "internal colonialism" - which "comes to us from neither West nor East. It springs from the depth of our existence". But Ibn Khaldun had understood this when observing the colonialist culture of the Arab Empire, (writing in his "Muqaddima"):

"The vanquished always wants to imitate the victor in his distinctive marks, his dress, his occupation and all his other conditions and customs.... The soul.... assimilates itself to him." (2)

This seems to be a cultural version of the so-called Stockholm syndrome. But there is also a repulsion caused by the Western mentality, its way of life and its material symbols. A lot of Arabs although apparently Westernised are also (what Norman Dennis calls) "cultural resisters" (3). They sense the spiritual incoherence of Western culture, the disappearance of absolute truths, and (most obviously) the disintegration of family patterns. Many are, of course, at the same time willing to be debauched by it in a material sense. But the incongruity between acceptance of material benefits and the doubts about the cultural matrix which yields those benefits is disquieting. N.A. Farris points out the link between culture and politics:

"So long as our modern way of life is borrowed and our thoughts are those of others, the intellectual foundations of our political independence will be unsteady." (4)

So there is also a sense of insecurity caused by embracing a culture which is not truly absorbed. This stimulates a sort of counter-revolution, which can be a pendulum-swing too far in the opposite direction to be sustained for long in the real world.

In any event, cultural self-assertion is necessary. Avant-garde thinkers seek self-understanding and pursue self-construction by assessing their civilisation against other civilisations, and that can only be done by a recovery of the past, for the recovery of history means the recovery of identity, and that alone guarantees ultimate independence, or as Bennabi put it:

"Without civilisation there is no history, for a people that no longer has its culture, no longer has its history." (5)

It is in this general context that we may consider the relevance of historical urbanistic models to the design of future cities and the conservation or management of existing ones. Change is like a river, which may flow fast on the surface, and yet be quite still at the deepest level. Thus one can see that many valuable changes have occurred: for example, the motor-car and air-conditioning in the technical realm, and the emancipation of women in the social realm. These have revolutionary implications for the form of the city. On the other hand, the well-springs of Islamic culture are constant and remembrance of them is a vital part of cultural health. This justifies a deep respect for the past - and, to be specific, for the most dramatically total embodiment of that past, namely, the city. (One remembers how many German and East European cities were rebuilt after World War 2 on precisely historical lines.) However, the truth is, perhaps, that in Bahrain the past is regretted, and the old stones are a cause of shame. I met the same attitude when I worked as a public sector architect in Britain twenty years ago. Councillors wanted to sweep away historic areas, saying that they had fought to get rid of insanitary, crowded, unstable old buildings. This was a perfectly honest and decent instinct. Now, however, such buildings are restored and occupied by wealthy and educated people!

My own guess is that a similar change of perception will sweep the Gulf one generation from now. The problem, of course, is that the fabric itself will, without doubt, have

disappeared through decay before then, and so the chance to conserve historic architecture or historic environments will be largely past. However there may be a reawakened interest in using historic models as an inspiration for new design, and it is worth discussing this possibility a little more.

In the recent past, Gulf States have built along orthodox Modernist and "Late Modern" lines. The design of individual buildings is well up to Western standards, although the urban form suffers from the same anonymity and tedium as the typical new Western (particularly North American) city. It may seem unreasonable to find essentially similar architecture and urban form in Houston, Lagos, Bangkok, Bahrain and so on. Can the concrete and glass skyscraper or the gridded streets of villas be truly authentic in such a wide variety of places?

Two interesting themes have emerged in recent years. "Regionalism" would seek to create a unique architecture specific to the local culture and material conditions in each region of the world. (A convincing example of a regionalist would be the Sri Lankan architect Geoffrey Bawa.) Regionalist architecture should not, of course, degenerate into "postmodern" cliché-mongering - sticking decorative bits of historical reproduction onto an otherwise modernist building.

There is a clear tendency to see Western Modernism as sophisticated, progressive and universal. By contrast it would be easy to see Regionalism as parochial, insular, narrow-minded - a sign of backwardness or under-development. This would be a serious mistake. The only meaningful unity is that which underpins diversity. Unity through uniformity is false and empty. Furthermore, there is the issue of "cultural colonialism" (whether imposed or self-imposed). We can achieve liberty in the deepest sense only when our culture has grown out of our own circumstances and experience. The act of creating such a culture (and most importantly, such an architecture) is a necessary step to securing authentic self-regard and a fully independent identity.

Finally, it should be stressed that there is no implied rejection of modern technology and the benefits which it brings. Regionalism in architecture incorporates the issue of

"Appropriate Technology" in building science and construction. The principles of appropriateness apply to Europe as much as to developing countries: Britain for example has suffered in recent decades from the use of an apparently sophisticated but quite inappropriate technology to solve its housing problems. It now has a legacy of sophisticated but highly unpopular buildings which do not function properly and can hardly be maintained. Developing countries suffer in this way even more, and so a Regionalist architecture requires careful "technology assessment" to see what is most appropriate given the real needs and actual resources of each society.

The second theme is historical continuity in design. One much admires our best contemporary modernists but it is surely significant that they can only produce unique buildings: they particularly tend to avoid housing. An architectural language unable to make housing can never make a civilised city. That is still an unsolved crisis. Historicist architects have tried to point out one solution: in Britain, Leon Krier and Quinlan Terry are examples. Mohammed Makiya and Abdulwahed el Wakil are based in London but build mainly in the Middle East. El Wakil wrote:

"The case of the artist who makes effects by betraying the time-proven rules is an ill-doer. Scandalising by means of his techniques, he shatters the jar of an age-old treasure, the heritage common to all. In order to express himself, he ruins the possibilities of expression for others. Moreover, when once grammatical mistakes become the rule... the ill-doer has ruled out mutual understanding, the signs and symbols that have been built up from generation to generation, enabling the artist to transmit his thoughts down to the subtlest shades." (6)

Many people feel El Wakil's historicism is rather too rigid, but the aim of this thesis is not to enter this debate. The debate is happening, however, and it will spread.

I do admire El Wakil's buildings and I respect the integrity of his views very much. But it seems to me that a return to historical roots should not lead to precise reproduction. Is not El Wakil reflecting a very old and very Islamic antipathy to innovation - embracing

the idea of the "beaten track" to be followed for ever? The real challenge is to uncover the fundamentals - the roots - at a depth which guarantees their universal and timeless applicability, and then to allow new manifestations of those fundamentals in contemporary forms to appear. I find Aldo Rossi is helpful here and although he writes from an entirely European viewpoint, his basic arguments seem to have a general validity. It would be very interesting to know how his ideas are being received in the Middle East. Rossi, (if I understand his difficult writing correctly) argues that architectural form has a "classical persistence" of its own which does not arise from the needs and opportunities of a particular situation. Rossi quotes Jacob Burckhardt, who said that early artists "took their first steps toward the sublime: they learned to eliminate the contingent from form. Types came into being: ultimately, the first ideals".

These abstract, idealised forms (embedded within the artefact which is a specific building,) are the bearers of meaning and beauty. "All the great eras of architecture" (says Rossi) "have repropoed the architecture of antiquity anew as if it were a paradigm established forever; but each time it has been repropoed differently." (7). By this means is culture transmitted from one age to the next. He quotes Victor Hugo to the effect that great architecture is the product of historical processes not of individual designs: "the legacy of a race, the accumulated wealth of centuries, the residuum of the successive evaporations of human society - in a word a species of formation."

Furthermore, Rossi says that "urban artefacts have their own life, their own destiny". He argues that the powerful physical presence of symbolically-charged buildings actually constitute the strength of the institutions which occupy them (8). He is demolishing the naively pragmatic basis of functionalism and asserting the independent power of certain patterns underlying the environment which persist over long periods of time - subject to reinterpretation as epochs pass by - and which transmit culture from one generation to the next. These patterns organise functions, and more than that, their identity becomes the identity of the occupying institutions. At the level of the city, he gives the example of Italian Renaissance piazzas: they cannot be explained in terms of their function. They are

a method of forming a city, but they become an end: "Ultimately they are the city. Thus the city has as its end itself alone" (9).

Contemporary designers could look at history in this light. The rejection of the past - a past in Arabia's case stretching back beyond Ur - is almost total: so, at least, it appears. International modernism in architecture and urban design has made a conquest that seems equally total. Yet architecture and the city itself are the most profound manifestations and also influences upon culture and so cannot be treated simply as imported consumer durables - disposable, ever-changing.

The challenge is perhaps to re-establish the continuity of history: to discover the "persistencies and permanencies" - the archetypal forms - and give them new interpretations for a new epoch. This has little to do with surface detail. It is little use to dress up a basically modernist city in Islamic decoration like so much jewellery or make-up - piped history along with piped music or conditioned air. The transformation must come from within and may be felt rather than seen.

The approach to such a new direction could only be through an intense historical awareness - not the awareness of the antiquaries for whom history has passed, but of the avant-garde for whom the past contains certain secrets of the future.

2. Architecture and the Social Order

I do not think we can leave the matter there, however. The architecture of Islam and the Islamic city are generally thought to be part and parcel of a social, ethical and religious system which insisted upon consistency and wholeness. The religion of divine unity penetrates to all aspects of human existence and draws them together or integrates them into an internally consistent whole. What is wrong religiously cannot be correct economically, for example.

The question therefore arises as to whether "Islamic architecture" is possible outside a truly Islamic civilisation, which (it could be averred) exists nowhere in the world. This is not just a theoretical question posed by academics - it is keenly felt by many young architects. For instance, several architects in the Bahrain Ministry frequently debated whether it was possible to help realise an Islamic society by designing Islamic urban artefacts or whether they had to establish a sufficiently Islamic society in order to create the conditions necessary for Islamic architecture: indeed was it possible to conceive of an Islamic building as such in isolation? Would not such a building be merely a copy of historic models, which - however beautiful - could never lead to an authentic, living urbanism?

There are many aspects to this question, but in the present context, two are of particular interest. Firstly, may I mention the spiritual quality or life-enhancing function of work. Titus Burckhardt reports the words of a craftsman in Fez as follows:

"It is not only a pity that today, solely on account of price, poor quality combs from a factory are preferred to much more durable horn combs.... it is also senseless that people should stand by a machine and mindlessly repeat the same movement.... My work.... harbours a subtle meaning which cannot be explained in words. I myself acquired it only after many long years.... The craft can be traced back from apprentice to master until one reaches our Lord Seth, the Son of Adam. It was he who first taught it to men, and what a prophet brings must clearly have a special purpose, both outwardly and

inwardly. I gradually came to understand that there is nothing fortuitous about this craft, that each movement and each procedure is the bearer of an element of wisdom. But even if one does not know this it is still stupid and reprehensible to rob men of the inheritance of the Prophets, and to put them in front of a machine, where, day in and day out, they must perform a meaningless task." (10)

The second point concerns social solidarity, and the religious duty Muslims have to care for each other - even though in practice that is limited to mutual obligations within specific groups, such as the extended family. I have discussed this matter earlier in the thesis.

This reminds one very powerfully of John Ruskin, and his writings may provide a Westerner with an accessible and understandable philosophy as to the relationship between architecture, society and religion which is not unlike that of the Islamic world. There is much in common between Ruskin's Britain and the Islamic world today - in other words, a revival of religious piety allied to a hideous failure to heed its true promptings. Ruskin saw buildings as social artefacts and not only works of art. Great art is the product of a just social order, which is itself the response of a society to Christ's commands that we love one another. Gothic architecture was great but could not be produced under modern conditions of labour. Architects were therefore wasting their time when reviving Gothic art. It was first necessary to change society, and only then could Christian architecture be produced. Is the same also true for Islamic Architecture?

4. Some Specific Research Issues

4.1. Institution Building

As I explained in Chapters 2 and 3, the historic Islamic city contained a variety of self-help groups (which had a spatial basis). These groups may have been families or professional groups for example: they shared out many burdens, such as caring for the old and supporting the young; they regulated group behaviour and endowed their members with a sense of identity, security and possibly pride.

The modern city - east and west - does not generally have such a structure. It may arise, of course in some Third World cities, where rural migrants cluster on the basis of their original village or region of origin, In the case of Bahrain, that does not apply. New housing - whether government units or plots for self-build - is allocated to individual nuclear families without regard to wider groupings. This is done on the basis of need - a "points system" for need assessment is used - or on the basis of a politically-manipulated market mechanism. The destructuring of the city (from a social standpoint) proceeds apace, and soon the old family loyalties must disappear. Concrete individuality will succumb to individualism. Loneliness and despair (particularly for the old) will gradually increase. The weakenings of communal integrity will also undermine Islam, which is very much a social religion.

The conditions of modern life make the fragmentation of the family inevitable. But surely it would be possible to construct equivalent institutions to structure society (on a spatial basis) between the nuclear family on the one hand, and state bureaucracy (or other similar instrumental entities) on the other? Could one envisage land allocated to "Community societies" which would build dwellings, operate social services etc. given a balance of age, wealth and social need. This would provide an institutional framework for the application of the injunctions of Islam relating to mutual care and unselfishness, whereas the conditions of the modern metropolis conduce to the very opposite.

4.2. Arts and Crafts in Building

The craft basis of the historic building industry has largely disappeared in the Gulf. To argue for its revival is not to argue for historicism. One would not necessarily want to revive precisely the old crafts using their old techniques to produce the old work. The matter is one of principle. Islamic architecture is surely only possible when essential elements of a building are produced by craftsmen or artists (as opposed to industrial workers). Only then can spiritual intuition be brought to bear on the process of production, and the question here must be what conditions of working are prerequisite to the application of such intuition. Evidently this is an extremely complex matter.

Could we envisage the foundation of Art or Craft Workshops, to act as teaching, research, design and production institutions? How could such workshops relate to the process of commissioning building work? In some way they would have to be given a good deal of influence. Direct authority would be undesirable and their strength should arise from the acknowledged brilliance of their output. In practice, however, state direction and subsidy would be needed. Major commissions for all state buildings would provide a basic workload, to which private commissions could be added.

The combination of enlightened artistic and financial patronage and a serious cultural and spiritual context, could gradually lead to a new Islamic architecture.

4.3. Restraining the Impact of the Car on Urban Form

The layout of the city in the Gulf is dominated by the demands of the motor car. The streets - even in the low density housing areas - are wide and straight. One is reminded of the "prairie planning", (as it was then called,) in Britain twenty years ago. In the Gulf it seems even less reasonable than in Britain: there are other factors, such as the need for shade from the sun and local cultural priorities (about privacy, for example). Perhaps the new philosophy about road design enshrined in the so-called Essex Design Guide, (and similar documents for Kent, Cheshire, Sussex and elsewhere) is relevant (11). Such work shewed how it was possible to create far more intricate road patterns and more intimate public space in housing areas. This opened up an entirely fresh approach to urban

design. The keys seem to be: (1) more careful design for privacy, so that distance between buildings can be reduced, and (ii) the reduction of traffic speeds by the creation of deliberate obstacles, (including for example, frequent T junctions,) which in turn reduces land requirements for sight-line and associated setting back of structures. The urban intimacy of Islamic tradition could be recreated in housing areas by similar methods and the principles of form (explored in Chapter 3) could be repropoed.

A related point can be made about the nature of public space. In developing Madinat Hamad, a new town in the desert in Bahrain, no thought was given to water demand for irrigating public spaces, of which there was a lot - much of it best characterised as S.L.O.A.P. (12). When it was too late, this point was discovered, and a desperate plea for ideas to resolve the dilemma issued from the Undersecretary's office. A better approach, in my opinion, would have been to design a close-packed urban form, in which virtually all local open space was in courtyard form or at least well shaded by buildings, and readily irrigated by grey waste (although some religious taboos might have arisen over that).

4.4. The Courtyard House

The final point concerns the basic form of the house, and hence the characteristic built form of the city itself.

In the modern city, exterior space lies between - not within - buildings. Buildings are objects set in space: there is also a common tendency to waste that space. Sometimes space within a curtilage will be so lacking in privacy that it can never be actually used, (except as a decorative thing). Often one finds left-over space between road lines and property boundaries or land used to separate buildings (for reasons of noise, privacy etc.) which is apparently "public" but useful to no-one. The modern city abounds in such wasted space, and even then it provides little privacy. The historic city of Islam is quite different, of course. Al Muharraq achieves astonishingly high densities at 2-storey height - up to 80 dwellings per hectare - with complete privacy. There is a rigorous economy in the use of space, so that every inch is useful (and, of course, feasibly irrigated).

A good deal has been written on the contemporary relevance of the Arab courtyard house - to mention only one document, the 1986 Colloquium on this subject at Newcastle University contains several excellent papers (13) and, of course Hassan Fathy is a great source of inspiration and wisdom. Much has been written from a specifically climatic and environmental standpoint. Why, in this case, is it so poorly regarded: why does the European villa ride high? One answer - probably the fundamental answer - is self-imposed cultural colonialism or a desire to mimic the West for reasons of prestige and fashion. But there are also some other reasons. Because the matter has been neglected in recent times, there are unresolved technical difficulties about designing small single-family dwellings around courtyards, providing for modern lifestyles, air-conditioning and so on. Ordinary designers may be unwilling to tackle this. Building Regulations and Planning Regulations (and Local Plans themselves) are often based on the assumption that villa houses will be built, and for that reason it becomes difficult in practice to construct a courtyard house.

I think two types of action would be helpful. Firstly, more systematic and down-to-earth design research is needed into courtyard houses. Perhaps a book of generic plans would be useful, (including practical details and costs). This should not only cover dwellings for the rich - since most courtyard houses are built for the rich already - but a full range of types. The mass of ordinary designers could then learn how the design problems may be overcome, and may be armed with the necessary facts and arguments in favour of this building type. Secondly, a new approach to regulations and local plan principles is needed. In this connection, regulations ought to be extended to deal with energy and environmental control. Perhaps this is the most important single determinant of design, and yet it is wholly neglected in the Bahraini regulations. In Chapter 6, I discussed this, and cited certain recommendations already made by the Public Works Agency (as it then was). This concerned insulation levels only, but of course, the matter is much wider than that, covering the plan form, orientation and design of openings in particular.

5. Conclusion

"Every great national architecture has been the result and exponent of a great national religion. You can't have bits of it here, bits there - you must have it everywhere or nowhere. It is the manly language of a people inspired by resolute and common purpose, and rendering resolute and common fidelity to the legible laws of an undoubted God." (14)

"If you can fix some conception of a true human state of life to be striven for - life, good for all men, as for yourselves; if you can determine some honest and simple order of existence.... then and so sanctifying wealth into commonwealth, all your art, your literature, your daily labours, your domestic affection, and citizen's duty, will join and increase into one magnificent harmony. You will know then how to build, well enough." (15)

Reading these passages, written by John Ruskin, one might suppose them to have been written by a Muslim architectural and urban philosopher. This perhaps makes a fitting conclusion for an essay on an Arab subject written by a European, for it reminds us of certain common threads that bind us. It is to some extent wrong to contrast the religious East and the materialist West. There is materialism to be found in parts of the East - certainly in the Gulf - as gross as anything in the West, and Ruskin reminds us of a strong thread in our own culture (a little submerged right now, perhaps,) which seeks a harmonious integration of spiritual, moral, social and artistic spheres. Doubtless it is wrong to make simple classification of complex phenomena - as Edward Said reminds us. One reason surely must be that it makes it harder to identify relevant lessons and sources of inspiration for ourselves and our present condition in other places and other times. The present essay could be read in this light. Taking Ruskin's words as a normative framework, we can see how Bahraini society and our own society have both failed and both succeeded, and we may try to find meaningful lessons in both.

CHAPTER NINE - FOOTNOTES

- (1) See VON GRUNEBAUM G. E. (1952) page 129.
- (2) IBN KHALDUN (1967) page 116.
- (3) See DENNIS N. (1975).
- (4) Farris N. is quoted in VON GRUNEBAUM op. cit. page 169.
- (5) Bennabi M. is quoted in VON GRUNEBAUM op. cit. page 170.
- (6) See EL WAKIL (1866) page 16.
- (7) See ROSSI A (1982) page 107.
- (8) Ibid, page 103.
- (9) Ibid, page 162.
- (10) See BURCKHARDT T. (1960) page 70.
- (11) See for example, ESSEX C.C. (1973).
- (12) A well-known term invented by Leslie Ginzburg meaning "Space Left Over After Planning".
- (13) See HYLAND A.D.C. and AL SHAHI A. (1986).
- (14) RUSKIN J. (1985) page 240. These extracts are from the essay "Traffic" in the collection "The Crown of Wild Olive" originally published 1866, London.
- (15) Ibid, page 249.

GLOSSARY OF BAHRAINI ARCHITECTURAL TERMS

Note: AL ORAIFI (1978) gives a somewhat fuller glossary of Bahraini terms. The terminology for decorative motifs is given in Chapter 4, page 108.

- Amara : Warehouse (in the suq).
- Amil : Building worker: (can also mean agent or governor in other contexts).
- Astadh : Master (mason).
- Badgir : A device for speeding up air-flow and so assisting in ventilating a room or cooling a terrace. It consists of a horizontal slot in the lower part of a wall.
- Banna : Mason.
- Bascheel : Bamboo used in traditional roof construction.
- Bayt : House (or building complex).
- Chendel : Mangrove (or "Zanzibar Poles") used as rafters.
- Denchel : See Chendel.
- Dibriz : Entrance passageway (usually L-shaped) between street doorway and courtyard.
- Djuss : Gypsum.
- Farsh : Coral rock split along its bedding plane (so as to form large flat panels).
- Fuladh : Chisel.
- Ghurfa (al Bahriya) : A small meeting-room on a roof terrace (overlooking the sea).
- Hadjar al Bahr : "Sea Stone" or "Bahrain stones" i.e. coral rock.
- Hoosh : Courtyard.
- Jadum : Hammer.

Khingiah : A small mezzanine room with a low roof used for storage or keeping chickens, or for children's play etcetera.

Liwan : Portico usually attached to a room and facing a roof terrace.

Majlis : Meeting room in a house used by men.

Mankrur : Woven palm-leaf matting used in roof construction (above the bascheel) also known as "Basra mats".

Marzam : Rainwater spout or gargoye made from wood.

Matbakh : Kitchen.

Mijdah : Drill (used with bow : goas).

Mishara Khashab : Hand saw.

Musayed : Apprentice (mason).

Nasal : Bit.

Nurah : Lime.

Roshan : Niche in the internal wall of an apartment (used for storage and display).

Qayseriyyah : Part of the market, formally planned and secured by locked doors.

Sathi : Roof terrace.

Suq : Market and related facilities (originally referring to the covered street).

Tin : Mud.

Yadhaw : Palm trunk (quartered to reinforce walls).

Waqf : Mortmain endowment for religious motives.

Zariba : Open-sided stable and area for animals.

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NOTE.

I have divided the bibliography into five sections (in descending order of significance) as follows:

PART A: Architecture and Urbanism in Bahrain.

Part B: Contextual Studies in Bahrain (Social, Economic, Cultural).

Part C: General Architectural and Urbanistic Topics.

Part D: General Contextual Studies (Social, Economic, Cultural).

Part E: Other Works (not directly utilised in this thesis).

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