Building Community in Low-Income Areas: Designing a New Architectural Language for Community Centers in Jordan

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Abstract

The aim of this thesis is to develop a vocabulary of principles to be used in the design of future community centers in Jordan. Community centers provide the stage for bringing members of the community together to meet and discuss community issues, and for increasing their sense of community spirit which advances social and economic development. This thesis rethinks the present idea of a community center taking into account the changing social structure and culture, the regional climate and use of local materials. The principles that evolved may be divided into two categories; spatial vocabulary, which focuses on the relationship and design of spaces that encourage interaction amongst members of the community; and character vocabulary, which focuses on the character reflected by the community center as being the heart of the community. This thesis was investigated through the process of redesigning a community center in one of the housing projects built by the government to house low-income families.

Thesis Supervisor: .... Jan Wampler
Title: ....Professor of Architecture

Acknowledgments

To my family who has always been there for me and supported me in all of life's advnetures, to you I owe any success

To my Jan, Hasan and Shrimp, thank you for your input and encouragement

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To my friends, thank you for being there for me. I wouldn't have had such wonderful years without you

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Introduction

Figure 1. Painting of my image of Amman

This thesis deals with a very common and pressing issue for most developing countries, namely, the tension between modernity and tradition. Such societies are in a transition, living between a long-established culture and a new lifestyle with different expectations. This problem involves all aspects of culture, and in this thesis I will address this issue through the medium of architecture in Jordan.

There are many attitudes that may be taken towards this pressing issue. One attitude is to impose modernism/internationalism on this culture, disregarding the existing traditions, so people may develop like "the rest of the world, and become as advanced as the West". Another attitude is to return to, and reinforce the revered traditions, in this case of Jordan, by resurrecting the traditional architecture to this culture, namely, "Islamic architecture". The third attitude lies in between the first two, and it represents my personal attitude to this predicament. This attitude is to examine the existing culture, understand the way people live and why, find out what they aspire to achieve, and try to reconcile all these factors into a suitable architecture. It is important to look at traditional and modern modes, investigate them and from them extract a new language that relates to the contemporary needs of the existing society and helps it achieve its dreams.

I have chosen to address this issue by developing a new architectural language for the design of community centers in Jordan.
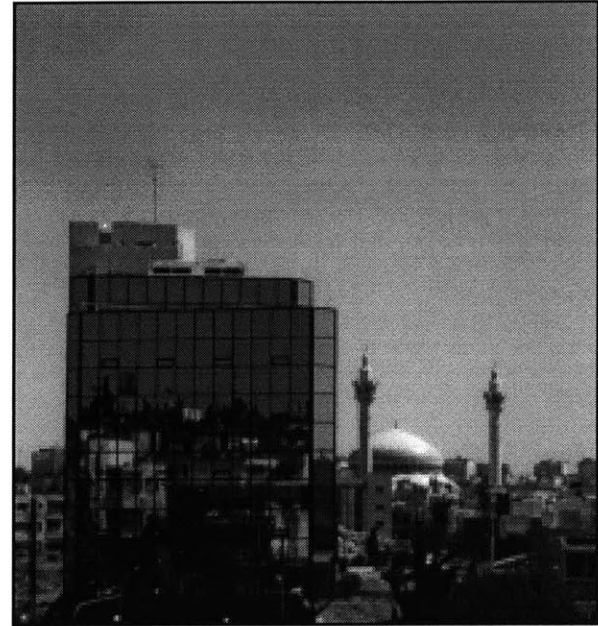

Figure 2. Juxtaposition of modern and traditional in the new city of Amman

1. Community Centers

Figure 3. Boys from the Naqab summer camp pointing at their houses on the plan

The concept of a community center is a modern-day invention that was developed as a result of a changing society's need for a place that provides a new facility that can accommodate the new roles played by individuals and groups.

Traditionally, a community center never existed as a separate entity. If one defines the community center as a place that provides services and a place to meet, one could say that the community center of a traditional "Islamic city" was the central area of the commercial and public buildings, around the mosque and its courtyard, the bazaar, the public bath, and other public buildings. Traditionally, these places provided the meeting places for people.

Presently, in the existing housing projects, there are few places where people can come together and it becomes important to intentionally provide a place for people to meet one another. Additionally, with the change in society, there is a growing need for activities that did not exist before. For example, with the liberation of women, came the need for a place to leave their kids when they needed to go out for example, to work. Also, with their liberation they are able to contribute to their family's income by learning an income-generating task, such as sewing or hairdressing (see figures 4 and 5) and then practicing this skill on their neighbors and friends to earn extra income for the household. The change in structure of the family that lived in a single house also had an effect. Whereas traditionally an extended family lived in the same house and daughters and sons learnt from their parents and elder relatives,
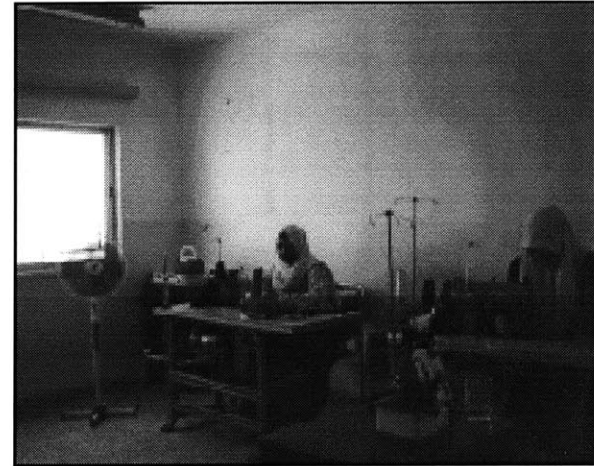

Figure 4. Women in a sewing class in the Jofeh community center

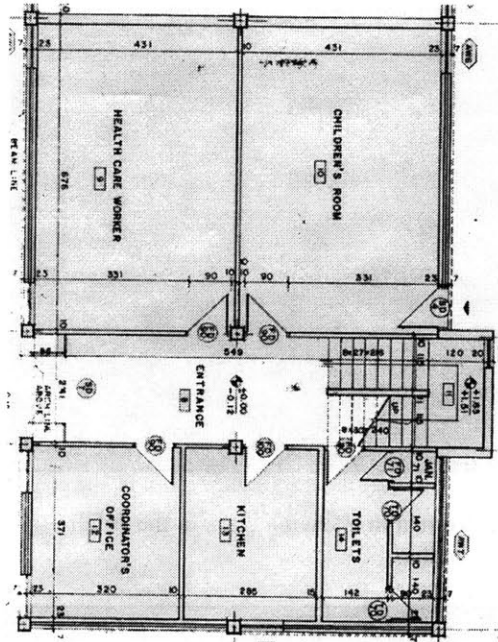Figure 5. Hairdressing classroom in the Jofeh community center

Figure 6. Community center prototypical plan

Figure 7. Main entrance to a community center

today, in the new society of nuclear families and the relative loosening of family ties, people need to go to special institutions to learn tasks such as sewing, hairdressing and craft making. Finally, people, especially women, who did not traditionally get a school education realized the importance of being literate in today's world and needed literacy classes. The role of the community center comes to satisfy all of such developing needs in this Jordanian society.

The community centers investigated in this thesis are those built by the Housing and Urban Development Corporation (HUDC) in Jordan. They are built as part of 'sites and services' projects or in neighborhood 'upgrading' projects. The 'sites and services' projects are housing projects built on cheap land bought by the HUDC which it then divides into plots and provides infrastructure. The plots are then sold to low-income families as empty land or with built core houses (a room, a kitchen and a restroom). The 'upgrading' projects are in squatter areas for which the HUDC provides infrastructure and improves the existing houses. One of the many services they provide is the construction of public buildings such as girls' schools, boys' schools, emergency centers, community centers, health centers and women's training centers; (mosques are funded by private donors, and there is usually at least one mosque per project).

Presently, the HUDC has a single prototype of the community center which it places in each project. The design is very simple as illustrated in figure 6. One enters the building through the center of the main elevation (figure 7) into

a corridor from which one may enter the co-ordinator's office, the kitchen, the restroom, or one of two multi-purpose classrooms as shown in figure 8. Directly facing the entrance is a stairway leading to the floor above and into a distribution area that connects to more classrooms. Sometimes, if space permits, there is an outdoor playing area for children. The community centers provide computer skills (figure 10), English language, literacy classes and a kindergarten. In the summer, some of them additionally offer summer camp for children. If they are coupled with the women's training center (in cases of lack of space or small-sized communities), they also provide sewing, knitting, flower arrangement and hair dressing classes. In a way, the present concept of a community center in these projects becomes that of a kindergarten and classes, for the exclusive use of children and women.

I strongly disagree with what the community center has evolved into. To me, it is a very important building that has not been used to its full potential presently. The community center could potentially provide a function that no other public building does, i.e. the integration of the families of the community. The users of schools are gender and age-specific. The users of mosques are gender segregated, and usually men, the users of women's centers are women, and the users of health clinic are individuals in need. No public building has the potential to provide for entire families, for both genders and all ages as much as the community center; yet, as we can see in the existing community centers, this important feature has been ignored and the community

Figure 8. A multi-purpose classroom in the Naqab community center
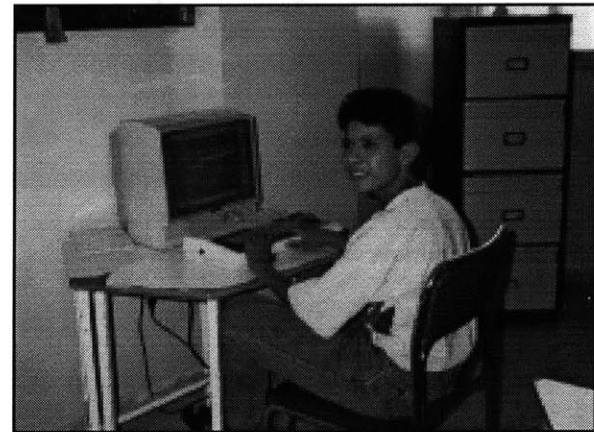

Figure 10. A computing student in the Naqab community center

Figure 11. Acre 1979. Open air-cafe at the port.
Photo by Jean Mohr from *After the Last Sky: Palestinian Lives*

centers have been relegated to a multi-purpose building for women and children.

For me, a community center should be viewed and used as the center of the entire community. Ideally the community center should be physically integrated with other public facilities. Together with the mosque which deals with the religious aspect of the community, and the community center which deals with secular life, this area becomes the heart of the community. Most of the community-related issues could take place in the community center, such as the community's weddings, graduations, cultural events and meetings. These are events that bring people together to deal with shared issues of interest and make them feel close to one another. This does not exist in the present-day community centers. I suggest, for example, developing the program to include other activities that bring people together such as an exhibition shop, a coffee shop, a public library, a conference room, events hall and common areas for people to meet informally. I would also suggest the incorporation of outdoor public spaces and provision of more shaded areas and seating space to encourage people to mingle. I would also suggest making the community center open to passers by to raise their awareness of its activities and encourage them to use it. These are examples of the principles developed in this thesis to guide in the design of future community centers.
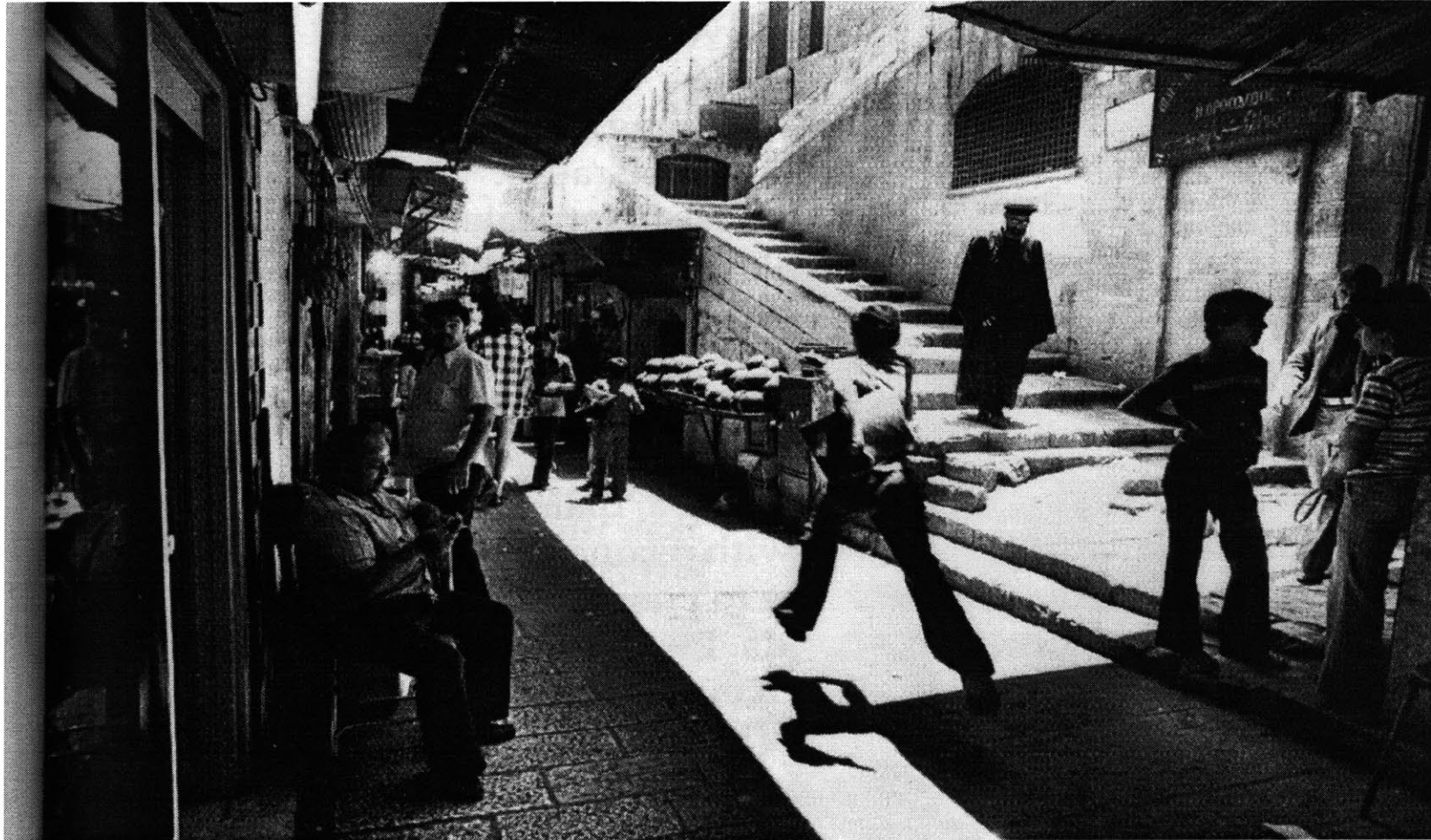
2. Public Space

Figure 12. Jerusalem 1979. A snapshot. Photo by Jean Mohr from *After the Last Sky: Palestinian Lives*

It is very important to integrate outdoor public spaces with the buildings of the
community center because these are major spaces in which social interaction
takes place.

In traditional "Islamic towns" the major outdoor public spaces were in the
mosque (for use by men only) or in the leftover spaces after buildings were
constructed. This was sufficient for the culture of that time. Only men met in
the outdoor public sphere, and that was provided by the mosque courtyard,
women generally did not meet in outdoor public spaces but in each other's
houses. By the 19th century, there was a rise in semi-public parks, squares
and spaces attached to government buildings. However, what is stressed in
this thesis is a public space that is accessible to everyone, i.e. a 'civic society'
space that is both indoor as well as outdoor.

In the present city-planning in Jordan and most "Islamic" countries, little
provision for outdoor spaces has been taken into consideration, even though
the people and present culture greatly need it. There appears to be two
different kinds of public outdoor spaces. The first kind is the public space that
one goes to as a destination, such as green parks in Jordan. The other kind of
public space is that which one finds oneself in unintentionally. In Jordan, there
are few of the first kind, some of these spaces get used, but most are
neglected and badly maintained. As for the second kind, there are barely any
such spaces. I believe these are the kinds of spaces that are greatly needed
and greatly lacking in today's Jordanian cities.

Today people in Jordan use outdoor public spaces. I have noticed this strong desire from observing men, women and children walking, sitting and chatting in the islands in the middle of the streets in commercial areas, or in the famous roundabouts in Amman due to the lack of other forms of outdoor spaces in these areas. These spaces are of the second kind and are much needed.

In the low-income housing projects, there are two forms of public space as illustrated in figure 13. Due to the relative narrowness of the streets and the small-sized neighborhoods, the doorstep of every household acts as a public meeting place in the evenings when the climate permits and when the families are reunited at the end of a workday. The other form of public space is offered by the neighborhood *sahahs* (small outdoor plazas) in the middle of each block of houses which includes a car park and a "garden" intended for the use of the surrounding residents. The intended "garden" is usually neglected and is turned into a dumping area, but sometimes it gets used by the community children for playing soccer or other games. These public spaces are scattered all over the neighborhood. The provision of a consolidated central outdoor and indoor public space that the community center could potentially provide becomes important in these projects in order to unify the residents in one place. The design of outdoor public spaces is a complex task because people may easily feel lost in the space if no attention is given to the finer details of making it a place rather than a neglected area or a path; the same care must be taken in the design of outdoor spaces as in the design of indoor spaces.
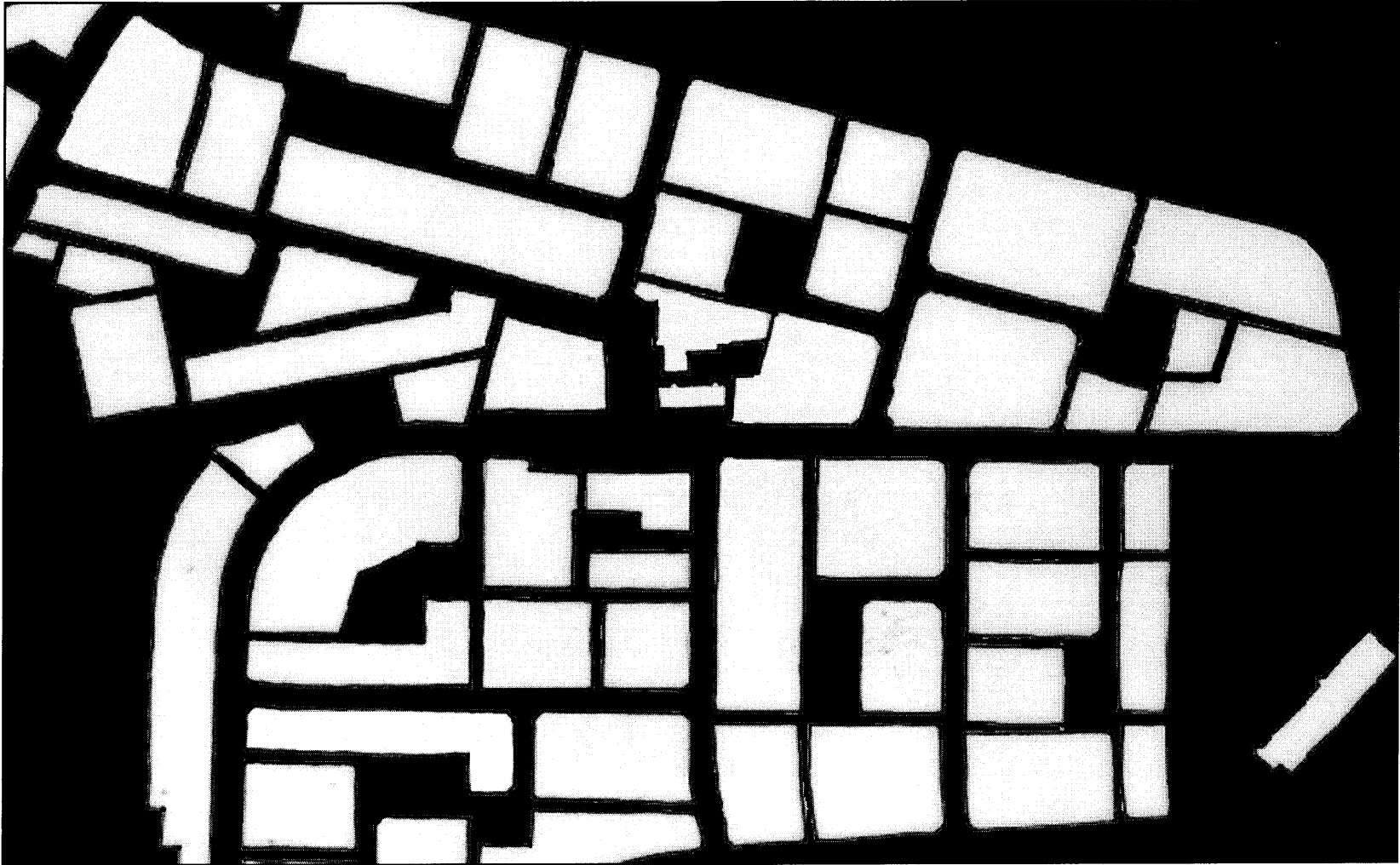
Figure 13. Diagram showing 'space between' in the urban planning of the Naqab project
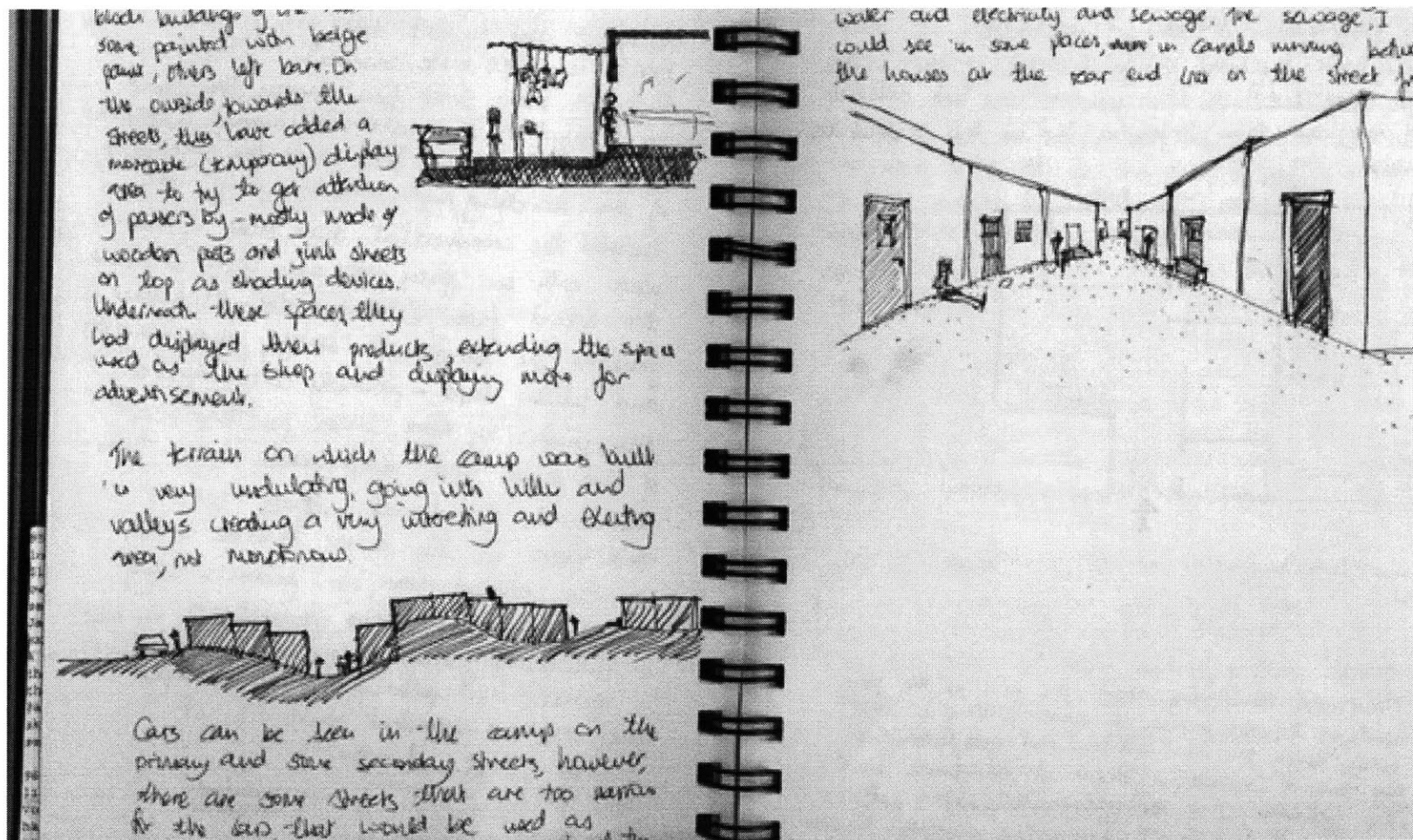
3. Method of Investigation

Figure 14. Sketches and notes from my sketchbook during my investigation

My thesis stipulates a set of principles that may be used in the design of future community centers. The vehicle that I have used to investigate these principles is the redesign of an actual community center in one of the existing housing projects in Jordan, just outside the capital, Amman.

The design of this community center on a real site, presents a way of integrating all these principles together to produce an example of their application. I reached this design language by investigating the existing architectural grammar on site, understanding its reasons for being, understanding the culture, which is my own, and eventually promoting an architecture that caters for the changing lifestyle of people in such areas. With the help of HUDC and the UNRWA (United Nations Relief and Works Agency) in the summer of 1996, I visited various public buildings such as community centers, women's centers and schools placed in low-income areas such as in 'sites and services' and 'upgrading' projects as well as in Palestinian refugee camps. I talked to community center administrators and users and people in the community. Finally, I chose the HUDC Naqab site as a prototypical 'sites and services' project with a prototypical community center as my focus. I interviewed the two young and ambitious women in charge of the community center and seven of the users at that time who were the children in the summer camp. I also visited four families varying from very low-income to well-to-do. I also talked to the men in the shops opposite the community center. With all the people, we discussed the activities offered by the community center and how they propose the center be improved, as well as other community-related

issues, in order to gain a better understanding of the community within which I will be designing.

The following chapter, outlines the site analysis and the elements that I took into consideration when designing the community center in the Naqab area.

4. Naqab Area Site Analysis

Figure 15. Sketch diagram of site factors taken into account while designing

Most of the housing projects in question are located on a major highway between the capital city of Amman and another major city to the north, Zarqa, as illustrated in figure 16. The highway is mainly deserted except for industrial factories, commercial shops and gas stations. This adjacency to the highway makes transportation very accessible and the location extremely desirable to workers.

Topography

The topography of most of Amman and these areas is hilly and steep as shown in figure 17. This is an important factor to take into consideration when designing.

Climate

The climate in Amman is very hot and dry during the day in the summer reaching as high as 38 degrees centigrade, turning cool and breezy at night. In the winter, it reaches as cold as 0 degrees centigrade with little rain (annual rainfall of 75.5 mm between the months of December and March only) and it snows a couple of times every other year.

The People

The people in the HUDC housing projects are mostly large low-income families (average number of members is 6). Most of the working members have government jobs commuting 20 minutes to Amman or Zarqa or work in the surrounding factories. Families in Jordan in general are very close-
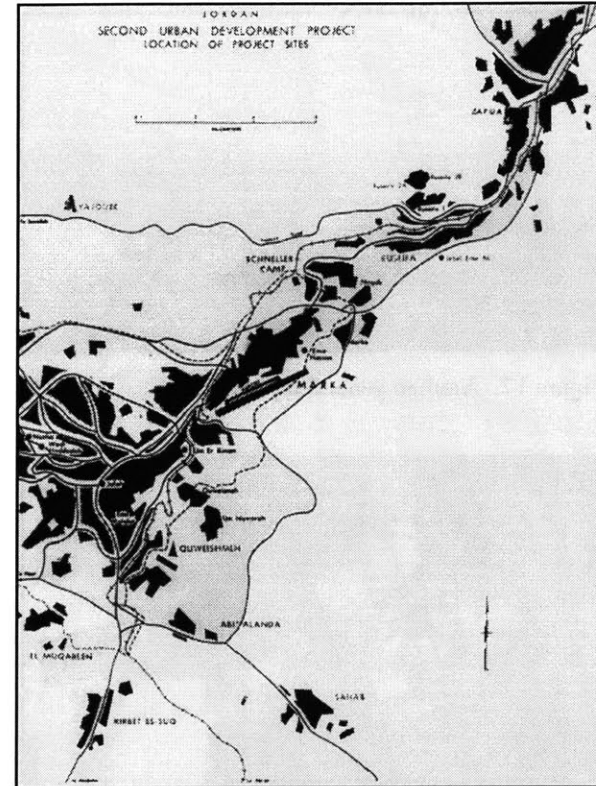

Figure 16. Diagram showing the 'sites and services' and 'upgrading' projects done by the Housing and Urban Development Corporation on the Amman-Zarqa highway (source: World Bank Appraisal Report UDP2, 1985)
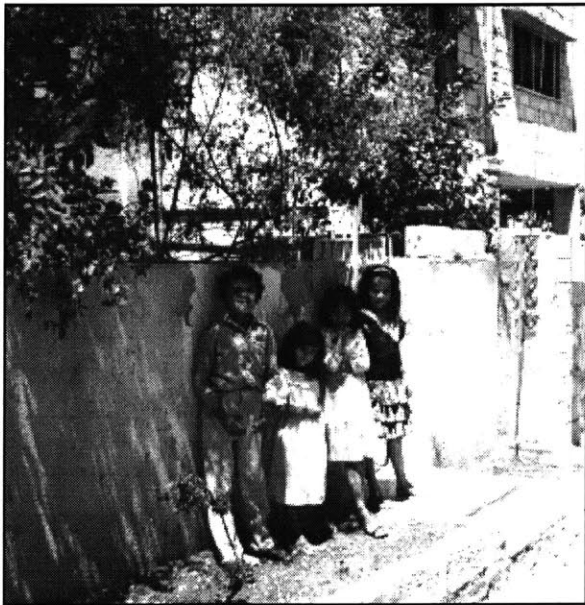
Figure 17. Amman general topography

Figure 18. Some of the users in Naqab community

knit and more so in these projects than in the main city. The people in the 'sites and services' housing projects originate in many different regions. Some come from the Palestinian refugees camps, while others come from other housing projects, and some are returnees to Jordan after having worked in other countries. The diversity of the community members and the lack of a unifying community spirit often characterize the beginning of a project's life.

Project Planning

As explained earlier, the housing projects are divided into preconceived different sized plots of land placed in blocks around an interior small neighborhood *sahah* for car parking and for a common garden. This *sahah* is used by the houses of that block. The largest plots of land (types A and B) are placed on the edges of the site and are sold empty at market prices. The interior plots of land are sold either empty or with core housing at reduced prices to the relevant buyers. The HUDC also builds public buildings which vary from project to project depending on the funding, the size of the project and the need for such buildings. These buildings include girls' schools, boys' schools, emergency centers, community centers, women's centers, and health centers.

Naqab Site

The site of the redesigned community center in this thesis is in the Naqab 'sites and services' housing project. The project is located on the major Amman-Zarqa highway. It is directly surrounded to the north-west by the Marka Palesinian refugee camp; to the west by the Pepsi factory, to the south-west
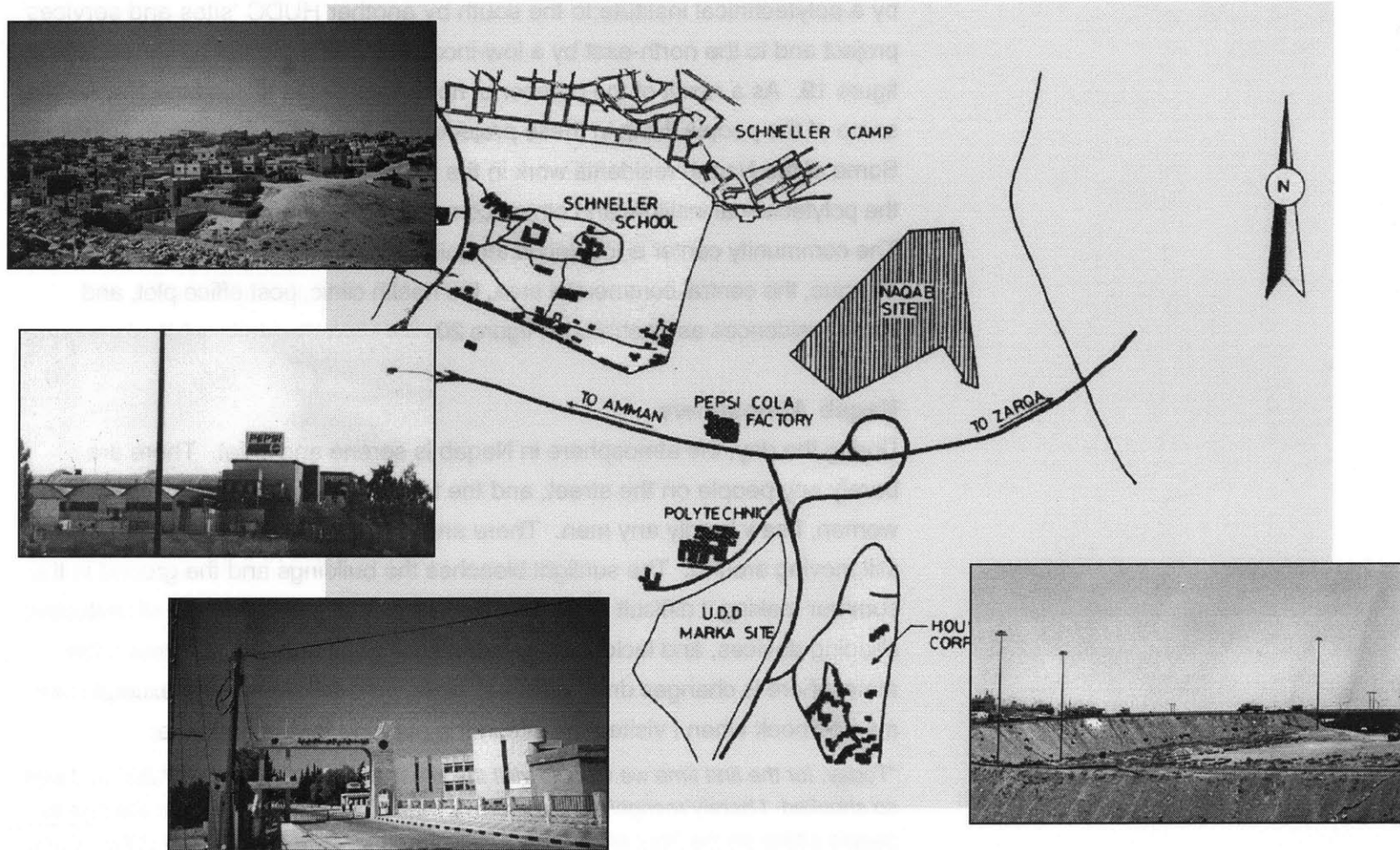
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Figure 19. Diagram showing the context surrounding the Naqab project

by a polytechnical institute;to the south by another HUDC 'sites and services' project and to the north-east by a low-income housing project as illustrated in figure 19. As a result of the number of housing projects around the Naqab site, some of the people living in these projects use the public facilities in Naqab. Some of the Naqab residents work in the Pepsi factory, some teach or learn in the polytechnical institute and others commute to Amman or Zarqa to work. The community center is located in the middle of the housing project, next to the mosque, the central commercial area, the health clinic, post office plot, and some residences as illustrated in figure 20.

Naqab Atmosphere

During the day, the atmosphere in Naqab is serene and quiet. There are barely any people on the street, and the few I saw were mostly children and women, I saw hardly any men. There are very few cars parked, and fewer still moving around. The sunlight bleaches the buildings and the ground in the summer making it difficult to stay outdoors especially with the lack of protective shading devices, and lack of sheltered places to sit outside. However, the atmosphere is changes dramatically at night. The following is an excerpt from my notebook when I visited the site in the evening for the first time:

"Today, for the first time we went to visit the site in the evening around 7:30pm. I was so shocked- I barely recognized the area. It was full of people strolling in the streets, people sitting on the front steps, kids running around. The light was so different and so "friendly" compared to the noon light. The place looked much less isolated than it appears in the daylight. There were a lot of buses and cars in the streets or parked on the sidewalks, kids running all over the place playing football or kids biking through
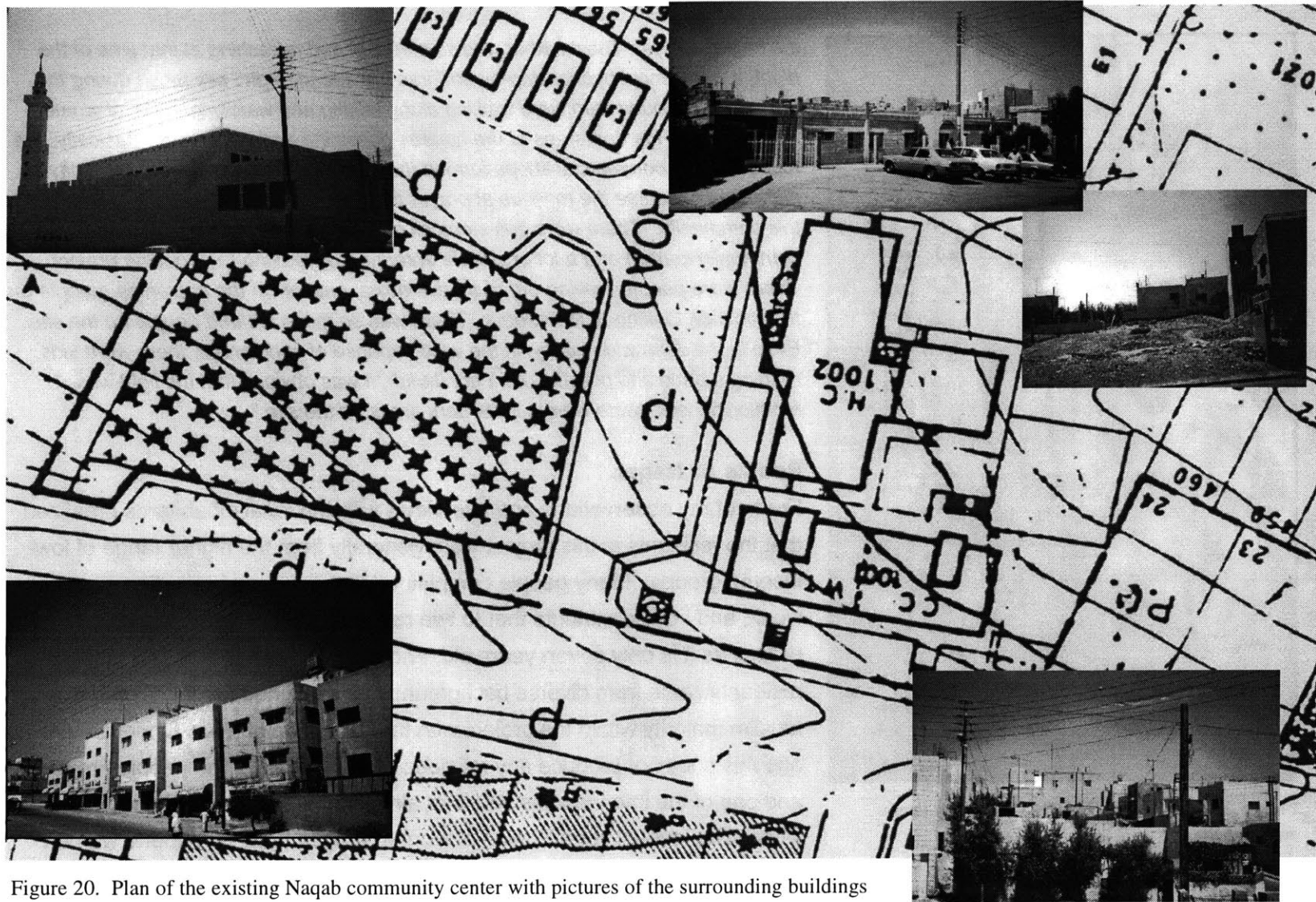
Figure 20. Plan of the existing Naqab community center with pictures of the surrounding buildings

Figure 21. Girls in the Naqab community center summer camp

the narrow alleys. The weather was so pleasant and refreshing at that time of the night, it was almost hypnotizing- even Firas (my friend) didn't say much during the visit. A lot of young men were walking along talking and watching. A lot of women were sitting at the doorsteps of the houses gossiping and observing. Basically, the roads and the commercial shops formed the gathering spaces of the community at night (and of course the mosque at prayer time). The bus was an active ingredient in this community. There were bus stops all over the place (including right in front of the community center) and a lot of people entering and leaving the housing project. There were people looking out of the windows, people on the balconies, people on the rooftops looking at the streets. There was so much life and people on the site. Even in the deep wide valley, in the wide expanse of sand areas, there were kids running around and playing. As it got darker, it was obvious that the light wasn't functioning well -there were a lot of dark areas on the site."

People of Naqab

From of my observations and interviews with the local inhabitants I realized that the residents in this project were generally from the higher range of low-income groups. Many people complained that the community ties were very weak, and I could attribute that to two reasons. Firstly, to the age of the project as it is only seven years old, and secondly to the fact that most of the residents came from diverse backgrounds as explained earlier. There is a Muslim majority within the project with the exception of a few Christian families, and this does not produce any religious friction. Most of the people are literate and one of the interviewees said that almost 20% of the women in this area work. The level of liberalization of women ranges from very liberal women who go to college and use public transportation unaccompanied, to very

conservative women who refuse to talk to me or to go out of the house without their husband.

View of Community Center

The following are quotes from my conversations with people that illustrate the way the community views the role of this public building and how they think it could be improved.

Community center administrators:

"I wish there was a place where the kids could sit and eat during break."

"We have no library, the few books we have, have to be kept locked in the co-ordinator's office."

"We have the worst playground ever- in the summer the sand is too hot to walk on, and in the winter it is too cold and muddy."

Community center users:

"The community center is good although its area is too small. If I could improve it, I would like to add a real soccer field, table tennis, a library and a cafeteria."

"If only there was a garden instead of having to sit on the front steps, as well as indoor living rooms to hang around in during breaks."

"The more floors the better."

"I would like to have more activities such as music and typing classes."

Figure 22. The barber opposite the Naqab community center

Figure 23. Salesman in grocery store opposite Naqab
community center

Shop owners:

"The location of the community center gives the commercial shops more
exposure and therefore more clients."

"As part of the Committee for Social Development, we want to try to have our
meetings in the community center to attract more important people."

"If I could, I would live outside in nature all the time and only go indoors for
sleep and shelter from the cold weather."

Community women:

" I don't need to got to the community center, I have a diploma."

"I would like to go and learn sewing, however, I do not have the time with all
this house work and taking care of the kids."

5. Redesign of the Naqab Community Center

Figure 24. Overview of Naqab community center redesign

My objective during the redesign of the Naqab community center was to
address several issues. First, the need for efforts to help build and reinforce a
sense of community amongst the people living in the housing project. Second,
the lack of outdoor public spaces as well as indoor common areas that people
can use to meet and interact with each other, spaces that are not confined to a
certain group of people or rigidly defined functions . In addition, I attempted to
change the perception of the community center as a facility that is exclusively
utilized by women and children, and whose functionality does not exceed
those of a kindergarten and vocational classes. Throughout the design, I tried
to be sensitive to the center's character, and its relation to the character of the
community and its inhabitants.

After I examined and critiqued the existing community center, with the adjacent
health clinic and women's center, my first reaction was to redesign the general
form of the existing elements to accommodate outdoor public spaces. In the
existing design shown in figure 25, the buildings dominate the center of the site
leaving narrow unusable paths around them. Most of this "lost" space is not
accessible and sparsely planted with trees. Therefore, there is no transition or
resting space between the street that one can hang around in. Therefore, the
first step was to move the built form from the center to the edges and
consolidate the open space into three unique *sahahs*, each with a certain
character.

The most public of these spaces was placed on the corner of the site located at the intersection of the two streets that border it. Although I initially had quibbles against placing the public *sahah* across the street from the women's entrance to the mosque, I eventually saw this as an opportunity to highlight and celebrate the presence of women in the community. The second *sahah* was placed between the women's center and the day care center, while the third space separated the community center from the health center.

In order to foster a sense of community among the residents, functions that were more community-oriented were added, such as a conference room, coffee shop, events hall, common areas, and a public library.   Informal vendors could also sell their goods in the public spaces. These functions are very important because they bring people of shared interest together at sad and happy moments in the events hall, at educational moments in the public library and the events hall, at recreational moments in the coffee shop, common areas and sahahs, at decisive moments in the conference room. The conference room is symbolically placed at the highest point in the main building of the community center, so decision-makers are overlooking the neighborhood, and constantly reminded of the community they are making decisions for.

The next step that was taken in the design was to develop the existing program in order to cater to the needs of a larger segment of the community. I provided functions that men could utilize as well, such as the coffee shop,

exhibition shop, classes, workshops, conference room, library, events hall, and provisions for an informal market place.

The new design of the buildings' facades makes use of several building materials including concrete, stone and stucco. There is also considerable incorporation of metal and perforated concrete blocks, and the spaces are inhabited with numerous seats, trees and 'arishehes.
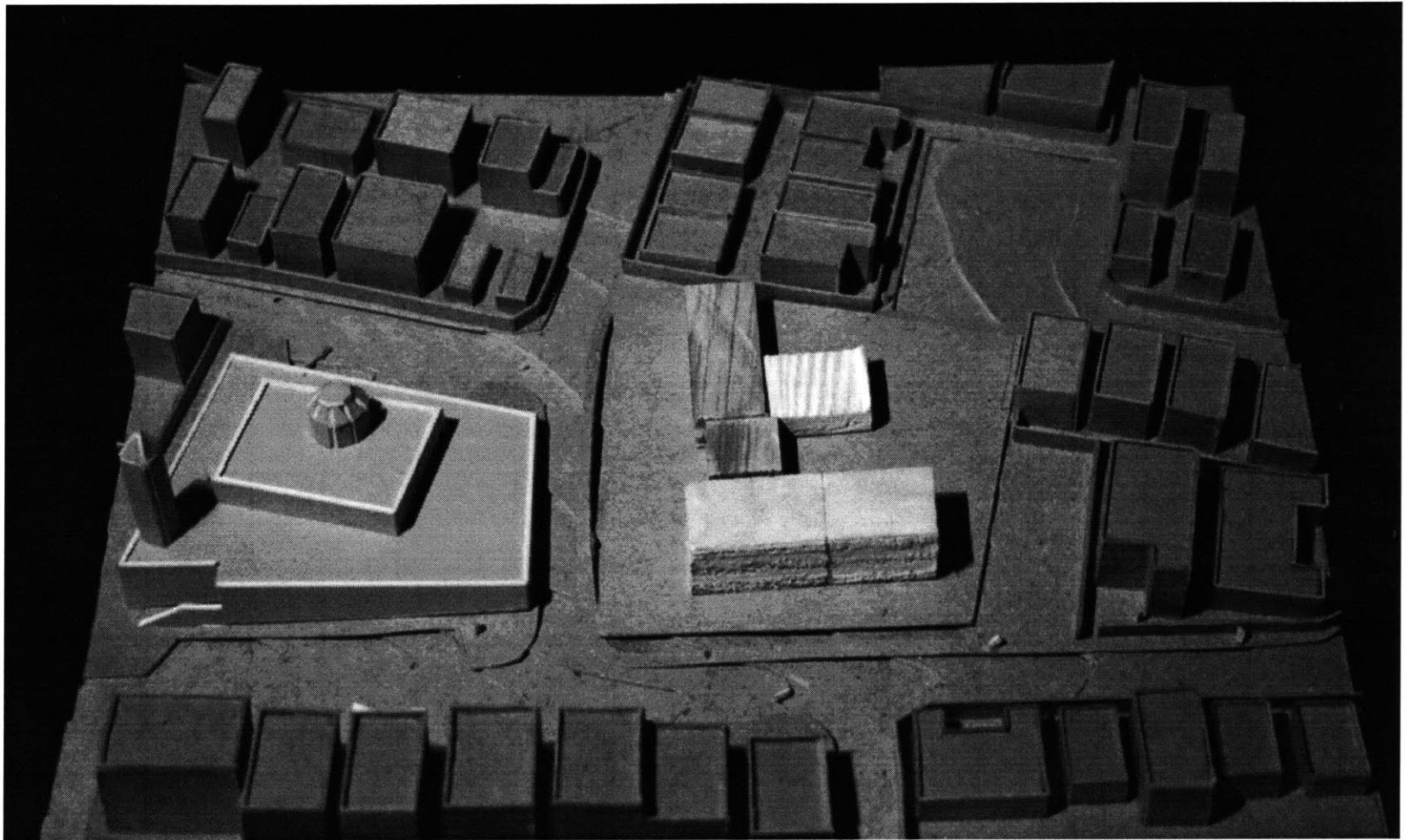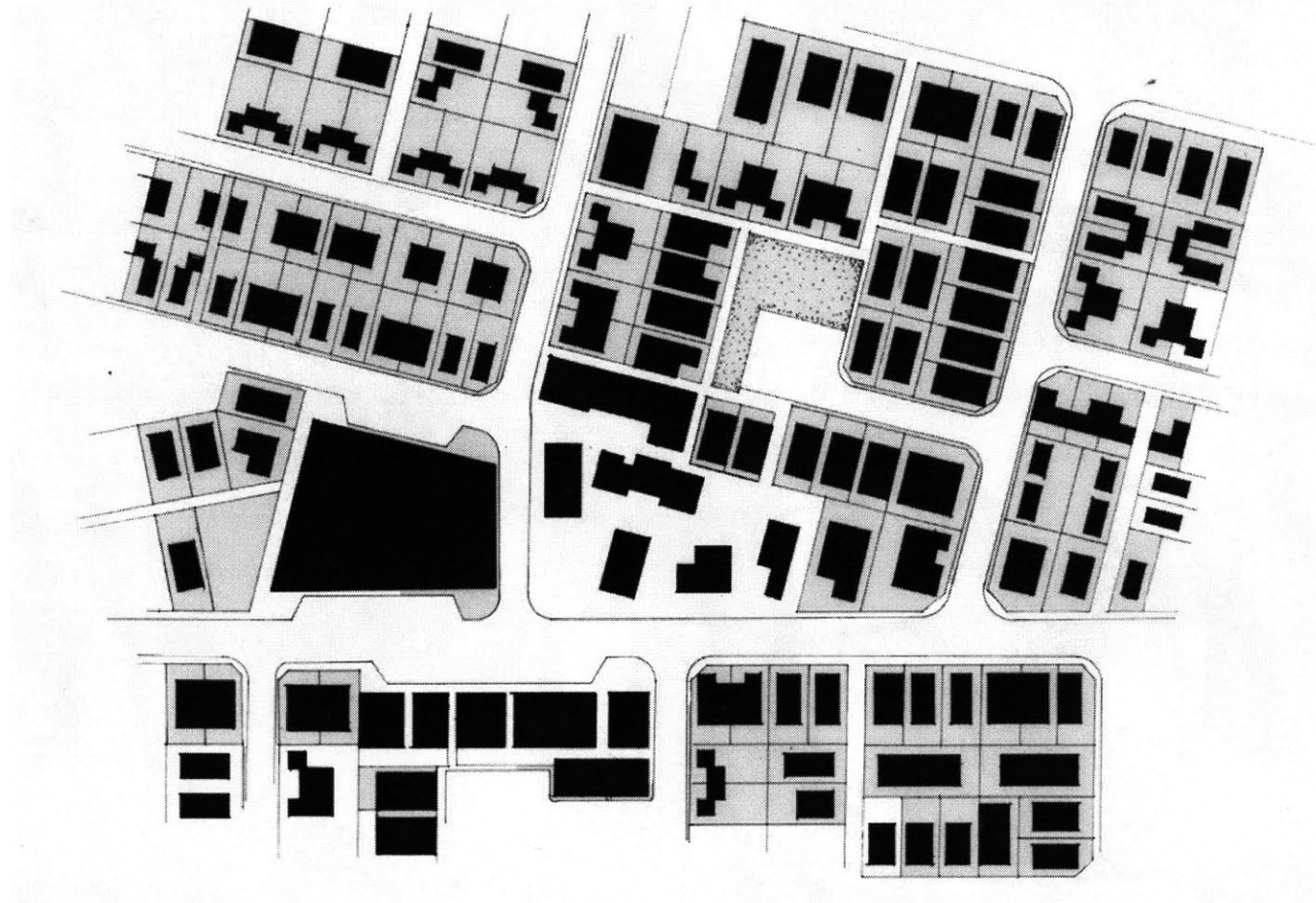
Figure 25. Model of existing community center in context

Figure 26. Figure ground of redesigned community center with context

Figure 27. Aerial view of community center showing outdoor public spaces

KEY

Ground Floor
1 Reception
2 Administration
3 Common Space
4 Daycare Center

5 Workshop
6 Exhibition Shop

7 Events Hall
8 Coffee Shop

9 Common Space
10 Administration
11 Workshop

12 Health Clinic
13 Post Office

Second Floor
14 Workshop
15 Classroom
16 Classroom
17 Classroom
18 Common Space

19 Classroom

20 Public Library

21 Classroom
22 Classroom
23 Classroom

Third Floor
24 Conference Room
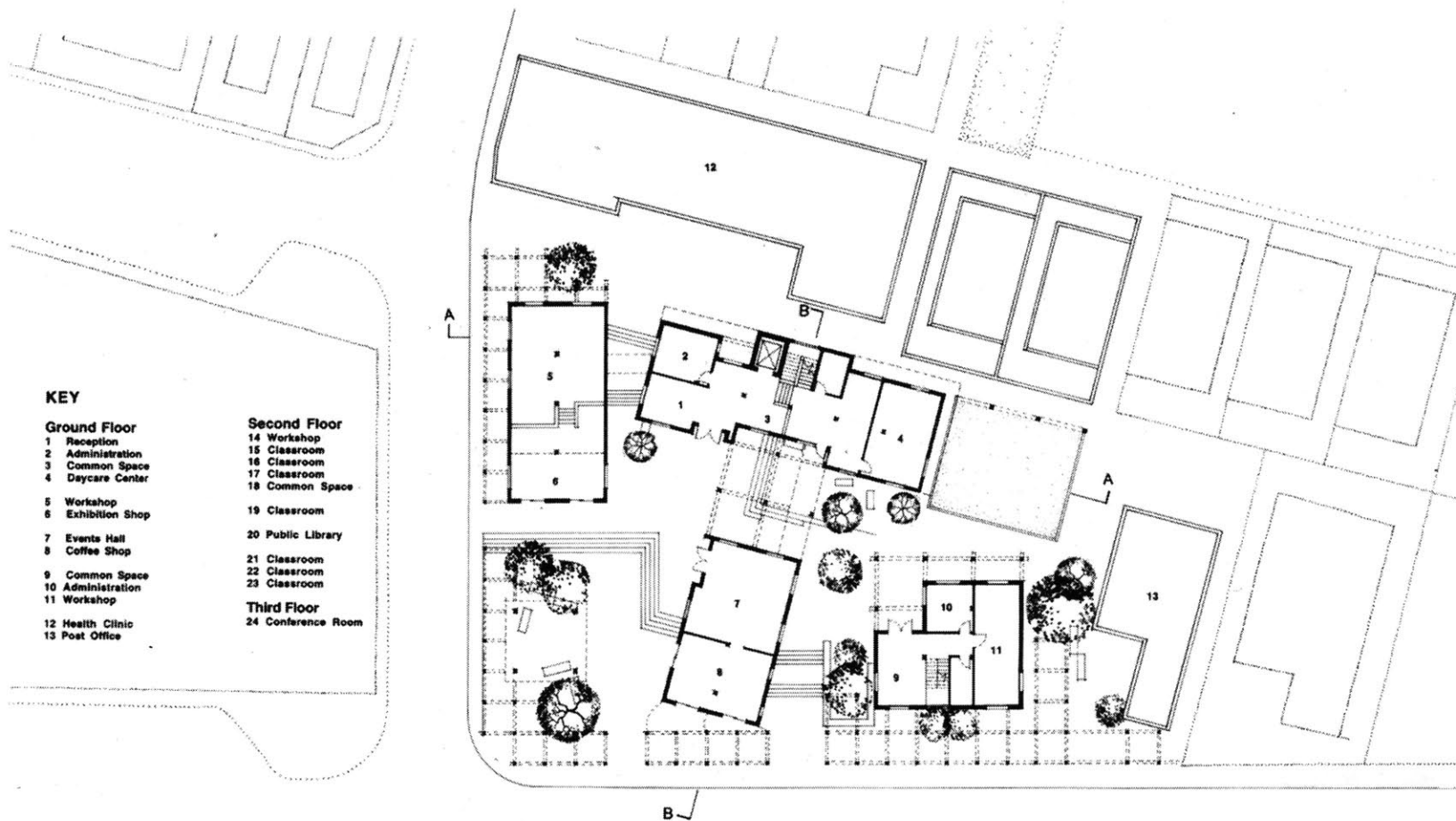
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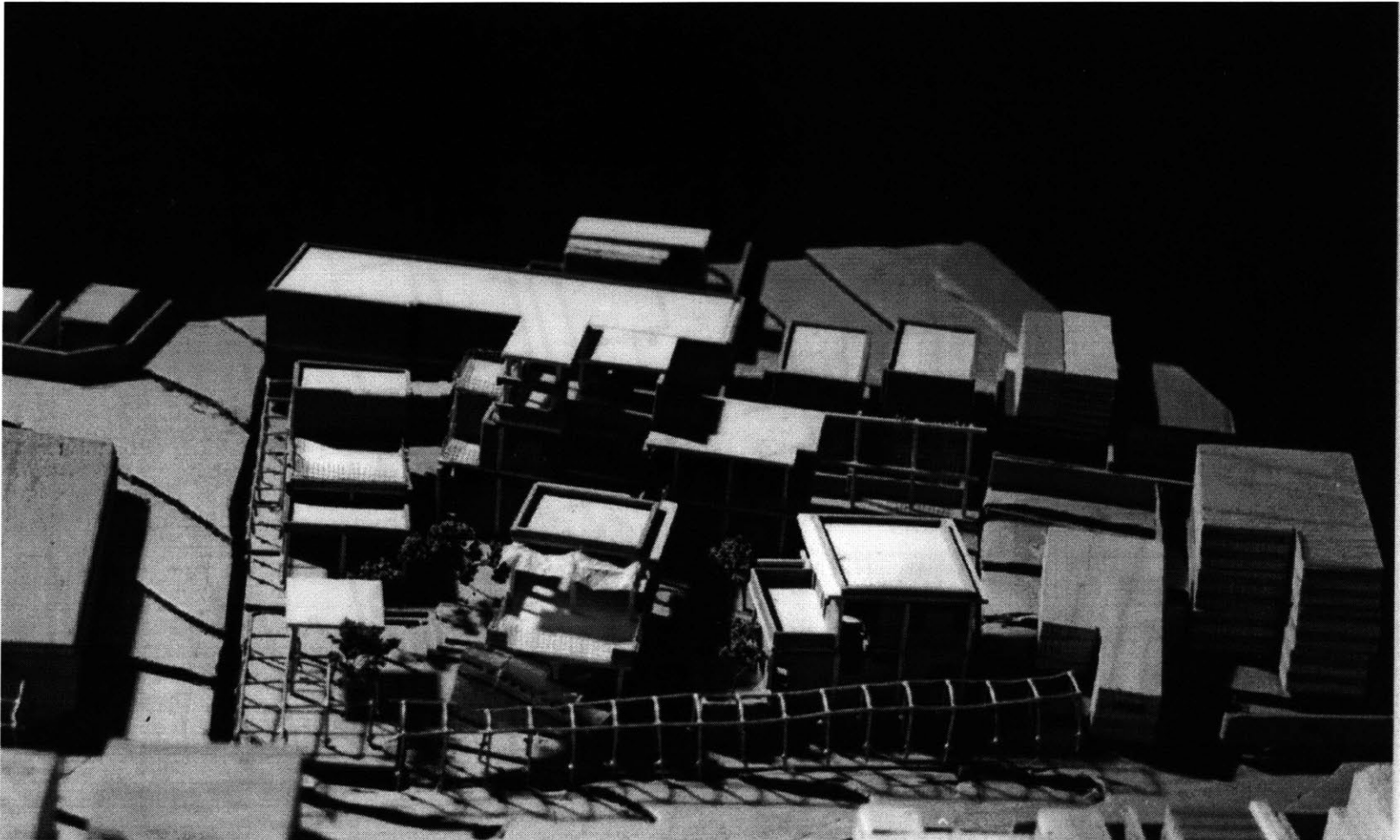
Figure 29. Sketch model
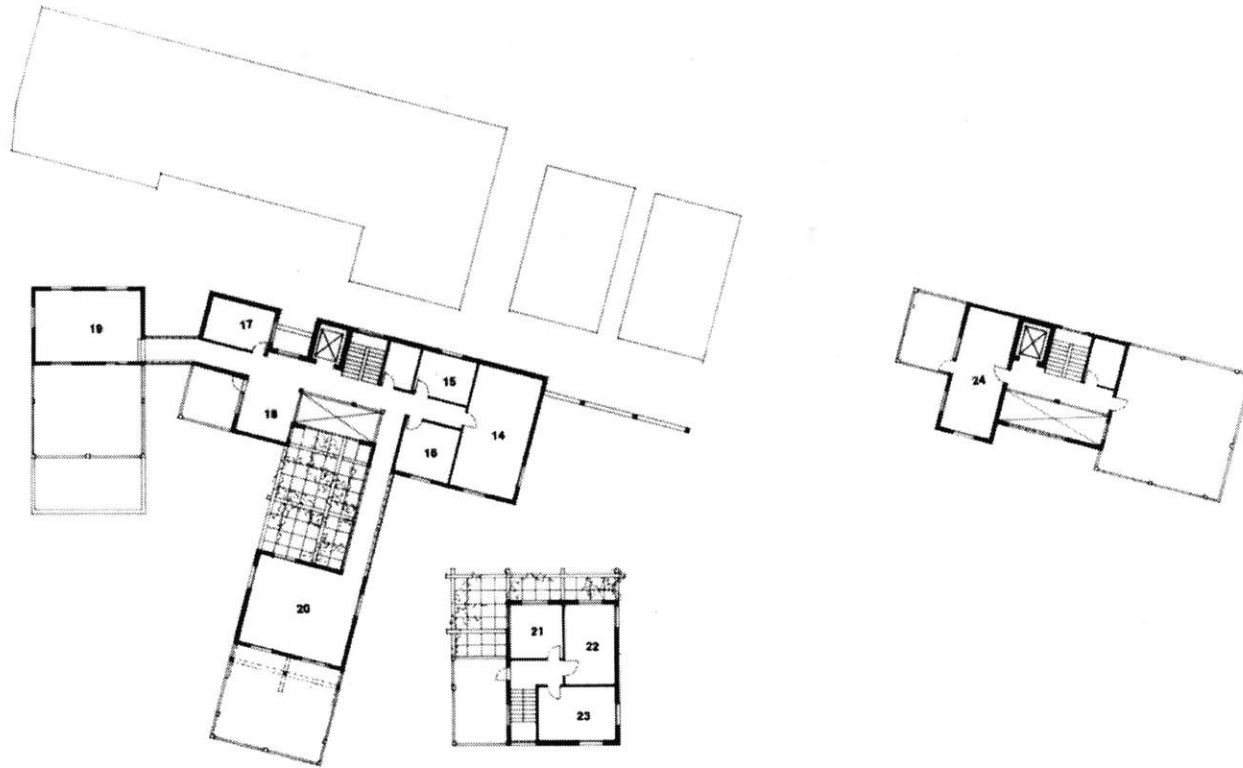
Figure 30. Second and third floor plans

Figure 31. View of community center from the main street
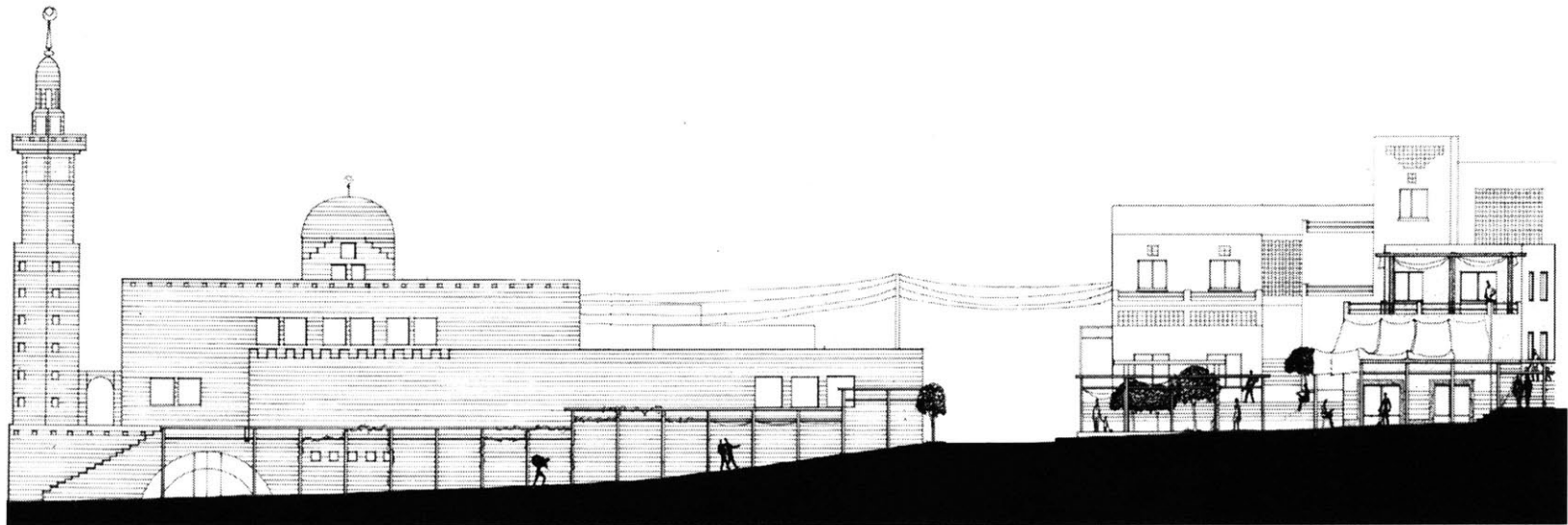
Figure 32. Main street elevation

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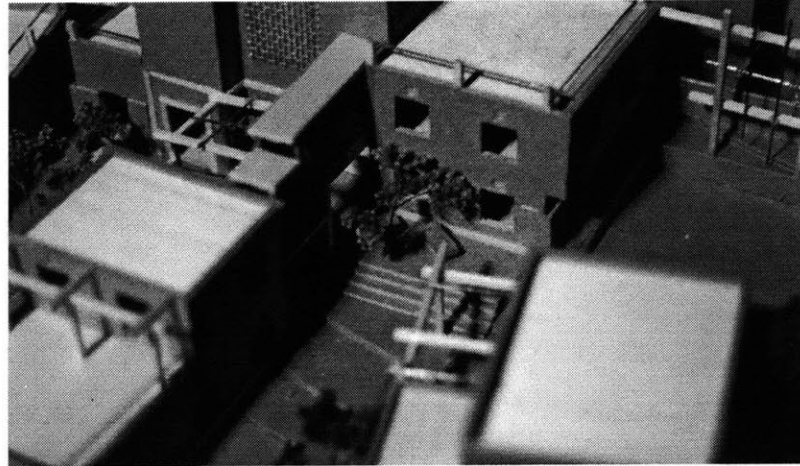
Figure 33. View into the semi-public *sahah* and the main community center building

Figure 34. Closer view of community center
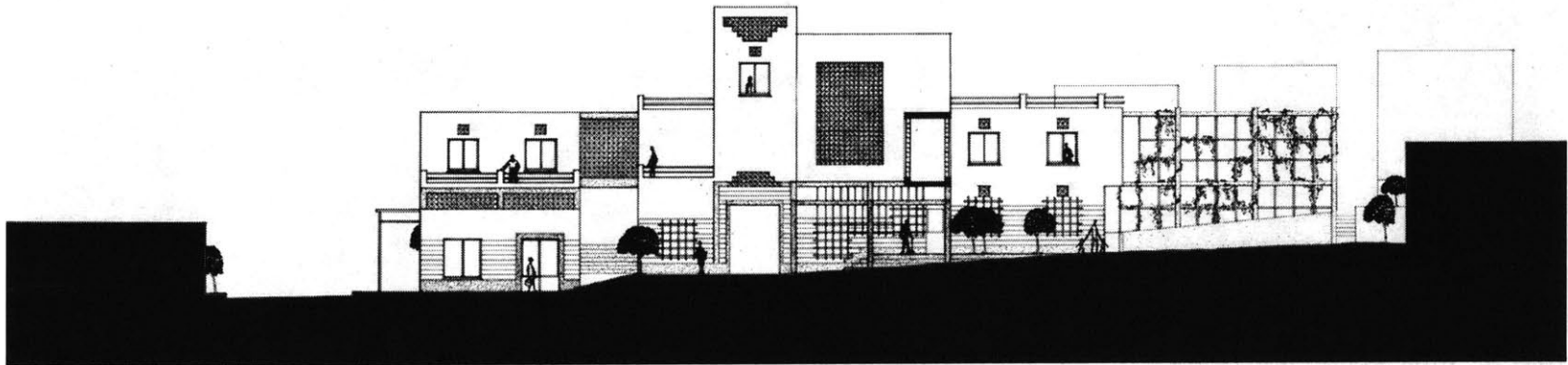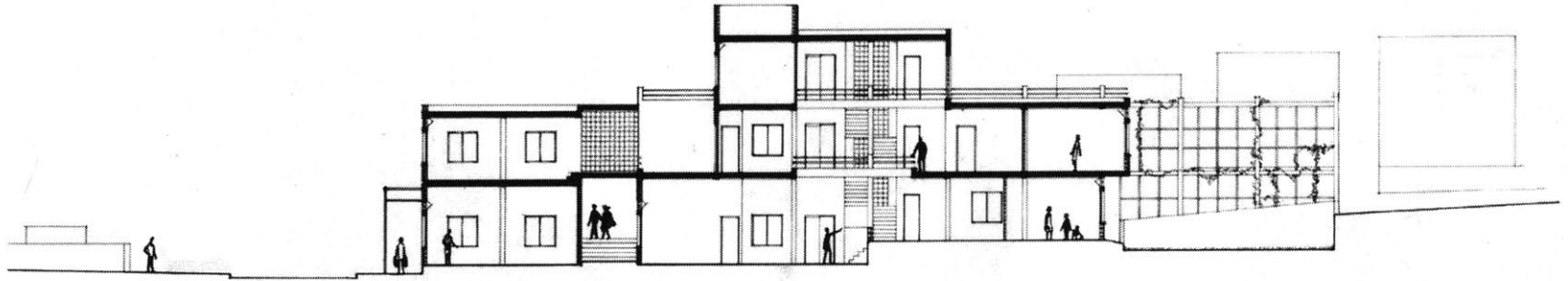
Figure 35. Section and elevation of the community center main building

Figure 36. View showing public *sahah*
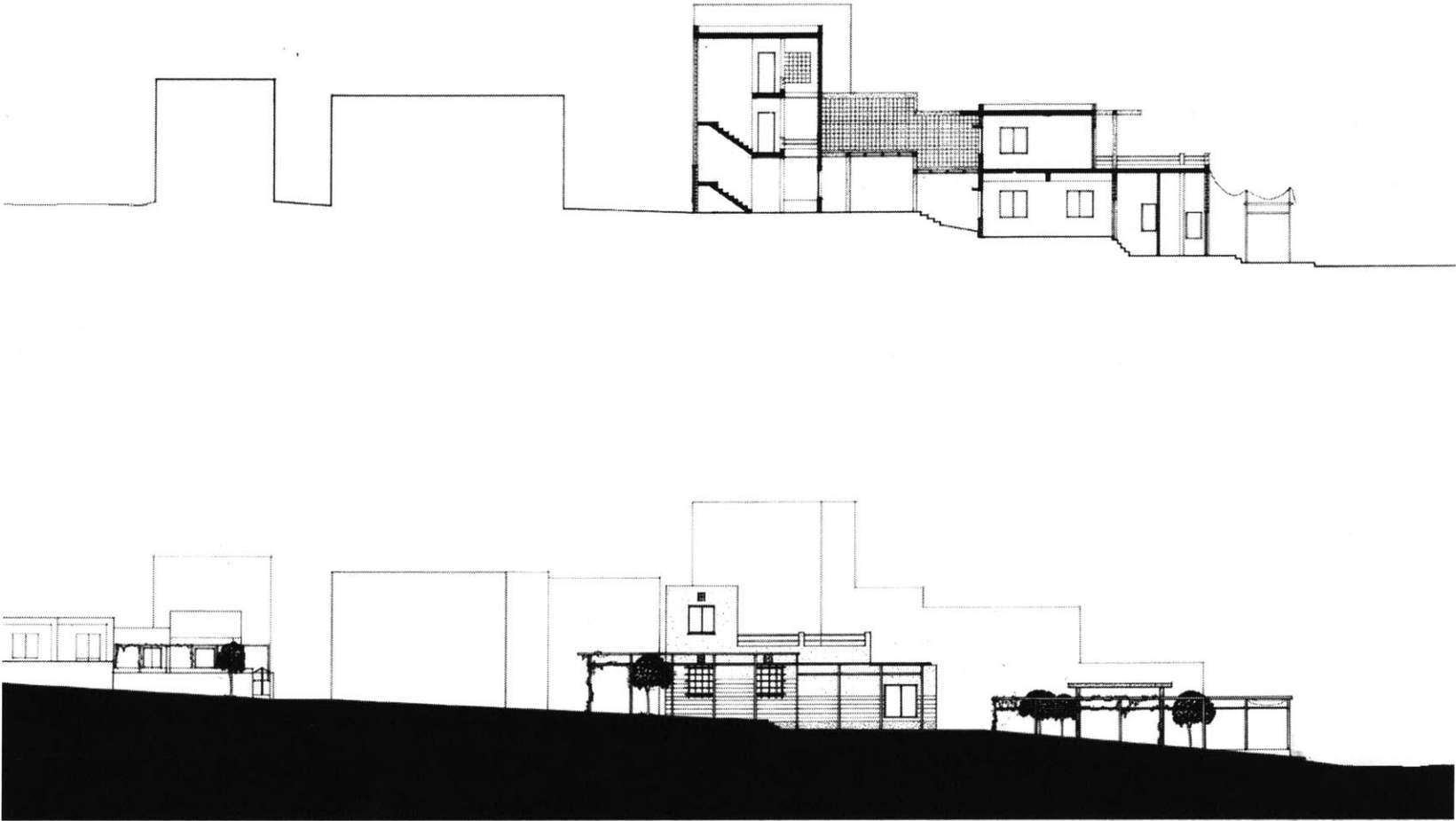
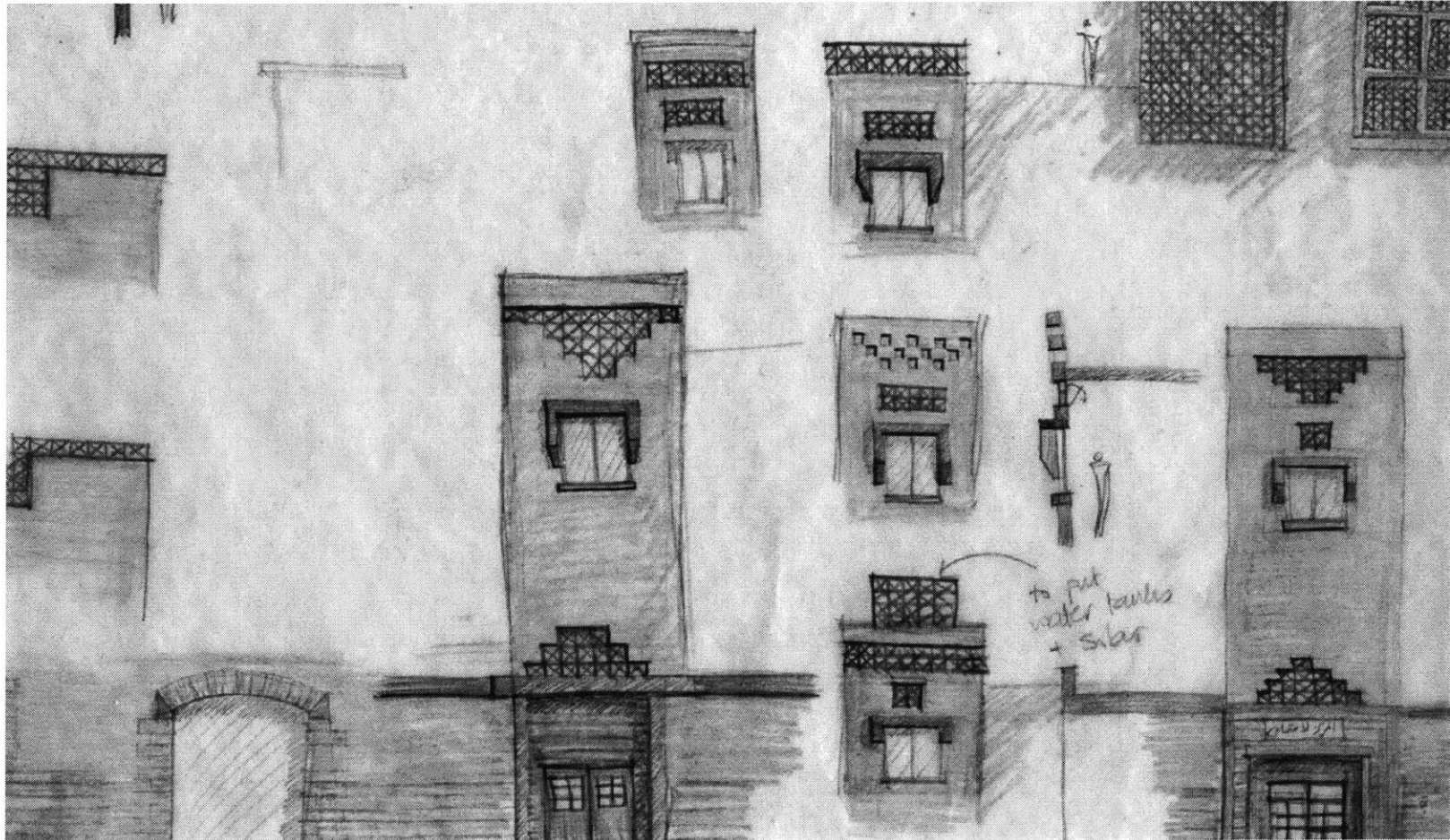Figure 37. Section and elevation of community center from the street
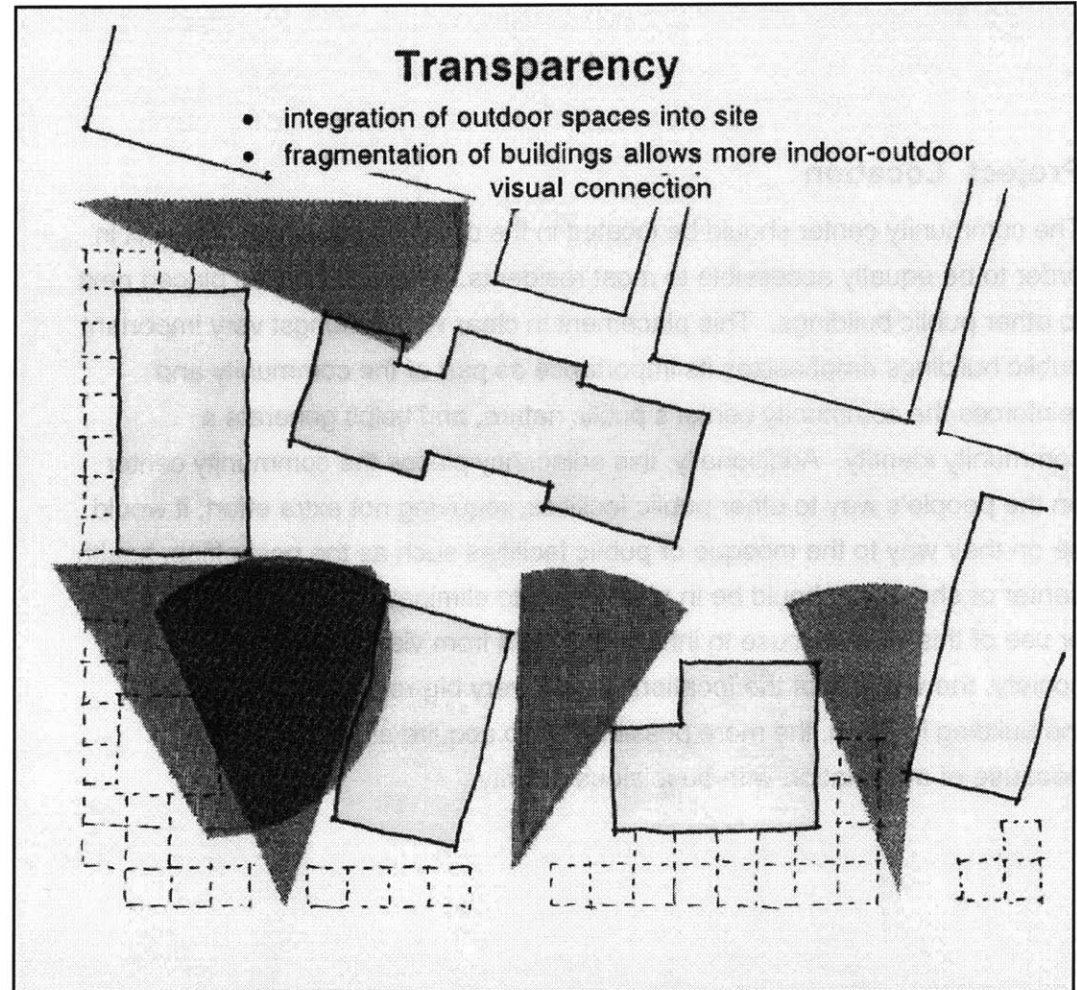
6. Principles

Figure 38. Elevation sketches

The following is a list of principles for the design of future community centers in Jordan. These principles were derived from my design of the Naqab community center. I believe that the application of these principles helps generate a more social architecture that fosters a strong community spirit amongst the members of the housing projects, advancing their social and economic development. After explaining the importance of each principle and how it may be implemented, I show an example of its application in the specific project that I have designed, together with diagrams illustrating it.

Project Location

Located in center of housing project,
next to public functions

- promotes accessibility
- prominently placed in the public sphere of the housing project
- enforces the community identity
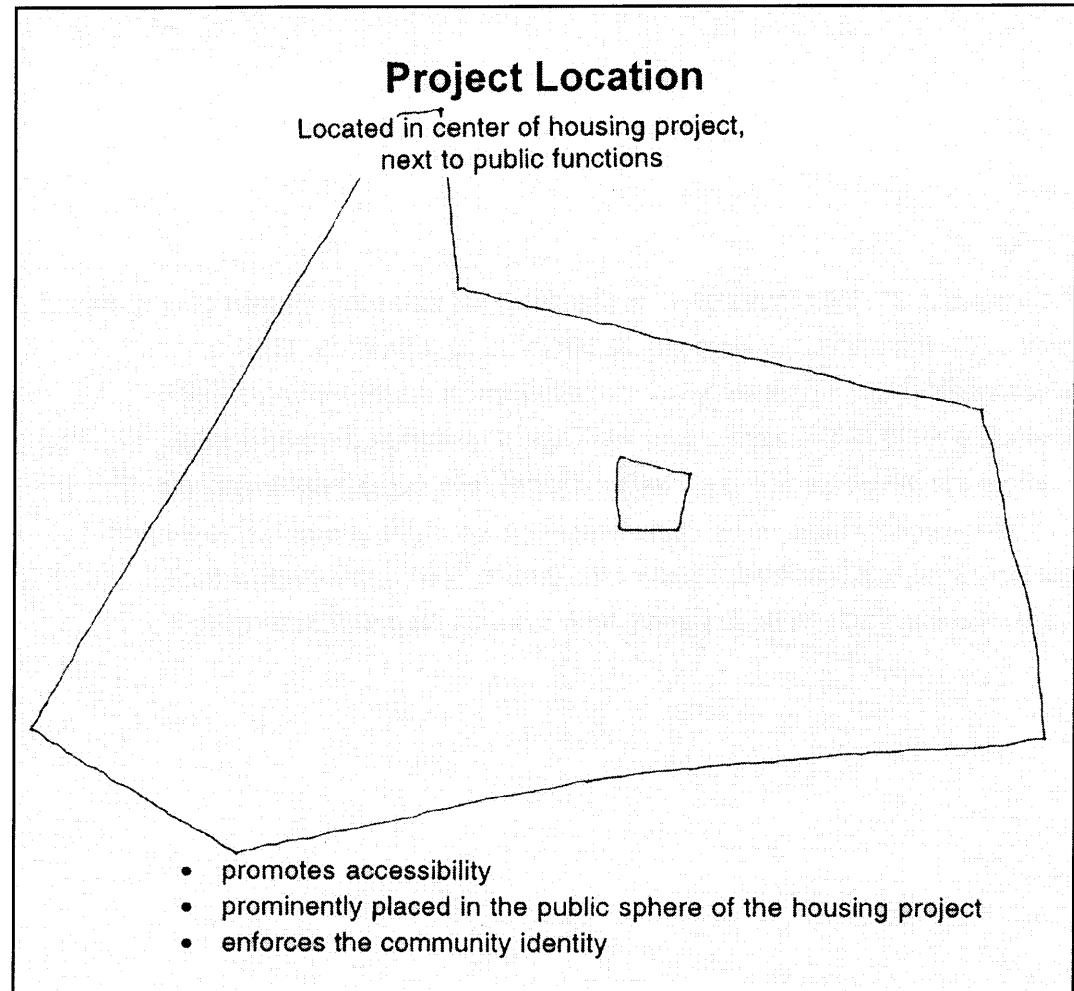
Project Location

The community center should be located in the center of the housing project in order to be equally accessible to most residents. It should also be placed next to other public buildings. This placement in clear view amongst very important public buildings emphasizes its importance as part of the community and reinforces the community center's public nature, and helps generate a community identity. Additionally, this adjacency places the community center on the people's way to other public facilities, requiring not extra effort; it would be on their way to the mosque or public facilities such as the post office, health center or shops. It should be in a safe area to eliminate any chances of danger or use of this as an excuse to inhibit members from visiting the center. In this society, the visibility of the location plays a very big role. The more hidden the building location, the more possible it is to acquire a bad reputation because of association with suspicious activity.
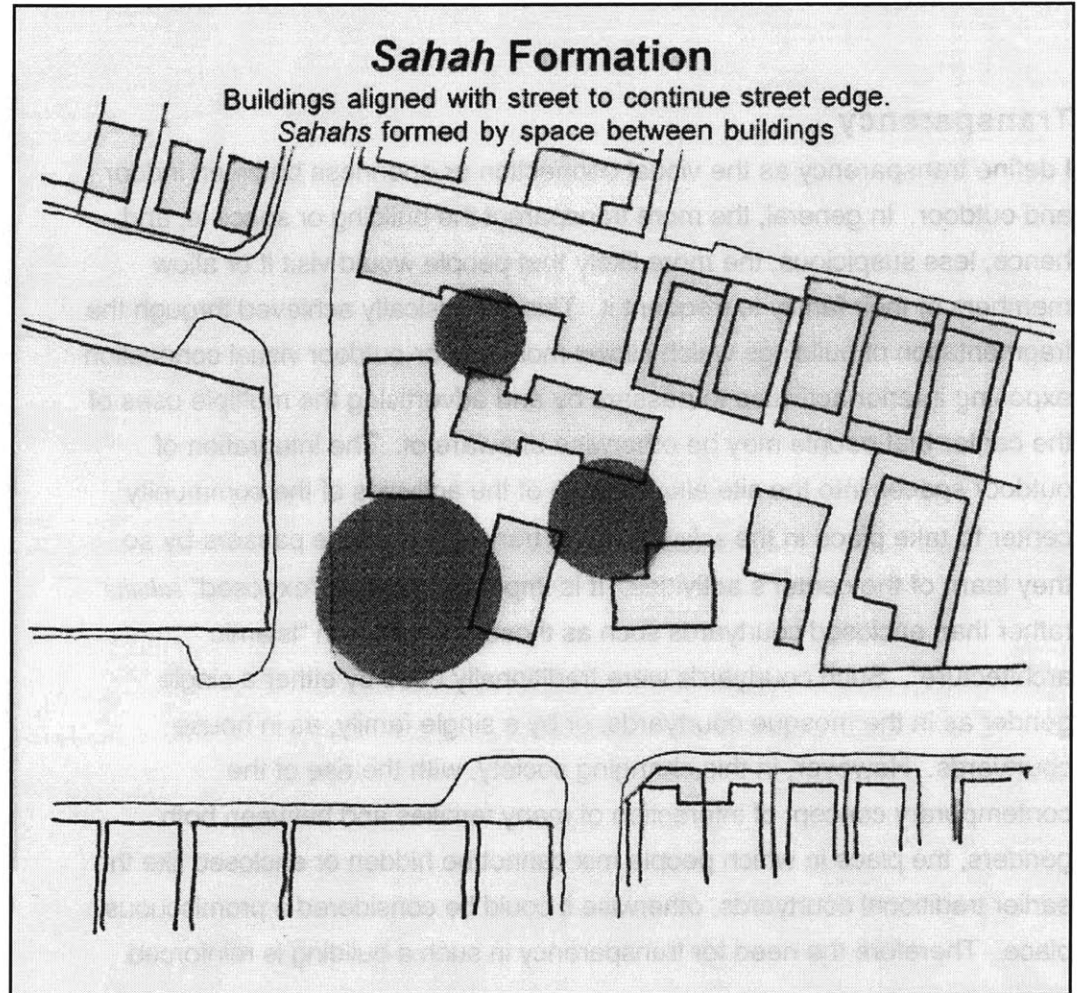
Transparency

- integration of outdoor spaces into site
- fragmentation of buildings allows more indoor-outdoor visual connection

Transparency

I define transparency as the visual connection or openness between indoor and outdoor. In general, the more transparent the building or space is, and hence, less suspicious, the more likely that people would visit it or allow members of their family to frequent it. This is physically achieved through the fragmentation of buildings which allows more indoor-outdoor visual connection exposing interior activities to passers by and advertising the multiple uses of the center that people may be otherwise unaware of. The integration of outdoor spaces into the site allows some of the activities of the community center to take place in the *sahahs* and be transparent to the passers-by so they learn of the center's activities. It is important to have "exposed" *sahahs* rather than enclosed courtyards such as those referred to in "Islamic architecture". Such courtyards were traditionally used by either a single gender as in the mosque courtyards, or by a single family, as in house courtyards. However, in this changing society, with the rise of the contemporary concept of interaction of many families and between both genders, the place in which people mix cannot be hidden or enclosed like the earlier traditional courtyards, otherwise it could be considered a promiscuous place. Therefore the need for transparency in such a building is reinforced.
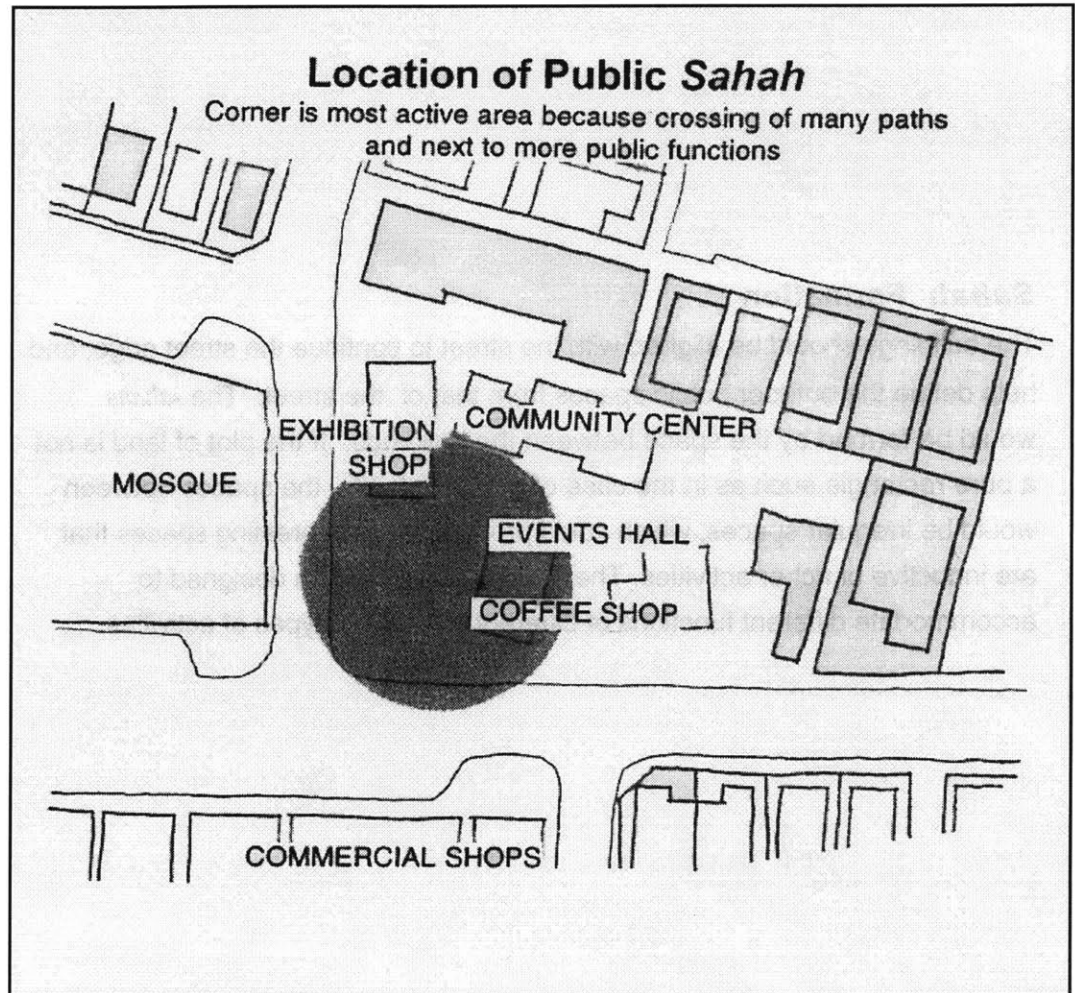

Figure 39. View from street into community center

Sahah Formation

Buildings aligned with street to continue street edge.
Sahahs formed by space between buildings

Sahah Formation

The buildings should be aligned with the street to continue the street edge, and help define the outdoor public spaces from that of the street. The *sahahs* would be formed by the space between the buildings. If the plot of land is not a pure rectangle such as in the case of the Naqab site, the spaces between would be irregular spaces, which could produce more interesting spaces that are inductive of richer activities. The spaces could then be designed to accommodate different functions of different scales and types of activities.

Figure 40. Aerial view of community center showing outdoor public spaces

Location of Public *Sahah*
Corner is most active area because crossing of many paths and next to more public functions

EXHIBITION SHOP

COMMUNITY CENTER

MOSQUE

EVENTS HALL

COFFEE SHOP

COMMERCIAL SHOPS

Figure 41. View of corner of the site

Location of Public *Sahah*

The public *sahah* should be located at the most visible, open and public location on the site. This would be that part of the site most exposed to the streets, and closest to the most public areas in the community. The optimal location is a street corner. It is the most active area because of the added factor of the crossing of many streets and pedestrian paths, especially short-cuts. The public *sahah's* proximity to the more public functions increases its chances of being frequented because it may then also be used by people attending public functions other than those of the community center.

Progression of Spaces

1 street
2 break through arcade
3 courtyard
4 building entrance

1 → 2 →

4

3

4

4

1 → 2 → 3   4

3

4

3

4

4

4

3

4

↑
2
↑
1

↑
2
↑
1

↑
3
↑
2
↑
1

Progression of Spaces

The community center visitor should go through a procession of spaces before
reaching his destination. The importance of going through many spaces is that
each stage offers the pedestrian exposure to a variety of activities that are
happening in these spaces before he gets to his destination, and hence he
has more opportunities of engaging in social interaction, both indoors and
outdoors. For example, in the present design, on the street one meets people
coming from and going to the public buildings. Once one enters into the
'arisheh (the metal structure provided for growing vines) one may meet people
in the coffee shop, or see the informal vendors who are selling their products.
In the *sahah*, one meets people hanging around, or walking into or out of one of
the community center buildings. All these encounters would be part of just one
journey to a class in the community center for example . This way,
pedestrians get to at least visually recognize members of their community,
have more chances of engaging in conversation with them and thus develop a
stronger sense of community.

Public Space Transition Element

- Integrates fragmented buildings
- Defines site edge
- Provides shaded areas
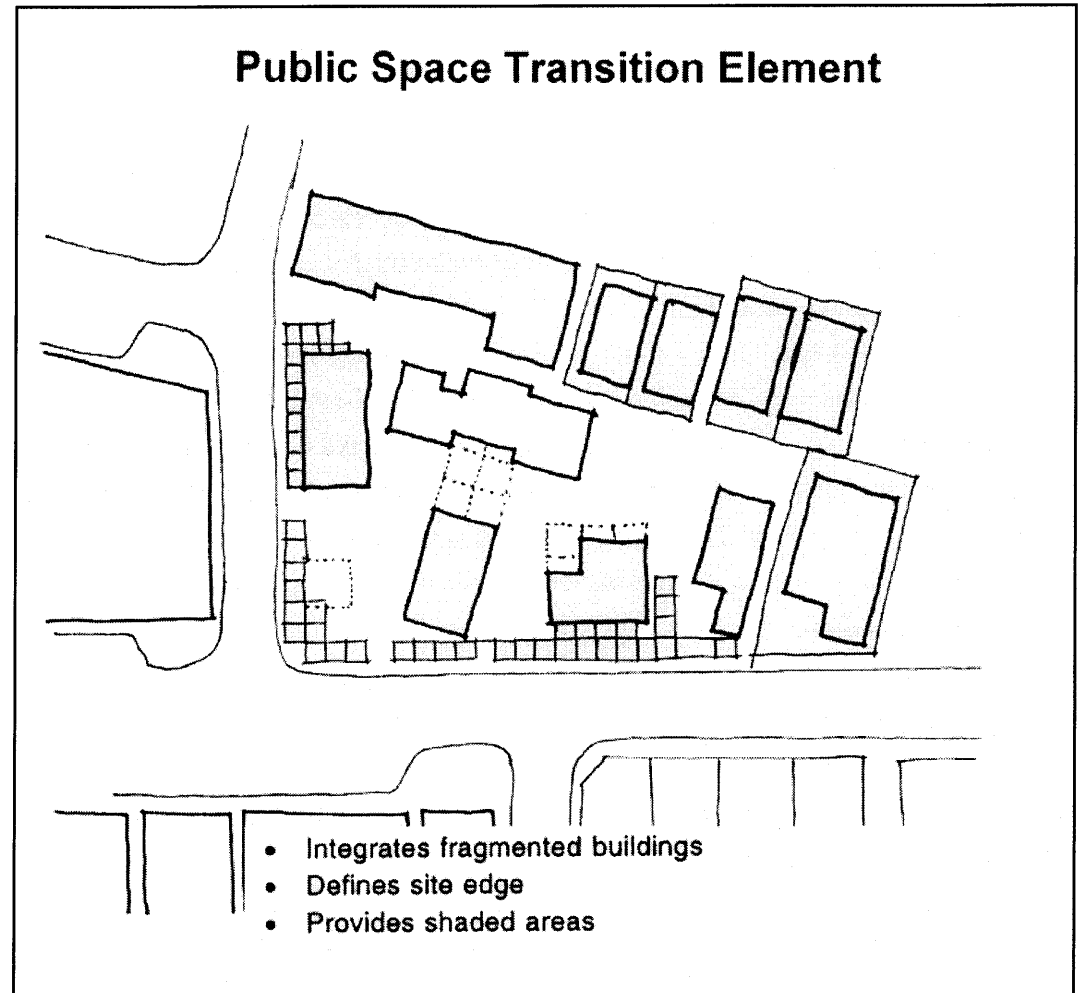
Public Space Transition Element

An example of this element is the *'arisheh* which is the metal structure provided for the growth of vines or for spreading canvas tents. The provision of such an element is very important to create a transition between the streets and public *sahahs* so that the latter do not lose their definition to the street. This element plays a major role in the architecture of the community center both visually and functionally. Visually, it integrates the fragmented buildings and unifies them as one project. This element also helps define the site edge and provide continuity to the streets. Functionally, this transition element provides shaded areas for people to hang around, for informal vendors to set up their products for sale, for coffee shop visitors to drag tables out and sit under the *'arisheh*. Additionally, the points of entrance from the street into the *sahah* may be emphasized through gateways within the structure, as markers of entrances. Such a transition element (as arcades) can be found in many historical and 19th century structures in the commercial streets of Islamic towns.
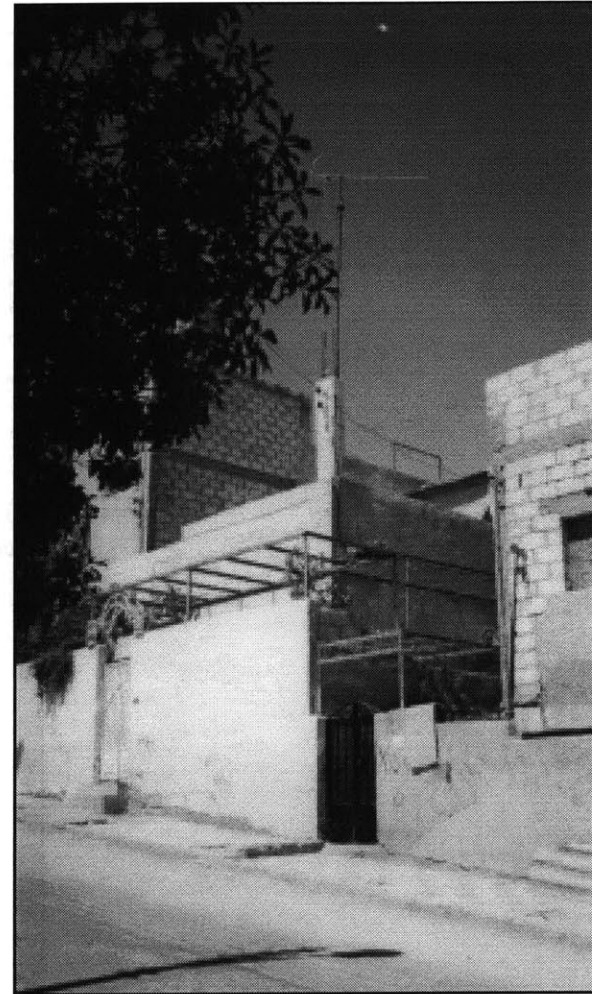
Figure 42. Example of a *'arisheh* in the Naqab community

Public *Sahah*

Provision of frequently-used public functions around public *sahah*

connection to clinic *sahah*

COMMUNITY CENTER

EXHIBITION SHOP

street entrance to
public *sahah*

connection to
semi-public *sahah*

EVENTS HALL

INFORMAL VENDORS

COFFEE SHOP

street entrance
to public *sahah*
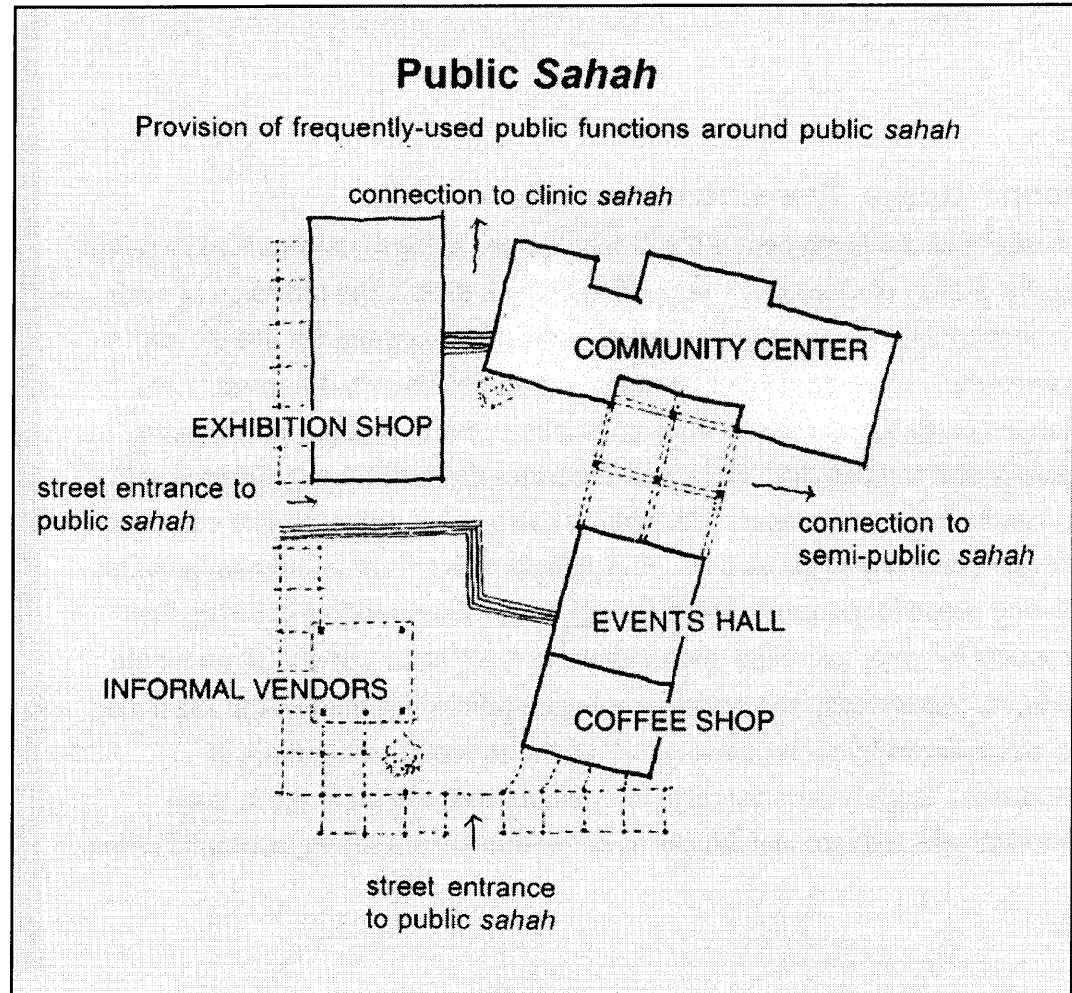
Public *Sahah*

The important of public spaces in the project to increase social interaction in and around the community center cannot be stressed enough. This public *sahah* as opposed to the rest of the *sahahs* mentioned, should give the impression that it does not specifically belong to any individual public building, but rather to the community as a whole. This feeling would encourage people who are not visiting the community center to also utilize it. This may be done by carefully surrounding this *sahah* with other public buildings and by the most public functions of the community center such as the exhibition shop, the events hall, the main entrance to the community center, etc. It should be mostly at street level so people associate it with the same public nature of the street so they do not have to put in the extra effort to use it; they should find themselves in the public *sahah* with great ease.

Figure 43. View of public *sahah*

Semi-Public *Sahah*

DAYCARE CENTER

CHILDREN'S
PLAYGROUND

connection
to public *sahah*

WOMEN'S CENTER

street entrance to semi-public *sahah*

Figure 44. View of semi public *sahah*

Semi-Public *Sahah*

This is a secondary level *sahah* which is less public than the main one. It offers some privacy to the functions around it such as the women's center, the day care center and the children's play area. This sense of privacy may be attained by raising the *sahah* to a higher level than the more public street level, and by making it less transparent than the public *sahah* from the street by hiding part of it behind the buildings and by placing a screen such as a screen of trees, a *'arisheh* or a wall of perforated concrete blocks.

Women's Center

- On street edge- not hidden
to give importance to center and its users
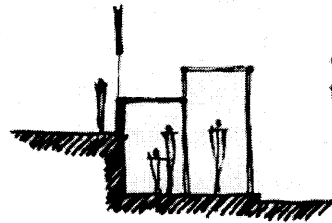
- Raised from street level
to provide privacy for center users
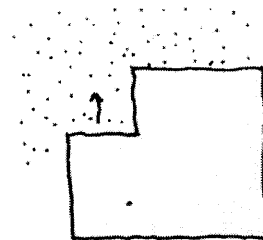
- Opens onto semi-public *sahah* for degree of privacy
- *Sahah* overlooks children play area
- Located close to Daycare Center

Women's Center

This building offers the option for women who do not want to mix with men when they are taking classes. (Given the current social structure of the society, there is a need for some segregated spaces). The women's center contains a common space, workshop, classes, administration area, and a balcony. The location of this building is very important. It should be placed in a prominent location next to the street, as opposed to a hidden place, in order to highlight the center and its users. However, at the same time, it needs some degree of privacy for its users. This may be done by raising the building from street level so that women users have the choice of overlooking and not being overlooked, or overlooking and being overlooked. Another way of providing a sense of privacy is by placing the entrance to the center away from the street and by providing a semi-public *sahah* that women and their children could use. This *sahah* should overlook the children's play area so that women have the option of watching their children while in class or in the *sahah*.

Clinic *Sahah*

CLINIC

street entrance to
clinic *sahah* →

outside waiting area

connection to public *sahah*
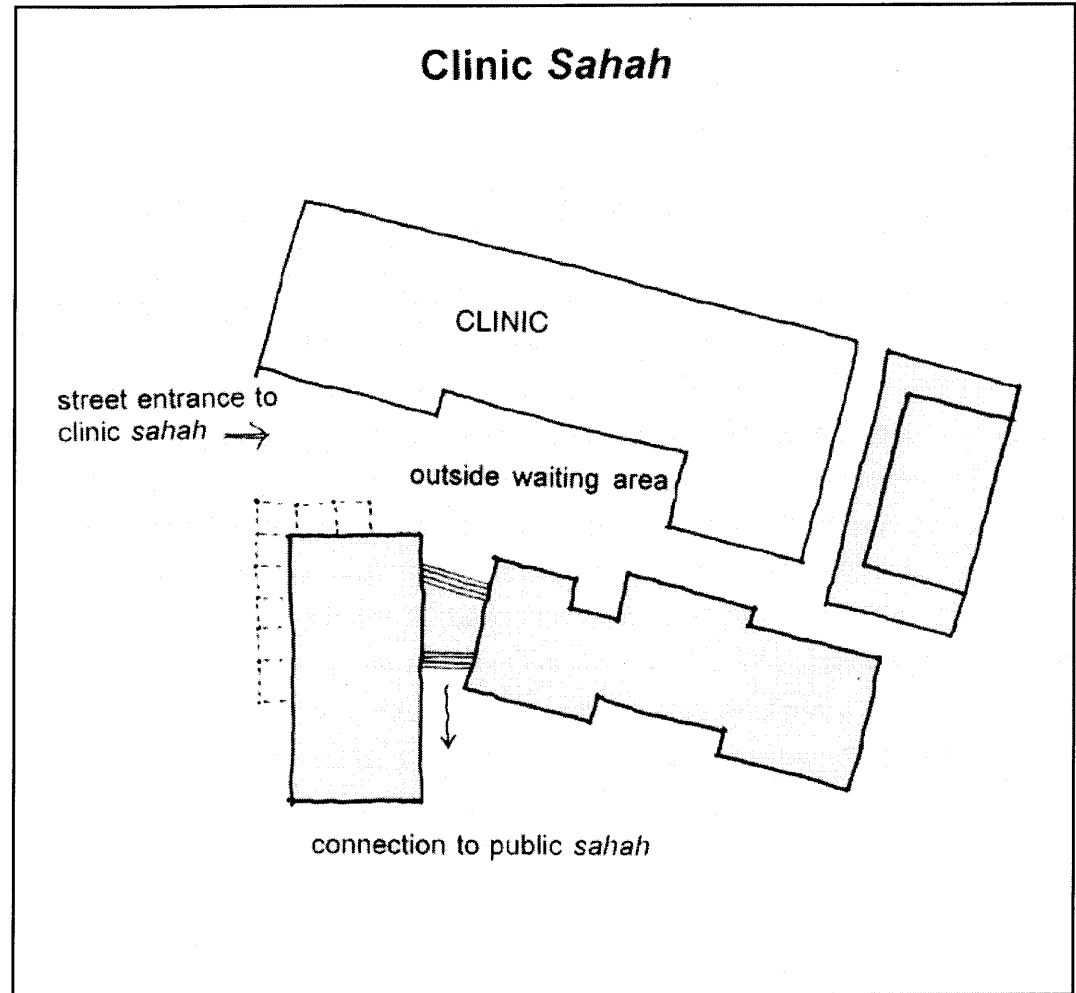
Clinic *Sahah*

This *sahah* is mainly for the use of individuals visiting the health clinic. It could be used as the outdoor waiting area when weather permits, in the shade of the building, the trees and the *'arishehs*. The location of this *sahah* is directly off the main street for easy access and so that vehicular drop off can be achieved. People in the courtyard have visual and physical access to the main public *sahah* so they are aware of the activities that are taking place within it while they are awaiting their turn. They also see the main community center and workshop buildings.
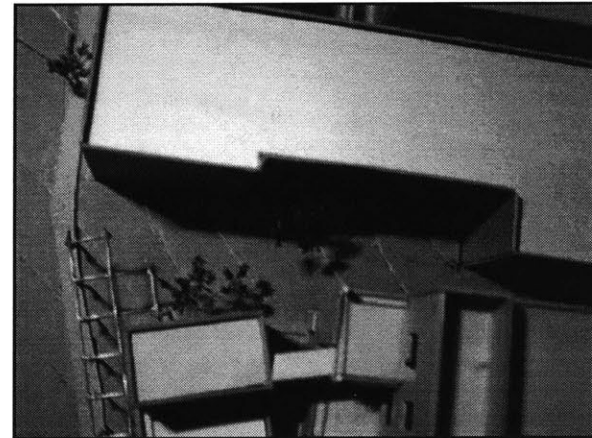
Figure 45. View of clinic *sahah*

Provision of Shade in Open Areas

To encourage people to stay in *sahahs*

- Orientation of building to provide maximum shade

- Building cantilevers

- Plants

- Metal arcades with cloth or plants

Provision of Shade in Open Areas

In order to draw people into the outdoor open *sahahs*, there are a few very important factors have to be taken into account such as the provision of shade and seating and surrounding the *sahahs* with public functions. In the case of shade, this may be done by paying attention to the orientation of the buildings so they would cast shadows on the *sahahs*. Also by planting large trees and providing *'arishehs* at convenient locations where people tend to loiter most such as at building entrances or next to outdoor seating. Additionally, one could make use of the buildings' ability to provide cantilevers to cast shadows on spaces or paths often used by people.
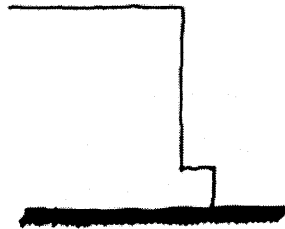

Figure 46. Women sitting in the shade of a tree in the Marka 'sites and services' project

Provision of Seating Platforms

To welcome people into *sahahs*
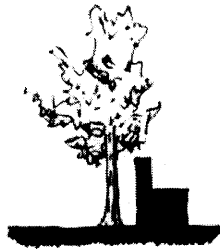
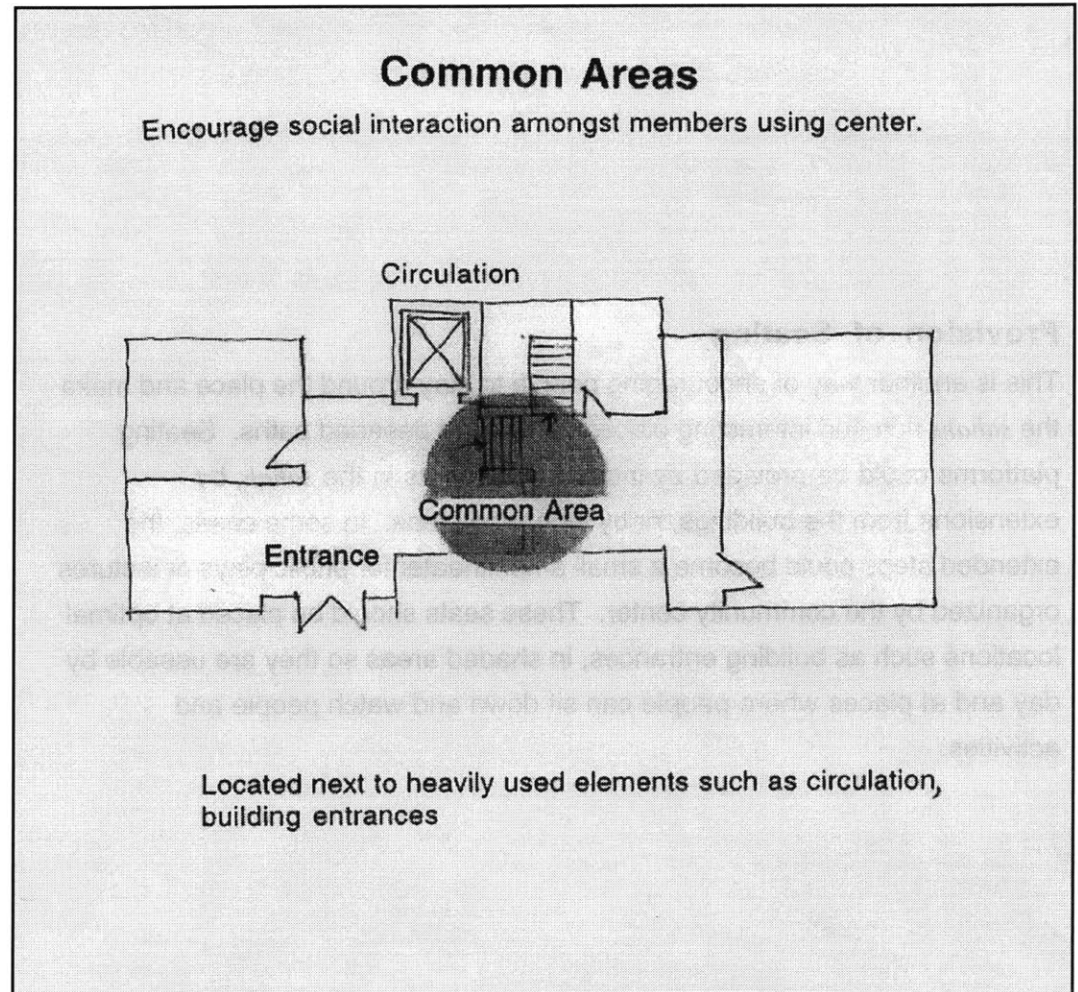- Independent concrete seating

- Extension of building elements

- Some steps increased for seating

Provision of Seating

This is another way of encouraging people to stay around the place and make the *sahahs* rich and interesting places rather than deserted paths. Seating platforms could be provided by independent seats in the *sahah*, by extensions from the buildings, or by extended steps. In some cases, the extended steps could become a small amphitheater for public plays or lectures organized by the community center. These seats should be placed at optimal locations such as building entrances, in shaded areas so they are useable by day and at places where people can sit down and watch people and activities.

Common Areas

Encourage social interaction amongst members using center.

Circulation

Common Area

Entrance

Located next to heavily used elements such as circulation, building entrances

Indoor Common Areas

Within the community center buildings it is very important to provide common areas at strategic locations. Common areas within the interior are analogous to *sahahs* in the exterior. They provide an informal setting for people to congregate in groups, to wait for one another, to watch people and activities and to be watched. These spaces are very important, because people can be in the building without having to head towards or perform a certain function; they could just sit and look around which encourages more social interaction. Present community centers lack such a space. The common areas should be located near the more frequently used paths and places in the building such as the entrance, services, points of information (reception area) and circulation rather than in an isolated closed area. They would thus be open and transparent, not an enclosed room, and in this way the common areas reiterate their public nature.

Vertical Connections
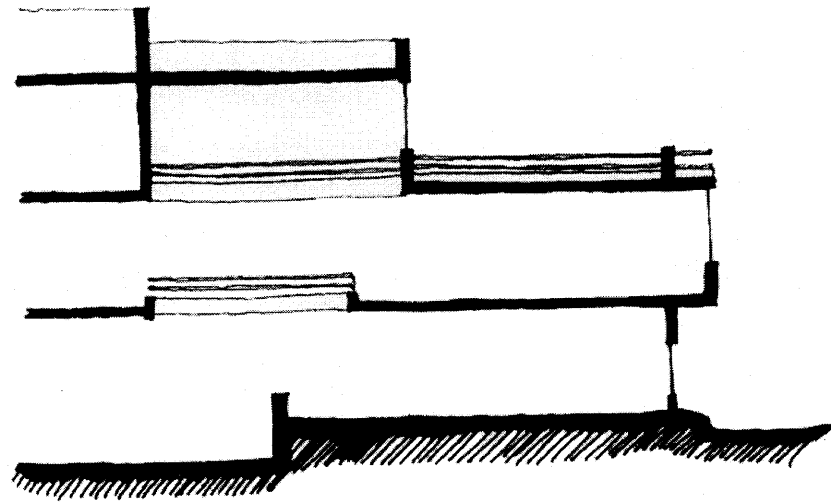
Atrium   provides vertical visual connection between floors
to encourage social interaction

Balconies   offer connection between upper floors and outside

Vertical Connections

Examples of vertical connections are atriums and balconies. These features make a strong visual connection between the floors of the building (atriums) and between outside and inside (balconies) so that people are aware of people and activities on other floors. One can call this vertical transparency as well. Placing the common areas next to these vertical connections makes the common areas richer because people can have lateral as well as vertical transparencies.

Figure 47. Atrium in Baqa'a camp UNRWA school

Future Expansion
Balconies may be built up when extra space is needed in community center
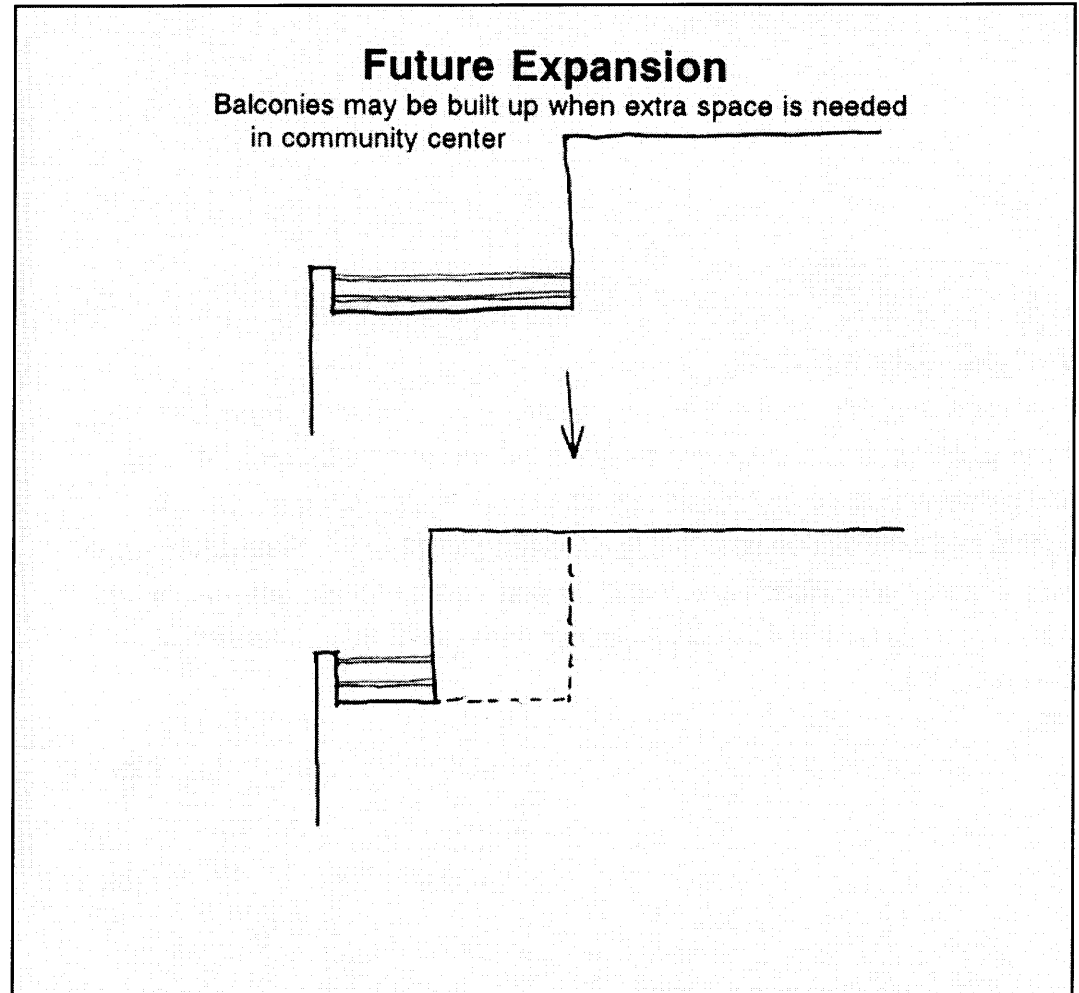
Future Expansion

To accommodate community growth and the need to expand the community center to provide more activities, the balconies become very important elements. Besides offering visual connection between people inside and outside the center, these balconies and terraces offer a place to expand into when desperate for an extra classroom or activity space. Although this option is provided it should be carefully considered so as not to eliminate all the balconies since they are important to the well-being of the community center users. Also each building could have some space around it to allow for future expansion on ground level if necessary.
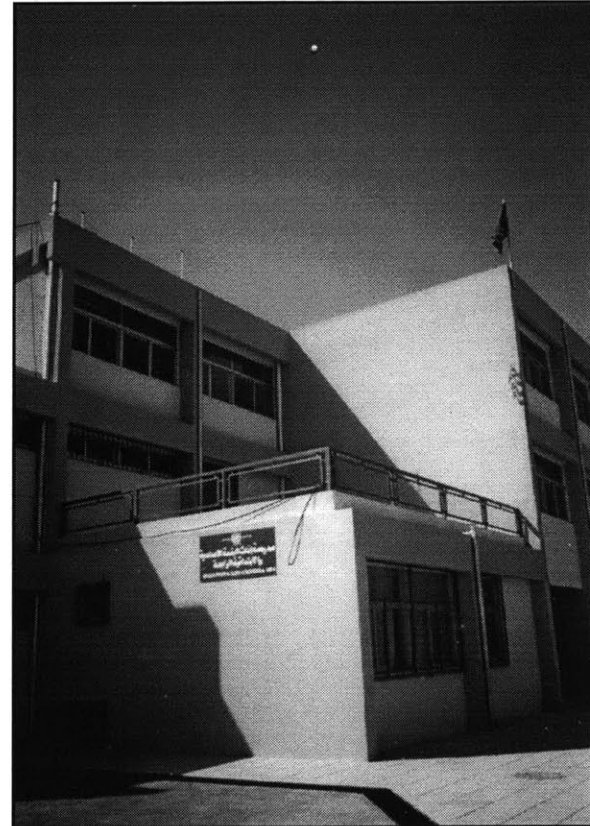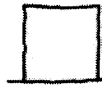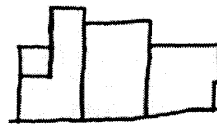

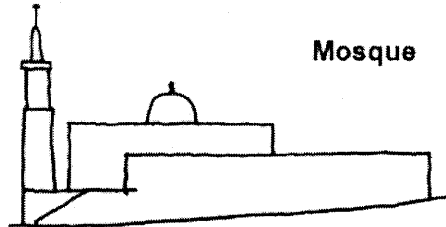Figure 48. Balcony in Baqa'a camp UNRWA school

Character of Community Center

Residence
- small scale
- very private
- stucco or stone

Community Center
- complex of residential scale buildings
- public
- stucco and stone

Mosque
- monumental and large scale
- very public
- stone

## Character of Community Center Buildings

The community center, being a public building, should be at the same scale as the public buildings surrounding it. It should not be as monumental as most public buildings tend to be, because it might intimidate some people. In the case of the Naqab redesign, the mosque and community center should be complementary to one another; the mosque deals with the spiritual aspect of an individual's life, and the community center deals with the secular aspect; the mosque is mostly used by men, whereas the center is used by both genders and all ages. The community center should have its own distinct identity, separate from the mosque, otherwise, it might reflect the idea that it is mostly to be used by only a section of the people. It is important to clarify that this building is public so it needs to have some measure of formality; yet at the same time, there should be some relationship to the residential buildings to offer a degree of familiarity. For example in my redesign, the community center uses the same concrete modular frame, 4m by 4m, dimensions of the houses for ease of building with the rest of the housing as well as for association with the residential scale. The general character of the center should be very "approachable" and inviting to encourage people to participate in community activities. Aesthetically, the center should be a building that the members could be proud of -- a symbol of the community.

Figure 49. View of community center and mosque

Marker of Community Center

Marker distinguishes community center from rest of residential
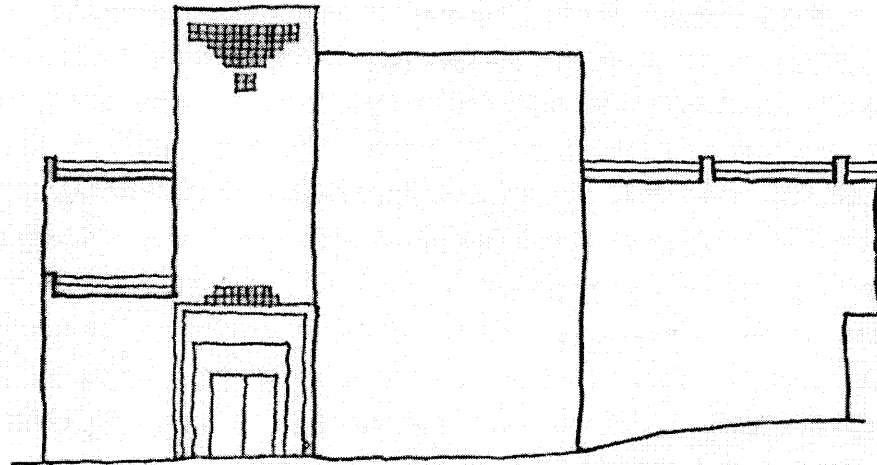
- Added height to make a vertical element
- Distinctive pattern
- Marker signifies major entrance to Center
  (entrance indented and more articulate)

Marker of Community Center

It is important to mark the community center, not only as a special building, but as a place in the urban landscape; the tower helps identify it from a distance. It should be differentiated from the surrounding residences and given some measure of formality. This could be done by having an elegant tower in part of the building as is the case in the redesign of the Naqab community center or by incorporating a pattern that makes the building special.
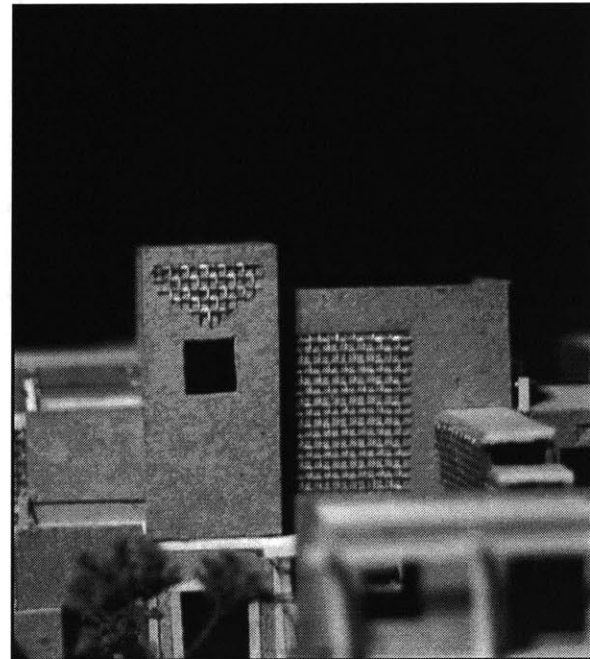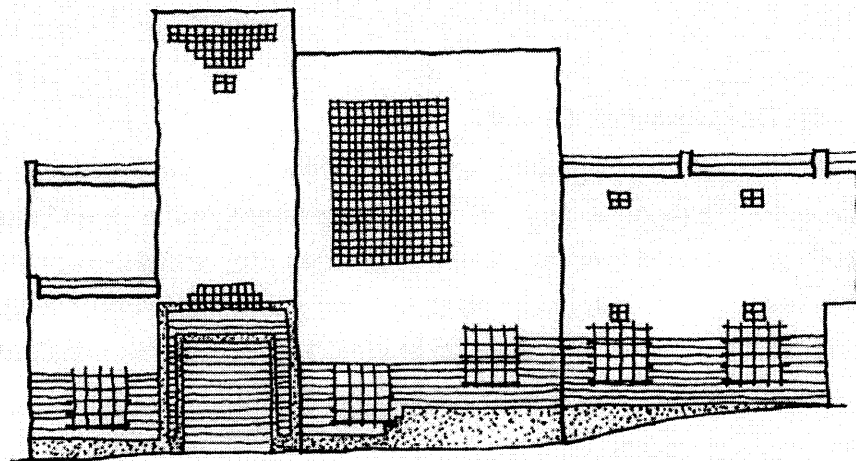

Figure 50. Main community center building

# Use of Materials

Use of locally available materials

- **Metal** balcony railings and window protection bars
- **Perforated concrete block** for special uses e.g. atrium
- **Stucco** general surfaces
- **Stone** at level of contact with pedestrian
- **Concrete** foundations rising into building

   concrete and stone rise to define entrance

Use of Materials

The materials should be used in a logical manner taking into consideration
practical and aesthetic issues. For example in this design, the concrete
foundation of the building rises above the ground providing a tough surface at
the foot of the building to deal with the dirt at foot level and to mark the base
level of the building. Then comes the stone which is a precious and
expensive material not used by many houses because of its cost. It is placed
at the level a pedestrian is in contact with the building so one experiences this
material and there is a feeling of pride associated with this building and
because stone is hard, therefore it can accommodate rougher usage. The rest
of the surface material then could be the inexpensive stucco. The concrete
block is then used at special moments such as for ventilation or decoration.
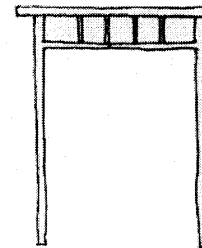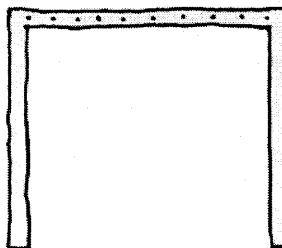
Use of Metal Bars
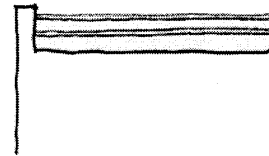
- Railings on balconies
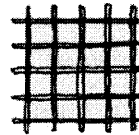
- Window protection on ground floor

- Pavilion structure throughout project

- Support for vine growth on concrete structure

Use of Metal Bars

Metal bars are used for protection on the ground floor windows -a common and necessary precaution in Jordan). They are also used as railings on balconies. Finally, they are used for the *'arisheh* to support the vines and canopies for shade.
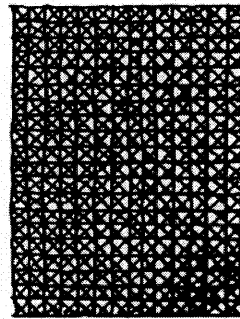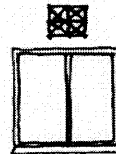
Figure 51. Use of metal bars on windows

Use of Perforated Concrete Block
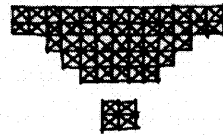
- Marker of a special element e.g. entrance

- Indicator of vertical and horizontal connections e.g. atrium and bridges

- Ventilation above windows

Use of Perforated Concrete Block

This element is locally available and used in some houses. Unfortunately it is not used much even though it is very useful and can be aesthetically pleasing. (Historically, this is analogous to the *mashrabiyah* or screens were both used as a visual barriers or a wall which allowed for the circulation of air, either from the outside to inside or between interior spaces). It could be used for decoration to emphasize or mark an important element such as the main entrance of the community center or connection elements such as atriums or bridges. It could be used as a screen for reduction of visual connection, for diffusion of light on south-facing facades, or for ventilation. Examples of these uses are in the ventilation holes above windows or in the atrium to diffuse light entering the building.
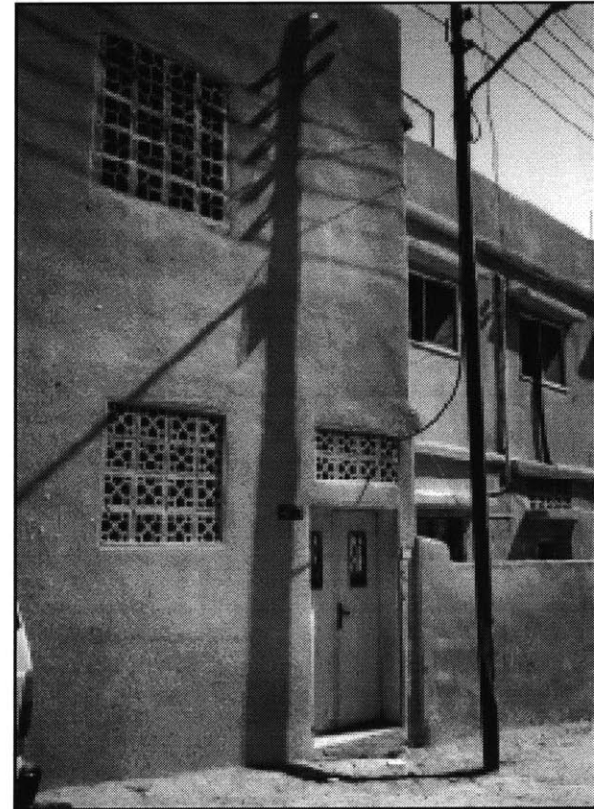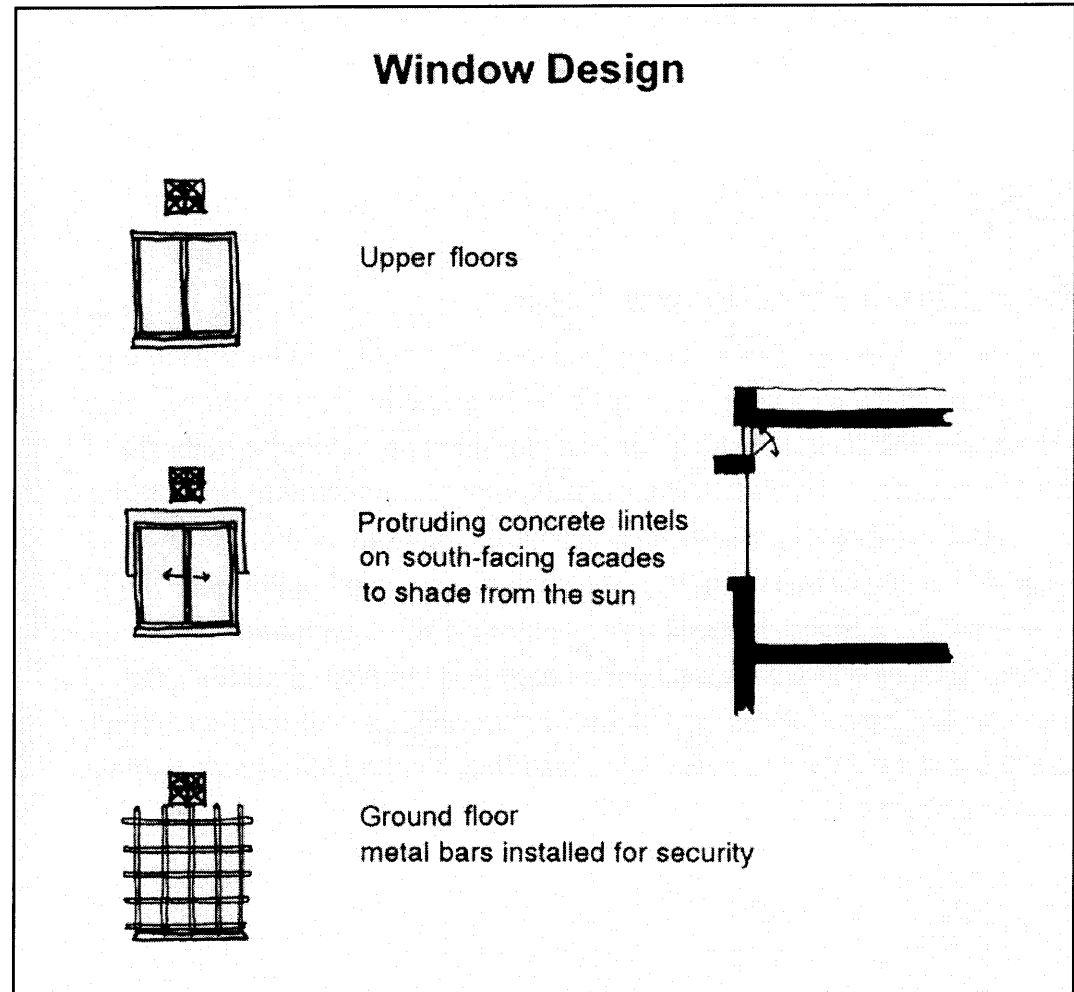

Figure 52. Use of perforated concrete block in East Wihdat 'upgrading' project

Window Design

Upper floors

Protruding concrete lintels
on south-facing facades
to shade from the sun

Ground floor
metal bars installed for security

Window Design

The design of windows in this area and climate should be that of punched out holes in a thick wall to protect from the heat of the sun and keep the interior cool during the summer days. The dimensions of the windows should be kept to a minimum to protect from the heat yet at the same time provide visual access to the outdoors, and sufficient light and ventilation. There should be a minimum amount of windows on the south-facing facade and these should have overhangs to reduce the amount of direct sunlight into the interior. On the north-facing facade, the windows should be relatively larger. On the first floor, the windows need to have protection against break-ins and this is usually done by having metal grills around the windows.

Conclusion

Figure 53. Public transportation

When architects are designing public buildings in a strongly defined cultural context, it is particularly imperative to investigate the culture within which they are building, to understand the needs of the people they are designing for, and to provide a compatible architecture. If they impose an ill-suited foreign architecture on a culture, they run the risk of alienating the users from the buildings themselves. On the other hand, if they strictly adhere to the traditional architecture of the region, they would be passing up a unique opportunity to develop a more progressive architecture that may better serve the people's evolving needs.

When the public building is intimately linked to the identity of its users, such as a community center is, it becomes even more important to be sensitive to its character particularly if it is set in a low-income community, where people are more wary of new elements in their midst. The unique potential of a community center to bring together various members of a community and strengthen their sense of mutualness, is something that the architect must keep in mind when designing the space and developing the character of the building.

Public spaces, indoor and outdoor, are very important because they provide the stage for community expression and interaction that could lead to the building of a much needed community spirit. Their informal atmosphere and non-exclusivity encourages the formation of new ties, and the exchange of ideas. Paradoxically, in a society where individuals rarely enjoy the luxury of

a personal space, a public space could be one each could claim as his or her own.

The character of a community center cannot afford to be divorced from that of its surroundings, because the justification of its existence lies in the widespread participation of the community in it. This participation is very dependent on how closely the residents identify with its character, and how it fits in with the other important landmarks of their neighborhood, such as the mosque, the shops, and the schools. To be embraced by the community, the community center must strike a balance between representing who its participants are, and what they aspire to be.

Architectural language and details, such as those shown in the principles, and which shape and direct the design of the space and character of a community center, make a large difference to the building of a community spirit within a neighborhood, which in turn could have a considerable impact on the social and economic development of the community.

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Figure 54. Mobile tomato salesman

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