DEALING WITH THE INCOMPATIBLE!

by

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ABSTRACT

The thesis attempts to study the urban structure of a traditional quarter in Cairo through a sociological point of view. In order to pursue this study it is necessary to understand the relationship between the built form and its users. From this understanding stems the approach of how to discern the social study in a way that could be useful and apprehendable to the architect.

Before undertaking the case study, examples of other sociological studies are extracted to demonstrate the connection between behavioral patterns of the users and their built environment. These preliminary examples show how the built form, together with the disposion of its elements, could be understood through social studies.

The problem facing the architect that will be revealed through the research is that the social scientist mainly deals with different layers of interactions between the members of the community, without showing how this interaction resonates with the built form. Consequently the architect may find a great difficulty in trying to incorporate social studies into design criteria. And from there, the sense of incompatiblity emerges. In this regard, the research attempts to bridge the gap created by the lack of communication between the two disciplines: social science and urban design.

Thesis Supervisor: Ronald Lewcock
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CHAPTER ONE

THE RELATIONSHIP BETWEEN BUILT ENVIRONMENT AND USER.

How do we --as architects-- design a built form for a community, taking into consideration its social background as well as its behavioral patterns and existing habitat? Even if we trace dynamic social change in all levels of interaction with the built environment, can we predict the community's needs or anticipate its behavior toward the new design?

The issue becomes apparent, yet more difficult to handle, when dealing with communities in traditional quarters. This is because the more the community has distinct social or cultural patterns, the more difficult it is to anticipate its attitude to newly built form.

This difficulty is augmented by the survival of a society in a built environment that has been more or less frozen since the fifteenth century, one consequence of which is that it has highly distinctive characteristics compared to the contemporary environment. These characteristics persuade the architect not to ignore them since --no matter how objective he is-- he cannot but notice their connection with the behavioral patterns of the community.

In other words, the traditional community and its built form pose problems to the architect since both have distinctive features, and have survived until now.

Moreover, they pose problems because of the

difficulty in tracing which of the two components --community or built form-- is more effective. If it appears to the architect, for example, that the environment has less effect on the behavioral pattern of the community, then he is relieved from copying the old environment and can eventually find modifications (derived from the original model) to which the community is likely to respond. If the case is the opposite, the architect is in a more difficult position; if he is still keen on on maintaining the social behavior he once admired in the community, he doesn't have much choice about changing the environment since, in this case, the environment is more influential.

Moving along this line of thought may be misleading however. This is because the relation between community and built form is neither simplistic nor clear-cut. The two components of this relationship do affect one another simultaneously and consecutively through time. Thus the mode of influence shifts from one component to the other, leaving the architect and the social planner in conflict, disputing the more effective one. Consequently, whatever status researchers may find in one community may be the result of a long sequence of interacting waves ebbing and flowing between the two components. Multiple layers of constraints have been

erected and dismantled continuously over the two components; this has resulted in the situation which researchers may find at the time of the study. Trying to attribute the resultant environment to the surviving community and vice versa without tracing the history of their interaction may lead to a mistaken interpretation. More disastrous would be the implication of such a static interpretation in designing criteria for new built form. This is because certain patterns of living and modes of space usage and configuration are tied to a set of constraints. The architect, consciously or unconsciously when designing new proposals, tends to unlock some chains of constraints, thus giving no ground for such modes of living to persist (because they were conditioned by such constraints). Yet the new built form, however sensitively it may be derived from the original environment, fails to provide the grounds for the former social interaction. This, in my opinion, is worse than ignoring completely the original habitat and its users.

On a deeper level, the relationship is more difficult to resolve. Attempting to analyse the relationship, scholars more or less agree that it is not "deterministic" but rather "possibilistic"; the environment allows certain modes of activities and

interactions from which the community can possibly choose and adopt, according to their socio-cultural needs. (Rapoport 1977, p.2)

Stanford Anderson has extended such an interpretation. He names the built environment the potential one, including "influential" and "latent" portions. The "influential" environment is that portion which is adopted by the users; it is the realized potential environment. The "latent" one, on the other hand, is the unrealized potential environment which is not "assimilated by the users". It can be recognized but unexploited, or unrecognized but theoretically possible (Anderson 1975, p.24).

The interesting part of this interpretation is the last part, i.e. the "latent environment". This allows the environment to be flexible enough to accommodate the dynamic change of the community without really being changed. This "bit" of the environment, which is not used by the community but recognized, is crucial for the architect to discover. It is only in that portion that the architect can work more freely and effectively to improve the built form with the minimum possible change in the desired behavioral patterns of the community. Moreover, he can also use such a portion in defusing pressures and constraints that were undesirable in the

original habitat.

The question, then, is how we can detect such a portion in the environment. One way is through cross analysis of similar communities where the architect knows that what is influential in one may be latent in another (Anderson 1975, p.25). Another way is by looking into the history of the community and tracing the development of the consumption of the latent portion of the environment. In other words, by comparing the modes of consumption ,past and present, one can define what was once latent and is now an influential environment. One can then trace the remaining portion of the latent environment, i.e., the recognized portion of the latent part which is unexploited.

A direct tangible denotation of the latent environment may be seen in the case of the vacant strips of land overlooking the lakes in Fatimid Cairo. By tracing their history, one can understand that such recognized but unused potentials of the environment came to be exploited in a later stage of the city's growth (the Mamluk period). Such potential was recognized because similar plots had been exploited (overlooking the river) in a specific mode, and the vacant lots were waiting for similar intervention.

As for the second portion of the latent environment, unrecognized but theoretically feasible, this is more difficult to deal with. There exists in the environment the capacity to accommodate certain modes of interaction that are beyond the awareness of the users. Nevetheless, these modes may be appropriate for them to use. In this case, it is more likely that history will eventually reveal such hidden potentials. In a medieval city like Marrakesh, the built environment accommodated mules and camels as means of transportation; now, such means are almost replaced by motorcycles. This example shows that the built form of the fifteenth century has successfully accommodated a much quicker means of transportation. The fifteenth century user could not have imagined such a capability; yet it was theoretically feasible. Although such a portion of the latent potential may demand greater effort from the architect in its development, the eventual outcome may be subject to failure for it poses a new set of constraints that may have immeasurable repercussions on the community.

The theory of potential, effective and latent environment is logical to accept and verify, but it fails to explain environments that have no recognized unexploited portion, ie. those that are fully

"influential". If the environment can reach such a limit, how then can it accept further changes in the community?

On re-examining the theory one discovers a possible weakness when one realizes that the community also has its own potentials, partly "influential" in terms of the environment and partly "latent". If the environment undergoes change (which might be due to involuntary forces), the community uses its unexploited potential to re-adapt itself to the newly existing conditions. In other words, the relationship is determined not only by the potentials of the built environment, but it is a two-way system with the users as the other participant. Each of the two components has its own potentials and, at a given time, parts of the two potentials interact together to give an "influential" relationship. It only becomes apparent that the potential of one of the components is more "influential" (or exploited) when that of the other component is seriously lacking or not functioning. In other words, it is an "equilibrium" that is achieved, where the potentials of one component tend to compensate for the other. To ignore the existence of the "latent" potential in the user and accept its presence in the environment is somehow a deterministic attitude, although not a direct one.

Based on this analysis of the theory, I wish to readdress the question of how the environment can further experience changes introduced by the user when it runs out of its "latent" potentials. In this case, the user puts his "latent" potential into practice to bridge the gap created by the environment. In Darb el-Ahmar quarter in Old Cairo, the houses are continuously becoming dilapidated, leaving the inhabitants with a much smaller area in which to live. The willingness to accept living in an area which is more dense than it was originally ie. accepting a lower standard of living, is a manifestation of the user's latent potential now being put into practice. In the more serious case when the latent potential of the user also runs short, the whole relationship must collapse between the two components --the user and the built environment.

Looking at the relationship with this perspective is encouraging to the architect because he is able not only to capitalize on the latent potential of the built environment but also on that of the community as well.

This perspective is also helpful in understanding that there are two layers to behavioral patterns. One layer is inherently embedded in the community, i.e. the "influential" potential that has been reacting with the

built form despite successive changes over time. The other potential (lately acquired by the community) is also influential, but put into practice due to recent constraints generated by the built environment. These two layers are the elements of change and constancy in the community, of which the architect must be aware before he makes his design decisions. With such an awareness, the architect should be optimistic about the reaction of the users to his design.

To conclude, the outcome of this analysis reveals that the relationship of the built environment and the user is more of an "equilibrium", where the potential of one component compensates for that of the other. Furthermore, within this equilibrium, the mode of influence may shift from one component to the other; hence it is important to know the history of their interaction. Finally, the study shows that the behavioral patterns of the user can be either attributed to constraints in the environment or to his ethnic background. Through the analysis of those patterns, elements of both change and constancy are unveiled.

CHAPTER TWO

THE USE OF SOCIAL STUDIES BY ARCHITECTS.

The approach of "equilibrium" between the user and the built environment reveals the importance of including social studies in the analysis of the existing built environment and at the design stage of the proposed one. The question is: how can we --as architects-- handle these studies to make them beneficial at both stages?

Social scientists, when studying a community to reveal its social characteristics, tend to analyse how the people of the community interact according to different relationships --individuals in a family or a family in a neighbourhood, etc. From these studies, the architect can relate the behavioral patterns of the community to the built environment. He should be able to trace how different elements of the built environment interact with the scenario constructed of the community by the social scientists.

Whithin this setting, he should then be able to differentiate between behavioral patterns related to ethnic backgrounds and those related to the constraints of the built environment. He must also study how much they persist through time. Although this may not give him direct feedback into his design solutions, nevertheless they provide a profound understanding of the community.

Hence design solutions may have greater validity and viability.

To highlight the first type of behavioral pattern, an example is given. H. Gans points out, in his social study of the Italian community that used to live in the West End of Boston, that children at an early, even pre-school age start to communicate with peers they meet in the streets.

> "from this time on ... children form cliques or gangs [where] they play together and learn the lore of childhood.(p.37)...The departure of the children from home to peer group functions to support the adult-centered family...The children's need to behave like children must take place outside the view of adults." (Gans 1982, p.57)

This is because inside the house:

> "As soon as they are weaned and toilet-trained, they are expected to behave themselves in ways pleasing to adults...:to play quietly in a corner, or to show themselves off to other adults to demonstrate the physical and psychological virtues of their parents...[Thus] in the case of an acculturating ethnic group, the segregation of children and adults also reduces some of the conflict that would otherwise result from culture clashes between children and the parents." (Gans pp.56-57)

Knowing these facts, the architect must consider the children's behavior in streets to be crucial in this strong peer group community, especially when he is further informed that this behavioral pattern (of forming peer groups) grows with the child, to be

manifested continuously on streets, and that

> "[many] friendship ties ...formed mainly in childhood and adolescence last throughout life." (Gans p.39)

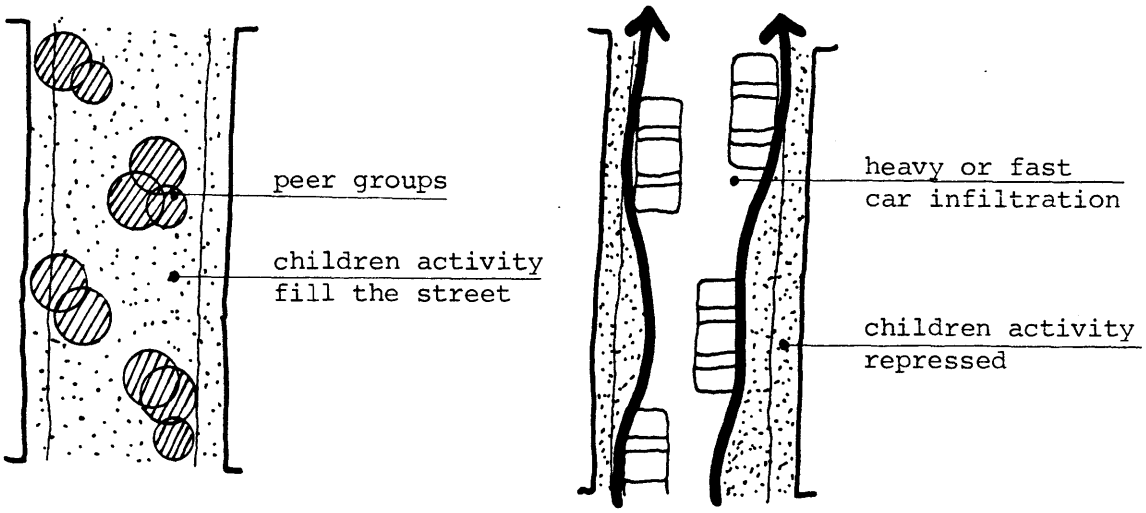
Hence the architect in his new design must allow for such activity to prevail, and it should be considered inappropriate to development goals to repress this behavior by ,for example, promoting heavy or fast infiltration of car mobility in residential streets. In such a case, children do not have the same safe environment in which they can manifest their childhood. By this act, the architect will have prevented a deeply rooted ethnic behavior that once persisted in the original environment of the Italian community and was partly responsible for their cohesion.

Worse than that, according to Gans (p.57), is the increased conflict that results from "culture clashes" between children and parents and that is otherwise reduced by the departure of children from their homes to peer group activity in streets.

It is interesting to note, furthermore, that solutions like providing a central playground for the neighbourhood children's use as a substitution for streets is not expected to work. This is because while Gans describes the childrens' and teenagers'

active presence in the street, he notes that the

> "West End's lone playground was fairly dilapidated and usually deserted."(Gans,p.14)



GANS VERBAL ANALYSIS OF THE STREET-LIFE OF WEST END

RECOMMENDATIONS INSENSITIVE TO SOCIAL STUDIES

This example shows that some behavioral patterns can be motivated by the ethnic background of the user; to ignore such a background can produce immeasurable damage since the repercussions affect the core of the characteristics possessed by the community. The example further reveals how the descriptive analysis of the social study can be transformed by the architect into guidelines and recommendations and --if nothing else-- can lead him to exclude design alternatives that are not

supportive of the community, no matter how they may appear otherwise logical to him.

With my other example, I will discuss how the built environment can work in congruence with the user's social patterns. The architect, in this context, has to link the verbal analysis of the social scientist to the fabric used by the user.

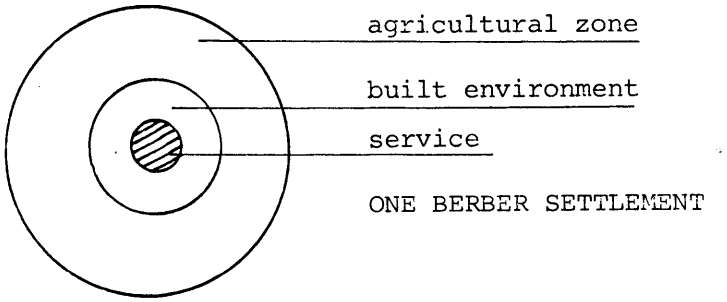
The social account in this case is of two communities: one rural community outside the walls of Sefrou (Morocco), the other an urban community inside the walls of the same city.

The first community is a Berber rural one of twenty families living in one of several settlements scattered around the city. The community is partially portrayed as follows:

> Each Friday evening, after prayers at the duwwar's [local name for settlement]...mosque, the adult men ... gather at the home of one of their number ... The gathering is highly informal, with scattered conversations going on all over the room as the twenty ... men lounge barefoot on the mats and cushions, eating smoking and drinking...mint tea ...Someone mentions that he needs a bit more water for his garden and others note who might have a portion that could be borrowed for the appropriate time slot ... Later someone mentions that the teacher of their mosque school is due to be paid, and with considerable joking ... several of the men who have been doing well in the sheep trade are cajoled into paying a larger portion of his fees than they paid last year. Before midnight, the men begin to wander out of the room...with no particular acknowledgments to

> their host...back towards their own houses."
> (Giertz 1979, p.38)

This report accounts for not only the space usage of the reception hall but also suggests a landuse pattern that is congenial to the community. They have <u>their</u> own mosque and school, i.e. they have their own set of services separate from those found in the neighbouring settlements. This pattern of landuse coincides with the notion of independence, the settlement has its own economic agricultural base capable of protecting it if its inhabitants are threatened.



This independent notion, or the feeling of one group, is even reflected in the "familial atmosphere" among the people of the settlement in which they help each other financially.

This example is distinctive in revealing the concept of grouping and homogeneity among the people of the community that necessitates the presence of sets of

services used mainly by them.

The same concept of grouping can also be traced inside the urban fabric of Sefrou.

> "Until well into the Protectorate most of the houses in a particular derb (quarter) were occupied by a group of relatives."
> (Geertz, p. 62)

By examining one quarter formed by a family called Adlun, we find that it is structured in a way to be self-sufficient in the service elements necessary for living: the mosque (including the school), the public fountain, the public bath and the cemetery of the family as well as different shops for daily use situated along the main spine of the quarter (Geertz, p.318-19). The desire to be perceived as one big family necessitates the possession of an environment that is independent in its elements from other quarters. Thus the case shows how the people of Adlun make their setting a part of their own social drama (Geertz, p.21).

Furthermore, within the quarter itself, the desire to socialize prevails among relatives, and elements in the built environment help to create this daily "coincidental" sociability. Thus the public bath and water fountain are there for women to meet and gossip; similarly, the mosque and the coffee-shop are for men, the corners and thresholds for teenagers, and the alleys and cul-de-sacs for children.

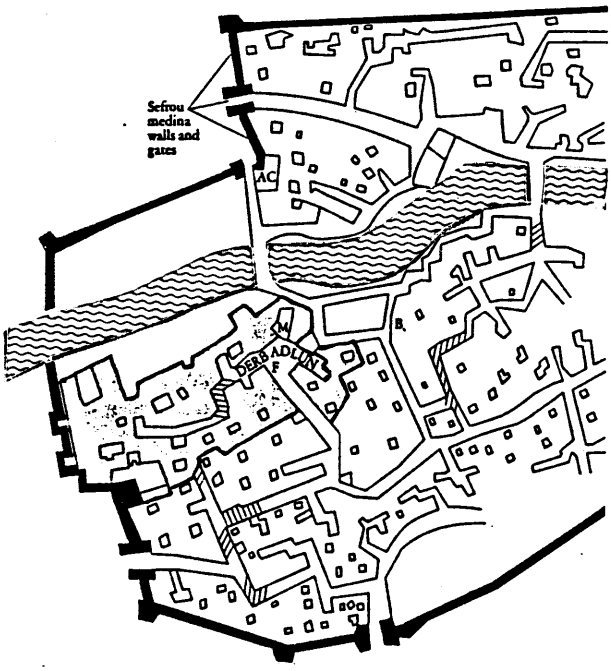
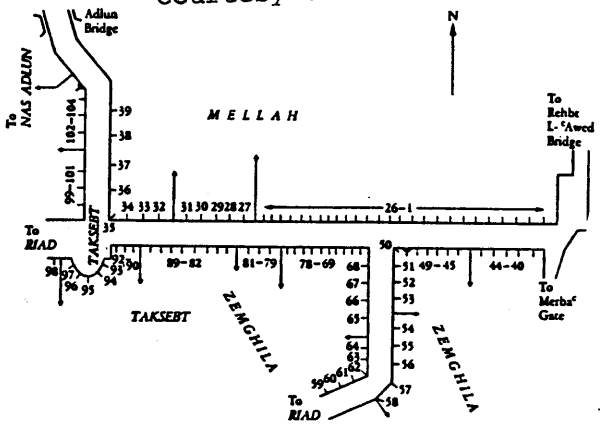


Figure 1. Portion of Sefrou medina showing Derb Adlun. Gray area is approximate extent of buildings surrounding Derb Adlun. White squares are larger courtyards. Cross-hatching indicates covered passageways. *M*, Adlun mosque; *AC*, Adlun cemetery; *B*, Adlun bath; *F*, fountain.

shops along the main spine
courtesy to C. Geertz)



Consequently, the physical quarter of Adlun resonates with the family <u>in whole</u>, thus giving them the unified identity they want to convey to the outer world; and <u>in part</u>, thus promoting desirable social interaction among relatives.

It is interesting to note that, in a later stage of development, the quarter was no longer fully inhabited by the same family; for some of them had migrated outside the city wall and were replaced by other users. Nevertheless, the

"concept of the darb as a social and

> geographical subdivision of the medina still remains significant." (Geertz, p.63)

Moreover, the "familial" atmosphere that prevails in the neighbourhood is no longer in terms of conjugal family alone, but in terms of intertwined networks of kinsmen, affines and neighbours as well (Geertz, p.338). In other words, the same characteristics prevail, despite dynamic change in the community. Is the built environment reponsible for such preservation? Or is it the influence of the remaining inhabitants (with their strong coherence to the built environment) over the new dwellers? Or is it because the environment has long been associated with such characteristics that whenever a new influx of inhabitants reside they follow the unspoken rules?

To answer this question, we may go to the other aspect of what is to be taken from social studies, the "image" with which the user conceives his habitat. The "image" I am speaking about is the individual's conceptual representation of the physical environment and its characteristics in sum or in part (Rapoport, p.41). In other words, it is the point of contact between people and their environment (p.43), through which the former conceive the latter and behave in consistent and observable ways (p.45).

The "attitude to space" is always connected to the

"images" constructed by people of their spaces. This attitude comes along with "conceptions" and "feelings" like security, self-identity, satisfaction, friendliness, and intimacy. And it is through the methods of the ethnographer-social scientist that these attitudes are revealed. The architect, on the other hand, has to relate those "feelings" and "concepts" formulated by the user to the actual environment and its characteristics (e.g. landuse pattern, architectural style, scale and density of the built form) and accordingly work out the images created. Furthermore, he has to separate desirable images from undesirable ones, and to note their hierarchical importance and the preferences of the community.

Eventually, the architect will have analysed the environment into different sets of elements which resonate in different ways with the user and which can be used in new schemes to achieve a more responsive environment. To deprive the new design of these elements that evoke desirable images to the community is a major step towards destroying its socio-cultural behavior.

To highlight the second approach, an example is given in which the opinion of a dweller concerning his environment is reflected in Gans' social study of

Boston's West End.

> "I like the noise people make. In summer people have their windows open, and every one can hear everyone else, but nobody cares what anybody is saying: they leave their neighbours alone. In the suburbs people are nosier; when a car comes up the street, all windows go up to see who is visiting whom." (Gans, p.21)

Although the feeling of the suburbs is overdrawn, the opinion reflects the "attitude" of the user towards a certain characteristic of the environment, namely the high density of the built form. The user here "likes" this high density, and a"feeling of appreciation" is expressed. The "attitude" towards the noted high density --surprising as it may be to the architect-- is of minding one's business. The user justifies this by the notion that "everyone can hear every one." He further highlights his argument by comparing his case to the suburban dweller who is "nosier" because he is in a much quieter environment where a casual street activity can arouse his curiosity.

Thus the "image" here that the user portrays --through his opinion -- is the "noise that people make" and that "everyone can hear everyone"; the "characteristic" in the environment that transmits such an "image" is the high density of built environment. In other words, this "image", the ability to hear the noisy people, is the point of contact between the user and his

environment. Moreover, the "image" is connected to the "feeling" of likeness because the former generates the "attitude" of minding one's business.

Thus, to put such a dweller into a suburb (i.e. low density) means not only depriving the user from the "feeling of satisfaction" he has in his high density environment, but also blocking a channel through which the environment interacts with the user to sustain the "attitude" of minding one's business. Hence the architect by his act will manage to distort an "image" that was once conceived and appreciated by the user.

To conclude, I wish to readress the issue of how we can as architects handle the social studies from which we can benefit in the design stage. The following approach should be adopted:

** Study the social studies done on the community.

** Note to what extent the behavioral pattern has an ethnic background or is developed because of constraints in the built environment.

** Relate the behavioral pattern to the built environment and note how they interact together.

** Trace the dynamic change of the community over time and see to what extent the environment is receptive to such change. Is there a "latent

environment"?

** Reveal the images perceived by the community of their environment and the characteristics of the environment that caused these "images". Moreover, note connected attitudes and feelings.

This approach can yield to information that can help the architect to develop recommendations and design guidelines for planning a new responsive environment for the community under study. The next part of the thesis will highlight this issue.

CHAPTER THREE

THE CASE STUDY: EL SUKKARIYA QUARTER IN OLD CAIRO

In this section, I will demonstrate how my approach to social science can be useful in projecting a realistic image of one community and its built form. The outcome of this study will be in the form of a series of recommendations, guidelines and conceptual diagrams that are, I hope, responsive to the community under study.

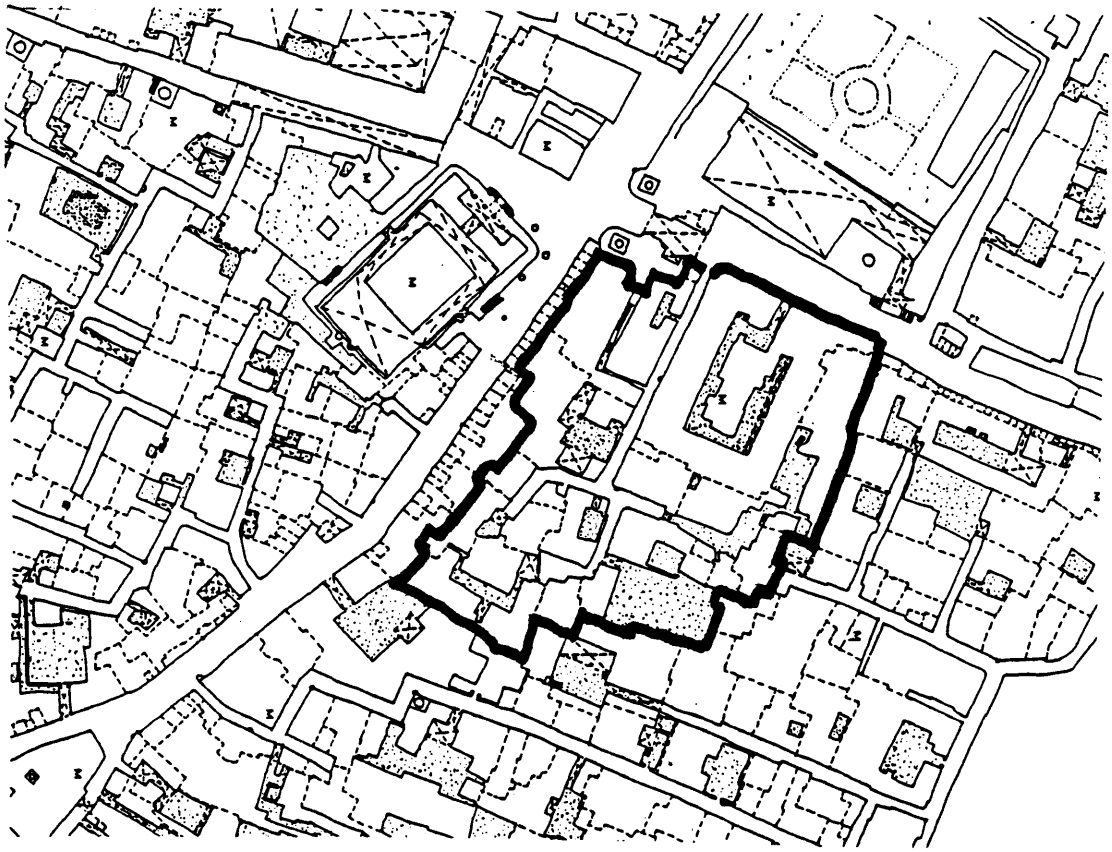
The case study is in Old Cairo, specifically in one quarter by the name of El Sukkariya. The reasons for choosing this area are that I know it very well and a detailed social study of it was done by Nawal Nadim.

Recommendations derived from these studies should not be taken as final proposals, but rather initial ones that are subject to further development. More importantly, they should not be taken as solutions for its present community, since Nadim's study was done eleven years ago. Hence further social study should be pursued before questioning the validity of the thesis research.

The limitations of my research should not shift the reader's attention off the main course of the thesis, which is the attempt to show how social studies can be useful to an architect in designing a built environment sensitive to the user's needs.

The quarter under study is a part of what is now called "Medieval Cairo". Historically, Cairo consisted of quarters; each was considered a separate social entity. In each quarter, the majority of the community was homogeneous sharing some characteristics (eg, social, ethnic,religious, etc) with which the quarter is identified. Politically, each quarter had its own leader who ran its administration and represented the community to the higher authorities. Moreover, it had its younger members who defended the place in times of danger.

courtesy to Serageldin M.



BOUDARIES OF THE QUARTER UNDER STUDY (EL SUKKARIYA)

The city fabric was thus composed of a number of socio-political entities linked by major spines from which defined gates acted as the threshold between the communities of the quarters and those in the outside world.

> "(These gates) reflected ...an entire society in which diverse groups existed perpetually in uneasy symbiosis and uncertain security..." (Abu Lughud 1971, p.67)

Al Maqrizi --a fifteenth century historian-- gives an account of different quarters of Cairo which explains how the built form strongly denoted particular communities.

> " [The] quarter of Baha el Dein: ...It was known originally by Al Rihaniya and Waziriya quarter. The name denotes two communities composed of group soldiers, among others in the army of the Fatimid rulers [eleventh century]...In this quarter they built their magnificent houses and numerous shops and workshops...Later they were killed and their houses were burnt because of their revolt against Saladin..." (pp.2-3)

It is noteworthy that when the Ayyubid ruler decided to abolish this community, he not only killed them but razed their built form. This act may be interpreted as a form of punishment; nevertheless, it reflects the inseparable relationship between the user and the built environment. The latter denoted the presence of the former.

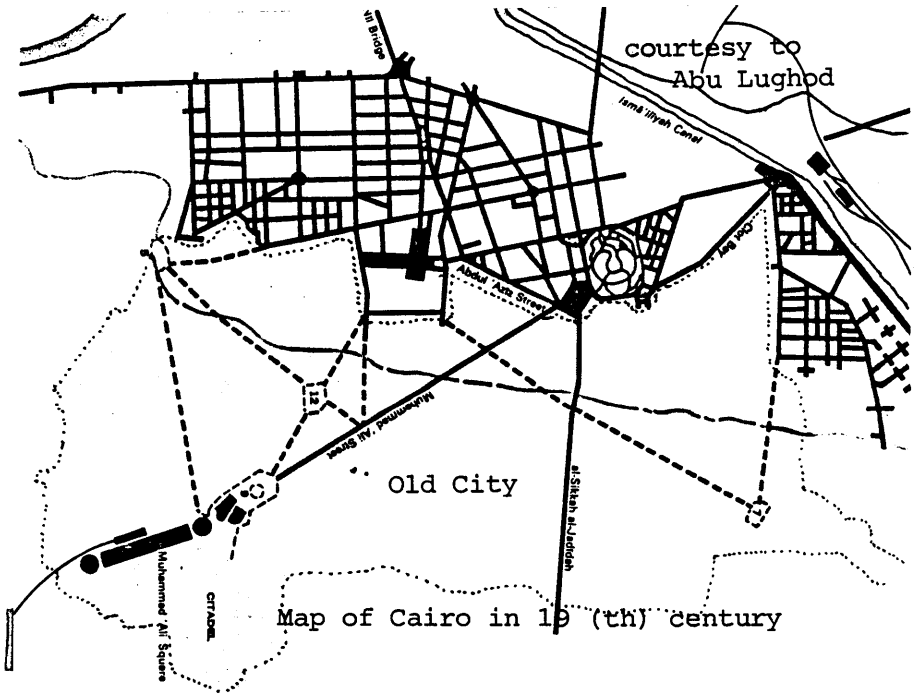
This strong link between the user and his quarter

lessened gradually over the centuries for several reasons. One was a consequence of the industrial age that Cairo entered with Muhamad Ali's reign (1820). Numerous job opportunities were created to attract a massive influx of migrants from rural areas. The native city at that time was the only logical place for them to settle in (Abu Lughud, p.125). Moreover, the life cycle of these quarters was about to end, as the rich inhabitants tended to move out to the newly planned European districts that were highly esteemed (p.117). Hence the quarters of the native city were no longer strictly composed of homogeneous communities of extended families or groups that shared distinctive characteristics.

Another reason is the change in the administrative organisation of the city that was started by the French Expedition (1798). The quarters were no longer conceived of as political entities administered by members of the community (Sheikh el Hara), but rather grouped to form larger sections which, in turn, formed the Governorate. (p.84) More crucial was the diminishing authority of the "Sheikh el Hara", who was no more than a "clerk without honor" by the end of the nineteenth century. His vital role was gradually transferred to the well disciplined police force (p.71),

initiated by Muhamad Ali to maintain security in streets

Along with the changes in the administrative organization * (p.87) came the imposition of some physical interventions in the native city (1875) that disregarded the integrity of the quarters and their individuality. Major routes were cut right through the native city that were insensitive to the boundaries of the quarters (pp.110 -113). Moreover, by that time, the gates of the quarter and alleys had been dismantled (p.85). These interventions were in response to the desire to "open up" the city to wheeled traffic.



Map of Cairo in 19 (th) century

* Other administrative reforms were: cancelling the role of the "muhtasib" and diminishing the power of the "kadi".

Consequently, because of social, administrative and physical interventions , the strong image of the quarter as an entity was weakened by the turn of the century.

Nevertheless, life in these quarters has preserved a lot of medieval characteristics until now, along with its dynamic changes. El Sukkariya quarter in this regard is a good example.

Like any quarter in the old city, El Sukkariya witnessed the influx of migrants from outside Cairo, this time it was from the oasis. The quarter accordingly is mainly divided into two ethnic groups* "Awlad el Balad" (sons of the city), and "Waheya" (the oasis people) (Nadim 1975, p.53). The latter group at first accepted inferior jobs (mainly serving the other group, p.73), but gradually they started their business of preparing cooked beans using the furnace of the public bath of the quarter. Consequently, their status improved vis-a-vis that of the other group. The two groups share a built environment that is similar to the rest of the old city. Eighty percent of the families live in one or two-room lodging units; fifty percent of the latrines are shared and have no water or electricity supply (pp.62-63). The lodging may vary from shacks of

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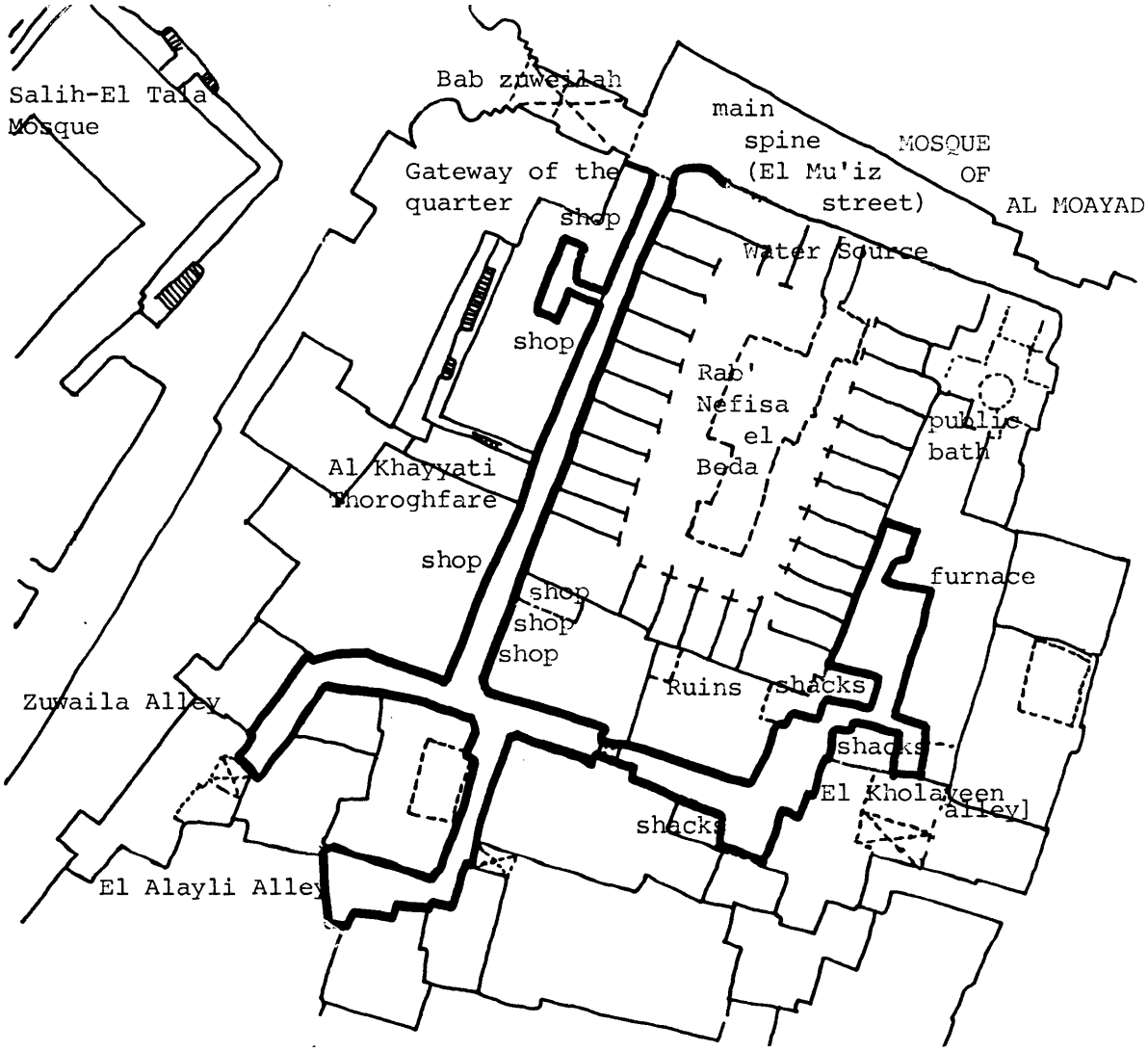
* There are other ethnic groups like Copts and People from "Upper Egypt".

one storey to three storey structures of concrete and bricks.

EL SUKKARIYA QUARTER
(LANDUSE)



The blocks of the two groups cluster around one central thoroughfare that starts from the main spine of old Cairo and ends with three branches of dead-end alleys.

Along this thoroughfare of the quarter, shops, as well as workshops, are present to accommodate forty percent of the working members of the community. Among the residential blocks of the quarter is a historic complex (rab') that was originally commercial and residential in function; now it is completely residential (Nefisa El Beda). Other annexed historic dependencies are a public bath (partially functioning) and a public water source that is now closed.

On plotting the ethnological distribution of the two main groups, one finds that they tend to cluster separately from one another with an intermediate zone that contains a mix of both of them. The natural tendency to form clusters was not only based on the desire to live near people of similar ethnic origins but also because of

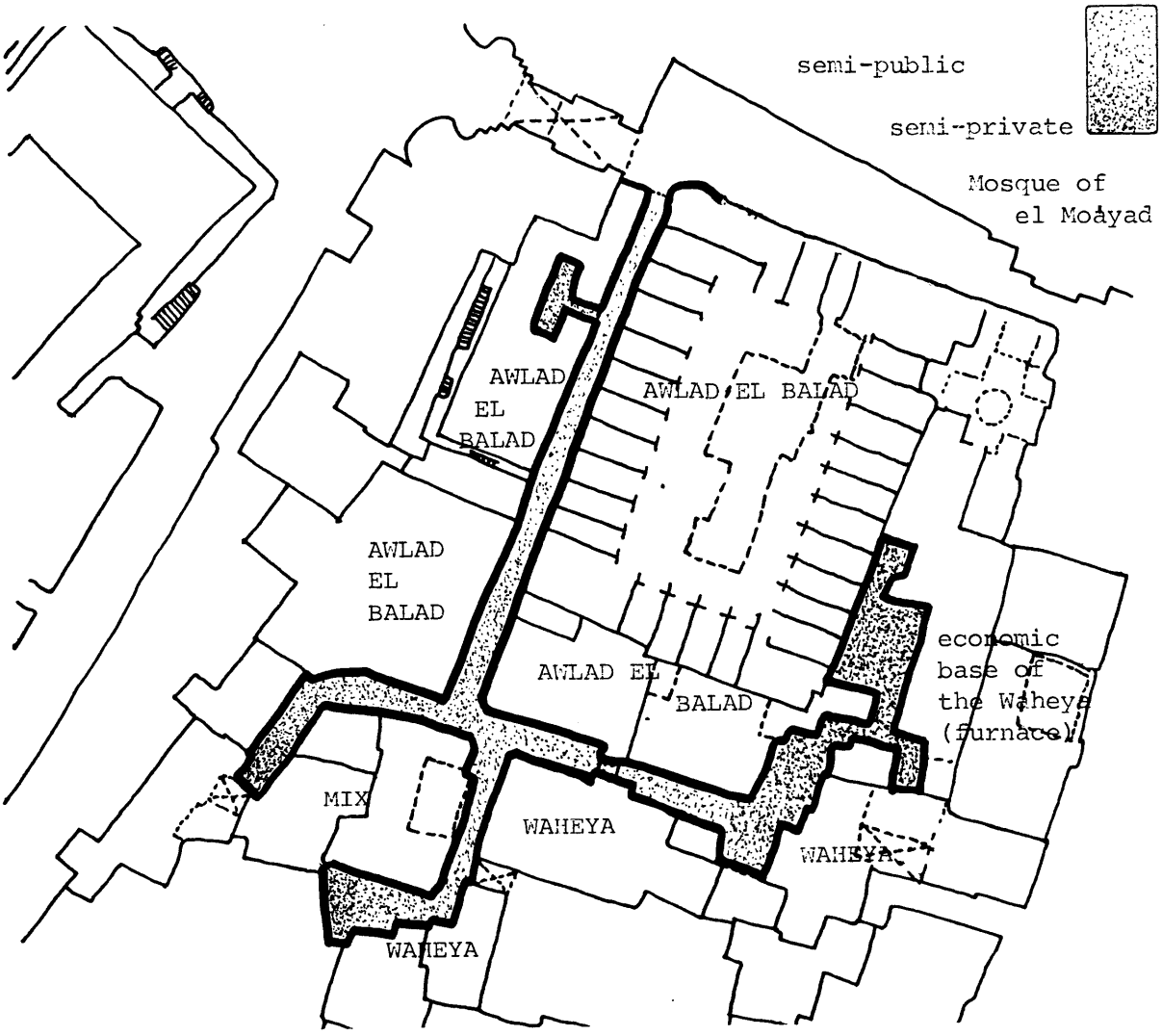
> "...their prejudices each [group] holds about the other." (p.74)

Hence, although the quarter today contains diverse ethnic groups, the medieval principle of grouping is still maintained, but on a smaller scale. This ethnological distribution also illustrates that the Waheya people tend to cluster near the economic base (the furnace) on which their survival is based (p.50).

In addition, the location of the Waheya is more towards the interior zones of the quarter where there is

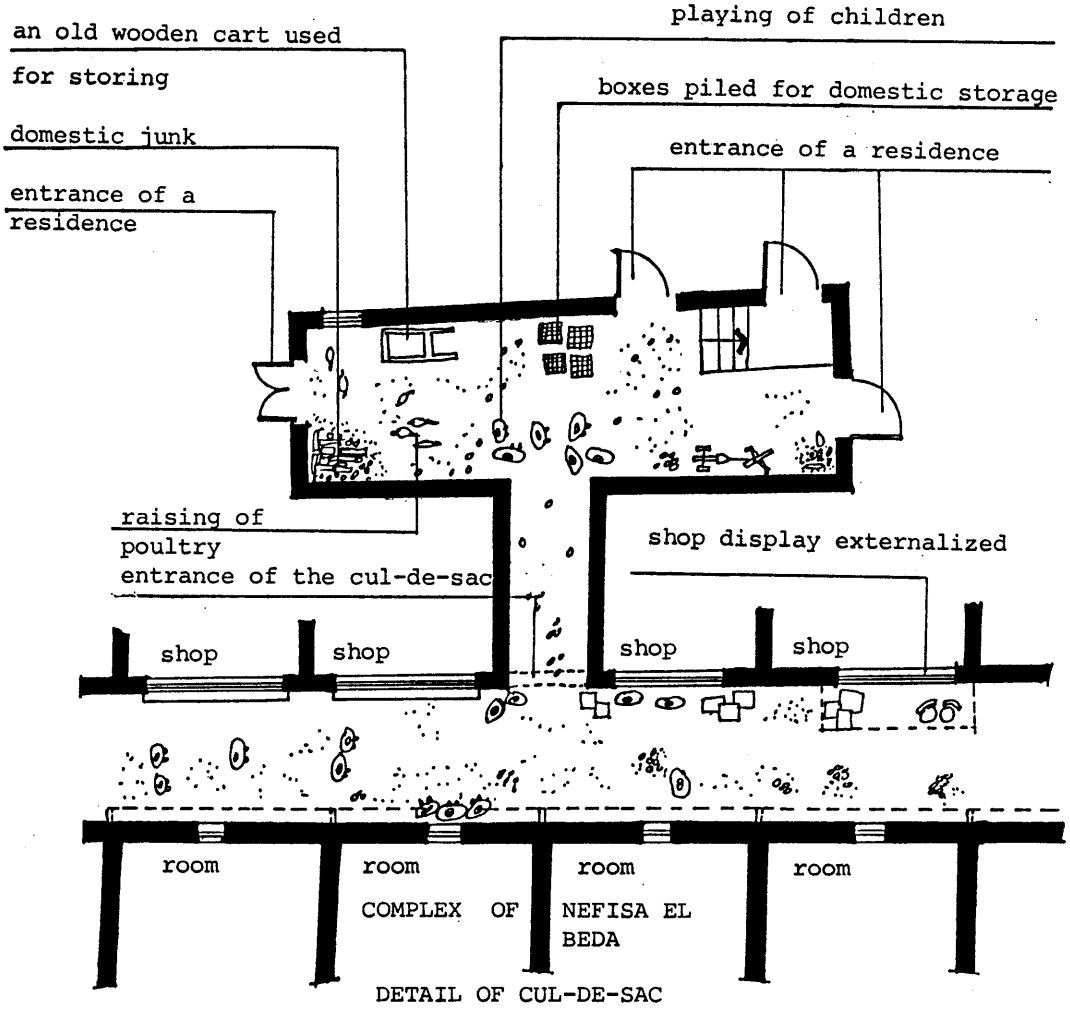
greater privacy (p.108). This may coincide with their ethnic characteristic of being more conservative (i.e. more protective of their women and female children, p.75).

ETHNOLOGICAL DISTRIBUTION (based on Nadim's discription)



This disposition of landuse elements allowed the Waheya people to make use of the alley more than those living in the outer blocks (p.108). This is because, by

comparing the landuse map with the ethnological one, the residents of the outer blocks (mainly Awlad el Balad) are more vulnerable to intruders who can enter the passage to buy from shops found there.



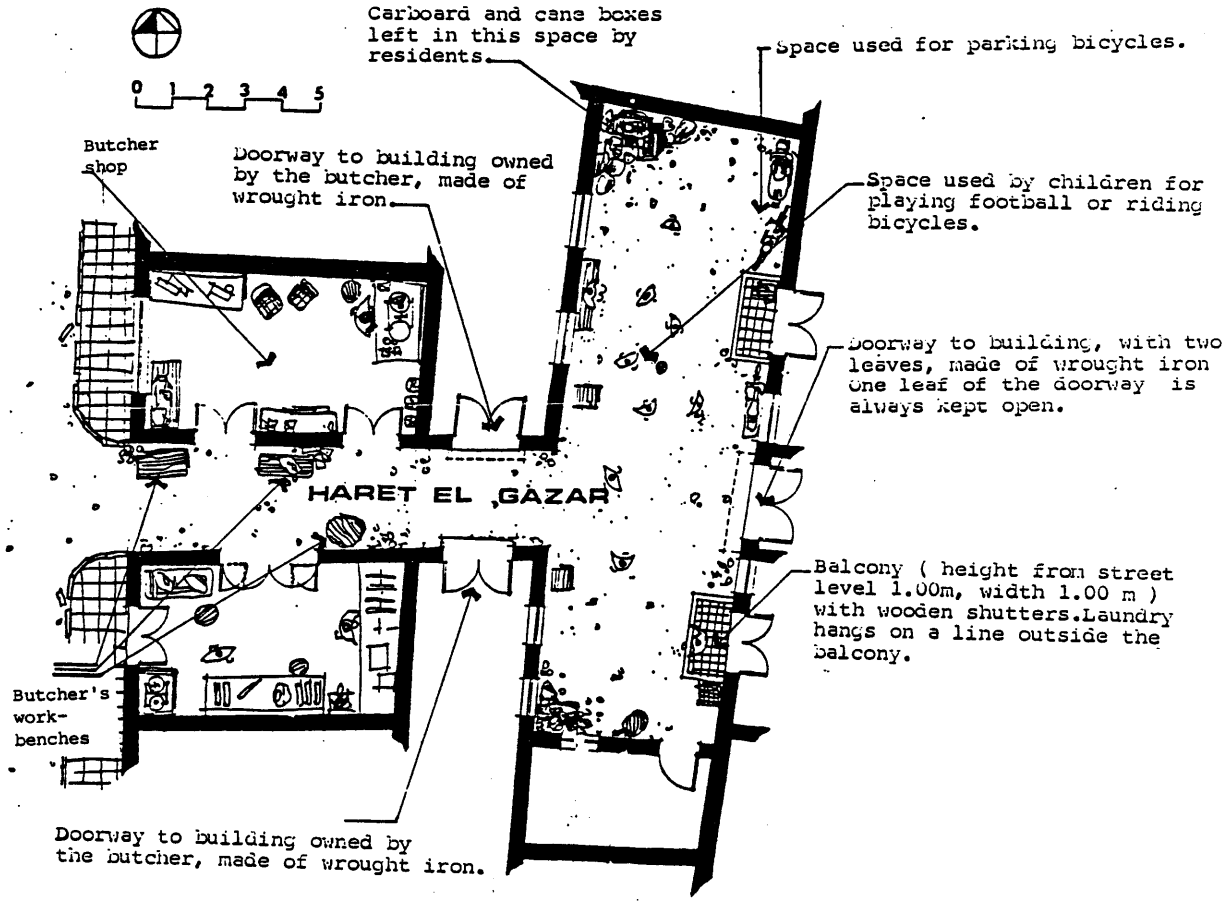
DETAIL OF CUL-DE-SAC

In the latter case, activities that should occur in the thoroughfare occur in the inner open spaces of blocks number two and three and the corridors of the historical

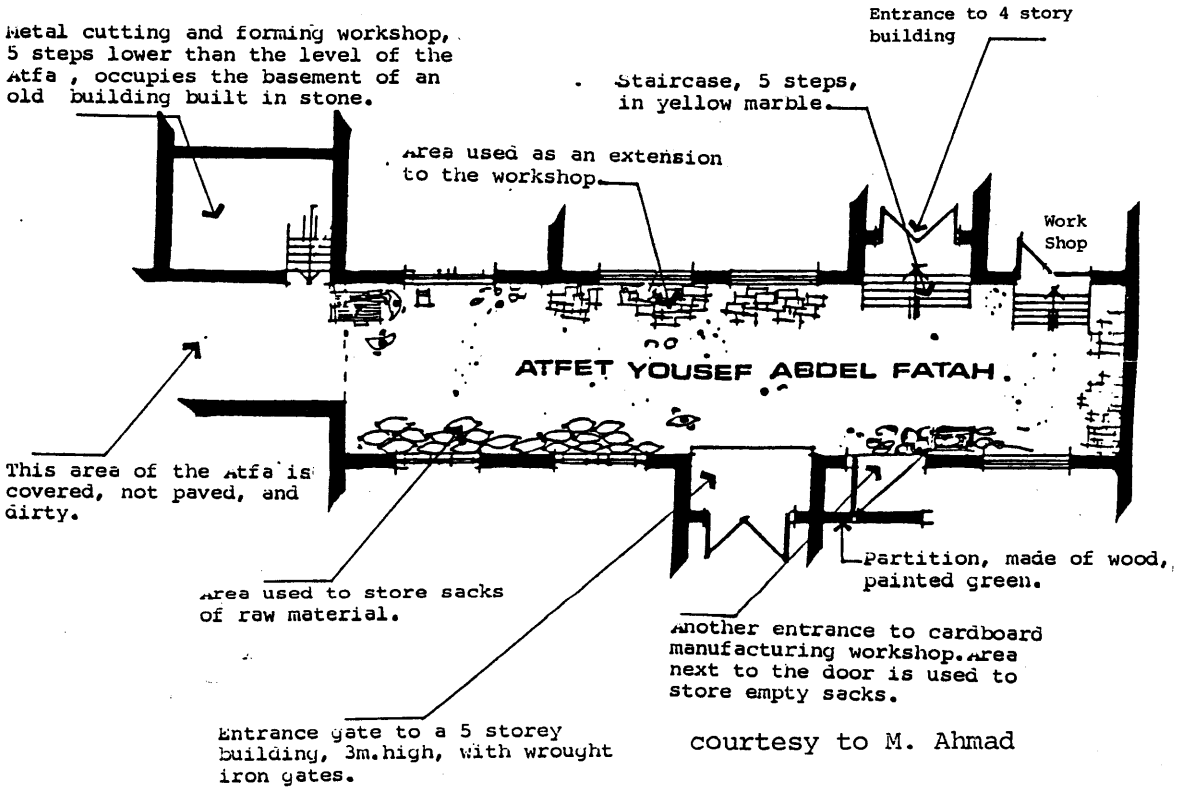
complex (p.109). Hence the built environment with its landuse character is, in this case, disruptive to the notion of privacy, and thus restrictive to behavioral patterns.

By comparing this quarter with a similar traditional one, "El Husayniya", we note the same phenomenon. The use of the "Gazar" alley as a space for externalized domestic activities (like storage), and a playground for children, only starts beyond the shops found at the entrance to the alley.

DOMESTIC ACTIVITIES ARE ONLY PRESENT IN AREAS WHERE THERE IS NO SHOPS AND WORKSHOPS (courtesy to M. Ahmad)



In other words, these activities take place in the private zone of the alley rather than the area flanked by the shops where it is vulnerable to strangers. By studying another alley in the same quarter, we find that domestic activities have entirely disappeared because of the complete occupation of the space by workshops. Hence the notion of privacy is no longer there, although the alley is a dead-end one. (*)



courtesy to M. Ahmad

DOMESTIC ACTIVITIES ARE NOT PRESENT IN THE CUL-DE-SAC FOR IT IS COMPLETELY OCCUPIED BY SHOPS AND WORKSHOPS.

*Ahmed, Muhamad. "Elements of Urban Structure: Coments on Physical Appearance and Spatial Organization. Case Study: El Husayniya." Report submitted to University of Berlin Summer 1984. (Unpublished)

It is clear from this comparative study that the notion of mixed landuse becomes undesirable beyond a certain point. This is due to the presence of shops in the space of a cul-de-sac, giving it one predominant function as a commercial mall and thus preventing it from being flexible, ready to accept any mode of usage by the surrounding residents. Such a limitation occurs because of the decrease in the level of privacy.

To conclude, the analysis of the ethnological setting of the two groups shows how the Waheya chose their setting in the built environment to fulfill their needs. Socially, they needed to keep a distance from Awlad el Balad. Economically, they were close to their source of income (the furnace). Ethnically, they were more conservative than Awlad El Balad, thus their grouping around the inner zones of the quarter is logical. Moreover, the setting reveals how the built environment restricted Awlad el Balad from operating along the thoroughfare; nevertheless, it offered alternatives like inner courtyards and corridors. In this case the built environment was "influential", yet part of its "latent potential" was utilized by Awlad El Balad. Hence the analysis shows the multi layered response of the built environment to different modes of interaction.

Based on the former analysis, recommendations for the distribution of commercial activities ought to favor the presence of shops up to the semi-public level of street hierarchy. Nevertheless, if shops are placed in semi-private alleys they should have the potential to serve the community of the quarter rather than encouraging the intrusion of outsider. This is done by signalling to the stranger that the place is semi-private, and that his presence is instantly noticeable (*). Moreover, shops should not be highly specialized in their merchandise, but have daily consumable items that will not tempt strangers to intrude. Similarly, workshops should be selected so that they will involve only minimal interaction with customers if they are located in semi-private alleys.

It is interesting to note that, although the Waheya's food preparation takes place inside their semi-private domain, the marketing of their product takes place outside the quarter. That is to say, the actual contact with customers (strangers) is separate from the work place; hence the notion of privacy respected by the community of the quarter is not violated. Consequently, this food production, though largescale, persists in the inner zones of the quarter without disturbing the

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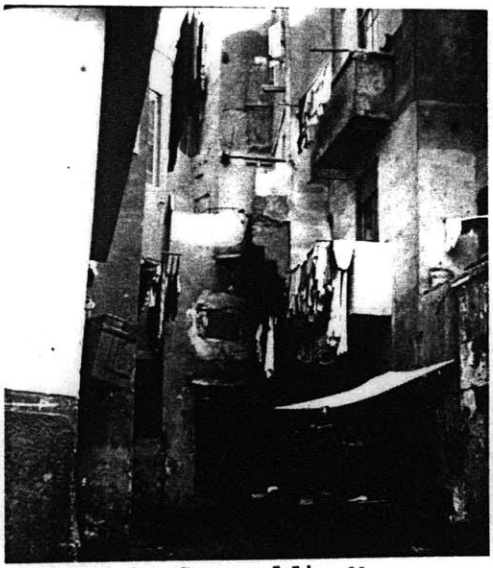
(*)Conceptual images of the quarter are discussed later.

rest of the community. This may lead us to think that workshops that deal with customers on a frequent basis and sell their product in the place of manufacture should accordingly be located closer to the semi-public streets rather than inside the quarter.

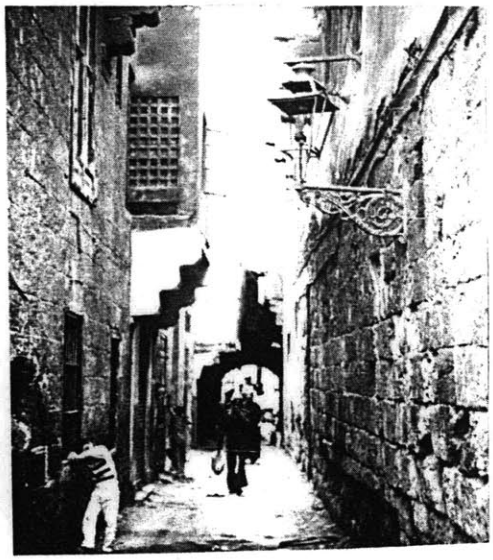
Another recommendation deals with the possibility of allowing socialization and externalized domestic activities in multi-storey open spaces besides the thoroughfare of the quarter, such as and courtyards.

It is noteworthy that people of the rab' ,for example, perceive their corridor the way the rest of the community perceives the thoroughfare or dead-end alleys of their quarter. Although the cul-de-sac, the thoroughfare and the corridor are different forms of spaces, yet all witness the same activities (p.109).



courtesy to Serageldin M.

CUL-DE-SAC



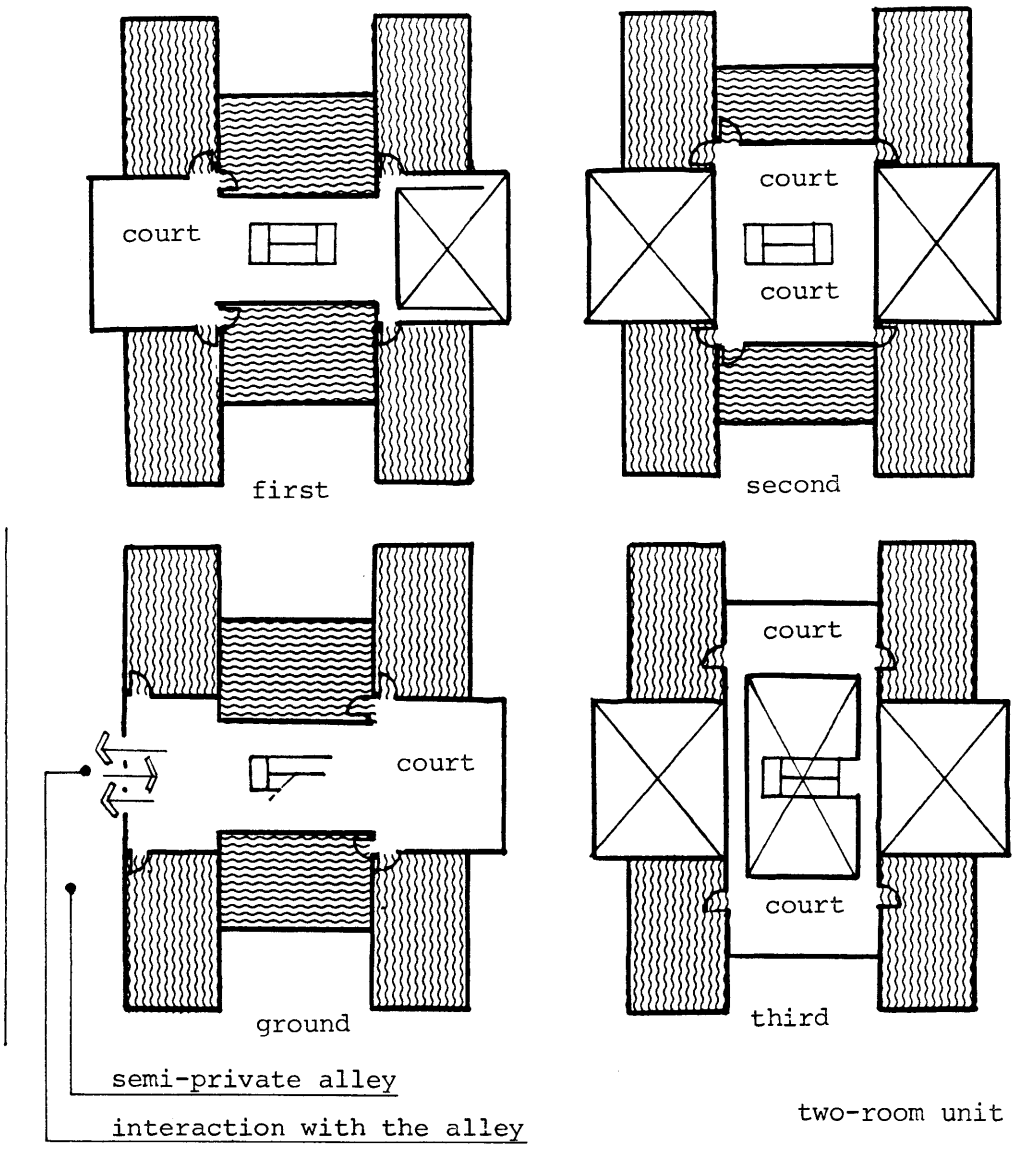
THOROUGHFARE OF THE QUARTER

This is because they all fall into the category of private / semi-private spaces and are flanked by residential units. Moreover, natural elements like sun and air effectively flood the spaces with their presence. Provided with these features, it is possible to apply the idea of having multi-storey spaces open to the sky (vertically or horizontally) between lodging units, and expect the spaces to respond to the behavioral patterns of the community.

In addition, these communal spaces should be directly outside the doors of the units, where the housewives can keep an eye on their dwellings at the same time as socializing and performing their externalized domestic activities in the open air. Hence their frequent movement to and from their units should be directly through the space used for interaction. To shift such space away from in front of their doorsteps may not encourage this behavioral pattern to prevail in the new designated areas.

To put the recommendation into a diagram, the following plans show how this idea could be realised. The house is composed of twenty-two lodging units that gather around different open spaces on different levels.

Open spaces should not be conceived of as waste or extra areas, but rather communal areas for more than one



CONCEPTUAL DIAGRAM OF A MULTI-STOREY DWELLING THAT INCORPORATES MANY OF THE ADVANTAGES OF THE OLD QUARTER

lodging where domestic activities occur along with socialization.

The design, in other words, is an attempt to reflect the ethnic need for socialization and the

performance of domestic activities in the open air with neighbours.

To understand the vitality of these recommendations, it is relevant to know that using the cul-de-sac and passages as semi-private spaces is an ethnic behavior that has not changed much since medieval times.

At that time, the privacy of the houses was insured by various means: entrance passages were bent, external windows and doors were staggered relative to facing ones, parapet roofs were raised window openings were screened with fine lattice woodwork. The passage or cul-de-sac in such a setting was an extension of the privacy of the dwelling and shared some part of the sanctity that the house possessed. In this setting ,too, the privacy of individual houses was as important as the privacy of the quarter as a whole.

Nowadays, these spaces witness externalized domestic activities that used to be done inside the house. The space outside the house is now part of it; and the halo of privacy that used to surround the house along with the space outside is no longer there. In other words, what is dynamic in the outside space perception is the change from its being an extension of the house's sanctity and privacy to an extension of the house's unveiled activities. What is always constant, on

the other hand, is the level of street hierarchy --semi-private.

On the level of the quarter, it is the "collective privacy" of the surrounding community that is retained (in relation to the other quarters), while the individualistic one of the family (in relation to other families in the quarter) has ceased.

The disappearance of individual privacy is generally attributed to crowdedness generated by a massive influx of rural migrants seeking better job opportunities in the capital. Under such pressure, the original built environment was divided into lesser livable spaces to accommodate the new comers. In other words, the built environment released some of its latent potential to adapt itself to new conditions. Similarly, the users have released part of their latent potential to reach an equilibrium with the built environment.

Manifestations of such latent potential of the environment are many, one of which is accepting the lack of privacy. Not only did members of this community adapt themselves to this scarce level of privacy from neighbours; in fact they are more than familiar with it.

> "They like to hear and be heard...enjoy seeing and do not mind being seen." (p.130)

In Najib Mahfuz's (*) novel "Al Sukkariya", Naima

expresses her concern to her mother that she will no longer be able to spend some time on the roof of their house. This is because they will be exposed to the neighbours living in the newly added upper flats opposite. The mother soothes her daughter and allows her to use the roof whenever she wants. She does not mind the neighbour's gaze.(**)

Consequently, this attitude, along with that towards performing externalized household activities, seems due to constraints imposed by the environment (lack of space). The question is, should we continue to attribute these behavioral patterns to these constraints? Or is it that these behavioral patterns were initiated or highlighted by the constraints and then departed to be part of the charactaristics embedded in this community? And, if this is the case, would these behavioral patterns prevail if the families of this community were provided with larger dwelling spaces?

Sociologist Madeha el Safti and Social anthropologist Nawal Nadim agree that these socialization patterns will continue among neighbours

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* Mahfuz is a contemporary novelist who depicts through his novels social life in the old quarters of Cairo.
** Mahfuz N. El Sukkariya, p.7, Dar Misr Egypt, 1956.

with outside spaces surrounding their dwellings.(*) This is because wives stay at home most of the day, managing the daily domestic affairs while their husbands are away earning money or entertaining friends (p.154). Consequently, the lodging unit is primarily identified with the wife, and not with the husband, who hardly stays at home (p.130). In fact,

> "the less time a husband spends at home the higher he is ranked." (p.128)

Hence, working in the thoroughfare of the quarter or any outside space also gives the women a chance to socialize and pass their day while finishing their domestic activities (p.108). Accordingly, the issue of providing larger dwelling space does not abolish the externalization of household activities since the latter is connected to the desire for socialization.

Based on the former analysis, it is now clear that recommendations that focus on preserving these behavioral patterns either by sorting the location and type of shops inside the quarter or advocating the idea of multi storey open spaces are important to achieve built form responsive to the community under study.

Another behavioral pattern that seems to be

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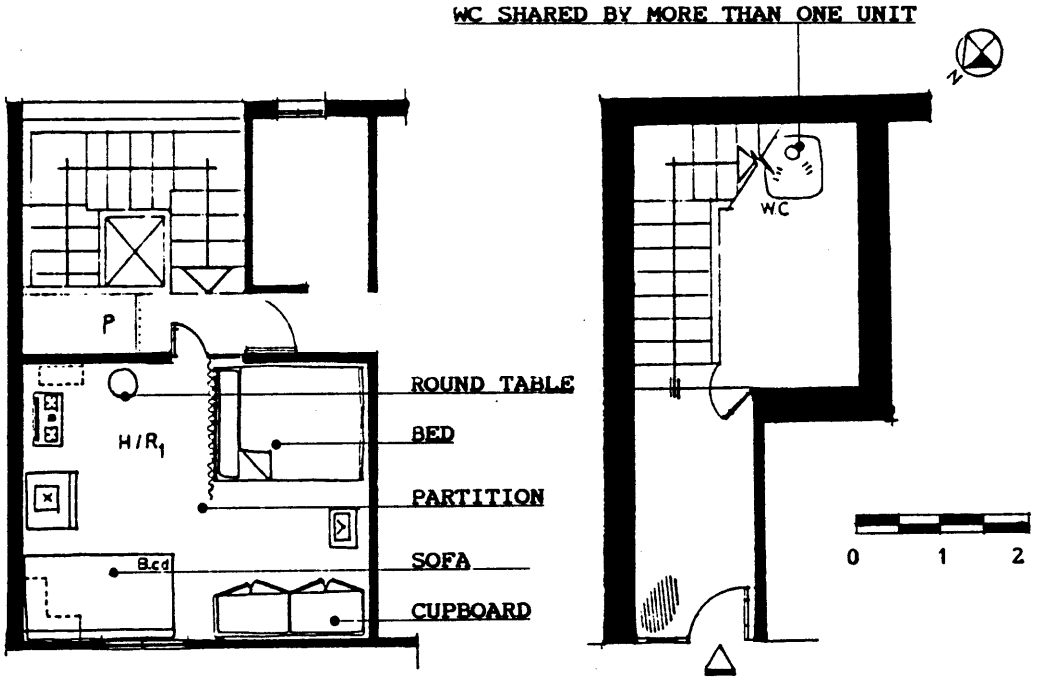
* The author interviewed both of them in December 1986

affected by the constraints of the built environment is the interior space usage of the dwelling units. The main criterion that governs space usage in the rooms of the units is flexibilty; the space is used for more than one function --sleeping, socializing, eating, studying, and sometimes even cooking. This flexibility in usage is reflected in the title given to these rooms, namely "place". That is to say, no special names like "living rooms" or "bedrooms" are designated.

The furniture in this context also reflects flexibilty in usage. Each unit must have a bed and a sofa. Both are used for sleeping (by more than one person) and sitting on. The third major piece is a small round wooden table that is used for eating, cooking and studying; when not in use, it is stored under the bed. The fourth major piece is a cupboard for the storage of different house utensils (pp.131-132). It is interesting to note that newly-wed couples furnish their home with additional pieces of furniture like those of the guest room, for example, armchairs, chests of drawers and tables. As time passes, children are raised, and space remains constant, the couples start selling furniture that occupies space and has limited use (p.133), leaving only the major, more flexible pieces.



EXAMPLE OF DWELLING UNIT IN A TRADITIONAL QUARTER SHOWING THE MAIN ELEMENTS OF FURNITURE (courtesy to Abdel Hadi A.)

To account for this concept of flexibilty in space usage and furniture ONLY through lack of space is not correct, for it can be traced back to medieval era. The room in the past was used for daily living as well as eating and sleeping. Beds and tables were packed

away after usage (*) giving space to sit or circulate (**). In other words, this mode of space usage can be related to manners and customs deeply rooted in the community since the Middle Ages.

In addition, Nadim --through her study-- reveals the preference of the community for these "small" dwellings. They don't feel the need for more rooms. When asked how they will use an additional room, they express their idea of using it as a guest room open only to visitors --and not for daily use (p.128)!

To the architect, this may seem confusing. On the one hand, the community prefers multi-functional spaces; on the other, they want to acquire highly specialized rooms such as guest rooms. Furthermore, the desire to partition the space contradicts the notion of flexibility in space usage. Although these conflicting sets of ideas may suggest a society in transition, it is understandable. The users of this community express this preference so that they can easily maintain the standard of cleanliness of the partitioned space (p. 108). Thus dividing the space into smaller ones, if they have the option, is

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(*) Lane, E. An account of the Manners and Customs of the Modern Egyptians 1833-38. East and West Publication 1836.
(**) Ibrahim, L. "Residential Architecture in Mamluk Cairo" in Muqarnas 2. Yale Univ. Press 1984.

psychologically encouraging in the sense that it allows them to finish their housework without feeling tired or burdened.

In addition, partitioning the space into two, for example, may satisfy their pride that they possess a home of two "places" rather than one.

Recommendations based on this study should focus on dwelling standards that shouldn't be derived straight from international guidelines. More important is the attitude towards improvements; they should be related to the actual conditions of the environment rather than an abstract concept of a utopia, ie. "what ought to be."

This notion of "relativity" is evidently found among the members of the community when they interact together. Their boastful nature is a good example. They exhibit their food menus if they are of highly esteemed items like a duck (p.128), or display their furniture in a parade along the thoroughfare of the quarter to be seen, counted and visually inspected by the members of the community. The parade is accompanied by music to attract the attention (p.123).

This boastful message is only apprehended among the spectators when they unanimously agree on a common standard of consumption by which they can rate what is being displayed. In other words, the tendency to "show

off" is always related to what is commonly accepted as the norm. For example, if the spectators cannot relate the type of food or style of furniture to what is familiar to them, they will interpret the display as "foreign" or "alien". Consequently, the evaluation process upon which is based the feeling of impressiveness or mockery will no longer take place, and communication between the viewer and the display will cease to exist.

This example may explain the cultural stability these people have although they are in friction with other cultures different to theirs (due to the nature of their work). They hardly ever transfer outside cultural experience to their quarter (p.86).

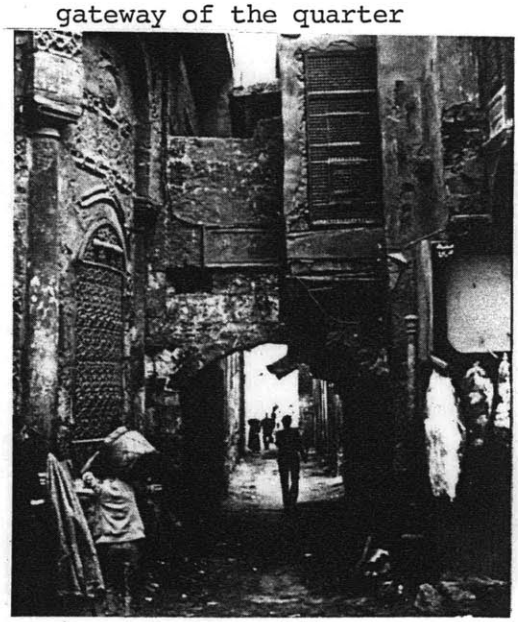
Similarly, if we want the dialogue between the two components to continue, the standards and norms of the dwelling should project from what is "known" to this community and improvements must be "related" to their environment.

Following this approach of "relative improvements", several recommendations concerning the dwelling unit can be made: The average number of rooms per dwelling should be two since it reflects the desired standard as voiced by the community. The architect, when designing, should keep the forms of the rooms simple

(closer to a squared rectangle) so as to allow for different alternatives of space use. This is because newly-wed couples perceive their dwelling differently than when they are raising children; change in space arrangment is expected. Designating additional space for the kitchen is not neccessary since the preparation of meals takes place in other rooms and in external annexed spaces (pp 127-129). Although bathrooms are currently shared by numerous dwellings, it is preferable to minimize this phenomenon of sharing for hygienic reasons.

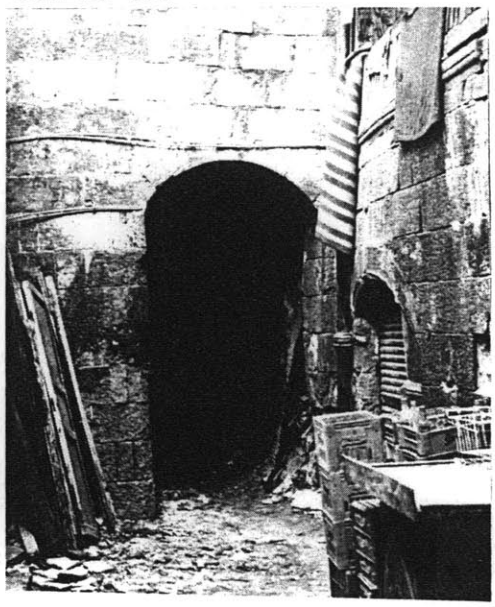
To conclude, these recommendations should be seriously taken into consideration when designing the dwelling unit; they reflect the expectations of a community about its environment, and its modes of space usage, which cannot be ignored.

gateway of the quarter



courtesy to Serageldin M.

cul-de-sac



The last set of recommendations is concerned with the "image" with which members of the community conceive their built environment. As I mentioned earlier (on p?) the image is the conceptual representation of the built environment by the user. This representation is connected with feelings and substantiated by attitudes towards the space. It also has to be related to the physical characteristics found in the neighbourhood.

Through Nadim's questionnaire, members of the quarter expressed their feelings towards their locality.

> "Here if you wear rags, it makes no difference for people know who you are," said an elderly woman.
> "All children know each other and parents too... it is like a village all come together," said a mother (p.68).

The feeling expressed is that of familiarity, intimacy, and friendliness towards neighbours.

> "Undoubtedly there are cleaner streets in which to live, but in the hara (quarter) you can raise sheep, goats and poultry," said a middle aged woman (p.68).

The woman expresses her feeling of satisfaction and belonging to the place.

> "When living in a street, the mother wouldn't allow her child to play in it for fear of cars," said a mother.
> "....to live in a hara (quarter), especially a dead-end one, is like living in one's own kingdom. The place is controlled, no outsiders can intrude. The minute such a person enters <u>bab el hara</u> (the gateway of the quarter) he is noticed," said a man (p.69).

The feelings expressed here are those of security and confidence.

It is understandable that the questionnaire might be subjective; nevertheless, it reflects some feelings expressed by members of the community which are emphasized by their attitude towards space. It is relevant to discuss the way they use the spine of the quarter in this regard.

For shop owners, the spine is an extension of their merchandise display or working area. It is also an extra space for storing their tools and product. In addition, the spine is often used for ceremonial purposes like weddings or funerals. This takes place in the area where the spine branches into three lanes. Recreation is another mode of use of the spine for children, as well as adults, at any time of the day. In the morning, women socialize while completing their domestic activities; their children play together in cliques and are free to enter any house. In the evening adolescents form groups and play football in the center of the quarter, while men take chairs from their dwellings into the street and gather for entertainment and conversation (pp.110-111).

The spine also witnesses the free movement of women socializing with men (p 180). Otherwise, they tend to

ask permission from their husbands if they intend to leave the premises of their quarter (p. 15). They also have to dress in extra clothing as soon as they cross through the gateway of the quarter into the outside world (pp. 177-178).

These attitudes towards the spine resonate with feelings of security, contentment, belonging familiarity and friendliness. The image that is conceived according to these attitudes and feelings is that of a "big house" of n which each individual is a member. Whereas, to an outsider, the place may look like a ghetto -- with narrow untidy streets, with the residents noisy, ill mannered and never minding their own business, living in dilapidated dwelling units -- to the natives of the place, the quarter is more than just a frame of reference; it is their entire world in which they find their identity. It is a place where a family atmosphere governs their interrelationships. In such an atmosphere the residents of the quarter easily become emotionally involved in one another's lives (p. 118). If a wedding celebration is announced, all of the residents (including friends from outside) gather to share the event, and similar support from the quarter occurs place if a death strikes someone's family.

Yehya el Haqqi, in his novel Kandel Um Hashim

(The Lantern of Um Hashim *), depicts a scenario of a scantily dressed girl walking along the center of the quarter asking for help. Dwellers living in the upper stories instantly respond by "raining" upon her old clothes and rags from their windows (p 12).The immediate response of the upper dwellers to the girl is motivated by her failure to maintain the minimum accepted standard of poverty. The act reflects the atmosphere of mutual help that prevails among the members of the community.

In El Sukkariya quarter, this mutual help is further evident whenever some poor residents lose their dwelling, due to cracking which leads to its collapse. Members of the quarter soon erect a temporary shelter to house the family (p 99). Another form of mutual help is the gratuitous purchase of unneeded goods from poor women who sell simple items like candy at the doorstep of their dwellings, a purchase motivated by the desire to help them financially (p 56).

This conceptual image of the quarter, as conceived by its inhabitants, is sustained by certain characteristics in the built form --for example, its particular system of landuse, its architectural style, its scale, and its critical density.

(*) El Haqqi is a contemporary novelist who depicts life in traditional quarters through his novels.

One of the characteristics that helps to sustain the feeling of privacy is the controlled, limited access to the quarter. El Suqqariya, in this regard, has only one entrance that is under surveillance by a designated person (p.187) --a habit that has persisted since the medieval era (Lane 1836, p.15). Although the physical door of the gate is no longer there, the frame of the gate is still conceived of as a threshold that serves both functions:

> "To inform [someone] that one is passing from a space which is public where one's presence is not questioned ... to a place which is private and where one's presence requires justification... thus forces an outsider to the realization that he is intruding on a semi-private domain." (Newman 19 ,p.64)

The feeling of privacy is further sustained by the urban structure of the quarter. This is done by having one spine that branches into several dead-end alleys. The spine in this way doesn't encourage the intrusion of any through traffic, either pedestrian or automobile; hence the daily social life of the spine is not disrupted.

More emphatic is the shift in the axis of the main spine, thus signalling to the intruder standing at the doorway of the thoroughfare that it is a dead end or an

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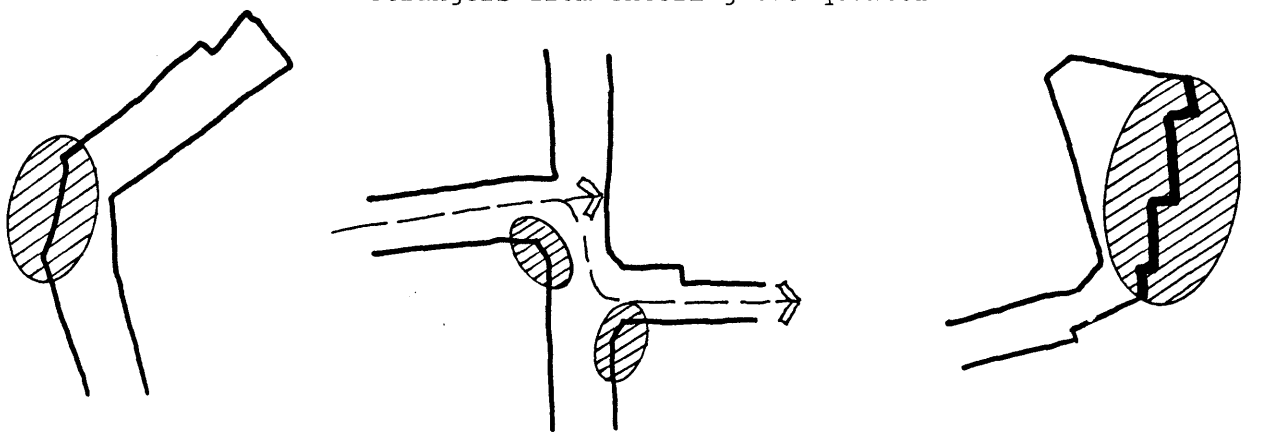
(*) The privacy I am referring to is the "collective privacy" I have discussed on page 48.

visual stop thus discouraging
strangers from entering the quarter



gradual shift in axis...more sympathetic
to pedestrians

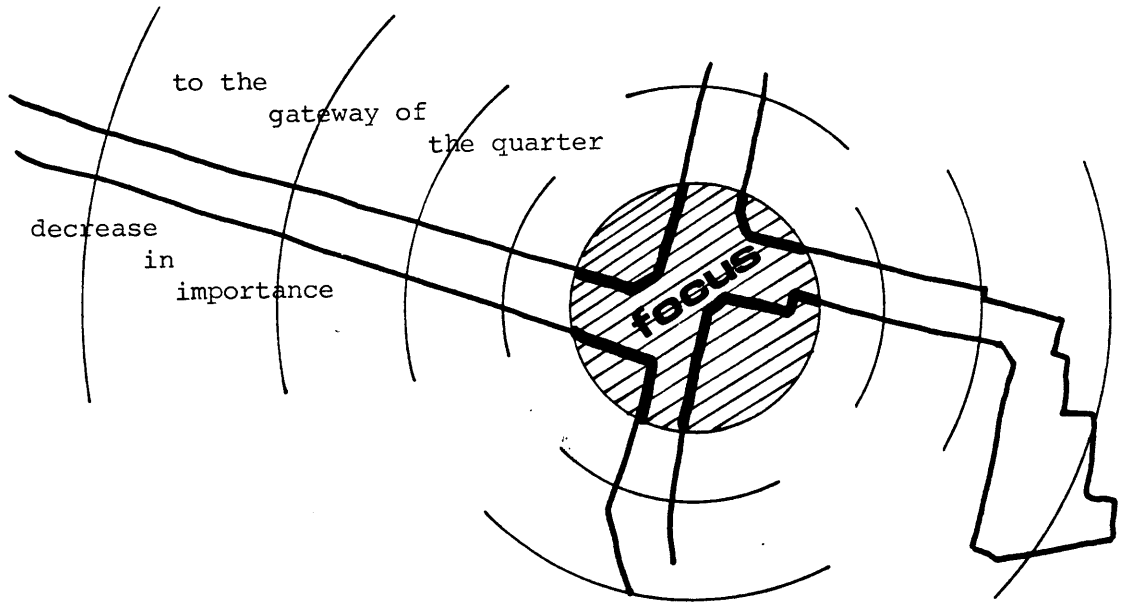
staggered side allows for
more corners

STUDY OF THE MAIN THOROUGHFARE OF THE QUARTER

intertwining axis that doesn't promise any easy way through.

The thoroughfare of the quarter also widens at one point, a junction of three alleys, to accommodate events in which all the community participates. This space is considered the most important one when compared to the peripheral ones, the entrance space of the quarter and the cul-de-sac. This is because the junction is the focal point in the quarter where people gather and experience a sense of enclosure and belonging to the community. In other words, there exists along the

length of the thoroughfare of the quarter a hierarchy in space perception. This hierarchy is not one of privacy (for it is all more or less a semi-private space), but of importance.



HIERARCHAL IMPORTANCE IN SPACE PERCEPTION
IN THE THOROUGHFARE OF THE QUARTER

This hierarchy serves to preserve the collective privacy of the community and to sustain the notion of introvertedness that prevails in the quarter.

Another characteristic in the built environment of the quarter is the presence of the shopping area close to the entrance of the thoroughfare on the main public

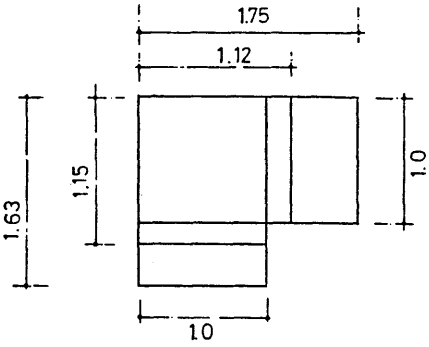
street. This landuse pattern helps to relieve the pressure that has mounted due to the crowdedness of the community. This is because, in such an environment where neighbours interfere so much into one another's affairs, it becomes impossible not to share possessions they have in excess. To counter-balance this habit of borrowing and sharing that prevails, housewives have developed the attitude of not storing any consumable domestic item; instead, they depend on near-by markets to satisfy their daily needs (pp78-79). Therefore the landuse pattern in this context generates the feeling of reliability among the housewives of the community and offers them a practical solution to this problem.

Consequently, the traditional environment has proved to be flexible enough to accommodate dynamic change in the community. Where problems emerge, solutions evolve, and the traditional environment remains constant in both cases.

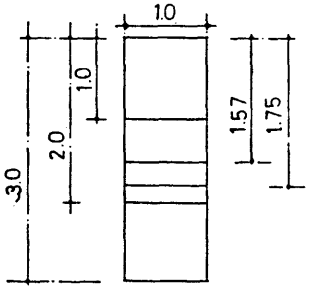
Another characteristic of the environment which stregnthens the feeling of belonging and self-identity is its physical appearance --the scale and style of its architecture. The next two pages demonstrate a study that has been done on those two aspects. Elements that compose the architectural style of the place have been identified; their types have been sorted out, and their

FACADE ELEMENTS

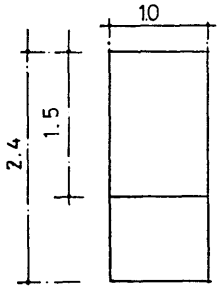
1 PROPORTIONS



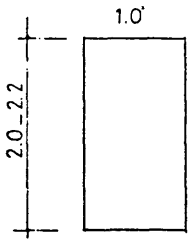
MASHRABEYA



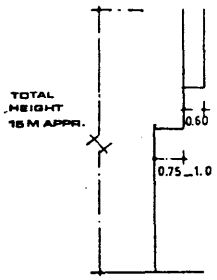
WINDOWS



PROJECTED ROOM

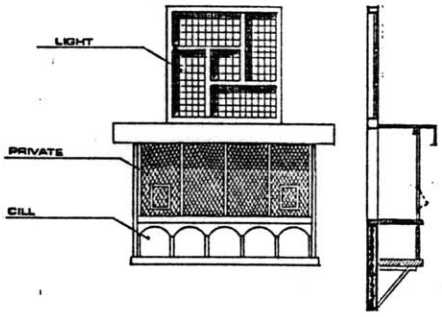


HOUSE DOORWAY

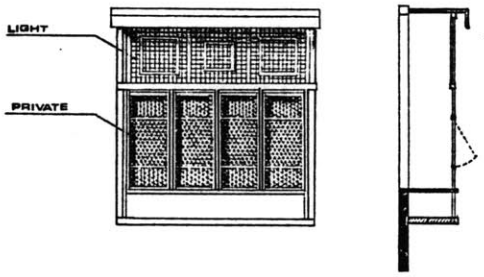


STREET SECTION

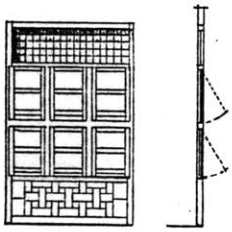
Z TYPES



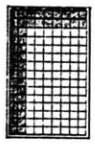
MASHRABEYA · A



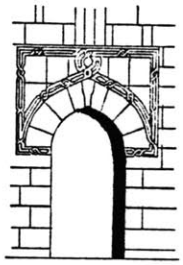
MASHRABIYA · B



WINDOW · A



WINDOW · B



DOOR

STREET SECTIONS A, B &C

proportions analysed.

The question that arises is to what extent can we extrapolate from the local vocabulary...especially when we know that it may not function properly due to modern circumstances and requirements? The width, for example, of the current passage of the quarter cannot make for the easy mobility of an ambulance or a fire brigade, a modern neccessity that cannot be ignored (*). Widening the street in new proposals, while trying to maintain the ratio in relation to building height will result in an additional number of floors. However, this is not a desirable idea from a sociological point of view. This is because any number of storeys higher than three above ground level (as in the existing fabric) makes communication more remote between residents living in the upper storeys and the street. Women and girls --as social studies reveal-- use their windows and balconies to watch all of the events happening in the thoroughfare of the quarter --fights, weddings (Nadim, pp. 119 -120), funerals (p. 124), and even football games (p.181). During such sight interaction, verbal communication may also take place. Therefore this "window activity" is crucial for women who cannot interact at street-level in

(*) Although service vehicles that can maneuver inside the traditional fabric are being developed, nevertheless widening is inevitable for other types of vehicles.

the evening when men gather to entertain (p.111). In other words, balconies and windows shouldn't exceed four storeys above ground level so as to allow women to have a continous interaction with events at street-level at times when they are not able to be there physically.

It is a difficult task to satisfy this social need while attempting to maintain the proportions of street width in relation to building height, and, at the same time, accommodating the emergency penetration of service vehicles.

Concerning the types of elements that distinguish El Sukkariya built form from others, they are even more problematic than the question of scale. An example of these elements is the mashrabeya (a screened projected window of latticed turnery woodwork). At times when the individual privacy of the residence was as important as the collective privacy of the quarter, the mashrabiya was a logical social device that allowed women to see the outside world without being seen. Now that the individual privacy of the dwelling has ceased to exist, the presence of the mashrabeya as a social device is highly questionable. It is relevant to mention that, when girls reach a marrigeable age,

> "...the tactic involved ...is not to isolate girls or prevent them from communicating with

> men, but to make sure that no unmarried girl has an affair with a man." (p.182)

Families are thus more open to each other than before, and a mashrabeya has no place in contemporary society.

On the other hand, looking at the street facade of the quarter, we find that the balconies are the logical substitution for mashrabeya(s). Consequently, the question that evolves is: can the balconies alone help to preserve the character of the place? Or do we still need the mashrabeya as an "image reminder"?

Attempting to solve this type of dilemma, in which the validity of an image carries weight as opposed to that of the real function of the element, the architect may perhaps determine that it is a question of priority rather than compromise. "Which is more important?" is a question that need to be answered before finding any solution.

Another aspect that should be determined by the community is the question of density. It is interesting to note that the community doesn't have a homogeneous density; it varies from one side of the quarter to the other (pp.53 -56). Which of these densities should be taken as an acceptable standard? How does the community perceive these varied densities? Studies have revealed, for example, that the community regards the people living in the Rab' of Nefisa el Beda as an extreme case

of overcrowdedness (p.71). In other words, people have an opinion on the favorable norm over and above which they are able to criticize the rab' as an overcrowded place to live. Consequently, further investigation is needed before the architect can decide on the right figure for a density that will allow comfortable interaction between members of the community without causing any strain.

The last characteristic I wish to discuss is that which generates the familial atmosphere in the quarter. It is the common background that is shared by members of the community irrespective of their economic status. Based on this common background, people are able to

> "share values, ideas and norms; understand and respond to the same symbols, agree about child -rearing, interaction, density and lifestyle --and hence leisure, food, clothing style, manners and rules." (Rapoport, p.256)

This common background can be based upon occupation (80%) of the working class are connected to handicraft, (Nadim, p.61), origin (60% of the members are Awlad el Balad and 30% are Waheya, p.53), or kinship (62% have relatives living in the quarters, p.59).

Unlike the earlier characteristics, the common background is not derived from the built environment, but from the community itself. The user also participates in casting his image perception of the

quarter; therefore the mechanism that is involved in the image-making process is not one way deterministic from the point of view of the built form.

This characteristic of having a shared background is important for reducing stresses the community may experience in their built environment (Rapoport, p.260). Through their latent potential, the members of the community are encouraged to adapt themselves to the constraints posed by the environment. The manifesting of latent potential can only take place when the individual feels that the problem he is facing is actually shared by the rest of the community. And solutions that are derived in response to certain constraints become widely acknowledged and collectively implemented because they stem from manners and customs shared by the majority of members of the community. Thus common background in a society helps cultural survival and strengthens its onging resistance to outside pressures. This continuity comes to a halt when the common background weakens and an individualistic attitude starts to develop. And that is the difference between traditional quarters and modern ones and not --as is generally supposed-- that of lower standards of social class.

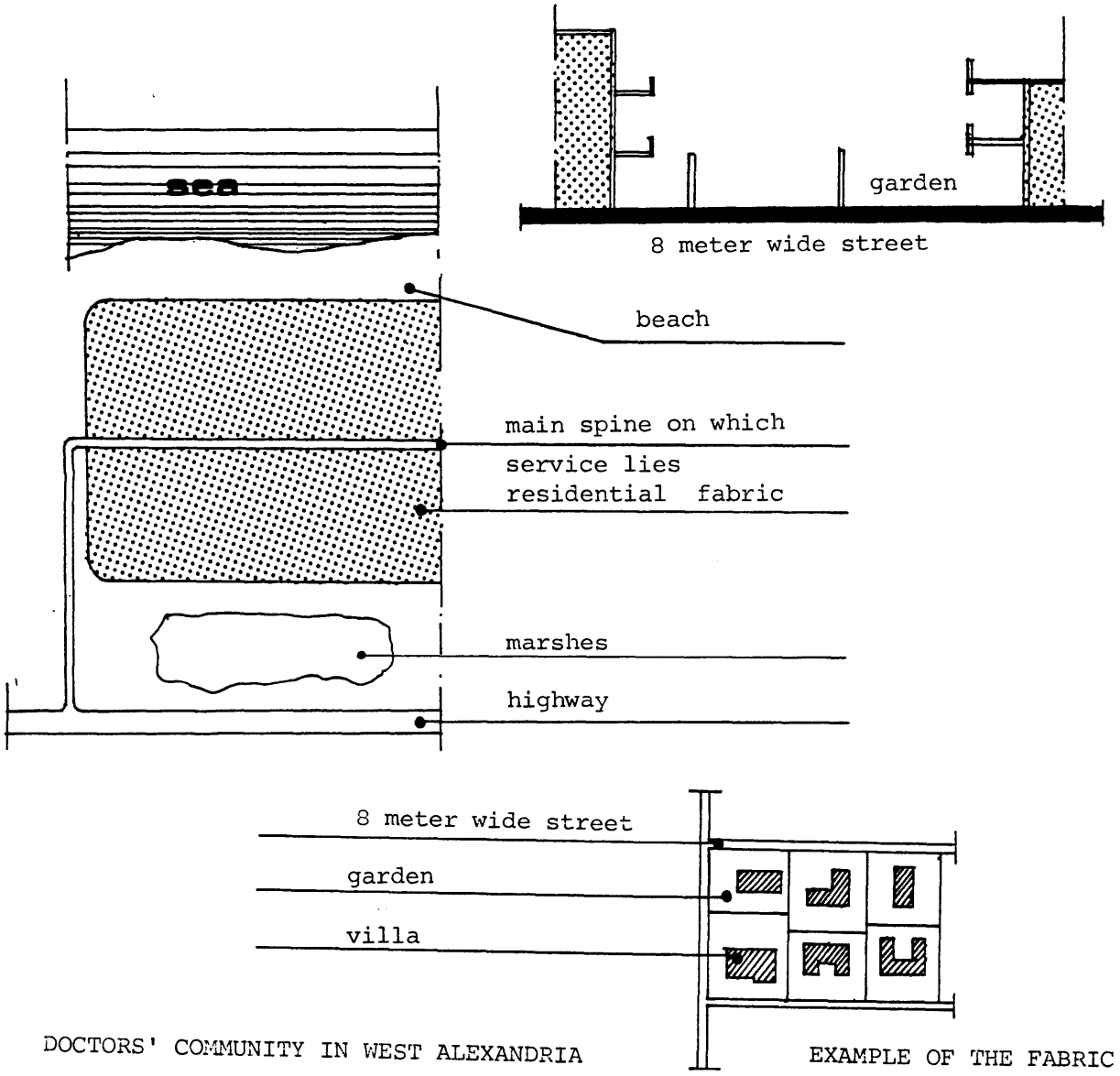
It is relevant at this point to compare the

community under study with another one that is much higher in social class. This community lives in a settlement they have built along the Mediterranian coast west of Alexandria (Egypt). The settlement came into existence when a group of affluent doctors bought a vast area of land from the Arabs of the area. They then started dividing their land into smaller portions and sold it to relatives and known clients. To this group of doctors, it was important to choose the buyers very carefully, not only because the transaction was only based upon mutual trust (since there was no legal basis for these investments) but because they were keen to create a homogeneous community sharing common values and accepted norms. It was not necessary that members of this community be rich; what mattered was the level of intelectual education. The outcome of this criterion in choosing clients was a community with a high percentage of doctors, highly sociable, with common behavioral patterns of living and similar modes of interaction with their own built form (*).

What is similar to both the community of doctors and that of the traditional quarter is the image perceived by each of their environment (the image of an

(*) The author interviewed Dr. Said Laban in January 87. He is one of the founders of this settlement.

entity where a familial and friendly atmospher prevails). What is also similar is the concept underlying the perceived image, the common background each of the two communities has.



DOCTORS' COMMUNITY IN WEST ALEXANDRIA

EXAMPLE OF THE FABRIC

What is different --on the other hand-- with the doctors' example is the physical elements in the built environment that helps in weaving the perceived image. Streets, for example, are not places for socialization as in Sukkariya quarter, but gardens and terraces overlooking them. The inhabitants of the traditional quarter with their colorful dress, gathering in the thoroughfare are like the flowers in the doctors' gardens --a source of entertainment and pleasure to the community. In addition, the garden in the doctors' community is the pride of every homeowner because it represents his persistent ability to maintain its existence in the desert climate. The garden in this regard is like the guest room furniture for the Sukkariya community --a source of pride.

To conclude, the cross-cultural analysis shows how natural and favorable the desire is to cluster to form homogeneous settlements. The study also reveals how different characteristics in various built forms may tend to compose similar images for different communities It is the responsibility of the architect to understand these characteristics and their conceived images formed in each case, if he is keen on providing a responsive built form to the community under study.

CHAPTER FOUR

SUMMARY OF RECOMMENDATIONS

Recommendations concerning the urban structure of the quarter:

** The quarter should have a defined thoroughfare with one entry, to give a sense of collective privacy.
** The thoroughfare of the quarter should discourage the intrusion of any through traffic (either pedestrian or automobile) so as not to disrupt its daily social life. This is done by providing systems of cul-de-sac and the continuous shift in axis.
** The thoroughfare should have a focal point (eg. the intersection of more than one alley) to accommodate events in which all the community participates, thus sustaining the notion of the introvertedness of the quarter.
** Commercial activity should be located along the public spine outside the quarter, yet easily accessible from the thoroughfare of the quarter since housewives depend heavily on "nearby" shops for their daily use. The shops should not be located along the thoroughfare for its expected disturbance to the "collective privacy" of the quarter.

Recommendations concerning the dwelling unit:

** The design of houses should take into account open-

-air communal spaces (in each floor of the house) to allow for socialization while performing domestic activities.

** The height should not exceed more than four storeys to allow for sight, as well as verbal communication with street life.

** The dwelling unit should be on average two rooms. The rooms should preferably be close to squared rectangles in shape to maintain maximum flexibility in space usage.

** Spaces designated to kitchens may be designed solely for cooking. Food preparation takes place while socializing with neighbours in communal places.

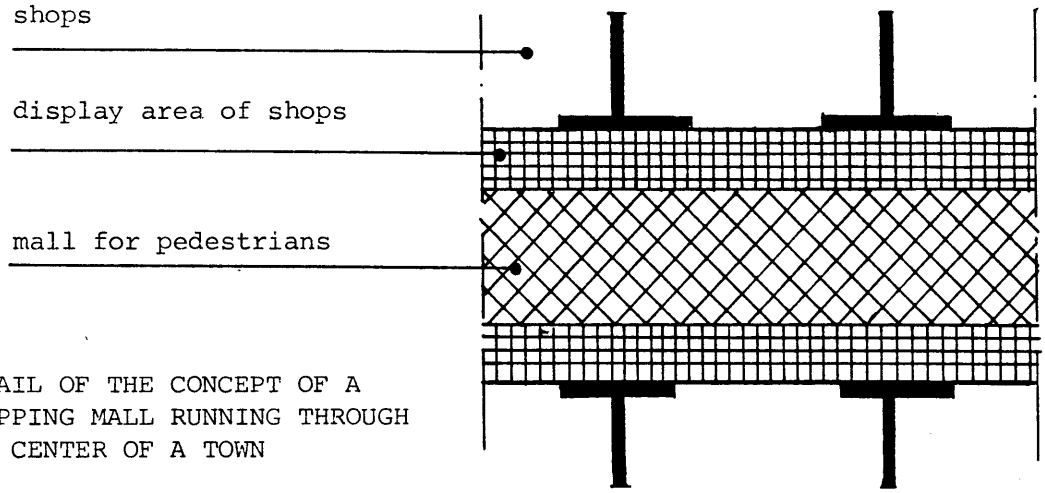
** Bathrooms should not be shared by dwelling units for hygienic reasons.

Recommendations concerning the physical appearance of the quarter.

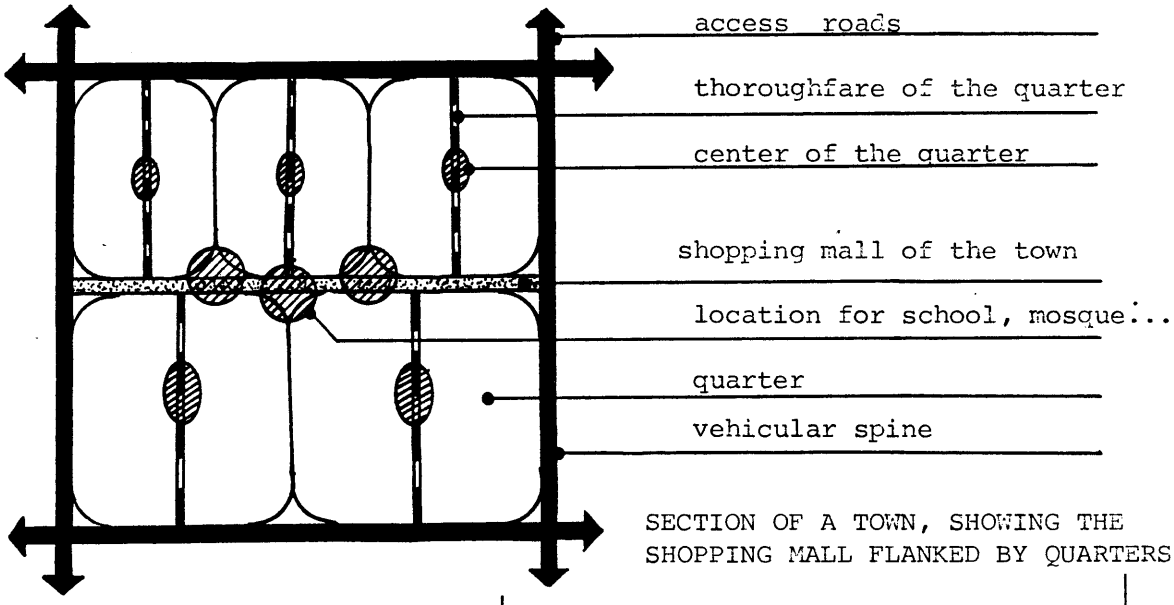
** These recommendations are not fully formulated due to a lack of information in social stdies; further research needs to be pursued on the way a community perceives the physical appearance of its quarter.

Recommendations concerning the community.

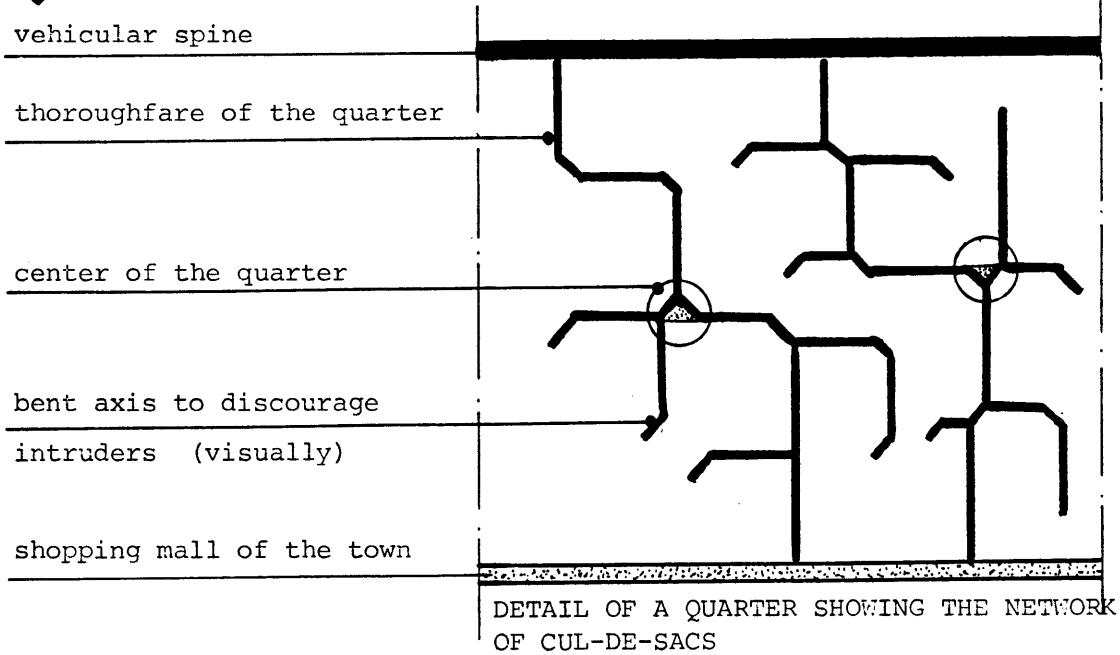
** The people of the quarter should have a common background that ties them together socially and creates a familial atmosphere. This background can be due to origin, intellectual education or occupation. It is relevant to mention that grouping a community on the basis of economic status only does not help to create collective interaction among its people. This recommendation is the most important one, since the structure of the proposed quarter, as well as its dwelling units, is based on the collective characteristics and behavioral patterns of the community rather than individualistic ones. If the principle of shared background is not implied, the whole set of recommendations becomes meaningless. The next pages summarize these recommendations in conceptual diagrams.



DETAIL OF THE CONCEPT OF A SHOPPING MALL RUNNING THROUGH THE CENTER OF A TOWN



SECTION OF A TOWN, SHOWING THE SHOPPING MALL FLANKED BY QUARTERS



DETAIL OF A QUARTER SHOWING THE NETWORK OF CUL-DE-SACS

CHAPTER FIVE

REFLECTIONS

The thesis reveals how the architect, when using social studies, may make some effort to reach meaningful guidelines for the built form that suit the community under study.

As part of the attempt to utilize social studies, the author found it necessary to look into the relationship between the user and the built environment. The relationship appears to belong to an "equilibrium", where the potential of one component compensates for that of the other. This equilibrium is evident in El Sukkariya quarter. The division of the original residential blocks to accommodate greater number of families, and the acceptance of lesser living space on the part of the families, reflects the latent potentials of both components (user/ built environment) now being released to attain a new equilibrium.

In addition, the study reveals that there are two kinds of behavioral patterns: one related to ethnic background, the other related to constraints in the built environment. In El Sukkariya case study, it was revealed how one type of behavioral pattern shifted through time to become the other. The externalization of domestic activities was initially motivated by the lack of internal space; it is now deeply embedded in the community as part of their ethnic quality associated

with a specific pattern of socialization.

In some cases the author had great difficulty in categorizing behavioral patterns or even sensing their importance. In this regard, the history of interaction between the user and built environment was helpful. By looking into history, it was revealed that there were two levels of privacy: that of the family and that of the quarter as a whole. Today, the privacy of the family has diminished, while that of the quarter has prevailed. Consequently, by tracing the dynamic changes in the community, the importance of maintaining the collective privacy of the quarter in the new design came to the attention of the author, while elements like mashrabiya denoting individual privacy became questionable.

The thesis also deals with the question of the "conceptual image" of the quarter. Attitudes and feelings towards space are traced with the help of social studies. The characteristics of the community or built form that help to sustain the "conceptual image" are extracted to formulate new guidelines.

Through the analysis of sociological research, it was apparent in some instances that the community under study was in transition. The question that arises is: how can an architect deal with this situation? Yehya el

Haqqi in one of his novels reflects such transitions in thought. The daughter voices her worry that the new neighbours will be able to see her while wandering on top of her house; her mother does not mind. The mother in this sense, is the symbol of the past and tradition, while the daughter is a symbol of modernity and change. Here we have two different perceptions of privacy in the same family; the architect is lost between the two. Which set of thoughts are to be followed, those deeply rooted in their manners and customs or those that have been newly introduced? These questions are difficult to answers.

On a deeper level, the author encountered the difficulty of transforming these social studies into an apprehendable form to the architect. The problem with social studies is that they are descriptive and verbally analysed. The architect must overlay the verbal analysis on designs for the built form. Once this is accomplished, it is easy to deduce recommendations and understand the relationship between the built environment and the user. Moreover, sketching diagrams that reflect the social analysis also helps the architect to visualize the social studies through a medium he understands. This attempt is an effective mean in bridging the gap between the two disciplines;

a dialogue between the architect and the social scientist is finally made possible.

What also helped to bridge the gap, was the conscientious attempt by the social anthropologist to relate the interaction of the community to defined places. Such an effort is immensely applauded by the architect because it holds his attention to the importance of certain spaces, for example when Nawal Nadim points out that socialization among women took place in corridors of the rab' and cul-de-sacs as well as the thoroughfare of the quarter. Hence the architect is motivated to look into the characteristics of the spaces that promoted such a pattern of behavior in order to incorporate them in new designs.

The last point the author wishes to make is that in trying to merge the two disciplines together, it became necessary to reflect such policy in the technique of presenting the thesis. While the author presented the social studies, the relevant urban spaces were analysed and in doing so the interaction between the two disciplines was noted. From this process the author derived set of recommendations. Therefore the methodology of matching the two disciplines together, as a technique of presentation was appropriate to the author in his attempt to deal with the incompatible.

BIBLIOGRAPHY

BIBLIOGRAPHY

Abdel Hadi A. ..... Personal Interview. January. 1987.

Abu Lughod J. ..... Cairo 1001 Years of The City Victorious. Princeton Univ. Press. 1971.

Anderson S. ..... "People in the Physical Environment: The Urban Ecology of Streets" Thresholds Working Paper 1. MIT. 1975.

Gans H. ..... The Urban Villagers. (Updated) Free Press. 1982.

Geertz C. ..... Meaning and Order in Moroccan Society. Cambridge. 1979.

Al Haqqi Y. ..... Kandil Um Hashim. Dar el Ma'are Egypt. 1954.

Ibrahim L. ....."Residential Architecture in Mamluk Cairo" in Muqarnas. Yale Univ. Press. 1984.

Laban S. ..... Personal Interview. January. 1987.

Lane E. ..... An Account of The Manners and Customs Of The Modern Egyptians (1833/35). East West Publication. 1836.

Mahfuz N. ..... El Sukkariya. Dar Misr. Cairo. 1956.

Al Maqrizi A. ..... Mawa'iz Wa -al- I'tibar Fi Dhikr al-Khitat Wa -al- Athar. Bulaq. 1854.

Muhamad A. ..... "Elements of Urban Structure --Comments on Physical Appearance And Spacial Organization" Case Study: El Husayniya. Report submitted to University of Berlin Summer. 1984. (Unpublished)

Nadim N. ..... The Relationships Between The Sexes In A Harah Of Cairo. Univ. Microfilms International. Ann Arbor, Michigan. 1985.

Newman O. ..... Defensible Space; Crime Prevention Through Urban Design. NewYork. Collier Books. 1973.

Norberg-Shultz C... "Genius Loci-Spirit of Place" in Architecture Design. July 1980.

Pressman N. &
Tennsyon J ....."Dilemas Facing Social Scientists & Architects" in Journal of Archit. Education. Summers 1983. No. 4

Rapoport A. ..... Human Aspect of Urban Form. Pergamon Press. 1977.

El Safti M. ..... Personal Interview. January. 1987.

Serageldin M.
& Vigier F. ..... Monograph of Cairo Studio. Harvard GSD. 1986.