

IN THE NAME OF ALLAH, MOST GRACIOUS, MOST MERCIFUL

DEVELOPMENT AND CONSERVATION
WITH SPECIAL REFERENCE TO THE TURKISH TOWN OF
ALEXANDRIA

Thesis submitted for the degree of
Doctor of Philosophy
in Architectural Planning and Conservation

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

ABSTRACT

The main concern of this study is the issue of long standing urban areas, where needs, traditions and expectations of once thriving self-regulating communities have been ignored by politicians, architects and planners. And where massive industrialisation and urbanisation programmes have led to devastating traffic conditions, pollution, severe overcrowding and social disintegration.

The approach to this has been the reconciliation of two often conflicting activities: development and conservation. The study addresses the need to maintain the inevitable process of change at a rate that ensures the survival and natural continuity of culture and tradition. In other words, how to utilise conservation in a development plan, in what the author is suggesting to call 'conservation development'.

In Egypt, with its long history and traditions coupled with its expectations for future prosperity, the above conflict has been strongly evident. Theoretical and practical approaches, based on recent Egyptian experience, are reviewed. On the basis of this analysis the study formulates a methodological approach to be applied to the city of Alexandria.

As the study maintains, there is a need for an indigenous, locally oriented and tailored methodology for conservation development; its scope is focused on the case of the Turkish Town in Alexandria. The history, architecture, urban environment and social structure of this area have been surveyed and evaluated, and opportunities for and constraints against future developments have been identified. To try to ensure the appropriateness of the measures suggested we have analysed three particular buildings in a chosen demonstration area.

Finally the study attempts to show in its conclusions that:

- Urban conservation can be a cost-effective utilisation of resources, where existing assets are used and new assets are sensibly introduced.
- There is a pressing need to address the issue of ownership and responsibility, particularly in *Awqaf* and *ex-Waqf* properties.
- Out of date Rent Control legislation has to be seriously reconsidered.
- Active community participation has to be promoted, practically encouraged and locally directed.
- Private property developers and enterprise co-operatives must be seen as viable vehicles for local development.
- The master plan approach must be avoided, instead a small scale, affordable and step by step approach should be considered.
- Conservation studies and action planning must address the implementation stage: socio-economic aspects, land and property ownership patterns, as well as financial aspects.

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*This work is dedicated to my first teacher, my best friend,
my late Father*

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1.1. Background

"Layer upon layer, the city holds within itself the imprint of the values of successive generations of great events and social movements, of the manifold activities of man which has lifted him above animals." (Middleton,1987:26)

Cities are man's greatest achievements; they have provided an insight into the lives of their inhabitants, their resources, achievements, economic and social life, and knowledge as well of their aims and ideas. Thus, before city life can be studied, it is vital to understand the problems associated with different periods and their underlying structures.

Over the last three decades cities of the developing countries have been facing numerous and various social and environmental problems, mainly due to the rapid rate of urbanization and industrialisation. Among other effects, this has led to devastating traffic conditions, pollution, severe overcrowding and social disintegration. Many of the consequences of a lack of attention by the authorities and the citizens alike have been rebounded on their unique cultural and architectural heritages.

In Egypt, this pattern of deterioration and disintegration has been strongly evident. Politicians, officials, and many architects and planners have ignored the needs, traditions and expectations of once thriving self-regulating communities. A massive industrialisation programme has led to an increasingly accelerating urbanisation rate (the urban population has increased from 6.49m. in 1950 to 24.4m. in 1990)¹. This was met with ugly, collective and low standard housing schemes that have been introduced in most cities but mainly in Cairo and Alexandria.

¹ Source: United Nation Population Division, World Urbanisation prospects 1990, pp.118-122

This process has not been merely physical; it has been affecting and effected by the totality of administrative, political, cultural and socio-economic life of the city. In other words, as Arkoun (1992:42) suggests " .. *there is a process of mental deterioration accompanying the physical deterioration structural violence is, more and more replacing the traditional, coherent and efficient codes of culture, ethics, and religion*".

On the other hand, the rich Egyptian history and traditions, coupled with its needs as a developing country, have highlighted the conflict between the presence of the past and the needs of the present and future. The magnitude of this conflict has been illustrated by various means: the conflict between archaeology and rural settlements in Upper Egypt (e.g. the attempt made by Hassan Fathy to replace the Gurna village; Fathy,1973), the effects of growing tourist activities have had on the Giza plateau and the nearby villages (e.g. Nazlet Asseman) are most significant, the dilemma of traditional urban areas (e.g. Cairo, Alexandria, Rashid, ..etc.), where this conflict is magnified by the complexity of issues involved.

Within this context, the medieval city of Cairo has become '*worth taking care of*' as it constitutes over 500 first grade monuments, mainly dating back to the 14-16th centuries, and represents one of the best surviving examples of Islamic cities; a fact which no one will dispute. In the last three decade it has been the subject of many studies and reports by international institutions, as well as much academic research. Since 1979, when it was listed by UNESCO as a world heritage site, an international supported campaign has been in existence for its salvage, and more studies were carried out. Unfortunately these studies and plans, apart from some odd restoration work, were not implemented (Fethi,1993:182).

This dilemma of urban areas, the focus of this study, has been often been approached by means of '*urban development*' or '*urban conservation*', using the

former term 'development' has meant grandeur projects and large wide avenues (e.g. Al-Azhar street in Cairo, Al-Nasr street in Alexandria) while using the latter term 'conservation' has implied the preservation of a body of monuments "*no less than as works of art than as historical evidence*" (Venice charter, article 3) where it has "*often been initiated by international experts and supported by the attraction they hold for tourism*" (Nevanlinna,1988:111). Many historic cities around the world, from which Alexandria is one, have not been qualified for 'conservation', simply because they do not possess this body of monuments that makes them 'heritage' cities.

1.2. Defining the problem

At this stage as we approach the 21C, we as a nation should face the vital question: what is needed, development or conservation? which activity would best provide a cure for our urban problems? At the empirical level, development has understandably been acknowledged as a national priority, especially in the developing countries, a process which involves growth plus change. Thus the issue of conservation at this point appears to be a factor in the clash of aims between development and conservation, and it is therefore of great importance to examine both activities and their impacts on the city.

Should we favour conservation "*.., since it is aimed at being of a cultural not commercial value which is to be passed on to future generations, it should be carried out regardless of cost?*". Rather decisions should be based neither on the cultural values nor on the employment of minimal costs, but it is necessary that available resources should be used with discrimination in a conservation objective, where "*development is not the problem of conservation but its opportunity*". (Lichfield,1988:69).

Conservation issues are often related to historical and architectural values. "Value" has always been attached to monumental "world heritage" areas where large international organisations and "expertise" decide on the criteria of "value",

make studies and set policies. This study therefore tries to highlight the need for a wider perspective of "value", and through an indigenous understanding of the living environment and its role in support of the local users. The basic hypothesis of this thesis can thus be formulated as:

The necessity of conservation has to become a tool for the well being of the society, where this can be achieved only when conservation policies come to terms with the local realities.

It is our aim therefore to try to demonstrate how development can be combined with conservation, where the city is allowed to "*.. be a healthy and attractive place in which to live, work and visit.*" (Fowler,1993:151). Hence, we might postulate the three linked questions to be addressed by this research as follows:

First, How is it possible to maintain the inevitable process of change, at a rate and of a quality that ensures the survival and natural continuity of our culture and traditions? secondly, who decides about what and how to conserve in the local urban environment, and thirdly what are the criteria for judging the possible solutions to these questions?

1.3. Scope of the study:

Looking at various examples of urban conservation and development schemes from different areas of the world, it is recognised that development is not a universal model and that 'value' is not a universally defined term. As universal solutions and practices have proved inappropriate in most cases, rather it is a case problem, where each case has its own values as well as its own model for development;

"What is needed, perhaps, is a more indigenous, programmatically - oriented methodology for conservation, tailored specifically to suit local contexts."
(Fethi,1993:164)

The scope of this thesis is therefore focused on one case, 'the Turkish Town of Alexandria'; this is an architect's approach to a daily life problem, dealing

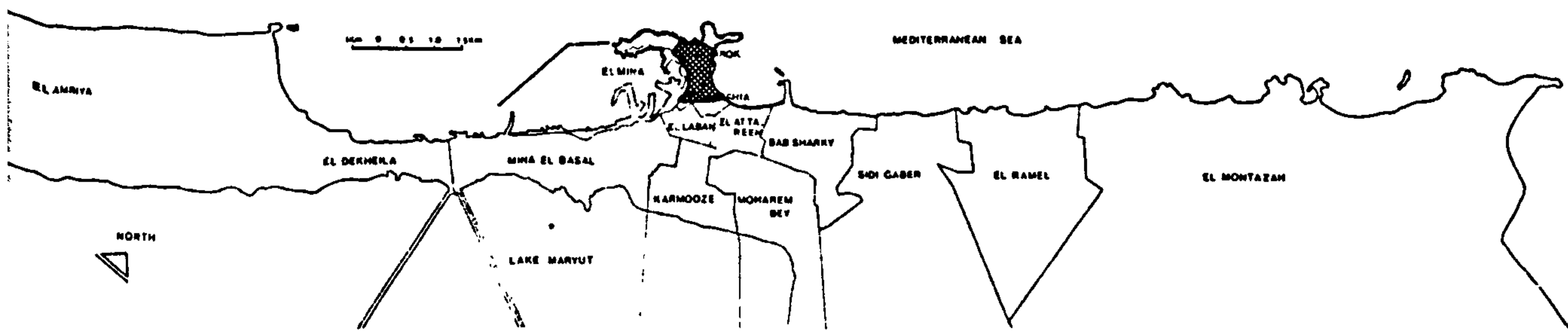
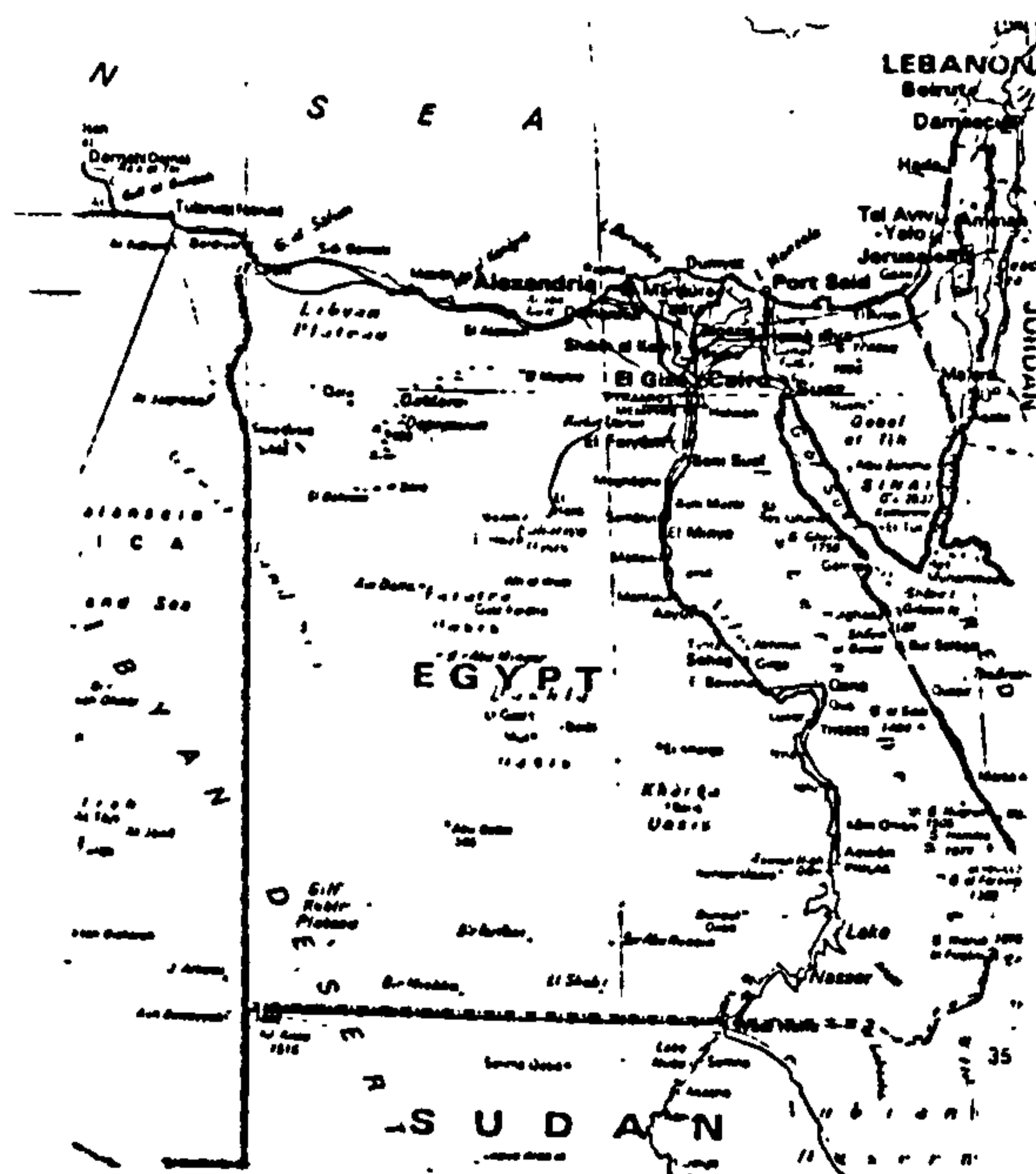
mainly with the community and avoiding, where possible, official bureaucracy.

1.3.1. Alexandria in the national context:

Alexandria is one of 26 governorates forming the administrative map of Egypt (fig.1-1). The city is the second city in Egypt after Cairo. It has over 6 percent of the total population of Egypt (3.5 million). It is the main port, and handles 70 percent of Egypt's sea born trade (Ewais,1988:118). Alexandria is also a major industrial centre with 38 percent of the national industrial capacity. The is on the coast of the Mediterranean Sea, with Matrouh Governorate and the desert to the west, the sea to the north, Abukir and the Nile Delta to the east and Lake Maryout and agricultural land to the south.

Fig.1-1, Right, Alexandria in the national context.

Fig.1-2, Below, the administrative division of Qisms in Alexandria; the study area is shaded.



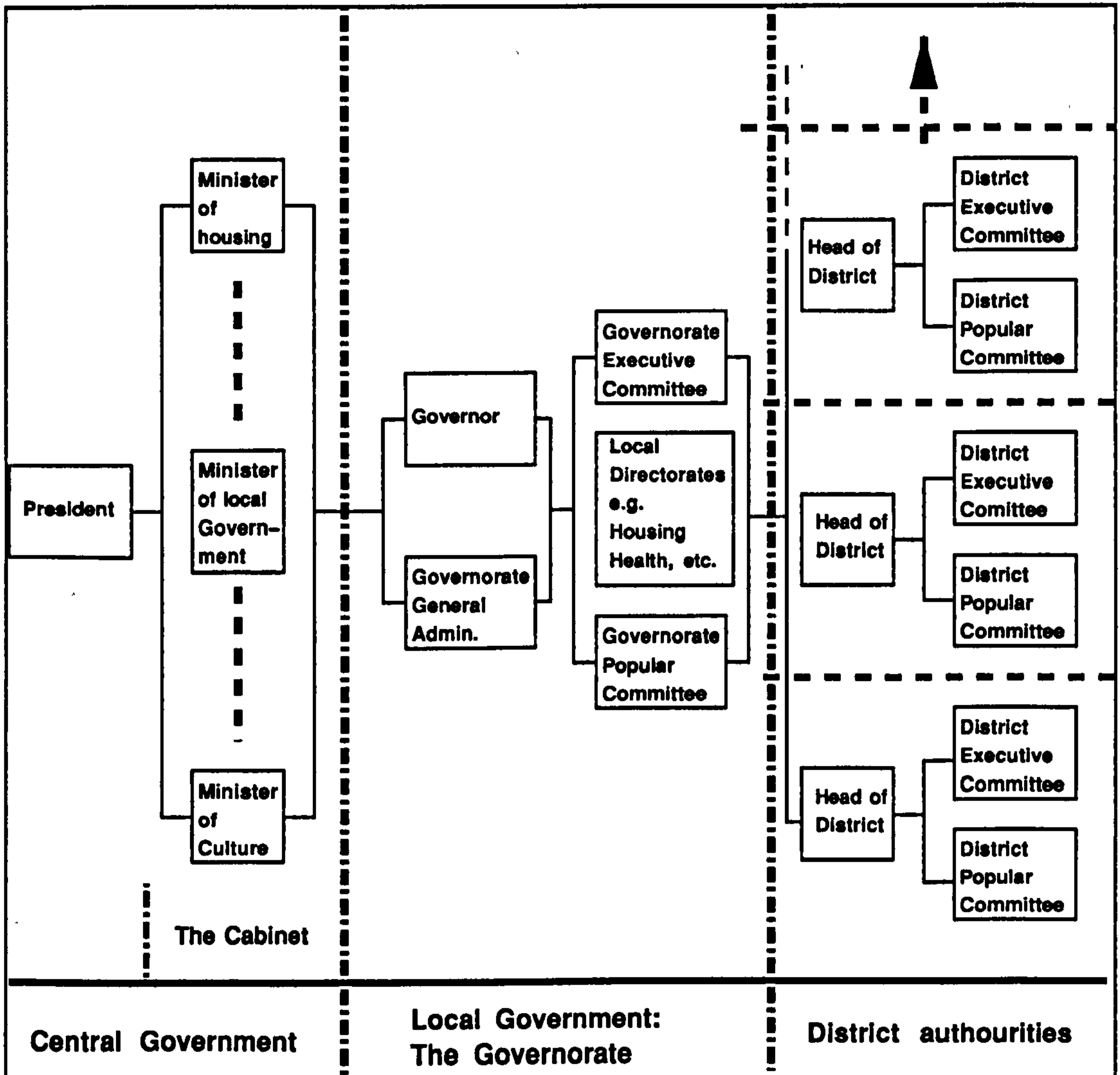


Fig.1-3, the administrative and policy making mechanism: Central government, the governorate and district authorities. In practice all policies are made and directed by Central Government while local and district authorities represent basically branches of the Central Authority.

The Alexandria Governorate is subdivided into six districts; these are further divided to fourteen *Qisms* (sub-districts) (fig.1-2). The chart (fig.1-3) explains the administrative and policy making mechanism in the inter-relations of local authorities represented in the Governorate and district authorities with the central Government. In theory the local authority is the main decision maker; in practice, however, this is not always the case: the centralisation in most administrations and ministries, especially in terms of finance, largely eliminates the role of local authorities.

In 1984, the local government participated in the decision making process by presenting the Alexandria 2005 Comprehensive Master Plan for the city with the collaboration of both Alexandria and Liverpool universities. This plan, illustrated later, was ratified as the official plan for Alexandria only in 1991!

1.3.2. The Turkish Town

The Turkish Town of Alexandria (Al-Gommrok); represents the oldest remaining settlement in the city (from the 16th century). It reflects a special character of its own, its urban pattern, architecture and social life. Being now the most densely populated district in Alexandria (134,000/km²), it is suffering from acute problems, housing, infrastructure, services, ..etc. Thus, large development pressures are mounting in order to meet

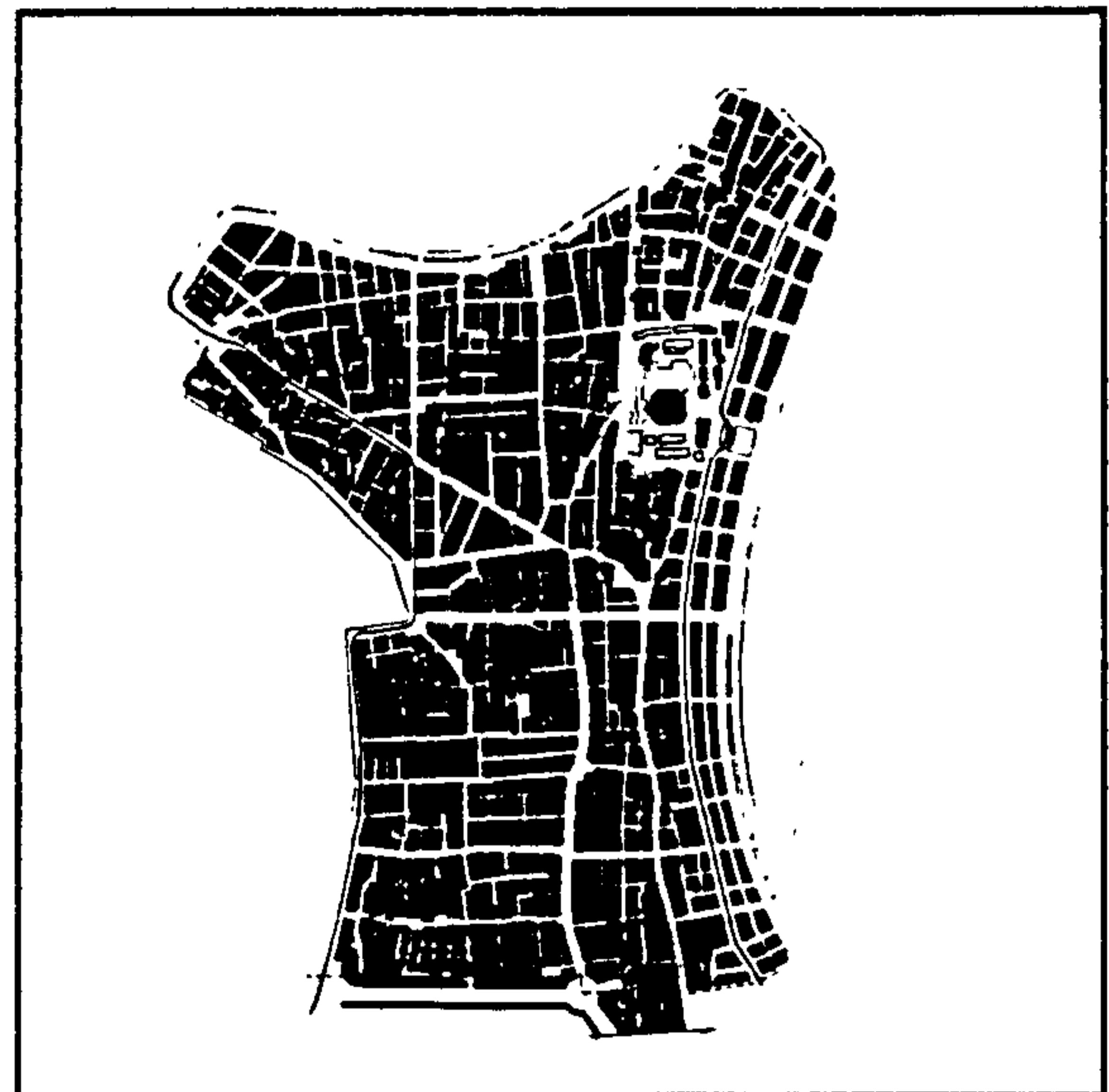


Fig.1-4, The Turkish Town (alGommrok district); the study area.

people's needs and threatening the area's cultural and socio-economic qualities. Among these threats:

- The rapid increase in housing demand, its location next to the central business district and by the main port (the first port in Egypt); all have resulted in its land value and consequently the desire to 'develop' and build high rise blocks.
- A number of projects have been proposed (or implemented) to 'develop' the area which do not consider the existing context of the area; they have therefore represented a direct threat to its urban, architectural and social fabric, e.g.; Mogamaa Al-Masajid and AlNasr Street projects.

Thus, the area will be studied to illustrate the acute threat to destroy this

important example of the built heritage and to highlight the controversy between development and conservation.

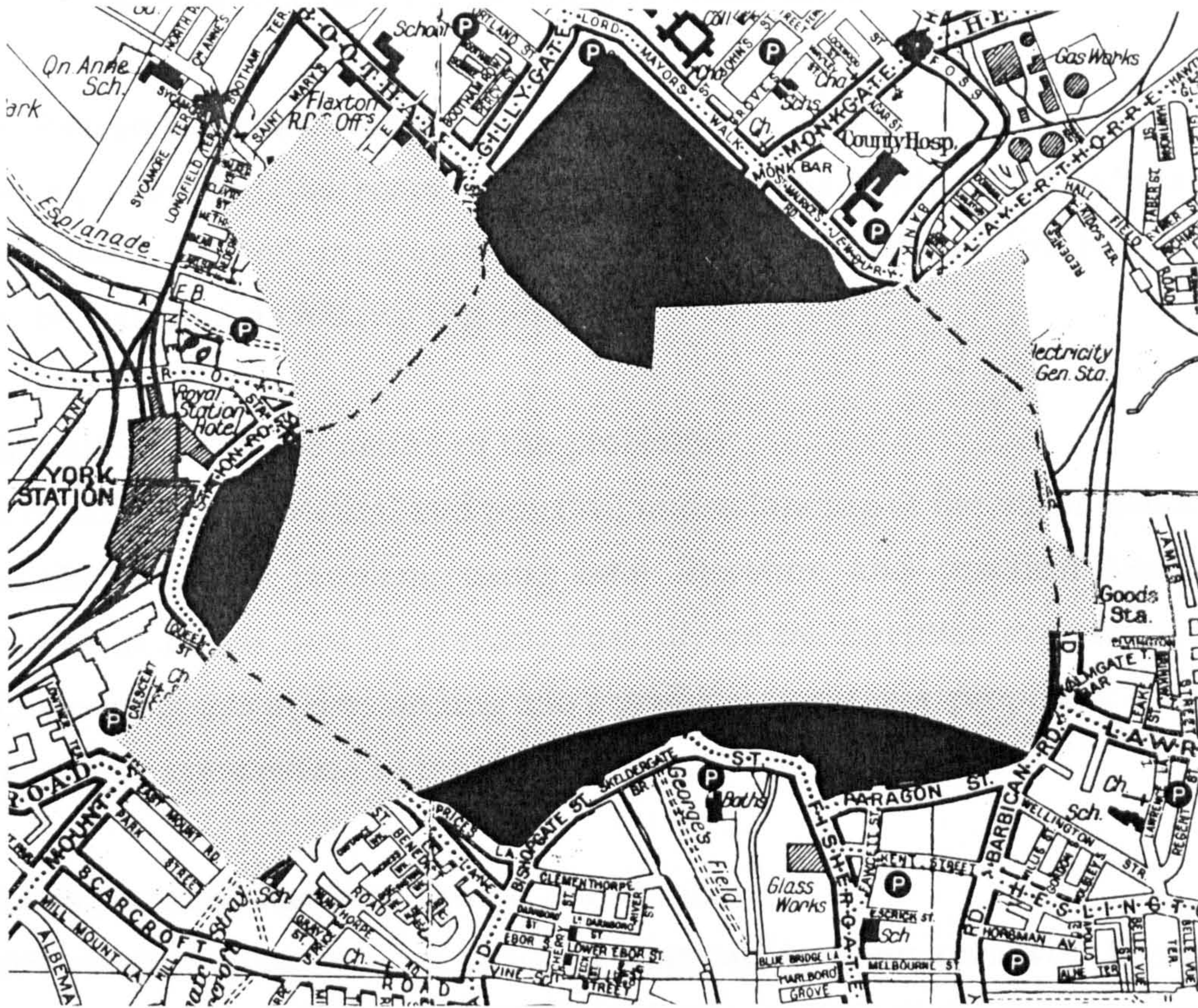


Fig.1-5, The scale of the area illustrated in comparison to the walled city of York, UK.; almost the same size (1 Km²).

1.4. Research objectives:

At this point, we may define the aims and objectives of the research as follows:

- Investigate and develop a framework for the relation between development and conservation.
- Examine the current criteria set for conservation in Egypt.
- Formulate a methodological approach to the planning process for a conservation development.
- Investigate the practical possibilities of utilising conservation as a tool for development.
- Investigate the role played by various parties and, in particular, the possible role of local communities.

- Provide planning guide lines and policies for the development and conservation of the Turkish Town of Alexandria.

1.5. Research Methodology:

Having identified the scope and objectives of the study, it is necessary to formulate a research programme to achieve these objectives. This programme can be classified as follows (fig.1-6):

- Identification of the nature of the problem.
- Developing a theoretical and practical understanding of the major issues that contribute to the problem, using both literature and practical lessons of experience, in this case by drawing basically on the Egyptian experience.
- Embodying this understanding into a practical study area, proposing solutions that can be appropriate to the study area.

This programme has been carried out as follows:

First, theoretical as well as practical approaches were reviewed through a literature study in order to identify the definitions, dimensions, aims and options of the following topics:

- History and heritage; the nature of heritage, and what is 'value'?
- Conservation and development; the theoretical arguments and practical approaches to the controversy between these two objectives.
- Tourism and development; the impact of tourism on the socio-economic structure of traditional urban areas, as well as its impact on the overall development process.
- Costs and benefits; the value of the cultural built heritage; economic, cultural and social costs and benefits of conservation.
- Legislations; the role of the legislative and administrative frame-works in both the development and conservation processes.

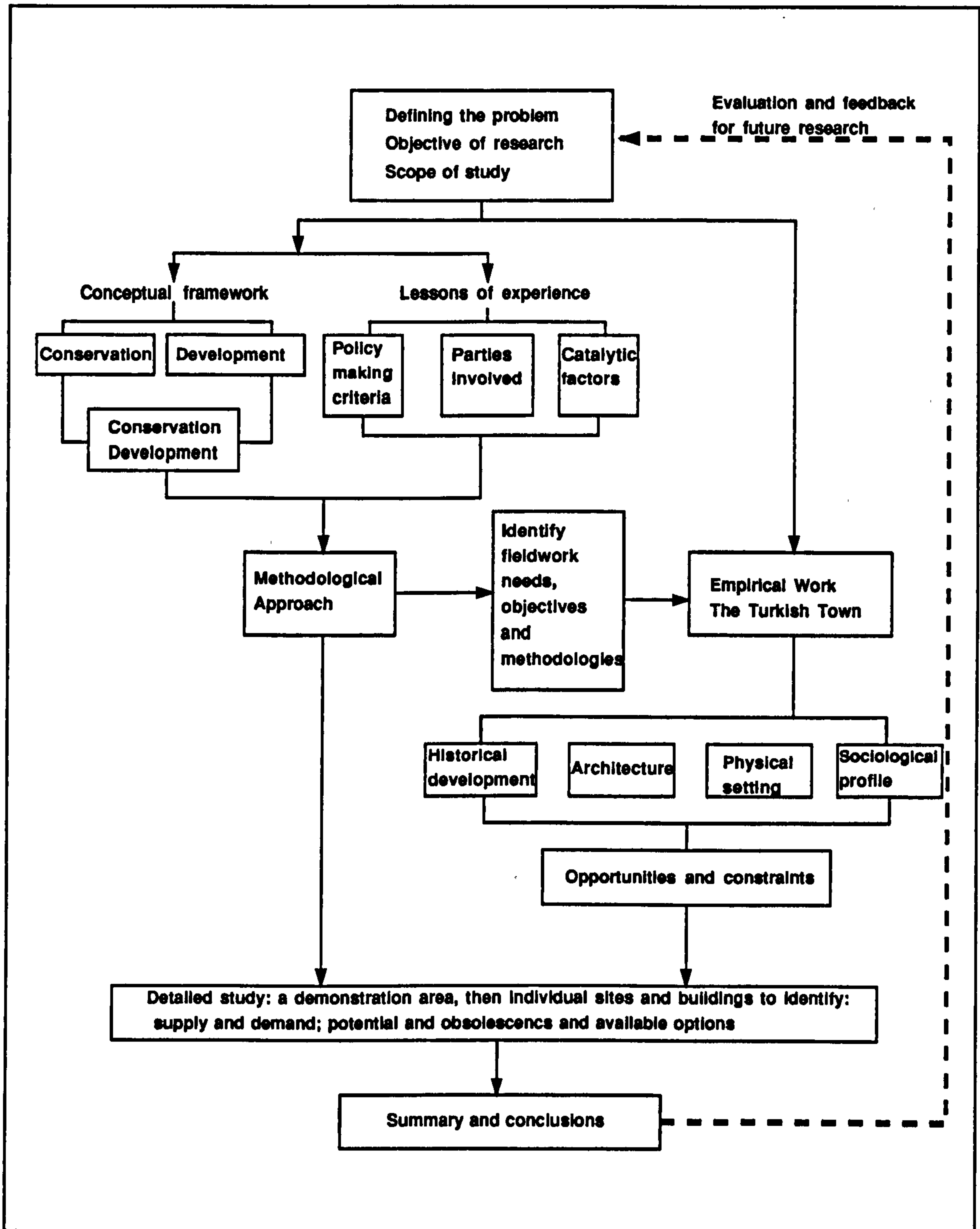


Fig.1-6, the research methodology

Based on the above mentioned analysis, conclusions were derived in order to evaluate the different policies and postulate the appropriate policy for the development and conservation of the Turkish Town.

Second, the empirical work of the study: both documentary and field surveys were conducted in order to evaluate the present condition of the area. In the absence of reliable data, field work and primary data has become the main source of information. The methods adopted are to be presented in Chapter 4; nevertheless we should point out at this stage that this work has involved:

- A documentary research through the archives of various organisations involved as well as study reports and academic work.
- An opinion survey that involved interviews and a structured questionnaire in order to examine people's attitude towards their surrounding environment and their regard to its historical, social and cultural values.
- An observational survey of the area to distinguish its various aspects; the urban fabric, the built environment, and the socio-economic environment.

Third: as a result of the scale of the area and for the sake of the practicality of the research, a demonstration area has been chosen (AlSagha)¹ and a detailed analysis for the conditions, the opportunities and constraints has been carried out. Furthermore, three case studies of this area are studied in more depth in order to illustrate the practical problems and issues involved in the process and hence, screening the possible options for intervention. *Finally*, conclusions and recommendations were formulated.

1.6. Structure of the study

In Chapter 2, the author examines the theoretical background of development and conservation; their goals, values and objectives, trends and role in the built environment. Thus, the study attempts to draw attention to the need for a comprehensive view of conservation development, where the objectives of both activities are more reconciled.

¹ Literally, *the jewellery market*; used to describe the area of traditional markets in Alexandria.

Chapter 3 sets out to provide a picture of some major issues which could possibly form, contribute and be involved in the process of urban development and conservation. It will do so drawing basically on the Egyptian experience. This chapter concludes with some 'lessons to be learnt' and a methodological framework to approach the problem and which will be applied through out the study.

Chapter 4 deals with the role of data; it will discuss the methodology for data collection as experienced during this study; the data needed for such study; the means to store, analyse and present this data.

Chapters 5 and 6 will present the study area. It will portray the Turkish Town: its development through the different historical periods, its physical setting, its built environment and a sociological profile. These will be further investigated in **Chapter 6**, in order to identify the opportunities for and constraints against a conservation development.

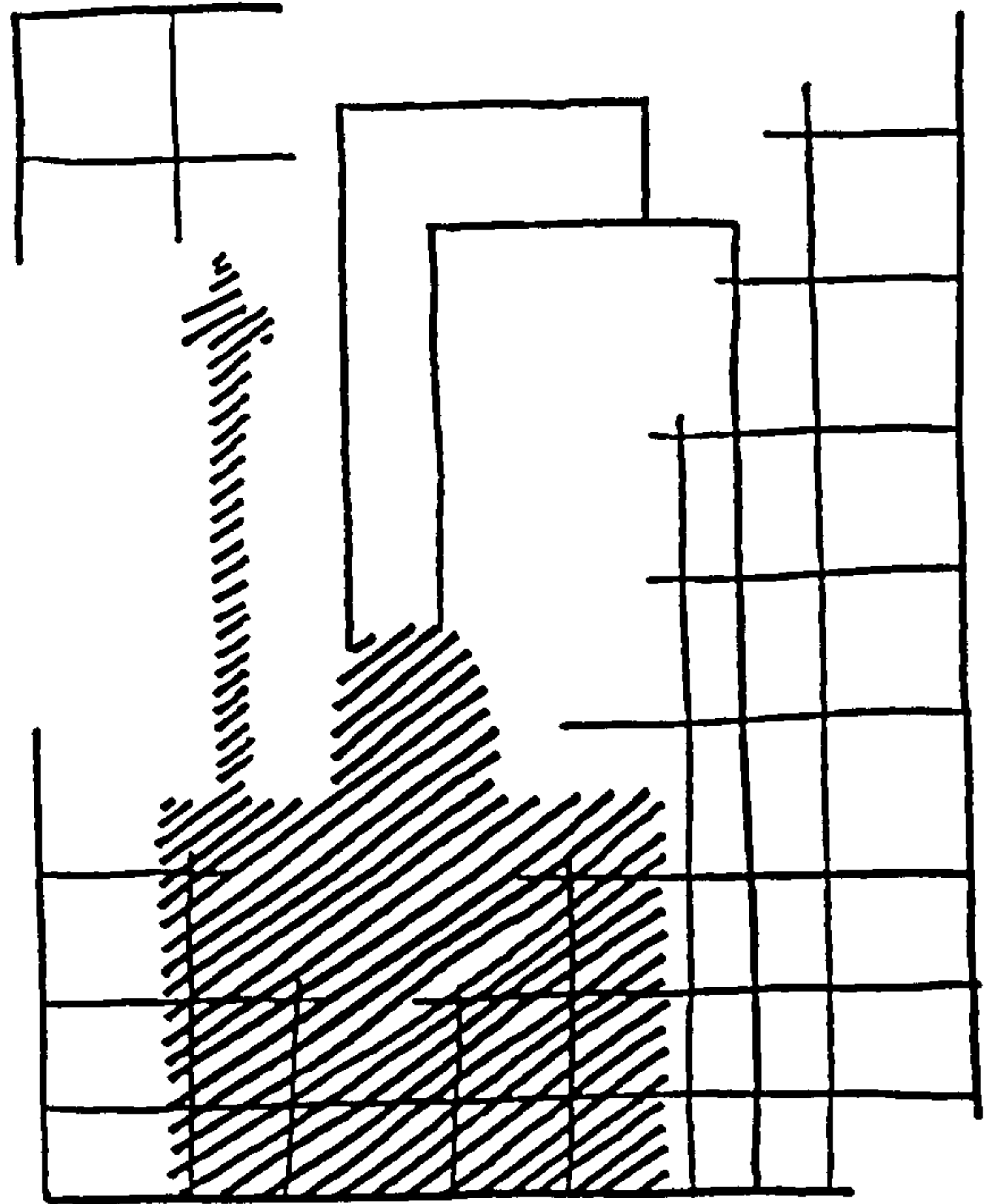
Chapters 7 and 8 examine, at a micro scale, the various issues, problems as well as possible solutions to the problem. **Chapter 7** identifies a demonstration area through which it will examine the "supply and demand" and the "limits and potentials" of the area. It will draw a pattern of potential and obsolescence to the area and will conclude by suggesting a model for looking at individual sites; and that will be used in **Chapter 8**, looking at three case studies, where each will illustrate different merits, problems and options for development.

In conclusion, **Chapter 9** summarises the problems and areas where decisions need to be made as well as recommending needed actions to be taken by both policy makers and community developers. Topics for future research work will also be suggested.

Finally, the **Appendices** provided at the end will mainly cover the following areas:

- **Legislative texts**
- **Statistical results, tables and analysis of the field survey.**
- **A historical resumé**
- **A provisional inventory of significant buildings in the Turkish Town, surveyed, or found in the field work.**

CHAPTER TWO



DEVELOPMENT AND CONSERVATION

DEVELOPMENT AND CONSERVATION

2.1. Introduction

"Development and Conservation appear to be pursuing quite separate paths in the Third world. In contrast to development interests, conservation has not established as powerful a set of institutions, any significant power base, or any real political power or track record of achievement."
(Welbank,1983:10)

This conflict has always been manipulated in terms of *a clash* between the aims of modernisation and preservation. Conservation has been regarded as an obstacle to modernisation, and development as a means for destroying cultural, social and historical values. However, as neither activity is an aim in its own right, together they are the means by which to achieve certain objectives; thus the reconciliation of both activities is therefore dependent on a skilful sorting out of goals and values (Antoniou,1981:9). This Chapter will look at both activities in order to identify their goals, values and objectives. The salient point here is, therefore, how to employ the inherited resources to meet our contemporary needs? Can we maintain our built environment at a reasonable cost? How is it possible to maintain higher standards of living and business efficiency without the deterioration of the appearance and performance of our built environment? We also need to address these questions and identify the main approaches and aspects involved. In fact, we need to answer the question: *How to develop our heritage?*

In the first part of this Chapter, the concept of conservation is investigated - its goals, values and objectives, trends and role in the built environment; the second part deals with development - the need for development, its appropriateness and its part in the city's life and, finally, presenting what the author suggests to call 'conservation development' approach, where we attempt to reconcile the apparently diverse goals and values of both activities.

2.2. Conservation; conceptual thoughts:

Conservation is a broad term, which involves a variety of aspects, political and social as well as economic, and which is open to a number of interpretations with a variety of philosophical stances in relation to both natural and built environments (Kain,1981:1). This attitude, however, is argued to be an evolutionary concept; Erder(1986:15) argues that the concept of conservation, in other words 'protection', has been practised throughout history. The human desire to leave evidences of his passage in history for future generations can be observed in the 'monuments' of early historical periods on one scale or another, from the gigantic structure of a pyramid to the modest inscription on a piece of grave stone.

"..monuments have furthermore acquired meaning ever since man has valued his past and his future as much as his present.....Whatever the reasons behind their creation, monuments have established a link, a continuity between generations through time" (Erder,1986:21)

This attitude has been the response of various motives, political, religious,..etc. But it is true that:

"..,protective measures were always implemented within the framework of the artistic and aesthetic trends of their time.....and, whatever the activating force behind it, tends to become a social issue" (Erder,1986:15)

Since these early days, however, conservation has taken different shapes. In the Islamic world conservation was practised through the Awqaf system¹, whereby certain properties were endowed in order to ensure the survival, maintenance and upkeep of designated buildings (e.g.Mosques, Maddrassas,.. etc.). Current trends of cultural heritage conservation started, in Europe with the Renaissance of the sixteenth century² (Ashworth and Tunbridge,1990:9), as it was the:

1 The Awqaf system is further explained below in Ch3.

2 See for example, Jokilehto, J., 1986

"preoccupation of a small, but influential, group who were motivated by a sufficiently crusading vision to allow this aspect of planning to be labelled a 'movement', whose driving force was the enthusiasm of amateurs rather than the technical expertise of professionals." (Ashworth and Turnbridge,1990:9)

This *movement*, however, in the eighteenth and nineteenth centuries had been primarily a chronicle of artistic, literary, historical and scientific societies in centres like London, Paris and Berlin. Inspiring an interest in antiquity, this led to the formation of a new attitude towards the past (Ashworth and Turnbridge,1990:9). In 1877, William Morris called

"..to resist all tampering with either the fabric or the ornament of the building as it stands.. to treat our ancient buildings as monuments of a bygone age, created by bygone manners, that modern art cannot meddle without destroying ..Thus, and thus only can we protect our ancient buildings and hand them down instructive, and venerable to those that come after us." (Kain,1981:5)

The scope of this *movement* started to broaden as a reaction to the rapid industrialisation and urbanisation process, thus including natural environments and landscapes, e.g. the establishment of the National Parks movement in the United States, Australia and Canada, and the National Trust in Britain. Furthermore, the definition of *monument* started to widen to encompass the broader morphological context in which the building was set. More concern was given to the quality of the urban environment (Maass,1968:271-279), and this *movement* was more used for programmes related to cities.

Having considered urban areas as subjects for conservation, or, in other words, a whole scene of life with people having their normal daily life, it is therefore ironic to realise that conservation should not be used for inhibiting the progress of human history and its development, nor should it fail *"to respect the pattern of spaces and buildings as an agglomerate and as a working expression of a special style"* (Warren,1976:21)

This development process can be illustrated by the fact that *"many of the beauties which we cherish so dearly today only exists because of the demolition of what once stood in their places"* Kain (1981:2).

Conservation must therefore be used with care as if *" misused it can impede progress and inhibit that change for which it should be the proper foundation"*. (Dix,1987:113).

2.2.1. Why Conservation?

At this stage it is important to answer this question; why should we conserve at all? It is often quicker, politically more dramatic, and often cheaper to bulldoze, or build on open fields; answers to this question have taken various patterns, shapes and directions; Shankland (1975:24) notes that conservation claims a high place in the priorities of nations of various political outlooks, the Soviet Union, Spain, Poland and in newer countries such as Australia. This attitude, he argues, draws on very deep psychic sources in national consciousness:

"This almost magical power of the past does not lie only in the intrinsic beauty of what is being preserved, survivals of an age when towns were made by artisans, but above all in the identity they confer..... Psychologists lay great stress on the importance of identity to individuals and groups as something they must maintain in the face of social and economic developments that offer physical comfort, security and cheaper products at the price of de-personalisation". (Shankland,1975:25)

Another aspect of conservation policies is that it provides a stabilising factor in a fast changing world as well as a tool for assessing its progress; reference points by which progress may be assessed (Dix,1987:123). A notion that has been more commonly regarded: an Egyptian proverb expresses this: *"Min faat qadeemoh tah"* : (whoever missed his past will be lost).

Our relationship with the past is therefore an important dimension in defining the values of conservation. In the face of the present conditions of decline and deteriorations in most cities especially those in the developing world, the past is always seen as a better place to be in. Hewison (1987:43-44) argues therefore, as he reviews the '*climate of decline*' in post-war Britain, that nostalgia is not merely a longing for the past, but a response to conditions in the present, where the past is considered a better alternative.

Jokilehto (1989:51) points out that conservation is closely related to information and communication, as a '*monument*' will transmit a message from the past to the future. In other words, this relationship has to be defined in terms of continuity and development; to learn from the past and add to it.

"It is no solution to retreat into a fake history: we need to recover the true continuity between past and present by coming to terms with previous failures. If the disruptions they have caused are so great that it seems impossible to make sense of them then we must make new meanings, not retrieve old ones". (Hewison,1987:143)

What are the border lines of this movement and where to stop? These questions or fears have to be properly addressed; calling it *Heritage industry* Hewison (1987:83-105) criticises conservation movements in Britain, as he expresses his fears of a possible distortion of the past as well as a stifling of the culture of the present as a result of the growth of this heritage culture:

"Hypnotised by images of the past, we risk losing all capacity for creative change." (Hewison,1987:10)

The economic dimension is no doubt most significant, not only as a justification for conservation but as a motive. Three economic reasons for conserving the Cultural Built Heritage (CBH) can be identified (Lichfield,1988:68): first is that the CBH can be seen as a resource for continued use by the current generation, thus avoiding the need for new investment resources to replace it; second is that an irreplaceable value has been protected for the current generation; a further

reason is the burden felt by any contemporary society to pass on its cultural built heritage to succeeding generations.

2.2.2. What to Conserve?

At this point it is necessary to establish *what* to conserve? Is it the artifact or the idea that we are conserving? There are undoubtedly great 'monuments' and individual structures such as the Pyramids and the Acropolis that are in need of protection. But is this all? Where does it stop?

"The question then is not whether or not we should preserve the past, but what kind of past we have chosen to preserve, and what that has done to our present." (Hewison,1987:47)

During the past twenty years attitudes have emerged in the forms of *area, urban, comprehensive* and *integral conservation*. In other words, the concept of *heritage* has developed within a wider view:

"We have in recent years concentrated too much on the artifact and too little on the idea and ideal of the city as a respiratory of man's knowledge, changing as that knowledge changes and more experience is acquired". (Dix,1987:123)

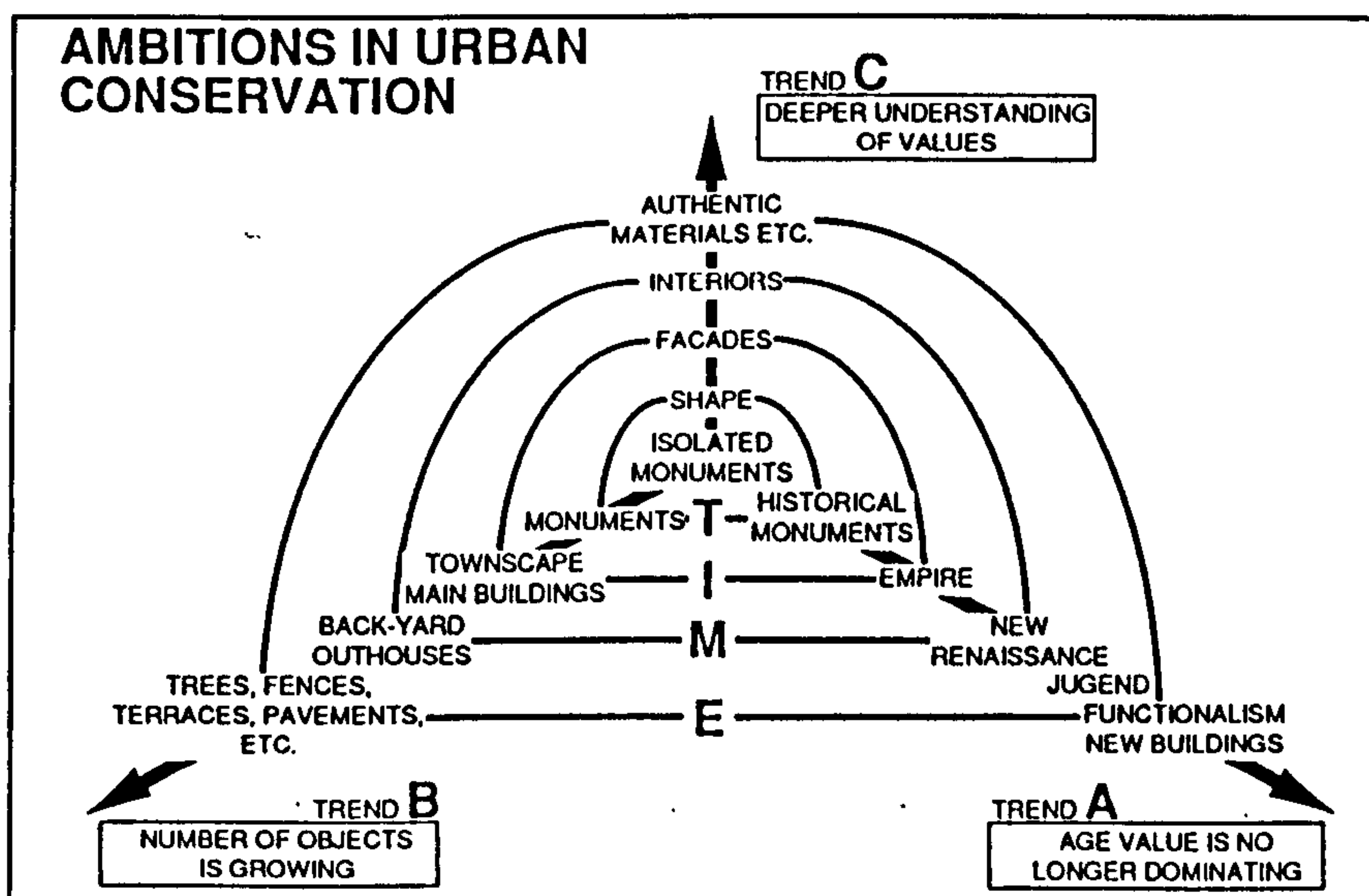


Fig. 2-1, Evaluation of the environment has changed. Instead of isolated monuments we nowadays want to preserve larger milieus. (source: Mattinen,1989:64)

Mattinen (1989:64-65) illustrates (fig.2-1) the change in the objects of preservation from isolated monuments to larger milieus, and that age is no more the factor that decides, rather *"if they are appropriate to their environment..are worthy of preservation"* (Mattinen,1989:64).

2.3. Development - the need and the approach:

Apart from being an important branch of economic theories, development is a natural human practice. Individuals as well as communities throughout human history have been striving to *develop*. All underdeveloped countries are planning for development, but what has *development* meant for them? How much did they achieve? All definitions of development contain the central notion of progress or change from something less desirable to a more desirable kind of society. In order to contrive such a model, three crucial questions have to be considered. Development of what? Who has benefited from the development? And what have been the costs of that development? There are many answers to these questions and thus there are many definitions for development. However, conventional views for development have been largely measured by economic criteria such as Gross National Production (GNP) and Gross Domestic Production (GDP)¹; these views have been gradually recognised to be far from sufficient as they are almost entirely about *indiscriminate* economic growth; Trainer therefore states that:

"It doesn't take much thought to realise that development must be conceived in terms of improving a society as a whole, and enhancing the welfare or quality of life of all. Consequently, development of the political system, of technology, of social arrangements, of ecosystems, and of the whole geography and culture of the society should be on the agenda."
(Trainer,1989:59)

Conventional *development* theories, mainly based on mere market forces, are often accompanied by social, cultural, political and environmental problems (Coneyrs & Hill,1984:25); it therefore creates what Trainer (1989:62) calls

¹ See for example Thirlwall 1988

inappropriate development, where there is no concern about the actual needs of the society as the main objective is simply to increase the output of anything that those with capital, and therefore able to enter the market, want to produce (e.g. bubble gum, Cola,.etc.).

Appropriate development on the other hand has to be set within a comprehensive and fundamental change in some of the basic values, especially those to do with material living standards (Trainer,1989:195). This has to be applied for both developed and underdeveloped countries:

"We cannot tell the Third world to live simply while we do not."

(Trainer,1989:196)

So what is appropriate development? What are the aims of this development? And what are the means to achieve it? These questions have been the subject of a large variety of literature attempting to define *development, its aims, approaches,..etc.*¹; a matter of continuous debate over the years which is beyond the scope of this thesis. But we would, however, maintain that "*.. any definition of development is a philosophical or ideological matter and will change from one society to another*" (Zargar,1989:242). Further, development is not a universal model which can or should be applied anywhere; Western models for development should not be the same for the Middle East nor the same of the Far East, .. etc.

" There is no state of development to which all countries can or should aspire, no one way of achieving any such state and no one way of measuring the extent to which it has been achieved" (Coneyrs and Hills,1984:p.37)

However, we can also agree in principle that any development model be related to the socio-economic and cultural needs; in other words, it is about utilising the readily available resources to meet the local needs. It has, therefore, to observe the following (Trainer,1989:198-201):

¹ See for example: Coneyrs and Hills, 1984; Thomas and Pottar,1991; Seers, 1979 and Zargar, 1989)

- 1- Develop only things likely to raise the overall quality of life, and not mere economic growth.
- 2- Abandon the alien (western) affluence as a goal of development.
- 3- Enable people to identify their priorities and plan their own strategies, by making resources available to them.
- 4- Maximise local self-sufficiency by encouraging small scale regional economics; using locally available inputs and providing most of the goods and services needed in the area. On the other hand, minimise dependence on foreign sources.
- 5- Use appropriate technologies, i.e. technologies processing locally available resources.
- 6- Encourage co-operative and participatory arrangements.
- 7- *"Seize the opportunities that appropriate development gives to preserve and restore cultural uniqueness"*.

2.3.1. Development in the built environment

In this instance we are focusing basically on development in an urban context; the impact of development on society and the built environment and the adaptation of urban resources to urban needs. The conflict between man and his surrounding environment has become typical of today's life. And it is becoming more difficult to find harmony between man, nature and the built environment. And thus, more vital to establish this relationship. This conflict can be physically witnessed in a common morphology which can be detected in the urban fabric of most cities, especially in the developing world; a dichotomy between two or more generations of urban fabric, on one hand a dense *traditional* core with tiny patterns of streets and pathways, small buildings, artisan workshops,...and *apparent* poverty, and on the other hand the *modern* fabric with wide roads, geometric layouts, high buildings, cars,...and *apparent* wealth.

And yet, as these settlements proceed in life they become subject to various pressures: obsolescence, adaptation, replacement,..etc. (Lichfield,1988:9-27). With ever changing influences, the understanding of this cycle has, however, been changing throughout the human history. Without losing their identity urban areas have been subject to a continuous process of change and adaptation as a part of a continuing process of city living (Antoniou,1991:12). With the industrial and later the technological revolutions of the twentieth century, this life cycle has, however, been severely disrupted by the accelerating pace of modern life: the increasing rate of urbanisation and the different demands for space (office, shopping, ..etc.), for mobility and transport (wider roads, parking areas,..etc.), massive population pressures (rural exodus, uncontrolled urbanization) and a remarkable change in social structures and aims. As a response, the perception of urbanisation and urban quality is now more often questioned.

Although they are common problems experienced by most cities in both developed and underdeveloped countries, the magnitude of the problem is being mostly witnessed in developing countries, where the massive scale of the challenge is matched by the scarcity of resources. Serageldin (1980:69-70) highlights four main aspects of the problem:

First, Urban growth: Since the beginning of this century, most old cities have been surrounded by modern urban developments. In the industrialised world this has been to satisfy the random demands imposed by modern life (e.g. the motor car, services' networks,..etc.). In developing countries they were first established by colonialists in order to create urban settlements which resembled those of the 'mother country'. This has led to an increase in land values of the old cities, thus creating a growing potential for commercial and economic pressures to replace the old residential structures with new commercial high rise ones. Rural-urban migration, high-birth rates, rapid industrialisation and centralised

administrations have also contributed largely to the magnitude of the problem (Al Hammad,1988:365).

Second, The social dimension: These areas are characterised by severe overcrowding problems. As for their demographic pattern, they retain a spread out population pyramid; thus, studying the human dimension becomes a necessity. In many of these cities the social structure has been seriously altered; with their expansion and the formation of *modern* suburbs, wealthier families have fled the old cities and settled in the new neighbourhoods, and thus their homes were taken by poor tenants, mainly rural immigrants. This, on one hand, has increased the overcrowding problems as large residences have been subdivided to accommodate many families, and, on the other hand, accelerated the degradation of these structures. In any remedy policy, it is however equally important to avoid a major reverse action, that is, major displacement of the poor to accommodate wealthy trendsetters. Such major displacement, in either direction, has proved to cause undesirable social disruptions.

Third, The economic dimension: Inevitably, with the social movements we have previously mentioned, the traditional economic base has been either diminished like much of the artisan craftsmanship or modernized by the introduction of modern machinery - a major challenge in any attempt of economic regeneration.

Fourth, The institutional setting: In developing countries this comprises a major problem, that is, the fragmentation of ownerships and responsibilities among various parties, e.g. the municipality, local government, ministries, antiquities, *Awqaf* and utility agencies (electricity, water supply, sewerage). As well as the confusion in responsibilities, many legislative frameworks have been formed as explained below, which quite often contradict each other.

2.3.2. Planning for development

In other words, planning to achieve a state of development. It is no doubt a complex process which involves changes in many socio-economic aspects and is the result of a variety of influences, typically interwoven with the revolution of the inner city (Ashworth and Tunbridge,1990:243): changes in the demographic structure, affordability of housing, cost of energy, etc.

For over a hundred years the *inner cities debate* has been an important and controversial public issue; various approaches have been attempted to deal with these problems according to their political, social, economic, and cultural backgrounds. This debate has prompted an increasing awareness of the complexity of issues involved and of the various cultural, socio-economic and political consequences of spatial planning.

Levels for intervention: It is often the question: the *environment replaced* or the *environment enhanced*? The answer has developed large terminological arguments: clearance, up-grading, regeneration, revitalisation, renewal,..etc. At one end of the scale is *clearance*; an action taken by the state to *replace the environment*: a concept which had been introduced in the industrialised world by the end of the last century to replace the massive working-class housing built at the beginning of the Industrial Revolution (Gibson & Langstaff,1982:41). Large-scale clearance schemes have then dominated the *rebuilding* of war-damaged cities. And with industrialised building techniques, it was not until the late 60s' that awareness of the various shortcomings of such developments were realised. Developing countries on the other hand, with western models for development, and under the illusion of monumental national *achievements*, are still hanging on to the idea of such large scale projects, the shortcomings of which can be classified in five categories (Bianca,1984:21-22):

- The environmental and social costs resulting from the absolute primacy given to traffic plans in most modern town planning, thus dissecting the fabric into isolated islands of sectorial functions.
- The incompatibility between the typology of these developments and that of the traditional fabric.
"Modern developments are often conceived in isolated blocks and use the historic fabric as a the quarry, so to speak, out of which open spaces are cut." (Bianca,1984:21)
- The disruption of the continuity of the fabric as well as the climatic and social problems resulting from the conflict in scale between the sheer size which often characterize these developments and the surroundings.
- The aftermath of the sudden pace of change;
"..,no time is allowed for an evolutionary process. The old city is given no chance to adapt to the intervention or to recover from the surgery; mistakes cannot be corrected; lessons cannot be learned; and a genuine local tradition has no time to develop." (Bianca,1984:22)
- The gap between concepts and the actual practice, and which results in an alien built form as for being a mere expression of an individual architect's taste regardless of the social and cultural principles which *might* have existed in the *master plan*.

At the other end are the trends for *conservation that are often sterile because they do not consider the requirements of a living city* (Bianca,1984:21). Standing on the brink of the *post-modern* age, it is inconceivable to turn our backs completely on the industrial age and resume the *traditional* pattern of life; the changes in the social, economic and technical patterns are too significant to be ignored. It is, therefore, why we have to consider that:

"Two myths can be disposed of. The first is that every older housing area contains a cohesive community implacably opposed to clearance and rehousing; the second is that every older housing area contains residents who will universally welcome clearance and rehousing into more modern council housing." (Gibson & Langstaff,1982:45)

In reality the process is more complex. The resident's attitude towards moving is the result of comparing the net costs and benefits incurred by remaining in one place with the net gains and losses he expects to incur by accepting the move.

As we have previously indicated, between these two extremes of clearance and sterile conservation there has been a wide range of intervention policies: renewal, upgrading,..etc. We are not attempting to participate in this terminological debate, rather we would attempt to conclude this debate and set the criteria and issues that have to be considered in any such intervention policy:

- What will raise the over-all quality of life, and not only its economic growth?
- What is the local model for development? and what are the social, cultural, economic and political aspects for the desired development?
- How to employ development aspects in preserving the cultural heritage and *vice versa*?
- What are the resources available? and what are the appropriate technologies for this development?
- How can people get involved in the process?

Levels of interest: Thus it becomes essential to define the major aspects involved in order to balance between what is desirable and what is possible, and consequently to make the decision. This varies among the different parties involved; in other words, what are the *levels of interest*? Co-ordination between these different levels of decision-making is a vital factor in development planning. Grading from the National level, three levels can be identified for decision making in any form of urban programme.

The National level; at this level decision making is mainly concerned with:

- National economic policies - are they free market policies? Or are they social policies? Does the national policy encourage large investments, and consequently large scale developments?
- Housing - does it contribute to the problem? Positively or negatively?
- Balance of payments - how far is it contributing to the national economy? Does it, for example, have a tourism potential?
- Legislation - how far does it coincide with national legislations? are there any required amendments for the implementation of this policy? And how desirable are these amendments at both official and public levels?
- Political acceptance - how acceptable is it on the political stage?

The City level: more detailed concerns take place at this level:

- The balance with the rest of the city; how to secure the balance between the various areas of the city in terms of population, jobs, housing and commercial activities in order to avoid centralisation and overcrowding problems. Also the balance of funds' allocations.
- The main arterial traffic network; how does the local network interfere with that of the main city?
- The main infrastructure and utilities networks; the capability of the main network to accept any loads as a result of this programme, as well as the technical and financial feasibilities for inco-operating the local network into that of the city.

The Local level: more detailed implementation programmes are to be considered at this level:

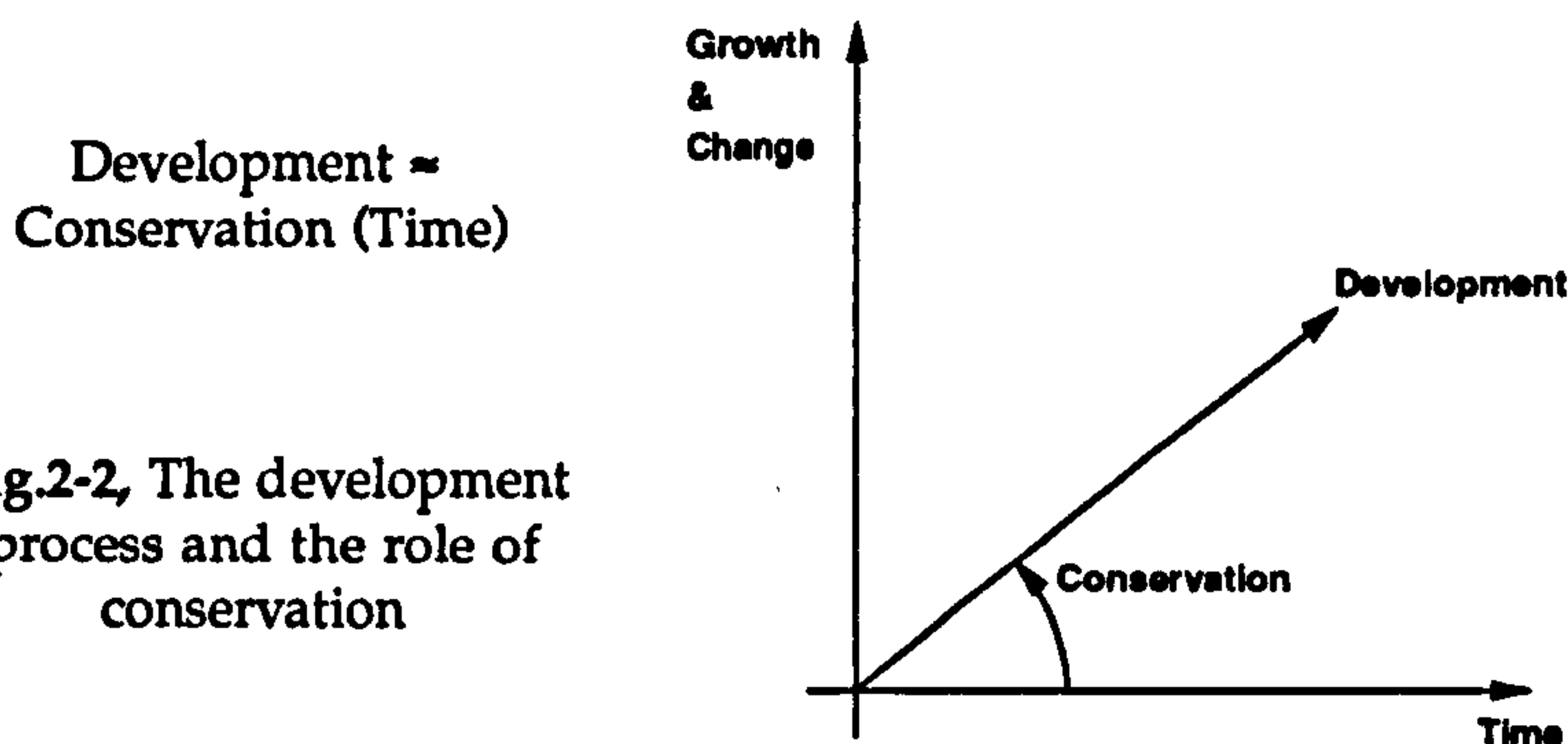
- Local networks of roads and infrastructure.
- Local needs for housing, services, amenities, etc.
- Available resources and potentials.
- The role of community participation.

2.4. A 'Conservation Development'?

Two key problems face planners and decision makers (Serageldin,1980:67); first, the conflict between the need for change and the political and cultural reluctance to clearance programmes. Second, the general fear that tackling these problems will involve enormous expenses which cannot be met. Yet, having defined both activities of conservation and development, the question arises: how to match both activities and achieve a conservation development? In other words a development by means of conservation. A relationship that has to avoid the notion of sterile conservation mentioned above; rather it has to utilise the conservation of the 'present' past in order to develop a desired future: two complementary agents in the built environment, at the point when conservation can express itself as a special case for renewal (Lichfield,1988:69); an attempt to match needs with available resources and to make the most of them. An economic justification is therefore most understandable as Jokilehto points out;

"This is especially true today as it comes increasingly clear that the world's resources are not unlimited, and that a certain degree of control and guidance is required in order to provide a livable place." (Jokilehto,1989:52)

We may attempt to illustrate this relation as follows (fig.2-2): *Development* comprises growth and/or change, thus it is a function of time; *Conservation*, on the other hand is the *slope* which regulates this function. And at this point, an important distinction has to be made between artifact conservation and urban (living heritage) conservation. While in the former change and growth are undesirable, in the latter they are facts of life which are unlikely to stop; rather, they are an essential factor in their livelihood and therefore their survival.



2.4.1. The reality of 'conservation development'

This process of 'conservation development' is largely dependent on the surrounding context: the legislative and institutional framework, the sources of funds, the cultural and social attitudes and the political will. These factors which are largely related to the individual case which will be illustrated in the next chapter.

Nevertheless, the first and most crucial issue in this process is to set the criteria for intervention, i.e. to know when to say "this is value; here we need conservation / development". We maintain that different *types* of people have different preferences among *types of values*. On the other hand, their perception of values is highly referred to the "*knowledge they prefer*" (Mattinen,1989:66) and their relationship with natural and man-made environment. The *values* of this heritage can be seen under different headings - *cultural*: aesthetic, artistic, architectural, historic; *political and emotional values*: patriotic, religious, or prestige; *use values*: social, functional and economic (Jokilehto,1989:47). These categories of attitudes have been illustrated in Kervanto and Pietarinen's studies in the human concepts of environmental relationships (Mattinen,1989:66) ; they outlined them within three models of concepts (fig.2-3).

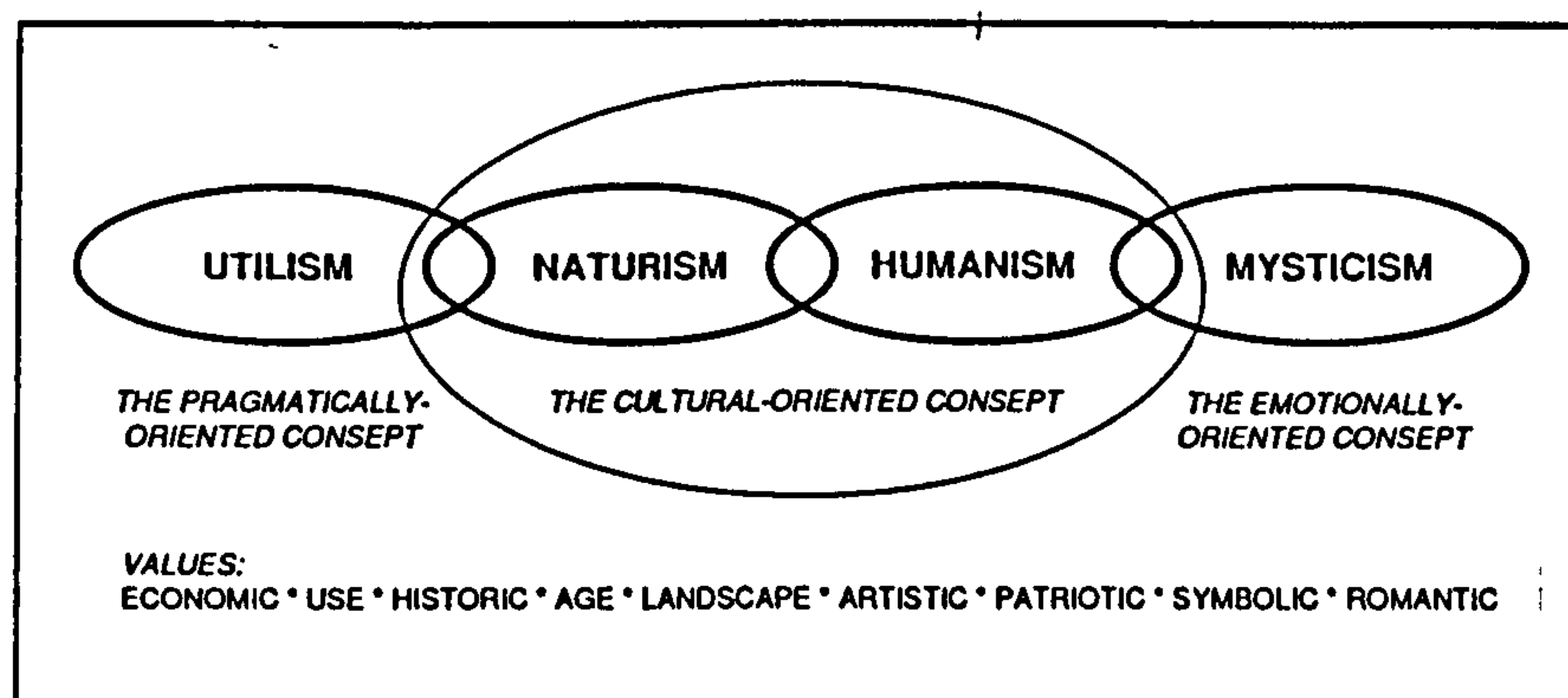


Fig. 2-3, We experience our environment through our knowledge. People are oriented in different ways and prefer different kinds of values in their environment.'

The prime target for such development is often known as Heritage. Hence it becomes important to identify 'Heritage'.

2.4.2. Nature of heritage

As well as the whole urban system, its heritage can be classified under two main titles: the physical stock and the activities within that stock (Lichfield,1988:63).

This classification can be further categorised as follows:

First, the physical stock constitutes both natural products such as minerals, agricultural and timber,...etc, and man-made resources such as buildings or mobile works such as cars. The built environment, which is our area of interest, can be classified as follows (Shankland,1975:34-42):

- Historic groups, sites, palaces and so on. (e.g. Acropolis, AlKarnak,..)
- 'Historic' quarters in large towns and cities (e.g. Fatimid Cairo, ElHafsia,..)
- Small 'historic' towns and villages (e.g. Rosetta,..)
- Towns and cities which are themselves 'historic' (e.g.Fez, Isfahan,..)

Second, activities exercised by humans on this stock, which involve:

- Consumption: for available goods and services;
- Production: the way to produce goods and services for consumption. In addition to the goods and services needed for daily life, this also involves various sorts of products, e.g. arts, knowledge, folklore and tradition.
- Religion: relation with God and the institutes serving this relation.

Thus, and as part of its life cycle, heritage is in continuous growth, not only by the accumulation of products in the continuous process of history, but by the exponential rise in population which enables it to be conveyed to future generations. On the other hand there is a constant deteriorating factor which varies according to the measure taken, if any, to preserve it.

Being mostly a property and a commodity, proprietary rights have to be well defined in order to maintain its survival and prosperity (Lichfield,1988;64). The

nature of these rights varies according to the different categories of heritage as well as the nature of ownership. He therefore claims that if certain values are attached to a particular part of the heritage it becomes necessary to have a 'heritage tenure', i.e. a form of tenure which surmounts the proprietor protected in law. Many question marks arises here; what are these certain values? who attaches these values to that particular part of the heritage? what kind of tenureship is the heritage tenure? Very often *Cultural* is the common word to describe these values and it is often that part of heritage which is popularly called *heritage*. In his definition, Lichfield (1988:64) notes that the common tendency is to define the cultural built heritage as such only if it has had a considerable lifetime. He then argues that the *heritage reservoir* tends to be bigger in size where the conservation movement is strong. This argument can, however, be observed by comparing the amount of *registered heritage* in both developed and developing nations. Although the latter might have a rich history (e.g.Egypt, India,...etc), the size of its *registered heritage* is well behind a developed nation which doesn't have that rich history. However, we maintain that heritage has to be broadly defined as **the part of the built environment which possesses a special *value* to the user, and is therefore a major resource in the particular urban environment.**

2.4.3. Market price of heritage

But the main question is still there; how to reconcile these concepts? How to measure the value or the *utility* of heritage? The principle of *evaluation* is a common practice which is widely accepted in various aspects of life, education, employment,..etc.; a set of classes and standards are established and each *object* is then measured and classified within these classes. Various techniques have been developed for these assessment techniques. The base of these systems has been mainly the principle of *costs and benefits*. This technique, when applied in financial terms, is a straight forward process; applying it to heritage raises a major question: what are the units of measurements? what is the market price for culture?

Economics, as described by Lichfield (1988:117), are an integrated part in all other activities and however ideal a society is, activities are often translated in financial terms:

"The implementation of any decision to act in any of the lives typically implies the use of economic resources, natural or man-made, for without them the decision will not result in action"

In other words, man lives what he calls an economic life within his everyday activities. This applies to individuals and institutes as well as to countries as a whole. In this cycle there is a continuous trade-off between different ways for spending resources for a variety of goods and services:

"In this criterion of choice is seeking the best 'value for money': that bundle of purchases which will achieve the greatest value to the consumer (benefits) from whatever expenditure he makes (costs)." (Lichfield,1988:118)

In this context McNulty (1989:21-25) derives lessons from North America where he attempts to identify the *value of heritage* on the market in terms of tourism and publicity potentials:

"to measure heritage you need first to empower it economically...heritage resources are the cheapest public relations asset in marketing strategy...because that creates the favourable press notices, the opportunities that are really useful for furthering jobs and opportunity in your cities.....So never think that heritage is not the main opportunity."

Although we might agree that heritage can be an opportunity, we must note that tourism is not the only option as it can be, as explained later, the undesirable one. The opportunity has therefore to be regarded more comprehensively; as we have agreed above value is not an absolute term, neither is *historical*, *artistic*,...etc. And that it is in the *"eye of the beholder"* (Lichfield,1988:169), the owner, occupier,..etc.

Girard (1986:19-22) suggests that policies which fail to take into account extra-economic factors are unlikely to be implemented; as for the high social and

cultural costs involved he goes on to clarify that individual and group welfare depends on manifold components, some of which are qualitative. Thus he concludes the necessity of an optimal balance between economic, social and cultural dimensions.

How? remains the question; it remains the aim of conservation to justify its high costs in terms of resulting socio-economic benefits. Hence Girard (1986) points out the importance of correct methods for the assessment of benefits and for the quantitative analyses of the interrelation between the economic and cultural sectors. Moreover he refers to these indirect values as the "*Complex Social Values (V_s)*", that is,

"the set of all social, economic and cultural net benefits that all types of users (direct, indirect, potential and future) can derive, in time, from a historical, architectural and environmental resource"

In economic terms he expresses his view in the following equation;

$V_s = f(\text{quantity and quality of net benefits to direct, indirect, potential and future users})$

And for any project to succeed it has to guarantee an increase in the overall social value:

Conservation: $\Delta V_s = (\Delta V_1 \dots \Delta V_n)$

This model and similar ones remains theoretical as they lack the means to quantify the *value*. Often, therefore, the need has been for project appraisal methods which ensure more balance between equity and efficiency. And so it was that *Social costs and benefits analysis (SCBA)* methods were developed, as they attempt to involve not only the efficiency of use of resources or the maximisation of the benefits of the promoter or developer but equally involve the equity of income distribution. In other words, it involves the developer, the user, the authorities...etc.

Cost-benefit analysis (CBA) is a tool for making decisions about the use of society's scarce resources (Shofield,1987:1-7); in other words it is a method for answering questions such as: Is an intervention (or a project) worthwhile? What is the optimal scale for operation? What is the optimal timing of its initiation? What is the relative merit of different *projects*?

In general terms, Schofield (1987:1-7) defines benefits as contributions towards, and costs as detracting from. Thus, in pure financial terms, it is an analysis for revenues and expenditures according to market values. But, as far as a society is concerned, it goes beyond mere financial appraisal to include a wider scope; two broad objectives are necessary for the validity of such analysis: efficiency (efficient use of the resources), and equity (equity in the distribution of benefits among the society). The latter has developed the concept of *Social* cost-benefit analysis (SCBA).

Another important aspect of CBA is the *discount rate*; the value of a pound today will not be the same next year, an important aspect where projects tend to have a long life span. Various techniques have been developed for economic evaluations in order to incorporate this aspect, namely: "net present value (NPV)", "Internal rate of return (IRR)" and "benefit-cost ratio"¹.

In determining the cost of any 'benefit', it is not only its direct cost that has to be considered but there is the *opportunity cost* as well, i.e. the alternative buys for a given cost. These decisions are by no means absolute; they are entirely personal. For example, a book in astrology is of great benefit to some while others will prefer a sandwich as this book is of no benefit to them. Despite the fact that the obelisks (fig.2-4) are dated to the same period, being placed in different settings gives each a different value; i.e. the one in Luxor (its original setting) probably has a higher value than the one in Cairo and, furthermore,

¹ See for example Serageldin (1980:97-106)

than the one in Paris; in this case this variety in values stems from the originality of the setting and its belonging to the surrounding. In Paris the Eifel tower is much more valuable than the Egyptian obelisk as it is French; built originally on this site, it has a memorial value within each French citizen, factors which does not necessarily apply to the Egyptian obelisk and *vice versa*.

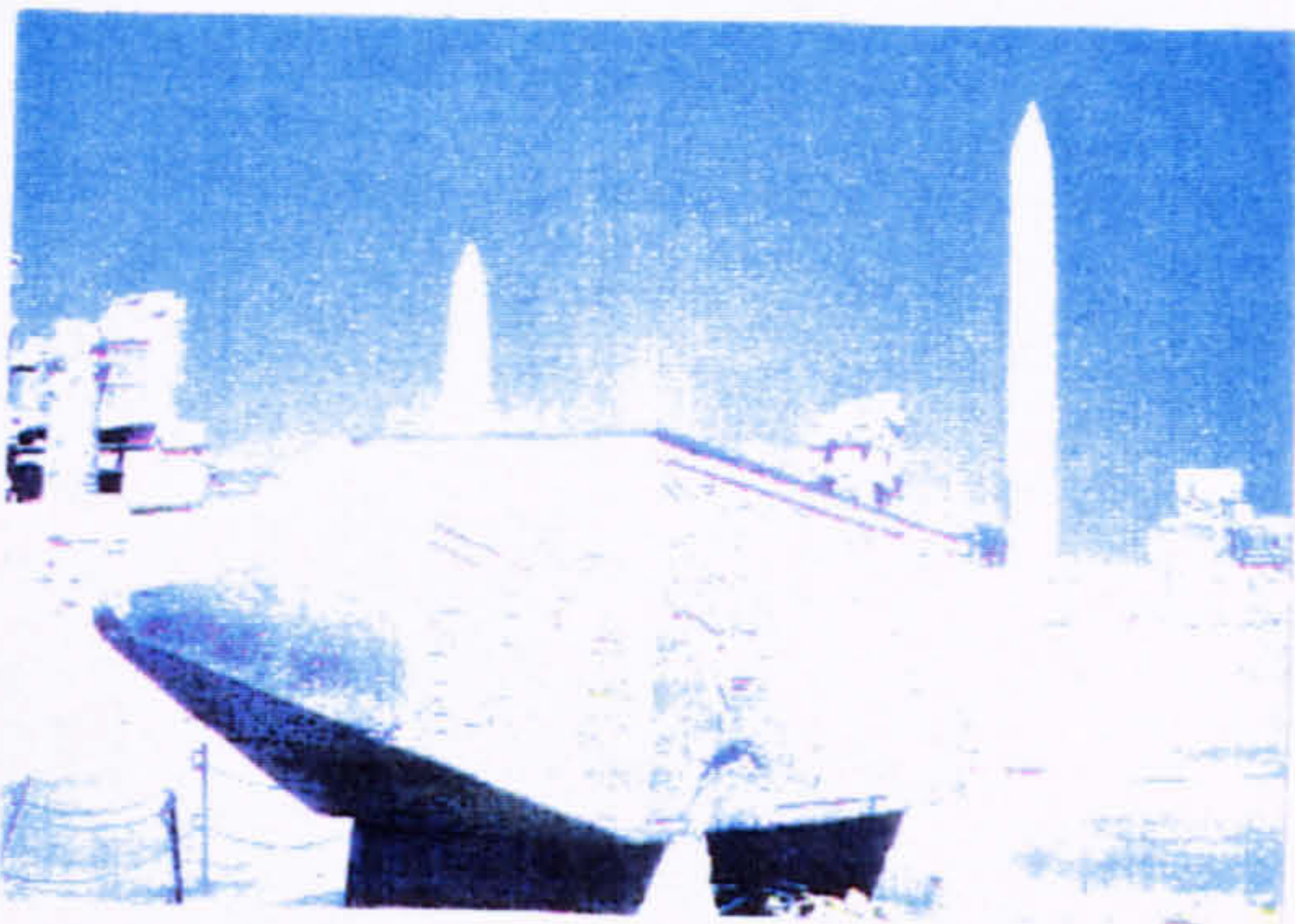


Fig.2-4, A variety in values according to the setting; the obelisk in Luxor (right) has a different value from the one in Paris (left).

Thus, the amount of value is a direct function of the amount of satisfaction acquired by the *user*. In economics this potential is called in *utility*; "what is the value of a motor car stuck in some inaccessible desert or the building site in a jungle?" (Lichfield,1988:168)

Obsolescence therefore becomes a determinant factor in defining the *utility* of any built fabric and its worthwilenes for conservation. Obsolescence can be the result of four elements (Lichfield,1988:22-25):

- *Physical or structural deterioration* - it needs repair and improvements beyond that offered by normal maintenance. Thus, an economic justification becomes a necessity.
- *Functional quality* - when the building, due to its original design or the services provided, is no longer suitable for efficient functioning. The usability of a

building in terms of its design and the space it offers; what are the changes needed for adaptation and how economically justifiable?

- *Locational change* - when the location of the building is no longer practicable in relation to its users or its external linkages and communication lines. For example, its accessibility for users (e.g. shoppers) and services (e.g. supply transport)

- *Environmental unsuitability* - as the human, social, economic and natural environments have been changing, some become unsuitable or less attractive for their former occupiers; the question again arises of adaptation and the costs involved.

It is, however, a prerequisite to define the criteria of analysis of costs and benefits, i.e. what are the costs or benefits involved? Within this context, Lichfield (1988:176-177) reviews the views of Forte and Girard; in summary, they suggested various bases for the valuing of the heritage:

- The contribution to the national income (e.g. tourist economy) as well as the indirect costs and benefits to those nearby who are impacted by the conservation (e.g. increased trade for hotels, shops, transport, increase in crowding problems and in accommodation prices).
- "Willingness to pay" for visits and for extra expenses for locals in accommodation and living expenses.
- The capitalisation of the annual expenses for conservation, maintenance,..etc.
- The *opportunity cost*, that is the value of resources saved in providing a new building.

Thus, the following are examples of costs and benefits involved:

I-Costs:

- Costs for retaining obsolete buildings: in historical cores, with high *development* potential where the land value rapidly increases; retaining an obsolete building, probably historic, becomes a substantial *economic* cost.

- **Social costs:** local families and small businesses who cannot afford the rises in rents, which often accompany the implementation of conservation policies, can be displaced by others who can afford.
- **Costs for tourism:** extensive exposure to tourism leads to the disturbance of normal living patterns; it can mean higher prices and scarcity of goods and services for local residents, more traffic problems and restrictions for them and, moreover, the possible adverse effect on their sense of belonging to the place.

II-Benefits:

- **The utilisation of readily existing resources within the built environment;** the economic regeneration of the society and the provision of new jobs.
- **Enhancing the quality of the environment;** pedestrianisation measures, the provision of green spaces, traffic limitations as well as most activities which accompany conservation projects positively contribute to the quality of the environment.
- **Tourism: benefits generated from tourism,** as explained later, are mainly concerned with the economic growth of the area and the provision of job opportunities.
- **Maintaining the sense belongingness:** preserving the local heritage is necessary for preserving the local identity and consequently maintaining the sense of belonging.

2.5. Conclusions

At this point we may argue that **no single formula can be subscribed to develop an urban neighbourhood. Nor is there a model for development which can be applied anywhere.** The question is, therefore, of utilising our *locally* readily available resources to our actual needs. Hence, what are these available resources? Lichfield (1988:17-21), identify three categories for urban resources:

- *Natural*: these include exhaustible resources (topography, landscape,..), exhaustible but renewable (vegetation, water,..) and non-exhaustible but pollutable (sun, air, rain,..)
- *Human*: a resource which is both exhaustible and renewable. Humanity, as a resource, contributes to the cycle through many aspects - skills, ambitions, intelligence, personality as well as character.
- *Man-made*: or the built environment which includes immovables (buildings, roads, utility services,..etc.) as well as movables (motor cars, furniture, etc.)

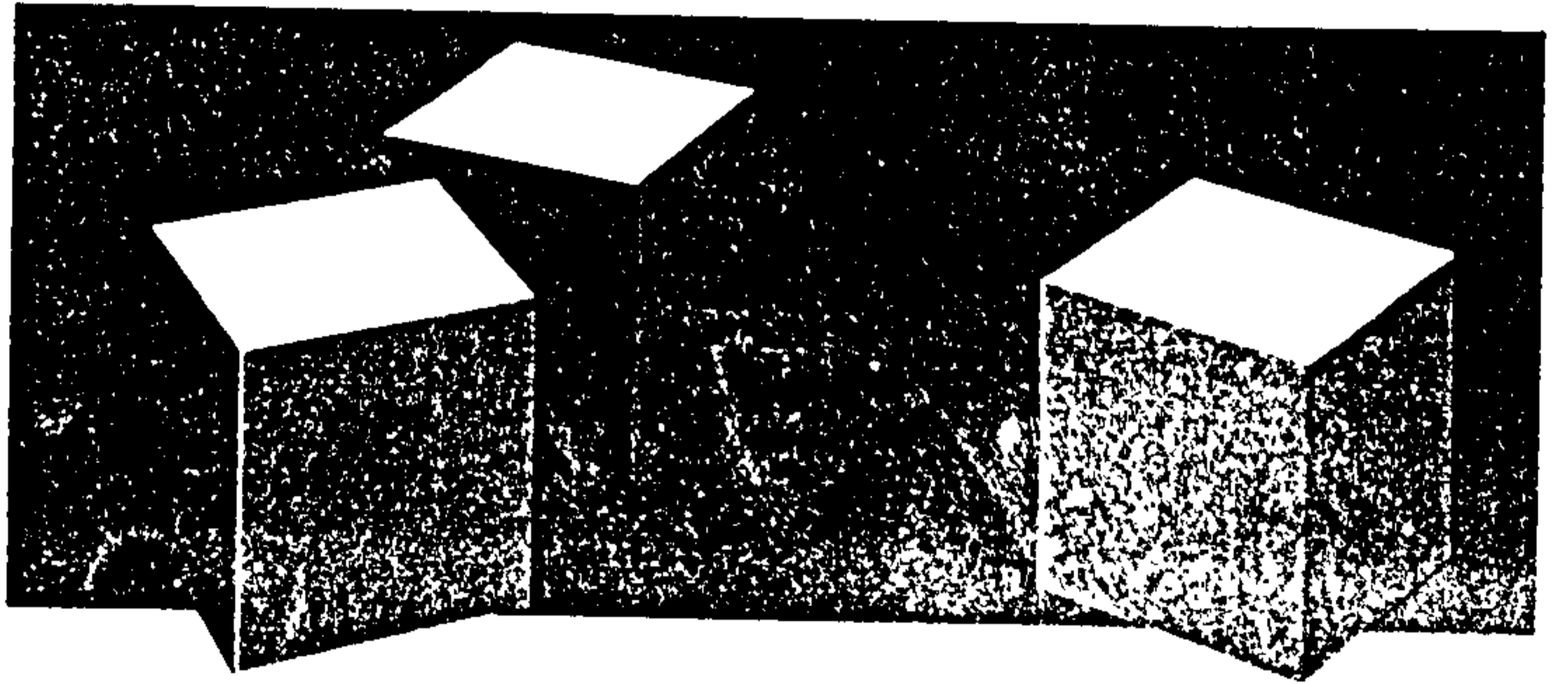
At the other side of the equation: *what are the local needs? what is the local model for development?* These, understandably, vary from one community to another. They can though be identified in general terms as the *improvement of life quality*: housing, transport, services, education,..etc

Yet, remains the solution; how to utilise these resources to satisfy the needs, whatever they are? Is it through clearance, conservation, or what else? A mere choice of one of these or of any other options would be a naively simple answer, as from our earlier discussions, the complexities of issues and parties involved don't allow for such simplicity. A more comprehensive concept has to be identified; '**conservation development**' where conservation is seen as

".. an aspect of development control, and an integral part of the global planning required in developing countries with natural resources and cultural values of potential tourist interest. In any case, even restored historical cultural property must, if at all possible, to be assigned a useful role, both for tourism and the native community." (Cotta,1982:29)

At this point, and having identified the broad meaning of heritage as a main *urban resource*, we may thus argue that the actual question is: **how to develop our heritage?**

CHAPTER THREE



LESSONS TO BE LEARNT

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LESSONS TO BE LEARNT

3.1. Introduction:

" Fundamental to our perception of the environment should be the realisation that it is not just a physical/spatial world but one comprising people and the organisation of people. When we see a decrepit area it is not just physical decay we are observing but a manifestation of organisational lethargy, disinterest and financial withdrawal, and of individual despair and lack of motivation. These grim qualities are self-reinforcing and together make any change towards improvements a very difficult task."
(Aylward,1979:1)

In the previous chapter we have concluded that development is not a universal model; it is unique in terms of its relation to the people's perceptions, their resources and the *knowledge they prefer*, as well as the constraints of the surrounding environment.

We have explored the apparent conflict between conservation and development, and the need for a more comprehensive concept where heritage is considered an important resource and conservation policies are regarded as means for *the management of change*. Hence, the process involves seeking answers to a variety of questions: what is needed? who needs it? what to do about it? who does it? and how to do it? This chapter attempts to explore these issues drawing principally on the Egyptian experience, where the scale of the problem is magnified by its rich history and the scarcity of resources.

The first part will deal with making policies, the criteria of decision making, the scale of intervention and its financial aspects; the second part will investigate the various parties involved and their role in the process, and finally the catalytic factors which are involved in shaping these policies, such as the role of tourism and traffic.

3.2. Making policies:

Heritage is, by definition, part of a nation's life cycle, as both a resource or as a consumer. Thus, it is a part of the national planning of any country which, in turn, is a part of the political process (De Monchaux,1987:21). In other words it is involved in the dilemma of estimating the worthwhileness and priorities of public projects (housing, defence, infrastructure,..).

3.2.1. Defining the criteria:

What are the criteria for a building or an area to be conserved? As we have touched upon earlier, this perspective has generally evolved from single great works of arts to more comprehensive contexts such as urban areas and historic towns, but is this the end? In Egypt, with its wide historical arena which exceeds five thousands years, the criteria for conservation have been very narrow and confined to limited range of values, e.g. the age of a building and its historical and architectural significance; these have always been thought of in terms of large monuments and archaeological sites mainly from the pharoanic era¹, which are likely to be tourist attractions; historical has meant untouchable: for tourists to see and take pictures; for example, the UNESCO International campaign for the safeguard of the Nubian Monuments, where more than \$70 million was spend to rescue the temples of Abu-Simble and Philea (Daifuku,1986:58). On the other hand, a similar campaign was launched by UNESCO to save Islamic Cairo, and despite the fact that it has been declared a world heritage site, this campaign has not resulted in much more than research and study reports. These deal mainly with the technical problems of restoring structures while assuming, in one way or another, the evacuation of most of its residents from the area to allow for this restoration. Various restoration projects have been carried out by establishments such as the German, the French and Polish Institutes, but despite their technical quality they did not contribute to the

¹ This has been largely promoted by colonial powers not only in Egypt, but in other areas of ancient civilisations (e.g.Iran, Iraq, Syria,..) during the last century for political reasons, i.e. alleviating the notion of individual nationalities rather than collective identities such as Islam or Arab nationalism; divide and rule.

area, as they were kept locked and out of reach, for being *monuments*. This attitude, in one way or another, has been supported by international charters and conventions for conservation, where the greater emphasis has been on *monuments, cultural significance and architectural heritage*;

"The conservation and restoration of monuments must have the recourse to all the sciences and techniques which can contribute to the study and safeguarding of the architectural heritage." (Venice Charter; article 2)

Again it is a question of economics; how much can we afford to conserve? This in turn has been largely dependant on what is meant by conservation; an expensive exercise to restore and freeze a threatened structure as illustrated above? No economy, even a *developed* one can afford such an exercise, especially on the Egyptian scale¹. We can therefore afford to conserve the Sphinx and the pyramids because tourism will pay the bill. On the other hand, urban areas and historic quarters are hardly receiving any attention, as it is not yet clear who is going to pay for it and such conservation seems to be an unrealistic aim for some nostalgic dreamers; this was clearly witnessed after the earthquake in October 1992 where the damage in Islamic Cairo has revealed the neglect that has been inflicted upon such urban areas through the years². A broader set of criteria has therefore to be defined in order to reflect the concept of 'conservation development' discussed earlier, where conservation is a tool rather than an aim. We may thus consider the following as basic criteria for such development:

- There is a value attached to it; the nature and amount of this value has to be determined mainly by its value/utility to the user.
- It is economically viable and conservation is justified.

3.2.2. Magnitude of intervention: We have previously discussed the levels of intervention and their impacts on the urban environment; yet another dimension has to be highlighted, i.e the scale of intervention and its role in policy making. There has been always the tendency to intrduce large propaganda projects such

1 In 1992, English Heritage had to give up some sites that it couldn't afford to keep.

2 For example see Fowler,1993.

as major road works and housing schemes, and moreover, 'comprehensive' master plans which attempt to deal with all problems at the same time on a global scale. This scale of ambition has proved to be unpractical as illustrated below.

Projects which are well defined and of a reasonable size are more likely to be implemented since the scale of problems is more practical to deal with. This has proved to be true in some individual small projects within the Fatimid Cairo, e.g. the restoration of Darb Qirmiz¹ and the projects of Al-Azhar and North Gamalia initiated by the newly founded Agency for the preservation of Islamic Cairo²; other major studies and master plans for the area failed to leave the shelves. Although the UNESCO report in 1980 acknowledged this fact by defining six potential clusters to start with, the criteria on which these clusters were chosen didn't have much sound socio-economic justification; it was based mainly on their monumental characters, i.e. areas with larger numbers of highly graded monuments, regardless of the existing zoning of communities and their socio-economic structure.³

3.2.3. Evaluating the alternatives: We have previously discussed the evaluation of the cultural built heritage (CBH) and the concept of Cost & Benefits Analysis. Yet there is an important question to be answered: *What are the alternative development proposals and how to prefer any of them?* Several manuals and methods have been developed to answer these questions, for example the *UNIDO model* (UN,1972; Hansen); the *Rothenberg model for urban regeneration programmes* (Schofield,1987:99-102) and *Community Impact Assessment (CIA)* techniques

1 Unfortunately, although the restoration was carried out successfully by the German Institute, its current situation is re-deteriorating for lack of maintenance and inefficient post-restoration management carried by the Antiquities Organisation as mentioned earlier.

2 It is difficult to judge the success of these two projects as they have only just started; but being in the implementation stage is a kind of success in itself.

3 This, among other administrative and political reasons has contributed to the causes of not implementing these projects as explained later.

(Lichfield,1988:249-280). These evaluation models aimed mainly at optimising the balance between *efficiency* and *equity* by highlighting the need to increase the 'Social Soundness' of projects; who will benefit from the project? where do the beneficiaries live? who will be hurt by the project? .. etc. Within their technical varieties, they generally attempt to, considering the social side, to assess; first, the future costs and benefits '*with*' the project; second, the future costs and benefits '*without the project*' and finally the incremental difference between the two. Lichfield (1988:249-280) adds in his concept of CIA; the need to assess the distribution of the costs and benefits among the sectors such as the central government, the municipality, the community, the landowners,.. etc.

However, the main attitude of these evaluation techniques can be described as follows:

- Framework for change - what currently exists on the site and what will exist on the completion of the project.
- Impact identification from the project variables - to identify the impact of changes introduced by the project.
- Identification of community sectors - to identify the different sectors involved such as the government, the municipality, landowners,..etc. And thus identifying the impacts on each sector.
- Analysis and evaluation - through a matrix, a preference is to be allocated to each sector.

Although these techniques and many others claim to evaluate intangible values and social soundness, in practice this is not always the case, as they incorporate both economic and social values in one matrix. Thus, introducing two different units (languages) in one formula (table); a tangible (money) and intangible (e.g. grades). But being in a 'one context' makes it more likely to neglect the intangibles in order to have a numerical total. It would be more valid to rank an option in both economic and social terms. In other words, to have two ranking systems where each project is ranked twice (tangible and intangible) e.g.

project X is the best project according to its social soundness and the second according to financial terms, and hence, according to our priorities, to select the most appropriate (e.g. the option with higher social ranking).

Nevertheless it is necessary to note that these methods should not be regarded as an absolute tool for decision making but should be mainly used as means of exploring *possible* options and of advancing implementation.

In the Egyptian context, however, the evaluation stage is persistently absent, either before or after implementation; this can be referred mainly to the fact that decisions are often taken directly from the political stage and for political reasons regardless of their actual common benefits - or otherwise. This, coupled with the institutional and organisational confusion described below, have resulted in the serious omission of the evaluation stage in the decision making process.

3.2.4. Sources of funds:

" The skill, or genius, of the designer and the artist will come to naught if it is not supported by the hard discipline of financial realities. We need to work as much, if not more, on economic and financial policies and implementation as we do on the more attractive and familiar occupations of architecture and urban design. Only the former can turn the latter into realities." (Serageldin,I. 1980:89)

This statement is particularly true in developing countries where there is a scarcity of financial resources and currency problems. Generally speaking, there are three main sources for finance: government, institutions (NGOs) and individuals (Serageldin,I. 1980:97-106). The role of governments is a critical one, especially in a state-run bureaucracy, where housing, public services as well as *heritage tenure* are considered a state responsibility, where there are often many logistical and legal complexities and where there is a continuous trade off between needs according to their *priority* and political *acceptability*. This suggests that governments should not deal with this type of project alone, being a heavy

burden on budgetary resources and cash flow, in addition to involving managerial and technical requirements which are rarely found in the governmental apparatus. In Egypt, the government has claimed its responsibility over all aspects of the built environment, a task which it doesn't have the resources to achieve, and hence, seeks foreign aid, through loans, international campaigns or grants. We are not attempting to discuss the political issues and complexities involved in this process¹, rather we shall highlight that: *first*, the criteria for such aid have been set and focused according to international *standards*, i.e. World heritage sites and major monuments and no attention has been paid to local criteria of values; *second*, that, with exceptions, most of this aid is directed towards governmental institutions in forms of studies and research reports which are in most cases far from being practical.

In practice, however, public money either through foreign aid or from government, has been the main source of financing the majority of urban projects. While, on the other hand, there has been a serious omission of the role of individuals in the financing process of *heritage* related projects, they are in fact, the ones who would pay the money both by capital investment as owners and developers, and as consumers by rent or purchase, and it is this money that would make or break the project.

3.3. Whose policies?

There has been a growing belief that traditional urban environments are the best solution for their users and have therefore to be regarded as a cure for our contemporary failures. But these observations and studies are mainly concerned with urban form and patterns, in other words the final products of these societies, but not with the process which generated these forms. Akbar (1988:7) has therefore raised the question:

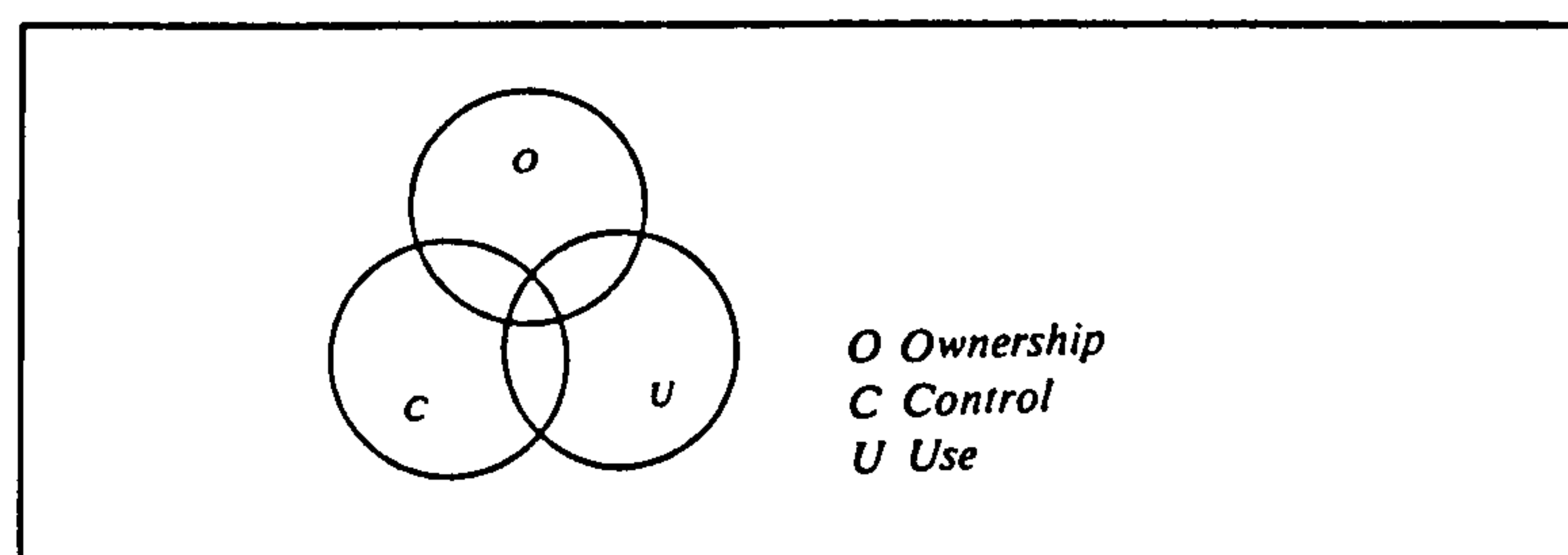
¹ See for example: Dudley, 1991

"Why, rather than investigating the societal process that produced the traditional environment, are we only analysing the end product?"

Although these environments were not designed by professionals, they are very homogeneous and follow a common convention. This, as he argues, is due to our failure to understand the complexity of the built environment, the responsibility patterns that determine the structure of the environment and influence it, and consequently do not deal with it competently. These patterns in the traditional environment were different from those today and have affected all aspects of the built environment.

The built environment is essentially made of *properties*; each property is shared by three parties: user, controller and owner. (Akbar,1988;1992)(fig.3-1) It is the relationship of these parties that makes the *institutional setting* for the management of the built environment. In his model Akbar illustrates the different responsibility patterns of these relations and he concludes that:

"The crisis of the modern environment should not be blamed on growth of population and shortage of resources. They are simply the growth of placing elements in the dispersed form of submission. This crisis will never be resolved until the form of submission and the pattern of responsibility is changed" (Akbar,1988:184)



Administrative rules and planning regulations for the management of the built environment were introduced as early as the ancient civilisations of Egypt, Greece and Rome, a practice which has evolved through human history. These measures have been usually aimed at bringing order to the environment. On a broad scale, religious and political institutions (temples, palaces,..etc.) often represented the authoritarian power of the state. On the other hand, communities were regulated by means of local agreements, not government

regulations. The state intervention was occasional and was mainly concerned with public spaces, such as the commercial streets that were controlled by the *Muhtasib* in a traditional Islamic community. In the Muslim world, the traditional built environment was first managed according to the teachings of the Holy Quran and the Prophet (peace be upon him), e.g. privacy, relations with neighbours,.. etc.¹ The different parties were largely unified; a large percentage of owning parties were also the users and controllers, their relationships were run by traditional societies' conventions. In a neighbourhood (e.g. *al-Hara* or *al-Mahalla* in the Islamic city), building regulations, maintenance measures,..etc. were the responsibility of the residents.

It was not until the Ottoman Empire, however, when this pattern started to change and the state had a greater role in *organising* the built environment (Akbar,1992:113-122). Modern municipal authorities were established in the mid. nineteenth century, their responsibilities gradually expanded, with more need for employees, thus generating opportunities to collect fees for things like building permits,..etc. (Akbar,1988:141) Consequently they became more powerful and therefore began to intervene more in the users' realm. On the other hand, in modern environments, responsibility patterns have been dispersed and shifted to remote authorities which apply sets of rigid regulations ending dialogues that developed and transmitted shared experience.

In Europe, conservation legislations emerged as an official expression of the conservation *movements* described earlier. Many countries in Europe had established some institutional and legislative measures during the course of the nineteenth century, and by the end of the century were followed by North America.

With the British, French and other European colonial movements, this attitude

¹ The Islamic regulations in Planning and Building principles have been explained in a variety of contemporary literature; see for example: Akbar J.; Hakim B.; Llewellyn, O.

spread to many other parts of the ancient world (e.g. Egypt, India,..). In 1860, a legislative frame work for antiquities was established in Egypt as a result. This has been further energized by the national movements for independence, as it was part of the national identity.

The main feature of these legislations has been the identification of *heritage* through the establishment of inventories of *historic buildings*, which has been followed by the designation of conservation areas; then measures were taken to *preserve* the fabric and *regulate* future development. Ashworth and Tunbridge (1990 :12) point out a notable degree of similarity among the various legislative measures taken by different European countries. This, they suggest, contains a strong element of internationalism, which has been taken further by international organisations such as UNESCO and ICCROM. The role of these organisations has been strengthened by financing major conservation projects such the *Unesco's international campaigns for the safeguarding of Cultural Heritage*; an example of this is the campaign to rescue the monuments of Nubia in Egypt (1960), which allocated a vast international contribution from different countries. Egypt for her part, in addition to half the total cost, *donated* four temples to some countries that had contributed. Here we may raise many questions; what are actual values of *heritage*? To whom does it belong? If a temple can be regarded as a mere artifact which can be replanted anywhere and which can be donated as a reward, can this be applied to a living quarter? What are the forms of *heritage tenure* which have to be secured? How can these international efforts be reconciled within the actual *values* and needs of the society?

Moreover, the introduction of international legislative forms such as the Athens and Venice Charters, which provided *guide lines* for conservation policies for conservation all over the world; this despite the fact that the committee which drafted the Venice charter was made up of twenty three members out of whom twenty were European. It is therefore important to ask how relevant are these Charters to the rest of the world? How far do they respond to the essential

needs for development, especially in developing countries? How far do they contribute to the enhancement of their lives? What are the objectives behind them, and how far do these objectives reconcile with those of the residents? These charters and *principles* must not be taken for granted, as despite all the noble objectives behind them, they lack any feeling for actual needs, which are, in fact, the steering power for any action, especially where these needs and desires are challenged by scarcity of resources.

Nevertheless it is true that any conservation policy needs the backing of an effective administrative and legislative framework. Although most countries, both developed and developing, have such legislations, they have been often criticised for not being effective in their commitment to conservation. This inability has always been referred to insufficient will (or funds) to implement them, or sometimes to their inadequacy as practical measures for enforcing conservation. To our earlier arguments we may add that little attention has been given to the nature of these legislations and their applicability; much of the heritage preserved today would have never been built if legislation in effect now had existed. In defining the objectives of such a framework, the notion of private responsibility has to be born in mind; in a community of a traditional quarter which keeps its forms, its patterns and most important its identity, the increase in the private share of responsibility is indeed a necessity. In other words, any intervention in these areas has to be an enabling measure and not a preventive one.

However, in the following pages we shall be investigating this model in order to identify the role and potential of each of the parties involved: the community (the user), the developer (the owner or an external party) as well as the institutional and legislative framework (the controller). This will basically draw on the Egyptian experience.

3.3.1. Community

"In reality we find out that decision-making in the building of the environment is not something that need ever be thought about purely philosophically or intellectually, or in a vacuum, since the entire process takes place within a social context, and thus concerns people. To go back to the first principles, therefore, is to examine the ways in which people will naturally make decisions about cities - decisions about the three - dimensional expression of their real interest, activities and lives" (Nicholson and Schreiner, 1973:5)

This statement, in addition to highlighting the importance of community participation, points out a very important aspect, i.e. *"to examine the way in which people will naturally make decisions"*; in other words, the fact that people do make decisions themselves and it is not always the case that they are consulted after decisions are taken for them.

This dimension is especially important in most developing countries where public consultations techniques such as "public hearings" and "public enquiries" are not a common practice. In Egypt, as well as in many other developing countries, the relation between policy making and the public does not practically exist, and the political and administrative system is a centralised and authoritarian one; even local authorities are no more than local branches for the Ministry in Cairo. Priorities, criteria and budgets are set in terms of National development policies rather than local development needs (Serageldin, 1985:119). There is therefore a need to examine the reality of the community role.

The Egyptian community in general, and in traditional areas in particular, has been governed by many factors other than civil legislations such as religion, traditions, the 'Ayeb (shame)¹ and respect for elderly people and community elders. In commercial areas, for example, there is a leader (*sheikh*) for every trade or craft (e.g. *sheikh el Soyagh*; the head of jewellers); an *Imam* of a mosque can also be a respected influential figure; in traditional areas where the *hara*

¹ These are the things which brings shame to whoever does them

(small closed street) is the main social structure, elderly people become the leaders of this *hara*. It is within these social units that decisions, consultations and participation are made; this reflects the traditional pattern of responsibility where the individual and local share of responsibility has been larger than the public (municipal) domain. In other words people have been taking care of their own affairs rather than policy makers and professionals in government bureaux. The task is therefore to exploit the potentials, conscience and the motives of these communities. The following figures attempt to illustrate the role of the community in shaping the built environment;



Fig.3-2, Reviving the Sabil; a traditional attitude which reflects religious beliefs of the importance of offering drink (water) to the passersby; a continuation of a tradition using available resources.



Fig.3-3, Right, An example of practical participation; the owner of this shop reflects his views by using what he believes is the appropriate style for the surrounding environment; it is worth noting that it is much more expensive to do it in this way than many other "conventional" styles. **Left,** Another example (with many reservations about the actual output); the owner attempted to express the "traditional identity" of his own belief and again it costs much more than "conventional styles"



Fig.3-4, Right, Accommodating his own needs; the occupant of this public housing scheme has extended his flat to satisfy his personal needs, regardless of building regulations. **Left,** Planting trees in the street, a community approach which authorities persistently failed to achieve.



Fig.3-5, Right, Celebrating Ramadan; a common practice in traditional areas; the youth of the street, directed by the elderly, decorate the street and compete with other streets in the quality of the decoration. **Left,** Restricting parking in front of his shop in order to allow access; much more effective than a traffic sign.



Fig.3-6, Right, The street is closed by the locals for traffic during Friday prayer; a common respected practice. Left, The mosque (Meibar mosque), has been restored by the local merchants, despite of being an Awqaf property.

3.3.2. The Developer: one of the most important ingredients for a successful development is a an interested, rightly motivated developer. Developers have often been negatively regarded as the enemies of culture and this has been reflected in the controversial relationship between development and conservation previously discussed. The prospects of implementing conservation policies, meeting community needs and enhancing the cultural and socio-economic environments are much better if they are placed in a development vehicle. The motive for such a vehicle is understandably the profit. Thus it is a prerequisite to assess the market dynamics and investment climate in this context; they are a combination of national and local financial factors. On the national level, this is mainly governed by national economic policies and investment regulations. In developing countries, these factors change quite dramatically¹, and thus affect the scale, type and trends of developments.

At the local end of the scale other factors are involved, including the area's ability to accommodate certain type/scale of development, the existing socio-economic structure of the area, the market demand for an activity and the strength and competition of current activities. These factors will determine the kind of new developments needed, whether to maintain or to change a certain activity, the scale and the amount of investment to be made. For example, in AlGammalyah quarter in Cairo, many of the traditional copper workshops have transformed their activities in order to accommodate aluminium for which there is a higher demand than for copper since it is cheaper; meanwhile they have maintained their social life and communality where the workshop (*warsha*) keeps its role as an institution of normative importance (Stauth, 1986:34). In the

¹ For example, till 1973 the Egyptian economic policy was socially closed and militarily oriented; large developments were confined to governmental industrial projects. From 1973 till early 1980s it was directed to the other end of the scale where the market was opened to all kinds of investments, especially consumer products imported from the West, and large private developments took place; from the early 1980s onward there have been more restrictions on imports, with greater emphasise on national industry. There has been a shift towards industrial and productive developments rather than services and housing developments. These changes have been accompanied by continuous alteration and instability of legislation in general and investment regulations in particular.

instance of such traditional communities two fields of development can be considered:

Housing: in urban agglomerations such as Cairo and Alexandria, housing poses a dilemma in both quality and quantity (Soliman,1992:186) and thus it has often been regarded a high potential field of development. An analysis, though, should consider the type and size of housing needed for the specific area; for instance luxury housing is not the ideal option in a popular area inhabited by a low income population who cannot afford such housing and *vice versa*. Housing co-operatives' systems are an important vehicle to encourage and initiate projects where there is a lack of private capital by providing a connection between public agencies and the private sector through long term co-operative loans¹.

Commercial activities (retail, wholesale, crafts and light industry, etc.): it is critically important to understand the characteristics and the basic strengths of the area under analysis in relation to its major competitors; several questions must therefore to be answered e.g.:

- Are the existing retail establishments adequately meeting the needs of the surrounding area, is there a chance for similar activities where there is a specialised market (e.g.Khan alKhalily in Cairo); or should it be new activities to avoid competition?
- What is the prevailing scale of the area which would attract shoppers? is it large multi-storey department stores or small ground floor access retailers?
- Is the kind of activity affordable by residents? or is it a tourist market?

¹ See for example Rageh,1985

3.3.3. Institutional and legislative frameworks

"How, then, can a conservation project ever be successful in a developing country? First, clearly, it has as a philosophy, to be acceptable to whoever is in power." (Worskett,1983:37)

This remark by Worskett points out the significance of legislation in the developing process, particularly within the conservation prospect. This significance, however, does not lie in the existence of legislation, but in its effectiveness, i.e. its applicability. The above arguments do not, however, imply that we have to completely abandon our existing institutional system and return to the traditional; *firstly*, it was generated by users with different norms, technical capabilities and urban pressures than those of today and it is therefore practically inconceivable to apply the same traditional system to our environments; *secondly*, for the practicality of the results of this research, it has to be assumed that the existing system, in many aspects, is an *ipso facto* which has to be dealt with, rather than dismantling it completely. But it is essential, however, to understand the existing mechanism, all parties involved and review their share of responsibility in order to identify its potentials and constraints. Thus we shall illustrate the existing mechanism of legislative and administrative power in Egypt, which is mainly directed through the following institutions: *Ministry of Al-Awqaf*; *Ministry of Culture*: Egyptian Antiquities Organisation (E.A.O.); *Ministry of Local Government*: The Governorate and utilities authorities; *Ministry of Housing and new communities*: The General Organisation for Physical Planning and the Agency for Preserving Islamic Cairo; *International Organisations*: e.g. UNESCO, the German Institute, the French,..etc. and *Ministry of Tourism*.

Ministry of Al-Awqaf; The *Awqaf* system is founded upon charitable endowments, and is basically classified into two types. One is *Awqaf Kheiriyah*, whereby the state is entitled by the benefactor to use the capital from certain land and buildings for public services such as mosques, hospitals, schools etc. These endowments can not be repossessed or subdivided among inheritors; they could only get a certain percentage of the revenue, while the main revenues are

provided for public services and charitable investments for the good of the community (e.g. Mosques, Madrassas,..etc.). The second is *Awqaf Ahliyah*, whereby property has been endowed but the income arising from it is enjoyed by specified beneficiaries and their descendants.

The increasing accumulation of waqf property resulted in the formation of sophisticated legislative and administrative systems to enable it to be managed. This was first achieved by appointing special judges for this purpose; then, at the beginning of the 19C. with the modernisation process, the State gradually took over public services by establishing ministries to control education services, health services..etc. In December 1880, the first committee for the preservation of Arabic monuments was established, namely "La Comité de conservation de monuments des l'art Arabs", administered by the Ministry of Awqaf (*Nezarat al-Awqaf*). The work of this Committee was to:

- Document all Arabic historic buildings by means of drawings, photographs and written descriptions.
- Carry out regular and thorough inspections of these buildings and do the necessary preservation and restoration work to them.

These preservation and maintenance activities were financed mainly by the Awqaf administrations. The work of this Committee was of great importance as it carried out a large number of restoration work and provided a rich record of Islamic buildings, but sadly this work was mainly concentrated in Islamic Cairo, while its interest in other parts of Egypt, such as Alexandria and Rashid (Rosetta) was confined to major monuments, e.g. the Qait-Bey fort and the walls of the Arab city in Alexandria.

It did, however succeed, by the turn of the century, in listing some 622 historic buildings in Cairo alone, in addition to 250 buildings in other places (El-Erian,1983:375)

In 1918, Law No.8 was introduced for the protection of Arabic historic buildings built from the beginning of Islam until the end of Muhammad Ali's reign (1840). These buildings (mainly in Cairo) were listed, and the government was authorised to take possession of all historic structures in private ownership, and to control any alterations for these buildings. With few exceptions this list, however, has largely remained the same until the present day with few exceptions. In 1936 the responsibility for the Committee was transferred from the Ministry of Awqaf to the Ministry of Education, but strangely, the ownership of the properties and their revenues remained in the hands of the Ministry of Awqaf, thus, denying the buildings the necessary revenues for their maintenance and preservation. And inevitably the Comité became much less influential.

In 1952, the system was abolished and all *Awqaf Kheiriyah* properties were placed under the control of the Ministry of Awqaf, while *Awqaf Ahliyah* properties were given to the inheriting families; each family had to appoint a member to be *Nazer alwaqf* responsible for maintaining the property, collecting rents and distributing rent to the rest of the family. These inheriting parties during the time since the start of the *waqf*¹, have become large, extended and complicated families and this means that some properties are being shared among more a thousand persons. This has proved to have an adverse effect on the properties, as the responsibility is dispersed among large numbers of *owners* has made it extremely difficult to maintain, develop or even sell the property.

On the other hand, the *Awqaf kheiriyah* properties which have been controlled by the Ministry of Awqaf, are no better; the revenue from Awqaf properties is no longer used for the maintenance and upkeep of the buildings, but for creating new buildings and for administrative expenses.

¹ Some of these Waqf in Cairo date back to the 12th Century A.D.

It is, however, important at this stage to point to the fact that the old Awqaf system and the Comité had proved an effective role in recording, restoring and maintaining historical building until they were abolished in the 1950's.¹

Egyptian Antiquity Organization (E.A.O): Administered by the Ministry of Culture, this is the official body responsible for all Egyptian museums and monuments; these range from the Pharaonic era till modern times, including major monuments such as the Giza Pyramids as well as modest houses in Rosetta. It is responsible for listing *monuments* irrespective of their ownership, for restoration work, and the licensing and monitoring of restoration works on listed *monuments* undertaken by others. Alterations and additions are conditioned by its permission. The work of this Organisation has been largely undermined by three factors:

- The enormous bureaucracy involved in its administration; everything has to go through its Central Administration in Cairo and in most cases through the Minister of Culture, this consumes much effort, time and money in lengthy paper work and administrative tasks, while causing increasing difficulties for real work to take place, e.g. restoration, survey,..etc.²
- The lack of adequate finances; counter to its enormous task of looking after five thousands years of history, it is part of the financial pool of the central government; its resources (from museum tickets,.. etc.) are directed to the central government which allocates an annual budget which is often less than adequate.³
- The conflicting interests of other parties involved, e.g. the Awqaf, the Governorate,..etc.

1 The work of this Committee was carefully documented in half-yearly records; some of them are kept in the archives of the E.A.O. and some copies can be found in specialised libraries e.g. Egyptology libraries

2 For example: a permission for photographing anywhere in Egypt has to be issued only by the director in Cairo

3 In 1980, the annual budget was L.E.45m, which had to cover all expenses, excavations and restorations, whereas the restoration of a single house in Fatimid Cairo could cost over L.E.1m.; (UNESCO,1980:)

In 1912, all ancient Egyptian and Coptic monuments were considered to be government property as a consequence of the introduction of the first law concerning monuments; this also stated that it was the responsibility of the government to organise any archaeological work. In 1951, law no.215 was introduced for the preservation of monuments and historical buildings of the Pharaonic, Coptic and Islamic periods, that is from the early Pharaonic period to the end of Khedive Ismail's reign (1879 A.D.). This law superseded all earlier laws and was effective till 1983. In 1983, law no.117 was introduced to cover the protection of movable and immovable historic antiquities, and this is still effective today (an unofficial translation prepared by the Unesco is given in Appendix 3-1), This law deals with the following:

A- The definition of protected cultural property (articles 1&2): "any movable or immovable property that is a product of any of the various civilizations ... extending from prehistoric times down to a point one hundred years before the present and that has archaeological or historical value or significance...". It also states that "any property of historical, scientific, religious, artistic or literary value may, where the Prime Minister so decides,...,be deemed an antiquity, even though its date of origin does not fall within the limits..". In practice this has never happened and it is often defined in terms of *monuments* which are before Mohamed Ali (1800 A.D.)

B- The system of ownership and use (articles 6, 8, 9, 24 and 35): states that "All antiquities with the exception of religious endowments (waqfs) shall be deemed public property..". This is practically hindered because firstly, the Organisation cannot afford to pay any reimbursement and secondly, most non-Pharaonic antiquities are waqfs.

C- The extent of protection, involves:

- Registration (articles 2, 8, 12 and 26). "Such property shall be registered..", "Antiquities shall be registered by decision of the Minister responsible for culture....shall be duly communicated to the owner of the antiquity concerned.. and shall be published in the official Gazette.", "The Antiquities

Organization shall be responsible for inventorying, photographing, making drawings of and registering all movable and immovable antiquities..". Again, in practice this has not been applied in all cases; most of the listed buildings, other than the great *monuments*, are not recorded.

■ Rights and obligations of the owner, the person having possession or control and the competent authorities (articles 2, 9, 10, 13(6), 26, 28, 29 and 30): "every owner ...shall be responsible for safeguarding it and may not alter it in any way as from the day he is notified...", "The Organization may at any time undertake at its own expense any work that it deems necessary for conserving a registered antiquity.", "The Ministry of Waqfs, the Egyptian Waqf Organization and the Coptic Waqf Organisation shall bear the cost of restoring and conserving their respective registered archaeological sites and properties." Strangely, the application of this article has meant partial maintenance by the Waqf; in Mosques for example, the Waqf is responsible of maintaining only the sanitary areas while the E.A.O. is responsible of the rest, and since there is no co-operation between the two organisations there is nothing real happening.

E- Sanctions (articles 40 to 47): the law deals with theft, wilful destruction, unauthorised excavations, etc. The penalties assigned are far from deterrent in most cases, e.g. the penalty for "the removal or detachment of a publicly owned or registered antiquity from its place" is "a prison term of not less than one and not more than two years and/or a fine of not less than 100 and not more than 500 pounds". However, in reality this has never been put to practice, as the Organisation doesn't have the efficient means to monitor and maintain its properties (unless in a museum).

However, traditionally the main concern of the Organisation has been the maintenance, restoration, excavations and archaeological works of the Pharaonic era which is mainly formed of antiquities, temples, tombs...etc, and used as museums or tourist attractions, while very little attention has been given to other areas. Nevertheless, a greater concern for the Islamic heritage has been recently

recognised, partly because of national and international awareness of the serious threats to Islamic Cairo. This awareness has been seriously shaken by the earthquake of October 1992, where there has been great damages to the buildings. (fig.3-7) As a result, and with personal pressures from the Minister of Culture, an emergency board was formed, the Executive Committee for the Rescue of Islamic Cairo; the task of this committee has been *first*: to assess all the damage resulting from the earthquake; *second*: to define all the emergency work needed and *finally* to formulate a long term plan for the "restoration" of Islamic Cairo. Despite the potential of this act, which has been politically and financially (through UNESCO) supported, it deals only with the technical side of emergency restoration projects, while other aspects for future use and maintenance are not tackled.

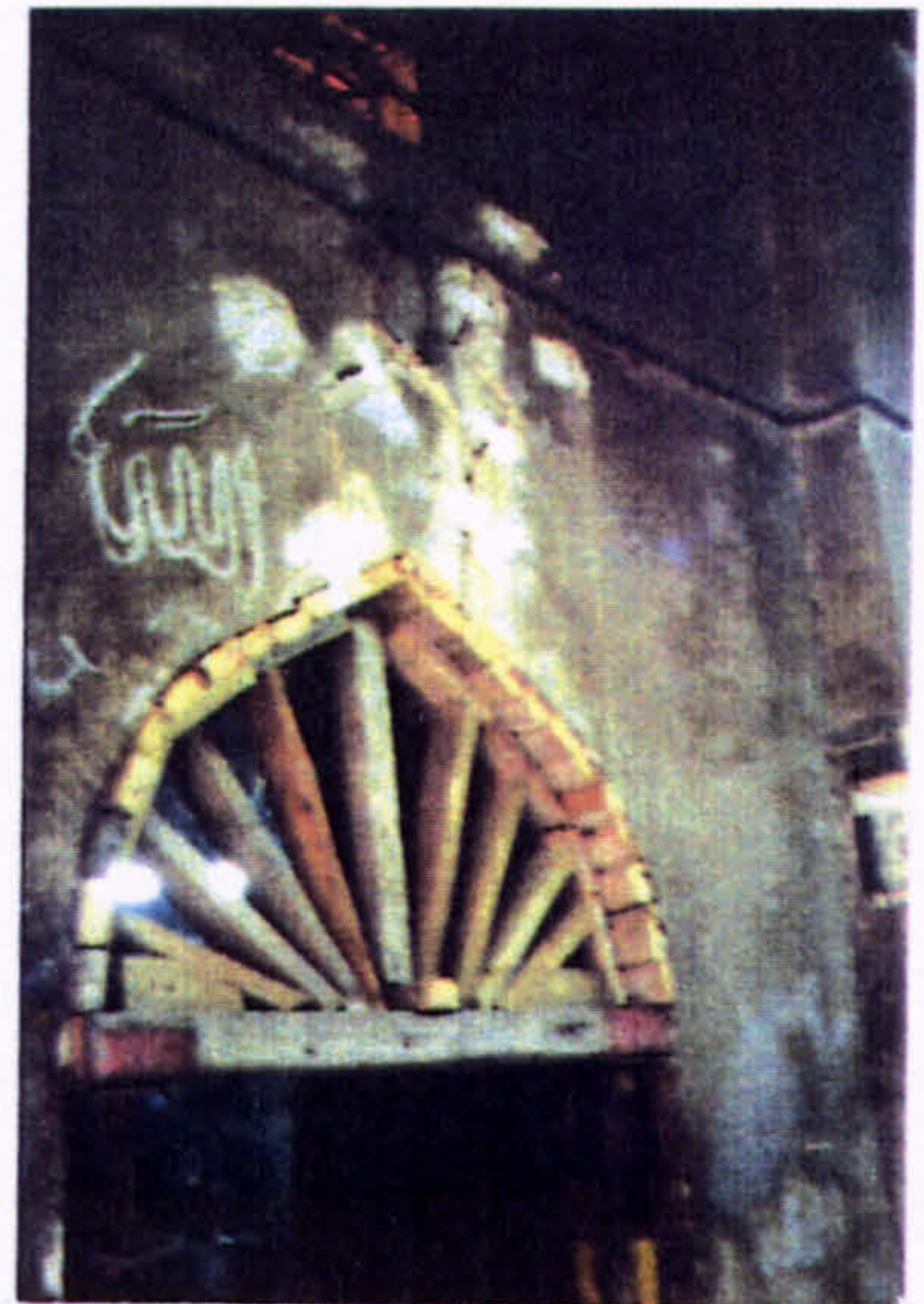


Fig.3-7 Right, Buildings were seriously damaged; not all resulted from the Earthquake. Left, Emergency scaffolding has been erected to support threatened structures; the efficiency of this questionable.

International Organisations: Egypt has always been the subject of historic fascination. Travellers and historians throughout history have recorded their observations in Egypt. The French Campaign in 1789 started a new era of extensive research and exploitation by Europeans, especially in the field of archaeological excavations. Thus, there have been well established institutes, French, German, Polish, etc. Their main interest has been the documentation and survey of Egyptian history, culture and society; this has, however, developed to taking part in excavation and restoration projects. Their role has been continued

till the present day; in addition to the archaeological excavation sites, they have been taking part in other restoration projects, e.g. Maddrassa of Amir Mithqal and Sabil Abdurrahman Kathkhuda (fig.3-8) by the Germans, Beyt Assit Wassila by the French. On the other hand, international organisations such as UNESCO have long been involved in Egyptian restoration; major projects have been organised by them based on national and international co-operation, e.g. The safeguard of Nubian monuments. Since 1970, UNESCO has showed interest in Islamic Cairo by conducting studies in the area and eventually it became a World Heritage site in 1979; this in turn has resulted in a UNESCO mission to prepare a report for a conservation plan (completed in July 1980) and an International conference was held in December 1980 to discuss all the matters concerning the preservation of Islamic Cairo. Unfortunately, these efforts have not been translated into any practical achievements. This can be referred to the following:

- The failure to recognise the area as a living traditional community, not merely a collection of monuments, and that the values of the inhabitants are as important as historic buildings and their restoration. This is related to the 'deficiency in criteria' definition discussed earlier.
- It has been undermined by factors of budgetary constraints and the existing institutional conflict described in this section.

Hence the role of international organisation can be described as follows:

- Conducting and financing studies, research and recording of historical structure as well as professional technical restoration.
- They are not sufficiently and effectively involved with the local communities, and hence the criteria and objectives of conservation are not always directed to the benefit of the community, rather for tourism or just for research purposes.

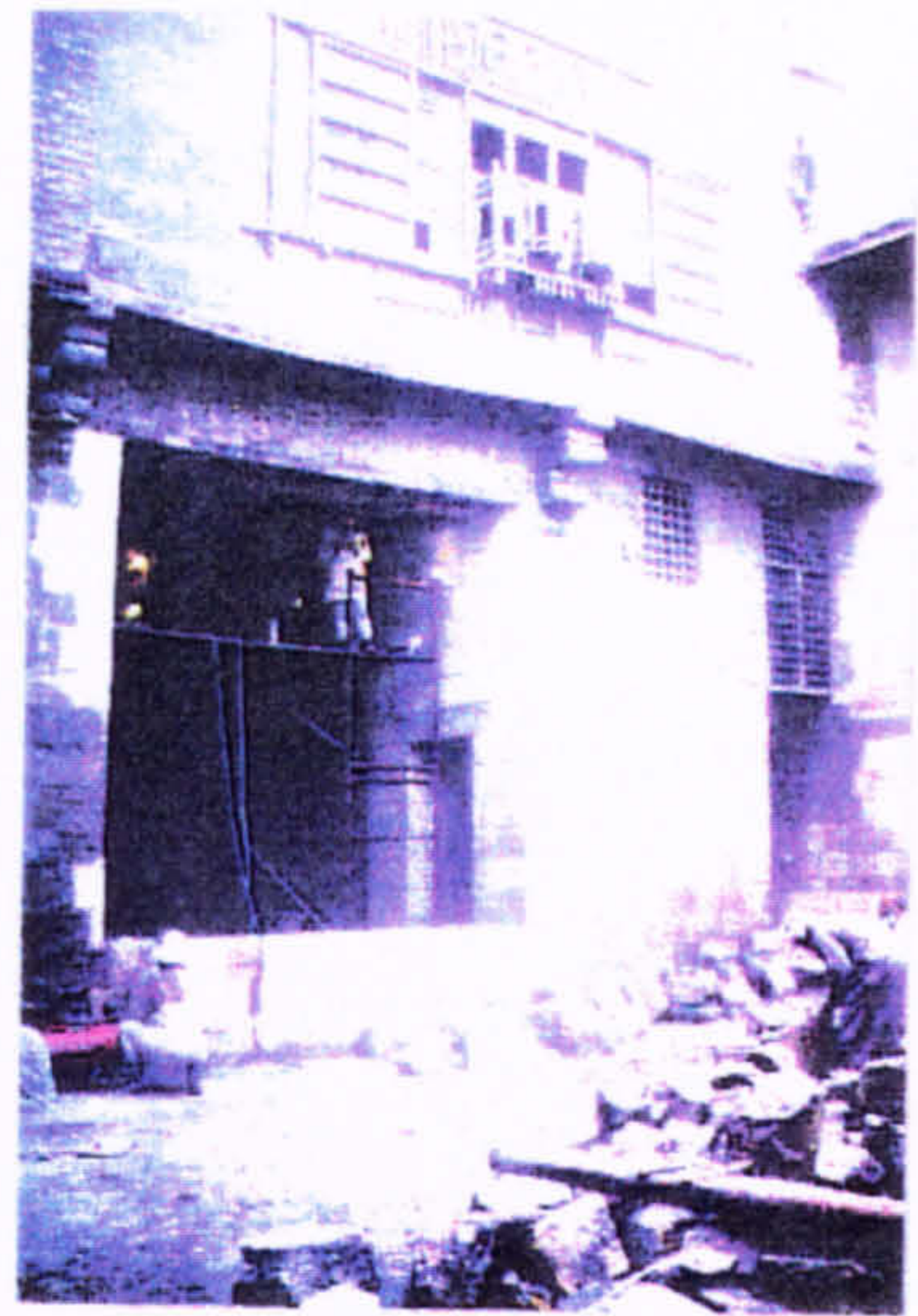


Fig.3-8, Involvement of foreign institutes in restoration; right: Sabil Abdurrahamn Kathkhuda restored by the German; left: Beyt Assit Wassila being restored by the French.

General Organisation for Physical Planning (GOPP): This is part of the Ministry of Development, New Communities, Housing and Utilities (MDNHU); the role of this organisation is to set the rules of regional planning and urbanisation in the whole country, new towns as well as the organisation of existing urban areas. In this context the Organisation has been drawing up master plans for Cairo; during the last forty years there have been four master plans for Cairo¹, and their implementation has often been partial; their achievements have been mainly in terms of transport technology (e.g. Cairo underground), traffic (e.g. bridges, the ring road) and infrastructure (e.g. the Greater Cairo sewage project); on the negative side, *"they have fostered enduring misconception, transplanted western models of dubious suitability, and adopted solutions which often proved counter productive in the longer term"* (Serageldin, I. 1985:122). The attitude towards traditional quarters in these plans has varied from complete restructuring to greater recognition of their historical values². In the latest Master plan, made with the co-operation of the *Institut D'Aménagement et D'Urbanisme De La Region D'Ile De France* (I.A.U.R.I.F.) there has been full recognition of the significance of the historical area and it has therefore included

1 These are the plans of 1956, 1969, 1974 and 1982

2 These attitudes are further illustrated in a variety of sources; e.g. El-Erian, 198:390-400 and Serageldin, 1985:122-124

studies of the existing conditions and possible solutions (G.O.P.P & I.A.U.R.I.F.,1988) and has resulted in the formation of:

The Agency for Preserving Islamic Cairo: A newly formed agency (1991), also administered by the (MDNHU). The main objective of its establishment has been to have an independent body with the task of getting together the different parties involved. It has adopted some micro scale, well-defined projects where there has been little interest shown by other parties such as the North Gamallyah Project and Al-Azhar Project; the success of these projects is questionable for two main reasons:

- The fact of being part of the (MDNHU) has made it another governmental organisation which is again inhibited by governmental bureaucracy and budgetary constraints.
- Its role in bringing other parties together is a consultancy one; in other words it has practically no real influence on their policies.¹

Local Government (Governorate): As we have indicated earlier, Governorates are administered by the Ministry of Local Government (MLG); they represent the local governments and in theory they are independent authorities which have the capacity to set policies and implement them; in practice they are merely local offices for the central government. Their responsibilities are to provide housing, building and planning permits according to municipal legislations, utilities, infra structure, traffic, transport, .. etc.

Ministry of Tourism: The role of tourism development is further explained below; yet we have to discuss the administrative role of tourism authorities in the process. It is regarded mainly as the client for any *heritage* related project. This notion has significantly manipulated the policies and criteria for heritage management; tourist routes mainly decide what to conserve and what to neglect. In Islamic Cairo their presence is confined to the Khan AlKhalily Bazaar area in

¹ In an Interview with the author, an official from the E.A.O. said: "I heard about this agency but I don't know anything about it"

order to control price lists for tourists, as well as to provide parking areas for tourist buses. However, as most of the area is not on their potential routes, a little attention is given by them, and consequently as indicated above, scarce attention has been received from other authorities.

To Conclude the previous review of the various authorities and their legislative status, two factors are to be highlighted:

First: The mechanism of interlocking authorities. There is a need for high level co-ordination and co-operation between the different authorities concerned, within a general framework for development in the area. The failure of the existing system can be referred to:

- The horizontal nature of responsibility patterns,
- the conflict of interests among and within these authorities; e.g. the only objective of the municipal authority is to provide as much shelter as possible. Thus has caused them to overlook even their own legislation of heights, specifications,...etc. And while the E.A.O. considers a building over 100 years old as a National heritage, the municipality considers it as a condemned outworn structure.

Second: the nature of these legislation.

- All these legislative measures, even if in favour of conservation, lack the realistic element necessary in their application; i.e. the practical means for implementation, such as financial compensation for the owner's loss of control over his property.

- The E.A.O.'s main interest is only the indexed buildings. This limitation leads to the damage, neglect, alteration and vandalism of many buildings of historic and artistic interest (e.g. Hallabo house, fig.3-9), especially residential buildings, since the index (basically made by the Committee of Arab Arts) mainly consists of religious buildings, mosques, madrassas, kottabs,...etc.

■ Although it does not directly involve the question of conservation, the 'social' laws for rent control in the early Sixties have had a notable effect on the physical deterioration, maintenance and preservation of the whole building stock, either new or historical. Enforcing control has meant that landlords can neither improve nor maintain their buildings since they cannot recoup their money by increasing the rent.



Fig.3-9, Hallabo house, Alexandria; a non listed building, which dates back to the early 19thC. is falling down because of neglect.

3.4. Catalytic factors:

3.4.1. Tourism development and conservation:

Despite the *apparent* diversity between tourism and conservation, on the one hand the dynamic aspects of utilizing tourist resources and on the other the static ones protecting those same resources (Cotta,1982:26), it is the most remarkable perspective for the link between *development* and *conservation* interests. Generally, this link is based on the ability of an *attractive* historic object to draw tourists and that revenues from tourism should be able to finance their restoration and maintenance.

Having defined conservation, its motives, aims and principles, it becomes necessary to understand the nature of tourism, and its implications on the cultural resources. Tourism is a major development form and although it is "*only one of a number of activities that occur in historic cities*" (Ashworth and Tunbridge,1990:51), its relation to heritage and conservation activities is unique; it is a large export industry and earner of foreign exchange, involves millions of people who spends millions, the largest single item in the world's foreign trade (Cotta,1982:26), and is often considered an economic sector with a realistic potential for growth beyond the short term (Williams and Shaw,1988:1). It also represents a major contribution to national economies, a fact which has been increasingly acknowledged in Egypt since the 1980s, as it represents over 10% of the Egyptian National Income¹.

The main component of this industry is the tourist; in the context of foreign tourism, it has been defined by the United Nations as a "*visitor staying at least twenty-four hours in a country other than in which his usual place of residence*". Domestic tourism, on the other hand, are visits made within a country by residents of that same country. The purpose behind these visits gives more

¹ According to official statements by the Minister of Tourism and Civil Aviation, the significance of tourism has been strongly expressed by the personal visits of the President to tourist areas in Upper Egypt and the Red Sea in December 1992 and his meetings with the tourists in order to assure their safety and comfort while they are in Egypt.

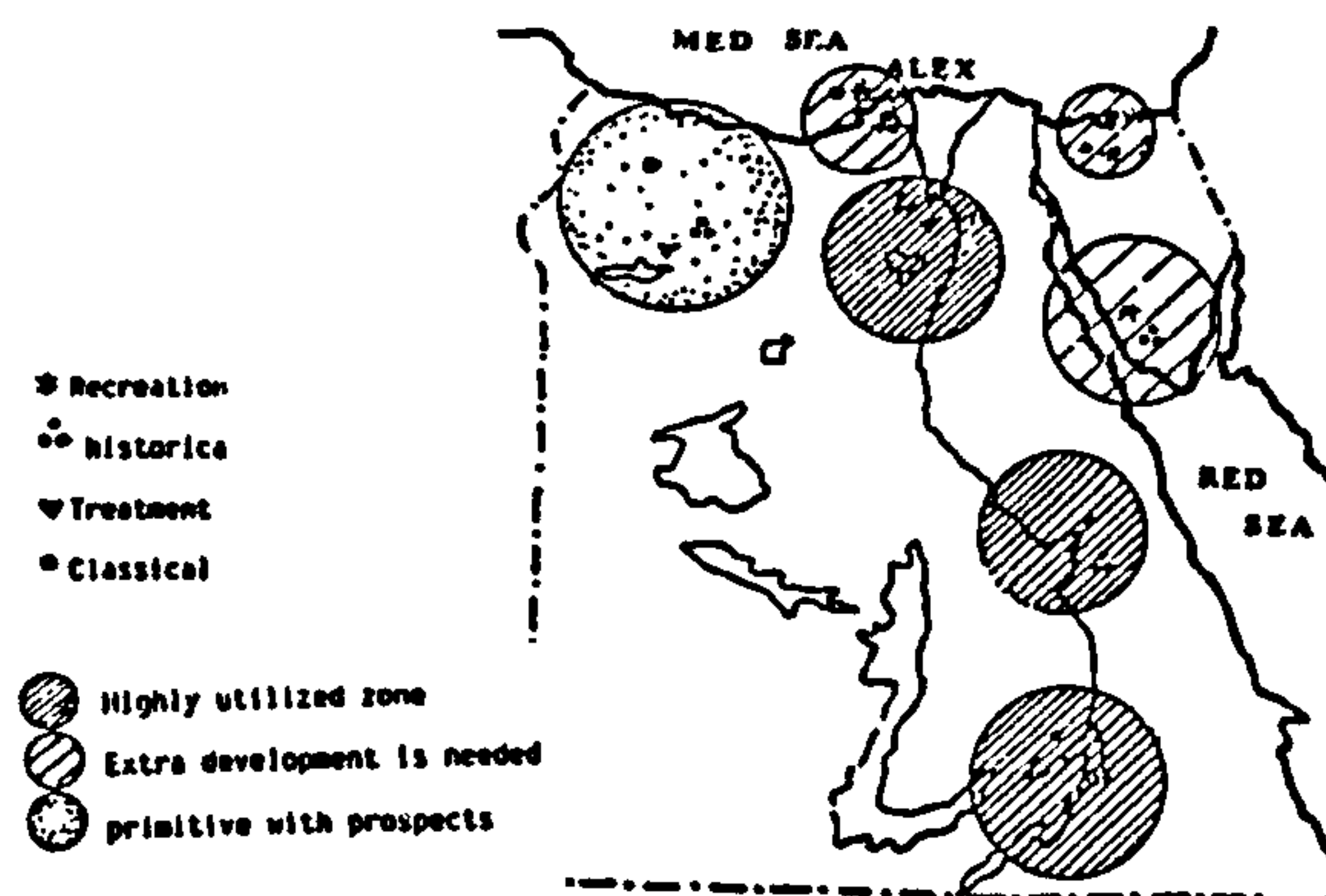
precise definitions, i.e. business tourism, leisure tourism,...,and culture tourism.

McNulty derives *lessons from North America* and points out that;

"Heritage or culture tourism is becoming the largest slice of the tourism industry. In the United States tourism is number one, two or three in economic earnings in 47 of the 50 of our states. The most popular form of tourism is not our casinos, they are coming to see heritage and culture ...So anything that you can do that creates a destination out of your community is piggy-backing upon a major growing sphere of economics."
(McNulty,1989:26)

Hence, and with the unique richness of Egyptian history covering over five thousand years, and despite the fact that Egypt's share in the international tourism market is not compatible with its resources (Zaki and Hamdi,1992:28), cultural tourism is a major component of tourism activity; fig.3-10 illustrates the main points of tourist attraction where Upper Egypt (Aswan & Luxor) and Cairo are the most dominant.

Fig.3-10, main points of tourist attraction in Egypt.
(source:Zaki and Hamdi,1992:29)



This, however, must not change the fact that other types of tourism are of great importance -if not as important as culture tourism (in some cases)- in their relation to heritage and conservation activities, in other words *"the historic heritage is only one tourism resource among many in the tourist city"* (Ashworth and Tunbridge,1990:51). Thus we may define two stages of impacts primary and secondary, the order of which is relative depending on each individual case. But generally speaking they are as follows:

Primary: the impact of culture tourism on the cultural built heritage and the conservation activities; this is to be considered a direct relation as an object is being conserved and marketed as a resource for tourism and similarly when another object (e.g. urban areas and traditional quarters with high population densities and large scale problems such as the Fatimid Cairo) is left to neglect and decay because of lack of immediate tourism potential. Another example is the impact tourism has had on the Giza Pyramids area and the nearby village (Nazlet Asseman), where both the physical and social structure of the area has been affected; the former by bus routes which cross the area, and the latter by the fact that all activities of the inhabitants became tourist oriented, e.g. souvenir shops, camel riding,..etc. An important aspect of this relation is the administrative framework under which this can function, where tourism authorities become an additional institution in the already existing conflict (explained before) of interests among other institutions, such as the Antiquity organisation and the Awqaf; the responsibilities of both tourism and conservation are spread out through ministries, directorates, organisations,..etc. Thus, to co-ordinate between the two would be even more difficult.

Secondary: in the case of other types of tourism; the *heritage* is indirectly affected and/or affecting the environment such as traffic, noise, litter and overcrowding; this can be clearly observed in the effects of Nile cruisers and their impacts on Nile pollution. Another example is beach tourism which is increasingly growing, nationally and internationally - Sinai, the Red Sea and the North-West coast - and which causes significant environmental impacts on cities like Cairo and Alexandria through the seasonal increase in population with all the related problems of traffic and noise, etc.¹

These mutual impacts can be explained as follows:

¹ The population of Alexandria increases by one million during summer time, causing enormous pressure on the roads, infrastructure and services of the city.

First: environmental impacts: tourism development projects are often associated with highly visible environmental changes; thus they tend to have a high profile and to be well known; for example the safeguarding of the Nubian Monuments and the excavations of the Valley of the Kings. On the other hand, such projects can cause environmental problems which can adversely affect the object of attraction; this has happened with the tombs of the Valley of Kings where the extensive exploitation by tourism has caused extensive damage to the quality of paintings in the tombs.

Second: socio-economic impacts: as indicated earlier, the stimulation of *tourist-historicity* to boost national economies has now become a common practice (Ashworth and Tunbridge,1990:244). The elements of such a process can be summarised as follows (D.O.E.,1991):

- Public sector investment; public money injected through both investments and grants.
- Visitor spending; a subsequent injection of money into the project.
- Spending by local residents; the impact on the local economy of the project, i.e. the money spent by local residents in the project. This, however, proved to have practical difficulties in identification.
- Primary employment creation; this involves three categories: the workforce required to construct the project, the workforce required to operate the project and the jobs created by the ripple effects of project and employee spending.

On the other hand, the secondary impact involves:

- Visitor spending in the city; money spent in other areas in the city; accommodation, restaurants,..etc. According to this survey, this proved to be a substantial contribution as it is almost equal to the amount spent in the project itself. (D.O.E,1990:22-23)
- Secondary employment created from visitor spending in the city.
- Local residents spending; the increase in spending as a result of the project.

This has proved to be as difficult in terms of practical identification as on the primary impact.

With this growing trend for employing *heritage* as a resource for tourism, questions raised by Ashworth and Tunbridge (1990:254) become increasingly vital:

"whose heritage is being conserved and marketed, and to whom do the consequent benefits accrue?"

In other words, who benefits and who loses from this *heritage market*? Cotta (1982:30) points out the danger of having the tourist industry, in developing countries, under foreign control. In addition to a financial *neo-colonial dependence* by exclusive rights to the provision and operation of tourist services (e.g. hotel development and management chains), there is the danger of visitors *consuming* the local culture; for example, building accommodation that would suit visitors from developed countries, at a scale and in a style which disrupts the local lifestyles and culture. This can be witnessed in many major hotels, Nile cruisers and resort villages where tourist development has attempted to create a complete western atmosphere which does not harmonise with the local culture; it is sometimes against its basic religious beliefs and traditions - drinks, dancing areas, swimming pools and even in their restaurant meals. It is not only the scale of such development that can disrupt the life style but even very small design details ignore its existence in an Islamic-Arabic environment, such as the absence of *asshatafa* in many of the tourist developments¹. These elements, among others, provide a transplanted environment within the local culture, and question the role of tourism in the conservation, or otherwise, of a traditional area.

¹ *Asshatafa* is a small device used in toilet seats to provide water for hygienic cleanliness necessary for performing Islamic duties (e.g. prayers) and exists in every single house in Egypt.

3.4.2. Traffic and conservation:

"..the automobile imposes its law, and traffic engineers do not hesitate to disfigure the traditional urban tissue. When more urban space is needed, old buildings are sacrificed unnecessarily in order to build a new. This slow but sure destruction of architectural inheritance is hastened by speculation on property and land, and imported architectural forms, resulting from speculative practices, emerge in the landscape, signs of a so-called progress....." (Belkacem,1982:10)

Historic cities were built by people who walked, rode horses or drove carriages (fig.3-11). Thus, with the need for high mobility becoming a characteristic of urban life, and with the motor vehicle becoming an integral part of the fabric, traffic comprises a major front line in the *clash* between development and conservation. Antoniou (1991:12-15) illustrates the magnitude of the problem (fig.3-12);

"continued demands of traffic have been colossal in cities. The ultimate requirements of vehicles can be dramatically realised when comparing the size of a clover leaf intersection with that of an urban area."

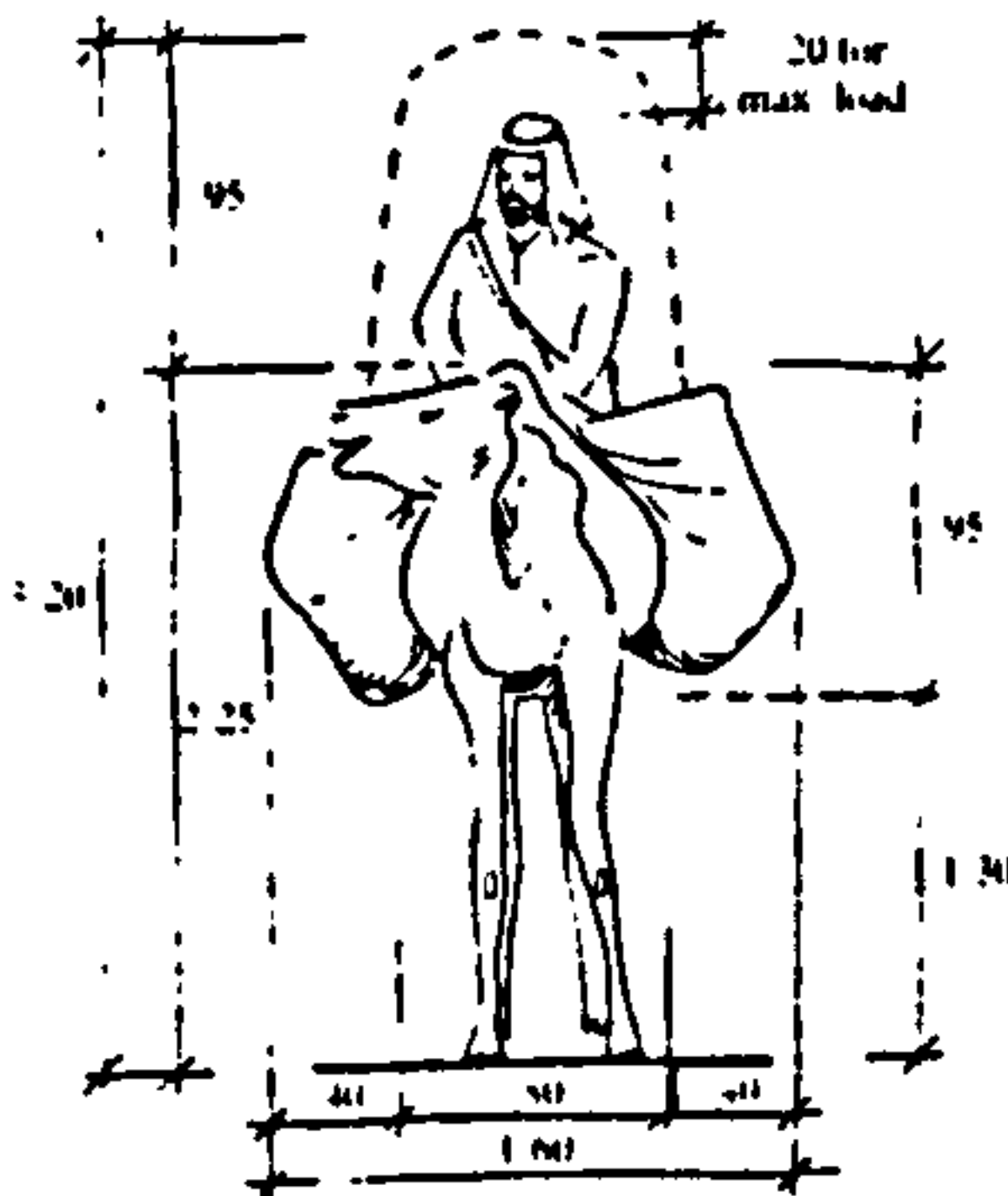


Fig.3-11, The width of the street has been determined by the mode of movement (source: Hakim,1986:21)

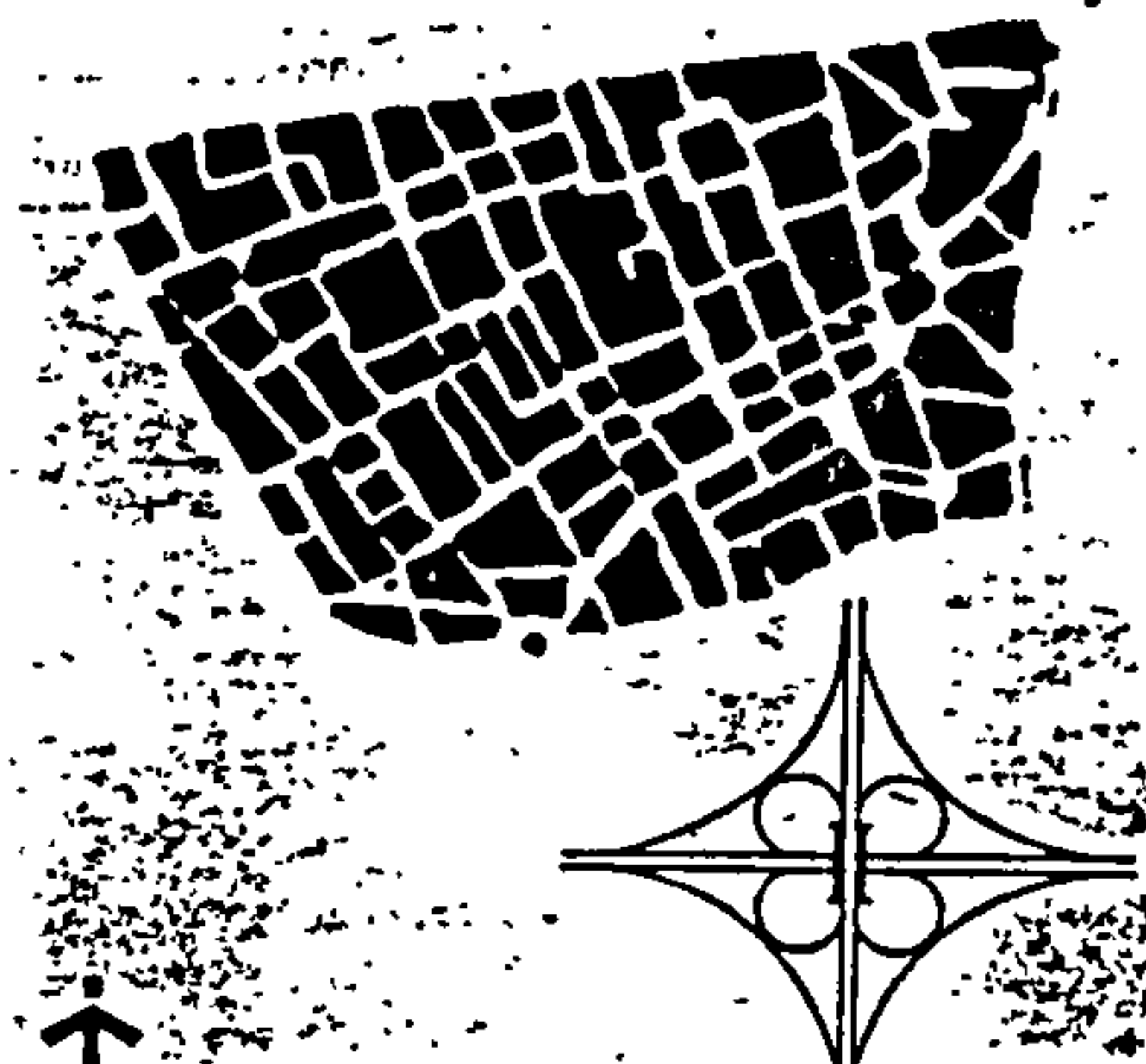


Fig.3-12, Traffic demands have dominated the urban environment; a clover leaf intersection compared with an urban area (source: Antoniou,1991:14)

Hence, we must face the question: why is the motor vehicle taking over? The main reason for its popularity can be explained by its *mobility* and *accessibility*; its ability to provide a door-to-door service, i.e. its ability to reach every single door, either for the sake of convenience or to provide a necessary service. Hence, with the appreciation of its adverse effects on the environment explained below, it becomes vital to establish a balance between, on the one hand, the actual requirements of the motor car¹, i.e.:

- *accessability*, which implies the need for wider roads, straight patterns, smooth street finishing, etc., and
- *parking facilities*; with the increasing use of cars and the need (desire) for a door-to-door service, a mounting need for parking facilities has therefore been contributing to the problems of the built environment by demanding more street space and multi-stories car parks.

On the other hand, the impacts on the environment; among others Foster (1974:166) lists the environmental effects of urban transport:

- 1- *Noise*; has been identified as the predominant source of nuisance in urban areas (Ward,1968:60); this in turn leads to the introduction of a continuous series of new requirements in buildings such as acoustic tiles or double-glazed windows. The latter, in a hot climate, will lead to the fitting of an air-conditioner (fig.3-13) and so on. In the 1980s the Tramway authority in Alexandria has replaced the timber sleepers with concrete; the increase of noise level as a result has been very significant; a recent study (Alim & Zaki, 1993) has proved that this has negatively affected people living nearby.
- 2- *Air pollution* is a serious problem which involves a complexity of issues: various pollutants from many sources with a variety of impacts. Among others, the motor car represents a major source of pollution: NO_x, CO₂, CO, etc.. The cost of pollution is substantial; medical impacts which in turn

¹ Most proposals for conservation tend to overlook these needs by suggesting pedestrian areas; not addressing these needs, which in turn results in other planning problems, e.g the need for large parking facilities close to the restricted area.

have adverse effects on the welfare of the society in general, as well as its effects on paint work, stonework, etc. Cairo has proved to have very high levels of pollutants as a result of the immense emissions from the motor car.

- 3- *Visual intrusion*; the existence of the motor car, whether parking or moving, has altered the visual appeal previously experienced in these streets, either because of the new scale imposed by the car, the fear of accident, the physical deterioration of the surroundings by means of pollution or by the *improvements* required for the motor car (widening, cuttings,..etc.).
- 4- *Neighbourhood severance*; with main streets, on the other hand, usually turned into large roads with heavy traffic, public transport and major through-traffic routes,¹ neighbourhoods, as a result, have been seriously injured. Isolated islands have been formed thus leading to social disintegration, more accidents and most important, the increase in land values, and consequently the increase in commercial pressures for *development* in the area. In addition, privacy, previously experienced in neighbourhoods, have been invaded by drivers and through-traffic. Also we may note that measures taken for noise reduction imply a decrease in the social unity among the neighbourhood.



Fig.3-13, Right, Windows are closed to avoid noise and pollution, and air-conditioners have been fitted. Left, El-Moaz street; the conflict between the motor car and the capacity of the street.

¹ About 25 per cent of Greater Cairo's total urbanised area is road space, (Cook,1984:153)



Fig.3-14, Right, Al-Azhar street and bridge in Cairo; a typical example of planning approaches towards traffic and transportation problems; the area has been completely divided by this body of traffic which is also resulting in pollution, noise. Left, Al-Nasr street; a project (explained later), where a community has been sacrificed to accommodate the motor car.

Thus, to deal with the town traffic it becomes necessary to bear in mind these twin objectives: maintaining efficient performance of the vehicle and better environmental conditions. The following aspects have therefore to be considered;

- 1- Location of main activities and their relation to the rest of the city; traffic patterns usually illustrate the pattern of activities in town; attraction points inside the area will lead to the increase of vehicles in the area with an increase in parking demands, while attraction points on either side of the area will result, increase the through traffic and the demand for larger thoroughfares.
- 2- *Public transport*: on the one hand, public transport has the advantage of reducing the number of motor vehicles and consequently all the side effects, pollution, noise, congestion,..etc. And on the other hand, it can be a great source of disturbance and nuisance, e.g. the big double-decker buses in the small and narrow streets of British historic towns, or the main bus (or tram) terminus in Cairo (and in many important cities throughout all the world).

- 3- *Different types of movements:* main traffic movements are to be identified. - Through traffic; the *extraneous* traffic (Ward,1968:50) which has no need to be in the area at all.
- *Residential traffic;* not excluding the residents from the area, they have to be given priorities for parking and access.
 - *Servicing traffic;* access has to be granted for service traffic.
 - *Visitors;* historic areas, as indicated earlier, have a great potential as attraction points.
- 4- *Environmental capacity;* two stages for capacity limits are to be considered, sheer capacity and environmental capacity (Ward,1968:44). The former refers to the maximum amount of traffic that can physically function in streets, regardless of the nuisance to the residents in the streets, noise, fumes,..etc. The latter refers to the amount of traffic which maintains the security of the environment of the street. In historic towns, this notion of limited capacity becomes a difficult challenge, where the physical fabric is inviolable and where the pattern reflects cultural and social values whose preservation is desirable. The acceptable levels of traffic in such context are those enabling visitors and residents alike to live, walk and, most important, to enjoy the qualities of the area.
- 5- *Parking policies;* as we mentioned above, traffic limitations represent a desirable practice in historic cores (e.g. Fez, York, Munich, etc..). It therefore becomes a necessity to provide adequate parking facilities to accommodate vehicles in restricted areas. This, however, can introduce structures of an undesirable scale and appearance.
- 6- *Speed of traffic;* another aspect which influences the vehicle's efficiency. In a city built in a traditional pattern speed limitations are the least measure for traffic restrictions. But this always raises the threat of the opening and widening of streets in order to accommodate higher speeds and get the most of the vehicular efficiency.

3.4.3. Interested parties:

Professional expertise

We have always to keep in mind that it is a professional task and thus, there has to be a place for professional expertise; three main aspects therefore have to be recognised;

- The need for accurate predictive tools; "that the outcome will actually be what we tell the residents"
- The need for constructive, creative critique which is very important, especially at the evaluation stage.
- The need for good management to deal with the complexity of influences and considerations involved in these projects.

Foreign expertise is undoubtedly valuable in terms of technical consultancy, while local professionals with their knowledge of the language, the traditions and the cultural backgrounds, are certainly most capable of understanding the needs, defining the approach and evaluating the results. The role of foreign expertise has therefore to be defined as,

"However successful, conservation will not be by foreign teams adopting monuments, but by sustained co-ordinated. Community involvement will prove a vital key in establishing the environment for sustainable conservation" (Fowler,1993:152)

In other words, this has to be considered mainly as a form of community participation, where local professionals, being available resources, are utilised to shape their own environment.

Education

As we have illustrated earlier, community participation has an active role to play in shaping the urban environment, education becomes, therefore, an important element in exploiting and shaping this potential as well as managing its output. An effective means to achieve this is by giving the example. This was

illustrated, with some success, in the Cultural park for children project in AlSayedah Zeinab in Cairo¹, completed in 1990. This project has been represented as a perfect example of an architect's "political rather than aesthetic innovation" (Steele,1992:30); it is not the architecture of the project that we want to highlight, it is the process of carrying it out and the community's response. The project was first blocked by political interests, till the architect has realized that

"... the people in the community, the real supporters of the project, .. they were cut off the press and from the power structure.... We realized that we would have to mobilize the community to get the project moving, not just to defend the project but to build it." (Abdelhalim quoted by Steele,1992:30)

To achieve this, he constructed a full scale model of the scheme and took the opportunity of the corner-stone laying ceremony rehearsals to involve the children,

" When they could not, we changed the scheme's arrangement. This happened several times and each time the scheme was improved. Instead of the original plan disappearing from sight, it continued to evolve in front of me. ... The action of the community added a sense of wholeness that would otherwise not have been there." (Abdelhalim quoted by Steele,1992:32)

Within this process

"the community was galvanised into action, and their participation in the realization of the park was assured" (Steele,1992:32)

Moreover, the park has created a community centre where different types of activities take place: education (painting, computer, reading, ..etc.), entertainment (shows and movies) as well as light sports. It has also reflected its physical existence, where surrounding residents started painting their houses and incorporating some of the architectural elements of the project into their houses.

¹ Designed by A.I.Abdelhalim, it has been awarded the 1992 Aga Khan Award for Architecture for enhancing urban environments

"It has generated a renewed sense of community by extending its presence into the surrounding streets. The residents take pride in their neighbourhood as well as their park." (from the Jury report, 1992)

And it did to some extent give

".. proof that the process of decay, which seems endemic to many of the older sections of Cairo, can be reversed" (Steele,1992:32)

However, the reason for illustrating this project, as mentioned before, is not for its architectural qualities, rather, because it highlights the significant role of the people as well as the means to guide and educate the community.



Fig.3-15, The cultural park for children in Cairo: the effect on the surroundings.

3.5. Conclusions:

From the above we may conclude the following lessons:

- Heritage is not a heavy burden, rather it is a resource of the urban environment and if properly employed, it is an opportunity not only for restoring cultural values but for economic regeneration as well.
- Conservation is the cost-effective use of available resources; the utilisation of heritage to meet our needs.
- There is a dichotomy between actual needs and desires. The latter are based mainly on imported models for development and living standards while the former are dependent on the local pattern of life: environment, traditions, religion, culture and, more important, the availability of local resources. Local awareness and education are therefore vital aspects in the process.
- The potential of active (as opposed to passive) community participation has to be fully recognised and exploited.
- The significance of community participation, *shoura*, has to have its role in determining the *utility* of heritage; is it of any value? is this value enough to justify the costs of conservation?
- Larger shares for government can considerably undermine the success of such projects; community resources have therefore to be utilised by giving way to self help initiatives.
- The ambitions for radical achievements must be tempered by:
 - the realisation of practicality as opposed to idealism.
 - the capacity to absorb varying degrees of change.
 - the risk involved in failure;

" The worst possible course is to launch a reform and the rescind in the face of bureaucratic opposition or popular rejection" (Serageldin,M.1984:128)
- Progressive moderately ambitious achievements, implemented with persistence and endurance, result in positive, though less spectacular achievements.
- The political will and acceptability: an important aspect for such interventions; means for generating this will at local, regional and national

levels have therefore to be carefully considered; economic, social, administrative, ..etc.

- The positive aspects of existing problems; most of those areas pose a number of serious problems; their positive aspects can be utilised to ensure the community's association in the project¹.

From the above lessons we may conclude that the process of 'conservation development' is a process of decision making, which can be formulated as follows (fig.3-16):

A Methodological approach:

I- Policy making

- i- The Initiative; according to their various motives, three parties are involved: the community (the user), the developer (e.g. the owner) and the Institutional framework; these motives varies according to their own needs.
- ii- Criteria of values and objectives; what is needed? and how to achieve it?

II-Management and feasibility analysis:

- i- A comprehensive understanding of the existing context;
 - its historical development and evolution in order to understand the formation process; the reasons for its present situation.
 - its built environment; the urban morphology, buildings' conditions
 - and its socio-economic structure;
- ii- Identification of opportunities and constraints; *priorities and needs*: the contentment of local priorities and needs, as well as the relation to national and city goals, objectives and priorities, *physical constraints*: the capacity of the site, *regulatory constraints*: the concordance with

¹ For example, illegal occupants can be forced to share in the project through *self help* in a way that occupants' tenure can be legislated. (Ibrahim,1986:17)

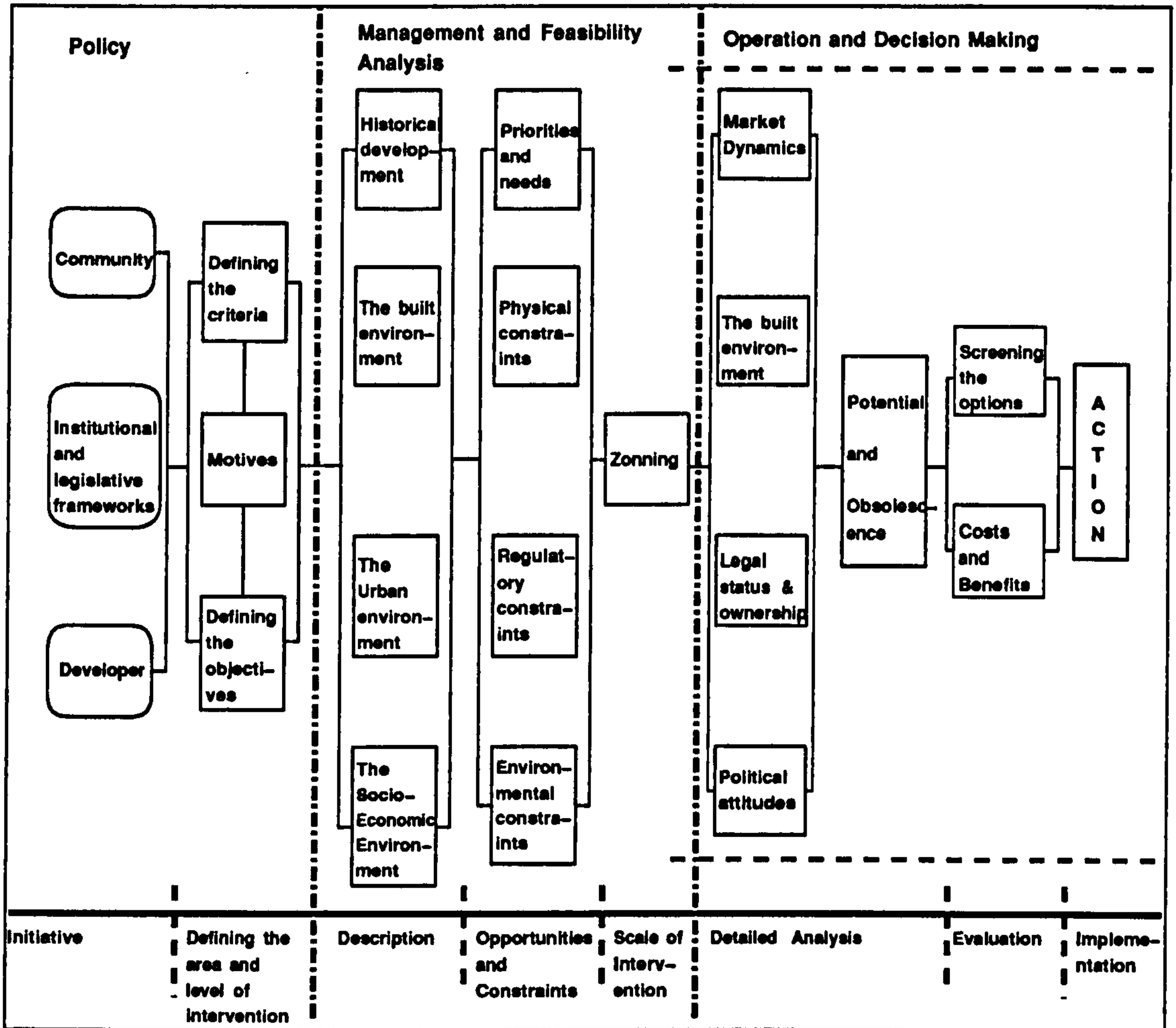


Fig.3-16, A methodological approach

existing legislations and *environmental constraints* such as air pollution and underground water.

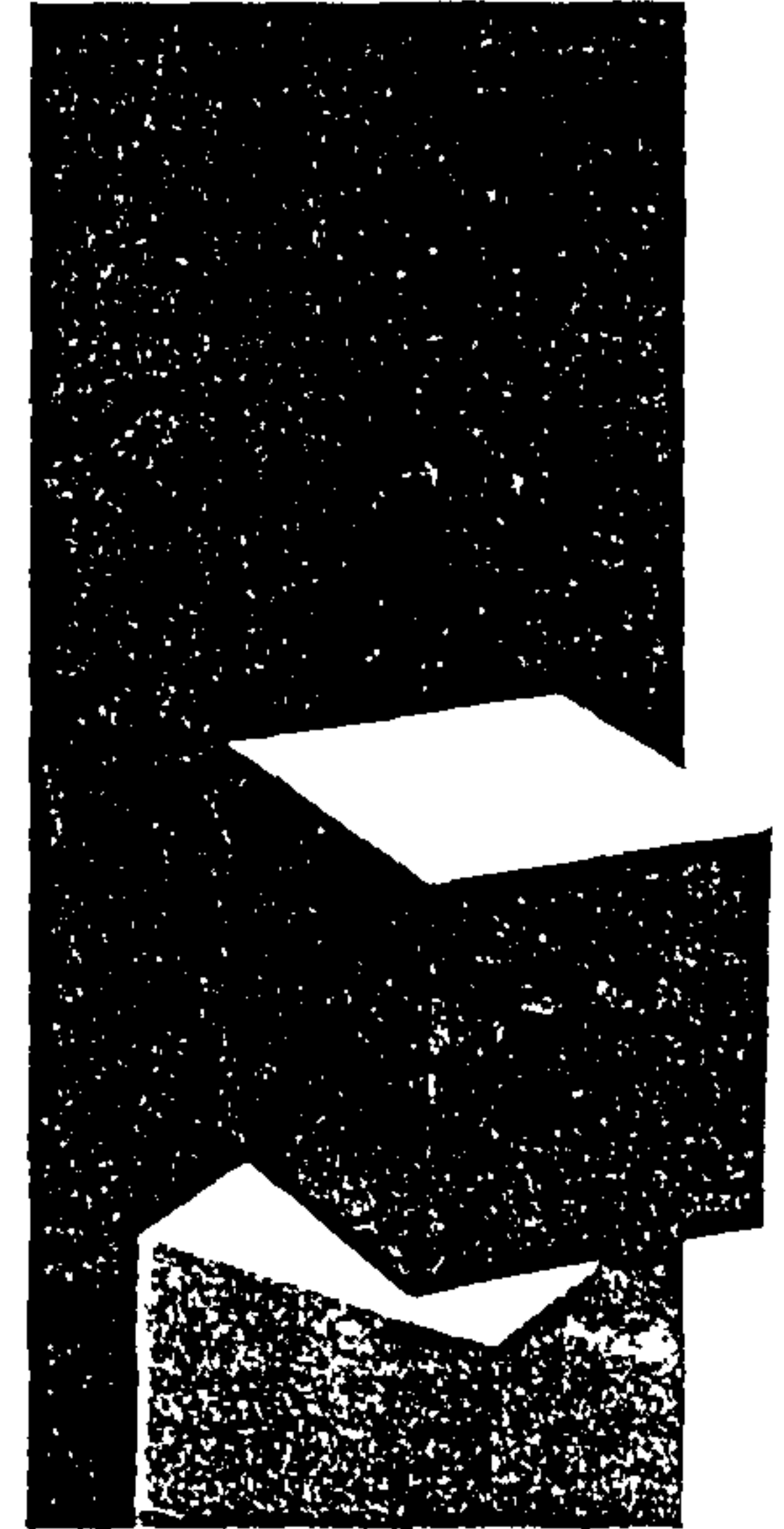
- iii- Defining the scale of intervention; does the scale of the area allow for a practical handling of the problems? is there a need for sub-areas? what are the criteria for zoning? which are the potential zones, and why?

III- Operation and Decision Making

- i- Overview analysis; to examine the development feasibility in the perspective of market dynamics, Physical assets and constraints: the existing stock; its usability and degree of obsolescence.

- ii- Evaluation and Decision making: final weighing of options and alternatives;
 - Screening the options; a screening of alternative options; the costs and benefits involved, both tangible and intangible.
 - Impact assessment; an evaluation for positive and negative impacts on the different parties involved: socially, culturally and economically.

CHAPTER FOUR



FIELD WORK METHODOLOGY

FIELD WORK METHODOLOGY

4.1. Introduction:

"This rapidly changing environment of public services also requires information systems that are flexible enough to provide critical information to the policy-makers as their needs change almost daily."
(Huxhold,1991:5)

In the previous chapter we concluded that the process of urban management under whatever title: development, conservation,..etc. is a planning process which involves a sequence of decision making through the various levels of interest: policy making, planning decisions, management and administration and implementation. The efficiency of this process, as Huxhold has pointed out in his statement, is largely dependent on the availability, accuracy and flexibility of the information systems supporting this procedure. Thus, it is essentially important to identify the methodological framework of this cycle;

".. it is a matter of necessity in a society that literally bombards one with multiple and often conflicting scientific ideas, claims, reports and counter reports. Increasingly to be a competent and fully functioning member of society, one must come to understand basic scientific processes, learn how to discern false assertions from questionable data, and develop the ability to conclude when something is truly significant and meaningful as opposed to merely having the pretence of importance." (Adams & Schvaneveldt,1985:vii)

Hence, the aim of this chapter is not only to describe the process of data gathering but to set up the basis for an efficient information system as part of the main objective of this study. This chapter is therefore made up of two main sections:

First: the experience of this survey; defining its objectives; its difficulties; the various techniques and instruments used to collect data for this study are

explained. Second: the means for storing, analysing and presenting this data, not only for the purpose of this research but to emphasize the importance of such measures for the implementation in real life policies and project management.

4.2. Defining the objectives and needs:

As has been agreed, we are dealing with a process of decision making which in turn needs the collection of data. An essential prerequisite is to identify the objectives of the field work: the nature of data needed; what type of data, how much data, and in what form is the data needed? As we are aiming at a cost-effective utilisation of our resources, the objectives of the fieldwork can be basically summarised as the identification of three tactical components: the available supply of resources, the potential demand for these resources and the alternative utilisation options for future development.

- 1- What is the available supply? a background knowledge of the physical characteristics of the study area has been necessary:
 - Buildings: first, the nature of existing buildings, their current uses, their present condition; second, their potential for development, can they maintain their current function, do they need new functions, can they be re-used, what are the criteria of their spaces, what does it allow for and is a certain option economically viable?
 - The urban fabric: what are the qualities of the urban environment, how compatible are these qualities with today's daily needs, what are the potentials and constraints for development, what are the patterns of potential and obsolescence, of accessibility?

- 2- What is the potential demand? A better understanding of the community and its demands has to be achieved:
 - A sociological profile; population trends; their priorities and needs, socio-economic environment, culture and their attitudes towards their environment as well as their preferences according the future of the area.
 - What is the investment climate, and market demands of the area, what

are they offering or depriving the development of the area, and what are the potentials for economic regeneration? a study of the economic activities has therefore been essential.

- 3- What are the available options? there have been always ready answers for all these issues:
 - What are the existing development plans, alternative policies and courses of action? and what are the positive/negative sides of each?
 - What is the political attitude towards these plans, and how does it respond to the public attitudes?

4.3. The collection of data:

Having defined the objectives of the field work, it is now the question of *Getting the relevant data*: "The most cost effective data collection is to collect only the data you need" (Aranoff,1985:35). Thus, we may distinguish two main types of data:

- 1- *Quantitative*: data that can be expressed in numerical form and which include:
 - **Census statistics**: the last two census (1976 & 1986) were consulted, to investigate population trends and statistics as well as some characteristics of the built environment such as tenureship, densities, conditions. However, they were handled cautiously as they proved, as illustrated later, to be inadequate and need to be thoroughly checked before being used.
 - **Commercial activities**: their nature and spatial requirements; theoretically this information can be obtained from both the Municipality and the Labour office, but it has been proved that the information found there is far from being realistic or updated. The field survey coupled with the data obtained from the records of the Egyptian Chamber of Commerce have proved to provide the most comprehensive data of the commercial pattern. (They were largely used in chapter 7).
- 2- *Qualitative*: this includes descriptions of the built environment, records of

social customs and attitudes towards the area: its traditions, development and future prospects, as well as accounts of the socio-economic pattern of the area.

- Opinion survey in order to investigate people's attitudes and satisfaction towards their surrounding environment, dwellings, services and needs.
- Observations were made as to the physical condition of the built environment, the community's attitudes towards shaping their built environment and their social customs and traditions.

In order to determine the actual methods for collecting the data it becomes essential to identify its availability and the practicality of actually collecting it. In Alexandria there is a general lack in the availability of published information and documentation. What is available is collected with great difficulty and is very often out of date and inaccurate. This has meant that the author has had to rely mainly on primary data sources which he had to produce himself. This task has involved many difficulties and thus, much time and effort was spent.

- 1- Since the latest detailed survey map is dated 1935 much time and effort has been necessary to produce an updated map for the area.
- 2- There are no available drawings of any of the historical buildings in the area (not even those registered in the E.A.O.), so the author had to make measured drawings himself with the help of some colleagues, e.g. Mosque and Wekalat AlShourbagi, Hallabu house and Darwish Shop. Only a few of the Waqf buildings have been recorded in the Awqaf archives. But there is no index for them and the author had to search the whole archive to find them.
- 3- To find out about the commercial activities in the study area the author consulted both the Municipality and the Labour Office only to find two completely different sets of data. So he had to consult the archives of the Egyptian Chamber of Commerce and go through the individual files for the different types of activity, in order to get an updated view of the commercial pattern of the area. Also to find the pattern of Awqaf

properties in the area the author had to go through the archives, locating the relevant addresses on the map, as there was no classified indexed records.

- 4- In order to conduct any of these surveys, official approvals from the various authorities involved (e.g. Egyptian Antiquities Organisation, AlAwqaf, the Governorate, the Police,...etc.) had to be given before any survey could be conducted. These have involved complex stages of bureaucracy and paper work among the various officials and in many cases the author had to go to the main administration in Cairo for approvals.
- 5- Being a closed society, it was undesirable (and sometimes suspicious) for the author to be seen walking through the small and 'private' streets observing and taking photographs. Various questions were asked by the people; what are these photos for? what are you doing here? are you looking for someone?.. etc. And there were many cases when the author was not allowed to conduct his survey before he had proved his intentions by papers and documents.
- 6- It was even more difficult to enter people's houses to conduct questionnaires and interviews. Despite their hospitality and social generosity, a stranger asking questions was not always welcome, especially when the man of the house was absent. Then it was impossible to carry out the interview, so most of these surveys had to be made in the afternoon when the head of the household was at home.

4.3.1. Methods and tools for investigation

In this section we shall examine the methods eventually selected for the collection of information. These of course depend on the nature of data required, its degree of accuracy and sophistication, and the availability of resources to the author (money, time and manpower) (Coneyrs & Hills, 1984:88-103). Three main courses were therefore followed for data gathering:

First, the Documentary survey:

The few published and unpublished studies and reports that were available were consulted to obtain the necessary information related to the subject and area of concern. This information covered the following:

1. The historical setting of the area within the city of Alexandria as well as its own historic evolution.
2. Details of the socio-economic pattern; population statistics and demographic analysis, nature of activities, employment and ownership patterns which rely largely on the official national census of 1986, as well as the survey conducted through the Egyptian Chamber of Commerce mentioned earlier.
3. Details of existing planning regulations and future Master Plan proposals.
4. The Port of Alexandria; its present relation to the area, its impact on the socio-economic pattern of the area and the future expectations for its activity.
5. Details of the current legislative system; existing legislations and their different sources.
6. Social and anthropological features of the area.

This documentary information was collected from two principle sources. The first was the official source, e.g.:

- *Al-Awqaf Administration*: in order to identify the pattern of Awqaf properties in the area as well as for a few drawings for some of these properties, e.g. Wekalet Khatoun.
- *Al-Gommrok District Authority*: an attempt was made to get necessary information about the property and commercial patterns of the area, which proved to be unreliable and the author had to find other ways as described earlier.
- *Al-Gommrok Police Station*: a prerequisite for any research has been to get permission from the police.
- *Alexandria Port Authorities*: for being a major economic activity of the

inhabitants, they were consulted for employment patterns and trends. But a considerable inconsistency was found among its various departments and sub-authorities.

- *Alexandria Governorate and the 2005 Planning Commission*: they were consulted for the statistics and studies done for the 2005 Comprehensive Master Plan but more important were the proposed development schemes for the area.

- *Central Agency for Mobilisation and Statistics (CAPMS)*: the statistics from the last two National Census (1976 & 1986) were obtained, though as illustrated later, they proved to be in need of verifications.

- *Egyptian Antiquities Organisation (EAO)*: much time and effort were spent to get access to their files, including their main archives in Cairo, for drawings or documents of the indexed buildings. But unfortunately, they didn't have any. So the author, after getting their permission, had to do some of these measured drawings himself.

- *Egyptian Chamber of Commerce*: their records were consulted in order to identify the pattern of commercial activities.

- *The Labour Office*: the office was consulted for the pattern of commercial activities, and comparing it with field findings, it proved not to be up-to-date and the author had to find other source as explained above.

The second source was published and unpublished academic works.

Second, Observational survey:

Photographs, sketches and measured drawings were the principle method for recording information in order to provide a clear understanding of the existing physical environment of the area. The observational survey has therefore covered the following:

- 1- The recording of different examples of buildings; their features, details and present condition, (for example: see Ch.8 and the documentry appendices).
- 2- The present condition of the built environment; buildings, streets and

- alleys, landscape and roofscape, (for example: see figures in Chs.6 and 7)
- 3- The qualities of road network, street hierarchy, public spaces and environmental conditions.
 - 4- Physical opportunities and constraints for development; availability of land, market demand, potential for development as well as the physical condition of buildings.

Third, Opinion survey:

The main objective of this survey has been to examine people's attitudes and satisfaction regarding their surrounding environment, dwellings and their priorities and needs (discussed in Chapters 6 & 7). It has therefore involved various sections of the community: ordinary people, local leaders and merchants as well as officials. Two methods were employed for this survey: informal interviews and structured questionnaires as they are,

" .. the two most common modes of data collection in all of the many branches of social-behavioral science" (Adams & Schvaneveldt, 1985:200).

Attitudes, satisfaction and feelings are very critical parameters to measure, especially in a large population and where such surveys are not widely accepted by the public. These tools have therefore to be adapted to the context of our research as illustrated below.

First, the structured Questionnaire: the objective of this questionnaire has been to examine people's attitude towards their surrounding environment and their regard to its historical, social and cultural values. The major advantage of using this tool is its suitability for statistical analysis. Hence, the questionnaire form (see Appendix S-1) was divided into four main sections: descriptive and biographical data; occupant's attitude and satisfaction towards their dwellings; attitude and satisfaction towards his district and lastly their attitude towards their historical surroundings.

The questions were designed as closed-choice questions, i.e. a number of

alternative answers were provided from which respondents were to select one; a possible disadvantage of closed questions is that it might give an insufficient range of alternatives to choose from. To try to avoid this, a pilot test of the form was carried out of 12 respondents and the form was amended accordingly to ensure that the range of alternatives was sufficient, with the ability of different items to discriminate. An example of these modifications was the addition of the item *"lack of amenities"* in the question *"I think that the main problem in this district is;"* Another important modification was the sequence of questions asked; when questions about income and personal data were asked first, the respondent became reluctant to cooperate because of a feeling of insecurity; the sequence was therefore reversed and personal data were asked at the end of the interview. On the other hand, the advantages of closed questions, as described by De Vaus (1990:86), can be seen as follows:

- 1- They are relatively quick to answer and therefore more likely to be answered,
- 2- as coding and classification is essential for analysis, closed questions tend to provide more accuracy in their analysis, as they allow the respondents to classify themselves, thus helping to avoid coders' misclassification, and
- 3- they do not discriminate against the less talkative and inarticulate respondents.

Administering the questionnaire: the technique used for conducting this questionnaire can be summarised as follows:

- 1- Special permission was obtained from the police to be allowed to conduct the questionnaire.
- 2- Due to the nature of questions, it had to be done completely by the author, in order to make sure that the respondents understood the exact meaning of the questions in their own language (style).
- 3- Following the sampling techniques described below, respondents were approached.
- 4- A brief introduction was made to each respondent explaining the identity of the author (official documents were needed in some cases), the study's

purpose, usefulness and assuring the confidentiality of the answers.

5- Questions were then asked and the answers were marked accordingly.

Sampling:

"One way of finding out about a group is to collect information from everyone in the group. For large groups of people this is prohibitively expensive and impractical. The alternative is to collect information from only some people in the group from which they are drawn. This procedure is much cheaper, faster and easier than surveying all members of the group." (De Vaus,1990:60)

In principle, sampling techniques aim at achieving the best desirable representation of the population, i.e. to have the characteristics related to the focus of the study representing its proportions in the population. To achieve this, sampling techniques vary according to the nature of the survey; they are often divided into two main categories: probability and non-probability samples. This subject is, however, covered in a range of literature from which De Vaus (1990), Adams G.& Schvaneveldt (1985) and Nachimas (1992) were found to be most appropriate and useful to the issues of social research and sampling techniques for this study. However, it has to be noted that although these techniques might be fully applicable in many areas, especially in the 'developed' world, this is not the case in most developing countries (see *Data Collection in Developing Countries*, by Casley J.& Lury, *An introduction to Development Planning in the Third World*, by Conyers D.& Hills and *Survey Research in Africa* ed. by O'Barr W. *et al.*). Some of these problems were clearly described by Knauss while doing a survey in Kenya:

"First having resigned myself to giving up any hope of constructing a random sample, I utilized a post facto quota sample. Second I altered my plans for using a written questionnaire ... Later, I discovered that such an expedient resulted in interviews which were, paradoxically, more relaxed.." (Knauss,1973:88)

In our case, and due to the size of the population and the scale of the investigated area, a probability sampling technique which provides best possible representation was required; the use of random sampling procedures has not

been possible because of the absence of any reliable means to enumerate the population. Aids used to identify members of populations like voting lists, city directories,..etc are not generally available and, for political reasons, may well be seriously distorted. A *stratified quota sampling technique* was therefore adopted¹; the area was divided (stratified) into 15 sub-areas² (fig.4-1) in order to achieve the full representation of the whole area. Because of the element of *chance* involved in probability sampling, full representation of other parameters such as age, sex and academic status will not always occur; to avoid this, relevant stratifying variable(s)³ have to be identified forming a *quota* sample which is a modified version of stratified sampling (Adams & Schvaneveldt,1985:183). Hence, the selection procedure was carried as follows:

- 1- By defining a cluster on the map.
- 2- Various settings were randomly chosen, i.e. houses, blocks of flats, shops or cafes.
- 3- Respondents from these different settings were randomly selected.

The size of the sample: How large should a sample be in order to represent the population? In answering this Adams and Schvaneveldt defined a variety of factors which determined the size of the sample: first, the homogeneity of the sample and its representation of the whole population:

"..the more homogenous the population under study, the smaller the sample needs to be to actually reflect the characteristics of that population,"(Adams & Schvaneveldt,1985:184)

Second, the method of data collection which in fact, reflects the issue of costs and availability of resources: whether the survey was conducted by the researcher alone (which, in our case, was very time consuming), using

1 Similar adaptations and techniques are fully described in O'Barr W.*et al.*, pp.97 - 134; Casley D.& Lury D., pp.52 - 61.

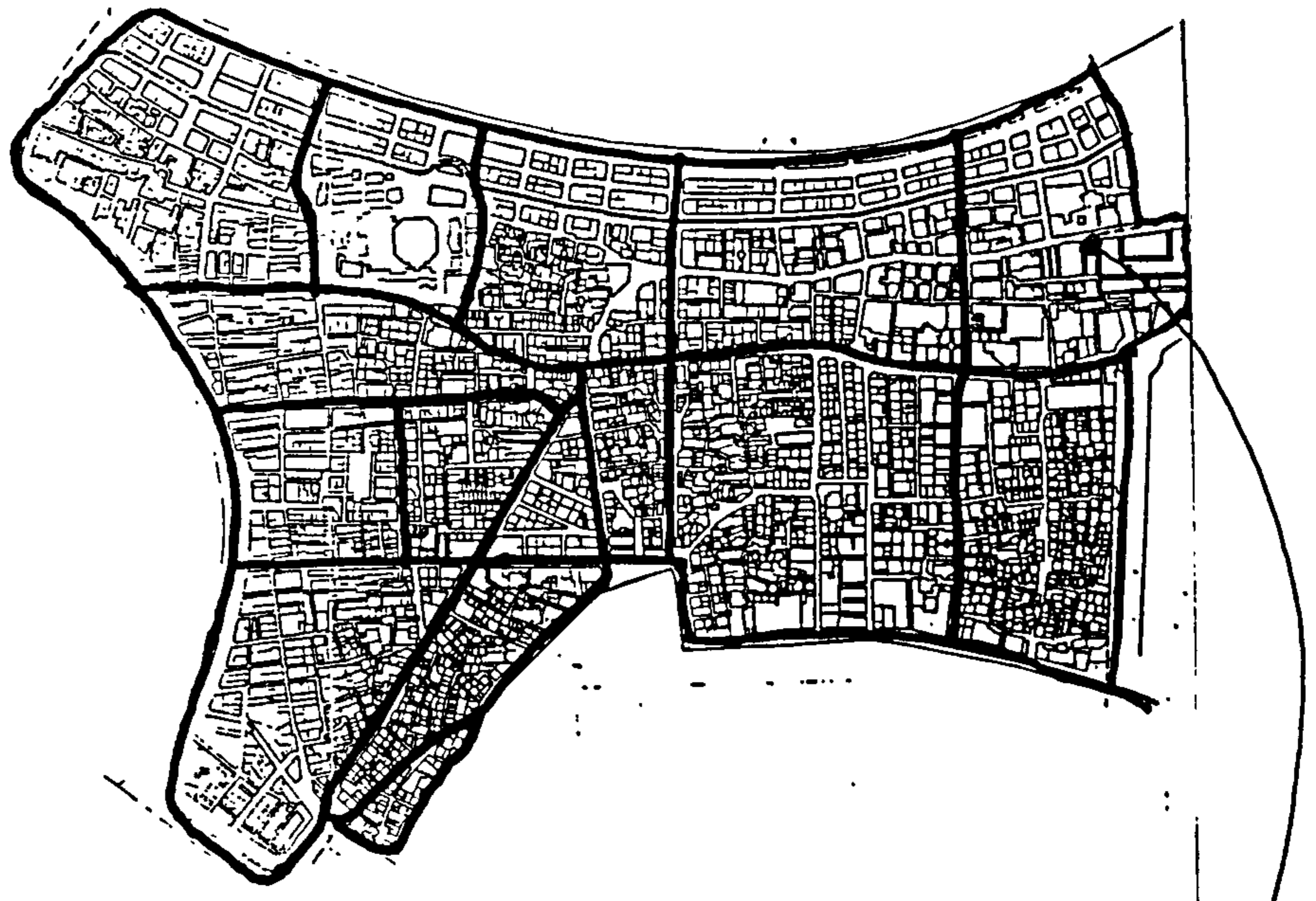
2 The criteria for this zoning is explained in Ch.7 as it has been the basis for choosing the demonstrative cluster

3 " A stratifying variable is the characteristic on which we want to ensure correct representation in the sample", (De Vaus 1990, p.65)

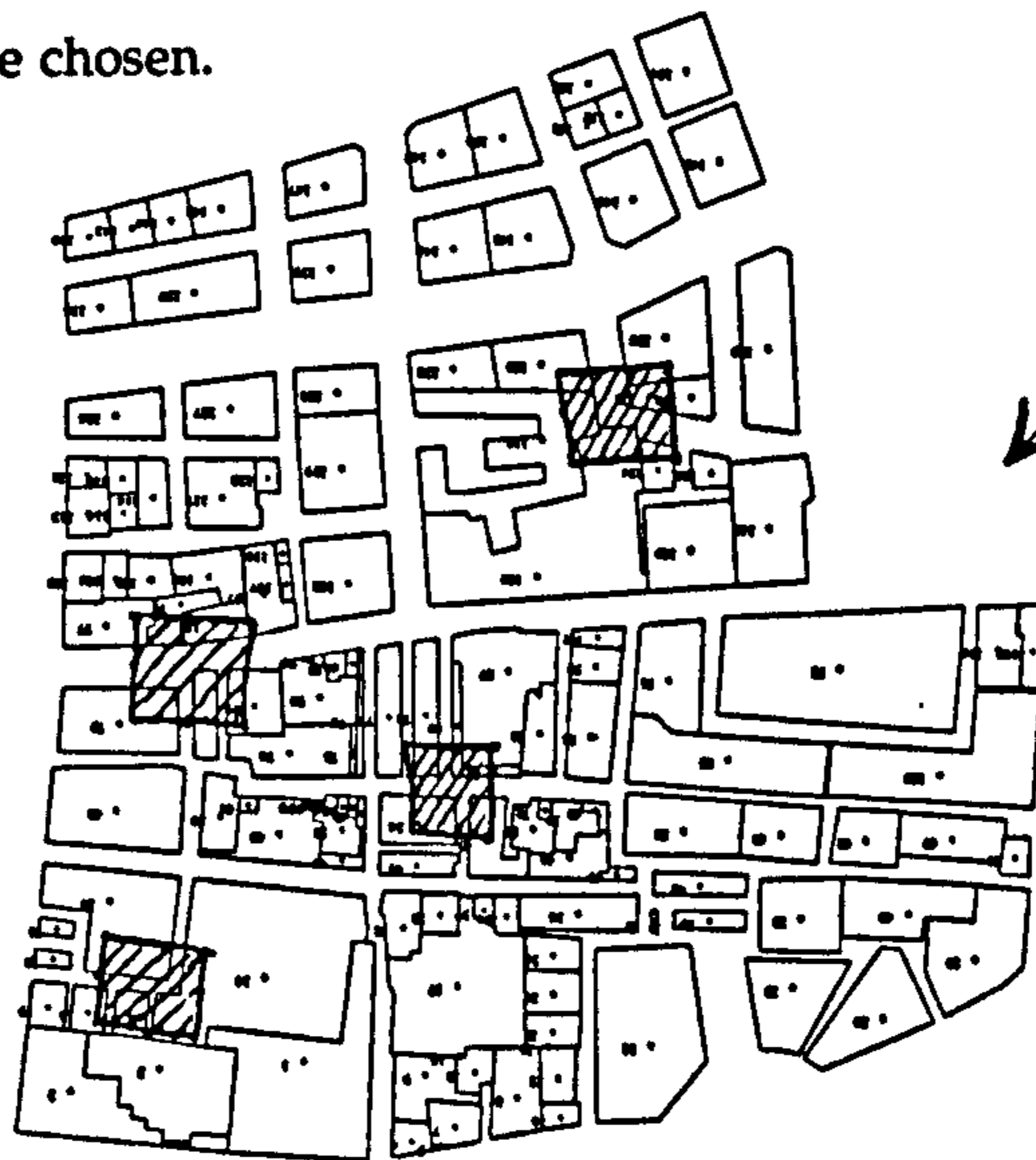
interviewers (which would involve higher costs) or by mail (which was out of the question in these circumstances). Taking these factors into consideration, a sample of 160 was found to satisfactorily represent the population. Comparing the attributes (age, sex and academic status) of both the sample and the population (fig.4-2), illustrates the representation of the sample.

Fig.4-1, The sampling technique adopted;

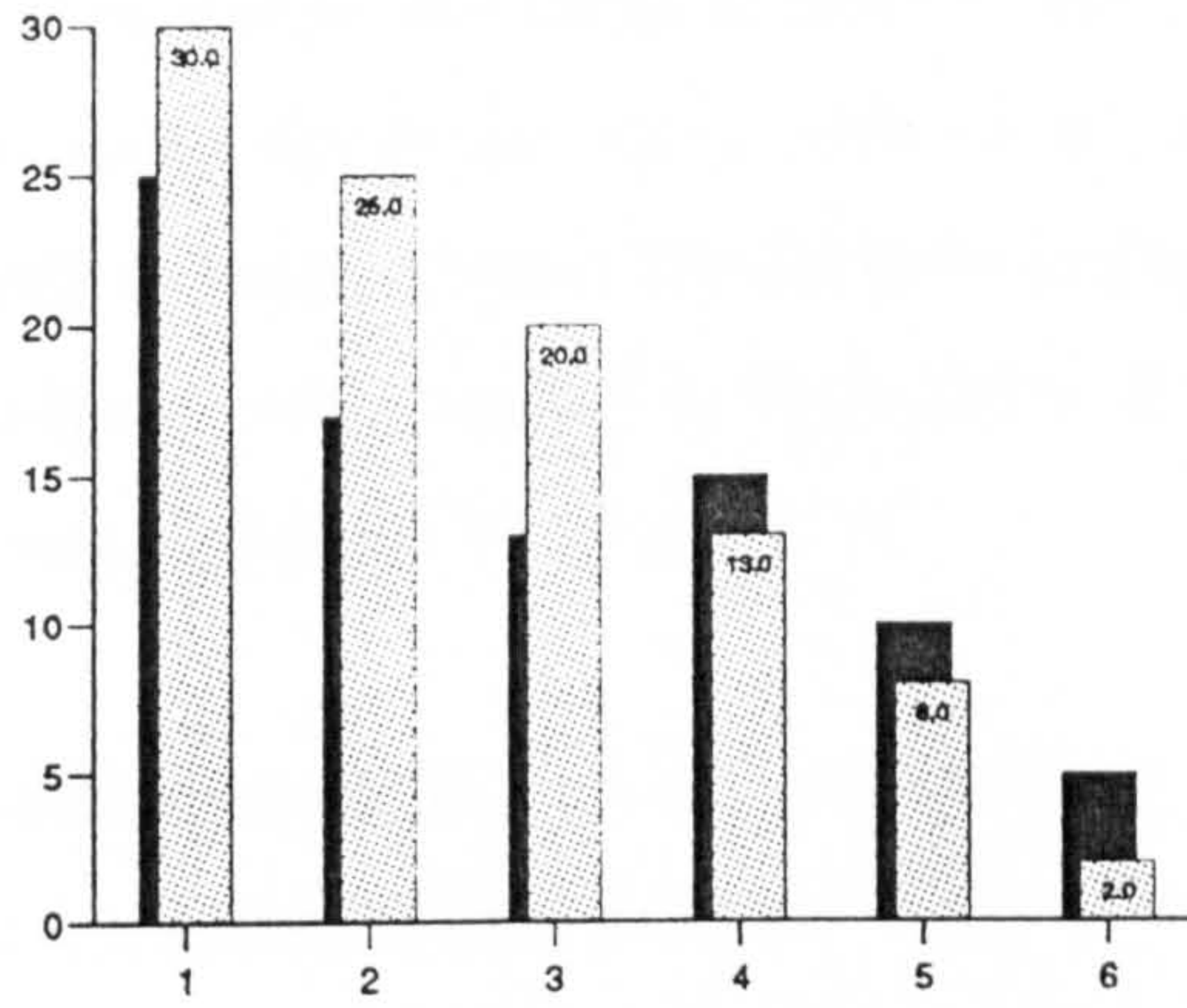
a- Zoning (see ch.7)



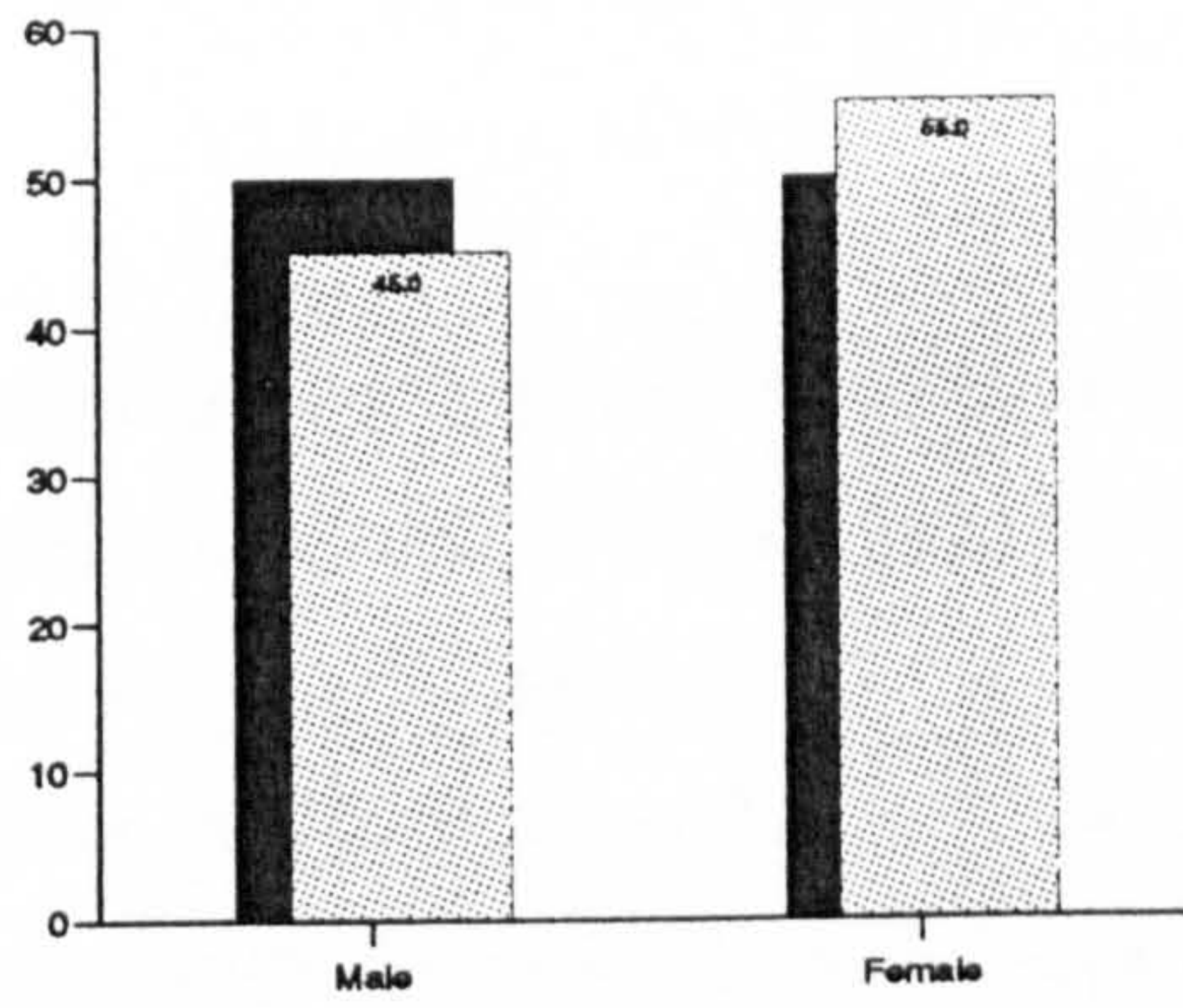
b- Random settings within each cluster are chosen.



c- Then respondents are randomly selected within the setting.



Age distribution



Sex distribution

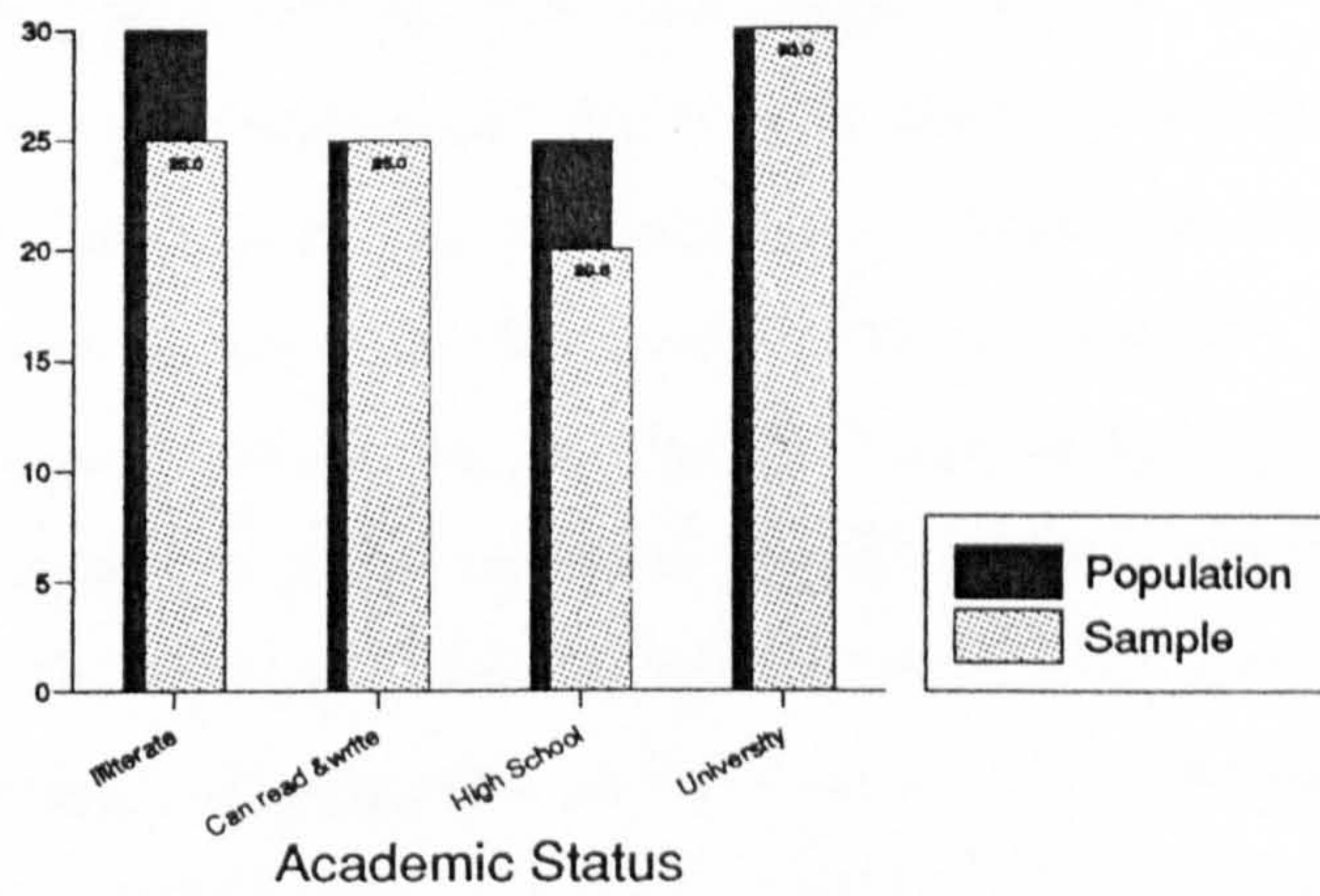


Fig.4-2, The sample's representation of the whole population; comparing the attributes of the population with those of the sample

Data processing: Using computer software for statistical analysis, namely SPSSX, (Spss Inc.,1983). The data has been screened for frequencies and descriptive statistics were obtained for each item, such as frequencies and percentages of occurrences, as well as some correlation factors and significance tests, (the results and statistical analysis are provided in Appendix (S-2) and the findings of these analyses are discussed (used) in Chapter 6.

Validation: A control sample of 30 subjects in al-Ramleh District, as a representative of a modern district (dates back to early 20C., started as suburb for the rich and became a fully inhabited district by the 1950s) was set up with the same questionnaire form in order to verify the results obtained from the original sample, i.e. to verify that the results of alGommrok are of special quality to the area.

Second, Interviews: a number of interviews were conducted with officials, community leaders as well as with ordinary people. Having experienced the constraints of the structured questionnaire illustrated above, interviews have proved to be more viable; the interviews provided, as described by Knauss (1973:83-99), a much more relaxed environment; the sight of papers of the structured questionnaire implied a certain degree of officiality, which made respondents very sensitive and sometimes reluctant to cooperate. While in open interviews they felt more secure, free and relaxed to talk. It was also possible to note that *Nondirective interviews*¹ were even more informative. These have provided a greater insight to the community; its ambitions and attitudes. The findings of this survey are to be discussed later in chapter 6 & 7. They were mainly conducted with merchants, within the same sampling frames described earlier, in their shops in order to avoid the formalities involved in entering peoples' houses. The theme of introduction has been often been to do with their daily life, e.g. the high life expense or the quality of his products, ...etc. In the process, the subject would then change, and eventually leading to our points of

¹ Non directive interviews do "... not purposefully guide the interview process with some goal in mind.." (Adams and Schvaneveldt,1985:218)

interest. For example, talking on the future of his business, the subject of AlNasr St. project was brought up, one merchant said;

" I am not against development, on the contrary, this is my area and I would appreciate any improvement; but this is street does not appeal to me as improvement or development; this is like killing someone to get rid of his cold,.., we form the pole of a number of specialised activities, and moving us the way they want means a real devastation to many businesses, because part of our power is the location which represents the tradition, history and reputation of that kind of business.. "

Another example was with a retired merchant sitting in one of the cafes, while his sons are running his business; he describes the social interaction and his relation with his neighbour;

" .. we are in fact as one family, if we are having a wedding, I don't have to invite them, they act as it is their party and will offer their apartment as an extension to ours in order for the party to take place, and vice versa .. if he (the man) is away for some business, then his family becomes my responsibility and vice versa; a relation which you cannot find in the houses of today; they hardly know each others name .."

An important aspect of this process is that the author, in order to achieve the desired relaxed environment, did not use any paper in front of the respondent; the main points were memorised and recorded directly after the interviews.

On the other hand, interviews with officials were not that informative. They often tended to be formal, press-like statements. Nevertheless, they did show, in some cases the official attitudes and perceptions, one official commented on the issue of AlNasr St. project,

" What history? we are only talking about one and two storeys shops with very narrow streets; some of these streets is only 2 meters wide!!"

4.4. The Analysis, Presentation and Management of Data

As indicated earlier, raw data have to undergo some form of transformation into useful and relevant information for the specific purpose.

"Data is of no value unless the right data can be at the right place at the right time." (Aronoff ,1989:36)

Three principles have to be considered; the nature (form) of data, the purpose

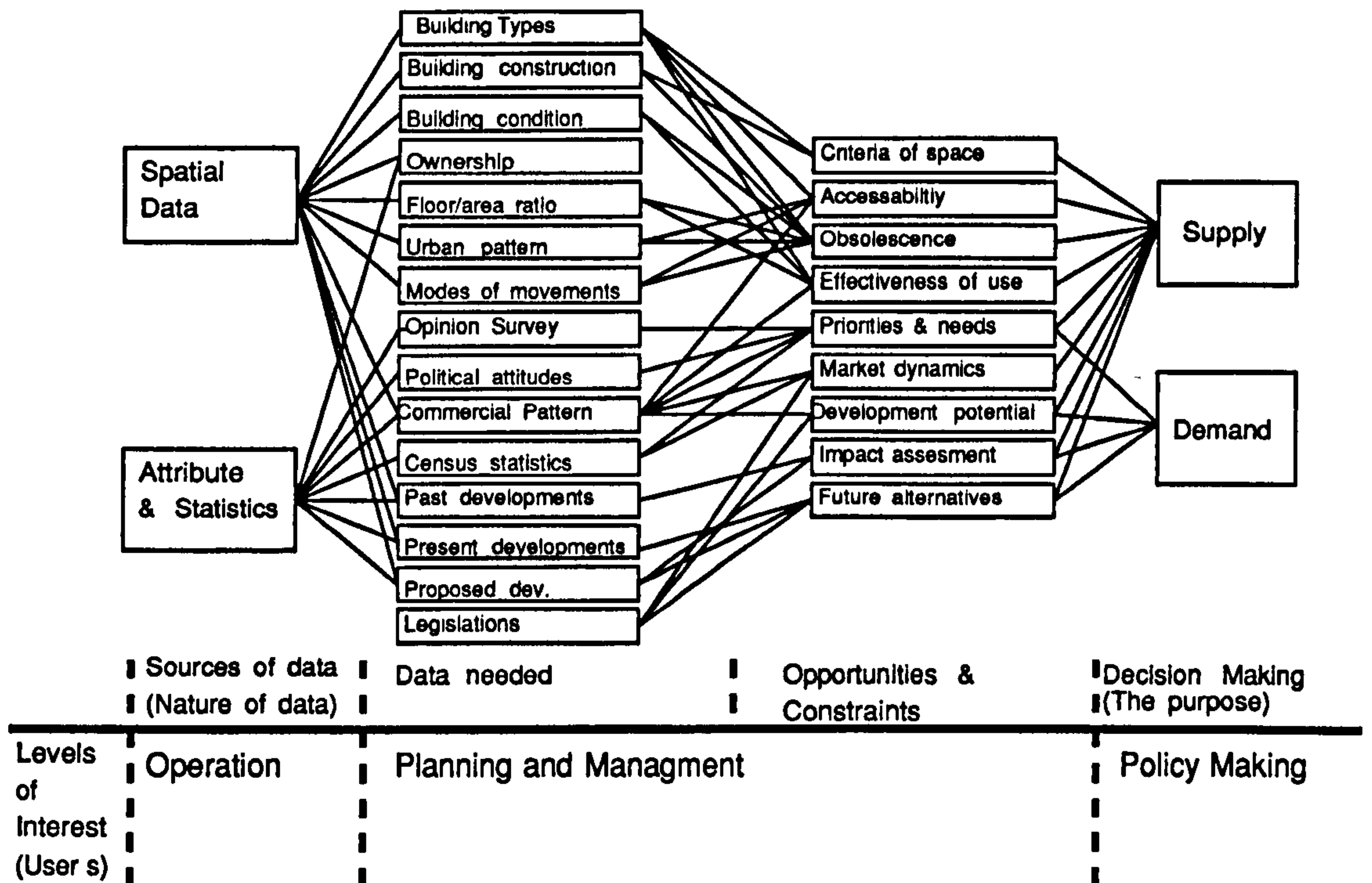


Fig.4-3, The various aspects of data and their interaction within the planning process.

for which the data is needed and the user of this data (fig.4-3):

- 1- The nature of the data; the data collected is of very diverse nature in both form and source as indicated earlier: spatial, maps, measured drawings, ..; statistical, census data, ... and observational.
- 2- The purpose for which the data is needed: A prerequisite is to identify why are this data needed and how is it going to be used? the answer to these is basically to identify the resources (supply), the needs (demand) and the alternative options (fig.4-4). For example, the data about a building will indicate the potential it has: its accessibility, its obsolescence and the efficiency of its space. In other words it would be telling that there is a supply of a building with X degree of accessibility, Y degree of Obsolescence, etc. And on the other hand, data about the commercial activities and the market dynamics would be telling that this supply is needed (or otherwise) for this activity, and so on.
- 3- The user of this data; in this study data has been used by the author through various levels through out the thesis; descriptions, analysis as well

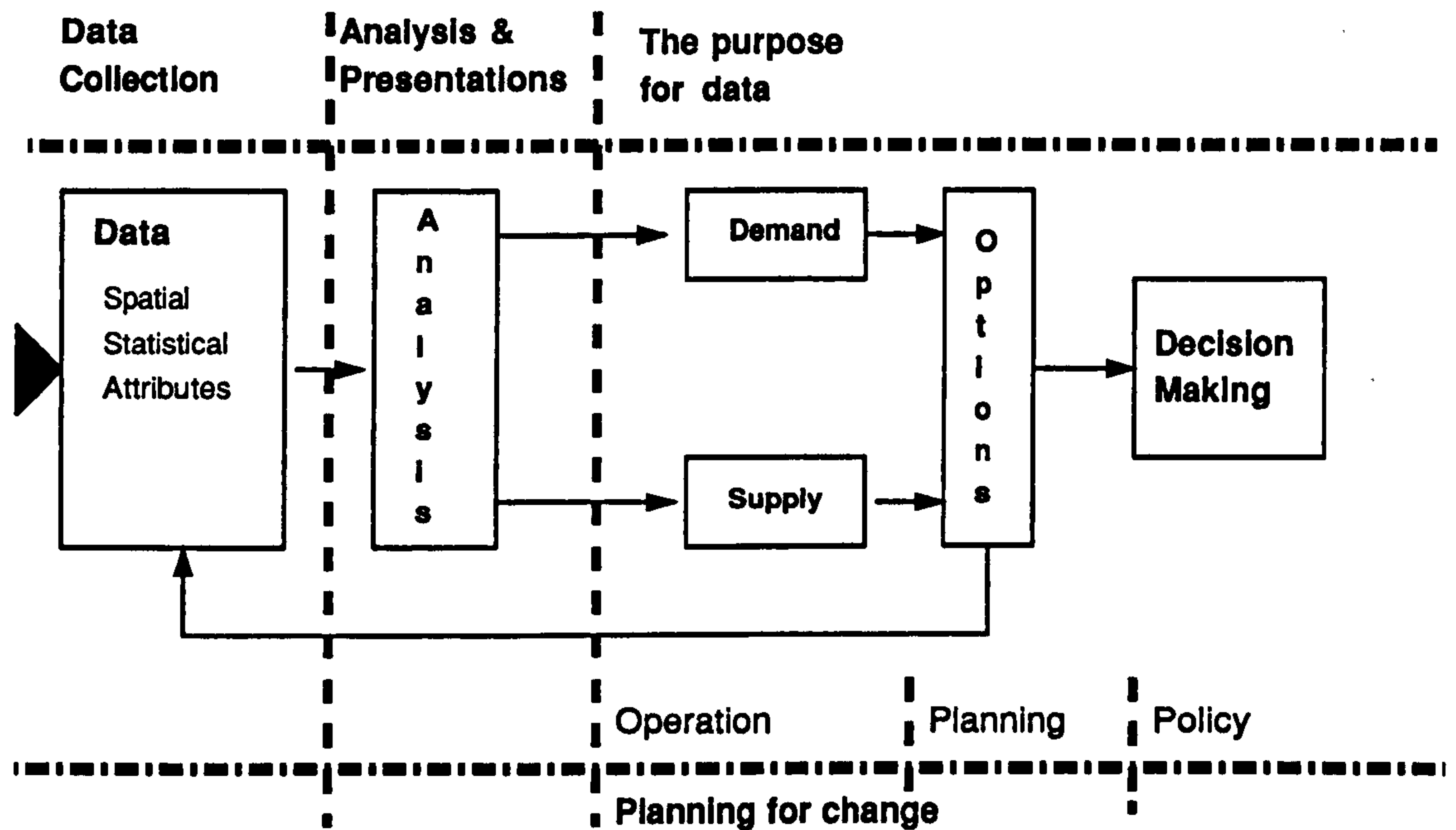


Fig.4-4, The data cycle

as conclusions. In real life this cycle operates within three main levels: 1) policy making, 2) planning and management and, 3) the operation level. While the policy maker who needs consistent and comprehensive sets of data which he can efficiently use, analyse and present to the managerial level where detailed and specific data are needed which he can communicate through and with to the operational level and *vice versa*.

The lack of, and the need for, an efficient mechanism for data management has been clearly realised through the experience of collecting data for this research. Having the previous inputs we may conclude that there is an essential need, not only for this research but in order to implement or evaluate any policy or action recommended by this or any other study, to devise a model for an efficient data management system. At this stage we have to ask: what is the most cost-effective system that would meet our requirements as well as our available resources (i.e. money, time and human power). With this variety of data forms, mentioned earlier, automated, as opposed to conventional systems, and despite

the initial high costs involved in the automation process (table 4-1) have great advantages in providing long term efficiency and consistency. It might be argued that such systems are not to be considered in such circumstances of scarce financial resources, but looking at the current system and the costs caused by its inefficiency (for example, there was a case in Cairo when a registered historic monument was issued a condemnation order from the governorate!), it becomes evident that a gradual automation process can be, in the long term, a more cost-effective approach. There is also a need for a more efficient utilisation of what is available, for example: research institutes in Alexandria University acquire reasonable resources of equipments, trained personnel and training facilities and which are only confined to pure academic degree-research without much regard of real world issues; a co-operation between the University and the authorities can employ these resources to real world applications, and thus enhancing the efficiency of the data system. However, in this study an attempt has been made, given the resources available, to demonstrate the advantages of such system. In the following pages we shall be illustrating these advantages as demonstrated in Geographical Information Systems (GIS) technology which proved to be a powerful base for such a needed model; presenting its main features and its possible applications in Alexandria.

		Initial costs	Maintenance	Updating	Availability	Efficiency & Consistency
Conventional	Money	Low	Low	Low	High	Low
	Time	High	High	High	High	
	Man P.	High	High	High	High	
Automated	Money	High	High	Low	Low	High
	Time	High	Low	Low	High	
	Man P.	high	Low	Low	High	

Table 4-1, A relative comparison between Conventional and Automated data systems according to the costs involved and the resources available.

4.4.1. Geographical Information Systems (GIS) an overview:

It has to be noted that this overview is not a description of GIS but only to briefly introduce the system:

History and development of GIS: Rhind and Coppock (1991:21-43) traced the beginning of GIS to the early 1960s, mainly in North America and followed by U.K., Australia and other European countries. Since then it has gone through four phases of development; first, from the early 1960s to mid 1970s, which was the pioneering age; second, from the mid 1970s till early 1980s, where it "saw a regularization of experiment and practice within and fostered by national agencies..."; third, from the early 1980s till late 1980s, which was a period of commercial dominance; fourth, the current phase which is "one of user dominance, facilitated by competing among vendors, embryonic standardization on open systems and increasing agreement on the user's perception what a GIS should look like."

This development of GIS technology took place alongside the evolution of all other aspects of computing systems, such as computer-assisted cartography (CAC), computer aided design (CAD), computer aided mapping (CAM), remote sensing (RS), image processing (IP) and data base management systems (DBMS) which has utilised all platforms from mainframes to personal computers (PCs). This has been facilitated by massive increases in memory size and speed as well as powerful graphics capabilities together with decreased costs. However, the development, diversity and extent of GIS applications is a very wide subject which cannot be covered here and is covered in various publications.

What is GIS ? As a result of its wide range of applications there has been some debate over the definition of GIS; Maguire (1991:10) screens a variety of these definitions, out of which he concludes that,

"In GIS, reality is presented as a series of geographical features defined according to data elements. The geographical (also called locational) data element is used to provide a reference for the attribute (also called statistical or non-locational) data element."

Put simple, GIS combines digital map information with attribute data associated

with features that can be located on a map (fig.4-5). The employment of such a techniques in the built environment can assist in the analysis of data in a spatial context to address issues, problems and policies related to the service delivery, infra-structure, management, and policy setting functions of decision makers. Huxhold (1991:64) briefly states these features as:

"The single most distinguishing characteristic of an urban geographic information system is its ability to integrate information from many different sources and at many different levels of responsibility in an organization"

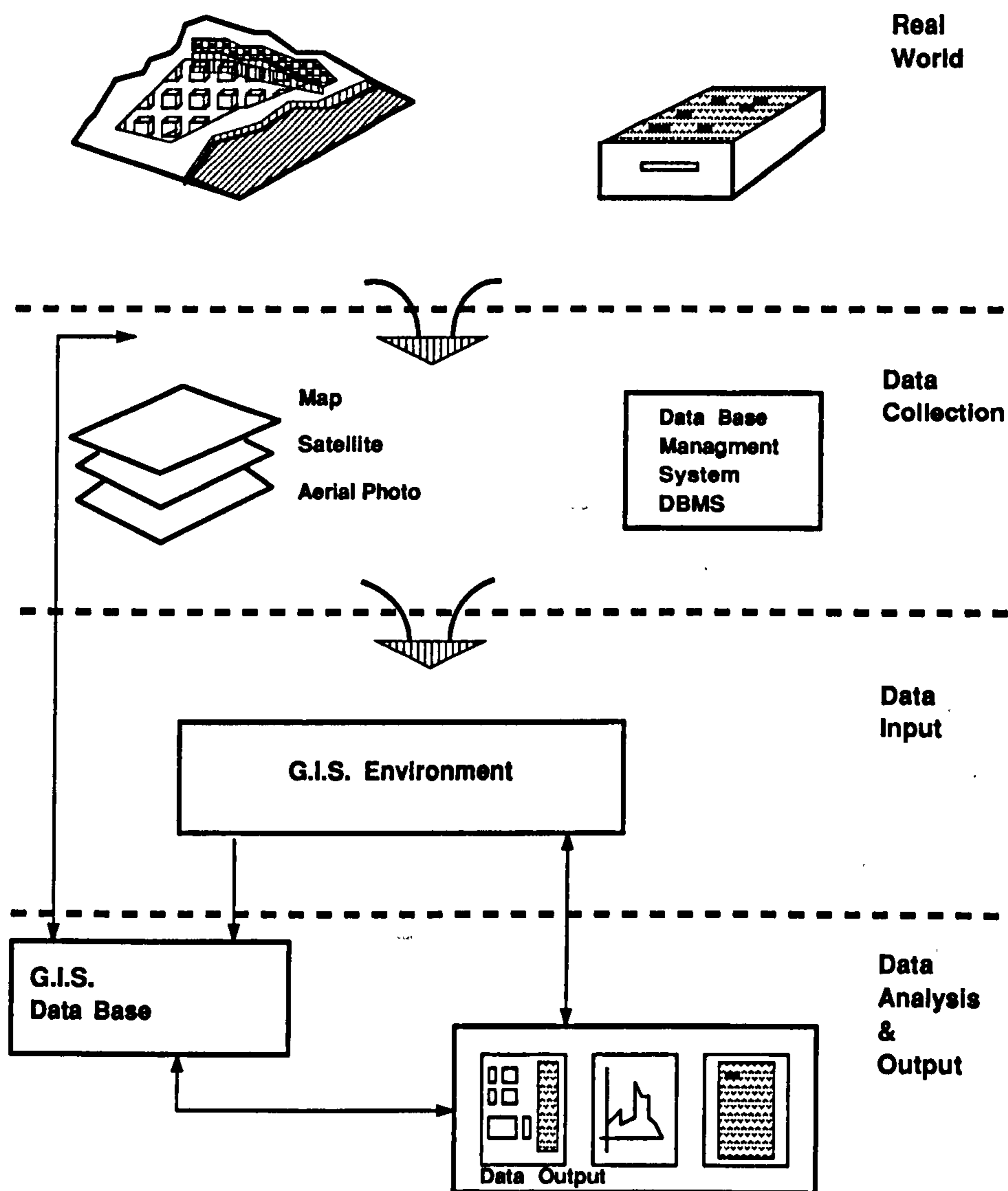


Fig.4-5, The main concept of GIS

Components of GIS? It is made up of four main elements: computer hardware, computer software, data and liveware (fig.4-6). First, the hardware; it can literally be any computer processor including personal computers, but in real world applications, involving substantial amount of computing, analysis and storing of data, high performance workstations and mainframe computers with powerful operating systems are much more realistic; second, the software; with the commercial potential developed in the 1980s a wide range of software was developed, e.g. ARC/INFO, IDRISI, MAPINFO and SALADIN; third, data; as we have already mentioned, data used in GIS are derived from many sources, both analogue and digital; these are mainly maps, aerial photography, satellite imagery (e.g. SPOT, LANDSAT) and attribute data (e.g. census data); finally, the liveware; the people responsible for using GIS; they have to be properly trained personnel.

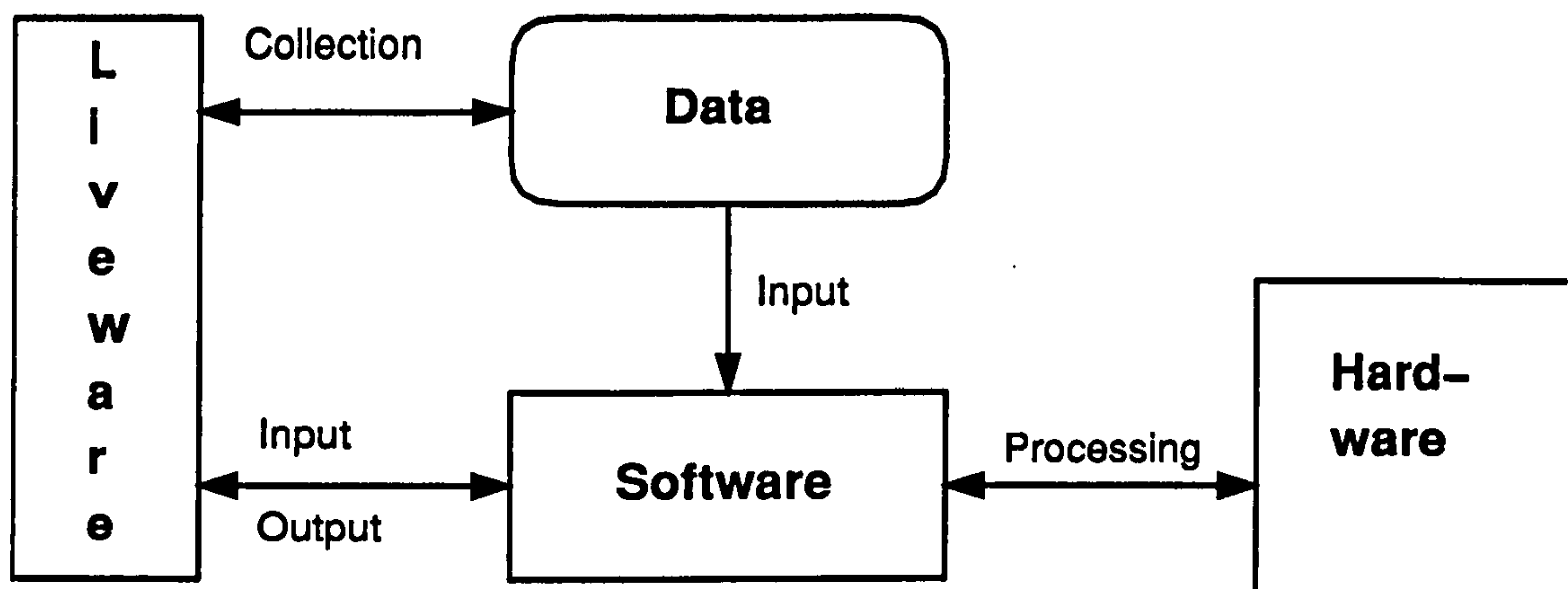


Fig.4-6, Basic components of GIS

Applications of GIS: Nevertheless, among this diversity, built environment applications stand as our main interest to which "An Introduction to Urban Geographic Systems" by W.E.Huxhold was found to provide a relevant and comprehensive overview. Earlier applications to the built environment were mainly municipal tasks related to public utilities (Martin,1991:33). An example of its current applications and potential was illustrated by Huxhold (1991:64-126) as used in the city of Milwaukee which included: map updating, land use maps, zoning, tax control and building inspection, historical spatial analysis of the growth of the city and environmental planning¹.

The use of GIS in Alexandria

A complete application of GIS technology in the Turkish Town is beyond the scope of this study as it forms a thesis in its own right, especially where there has been no such precedent in Alexandria and where basic components and facilities for such an application are not readily available/accessible, such as aerial photographs and satellite images. However, with the problems of collecting data for this research from the different and various sources, the importance of such a tool has been fully recognised as a powerful means for handling as well as updating data from various sources and shapes which is beneficial not only for research purposes but, more important, for real world urban management. It has therefore been partially applied in this study with the aim of: first, illustrating its features and capabilities; second, by actually using it in the demonstrative cluster of our study area as a basic data base and analytic tool.

The following is a simplified explanation of this application (used in Ch.7):

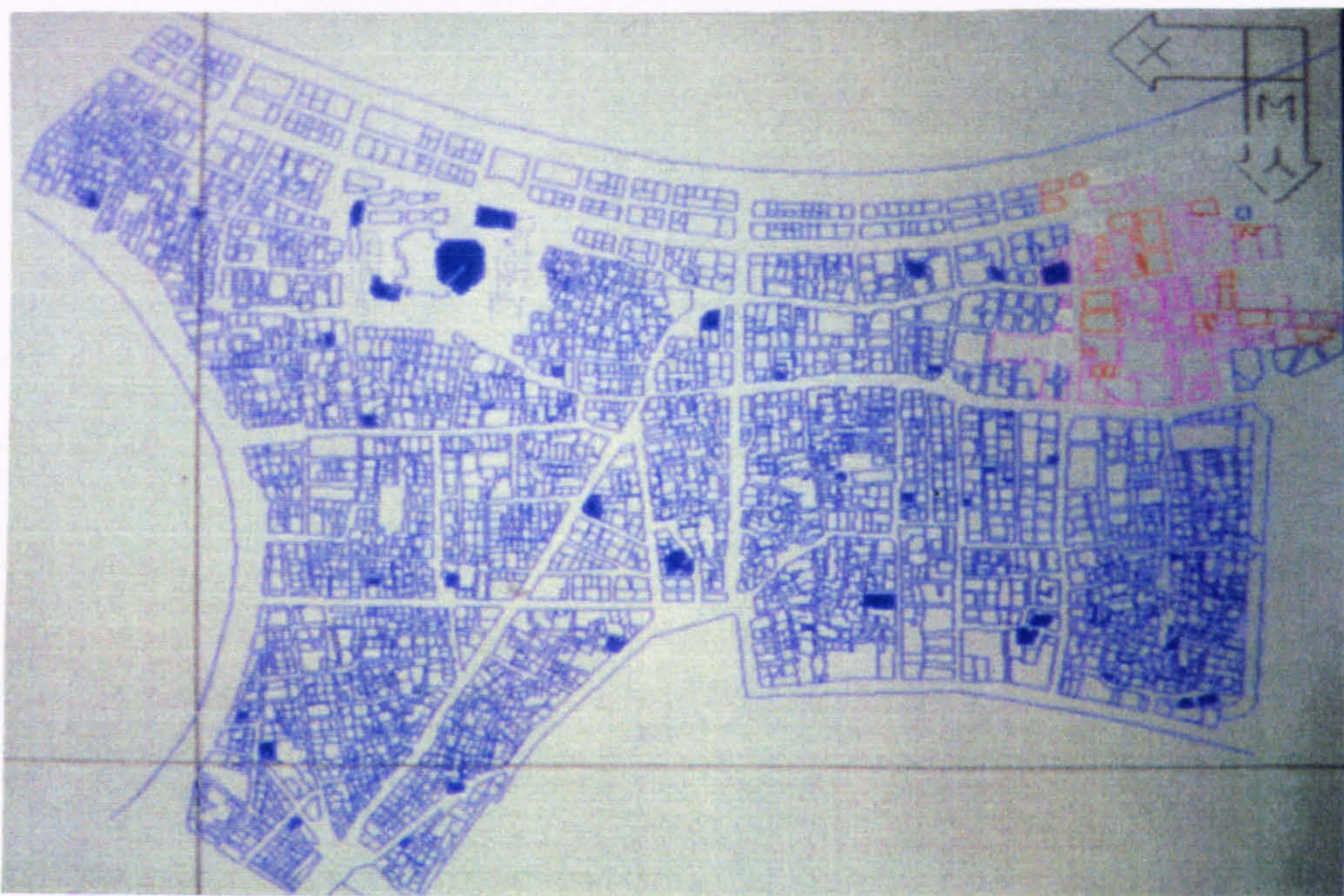
- 1- Using the surveyed map of the whole area of the Turkish Town (alGommrok; updated by the author from the ordinance survey map 1935), spatial data was first digitised using Autocad (r10 & 12), with each plot represented by a two-dimensional polygon feature. (fig.4-7)
- 2- After the selection of the demonstrative cluster of al-Sagha, it was given

¹ For a detailed example see Huxhold,1991:105-107

the third dimension representing the building heights and constructing a three-dimensional solid model of al-Sagha (fig.4-9). And it has to be noted that the use of Autocad as a digitising environment has been of great advantage as it has allowed for the visual analysis as well as the data analysis which can offer advantages means for urban design policies, e.g. the impact of (alNasr Road discussed) in CH.7 on the existing fabric.

- 3- Using the (*.Dxf)¹ mode the drawing was transferred to the ARC/INFO environment as a map coverage.
- 4- A polygon attribute table (*.PAT) was then created to define polygons and their Id. (fig.4-8)
- 5- Attribute data surveyed by the author (e.g. building heights, ground floor use, floor area ratio, date of construction,..etc) was then added through INFO to the polygon attribute table corresponding to polygons' Ids. (Appendix S-5)
- 6- Maps representing these attributes were produced using colour shadings (fig.4-8).
- 7- Statistical analysis using both ARC/INFO and an interface with UNIRAS were performed.

Fig.4-7, The surveyed map was digitised in an Autocad environment



¹ The main formate for importing and exporting drawing files from and to Autocad

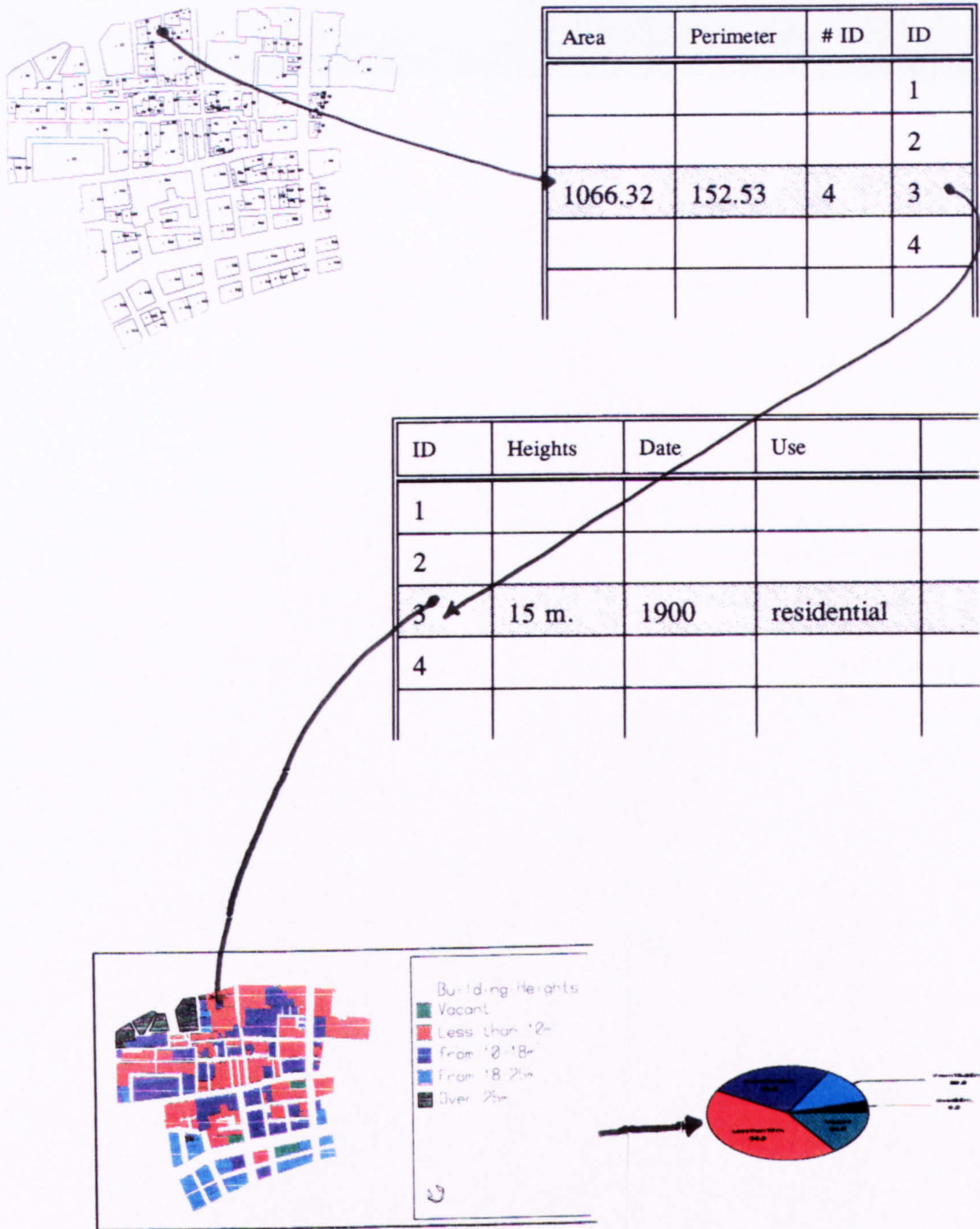
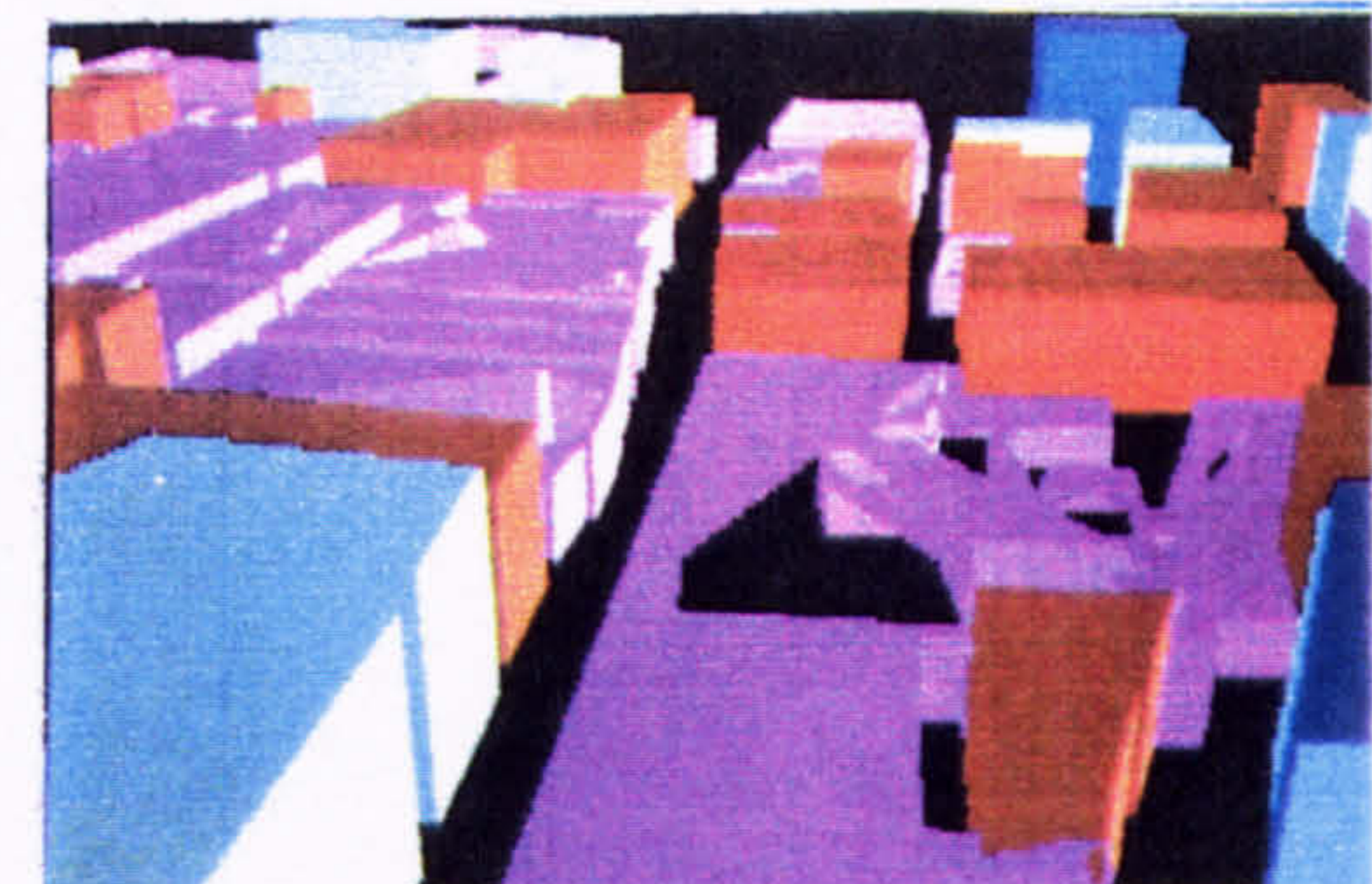
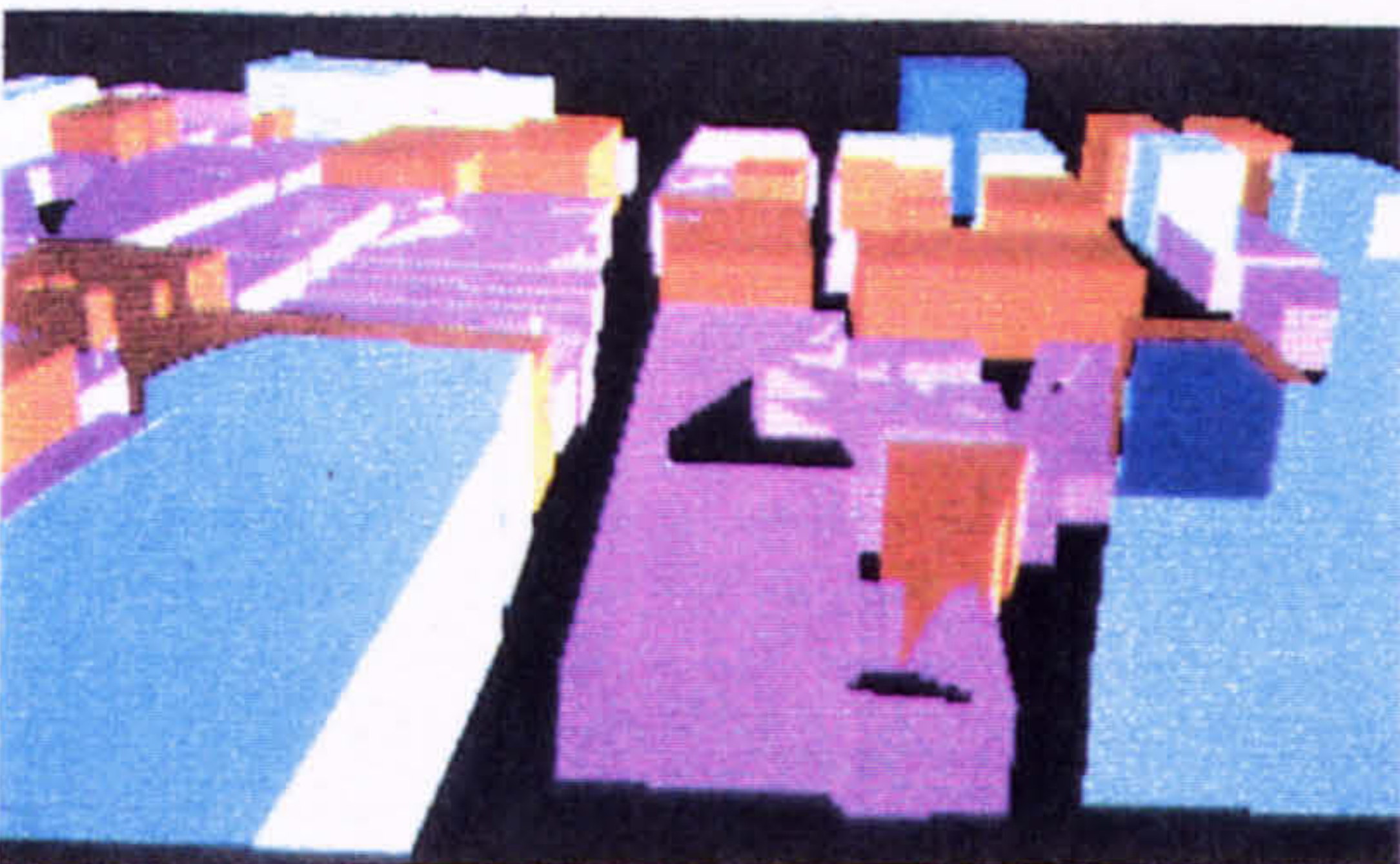
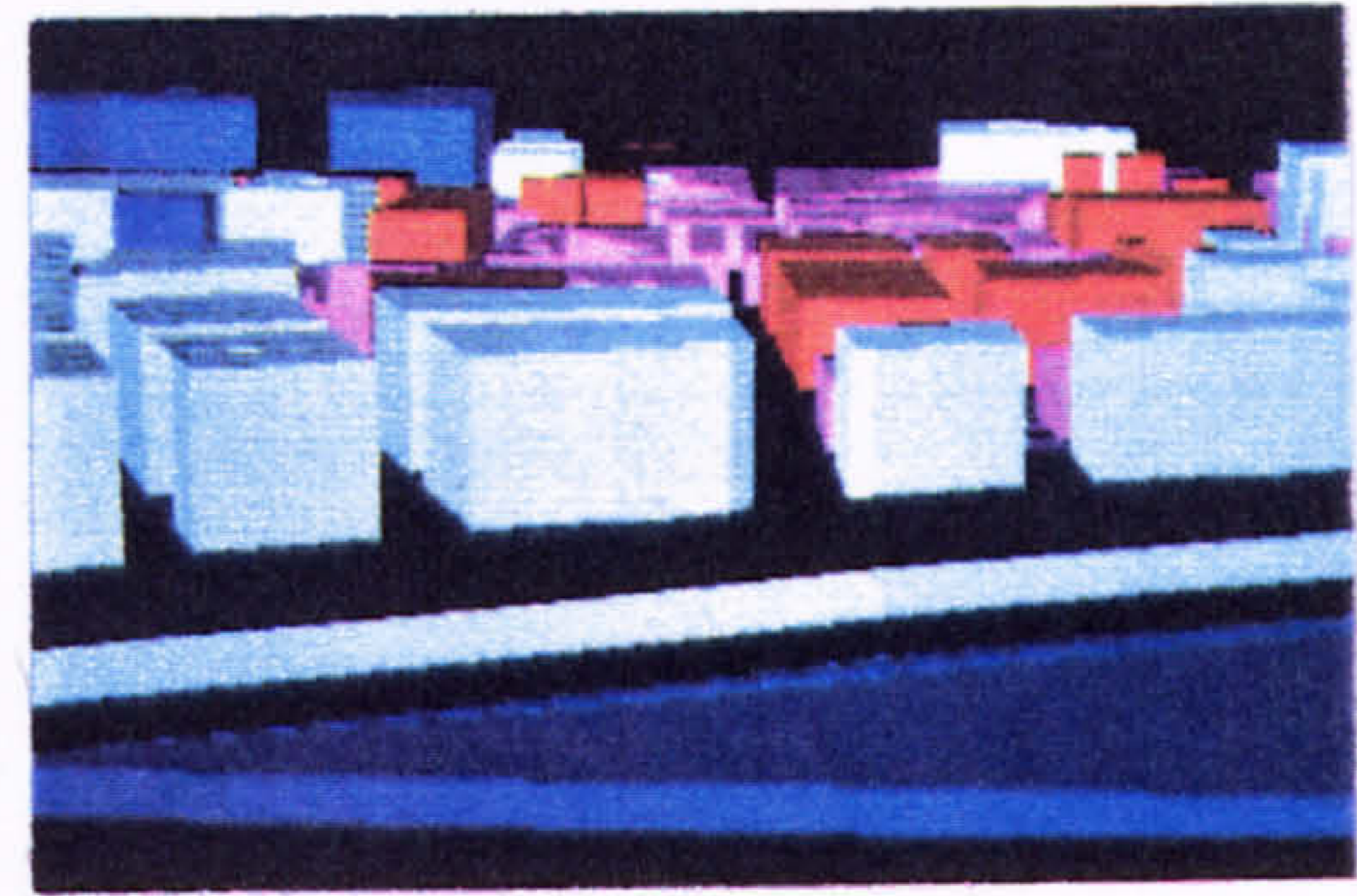
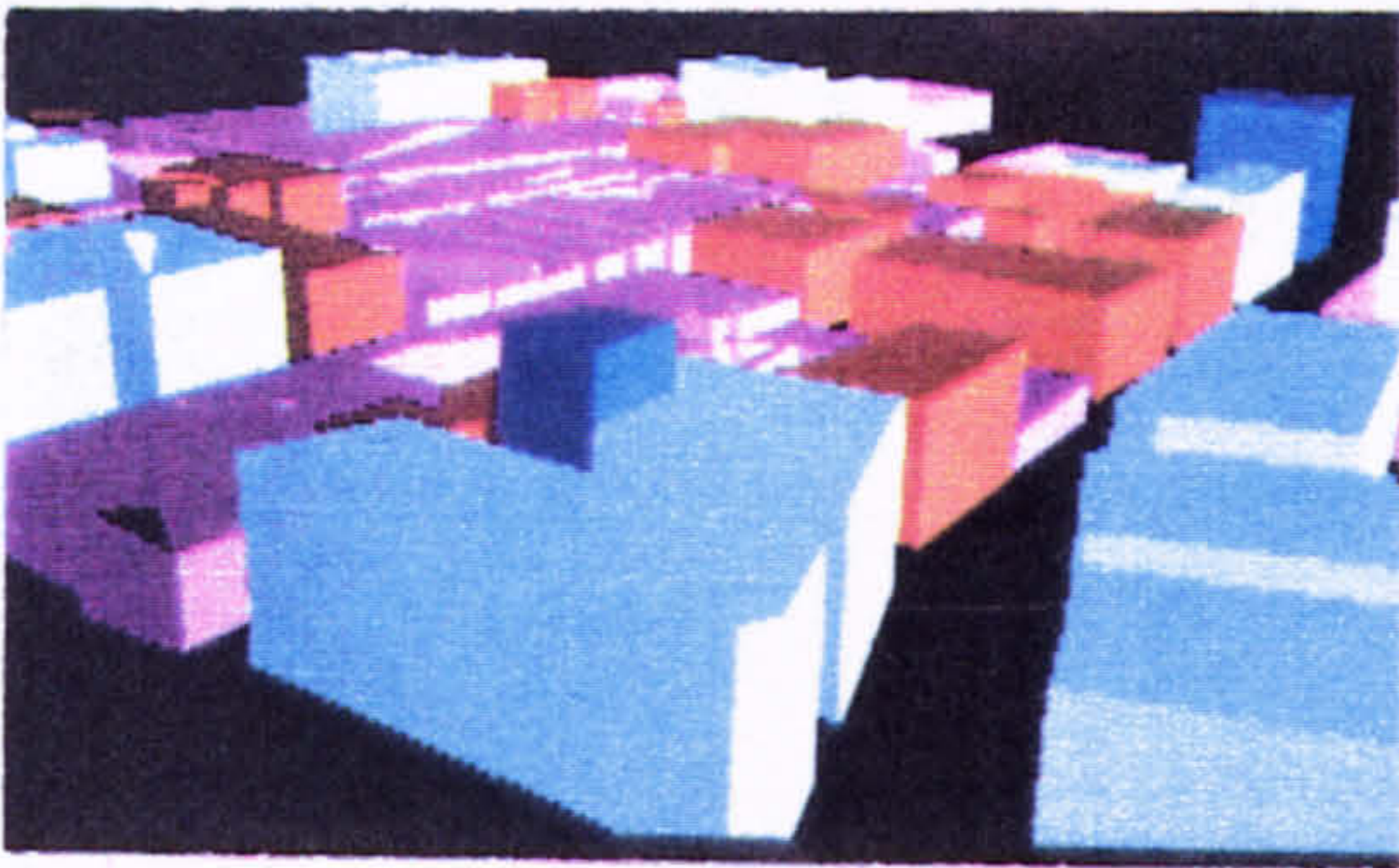
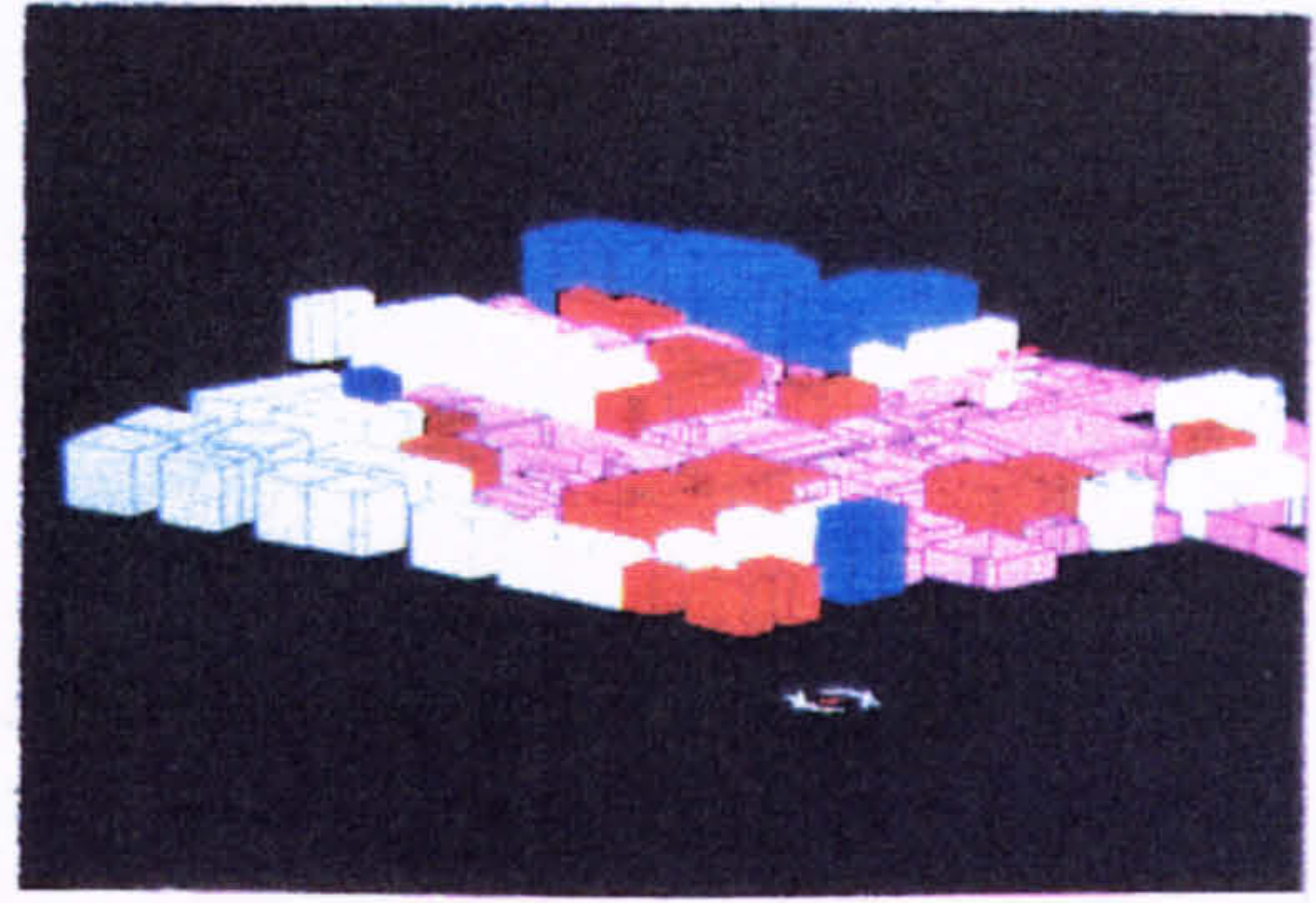


Fig.4-8, An example of GIS application in aSAGHA to analyse building heights.

Fig.4-9, A three dimensional model was constructed; another dimension which can be employed in visual analysis and urban design: general views and walk throughs; a tool that can aid decision making for any future development by having the chance to, easily, examine its impacts on the scale and pattern of the existing fabric, e.g. the impact of AlNasr Street.



4.5. Conclusions

This chapter aimed to define the role of information; acquiring, manipulating and managing data as a means for more efficiency in the process of urban planning. It has looked, using the experience of this field survey, at the various issues related to the identification of data needs, methods adopted for collecting the data and means of analysing, presenting and storing the data. We may therefore conclude that:

First, for efficient policy making, accurate, consistent and timely information is a prerequisite, and for an urban cycle to function, an effective information handling system is required. This need has been highlighted during the experience of this research where the inconsistent and out-of-date information

have proved to be causing the confusion and disarray of the whole urban system.

Second, the methodology of collecting the data has to consider the context in which it is carried out; Casley & Lury (1987:27) has addressed this dimension,

"There is a real dilemma here. The extension of statistical work and growing acceptance of the need to involve the surveyor more regularly and immediately in policy issues can be set back if the surveyor behaves as if he can operate only in ideal conditions and cannot adapt to the stresses and strains of helping decision takers effectively"

The literature dealing with social surveys is largely oriented to the context of western developed countries; survey theories, sampling techniques and data interpretation are based on societies where: a) this kind of research is available and largely accepted; b) technical means such as sampling frames, directories and voting lists are available and relatively reliable. It therefore a prerequisite for any social survey to understand the nature of the examined environment and adapted to it. From the experience gained in the social survey conducted in this study there are some noteworthy remarks which can be of help in any future study:

- 1- For political, cultural or other reasons people are not always aware (or familiar) and sometimes afraid of such surveys where others intrude into their private life; it is therefore important to consider the most convenient and reassuring method of talking and interacting e.g. the indirective interviews used in this study were more relaxing for respondents than structured questionnaires.
- 2- The principles of sampling techniques have to be considered in terms of the existing conditions such as explained in this study, e.g. sampling frames in most developing countries comprise a basic technical problem where they hardly exist.
- 3- Where privacy of households is a sensitive matter, morning visits when men are not at home has to be avoided.

Third, data collection has to be cost effective, due to the high costs involved in the process, and *only needed data are to be collected*.

Finally, with the growing complexity of urban life and needs, computerised information systems are becoming of more value; they provide efficiency, flexibility and interactive communications among the different levels, departments and organisations involved.

CHAPTER FIVE



THE TURKISH TOWN OF ALEXANDRIA: SPACE AND SOCIETY

THE TURKISH TOWN; SPACE AND SOCIETY

5.1. Introduction

" The design of towns is design in four dimensions. A town provides a framework for change to meet the changing needs of those who live and work in it . Local resources are discovered, exploited, and worked out; industries rise and fall; populations ebb and flow; living standards change. Responsive to every nuance of demand, the city all the time adapts itself accordingly." (Middleton,1987:35)

Alexandria has indeed been a representative example of this 'historical evolution' as described by Middleton. Through its long history, the city has experienced various stages of development and decline. Touring the city today, it unfolds its story, not only through the archaeological remains of its ancient history, but through its more recent history as well. The Turkish Town (Al-Gommrok district) is unquestionably a repository for many values; it is the oldest inhabited settlement and retains many of its activities, traditions and potential.

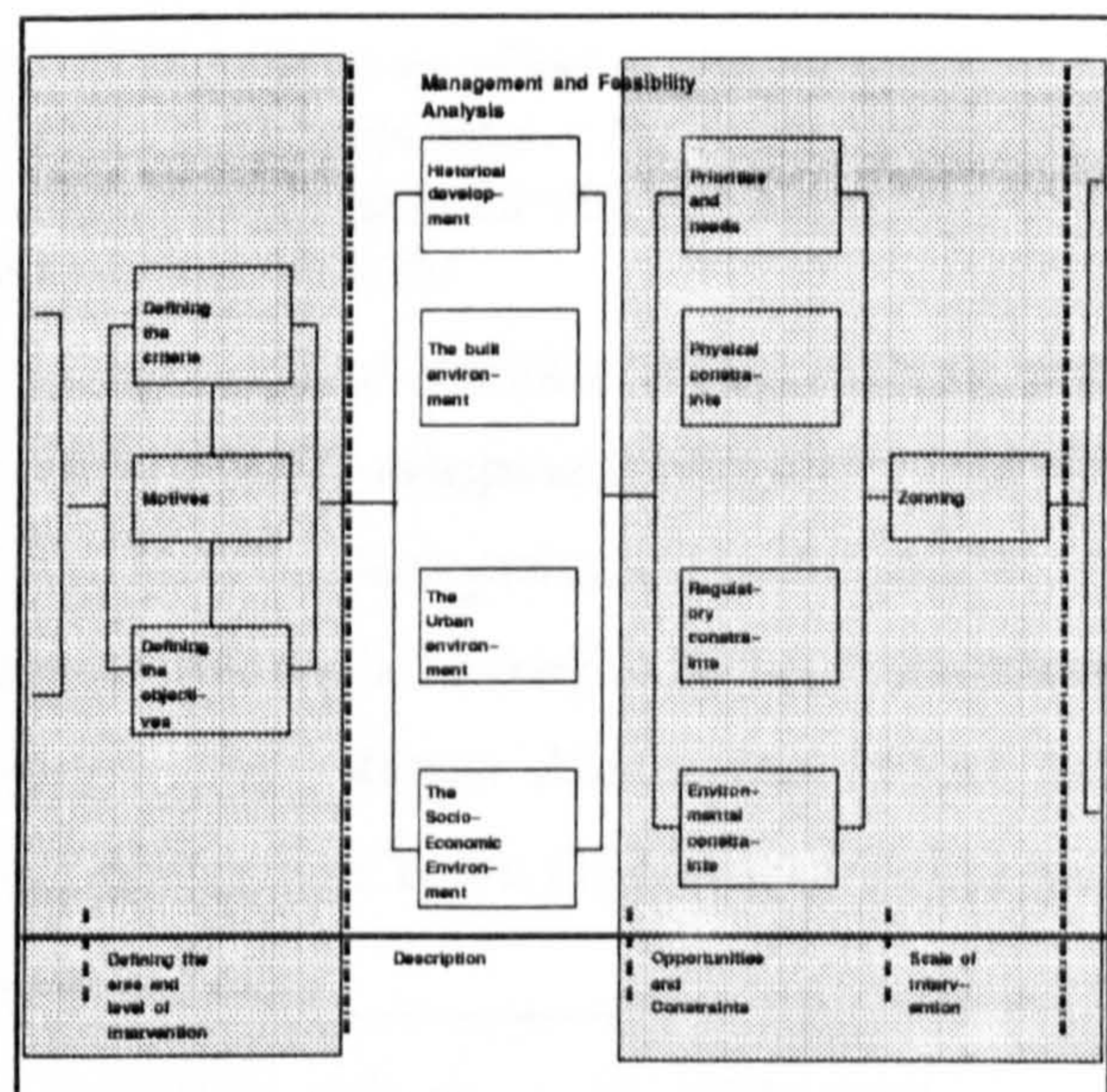


Fig.5-1, The stage of management and feasibility analysis: *description* (see Ch3: pp.85-87).

The aims of this chapter are: first, to make a case for Alexandria, where as many other historic cities, their long standing urban traditions do not fulfil the criteria set by experts and professionals for 'historic', 'heritage' and 'value'; their recognised 'value' is confined to the scattered archeological and monumental remains. Second, to set the scene for perceiving the Turkish Town (fig.5-1): the presence of its past, the nature of its present, as well as the prospect of its

future. It is made up of four parts: a review of its historical development, the formation process and the reasons for its present situation; the architecture of the area, its different stages, nature and functions; the physical setting and urbanisation implications, a morphological analysis and future prospects for development; lastly, a sociological profile of the area, the social unit, attitudes towards the area and the socio-economic patterns.

5.2. The historical development of the city:

Alexandria is a city with a long history, dating from 332 B.C., when Alexander the Great:

" Observing a harbour rendered safe by nature, an excellent centre for trade, cornfields throughout all Egypt, and the great usefulness of the mighty river Nile, ordered him (Dinocrates, the architect) to build the city of Alexandria, named after the king" (Vitruvius;Morgan,1960:36)

This long history, however, has involved various periods of flourishing and decline. In the next pages we will illustrate the development of the city and the formation of the Turkish Town (the historical resume provided in Appendix H-1 provides a more detailed description of the city's history). We will therefore classify the history of the city in three main stages: Alexandria before the Turkish Town (332 B.C. - 1517 A.D.), The Turkish Town (1517 - 1805 A.D.) and Modern Alexandria (1805 - 1990s A.D.)

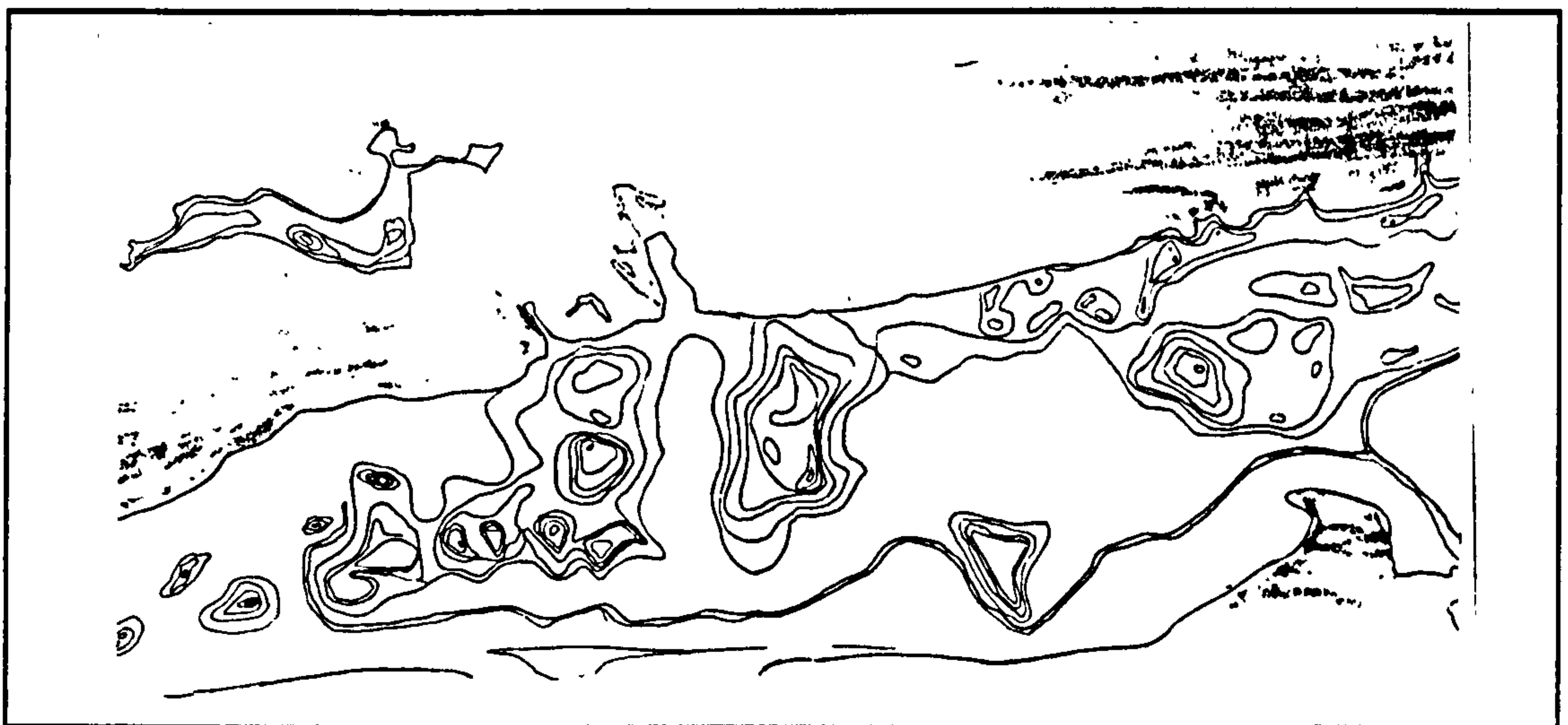


Fig. 5-2; The situation before establishing the city; derived by the author from El-Falaky plan of the ancient town.

5.2.1. Alexandria before the Turkish Town:

A- The foundation stage (Ptolemaic Alexandria). In the Ptolemaic reign (332 B.C.- 30 B.C.) the main characteristics of the city were (fig.5-3):

- a- The rectangular street pattern; there were two main streets: the Canobic Street running from east to west (almost the same as the present day Tarik alHurreyah) and the Soma Street running from north to south (almost the same as AlNabi Danial Street),
- b- the Heptastadion, linking the island with the mainland, creating the two harbours, and some major features like the famous Alexandrian library, the catacombs at the Serabium's site as well as the famous light house.

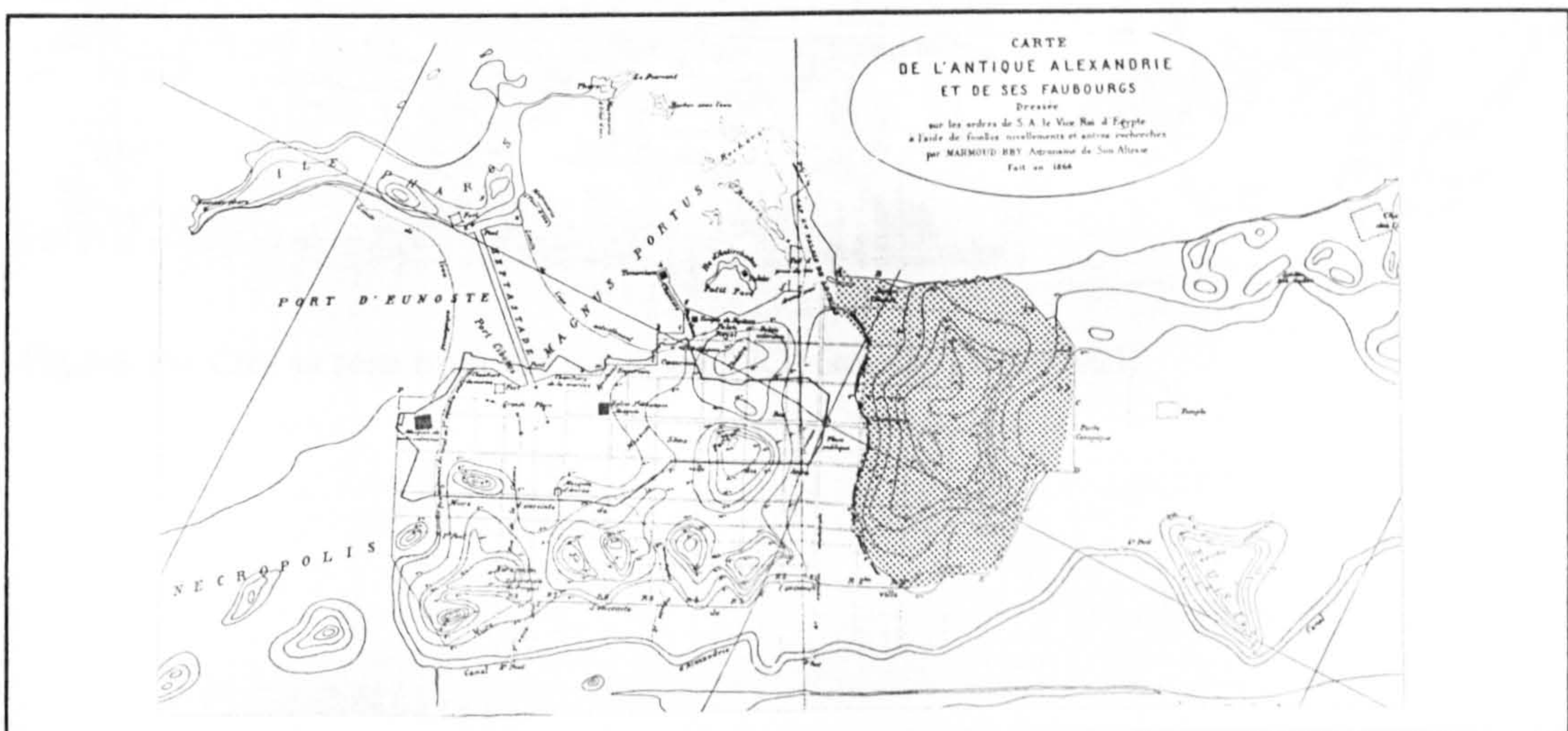


Fig. 5-3; The ancient town; (El-Falaky,1866), and the Roman expansion to the East (by the author)

B- The Roman period: the city was extended to the east by the suburb of Nicopolis.

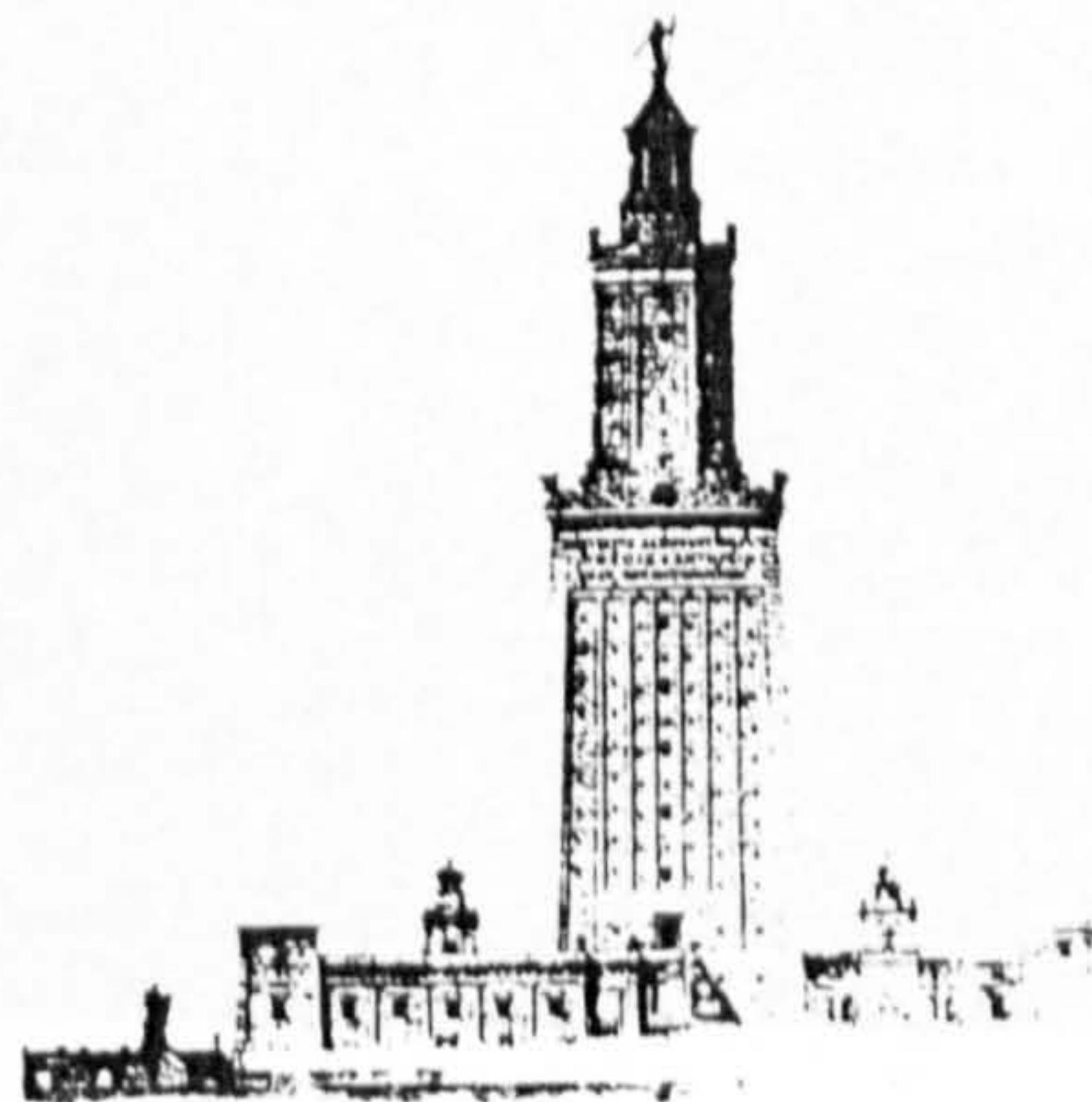


Fig.5-4, Right: The Light house, one of the Seven Wonders of the ancient world, stood on the site occupied now by the Fort Qait-Bey (source: Breccia,1922:24); Left: Aerial view of the Serabium's site, note the mistakenly called "Pombey's Pillar"; (Source: Fedden,1939:94)

C- The Arab city (641 - 1517 A.D.); With the choice of a new capital AlFustat, the city lost its importance, the population decreased, and the walls were rebuilt, enclosing a smaller area.



Fig.5-5, the City as seen from the sea in the 15C., (source: Jondet,1921)

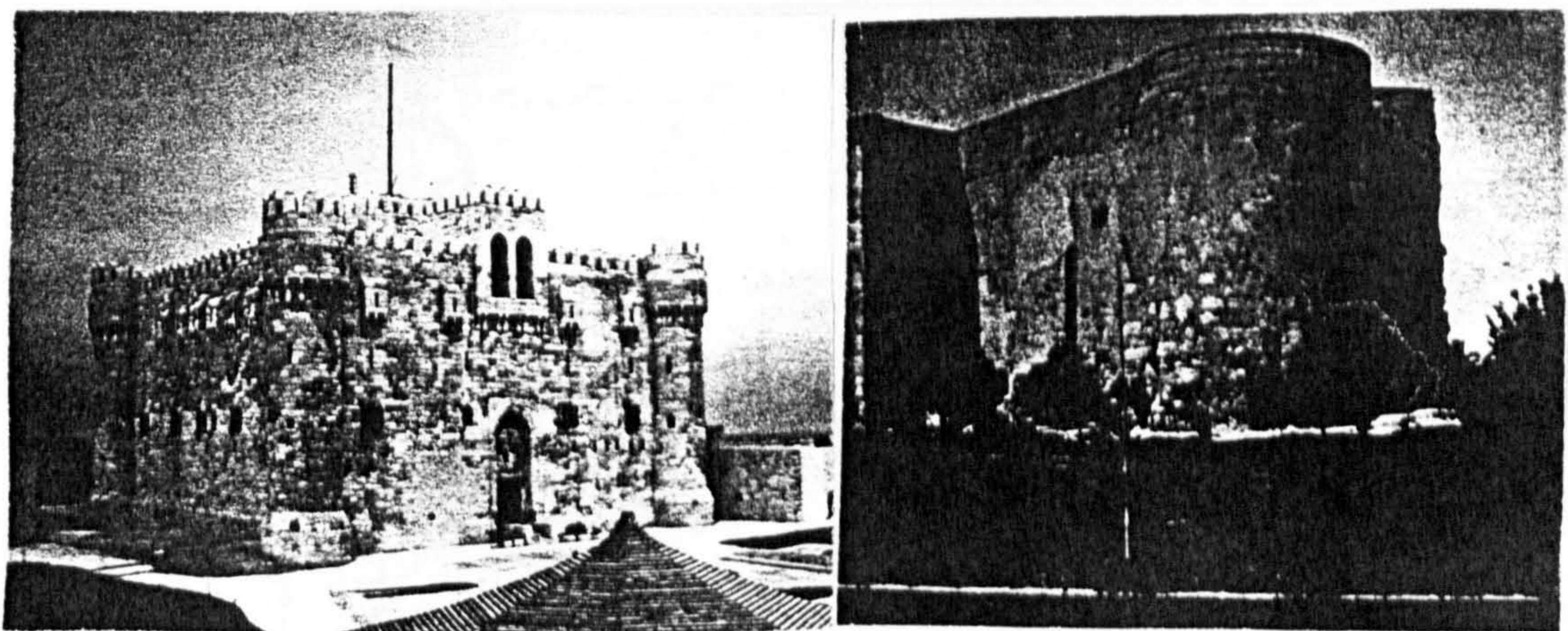


Fig.5-6, Right, remains of the Arab walls; Left, Qait-Bey fort 15C.

5.2.2. The Turkish Town

A- The formation of the Turkish Town started with the Turkish reign (1517 A.D.), and continued to be the only inhabited area until the early 19C.; the city was confined to the neck of land that had been formed between the two harbours and outside the walls of the Arab city. This follows a pattern commonly adopted in many Turkish settlements where the new settlement is

"..outside the walls despite the existence of fortifications. The commercial activities are also taking place outside the fortified area....were formed out of the walled area and also physically independent from the fortress-city."
(Tanyeli,1986:x)

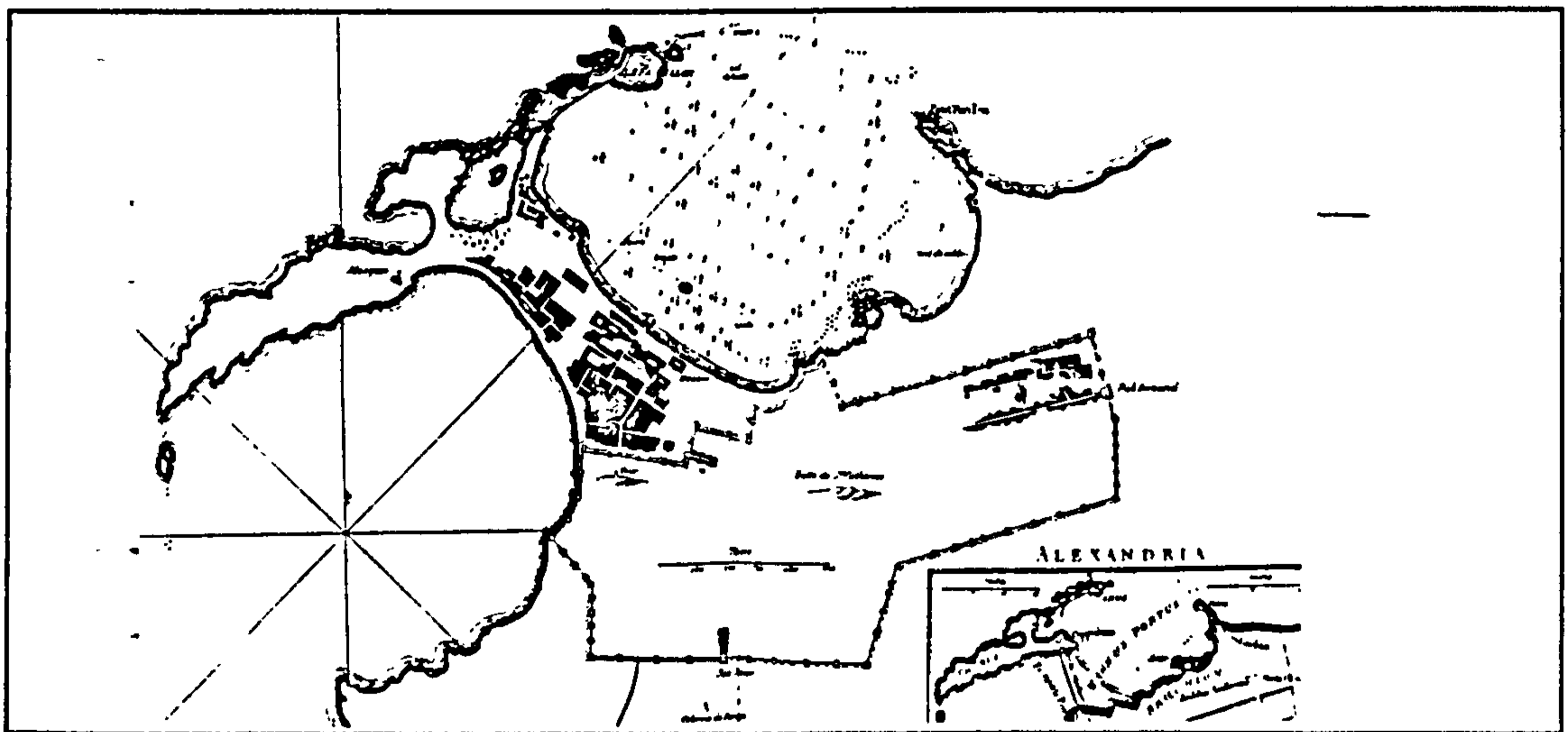


Fig.5-7, The formation of the Turkish Town; Alexandria in 1766 (source: Jondet,1921)

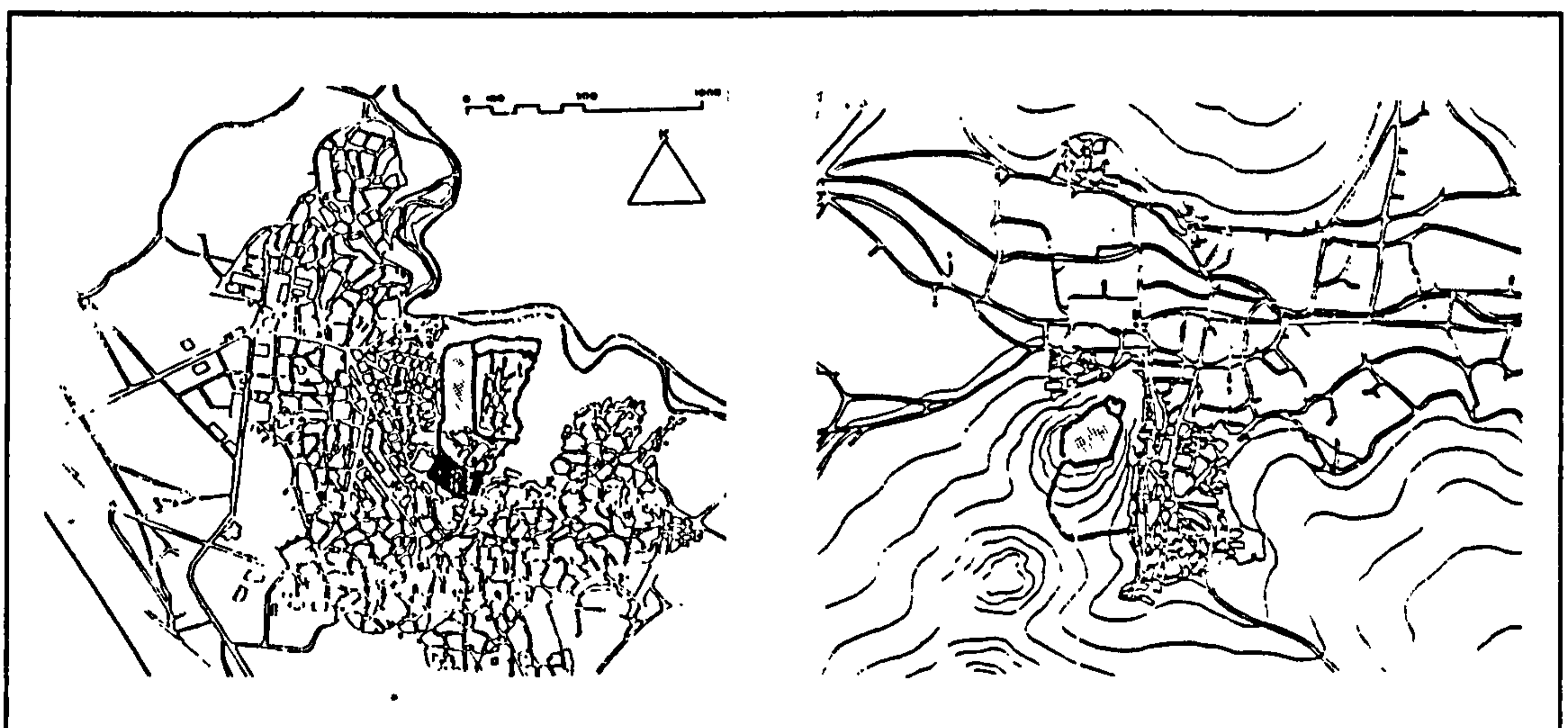


Fig.5-8, Right, Ankara; Left, Tokat (Turkey); note the similarity with Alexandria where the new settlement is outside the fortified area. (source: Tanyeli,1986)

B- The Development of the Turkish Town Unfortunately the sources available for reconstructing the history of this period do not form a very comprehensive image of the period¹ or its physical appearance (Reimer,1989:44). However, despite its state of decline as recognised by most historians, and as " .. it was the only Mediterranean port which could accommodate ships of great size.", the city has always held its position as a Mediterranean centre, with trade as its main *raison d'être*. Maps and engravings from the 16C. and 17C. shows the town's spatial form: clusters of blocks of building forming on the isthmus and it is possible to distinguish from the two different scales small residential blocks and the large blocks of commercial buildings (*wekalat*) and warehouses (e.g. fig.5-7, 5-10).

In the middle of the 17C. Alexandria was described as a small village with two or three streets and a bazaar:

"Toutes les maisons susdites sont comprises en deux ou trois rues en long ou au milieu y a un bazar ou lieu de vente couvert pour marchans"
(Panzac,1988:84)

In the period of 1630 - 1640 A.D., there were new developments based largely on the trade of Yemeni coffee beans exported to the Ottoman provinces and Europe. The development process was clearly described by a French traveller (Lucas) who had visited the town twice; in 1699, he wrote;

"la nouvelle ville est assez mal bâtie. Les rues en sont petites ou fort étroites. Excepté quelques mosquées qui sont très belles, le reste ne parait que des nids à rats. Il peut y avoir environ 800 à 1000 maisons",
(Panzac,1988:85)

and on his second visit in 1717 he wrote;

"La nouvelle ville d'Alexandrie s'agrandit tous les jours et je trouvois que depuis mon dernier voyage on y avoit bâtie plus de vingt oquelles, ce sont Auberges pour loger les voyageurs; et un grand nombre de maisons sans parler de quelques bazars qu'on a rétablis ou faits neuf". (Panzac,1988:85)

¹ For example: ElShayyal,1967;Salem,1982;Mubarak,1889;Reimer,1989.

In addition to trade, there have been other economic activities which, in a way, were dependent on trade. For example, about 12% of the population worked in textile manufacturing, especially that of silk imported from Syria (Reimer,1989:75). By the end of the 18C, the town as represented by maps and illustrations made by the French during the Napoleon campaign, published in *Description de'l Egypte*, was occupying most of the isthmus between the two port with a few scattered buildings in the walled city (fig.5-10).

This period was followed by a major turning point, not only for Alexandria, but for the whole country. This was the start of Mohamed Ali's reign (1805) or of what is known as 'Modern Egypt'. However, the development of 'Modern Alexandria' has not only been the expansion of the city as illustrated below, but it the effects it has had on the Turkish Town as well (fig.5-9):

- In 1840s, an access for Ras el-Tin Palace (1817), which lies on the extreme west of the ancient island of Pharos, was provided by the enlarging and widening of Faranca Street.
- By the beginning of the 20C. the water front of the Turkish Town had been dramatically altered by the establishment of the Corniche which involved the construction of a major thoroughfare as well as imposing a new urban strip along the water front. This changed not only the face of the Eastern harbour but also allowed a parallel development, as well the turning of the old traditional buildings occupied by the local communities of merchants and fishermen into Europeanised (mainly Italian) blocks of flats.
- On the other hand, and with the McLean plan¹, another project took place: to reconstruct Abou al-Abbas mosque; this involved the creation of new open spaces which gave a new scale, form and style to the area. This project also proposed a link between the Eastern and Western harbours via a canal for small fishing and trading boats; this concept has been badly (and partially)

¹ W.H.McLean; a British Engineer who was the commissionaire chief engineer of the Municipal Council; the plan was carried out by the Municipal Council in 1921.

implemented in the 1960s in the first phase of AlNasr Road. Another project which has been realised is Ismail Sabry Street. Other projects such as the boulevard from Ras el-Tin Palace have not been implemented.

- In the 1958 plan some major streets, such as Ras el-Tin, al-Haggary, Safar and al-Mosaferkhana, were proposed for widening. Though this part of the plan has not yet been implemented, the plan did have a major effect through the completion of the first phase of alNasr street project which literally cuts through the area with a 30 meters wide celebratory boulevard to link the Western harbour with Muhammad Ali Place (see Ch.7).

- In the 1980s, a further major development project of 35,000m² to 'develop' the area around the Abou al-Abbas mosque (Mogamaa al-Massajid project). This meant the evacuation of a large area of residential buildings, the introduction of a large piazza in the middle with a shopping area underneath, and the construction of new buildings for commercial and recreational use: hotels, offices, restaurants and shops (further analysis of this project and its implications is discussed below p.156).

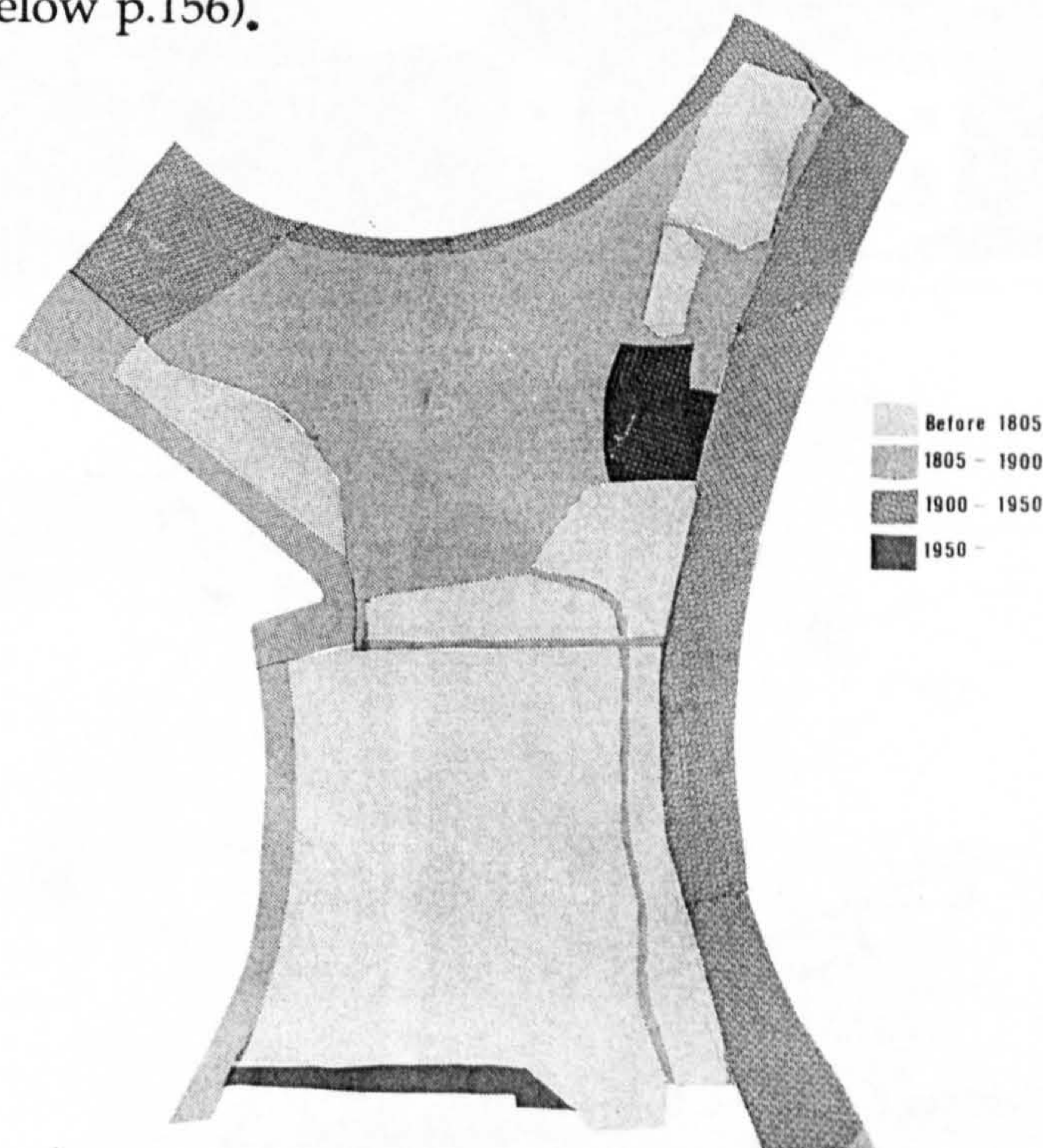


Fig.5-9, The development of the Turkish Town; a chronological analysis of the major developments of the area.

5.2.3. Modern Alexandria

Not long after the French expedition (1798-1801), Mohamed Ali came to power (1805) with his visions of modernising Egypt in the European Mode. Hence, he started a new era not only in Alexandria's history but in Egypt as a whole; he realised the importance of Alexandria as a maritime capital and as a major trade post in the Mediterranean which could maintain his desired links with Europe. Thus the city started to develop and flourish in four main stages illustrated in fig.5-11:

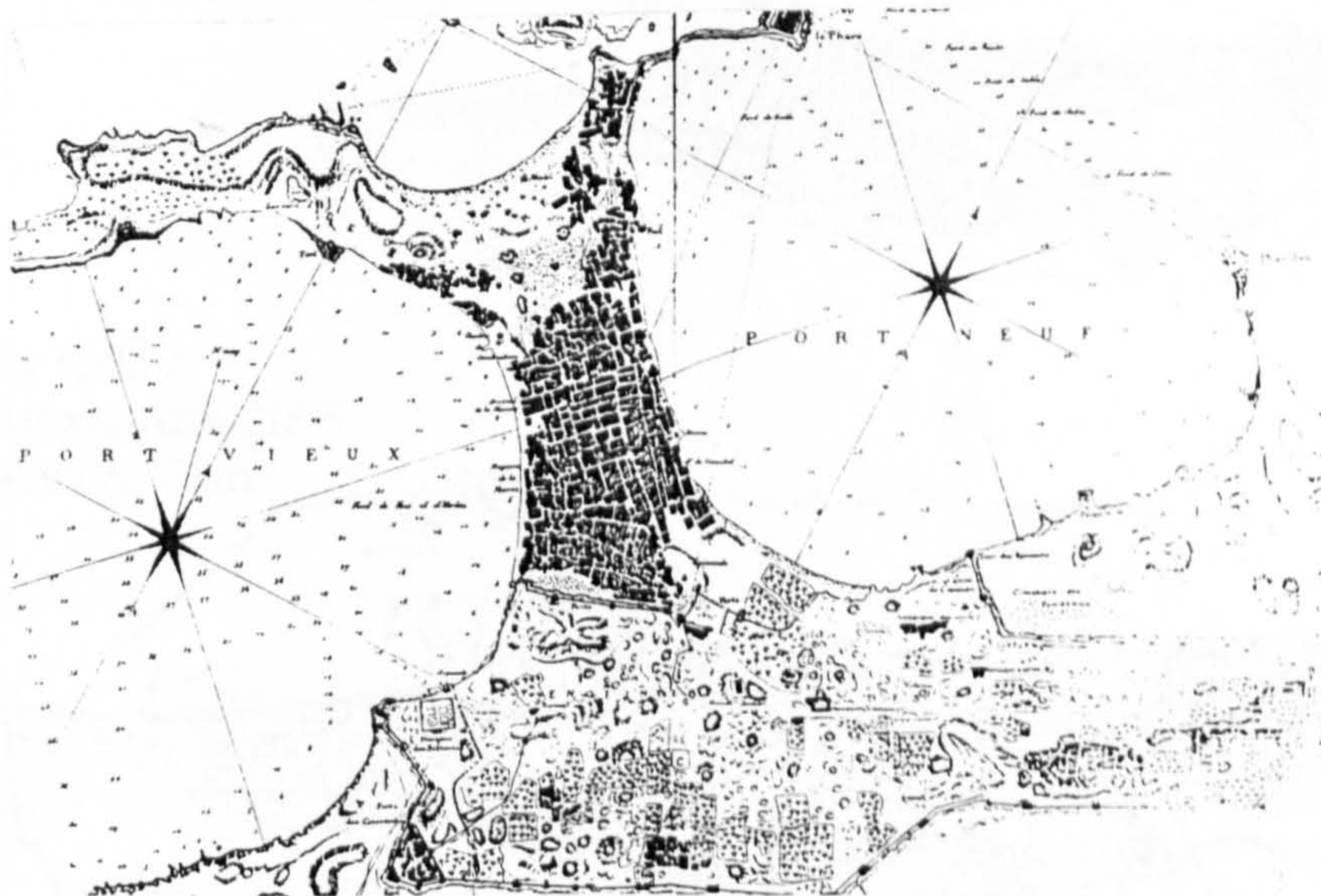
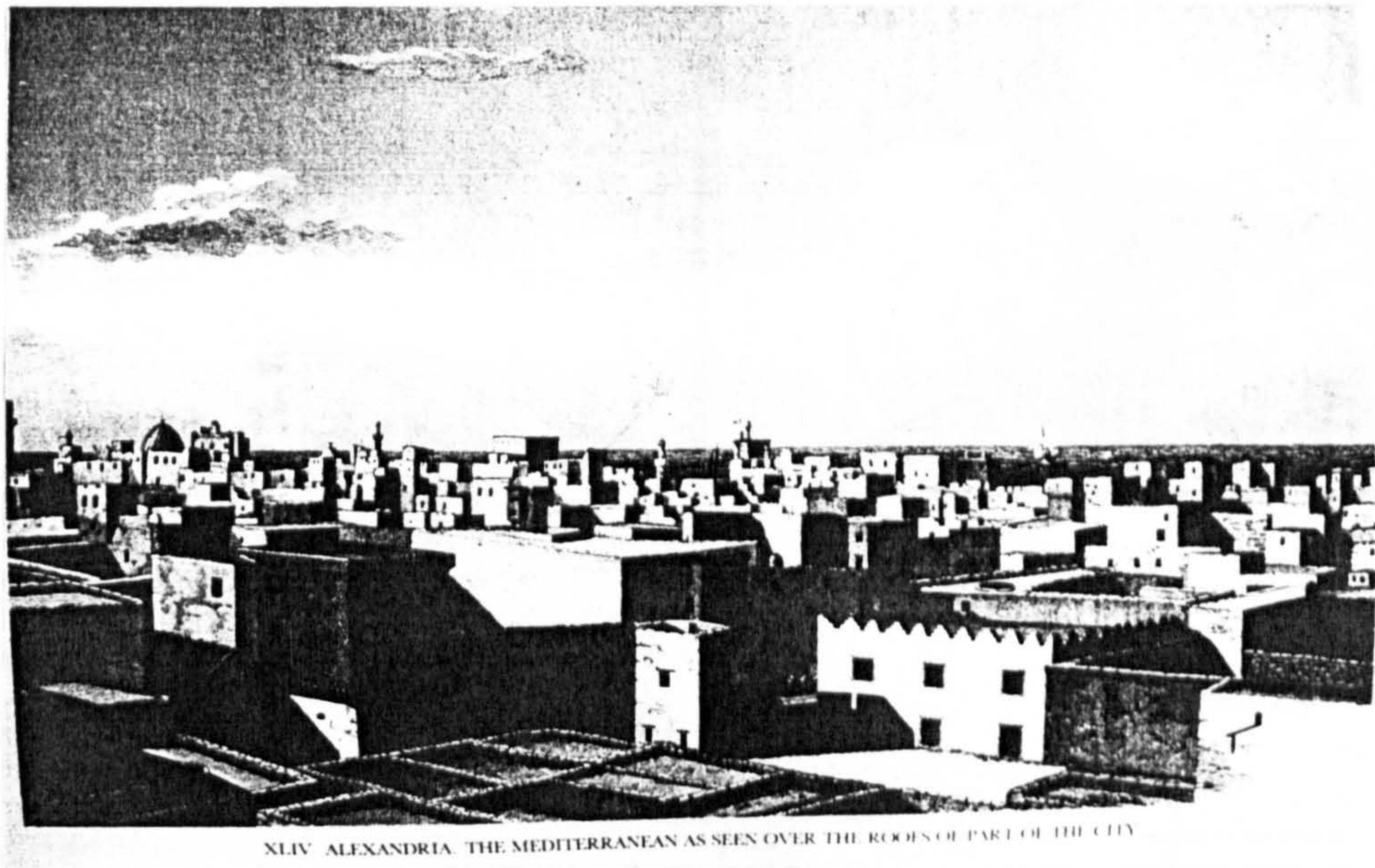
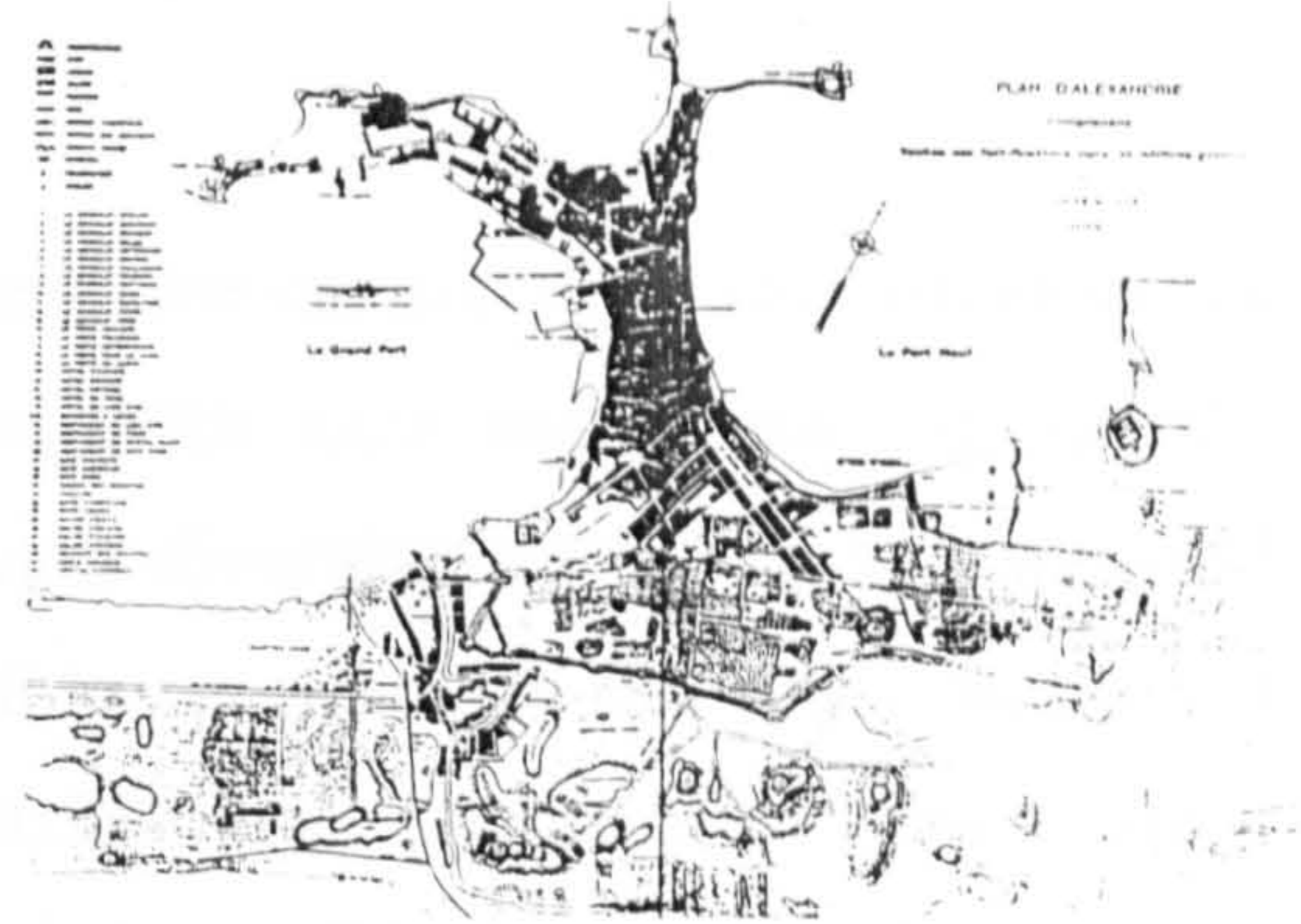
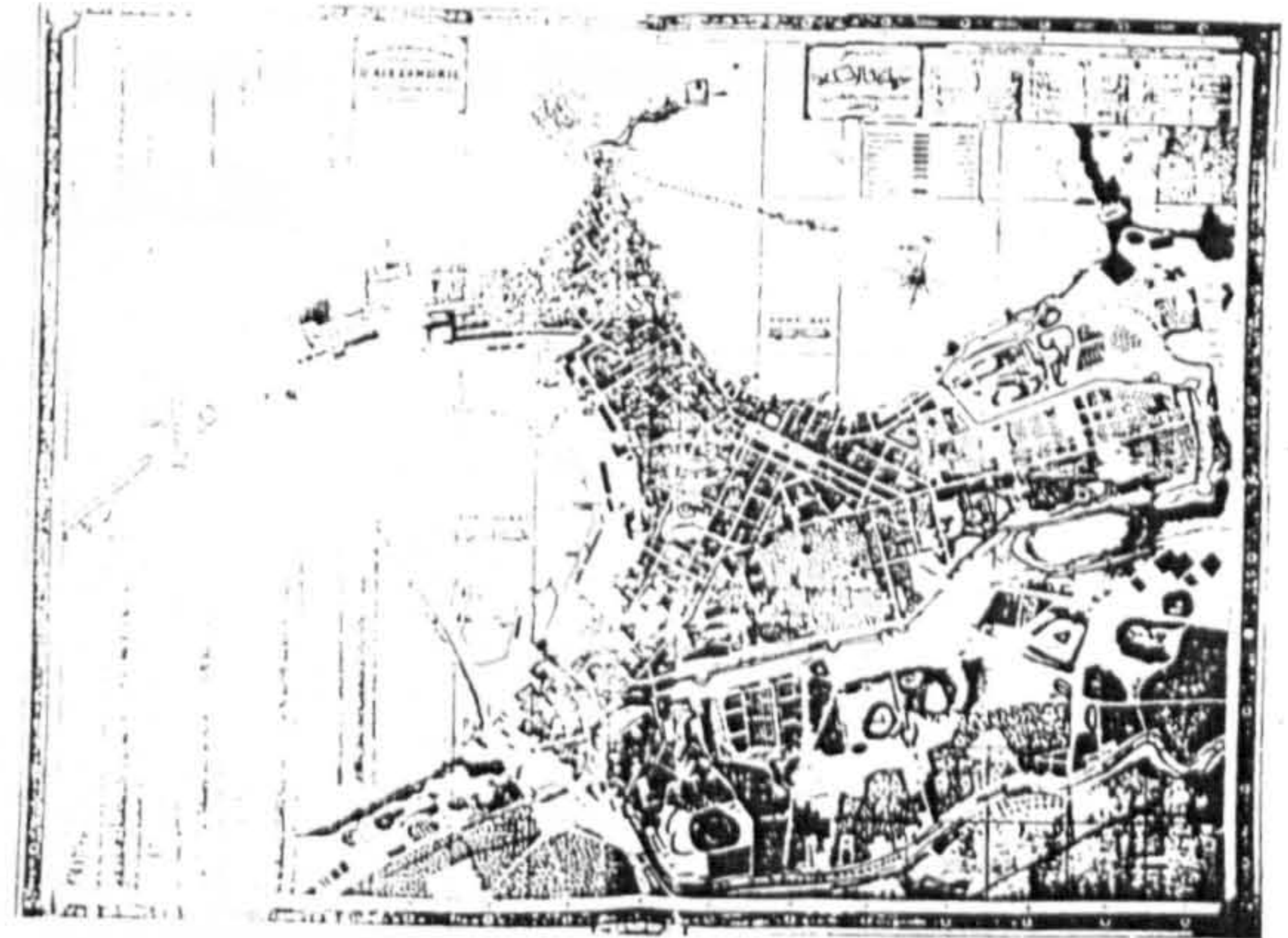


Fig.5-10, Alexandria before Mohamed Ali (in 1801), as illustrated by the French Campaign, (source: Anderson & Fawzy,1988)

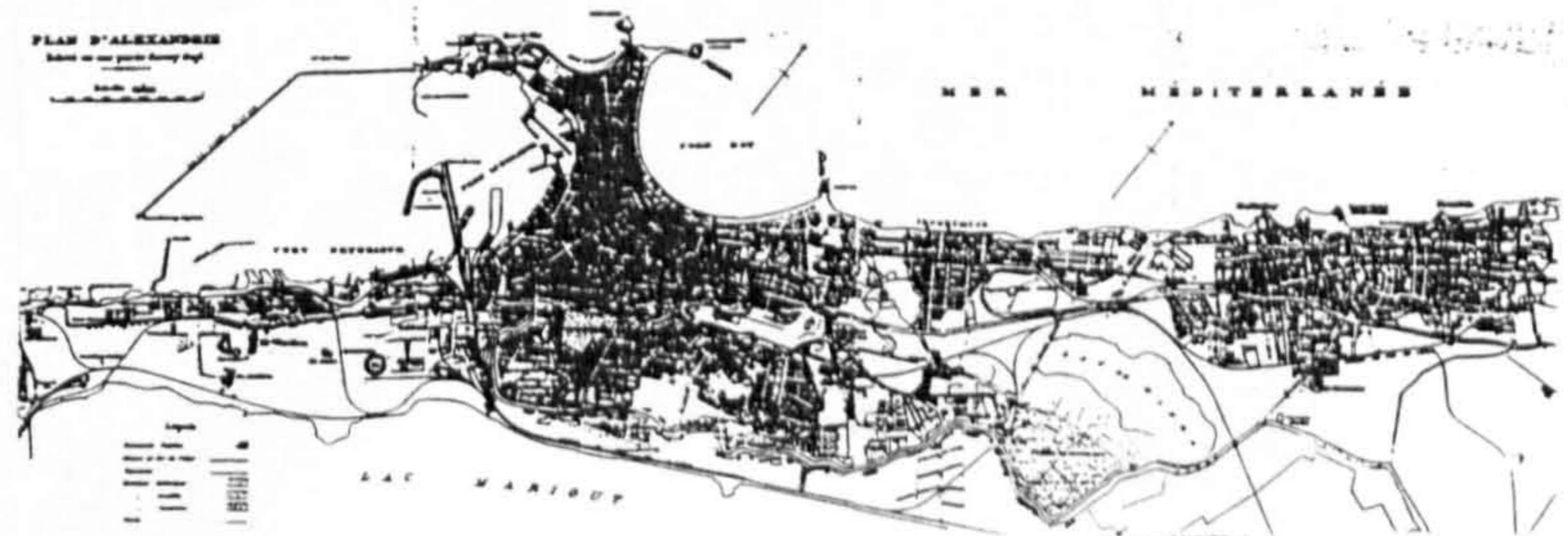
Early 19C.
Alexandria in 1858,
(source:Jondet,1921)



Late 19C.
Alexandria in 1887,
(source:Jondet,1921)



Early 20C.
Alexandria in 1919,
(source:Jondet,1921)



Late 20C.
Alexandria today.
(source: Alexandria 2005
Comprehensive Plan)



Fig.5-11, main stage of development during the 19C. & 20C.

5.3. The Architecture of the area:

Despite the serious lack in the documentation for the architectural history of the Turkish Town, as well as the absence, with rare exceptions, of specific architectural studies of the area, the apparent diversity in the nature, styles and state of the buildings has made it possible to establish the main outline of building development for at least the last 350 years and to relate the existing architecture to the historical evolution of the political, social and economic influences described earlier. Five main stages have been identified in the architectural development of the area; (fig.5-12):

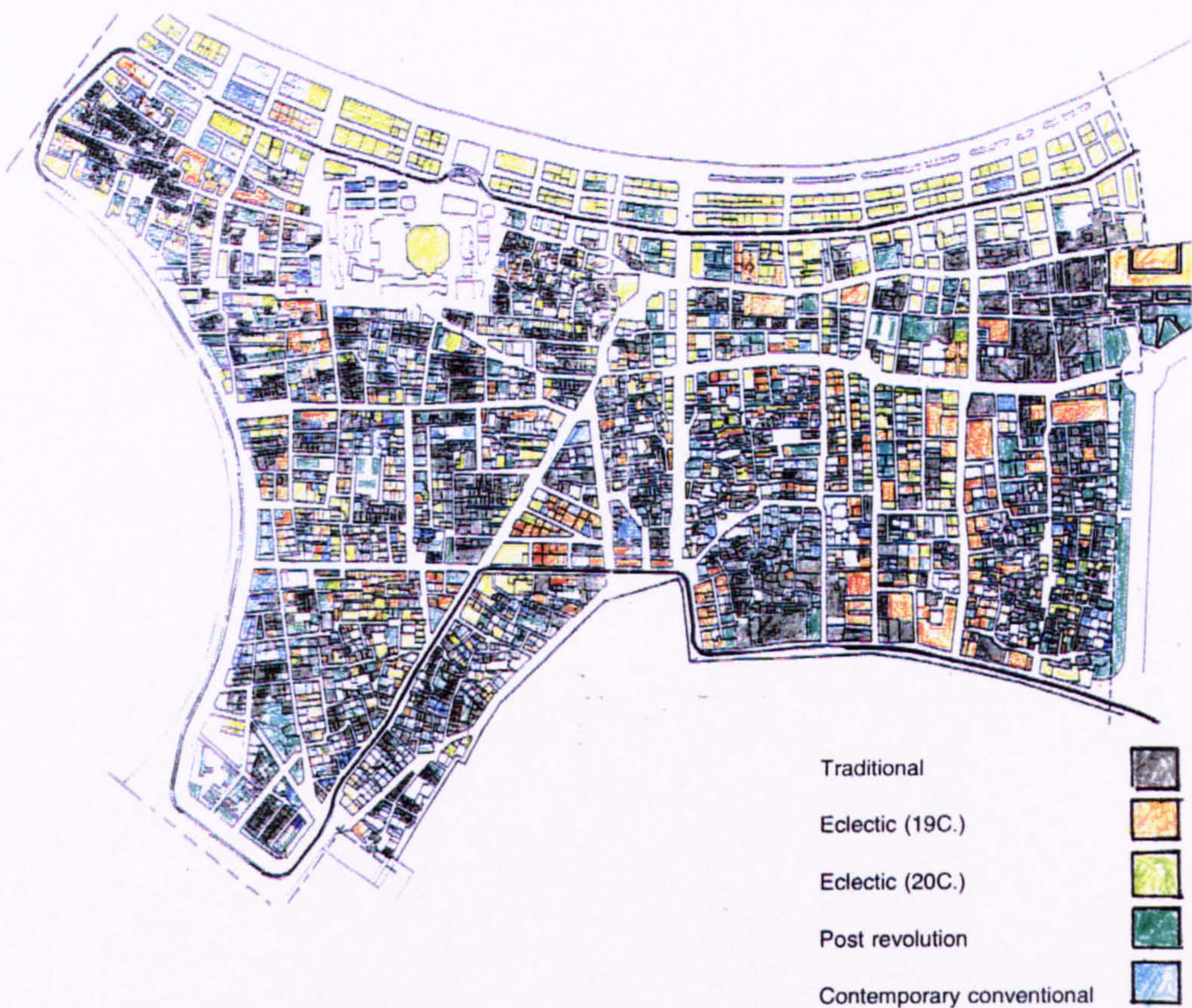


Fig.5-12, The different stages of architectural development in the area (surveyed by the author: 1991)

First, traditional architecture: belongs mainly to the period of the Turkish (Ottoman) reign (till late 19C.). Although it did not produce any monumental architecture, it did form a modest uniform built environment which enjoyed all the amenities of a city dwelling community. (fig.5-13)



Second, eclectic architecture (late 19C. - early 20C.): As mentioned above, Alexandria had been subjected to a notable Europeanisation process, which led not only to the formation of the European quarter but also influenced the existing traditional quarter (the Turkish Town) as well (fig.5-14).



Third, early modern architecture (early 20C. - mid 20C.): being strongly related to Europe, modern movements in architecture have had a further impact (fig.5-15);



Fourth, the Post-revolution architecture: The immense industrialization process and the adoption of socialism have affected the architecture of the city, especially housing, where a conventional housing type of architecture was produced; very well expressed in al-Nasr street and in some scattered infiltrations in the Turkish Town (fig.5-16);



Fifth, contemporary conventional: After the last war (1973) and Sadat's policy for an open market¹ explained earlier, the social structure has been dramatically altered and a new class of extremely wealthy people has emerged. Thus, large investments were directed to the building industry, leading eventually to speculative commercial buildings aiming at immediate and large profits (fig.5-17).



However, this development, briefly sketched above, has been taking place through various aspects (Table 5-1); not only on stylistic grounds, but in the way they were built, the function they have been acquiring as well as their ability to survive. This will be illustrated in the following pages.

¹ After the last war in 1973, a sudden change in the Egyptian economy took place by opening all doors which were previously closed for free trade, import-export and investment.

Table 5-1,

		Traditional	Eclectic	Early modern	Post-revolution	Contemporary Conventional
I N F L U E N C E	Turkish	■	■			
	European (neo classic)		■	■		
	Modern			■	■	■
	International				■	■
M A T E R I A L S	Stone	■	■	■		
	Timber	■	■			
	Brick	■	■	■	■	■
	Steel		■	■		
	R.Concrete			■	■	■
T Y P E S	Residential	Houses	Blocks of flats 5 Storyes	Blocks of flats 6-7 storeys	Blocks of flats 7-10 storeys	Blocks of flats 10-20 storeys
	Commercial	Wekalat e.g. (AlShourbagi)	Wekalat e.g. (AlBitash)	Large shops e.g. Darwish	Shops	Shops

5.3.1. Buildings, their nature and use:

In the following pages we shall be examining the architectural content of the Turkish Town in terms of usage, origins and functions; three main categories can be identified: residential, secular and religious buildings.

First, Residential buildings:

Housing in al-Gommrok (the Turkish Town) comprises one of its great and most acute problems, the magnitude of which has been clearly expressed in official reports and public opinion to be discussed later. Residential buildings however, form the majority in the district (60 %)¹, and as indicated earlier, they belong to different categories of historical and social backgrounds.

¹ Alexandria 2005 Comprehensive Master Plan.

Traditional housing:

Traditional houses must not be regarded merely as an example of an old method of design or building techniques, as they have been the genuine response to the complexity of physical, environmental, economic, social and ethical needs of the society and the amalgamation of various cultural and architectural influences;

"Housing is related to individuality, and indeed is one of the most important features of the expression of personality" (Schaflitzel,1982:209)

However, they form the biggest sector of housing in the area and face the most acute problems. In 1777 they were described by a traveller, Binos:

"Les maisons de cette ville sont en general baties en pierre de taille, et ont assez d'elevation" (Arnold,1989:43)

Another description was given by Sonnini in 1778:

"Ces maisons, comme toutes celles de levant, ont leurs combles en terrasses; elles sont sans fenetres et leurs jours qui tiennent lieu sont presque entierement bouches par un triellies de bois, saillant, de differentes formes et si serres que la clarte peut a peine y penetrer..." (Arnold,1989:43)

The traditional house of Alexandria can be generally described as a family house with a simple external appearance, facing the street with its smallest side. It is usually introverted to a courtyard with separate entrances for men and women. However, the absence of a central courtyard is not unusual where it has been replaced with a central hall for the family activities. In the following pages we shall be illustrating various examples of traditional houses, and where it is possible to note the influence of Turkish architecture:

First, form, style and function:

■ Their external appearance is noticeably simple, and which is a characteristic to the Ottoman domestic architecture as noted by Vogt-Goknil (1966:139)

"Viewed externally, their domestic architecture is very plain. Houses are generally two storeys high and the rooms are asymmetrically planned. The external characteristics of the Turkish dwellings are the broad, projecting tent shaped roofs, covered with red tiles. There is no evidence of vault, arch or portal. Styles are based on straight, especially horizontal lines."

■ As previously mentioned, the Turkish town is not a planned one, thus the external perimeter is hardly regular, especially in lower and middle class houses; this irregularity has however been controlled by the regular form of the courtyard (or the central hall).

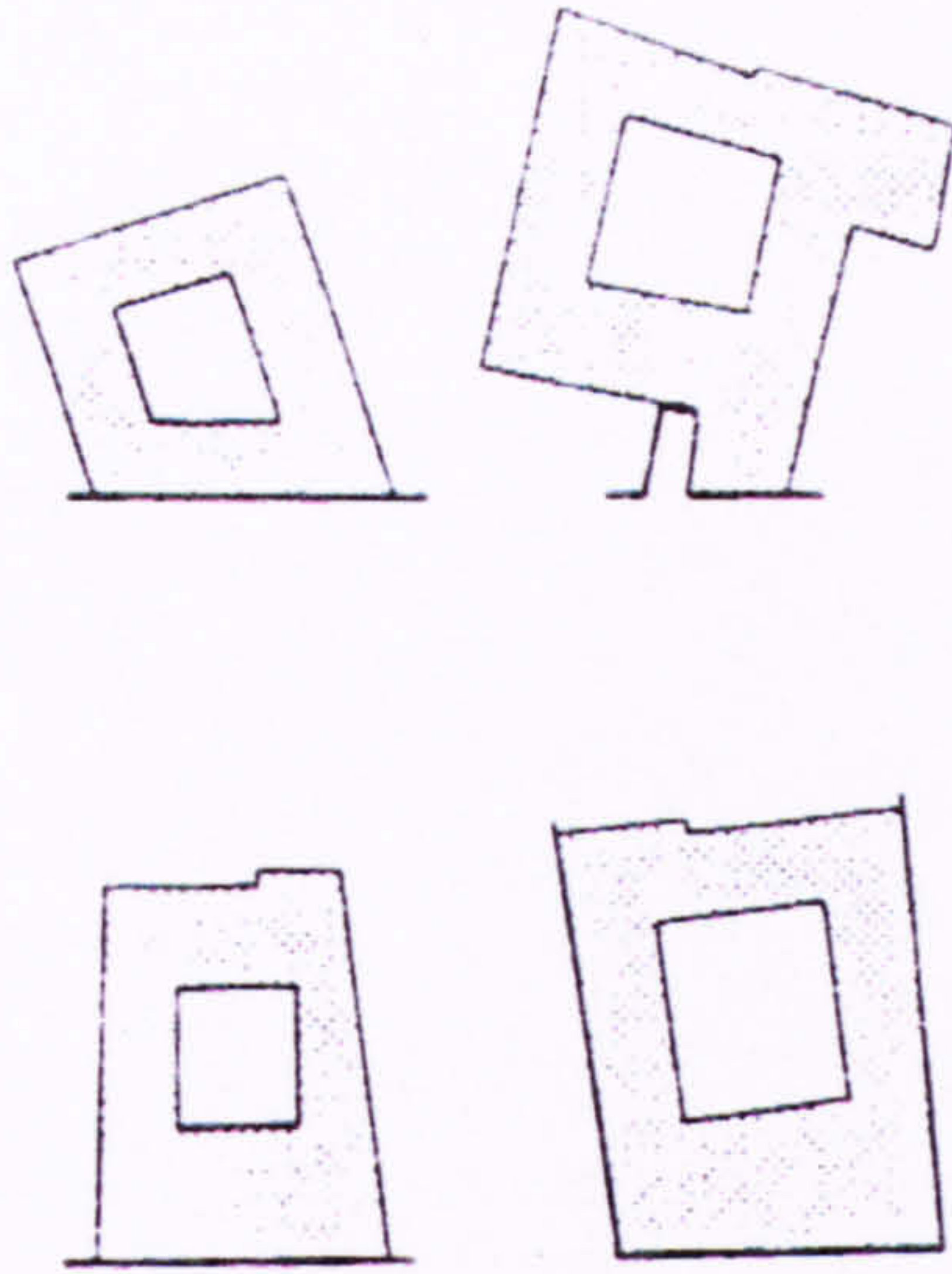


Fig.5-18, *Right*, the external appearance of the traditional house; *Left*, regulating the space by means of a central element (courtyard or central hall).

■ The need for private life to be separated from the public world has been accomplished by various means, such as 1) providing the house with its private open space within its introverted enclosure, in which the family can enjoy outdoor privacy, 2) avoiding direct entrances from the street and the gradual transition from the public space to the private space via a bent entrance, the *Magaaz*, and 3) the projecting alcove over the street, supported on cantilevered wooden beams. This shades the narrow streets and enables women to watch daily life on the street without being seen.

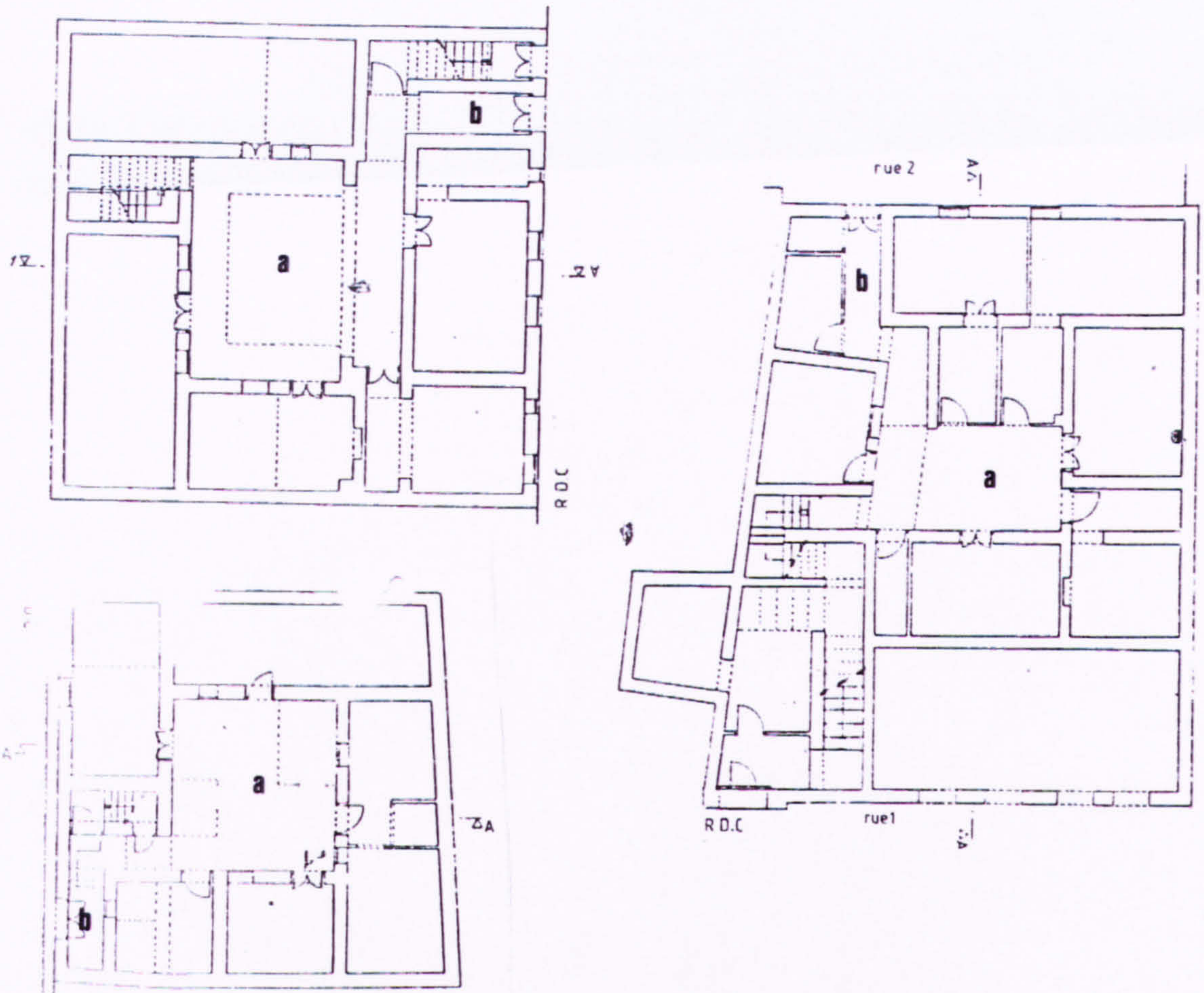
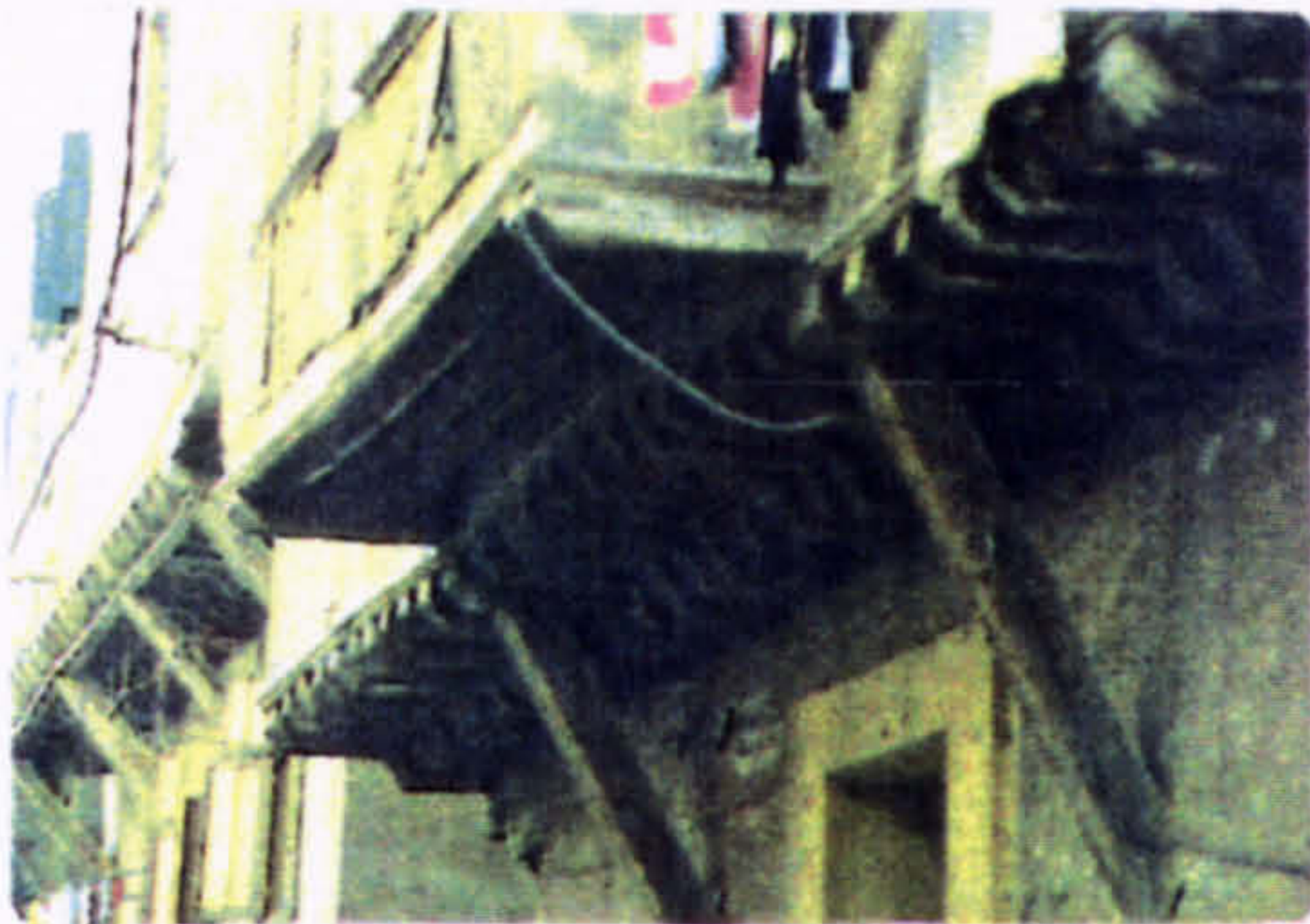


Fig.5-19, Above, examples of traditional housing illustrating: a) the introvercy and b) the *Magaaz*;
Below, the projecting alcoves: a character of the traditional street.



- The separation between the men's quarter *Selamlık* and the women's quarter *haramlık*. Each has its separate entrance, and guests could be received by the master or the mistress separately in their own apartments.

"Thus separate entrances and quarters for men and women were provided to all houses and without social distinction. Even houses consisting of only two rooms were divided into 'harem' (women's quarter) and a 'selamlık' (men's quarter)." (Vogt-Goknil,1966:140)

This feature is apparent in Alexandria, though there has been a further reason to have such separation: as the city was a major transit-trade centre, lodging was provided in these houses and which had to be separated from the rest of the house where the family (the owners) live.

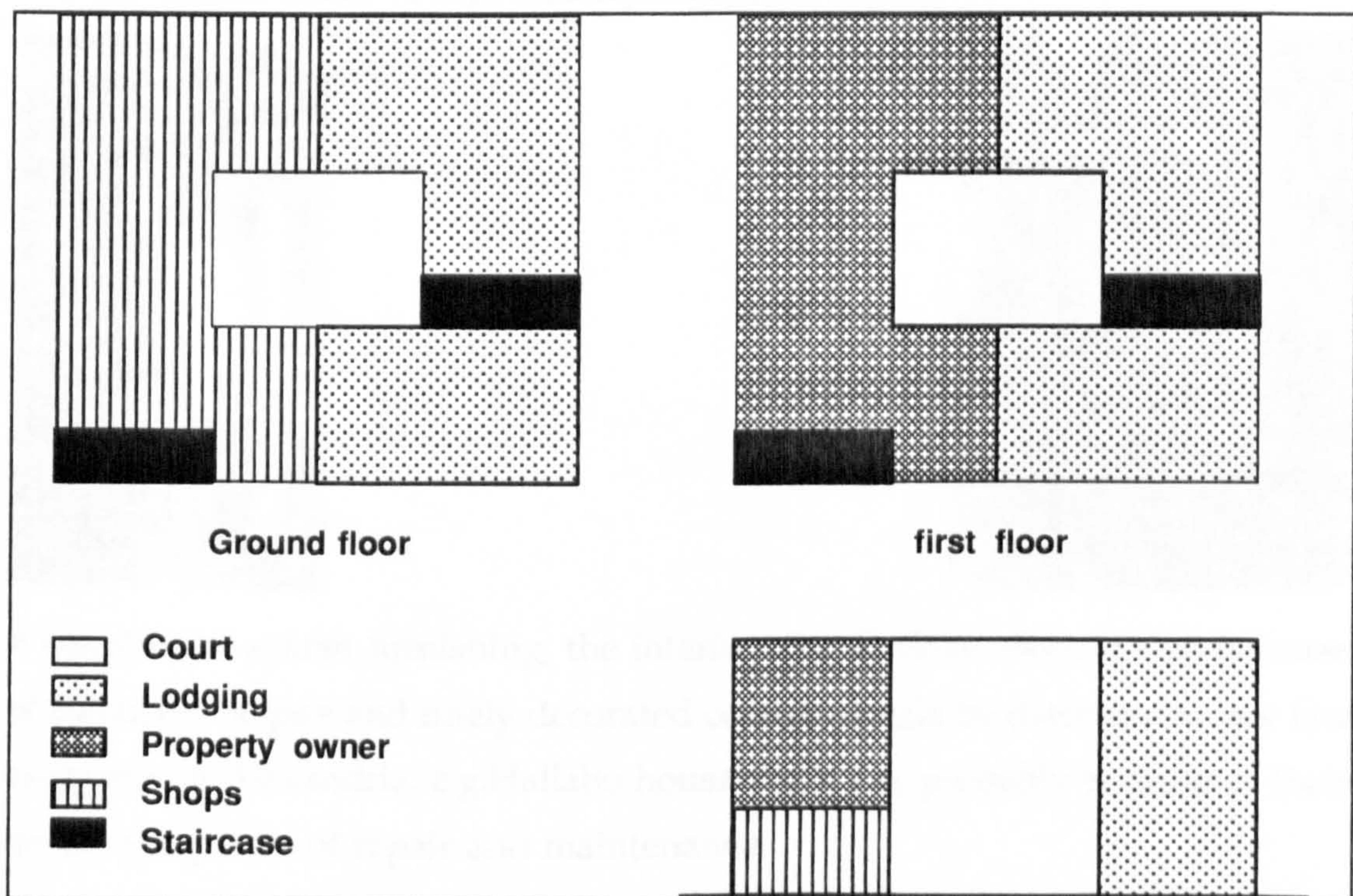


Fig.5-20, A Schematic drawing of a typical traditional house.

- Air ventilation and thermal comfort has been achieved either by through courtyard or by an air duct which has been situated either near the staircase or near the living area.

Second, the interior design:

- The interior arrangement of the house is a flexible one: a central hall/room *salah* surrounded with rooms,

"In Turkish homes, furniture such as beds, tables or chairs were not confined to one room. Every room was interchangeable; from living to dining to bedroom." (Vogt-Goknil,1966:139)

- Built-in furniture such as cupboards and open shelves is a common feature in an Ottoman house. In Alexandria, these were detected in few houses, e.g.Hallabo house (fig.5-21)

"At least one wall of the living-quarter had a continuous row of windows. The other walls contained built-in cupboards, open shelves and small niches for various items." (Vogt-Goknil,1966:139)



- Despite the sparse furnishing, the interior of a Turkish room is rich because of colourful carpets and finely decorated ceilings; could be detected in very few examples in Alexandria, e.g.Hallabo house (fig.5-22), probably because of their deteriorating state of repair and maintenance.



Third, Building materials and structural methods:

Brick and timber are the two main materials commonly used in the construction of traditional houses. The use of stone is generally confined to the foundations with the exception of some regions, where it has been used to adapt to their geographical and climatic nature, i.e. the availability of stone and the need for high thermal capacity to regulate the temperature inside the house. Thus, stone is more commonly used in the Alexandrian house, so the ground floor is usually built in stone while the upper levels are built of brick and timber. Roofs are built of timber beams and boarding, then covered with a thick layer of earth.

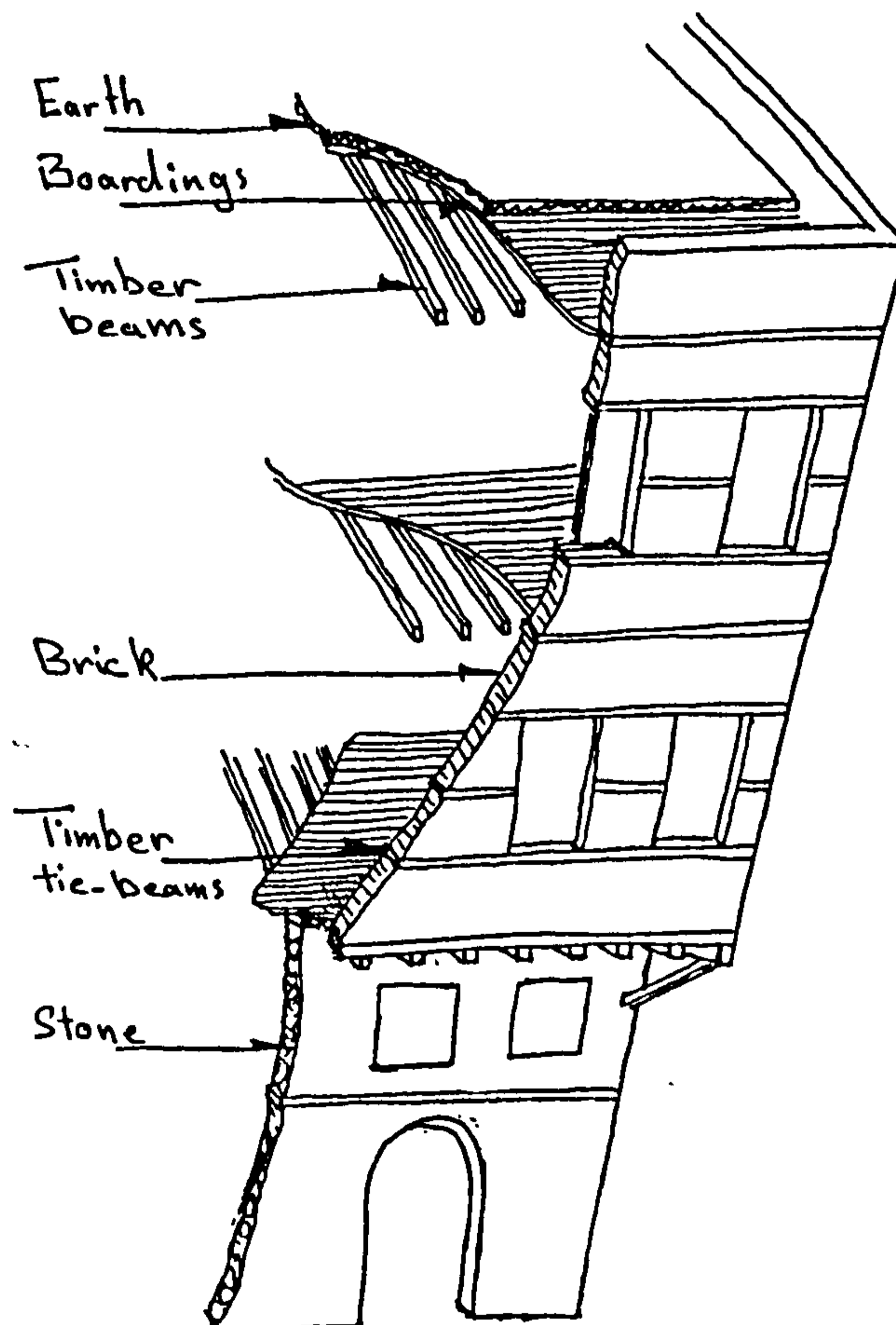


Fig.5-23, Building materials and construction techniques of the traditional house.

Blocks of flats

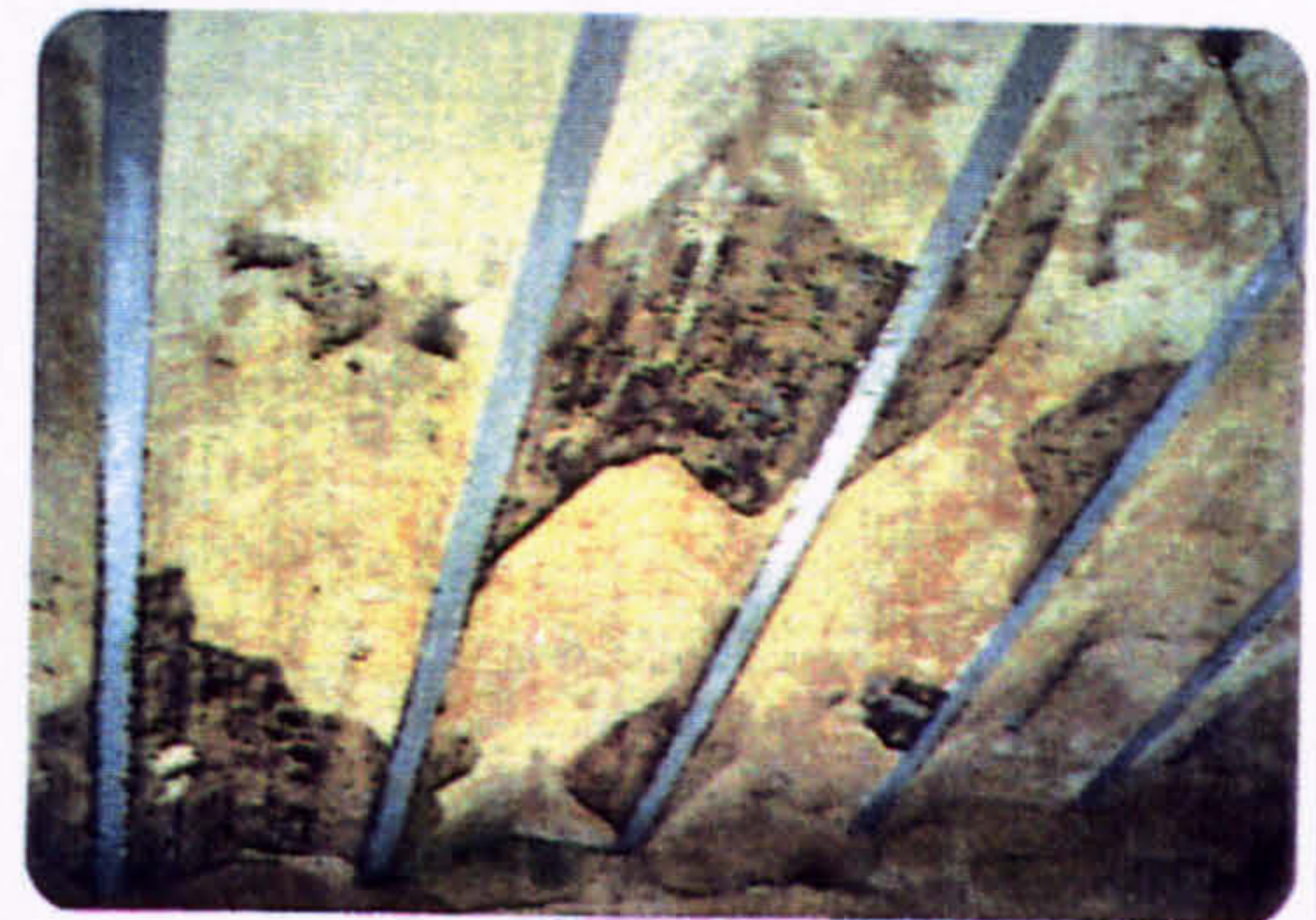
On the other hand, later residential buildings have been mainly flats.

■ **The eclectic and early modern styles:** After the start of the Europeanisation process and the establishment of the European quarter, wealthy people started to imitate the 'modern' buildings of the European quarter by building blocks of flats, using European styles and construction methods (fig.5-24). The average height of these buildings is five storeys with an average height of 4.5 metres for each storey and they are mainly built of stone and brick with the introduction of some new materials such as steel beams and later reinforced concrete (fig.5-25).

Fig.5-24, Blocks of flats, built early 20C. using European styles and construction methods.



Fig.5-25, The use of new construction methods; e.g. the use of the Jack-arch.



■ **The post-revolution architecture** of the period from the late 50's till the early 70's. As previously mentioned, the architecture of this period has reflected the ideological trends adopted by the government, namely Socialism and Nationalisation. Hence, the Turkish town has been infiltrated by blocks of flats with an average height of five to seven storeys. These buildings hardly possess any architectural merit; neither do they fit into the surrounding environment. They are built of reinforced concrete and brick. Their size, both in area and height, is much less than the earlier flats. These blocks were mainly owned by individuals and rented to middle and lower class families. Their rent has been imposed by the municipal authority.

■ **Contemporary conventional architecture:** Further infiltrations which have been taking place since the late 70's. They have caused more damage to the urban fabric and the built environment of the Turkish town. Their height ranges from ten to twenty storeys, and the architectural merit is also poor as they were built merely for immediate and enormous economical profit. To avoid the fixed rent system, the dwellings were sold to the tenants.



Fig.5-26, Right, post-revolution architecture (1960s); Left, Contemporary architecture (1980s).

Second, Secular buildings:

Both the type and architecture of these building has varied during the different stages.

The traditional stage: Secular buildings at that stage were largely confined to commercial needs (fig.5-27). As trade has always been a major entity in the economic machine of any state or system, it has played a notable role in the Muslim world. Among the various forms of trade, urban markets are indeed the most important of all, where commercial goods of great variety and high quality could be produced and a satisfactory consumer environment could develop. (Chalmeta,1980:105).

As indicated earlier, Alexandria had been an important trade centre with a high commercial potential; Cesar further emphasize the significance of Alexandria as a trade centre by stating that:

"Only Alexandria could have had an important trade centre in that part of the world at the particular time. It is therefore possible that a number of warehouses and shops built of durable materials built in that important port might have been called Kaysariya¹." (Cezar,1982)

This can be observed through the various commercial buildings still operating today, e.g. Wekalet al-Shourbagi, Wekalet al-Bitash, Wekalet Terbana,.. etc.² Here the following characters can be detected:

- They are twofold purpose buildings: commercial (the shops, workshops and stores), as well as residential; the residential units are on the first floor and which are often on two levels (duplexes). These residential units were originally for lodging traveller merchants during their stay in Alexandria, and with the change in the forms of trade they became permanent residences for families.

1 According to Prof. Cezar the word Kaysariya is believed to be derived from Caesarean i.e. belonging to the king, he also mentions that he finds the claim that the oldest Kaysaryia might have existed in Alexandria quite reasonable.

2 Different cultures, languages and even goods, have produced various forms, styles and names for commercial buildings through the Islamic world, e.g. Kaysariya, Bazaar, Bedesten, Arasta, Caravanserai, Khan and Wekalah (see Appendix h-6)

- They are designed around one or more inner courtyards
- Their building materials are a composition of stone, bricks and timber, and in the later ones steel was introduced.

The eclectic and early modern stage: the Europeanisation movement has had an inevitable influence on the typology of secular buildings in the city, by introducing new types of buildings, e.g. the Court house and the hospital¹, as well as new construction methods and building materials.

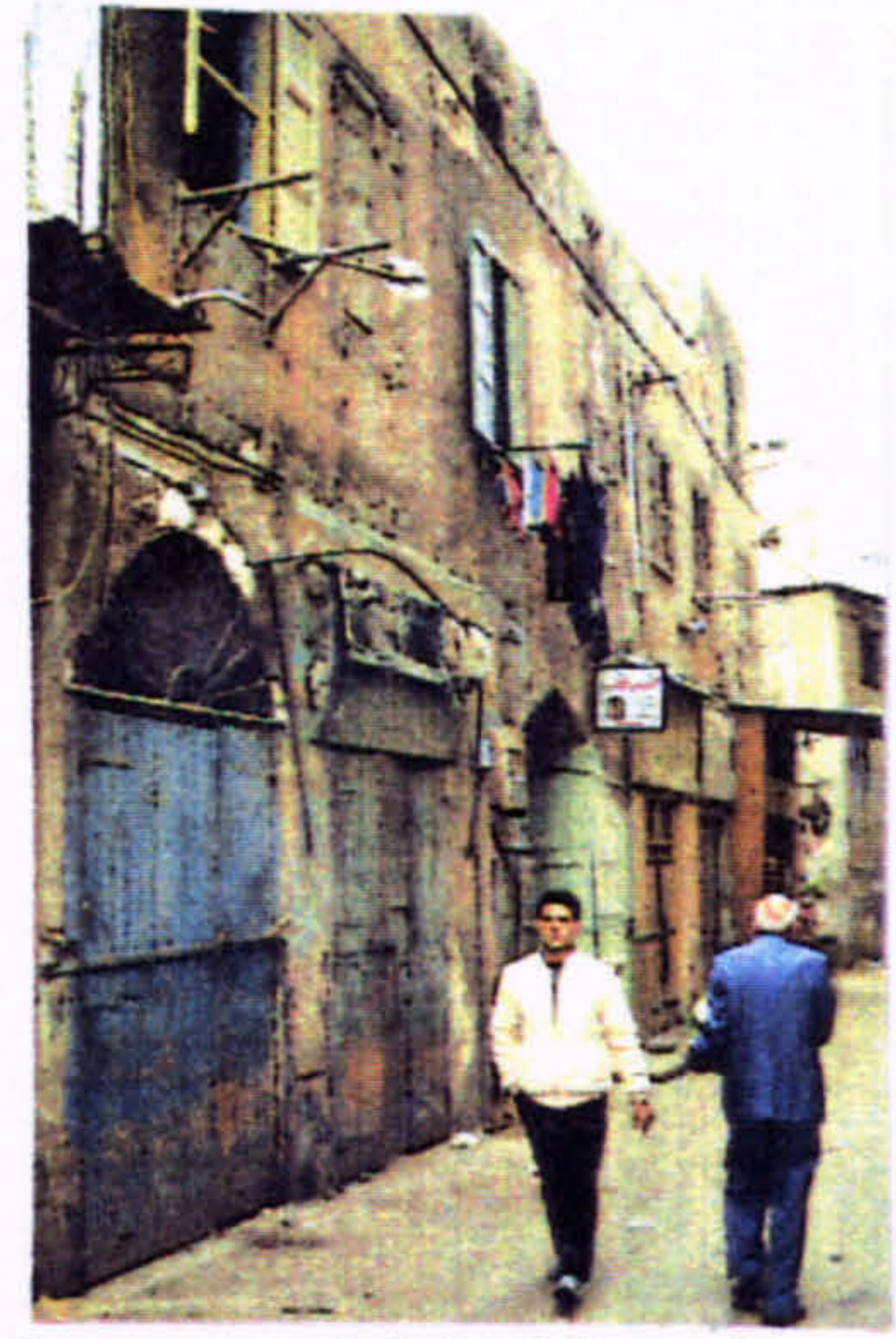


Fig.5-27, Above, Wekalet Terbana; a typical example of traditional commercial buildings²; Below, examples of secular buildings of the eclectic stage; Right, Nariman hospital, left, The court house.



¹ Although the existing hospital building has been built late in the 19C, hospitals were known in Egypt as early as the 12C. (e.g. Bimarestan Qalauun in Cairo), in other words, there might have been a bimarestan (hospital) at an earlier stage.

² Further examples are given in Ch.8 and the documentary appendix.

The post revolution and contemporary stage: have also followed the trends for mass production and standardisation; they have been mainly schools and health centres, which have followed the prototypes applied throughout the whole country (fig.5-28).



Fig.5-28, Right, AlAnfoushi school; Left, AlGommrok Clinic.

Third: Religious buildings.

The Mosque:

"The design of mosques belongs to the category of sacred art and through its tangible forms gives expressions to the spiritual genius of the community".
(Al-Wakil,1987:18)

The mosque has been a place for Muslims to gather, worship and to learn about their religion. Hence, it has been serving religious, social and political functions. Shapes, styles and forms have always been subject to the changing conditions of climate, urban patterns and building techniques, along with the social changes and the variety of cultural influences throughout the Islamic World, but the concept of design has however, remained basically the same.¹

¹ See for example: Al-Wakil:1987; Mustafa:1975; Fethi:1985 and Hillenbrand 1985

The traditional stage:

Due to the relatively cold and wet weather of Alexandria, most mosques have followed the Turkish pattern where the prayer hall is completely enclosed, and the courtyard acts only as a semi open area which links the internal space with the external¹. (fig.5-29)

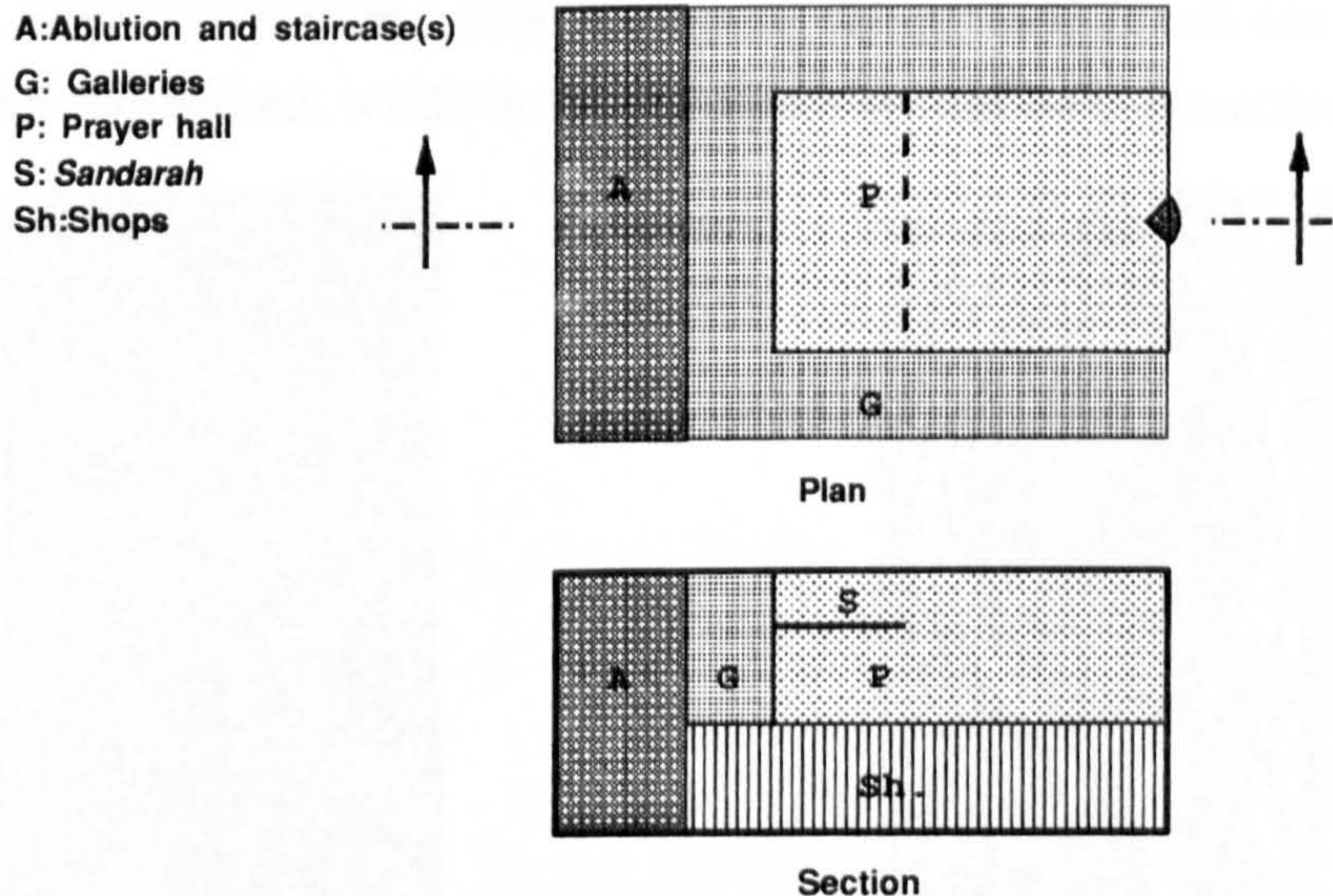


Fig.5-29, the common pattern of mosques in the Turkish Town

On the other hand, the treatment of the interiors of these mosques represented the Turkish influence by other means, mainly the extensive use of coloured tiles which is a dominant feature in Turkish mosques (fig.5-30);

"While the exterior of mosques gained their effect from their monochrome appearance, the interiors, however, were very different... Walls were decorated with brilliantly painted tiles: green or blue on a white background with relatively little red." (Vogt-Goknil,1966:181)

Other common characteristics in the traditional mosques of the Turkish Town can be detected as follows:

- The ground floor is used for shops and stores while the prayer hall is on

¹ For further reading about Turkish mosques, see for example, Goodwin:1971, 1977 and Vogt-Goknil:1966

the first floor and is reached via a courtyard by the means of staircases. The main entrance door is usually preceded by a portico.

- The *minarets* of these mosques are all very similar, especially the upper parts. (fig.5-31)
- The re-use of classical columns taken from Greek and Roman temples.
- The structural system of these mosques is mainly made up of stone walls with timber tie-beams. The ceilings of the ground floors are intersected and barrel vaulted, while the upper floors would be constructed in timber.

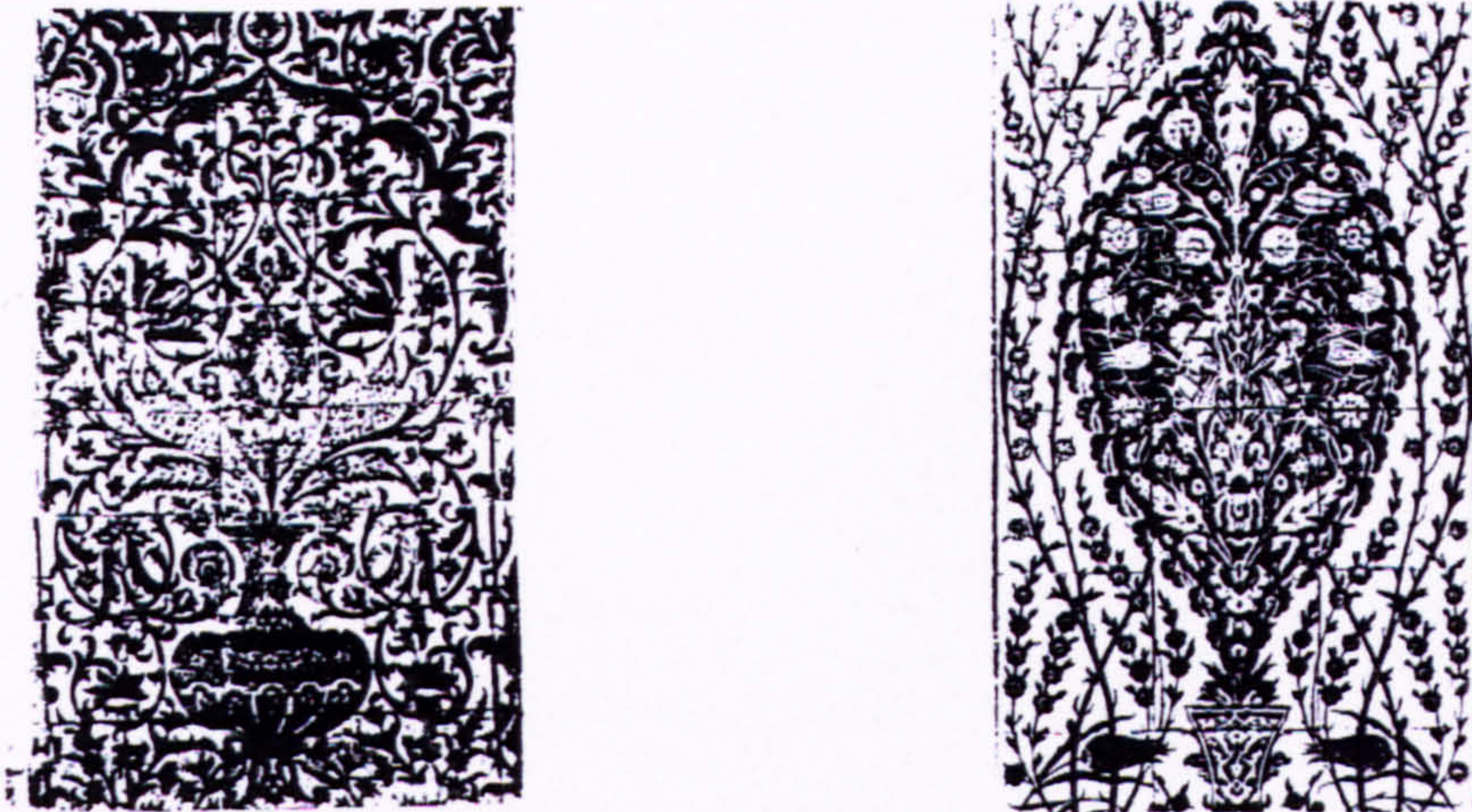


Fig.5-30, Right, tiles from AlShourbagi mosque (in the Turkish Town); Left, tiles from Atik Valide Complex, Uskudar, (source Goodwin,1977:150)



Fig.5-31, The typical pattern of Minarets in the Turkish Town; a)Terbana; b)Hurmoz; c)Taher Bek and Sidi Temraz.

The eclectic stage:

This stage was marked by the building of two major mosques, Sidi Timraz and Abou alAbbas. Neither followed the traditional pattern of ground floor shops and were built on a much greater scale. The latter, which is a reconstruction of an originally a small traditional mosque built at the shrine of Abou al-Abbas, a Muslim scholar from al-Andalos (Spain) (fig.5-32). In 1920s the work started on replacing this structure by a colossal building which is now one of Alexandria's main focal points, and the work was finally completed in 1945. The building is a mainly concrete construction which has been founded on mechanical piles. The walls are built of burnt red brick, the domes, the *minaret* and the lantern are of reinforced concrete.

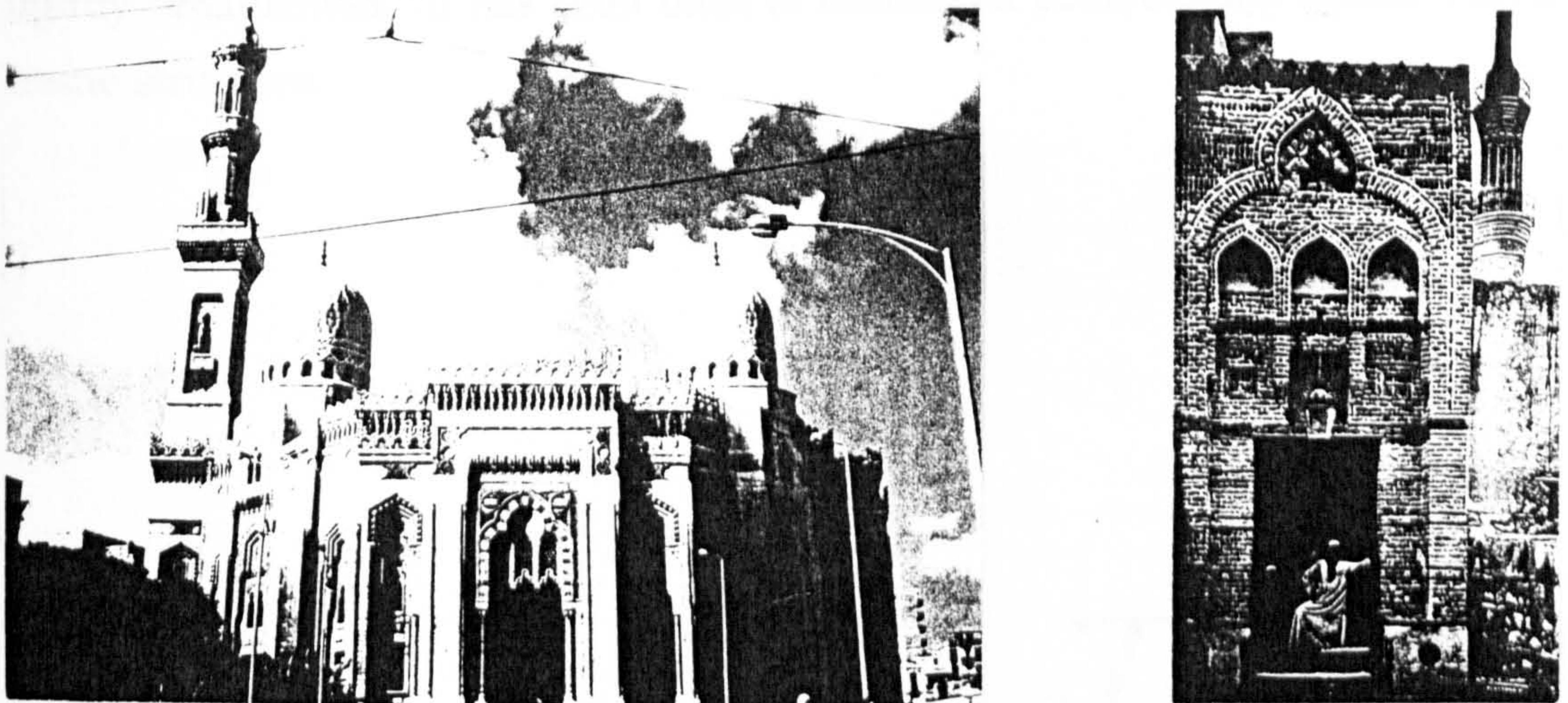


Fig.5-32, Above right, Abou AlAbbas mosque in 1913 (source: La Comité de conservation de Monuments des l'art Arabs); Above left, the mosque after reconstruction; Right, plan of the new mosque.

The most uncommon feature has been the shape of the plan; the octagonal plan is very unusual for mosque design, and it has not however been a successful one because the nature of the prayers requires a more regular space i.e. square or rectangular.

The post-revolution and contemporary stages:

Mosque building, due to the scarcity of vacant land, at this stages has been largely confined to small mosques on the ground floor of residential blocks. Nevertheless, there has been a noteworthy exception, namely the mosque of Sidi Gomaa Salem which was built in the 1960s (fig.5-33). It has followed the common pattern of the area; the ground floor is made up of shops while the prayer hall is placed on the first floor and reached via a staircase. The only exception to the traditional pattern is the placement of the ablution area on the first floor which has been facilitated by means of modern sanitation techniques. The building is very simple in its architecture; both interior and exterior are very lightly ornamented. It has been built in reinforced concrete and bricks with a frame structure.



Fig.5-33, Sidi-Gomaa Salem Mosque

5.3.2. Their present and future

Having illustrated the architecture of the area, its origins and its functions, it is our major concern to examine its future prospect-its ability to survive both physically and functionally.

First, Residential buildings:

Despite the great need for housing, it is habitual for old traditional houses not to be used completely as dwellings. This unexpected phenomenon is mainly due to the departure of the wealthiest inhabitants to modern houses because of the lack of sanitation and other essential services; consequently these dwellings have been rented to low income families with low living standards. As a result, these buildings have always faced frequent alterations such as the insertion of partitions in a one family house to accommodate more than one family, and the installation of inadequate sanitation equipment. In other instances only commercial premises at ground floor level, accessible from the streets, and workshops, still survive in use, while the original upper storeys being lost or partially demolished.

Later residential buildings are also facing major problems of poor maintenance, which are mainly due to housing laws which has left owners with low fixed rents and permeant occupants; thus maintenance becomes an extra burden which they cannot afford, and in some cases they deliberately damage the building in order to be able to knock it down in order to have a more profitable investment. Thus, we may claim that the future of residential buildings is largely dependent on their legal status and the housing legislations in general.

Second, Secular buildings:

Secular buildings obviously face more acute destructive stresses than any other buildings. This is due to the continuous changes in the activities which usually take place in these buildings; for example, the change of nature in transit trade and the decline in demand for merchants' lodging has led to the disintegration

of many commercial buildings (*wekalat*) in the area, the upper storeys and the interior court decaying, leaving the exterior to be used as shops. Another example is their incompatibility with the surrounding activities, such as the Darwish shop illustrated later, where the shop has become redundant because of its incompatible scale and function. With the city shifting to the east, and its centre shifting to the European quarter and with the Court House moved, the old building has become redundant.

Being mostly government buildings, they have become part of the bureaucratic process and therefore tend to face serious problems poor maintenance and neglect.

Third, Mosques:

The constancy and tradition of the daily Islamic life have given mosques a considerable protection against any destructive forces resulting from neglect or obsolescence which might have succeeded in altering or destroying other buildings. And as such, traditional mosques have been able to keep much of their identity. Nevertheless, they are threatened by means of modernisation, e.g.:

- Attempts at roof treatment against rain water which are not always efficient thus causing further damage.
- The installation of new sanitary utilities which are often done unprofessionally thus involving problems of water leakage, damp stains and consequently problems of decay and crystallisation in stone and plaster.
- Adding modern electrical fittings such as fans and fluorescent lamps which are unsympathetic to the original fabric of the interior (fig.5-34), or fixing sliding glazed aluminium frames to the timber windows.
- Most important are major area developments surrounding the mosque and resulting in the loss of the integrity and scale of the building, e.g. Abou AlAbbas mosque (Mogamaa alMasajid project illustrated later).

However, from the above we may conclude that what is needed to maintain mosques is largely technical assistance to the locals, who are normally willing to give the financial support needed for their mosque. The form of this assistance is a very important aspect; it shouldn't be just a set of inhibiting regulations governed by another set of bureaucratic procedures; unfortunately the current system of Awqaf administration does not allow such local initiatives to contribute positively, and because of all the complexities involved, locals normally ignore these regulations and find a way around them.



Fig.5-34, the interior of Terbana mosque; unsympathetic fittings to the original fabric.

5.4. The physical setting and urbanisation implications

From the brief historical review sketched above we may illustrate the physical setting of the study area as follows:

- It is situated to the west of the current city of Alexandria.
- It occupies the isthmus separating the Western (main) port and the Eastern (fishing) port.
- The area is bordered by the sea on three sides, while the south ends with Alexandria's central business district.
- It stretches about 1Km in the North-South direction and 800m. in the East-West direction.

Hence, with the rapidly increasing rate of growth and urbanisation expressed

earlier in the recent historical development of the city, we assert the dramatic pressures that are to be considered in order to deal with the problems of an over-loaded infrastructure, services, transport as well as the inevitable economic and commercial pressures resulting from its physical setting and the surrounding forces (fig.5-35).

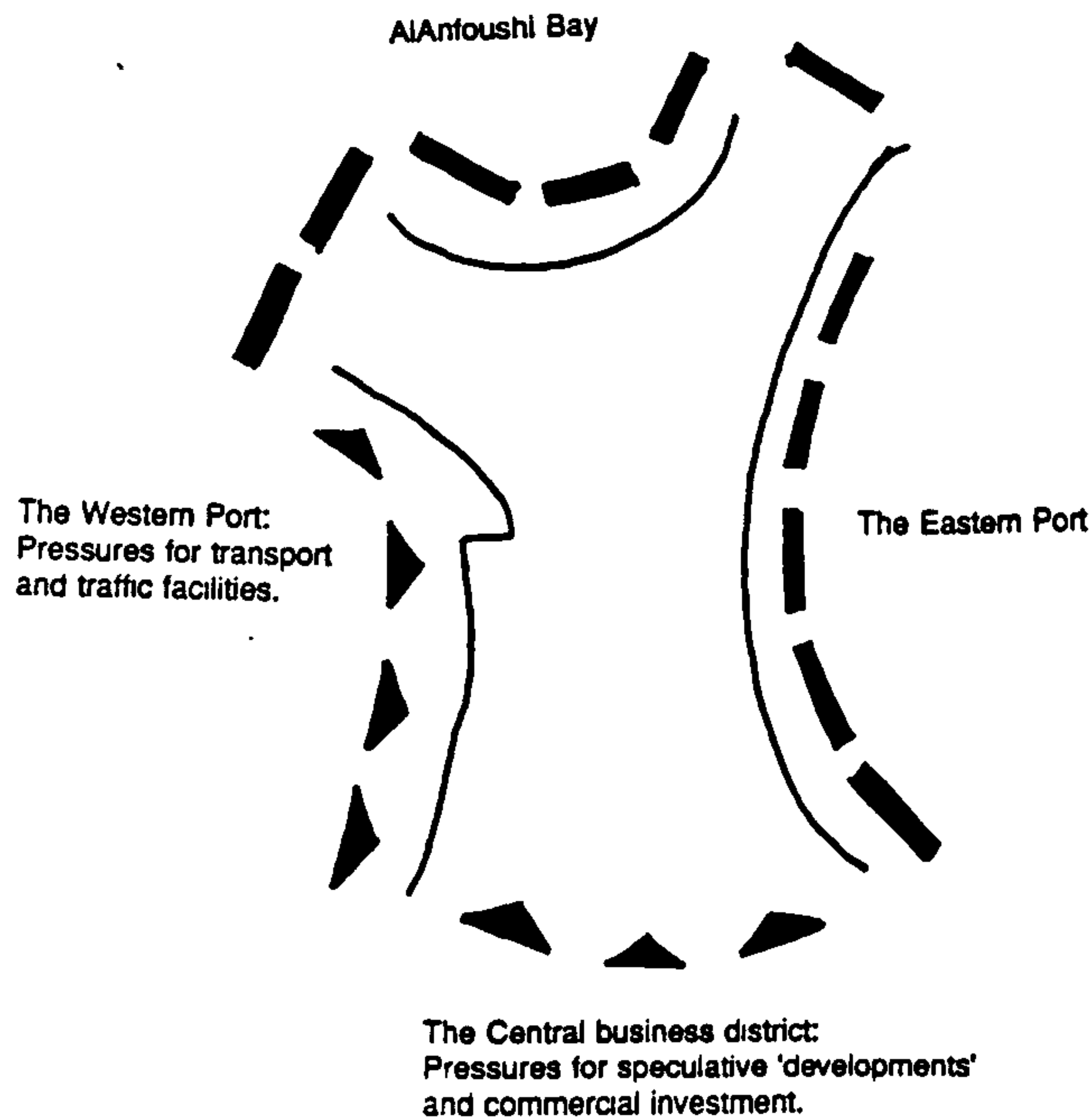


Fig.5-35, The physical setting and surrounding forces.

In this section, our concern is therefore to examine the present morphology of the area, and its future prospects.

5.4.1. A Morphological analysis

The area is bordered by a major thoroughfare (Al Corniche), and to the south by AlNasr street; within these borders it is sliced into smaller zones by a group of main streets which belong to the late 19C. and early 20C.; to the North, there is a notable vacuum which is a product of the 1980s (Mogamaa al-Masajid project). Nevertheless, despite the various attempts for 'modernisation', the traditional morphological outline of the area is still readily distinguishable, not only among other areas in Alexandria (fig.5-36) but among later influences in the area as well.

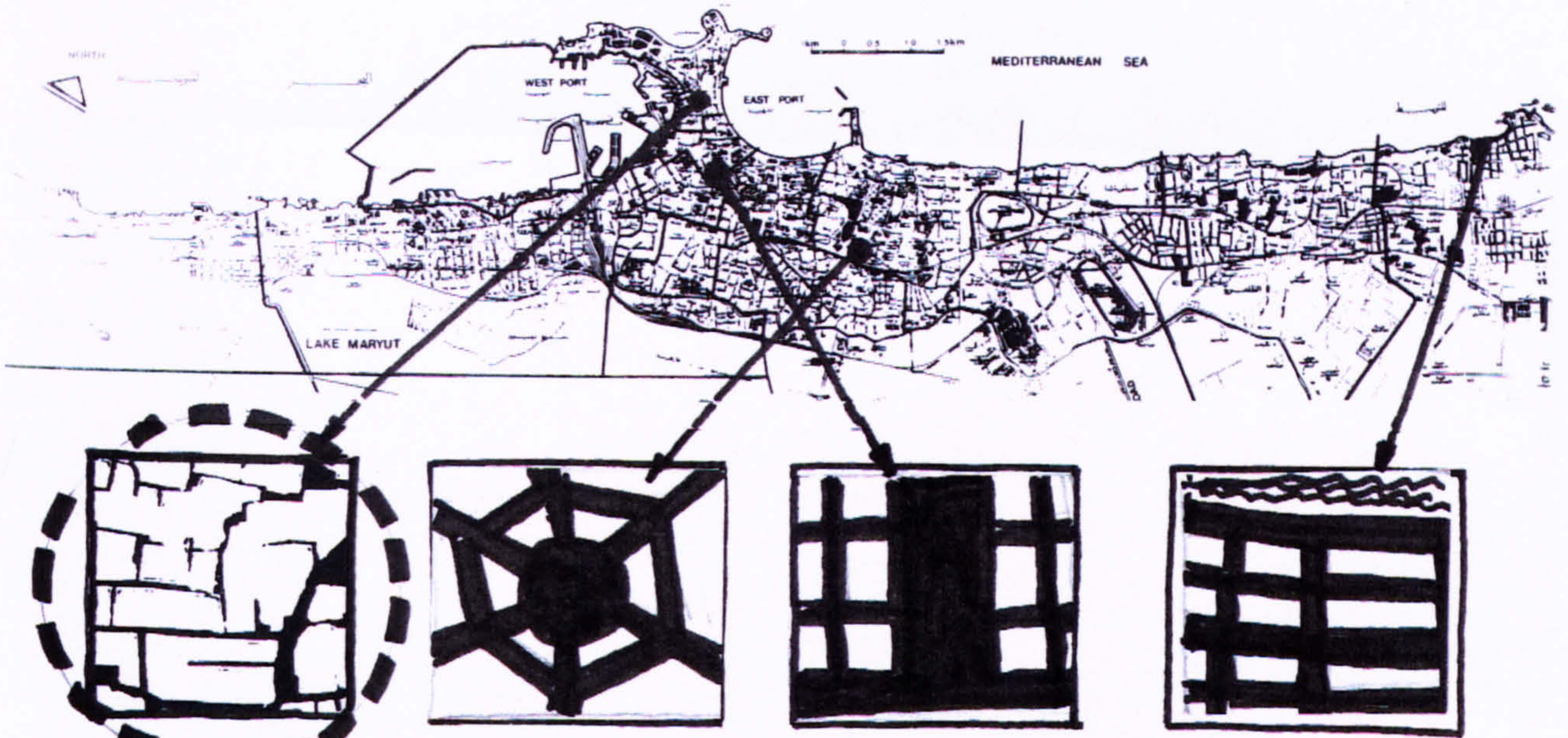


Fig.5-36, The fabric of alGommrok is still readily distinguishable among other areas in Alexandria.

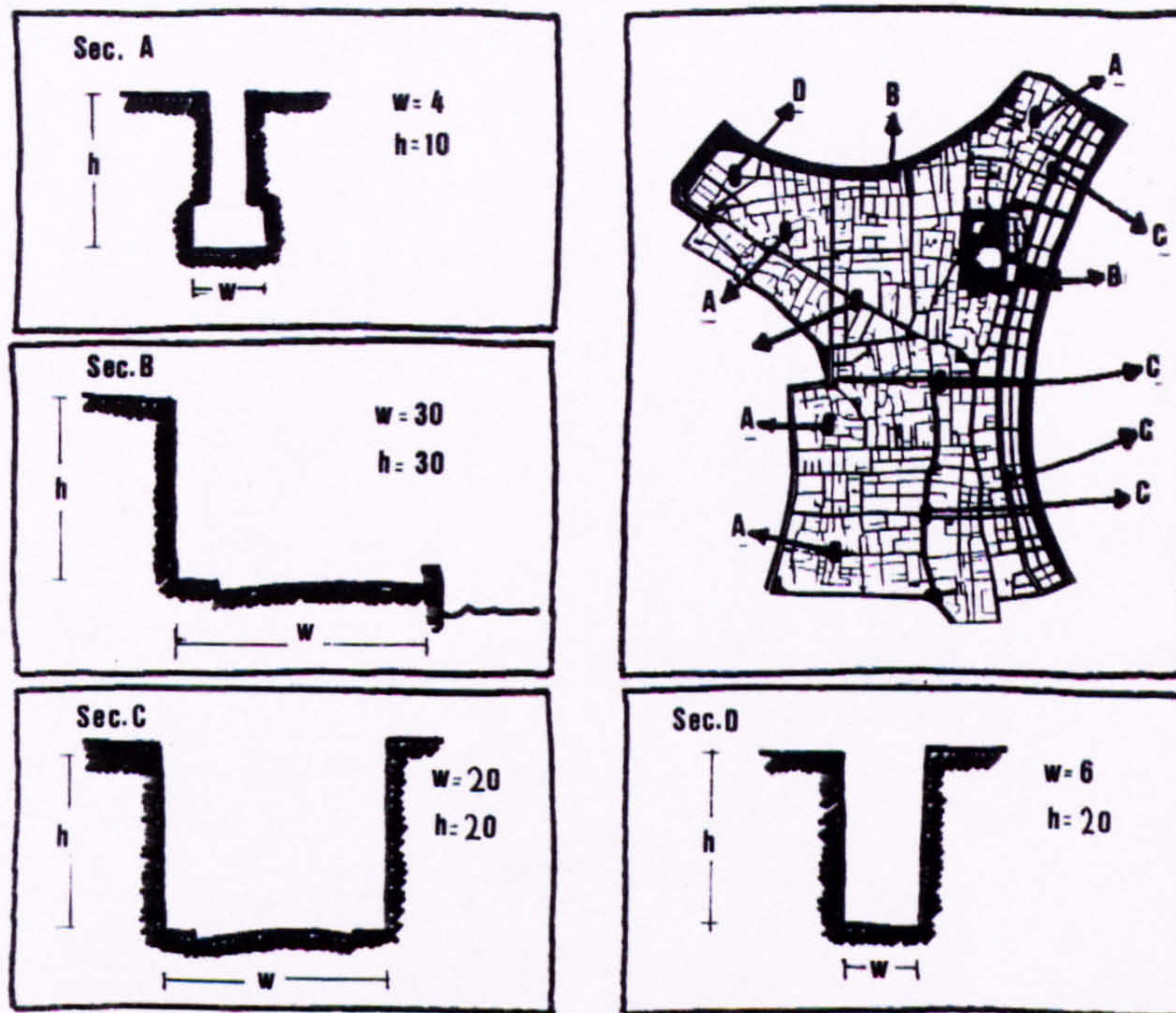


Fig-37, A morphological analysis

I- The street pattern: The general street pattern, even the modern parts have a certain degree of irregularity which is due to: the curved nature of its natural borders and obviously to the influence of the traditional urban pattern of the city. However, walking through its narrow streets and alleys is undoubtedly a rich experience; difficult as it may be for a stranger to find his way in them, it is a very well known pattern to the inhabitants; a rich urban space created with a variety of buildings, located in different positions and angles. These general features of this pattern can be illustrated as follows:

Fig.5-38, The intersections of these streets are hardly at a right angle, thus different views are to be seen from each side of the crossing.



Fig.5-39, Pedestrians gain a rich visual experience, since the irregularity of the streets provides them with a variety of spaces and scenes, hence avoiding monotony.



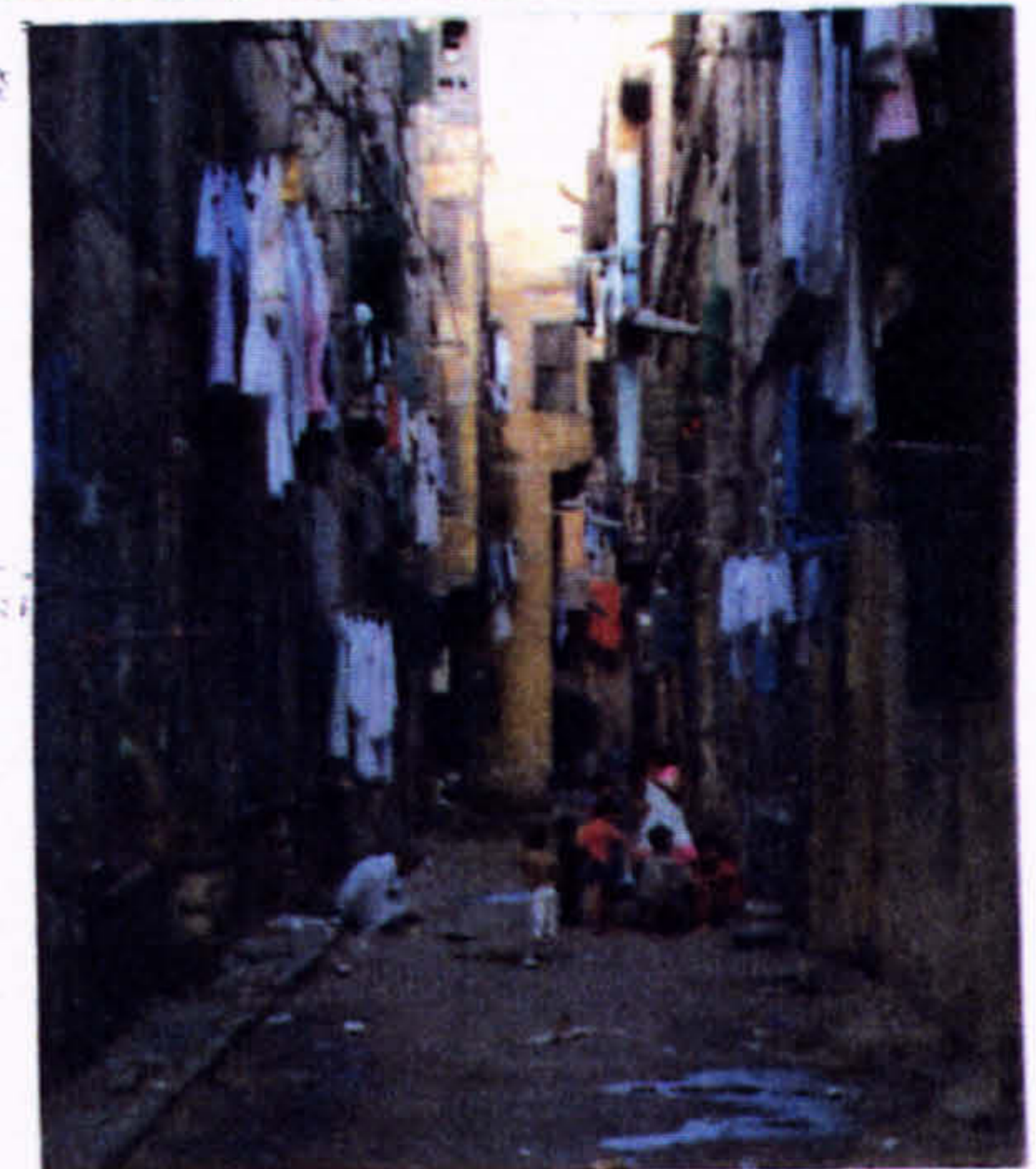
Fig.5-40, The richness of the street environment is conceived not only by physical means - facades' details and ornaments - but also by the existence of various human activities.



Fig.5-41, The narrow width of the street provides its environment with a climatic comfort by increasing the shadow area.



Fig.5-42, This pattern and mainly the width of the streets have contributed much to the social cohesion of the community, as they formed close social communities among the occupants of the street. Hence, the wider the distance between both sides, the less the social relationship.



These features, however, are essentially implying that these streets are mainly concerned with an ample environment for the pedestrian rather than a route for vehicular traffic. This fact has contributed largely to the present chaotic situation of the streets where different forms of movements, which are not originally meant to be there, are getting in each other's way.

Nevertheless, one need not to spend much time in the area, despite all the contemporary influences upon it, before realising that it is governed with an order which is, for one thing, different from the rest of the city and which follows a gradual sequence of importance, dimensions and level of movement. This sequence is evident in its street pattern where it is related to the function of the street, the amount of access served, the type of transportation allowed to operate as well as the social cohesion within the street community.

This sequence, illustrated in (fig.5-43), can be classified as follows:

1- *Shariah*: serves as the main street which shapes the area and provides its pattern, linking the area with other parts of the town; the main elements are the Sook (bazaar) and the mosque.

The dimensions of these streets allow for the movement of a cart, and despite their continuity they share the irregularity of the whole pattern.

2- *Harah*: serves as a secondary street which is less in its dimensions than the former, and is mainly used as access both to houses and smaller streets (*Atfa* or *Zuqaq*). These streets form the first community unit as the occupants of each *Harah* participate in a close social life and act as a big family. Thus, it represents the first degree of privacy.

3- *Atfa*: this kind of street serves as a link between the main street and the *Harah*, one *Harah* and another. The dimensions are smaller than the *Harah*. Both the *Harah* and the *Atfa* were intended only to accommodate pedestrians as well as carrying animals (donkeys and horses), i.e. not carts. Social life in the *Atfa* is closer than the *Harah*, since it serves fewer occupants and houses.

4- *Zuqaq*: a short dead end street which forms the last threshold of the sequence.

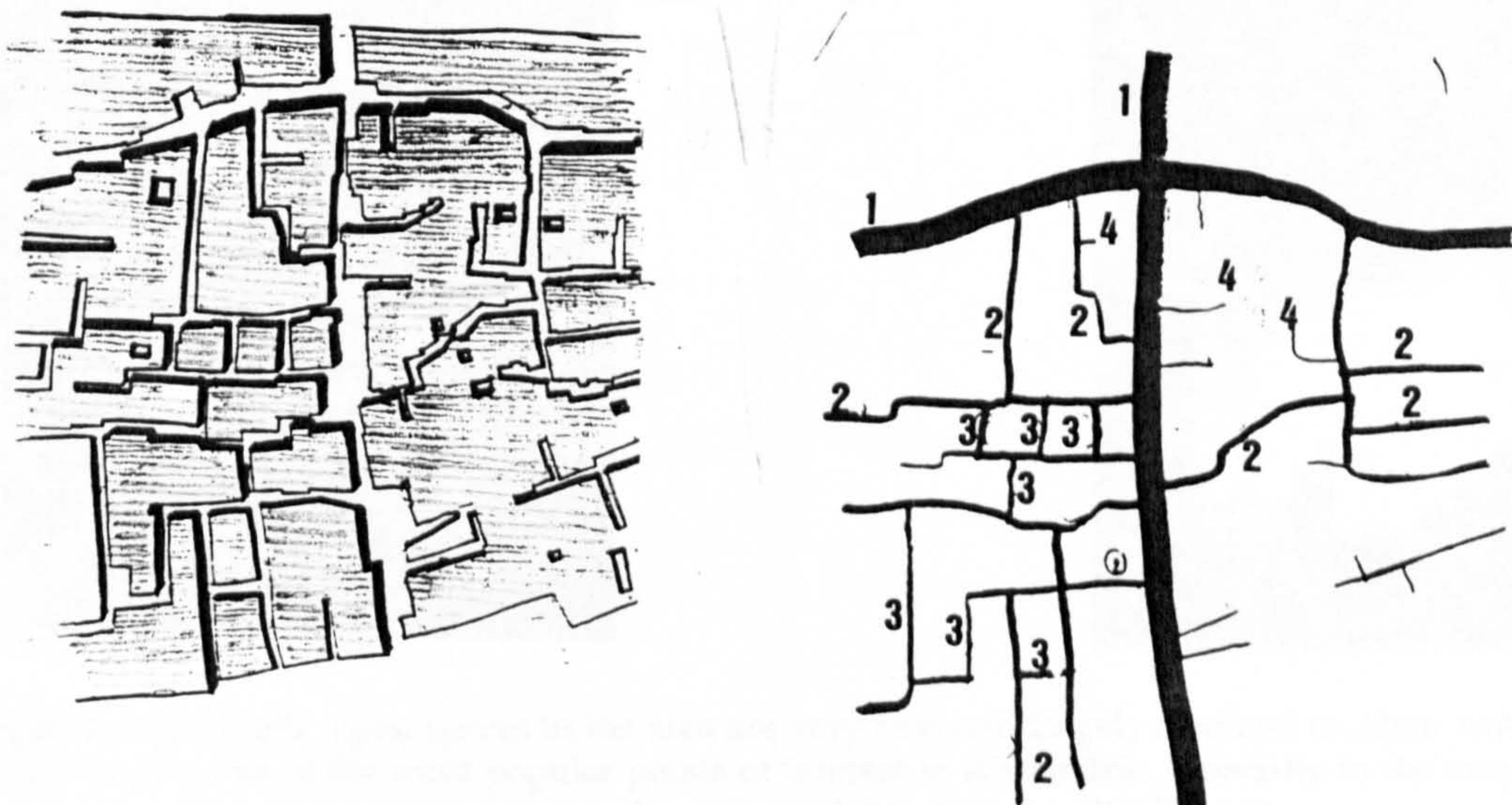


Fig.5-43, the street hierarchy.

II- The Urban form;

Although infiltrated with new components, the traditional form can be traced quite easily, different neighbourhoods (*Harahs*) are identified, each of which forms its own spatial and social integrity and constitutes its own urban order. An average of three storeys in height has been a traditional characteristic in the urban texture; this silhouette has, however, been badly damaged with the emergence of high rise buildings thus threatening the traditional form as it alters the homogeneity of the urban texture. Nevertheless, the richness of its visual quality can still be gained in various parts of the area as previously illustrated.



Fig.5-44, The traditional silhouette has been badly altered with the high rise blocks of flats reaching 15 - 20 storeys.

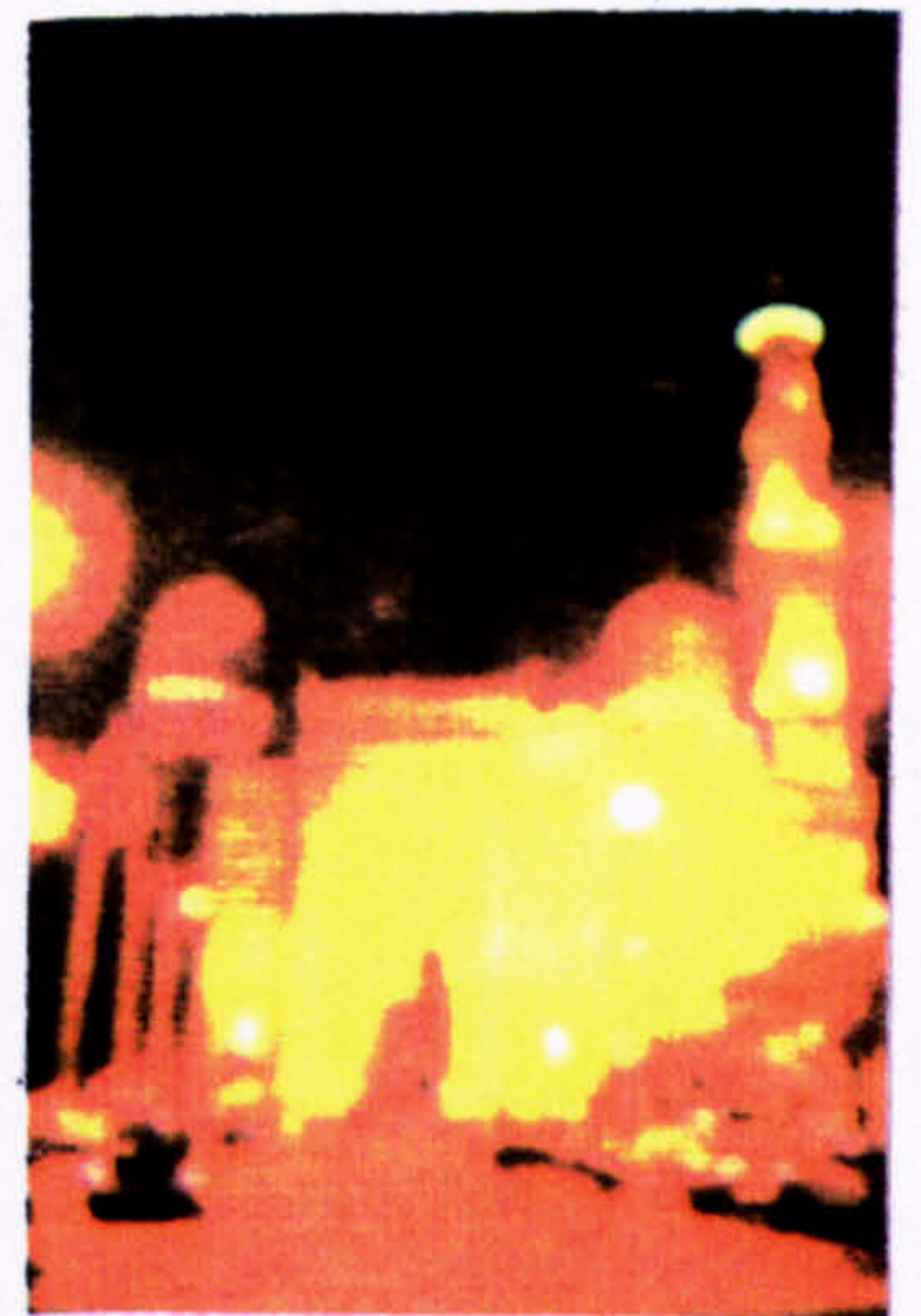
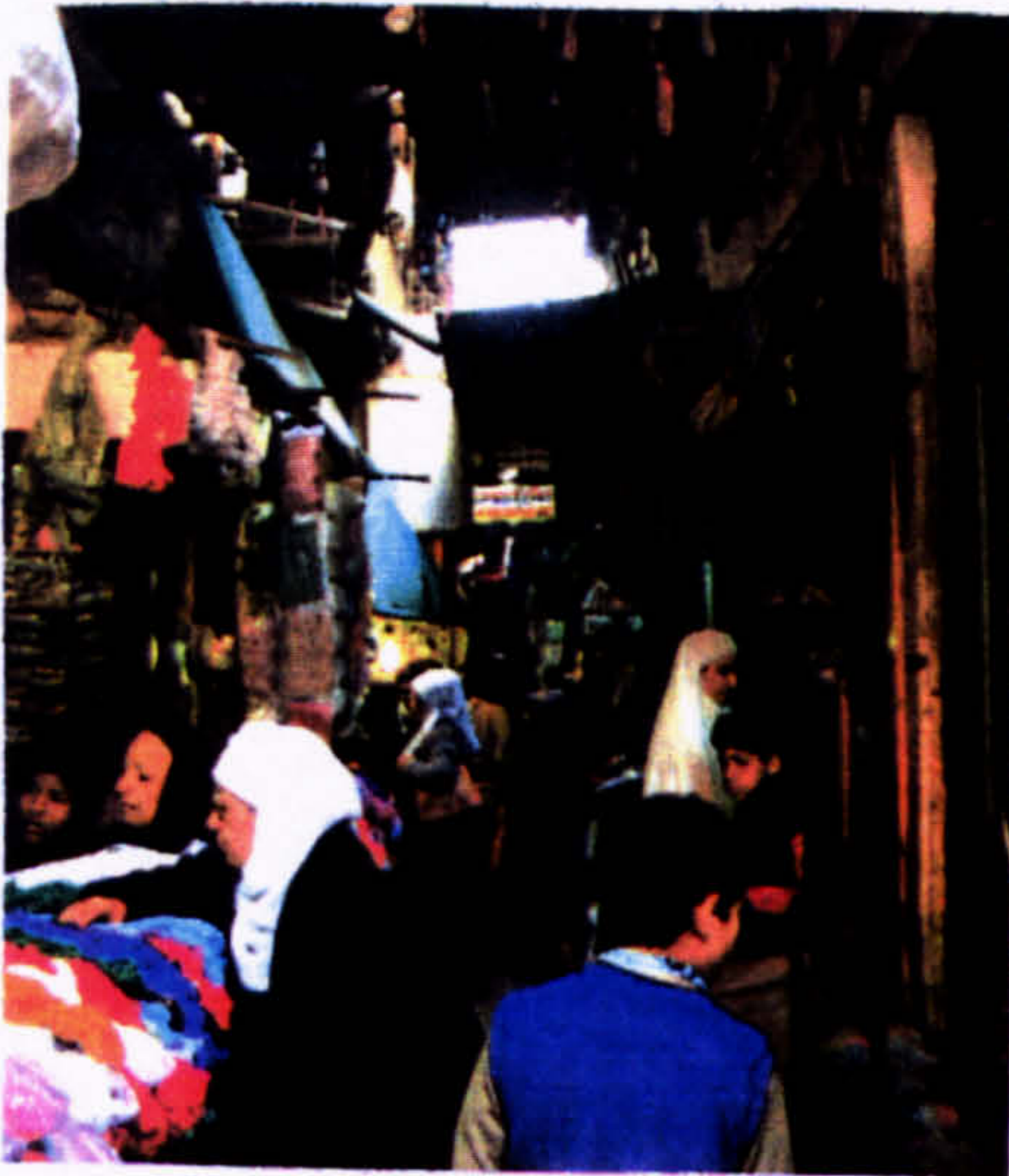


Fig.5-45, Right Public open spaces in the area are very few, and largely confined to Abou AlAbbas area, which is one of the most popular points of interest in Alexandria, especially in the month of Ramadan, when evening hours becomes bursting with life; Left, Zanjit AlSitat (the women squeeze); the most popular market in Alexandria, which is formed of a number of specialised *Sooks*, e.g. *Souk al-Kheit* (for cloth), *AlSagha* (for Jewellery) and *Souk alAttarin* (for herbs). It is now threatened by the AlNasr street project, illustrated later.

5.4.2. Development and future prospects

The transformation of the traditional community and its impact on the built environment is a major concern of this thesis; while it recognises the need for development it raises some fundamental questions: is it inevitable that development forces traditional communities to adopt alien forms? does it necessarily lead to social dislocations and loss of cultural values?

Officials and planners have long believed that the situation is hopeless, and therefore 'development' can only be conceived by means of an obliteration and physical 'ordering' program taking place, where wholesale clearances should give the way for straight wide roads; a belief which was clearly expressed in the 1958 Master plan and fortunately, apart from AlNasr street, was not implemented.

In the 1980s, a major development project was started for the development and renewal of the area of mosques around Abou al-Abbas mosque and their surroundings (Mogamaa al-Masajid). This project has constituted the following (fig.5-46):

- The evacuation of a large area of residential buildings.
- The introduction of a wide piazza in the middle, with a shopping area underneath and surrounded with groups of buildings for commercial and recreational uses; hotels, offices, restaurants and shops.

Such interventions (*Mogamaa alMasajid & AlNasr street*) are exceedingly threatening to the area by not only allowing the replacement of the traditional atmosphere with monotonous, unimaginative and inferior replacements, but by the destruction and condemnation of irrecoverable socio-economic environments.

In the instance of *Mogamaa alMasajid*, the field survey has shown that this project has:

- 1- Increased housing problems as a result of the evacuation process.
- 2- Caused great damage to the social structure of the area by evacuating a large number of families and forcing them to leave their neighbourhood

and go to government housing in other districts, e.g. al-Amriyah or al-Ras al-Souda.

3- In terms of urban design and architectural treatment of the buildings and spaces, this project is conceived as a totally isolated scheme with no regard whatsoever for its surroundings, "using the historic fabric as a quarry" (Bianca,1985:21) and causing harsh disruption to the fabric, to the sense of wholeness and consistency of life and to the physical coherence of the environment, e.g.:

- The typology of the new isolated blocks does not harmonize with the continuous cellular pattern of the traditional fabric. Thus, the border between the old and new is left with many undefined open spaces, occupied by squatters and rubble.

- The architectural style, the skyline, the proportions of windows and the materials used are alien not only to the traditional architecture but to the eclectic architecture as well.

- The sudden and quick implementation of the project has not allowed for the evolutionary process, *"The old city is given no chance to adapt to the intervention or to recover from the surgery"*. (Bianca,1985:22).

- There has been an actual alteration to the scale of the Abou alAbbas mosque by means of the piazza.



Fig.5-46, Right, Mogamaa AlMasajid project, Left, high rise development replacing two and three storey houses.

On the smaller private scale, this attitude has also been evident where high rise residential buildings are replacing two and three storey houses. The potential for such 'developments' is far from declining, and economic benefit has always been blamed.

5.5. Social structure and way of life

In previous Sections we have illustrated the physical formation of the area and its development process. This development has been evolving through a series of political designs. In the following Section we shall attempt to discuss a number of socio-political forces which have been shaping the society in recent times. Since Mohamed Ali's rule (1805-1848) there have been three major 'modernisation' attempts; under Mohamed Ali and his successors mainly Khedive Ismail (1863-1879), under Nasser (1952-1970) and under Sadat (1970-1981). Each of these attempts has had a lasting effect on the area as well as the whole country.

In his analysis Ibrahim (1985:26) explains Ismail's vision of modernisation: to turn Egypt into a European country and Egyptian cities like Cairo and Alexandria into European cities. He turned his back to the traditional quarter and started to build new districts and suburbs in European styles to the east of the city (e.g. Al-Ramleh, Boulekly, Zeizania,..) which were the houses for the Royal Family and a large European population. The old quarter on the other hand was neglected. Thus, its living conditions were worsened and ambitious people were able to move into the modern quarters, as well as privileged foreigners, forming a native upper class of bourgeoisie and landlords.

The 1952 revolution led by Nasser was another attempt at modernisation through the public sector, massive industrialisation and public housing and urban rent control, all of which have had an immediate equitable redistributive effect among the lower and middle-classes, but in the long run have had an adverse effect on the quality of life and the urban housing stock.

When Sadat came to power in 1970, he adopted policies similar to those of Khedive Ismail, as he tried to apply Western models to Egypt. But in his case they were American models. He adopted an 'open-door' policy, encouraged the private sector and land speculators. A growing demand for luxury high-rise buildings was created by Egyptians working in oil-rich Arab countries along with new foreign investments, mostly American. As a result, a new strata of 'nouveaux riches' (Ibrahim,1985,28) has emerged, leaving behind the vast majority of lower-middle and working class population.

As we have already discussed, these two different approaches have resulted in widening social differences and rapprochements have been reflected by both its urban fabric and its architectural content.

Alexandria's population has grown enormously during the last two centuries; from 7000 at the beginning of the 19C. to 319,766 by the end of the century (Panzac,1978,197) and to about 3.5 million in 1990. While the population of Egypt has grown six times since 1897, Alexandria has grown ten times. On the other hand, the population of al-Gommrok District has grown from 80,000 to 119,741 in the first half of the twentieth century, and to 122.151 by 1986. In other words the rate of increase is declining, which is an inevitable result of its high density (133,000/Km²) and thus not able to accommodate any further.

5.5.1. A Sociological profile

Communications need common 'codes' to develop, and for a social interaction common cultural background as well as common benefits and motives are necessary for its success. In an anthropological study of the social structure in al-Gommrok area, Ghoneim (1987) has figured out some of its constituent characteristics which shape the social life of the area:

The primary social unit, the family: mainly an extended family which normally consists of three generations, father, son and grandson. This type of structure

plays an important role in the society as it supports certain social, religious and financial customs. As a result, a member of this unit has certain obligations and responsibilities which determine his/her behaviour, relationships and even feelings and hence, it is hard for him to live outside; the father is responsible for the upkeep of his family and when his children, especially sons, are grown up they have to have their share in this responsibility; it is often the case that one or more of the sons follows his father's profession in order to keep the family business.

The *Harah* is another social unit which forms other aspects of this traditional social structure, e.g. neighbourhood, friendship and marriage. Ghoneim, computed that 37% of the sample he surveyed considered the relationships among neighbours as "like relatives" and 53% as "good neighbours" while only 10% as no relationships. On the other hand, he describes the personal relations and friendships as strong and firm. This is mainly due to the minimal social differences among the society and to similarities in traditional and cultural background. The trend for inter-marriage i.e. getting married to someone from the same neighbourhood, is another form of the social integration (88% do not agree that their daughters should marry someone from outside the *harah* (Ghoneim,1987:257). Also it has been found that working women represent only 12%, while in other areas the figure could be 80% (Ghoneim,1987:250), which on the other hand reflects the traditional role, still more evident than in other areas, of the man as the sole sponsor of the family.

However, these relationships necessitate some obligations on either side: protection, moral and financial support and also mutual congratulations or condolences. This relationship is expressed by them as: "more than brothers".

He finally concludes that:

"..the wide and generalized social relations or both the extended and complex families, relatives's groups and neighbourhood created the confident personal relations, which is distinguished by constancy and continuity."
(Ghoneim,1986:7)

For the purpose of this research there has been a need to explore the people's perceptions towards their history, traditions and the utility of the inherited built environment. Despite the fact that 'satisfaction' and 'feelings', especially among large populations, cannot be given measured scale as well as the difficulty in identifying the common attitudes of the population in general, it has been possible, through the field survey¹ carried out by the author, to explain and define the prevailing tendencies of the public towards their dwelling units as well as their district:

First, occupant attitude and satisfaction towards his own dwelling:

The attitude of an occupant towards his dwelling involves, on the one hand, his natural feelings towards 'home' and, on the other, his view of the reality of its condition. The former has been made clear through Question no.26 (My house is:); 61% answered that (it has a special value); this is however a natural feeling which applies to any 'home' and which has been confirmed in the control sample (al-Ramleh). But we have to note here that the reason for this appreciation differs from al-Gommrok area to that of al-Ramleh district. In al-Gommrok 55% referred to the 'surrounding environment' as the reason, while in the latter this represented only 16%. On the other hand, it has been noted that 49% didn't want to move from their houses, while 43% wanted to move to other houses in the same area, and only 8% wanted to move from the whole district. This desire to move has been highly correlated to the physical condition of the dwelling ($r= 0.50; d.f. 158; p<0.000$), the number of persons per room ($r=0.40;d.f 158; p<0.000$) and the availability of services ($r=0.45;d.f. 158;p<0.000$). When asked if he wished to move a man replied: "*..even if the new house is better, can you get the same neighbours, friends, atmosphere, these are irreplaceable*"; another one quoted an Egyptian proverb "*Ikhtar elgar qabl eddar*" (choose the neighbour before the house). On the other hand, the 'reality of its condition' has been described by 47.5% as fair, by 30% as good, while 19.2% described it as poor. Repairs have been defined by 48.5% as 'the cure' for their houses, 20.8% by

¹ The methodology of this survey has been previously explained in Ch4

necessary alterations, 8.3% by the provision of modern equipment and 15.8% by demolition. Thus, the prevailing condition is fair but in need of repair. However this positive attitude has been practically illustrated by various means:



Fig.5-47, Right, the interior of a dwelling: the occupant has spent a large amount of money, compared to his income, in order to maintain his apartment; repainting, installing various electrical equipment: the fan, T.V., etc; Left, a large amount of money has been spent to decorate this shop.

Second, occupant attitude and satisfaction towards his district:

There is a significantly positive attitude towards the district and a strong feeling of belonging. Although part of Alexandria, there is an intangible barrier which separates the area from the rest of Alexandria;

".. in spite of the fact that the connection to the modern city is constant and repeated but it is designated by social solitude", (Ghoneim,1986:6)

This solitude is manifested in the whole ambience of the area: street environment and activities, celebrations as well as the actual communications and dealings among the locals. The neighbourhood structure along with the social integrity have given the area a sense of unity. In other words, an outsider will always be looked on as a stranger who invades the 'sacredness of the place', and he will feel alien.

"A fish can live only in water"- by these words he described his relationship with the district. We have already mentioned that only 8% wanted to move from the district. On the other hand, asking about their attachment to the area: 66.7% are strongly attached to it, 25% attached and only 8.3% are not attached at all. This feeling has been strengthened by 84% who are 'proud of their district', while in the control sample we found only 35% who expressed this sentiment. But 77.5% were proud because of the 'character of the district' -"No where like it"- and 11.7% were proud of its 'history'.

Third, occupant attitude towards the historical surroundings:

In a direct question about the historical surroundings: 'surrounding environment stirs my historical imagination?', only 40.8% gave a positive answer, and in the control sample there were no positive answers. While in another question, we find that the 'historical interest' is a major reason for maintaining the al-Shourbagi mosque (57%) while the ornamentations were given as a second reason (29.2), and we have to note that 94.2% favoured its up-keep. A practical illustration of their regard for the history of the area has been the restoration of Meibar mosque (fig.5-48) where local merchants took the initiative and restored the mosque; they literately expressed their views in the appeal made against AlNasr St. project in a national newspaper (AlAhram,20 April,1991:7) in which they asked to prevent the implementation of the project as it is going to "*.. destroy one of the most historical features of Alexandria..*"



Fig.5-48, Meibar mosque (mid 19C.), restored recently by the local merchants.

5.5.2. Patterns of population and activities

As we have earlier indicated, the area has been steadily growing in population, but while the increase in Alexandria's population has been accompanied with the expansion of the boundaries to suit, the increase in the Turkish Town has not. Population density has therefore been always the highest in Alexandria (133,378/Km² in 1976). Still maintaining its position as the highest density, the 1986 Census marked a decline of about 10%¹ in the population. Comparing the 'natural increase' (birth - death) in both Censuses, we find that it has increased from 2246 to 2581, which suggests that this decline has been caused by means of migration; a trend that can partly be referred to:

- the deteriorating state of old residential buildings, accompanied with rent control measures explained above; the lack of repair and maintenance measures have permitted owners and municipal authorities to condemn them as many of them are in real dangerous state and thus forcing occupants out².
- massive clearances e.g. *Mogamaa al Masajid* project which has involved the replacement of more than 500 families in government housing projects in other areas (e.g. al-Ras al-Souda and al Ammeryah).

Economic patterns and activities:

To evaluate the economic pattern of the area, it has been necessary to use both the 1986 Census and the field survey; from the 1986 Census two important figures have to be noted; the first is that over 70% of the working force of alGommrok is working in the district; second, 50% of the overall working force in alGommrok comes from other areas. These figures shows the potential for economic activities within the area, as it employs about 140% of its working force. These activities can be classified as follows:

1 This percentage is calculated by comparing both Censuses; it has to be noted that the accuracy of these Censuses is in question; they are therefore to be regarded as indicators rather than real figures.

2 These occupants are normally given emergency government housing which becomes, in most of the cases, permanent because there is no where else to go.

The port: the main Egyptian port handles about 70% of the total seaborne trade in Egypt (Ewais,1988:122). It is no doubt a main source of living in the area; Ewais (1988:172) has estimated that more than 65 percent of the blue collar workers of the port live in the residential areas adjacent to the port, and which correspond mainly to al-Gommrok and Mina El-Basal in addition to El-Manshia and El-Laban, and he therefore anticipates that (1988:174):

" the interdependence relationship between the port and its city in terms of employment supplied by the city is rather steady"

A large proportion of the population of the area works in the port, both legal and illegal employment as well as port related activities; 30% of the commercial activities in alGommrok are port related activities (20% in the import and export trade and 10% in transport and shipping)¹. This has been negatively affected by the recent economic reform policies and the trend for import limitations. The significance of the port and its socio-economic impact on al-Gommrok and Alexandria in general has not been sufficiently considered due to:

- The lack of co-operation between the municipal authorities and the port authority which is resulting from the fact that the revenues from the port are directed to the central government without Alexandria governorate having any share in it.
- There has been no clear employment policy within the port as there is no single authority which governs the various organisations and companies within the port².

Fishing: the Eastern port is one of Egypt's major fishing ports; it fishes from most of the northern coast and goes as far as Suez, and produces about 25% of the








1 These figures are compiled by the author from the archives of the Egyptian Chamber of Commerce; the percentages represent the number of activities (i.e. companies) and not values.

2 There are various companies in the port such as "The General Organisation for the port of Alexandria", "The authority of ports and light houses", "The Customs", in addition to many companies for shipping, warehouses and transportation. Strangely, each is a separate body which has no administrative or policy corporation.

fish production in the Northern coast¹. Fishing activities are therefore traditionally of great importance in the area; AlSayaalah (a neighbourhood within the area) is where most of the fishermen live and where they form a very special community. Another activity related to fishing is the boat making industry; there are two main yards: one in the Eastern port and the other in the Anfoushi Bay (fig.5-49). Their products vary from small boats to large open sea fishing ships.



Fig.5-49, boat manufacturing; a thriving industry.

-  Port related activities
-  Commercial activities (retail & wholesale)
-  Food market
-  Religious activities
-  Fishing related activities (boat manufacturing)
-  Furniture workshops
-  Metal workshops

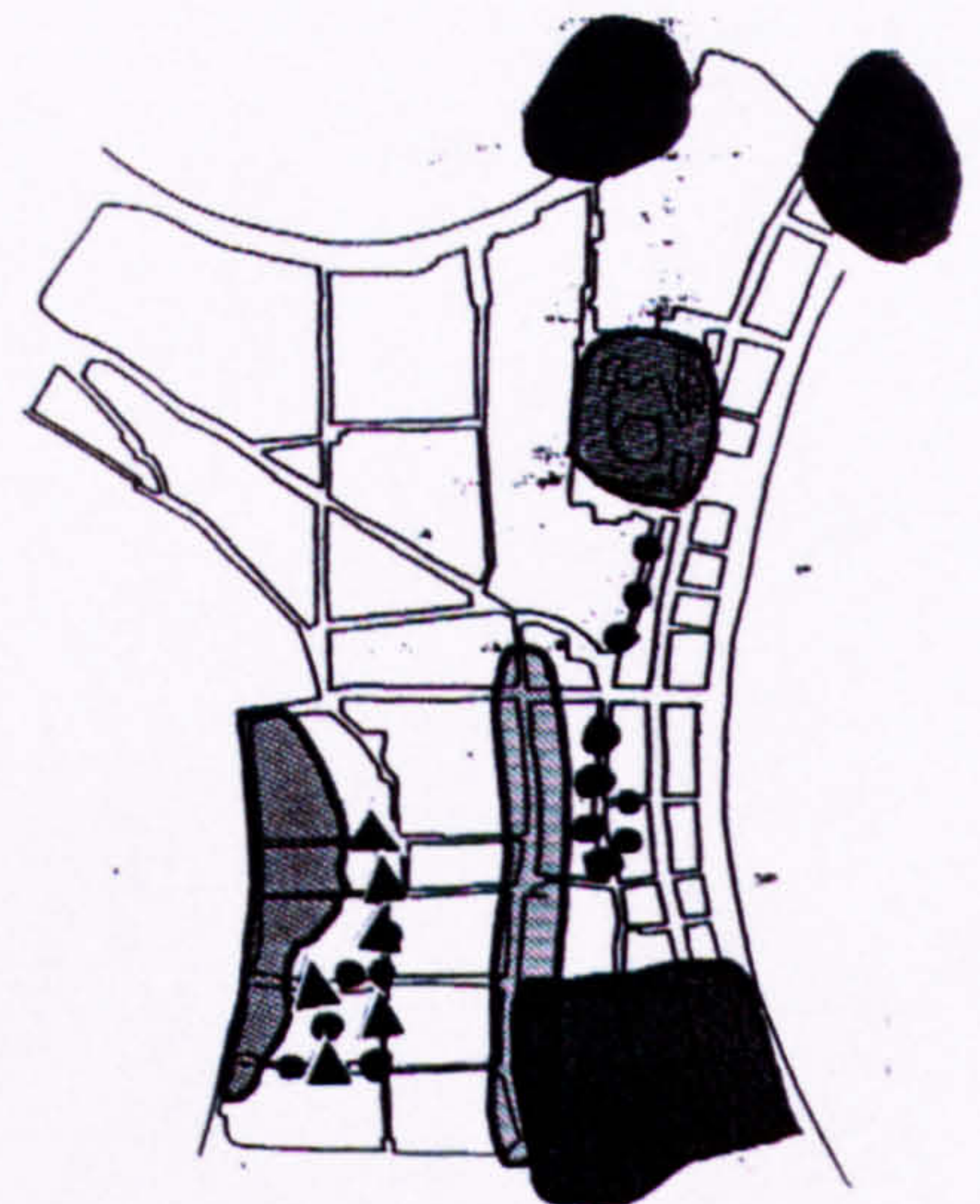


Fig.5-50, distribution of activities in the area.

¹ These data have been collected by the author from personal interviews with officials from the General Organisation of fishing

Commercial activities: these involve three fields of activity:

- **Retail:** small retail businesses are the backbone of the economic structure; they represent 40% of the number of commercial activities. They include mainly: food, cloth and related items, house utilities and equipments as well as jewellery.
- **Workshops:** represent 19%; their main activities are furniture manufacturing and metal processing.
- **Wholesale trade:** mainly in cloth and represents 11% of the number of commercial activities in the area

Land use:

Although commercial and industrial activities are mixed in the area, it is possible to construct a broad picture of the distribution of activities (fig.5-50).

This distribution indicates:

- i- A concentration of retail trades and markets along the longitudinal centre of the area.
- ii- Manufacturing and warehousing are distributed along secondary axes aside the centre.
- iii- Workshops and small industries are concentrated at the western boundaries of the area and closer to the port.

As a result:

- i- Informal pedestrian areas have been formed (e.g.sook al-midan) causing traffic congestions as they are not recognised officially in the traffic plan of the area.
- ii- Considerable commercial vehicular traffic in, out and within the area. These movements, in addition to (i) have producing acute congestion problems to be discussed later.
- iii- Incompatible workshops and industrial activities (e.g.blacksmith and metal processing) in residential areas; as well as their negative impact on the quality of life, i.e. pollution, noise,..etc. they have direct impacts on the

physical condition of the fabric. On the other hand these activities involve the use of heavy transportation which adds more pressure on traffic problems.

5.6. Conclusions

The traveller touring the area needs only eyes to accept that deterioration has blanketed the area. The overwhelming visual evidence is the appearance of an ill maintained urban agglomeration. On the other hand, such a tour can disclose a repository of many valuable physical, social and economic assets which can be summarised as follows:

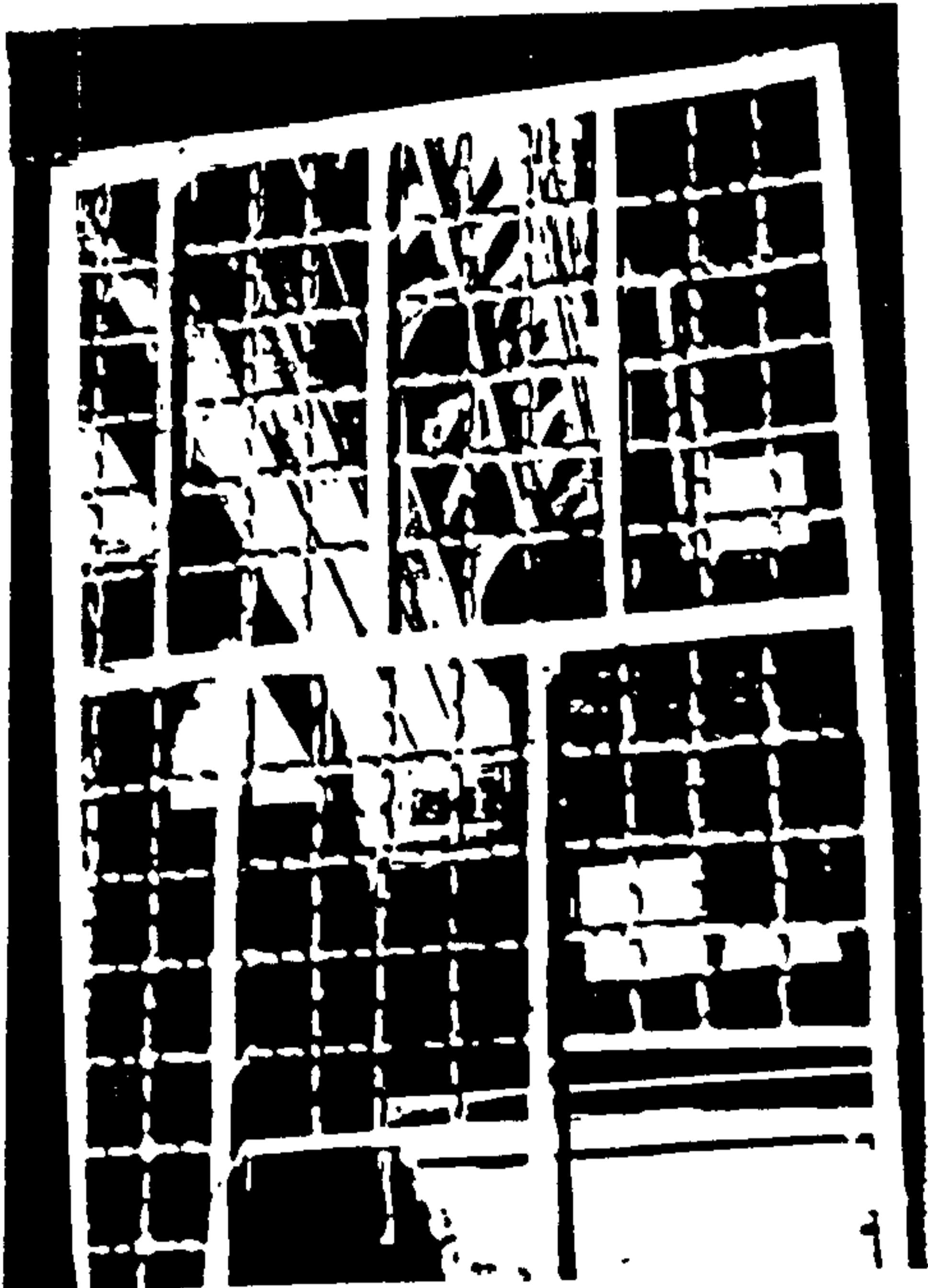
- It represents the living history of the city as it is the oldest inhabited settlement which,
- forms a continuing tradition of economic and commercial activities, with a great potential for survival and continuation; this has given the area
- a unique socio-economic character which, in turn, has been displayed in its
- physical character, that has been preserved by its community's social solitude.

On the other hand its

- physical setting is of great significance for its relation to the Port and the central business district of Alexandria. This has created a major potential for 'development' in the area and accompanied with various financial, technical and social pressures explored in the next chapter.
- The area has become a potential target for massive 'developments' that are threatening the community, its built environment, the socio-economic structure as well as its living traditions. And thus,
- we assert the need for action towards developing the area while making use of its assets.

In this chapter we have been portraying the area in order to allow for a diagnosis of its ailments and thus to be able, in the next chapter, to identify the "opportunities and constraints" for such needed 'development'.

CHAPTER SIX



OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES AND CONSTRAINTS

6.1. Introduction

"Where constraints are many and competing demands on finance numerous, ingenuity, imagination and creativity are our only hope. In the absence of basic necessities of life idealised dreams of the future are a luxury. We have to come to terms with reality." (Rashid & UrRashid,1985:101)

In the early stages of this study we have identified one of our objectives as achieving a 'conservation development' to which, a methodological approach was outlined¹ (fig.6-1). Having portrait the various aspects of the Turkish Town in the previous Chapter: its historical development, architecture, physical setting and social life. A recognition of the opportunities for and constraints against achieving our goals is then needed; a first step in understanding what development options may exist. The aim of this and the following chapters is to '*come to terms with reality*'; at the macro level of the whole area, this chapter will examine the opportunities for and constraints against achieving such development.

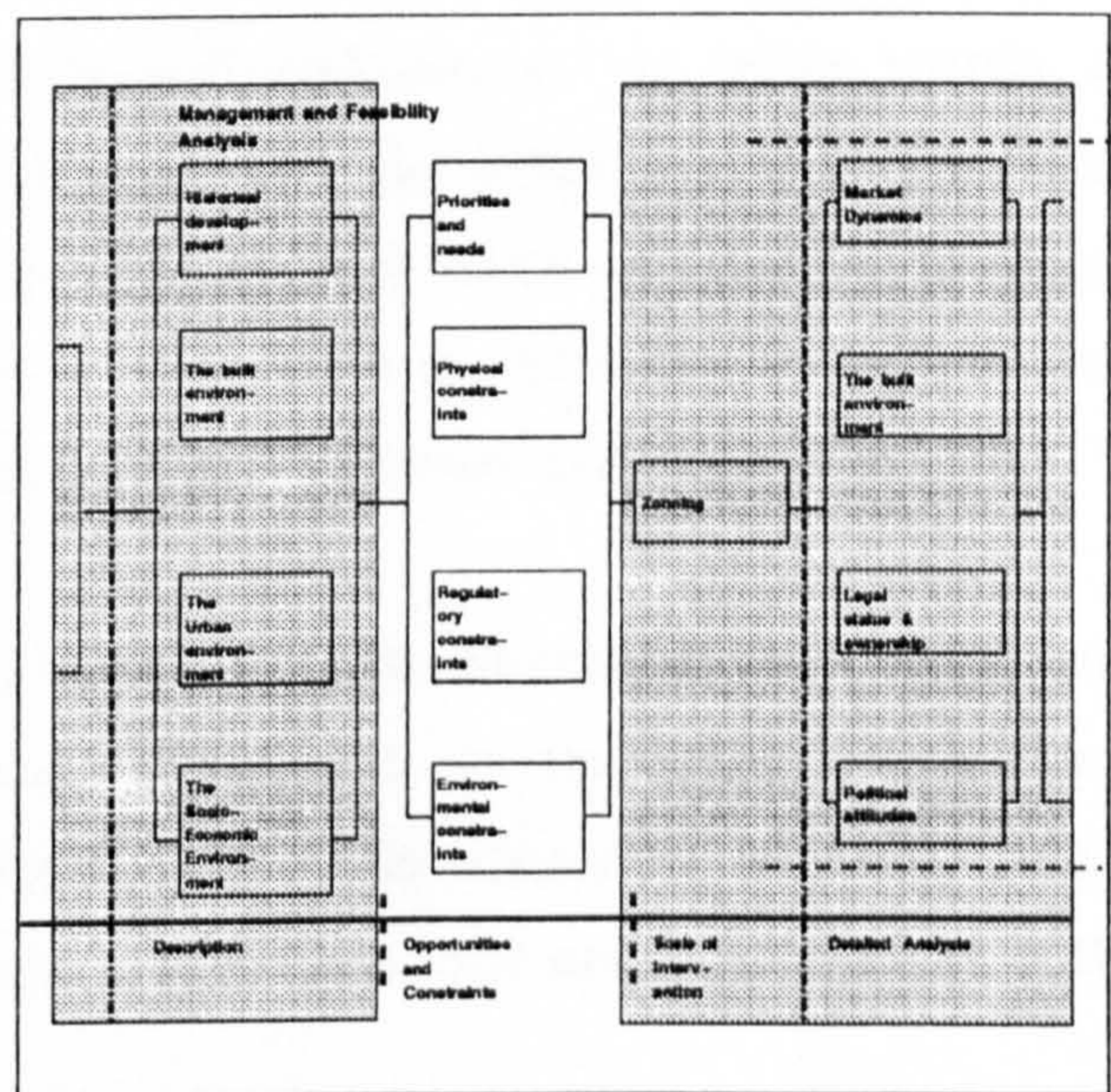


Fig.6-1, The stage of 'management and feasibility analysis': identifying the opportunities and constraints.

¹ see pp.85-87

It is made up of three main components: first, an identification of the priorities and needs of the community; the demand for housing, services infrastructure and transport; how do these needs stand in the priorities' order with our objectives? Second, the physical constraints; the built environment: what is the available supply? Third, regulatory constraints; AlAwqaf, the Antiquities and municipal codes; and finally the environmental factors; pollution and underground water.

6.2. The City and the Society: Priorities and Needs

The ultimate challenge in dealing with the conservation of an urban area is the fact that it is a scene with people. For the inhabitants, it is a place in which to live and work; they cannot be regarded as artifacts or museum objects, neither can they be "conserved" against their will and desire. In other words, a conservation policy must go hand in hand with the actual needs of the local affected community, not only their need to survive, but their need to develop, grow and prosper in their way, and to make their contribution to the present and future well being of their families, their businesses and their city.

The urban system as defined by Lichfield (1988:11-16) constitutes, on the one hand, the supply of existing building stock and, on the other, the human population who in their activities (work, recreation, education, worship, ...etc.) exercise their demands on that stock. These demands are expressed as both consumer and producer.

In the previous chapters we have illustrated the physical stock and the process of its formation as a genuine response to the human needs at any given time, but will they remain the same? Will they be the same in the future? It seems, from experience, the answer is inevitably unlikely. Human needs change as do priorities, living standards rise rapidly and consequently the attitude towards the physical stock is changing. Some families and their businesses thrive and prosper, others fall on hard times and may have to leave the area or become

dependent on the local community for support. Markets change, the demand for goods is, over the years, dependent on many factors, most of which are beyond the control of small enterprises. These needs are therefore a major determining factor in shaping the built environment, they are the real opportunity or otherwise in planning for any change. Understandably the restoration of a historical architectural feature is of no importance to someone who has a problem in getting clean drinking water. In other words, the priorities' order of the community has to be considered and utilised.

There is, however, always a danger of mixing needs with desires. While the former represents the actual needs of people and depends on the local pattern of life: environment, traditions, religion, culture and more important, availability of local resources, the later is based mainly on imported models for development and living standards. For example, it has been usual in Egyptian houses, and despite the limited space that they might have, to find a room which is usually kept closed; a sort of Louis XV saloon. It is only opened on very few occasions for visits; and only then to satisfy the desire and the social image of having such room, and not for an actual function. Another example is the air-conditioner; in a city like Alexandria, where the weather is mild most of the year, people tend to enclose the previously enjoyed balconies with glass windows in order to fit an air conditioner. Often having had the experience, they turn off the conditioner and open the windows. This attitude emphasises the role of education and public awareness as a major part of the development process. In other words, a physical development has to be accompanied with a mental one as for understanding the actual needs of the society.

Another aspect is the city; we must not overlook the fact that we are dealing with an area in a city which is, to a certain degree, part of a greater planning program. By declaring the area in need of 'development' we must establish its relation to the rest of the city, its input in the economy of the city, traffic and transport problems and the city's services and infrastructure.

It is therefore essential for any urban policy to investigate and identify the priorities and needs of society as well as its accordance with city's goals and objectives, and their impact on the physical environment. To this end the author carried out a field survey in the area which involved interviews, a structured questionnaire as well as observations, that was able, with some success, to highlight these needs and priorities; these are set out below under three main headings: "housing", "services and infrastructure" and "traffic and transport".

First, housing:

With the rapid increase in population densities, housing has inevitably become a major issue. As we have noted earlier, housing problems were classified by 50.8% of the questionnaire sample as the first priority in their area.

The pattern of housing in Alexandria, as well as over the whole country, has been changing dramatically over the last thirty years, where it has become one of the most pressing national problems. The extent of the problem in Alexandria is best expressed by the fact that the estimated deficiency in 1984 was 100,000 dwelling units (ACMP,1985). The causes and development of this problem are beyond the scope of this study¹. However, we need to highlight the following:

The origins of the problem: First, the city expansion in Egypt is largely constrained by ecological and geographical limitations: in the case of Alexandria, the sea, Mariot Lake, the rich agricultural land and the desert. These have and must continue to shape the growth of Alexandria as a whole. And while Alexandria's growth is accompanied by an expansion of its boundaries, especially to the west², AlGommrok (the study area) is not able to expand, where the pattern of growth is strongly limited by the sea.

¹ See, for example: Soliman:1985;1987;1992; Rageh:1985

² According to the 2005 Plan, the future expansion of the city has to be directed to the west where major government housing schemes are now being built, e.g. "the 36,000 unit project"

Second, the changes in the patterns of urban growth have not merely been to establish new settlements and suburbs, but have also taken place vertically within the existing districts. High rise commercial buildings are now infiltrating most areas, thus seriously disturbing the traditional character of the city. Both the Turkish town and the European quarter are facing the same problem: the replacement of villas and traditional family houses with tall apartment buildings, or the addition of new floors to existing buildings using a different architectural style (fig.6-2).



Fig.6-2, alterations and extensions to existing buildings; the quality of these extension, not only the aesthetics, but the structural as well is very much in question. A result of increasing land prices and shortage in housing supply.

Third, the strictly enforced **Rent Control Laws**; as well as their adverse effect on the physical status of buildings discussed earlier they play a key role in any solution to the housing problem. The Rent Control legislation started in 1940 by freezing all rents set at that time, and in the early 60's restrictions and even further reductions were made by the Revolutionary Government, dropping the return on income of landlords well below realistic values. Before 1981 rent laws allowed an annual return of 5 per cent on building costs and 3 per cent on the site value. The 1981 laws increased this to 7 per cent (Rageh,1985:134). In addition to the fact that figures determined by officials are usually less than the actual costs, the 7 per cent is approximately half the current rate of return from

banks or even other investments, and it is also about one third of the rate charged on construction loans by banks. (World Development Report,1992). This has eventually led to the dominance of the *Tamluk* system, whereby owners would only sell (and not rent) the units. On the other hand, where middle and low-income classes cannot afford the prices of these units, they would be obliged to go for public housing, which is far from being adequate for most of them. Those who can afford the price would buy, not only for themselves but also for their children, and keep them locked, again because of rent control measures.

The extent of the problem: Although not particular to the area, the housing problem has reached dangerous dimensions, the extent of which can be clearly:

1- Extremely overcrowded dwellings; according to the official statistics the average figure of crowding is only 1.5 person/room which is considered, even by Western standards, as acceptable, but from the field observations and conclusions reached from other figures in the Census we may claim that this figure is misleading.

■ From the field observations it has been commonly noted that most dwelling units are being occupied with more than one generation, i.e. when the son is married he'll have his new family in one room, and thus each room will have one of the sons with his family (in some cases 6 persons in one room).

■ This can be confirmed from the Census where it states that 25% of families are living in a one-room dwelling, and that the average size of a family is 4.6 persons. However, in addition to the inaccuracy of the Census, this figure might be partly explained as a crude average of the whole area, including some of the new speculative blocks of flats which are not yet occupied.

2- The fast dilapidating conditions of housing is mainly caused by the lack of maintenance and alterations to accommodate more inhabitants, a condition which has been positively aided by rent control measures as has been previously explained. The physical situation of the existing stock in al-Gommrok has been officially evaluated as follows: 10% very good, 15% good, 25% fair, 50% bad.

But these figure should not be taken to mean very much as, in practice, this evaluation is based on a visual "impression" of the buildings, rather than a thorough investigation. Nevertheless, it is quite evident from the street survey that the general physical condition is indeed in a very bad state of repair and maintenance.

The priorities of housing can be classified as follows:

- The need for shelter; the most acute stage, which takes place with the structural failure of a building, resulting in the occupants being forced out to live in the street as their houses collapse; they normally refuse to leave their houses unless they are already collapsed or forced by police; their argument is *"It is better to die under a roof than to be exposed in the streets and die of weather and shame"*.
- The need for more space as a result of the overcrowding mentioned earlier, where a whole family lives in one room (man, wife and children). This, causes not only health and hygiene problems but social diseases as well.
- The need for a better physical condition; this varies from the lack of adequate water and electricity supplies to the need to re-plastering, repainting and regular maintenance applications.

Hence, we may conclude that housing, being a priority as such, is a major opportunity or otherwise in any development process. Whereas there is a potential market demand, there is a constraint, by the limitation in affordability, to low cost housing.

Second, services and infra-structure:

The second set of priorities in the area is the obvious need for adequate services and infrastructure, and though not specific to our study area they have been contributing to the dilapidation of the area as well as forming major constraints for any development plans that ought to be carried out; their current situation can be summarised as follows:

I- Educational and health services

The deficiencies of both services are of wide national interest and the complexities involved are beyond the scope of our study. The current situation of both services can be highlighted as follows:

- There are 104 schools accommodated in only 55 buildings!, as most school buildings operate in two shifts with an average density of 50 pupils/classroom. This shows the urgent need for more school buildings to accommodate the approximately 43,000¹ pupils from the area, and especially those at primary stages (23,000).
- Many of these school buildings are in a very poor state of repair and maintenance. This was magnified during the October 1992 Earthquake where schools' buildings were the worst hit.
- The main health services are provided by Ras al-Tin hospital which serves the whole western area of Alexandria, a children's hospital and school clinic, a mother and child clinic, three family planning centres and a chest clinic. In addition, there are many private clinics in most medical fields; the main deficiency lies, however, in the lack of hospital beds and operational facilities.

II- Infrastructure

It doesn't need much investigation to realise the dilapidating condition of the infrastructure. Most of its water and electricity supply networks date back to the 1920s. Their condition is poor and much of it requires renewal. This has been caused largely by the lack of necessary funds; from the early 60s the nation's financial resources have been steered to priorities other than public utilities, mainly to the military. Nevertheless the last ten years have been witnessing some renewal projects, mostly carried out by foreign aid agencies. From our field survey, it was possible to have the following understanding of the infrastructure and its current situation;

¹ Compiled from the official statistics issued by AlGommrok Educational Administration, 1991

First, the water supply: can be classified into three categories;

- Excellent supply, and this applies mainly to the lower floors in most parts,
- Fair supply, and this applies to the upper floors (i.e. from the fourth floor) and,
- Areas depending on a common tap (fig.6-3), and this applies in the poorest areas, which cannot afford the installation of adequate water supply system, mainly for technical reasons i.e. the fear of possible damage due to leakage within an old structure.

Fig.6-3, A common tap; used by the surrounding houses in Abou AlAbbas area



Second, the electrical supply: the area is part of the whole circuit of the city and is served by two main stations (66K.V.), and two main distributors (11K.V.).¹ The general condition of the network is reasonably good, especially since the renewal projects which have taken place during the last ten years².

Third, sewage: the sewage system of the area is part of the general sewage system of Alexandria. Sewage and waste water disposal in Alexandria has been a major problem which reached its ultimate in the 70's, i.e. pollution of beaches and the overflowing of waste water in the streets, causing a great threat to public health in many areas of the city, including some areas in al-Gommrok. A great debate has been on going for the last ten years about this problem, and a general scheme for the sewage system in Alexandria has been launched by the

¹ According to a personal interview with the responsible engineer of the organisation.

² The questionnaire has shown satisfaction with the electrical supply in the area

General Organization for Sewage with the assistance of American aid, for the rehabilitation, improvement and development of the waste water system in Alexandria. This scheme comprises two distinct phases: first, the renewal of drains and connections of the network, which has started to take place in many parts of the district and in Alexandria in general. Second, the final disposal of the waste water, which is still under a long debate; whether to sea or to land. Although we do not have the authority or the necessary background to favour either side in the debate, previous attempts in Alexandria suggests that a sea disposal system can cause great damage to the marine environment, and particularly al-Gommrok district, unless very strict measures are taken to guard the marine environment.¹

Fourth, the garbage collection and disposal: this has been carried out mainly by private enterprise individuals collecting rubbish from premises for a charge. This system is now faced with a new system imposed by the municipality; the occupants have to dispose of their rubbish at certain points for the municipality to collect. This system has, however, proved to be inefficient in certain areas for the following reasons:

- The narrow nature of the streets coupled with their congestion is making the task difficult.
- There is a confusion regarding the responsibility of the municipality and the private operators.

Thus this has caused the accumulation of rubbish in various parts of the traditional quarter, rubbish dumps on vacant lots and on some street corners.

¹ The major discharge point for Alexandria is the Qait Bey outfall on the sea (in Al-Gommrok), Thus, adverse environmental impacts have been associated with the discharge of untreated waste water, e.g. the worsening of beach pollution which could have a significant effect on the tourist economy and the negative impact on the fishing industry in Alexandria. For detailed information about the magnitude of waste water disposal in Alexandria, see: Mitwally 1982; 1985 and Wratten 1985.

Finally, roads: most of the road surfacing and pavings, especially of the minor roads and lanes, are inadequate, being un-levelled, full of holes and un-levelled manhole covers.

And to conclude, the condition described above underlines the need for an action; for any 'development' to take place, a higher level of infrastructure has to be achieved in order to support such development; a process which has to consider that

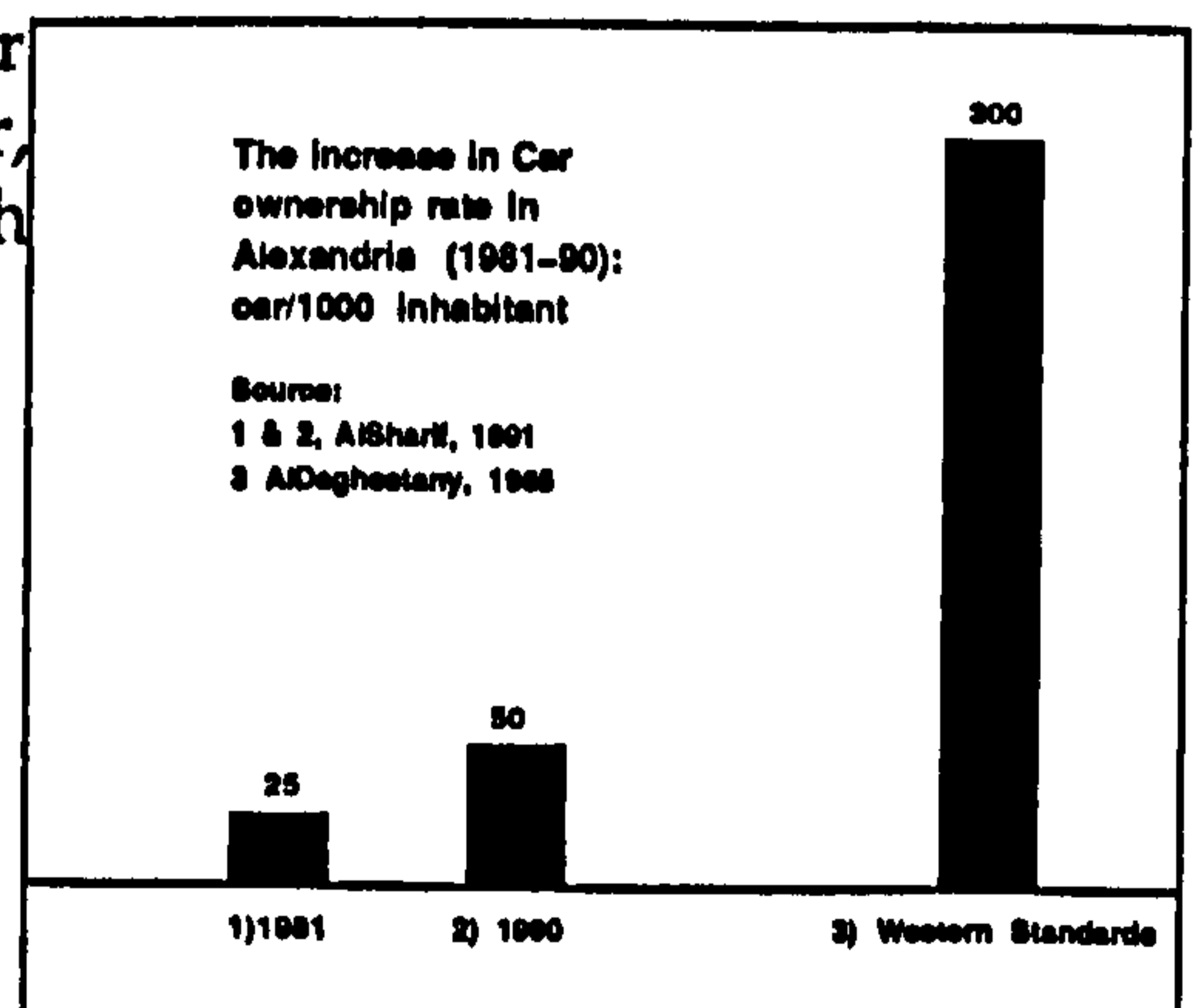
"Modernization and the introduction of sanitation in buildings should ensure that individual buildings are not demolished and the characteristics of the quarters are not distorted, whilst the character and historical features remain." (AlHammad,1988:367)

It is no doubt a complex equation which forms major constraint as a prerequisite for any development plan. Not only as a technical problem but a financial one as well.

III- Traffic and transport

In a city of 4 million inhabitants which has expanded as rapidly as Alexandria, traffic is undoubtedly a major problem, and this can be clearly witnessed while touring the city. The magnitude of this problem has become increasing alarmingly because of:

- The rapid increase in the rate of car ownership which has, in one way or another, been encouraged by planning schemes which are mostly car oriented (fig.6-4).

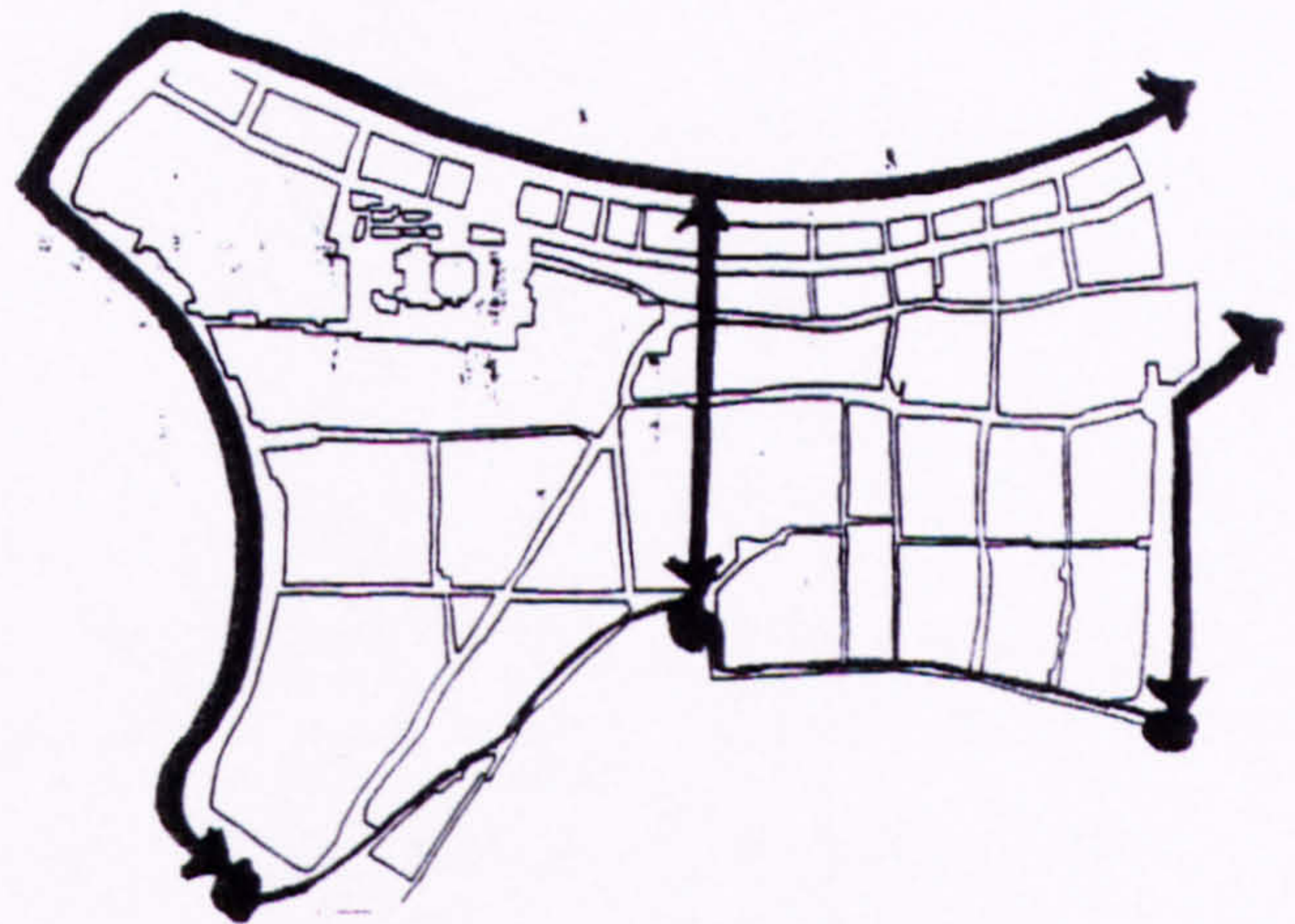


- The limited capacity of the city's streets to accommodate both moving and parking cars; Al-Manshia Square (fig.6-5)

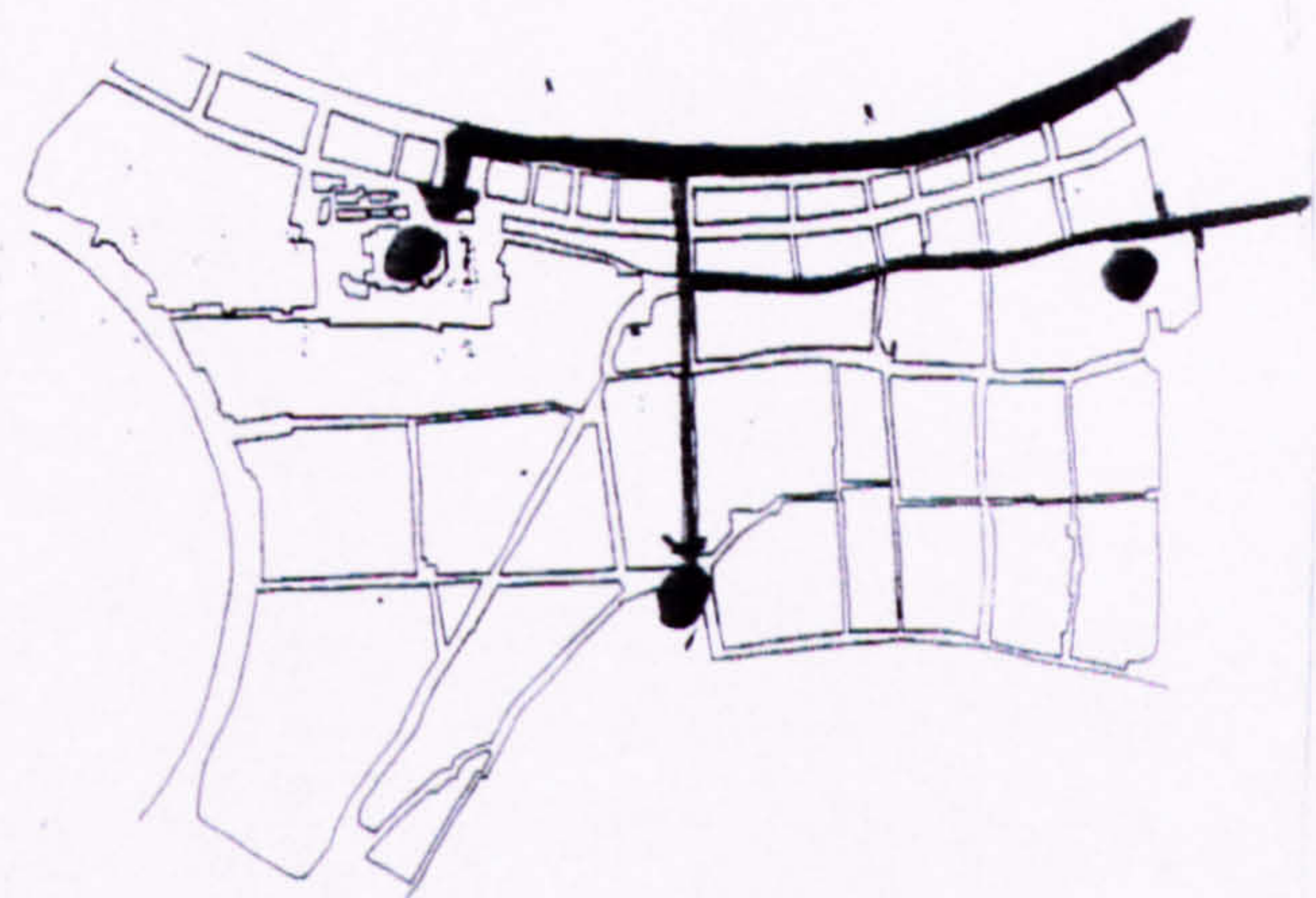


In AlGommrok, the problem can be classified as follows:

- Through traffic: made up mainly by the Navy using the Corniche; the port makes its contribution mainly through gates 1 and 10, using both AlNasr and Ismail Sabry's Sts. (fig.6-6). Its effect on the area is confined to a few congestion points; the main threat stems from future projects such the second phase of AlNasr St. Project.



- In - out traffic: Heading mainly to the commercial area (*Zanqit Alsitat*) through Faranca St., Abou-AlAbbas area through the Corniche, the restaurant area through the Corniche and Ismail Sabry Sts., and the port through AlBaharyah St. The effect of this traffic is witnessed basically in various congestion points, in parking problems and car-pedestrian interaction (fig.6-7).



■ Inner traffic: used by the residents and therefore dispersed throughout the area; in addition to the main congestion points, many of the inner streets and alleys are blocked by parking or by the interaction with pedestrian activities (fig.6-8).



Having illustrated the various aspects of the problem we may conclude that traffic and transport needs are potentially high constraints for 'developing' the area:

- The physical fabric of the area cannot be easily adapted to modern traffic requirements and as a result
- the pressures for road improvements and alterations (widening, cutting and curving, ... etc.) e.g. AlNasr St., are increasing and threatening not only the physical fabric but
- the social life of neighbourhoods, street activities and destroying the charm of the area by means of noise, vibration, fumes, air pollution and visual disharmony.

6.3. Physical constraints:

Dealing basically with the built environment, and having identified the priorities and needs, i.e. the *demand*, it is vital to identify the *supply* and its various aspects. The built environment is essentially made up of three main components:

First, Vacancies (fig.6-9), a potential supply, which has dual impact: on the one hand for speculative high-rise developments, and on the other for sensitive developments. This potential is in many cases undermined by two factors: ownership disputes and financial incapacibilities.



Fig.6-9, Vacant plots and ruins

Second, buildings with potential, the main component of the physical stock and which include buildings in dilapidating conditions, especially commercial ones, redundancies as well as one storey shops (fig.6-10)



Fig.6-10, buildings with potential: one storey shops and dilapidating structures

Third, Obsolete buildings, by this we mean buildings that not have the potential for any intervention other than regular maintenance. This is mainly the case in mosques and pure residential blocks of flats that are structurally sound (fig.6-11).

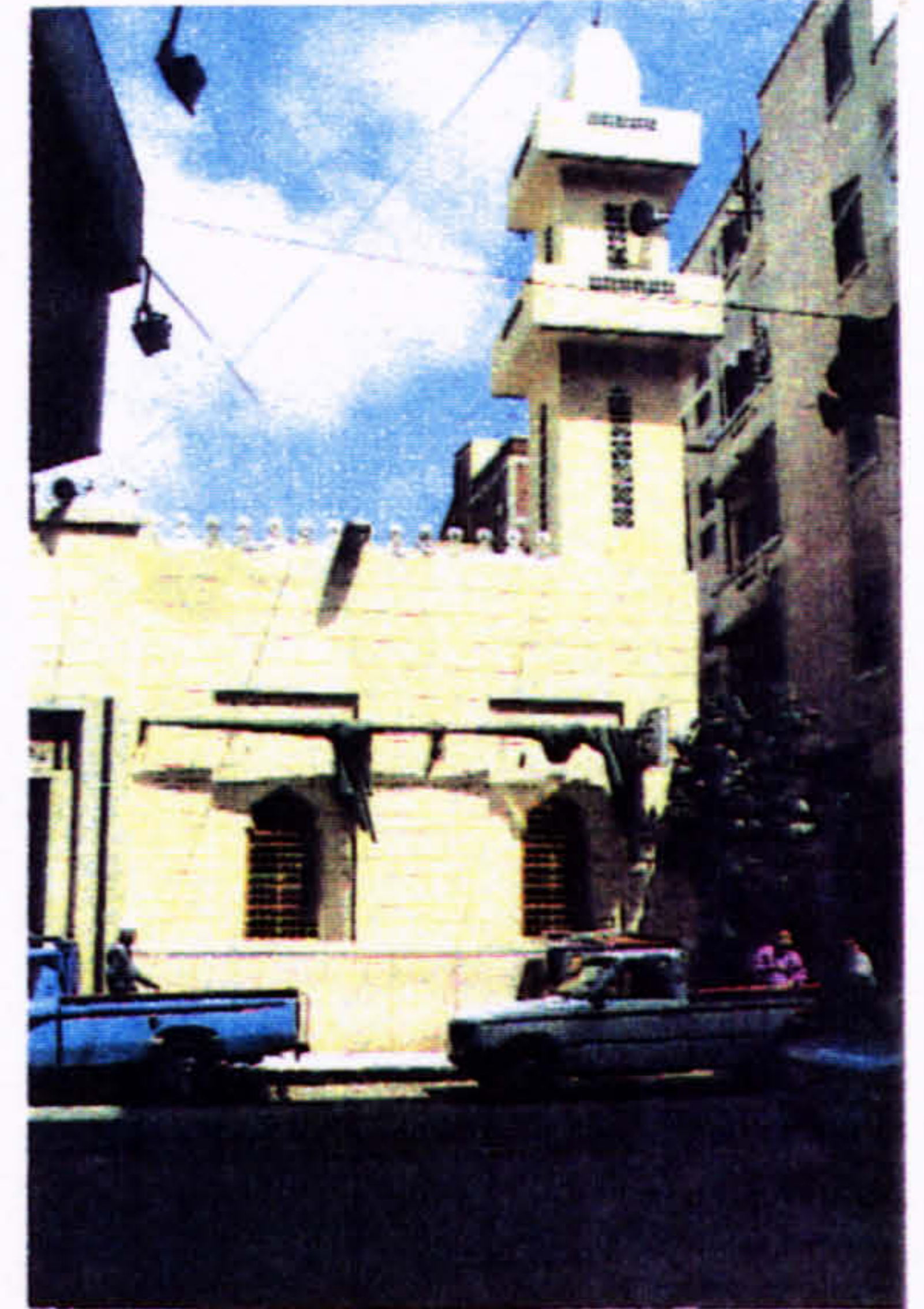


Fig.6-11, obsolescence; residential blocks of flats and mosques.

As for the scale of the area with about 6000 buildings, this aspect will be dealt with in more detail in the next two chapters; these components of supply will be assessed on a micro scale and their potentials identified.

6.4. Regulatory constraints:

As indicated earlier, the political system is a central authoritarian one which operates within the context of national politics, i.e. decisions, even at the local level have to be politically acceptable. This is by no means a simple issue as it involves local, national and even international (e.g. foreign aid policies) politics, and is not therefore within the scope of this study. Nevertheless, we may identify two main criteria for a politically acceptable intervention:

- It does achieve some political propaganda and relieves any public frustrations; thus political decisions are often large scale, over ambitious and involve major physical intervention, e.g. solving the housing problem with several thousands of public residential units, major engineering work such as new roads, bridges and tunnels, and major programmes such as the ones following the October 1992

Earthquake¹

- It does not cause any undesirable public unrest; a clear example is the case of "AlGhouriah merchants"² as well as AlNasr St. project explained later.

Hence, where does our study area stand in this context? In addition to the role of, or rather the dispute between, AlAwqaf and the Egyptian Antiquities Organisation illustrated earlier, the Alexandria Governorate has a key role to play; it is responsible for the planning process, the provision for public sector housing and social services in the area and it is also responsible for giving planning consents and building permissions for new buildings, demolitions and alterations. This task is carried out through the Department of Housing and Construction and the Alexandria 2005 Planning Commission.

The Department of Housing and Construction: Co-ordinating with the Ministry of Housing and Construction, this department produces all planning and housing schemes, together with the construction of building regulations: heights, open spaces, floor/area ratios, specifications as well as demolishing and rebuilding procedures.

The Alexandria 2005 Planning Commission: This is the responsible body for implementing, monitoring, reviewing and updating the Comprehensive Plan Project for the city of Alexandria, prepared by Alexandria University in contractual agreement with the Governorate of Alexandria; with a financial contribution from the Overseas Development Administration (ODA) of the British Government and the participation of the Faculty members of the University of Liverpool. The plan was introduced in 1984 for the future planning for Alexandria and its extensions until the year 2005. Strangely, this

¹ Several programs have been *announced* after the Earthquake, such as the rebuilding of 1000 schools and the restoration of all monuments in Medieval Cairo, etc.

² These merchants have been occupying AlGhoury Mosque and Madrassa in Cairo and have caused great damage to the structures through major alterations, and despite the court sentences obtained by the Egyptian Antiquities Organisation, the Government has been reluctant to enforce their eviction because of the expected public resistance; it was not until the Earthquake it managed to do so.

plan only fully recognised in 1991 as the official master plan for Alexandria.

However, the preservation of Alexandria's historical heritage has been recognised as one of its concerns. This has been expressed in the following 'recommendations', which have not yet been realised:

I- Increasing the public awareness for the conservation of the historical heritage by means of:

- Establishing concerned societies, acting as consultant bodies to the official bodies to be established for conservation and for propagating its ideas.
- Propagating the features of the historical heritage of Alexandria through tourist pamphlets. It is worth noting here that although *Zanqit alSitat* is stated to be one of Alexandria's historical features, it is threatened by AlNasr St. project as illustrated below!!
- Participating in regional and international conferences and seminars for the mutual exchange of experience and knowledge in that field.

II- Creating a provisional inventory for buildings and properties of historical interest; a provisional list of its contents and a form for this inventory was proposed by the Plan, mostly of the European quarter. The Plan has also recommended new functions for possible rehabilitation projects such as hotels, cultural centres, etc.

III- Promulgating a law for the conservation of the historical heritage and a new organisation for the historical heritage; again it is worth noting that there is no lack of legislations; on the contrary, a new organisation with a new law will only add to the already existing confusion explained earlier.

IV- Implementing some experimental schemes in order to promote public support for the conservation process and to develop the practical and technical

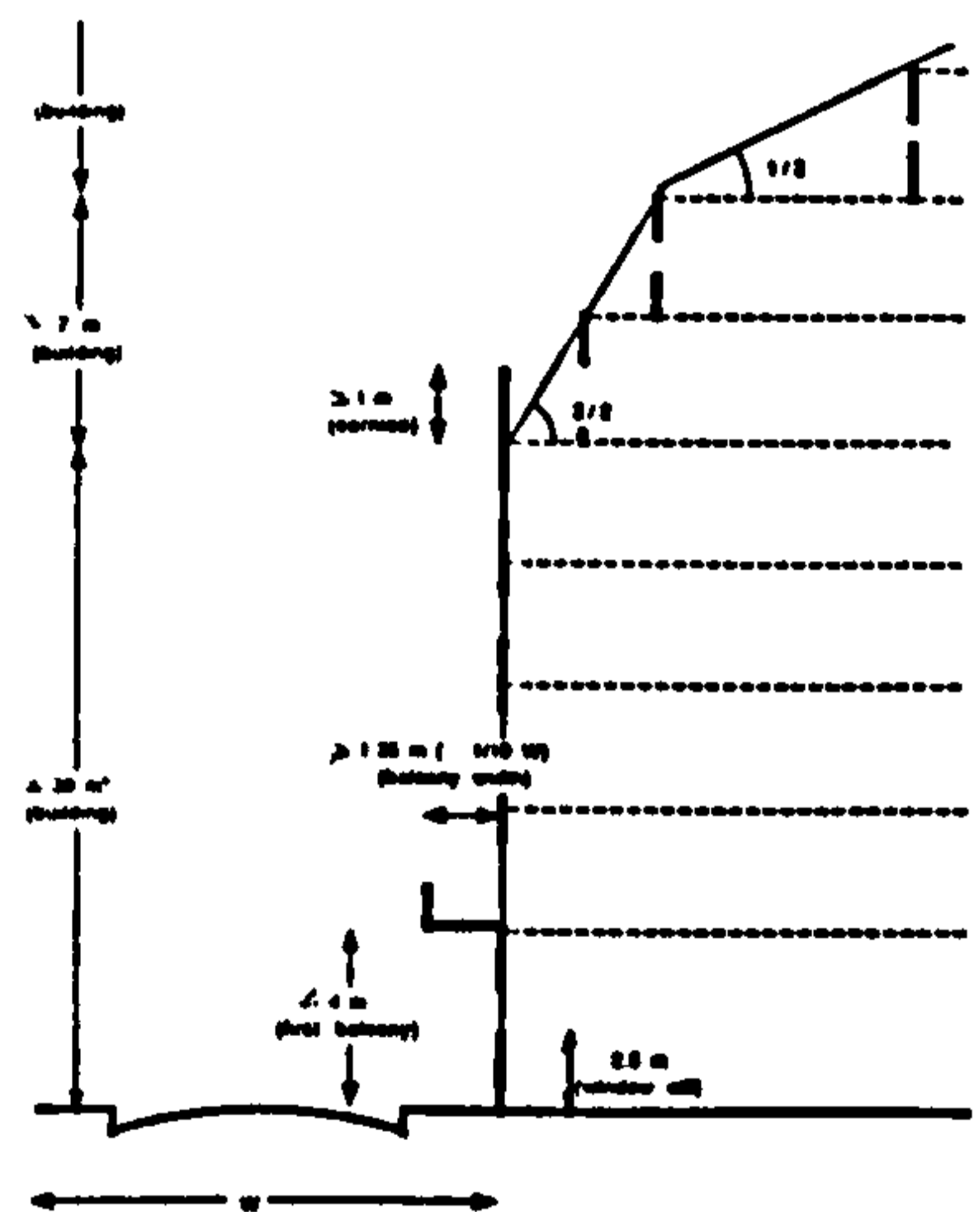
experience needed for such schemes.

On the other hand, special statements can be issued on the authority of the Governor, such as no.137, 1987, which prohibits the total or partial alteration or demolition of villas, residential and non-residential buildings with any artistic or historical value in Alexandria unless examined by the Alexandria 2005 Planning Commission, by the Governor and the executive council of the Governorate.

The new building regulations: In 1992 a new set of regulations were issued for the city of Alexandria; its main thrust is building heights and floor/area ratio. The city was divided into 16 different zone; each zone has its own regulations. In our study area the regulations are as follows:

Fig.6-13, Building regulations for the study area:

- Maximum height 1.25 times the width of the street with a maximum of 30m, with some exceptions (e.g. Ras alTin st.) where this maximum is only 16m.
- Maximum floor/area ratio is 5.
- The built-up area should not exceed 80% of the total area.



We have touched upon the complexity and controversy of the current legislative mechanism, and yet it is worth highlighting that:

- Current building regulations, even the latest, are only concerned with the physical outline of the building and not much attention is given to its quality and adequacy.
- According to law no.49, 1977 (translated by the author in Appendix L-1), non-residential buildings can be demolished and replaced with a larger floor area which includes residential units (article 49), thus encouraging the demolition of many non-residential buildings regardless of their values.
- Compulsory repair and maintenance is confined to securing the safety of

buildings, i.e. to ensure its structural soundness, regardless of not only its architectural merits but its adequacy for living as well, i.e. sanitary systems, water and electricity provisions, etc.

■ Although it not directly involved with the question of conservation, the 'social' laws for rent control in the early sixties have had a notable effect on the physical deterioration, maintenance and preservation of the whole building stock, either new or historical. Enforcing control has meant that landlords can neither improve nor maintain their buildings as they cannot recoup their money by increasing the rent.

■ The diversity in the official attitudes and interests is obvious and crucial. This is mainly due to the lack of co-operation as well as the conflict in interests among the various authorities, e.g. a hundred years old house is considered by the municipality as an "outworn" structure, while according to the Antiquities legislations it is "national heritage"; Al-Awqaf will consider only its economic feasibility as an investment while the Alexandria 2005 planning commission, on the other hand, has to mediate among them but without any firm authority for decision making.

■ Again we need to further emphasize the role that was played by AlAwqaf in the management of the built environment, and the confusion resulting from its abolishment as previously explained; this will be illustrated below.

■ Although the issue of conservation has been highlighted in these various forms, its objective has not been clearly expressed and thus the role of conservation in the whole urban planning process has not been defined; in the 2005 Comprehensive Plan, the issue was addressed largely as its role in tourism and 'tourist walks' rather than being part of the development process. The absence of practical measures to implement any of these policies has therefore been a serious omission.

However, to conclude, these constraints have had a controversial effect; while on the one hand they inhibit any action, their confusion and contradiction allows for many interventions to take place as they might be against one law, and in

agreement with another. And it is within this gap that most actions happen, both desirable and undesirable, as well as what we have previously noted as community active participation.

6.5. Environmental constraints

Environmental issues are becoming increasingly significant, not only in our study area, not even at the national level, but they are assuming global nature. We are not attempting therefore to engage in proposing solutions to these problems, as that is far beyond the scope of our study. The purpose of this section is, however, to acknowledge their existence, and thus to be able to understand the constraints developed as a result.

6.5.1. Air pollution:

Sources of air pollution

Industry: more than 50% of Egypt's industry lies in Alexandria, and has been increasing the pollution level throughout the city. Al-Gommrok has been mainly affected by industrial plants west of Alexandria (cement, petro-chemicals, tanning, lime,...etc)

Traffic: as we mentioned above, traffic problems have been dramatically increasing and overloading the city with a large number of cars and many congestion points. As a result the journey duration has increased and consequently the amount of exhaust gases, vapours and dust increased.

The Port: ships' exhausts, heavy transport, as well as cement and grain silos are contributing heavily to the air pollution of the area.

Construction: installing new sewage and water pipes, cables and new constructions have led to an increase in dust and suspended particulates in the area as well as in the whole city.

Forms of pollution:

A study has been made by the Institute of Public Health to measure the pollutants in Alexandria. This study was conducted from 1975 till 1979 and it

has not been updated since then. From this study we can conclude that the main pollutants in Alexandria are:

Dust and suspended particulates: represent one of the most serious air pollutants; in addition to the effect on human health (bronchitis, cancers,..), they have an adverse effect on the physical fabric, dirtying building facades and consequently causing their deterioration, and by the weakening of trees and greens. Studies (El-Dakhkhni,1979) found that they increase with an annual average of about 7% and that they had reached an average of 218 microgram/m³ in 1979, exceeding the international permitted average (75 microgram/m³). They also contain other pollutants such as sulphates, nitrates, lead, chloride, sodium, potassium and calcium. These cause many harmful effects to human beings as well as to building materials.

SO₂; another important pollutant as it has a very harmful effect on the respiratory system. It combines with moisture to form sulphuric acid which has an adverse effect on stone masonry, especially in high temperatures and humidity. Studies have shown drastic increases in its annual average (0.041 part/million in 1979) which exceeds the international limit (0.03 part/million). NO₂; the source of this gas is mainly the traffic, and it too has a harmful effect on the respiratory system. This is still within international limits (0.05 part/million)

The effect of air pollution on the fabric:

First: its effect on human health; although it doesn't seem to be the main issue in our study, its adverse impact on human health has in turn its impact on the overall well-being of the area.

Second: its effect on the built environment; in addition to the natural composition of the marine environment, air pollutants have been causing the deterioration of building materials in different ways, among which are the following:

I- Erosion, surface powdering and roughening:

- Acid attacks; sulphur and carbon compounds form weak acids such as (H_2SO_3), which react with calcium carbonate to form calcium sulphate, a compound which dissolves in water to quite an appreciable extent
 - Washing of calcium carbonate and sulphate from limestone.
- II- Blistering and splitting of thin, darkened skin:
- Repeated crystallisation of soluble salts during wetting and drying cycles.
 - Failure of calcium sulphate skin formed on the surface by reaction of sulphur compounds with the limestone.

Examples of these effects have been illustrated throughout our study of the buildings in the area.

6.5.2. Underground water:

There are two ways for water to enter a building: either by rainwater through inadequately maintained roofs, or by the rise of underground water. Thus, in a country like Egypt with a relatively dry climate, water becomes a serious threat which has a considerable influence on building conservation in Egypt as a whole. The water table in Egypt has been increasing as a result of various possible reasons, an issue which has not yet been settled among specialists¹. Nevertheless the rise in urban areas has been largely attributed to leakages in water and sewage systems (Cairo is a typical example). The situation in al-Gommrok is no exception: the water table in the area is at about 0.7 m below sea level and varies from 1.0 m to 2.5 m from ground level. This water is of high salinity as a result of its movement direction from the sea to the lake².

However, with the water table at the foundation level, the capillary attraction up into the dry porous masonry is seriously endangering the physical fabric in

1 These reasons varies from local: the leakage in water and sewage pipes; national: the side effects of the High Dam, and global: global warming.

2 This is based on a personal interview with Prof.Dr. Zeiton, in the dept. of Lands and waters, Faculty of Science, University of Alexandria. In order to measure the level related to the ground level personal observations were made on new building sites through foundation bore-holes.

various ways:

I- The rise of the ground water table leading to the over moisturising of walls and decay of the wooden elements of the structure.

II- The saline nature of the ground water, chemicals in the masonry and the oxygen at the wall surface. This interaction causes the formation of salts which continuously spall off the surface.

6.6. Conclusions

The problems and constraints described above, summarised in table 6-1, and due to their pressing and political nature, are fully acknowledged by officials of the various authorities and organisations. The question is, however, what is being done? Unfortunately and due to their political nature, mentioned above, solutions are often translated into quick drastic actions derived from the many available shelved master plans, which are mainly based on the concepts of physical ordering, e.g. Mogamaa al-Masajid, AlNasr St., ... etc.

Thus, a further major constraint is the scale of the problem. As mentioned earlier, AlGommrok has the largest population density in Alexandria and hence the scale of these constraints is largely magnified.

And having illustrated the various assets and limitations involved, what are we trying to achieve? Are we attempting to reach an ideal model where all these problems cease to exist and where the area is a very agreeable place which has many historic buildings, pedestrian areas and tourist attractions? We stated at the beginning of this research that we are attempting to achieve a practical and realistic approach, which has therefore to recognise the fact that the various constraints do exist and any attempt to ignore this fact is turning our study into a theoretical academic exercise which cannot be of any real use.

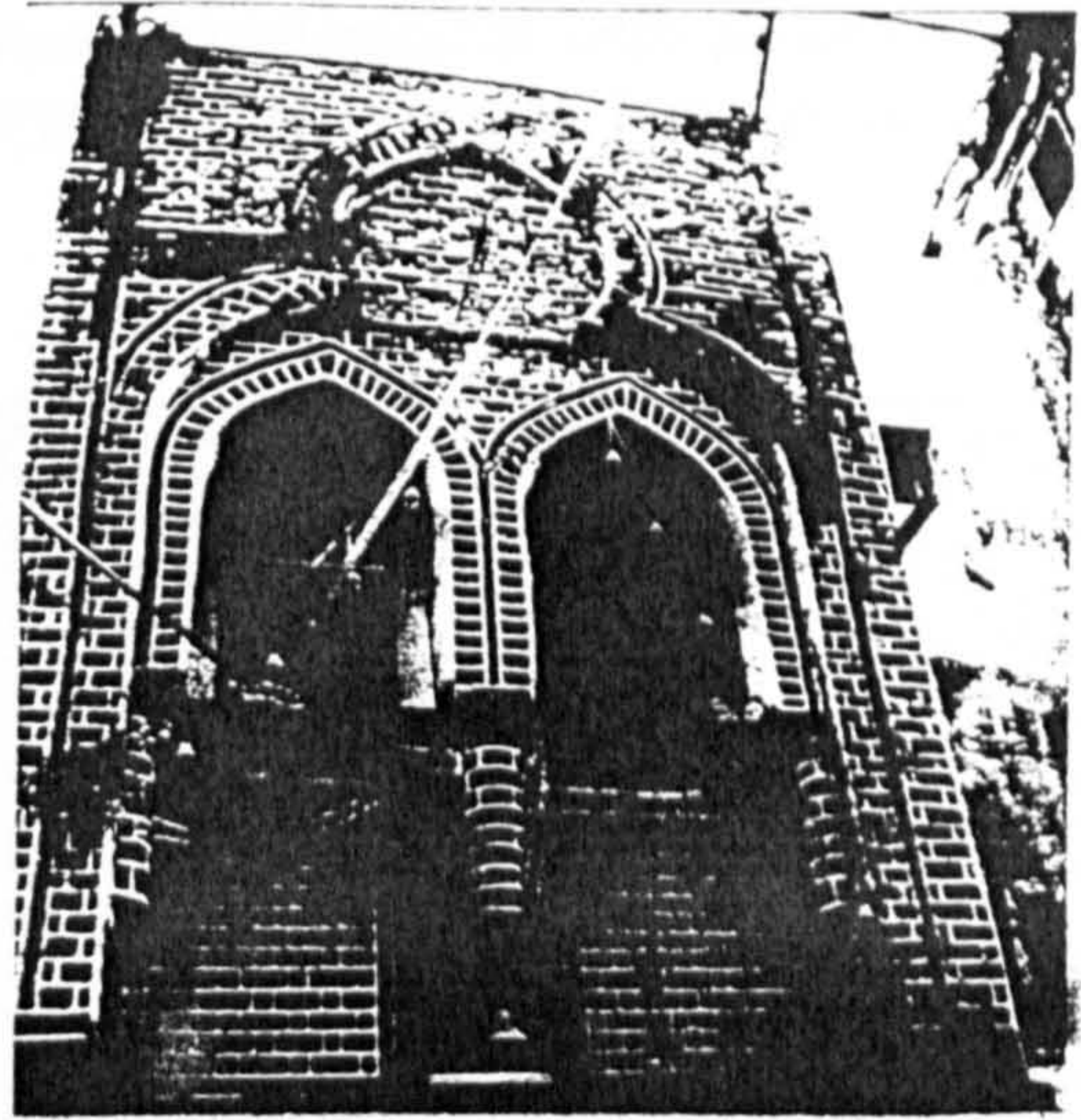
In the next two chapters we shall be looking at these pressures in their daily life form, where we normally face them and should deal with them.

Table 6-1,

	Opportunities	Constraints
Housing; the need for:	<ul style="list-style-type: none"> ■ creates a potential market for housing development. 	<ul style="list-style-type: none"> ■ the urgent need for 'shelter' is leading to: <ul style="list-style-type: none"> - low standards in buildings, regardless of any qualities or values. - potential for mass production high-rise residential blocks
Infrastructure & Services; the inadequacy of:	<ul style="list-style-type: none"> ■ Inhibits the potential for large scale development. 	<ul style="list-style-type: none"> ■ Causes further decay, decline and neglect of the existing fabric
Traffic and transport; problems		<ul style="list-style-type: none"> ■ Create the potential for road improvements and car oriented planning schemes. ■ Pollution, noise as well as physical and social disruptions caused by them, will eventually lead to further neglect and decline
Physical constraints	<ul style="list-style-type: none"> ■ Vacancies, redundancies and derelict buildings and sites offer an opportunity for redevelopment if sensibly handled. 	<ul style="list-style-type: none"> ■ Obsolete buildings do not offer any opportunities for development. ■ Vacancies, redundancies and derelict buildings can be constraints by being an opportunity for speculative developments.
Regulatory constraints	<ul style="list-style-type: none"> ■ Inhibit many actions which are undesirable. 	<ul style="list-style-type: none"> ■ The confusion of legislations and responsibilities gives way to neglect; this might also result in undesirable actions.
Environmental factors		<ul style="list-style-type: none"> ■ Threatens the physical environment, leading to high repair and maintenance costs.

ALSAGHA - A DEMONSTRATION AREA

CHAPTER SEVEN



ALSAGHA: A DEMONSTRATION AREA

ALSAGHA; A DEMONSTRATION AREA

7.1. Introduction

" Cumulative, less ambitious adjustments implemented with perseverance and firmness can often achieve very positive, though less spectacular results." (Serageldin M.,1985:127)

In the previous chapters we have touched upon the need for a practical scale for intervention. And hence, having illustrated the area and the variety of problems involved, this statement by Serageldin is worth considering. We ought to realize that dealing with the whole area as one unit is not practically possible; not only as far as this study is concerned but in any real life situation as well.

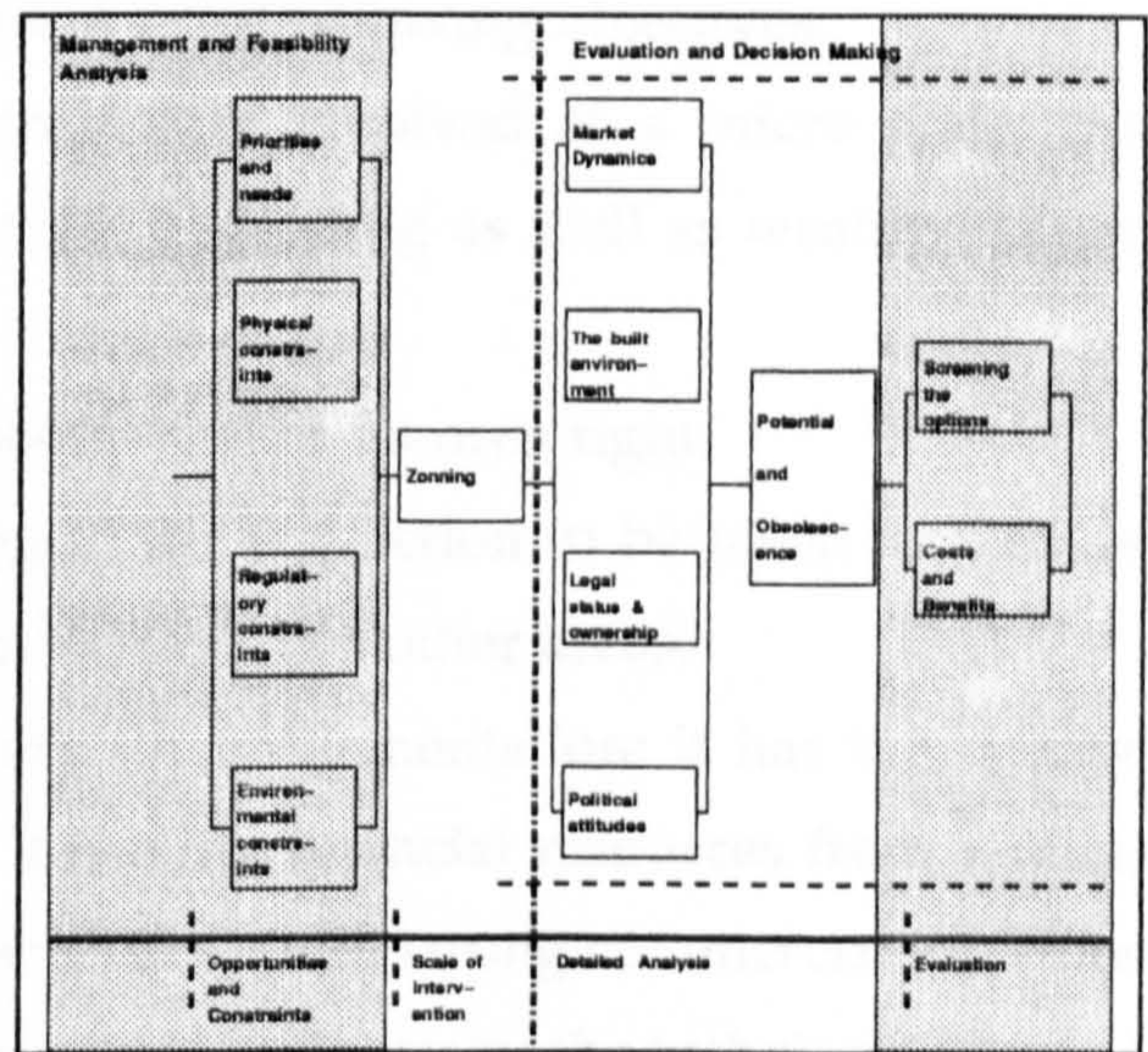


Fig.7-1, The stage of 'evaluation and decision making': scale of intervention and detailed analysis.

Following our plan established in Chapter 3 (fig.7-1), the next two chapters will deal with the 'operation and decision making' stage where the 'aspects of reality' can be identified at a micro scale, issues can be fully understood and more practical approaches can be achieved.

The study area is therefore subdivided in 15 zones, from which a single area was chosen, "AlSagha", in order to demonstrate the various problems, potentials, opportunities as well as possible/alternative options available.

The area will then be investigated in order to identify the 'supply and demand' as well as the 'opportunities and constraints' for future development. It will do so in two stages: first, an overview analysis of the market dynamics, the built

environment, the legal status and the political attitudes; second, a pattern of potential and obsolescence is then drawn. The Chapter finally concludes by setting the scene for the following chapter where individual sites and buildings will be investigated in more detail and the 'evaluation and decision making' stage will take place.

7.2. Selecting a demonstration area

The selection of an area was governed by the following objectives:

- That the area represents the main issues involved at a micro scale; the pressures for development, the need for upgrading as well as wealthy urban, social and architectural values.
- It constitutes an urban, socio-economic unit in its own right.
- It has the potential for public support for any action to be taken as well as publicity for any achievements as an example for other areas.
- It has the potential and opportunity for implementation; it has the energy needed for action. In other words, it has the financial resources from within, which implies that we are looking for an area with strong commercial activities rather than a pure residential domain. Fig.7-2, illustrates the technique adopted for the selection process; three main steps have been taken:

7.2.1. Zoning

The whole area was divided into 15 zones; the criteria for this zoning have been as follows:

- The existing division of *Shiakhah*, which is basically a Census subdivision.
- Main traffic routes which significantly divide the fabric, e.g. Ismail Sabry St.
- Pattern of activities in different areas.
- The social homogeneity and patterns of existing communities.
- The homogeneity of the urban fabric.

These zones are briefly stated below:

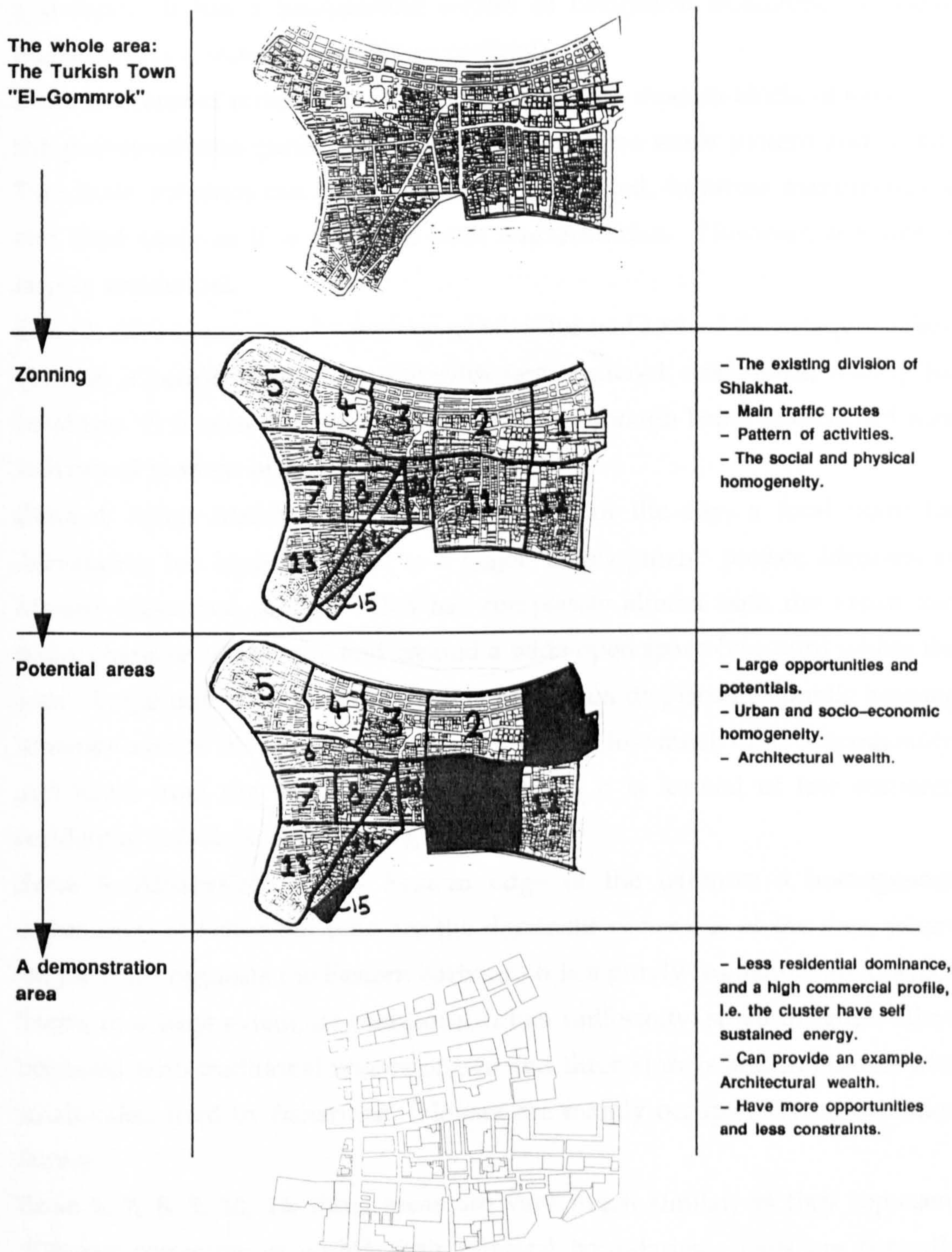


Fig.7-2, Selecting a demonstration area

Zone 1, AlSagha: a well established community, based largely on a powerful commercial domain, which is recognised over the whole city; it has a wide range of retailing and wholesale activities that includes mainly jewellery, cloth, herbs and food. It has a considerable wealth of traditional buildings, especially mosques and commercial buildings (*wekalat*).

Zone 2: an area of mixed nature; infiltrated by many modern blocks of flats from the post-revolution period, but still keeps the same street pattern and width. Two main activities can be significantly highlighted, furniture manufacturing and food trade as it is bordered with *souk* AlMidan. However, the area is largely residential.

Zone 3, AlTemrazyah: a community which is formed around the mosque of Sidi-Temraz; a residential community with few scattered workshops, mainly for furniture. It retains its traditional urban nature though being interrupted with individual modern high-rise blocks of flats.

Zone 4, Abou AlAbbas: the religious centre of the city, a focal point for Alexandria, has been subjected to a major 'development' project: *Mogamaa al-Masajid* (described earlier). This has completely altered both the urban and social character of the area and created a wide open space (vacuum) within the area. Large numbers of its inhabitants have been displaced to public housing schemes outside the area. The area has therefore lost much of its homogeneity, and apart from the buildings of this project, it is formed of few scattered residential buildings surrounding the project.

Zone 5, AlSayyalah: at the Eastern edge of the Isthmus; a homogenous community of fishermen who are the dominant occupants of the area, where they are just opposite the Eastern harbour. It is a purely residential area, which keeps, to a large extent, its traditional urban uniformity; small irregular alleys bordered with traditional houses of two and three storeys and infiltrated with small cafes, used by fishermen. Houses are mainly occupied by an extended family.

Zone 6, 7, 8, 9, 10, 14: these areas are very much similar, as they represent different communities within their physical boundaries. They are basically

residential.

Zone 11, AlShamarly and AlHalwagy: one of the well established communities in the area, with a variety of manufacturing activities, mainly metal, wood and paper. It has a major residential community. Despite its deterioration, it still holds most of its characteristics.

Zone 12, Souk AlSamak and Qabu AlMalah: another well established residential community with a mixture of activities, food trade as well as metal and shipping related activities which are located to the western side, close to the port. It has also kept a large portion of its original fabric.

Zone 13, Ras AlTin: at the western edge of the Isthmus, developed mainly early this century along the Ras AlTin St. which leads to Ras AlTin Palace (now the Navy headquarters). The area is essentially a residential one; there is also a large number of services which supply not only Ras AlTin but the area as a whole; the main hospital of the area (Ras AlTin public hospital), various schools as well as the main terminus for the city-tram and a main bus station.

Zone 15: bordered with the harbours walls and AlBaharyah St.. Apart from a few garages it is mainly a residential area in an advanced state of dereliction, which is clearly witnessed on the sites that became vacant after buildings' collapsed.

7.2.2. Potential areas:

Among these zones three potential areas were identified

Zone 1, AlSagha:

- Commercial potential that provides the necessary energy needed for change,
- it has kept much of its architectural wealth and urban homogeneity along with its coherent socio-economic fabric, and
- it has the necessary potential for public support for being widely recognised as a major traditional commercial centre (as has been demonstrated in AlNasr St. project illustrated below)

Zone 11, AlShamarly:

- Its manufacturing activities provide the financial energy needed, and

- it retains a considerable social coherence.

Zone 15:

- Well defined in terms of scale and boundaries,
- the extensive dereliction and the resultant vacancies provide an excellent opportunity for redevelopment

7.2.3. A demonstration area

Among these potential areas, and recalling the criteria set out above, we might identify zone 1 (AlSagha) as our demonstrative area, mainly for the following reasons:

- It has less residential dominance, while having a high commercial profile, thus an initiative within the area can have a self sustained energy that provides a developing process, which in turn,
- can provide the example for other areas, for its public fame is higher than other areas
- for being under direct threat from AlNasr St. project; this has generated a considerable public opinion as for the protection and development of the area, and for
- having a large architectural wealth represented in its *Wekalat* and mosques.

7.3. An overview analysis

AlSagha is located to the North of AlManshiah Square, the busiest Square in the city, which has been the centre for European Alexandria and is of very high commercial potential. The area represents one of the most active commercial centres in the city with a wide reputation on the National scale.

In this section, we will aim at identifying the 'limits and potentials' for future development by exploring: first, market dynamics, its main components, demands and patterns; second, the built environment and its relation to the pattern of activities; third, the legal constraints and their effects on the future prospects for development and finally the role of political attitudes.

Fig.7-3: Touring the area:

IA
BICID

A:Souk Al-Midan (a food market)

B:Faranca St.

C:Al-Shourbagi St. (jewellery)

D:Souk Al-Samak St.

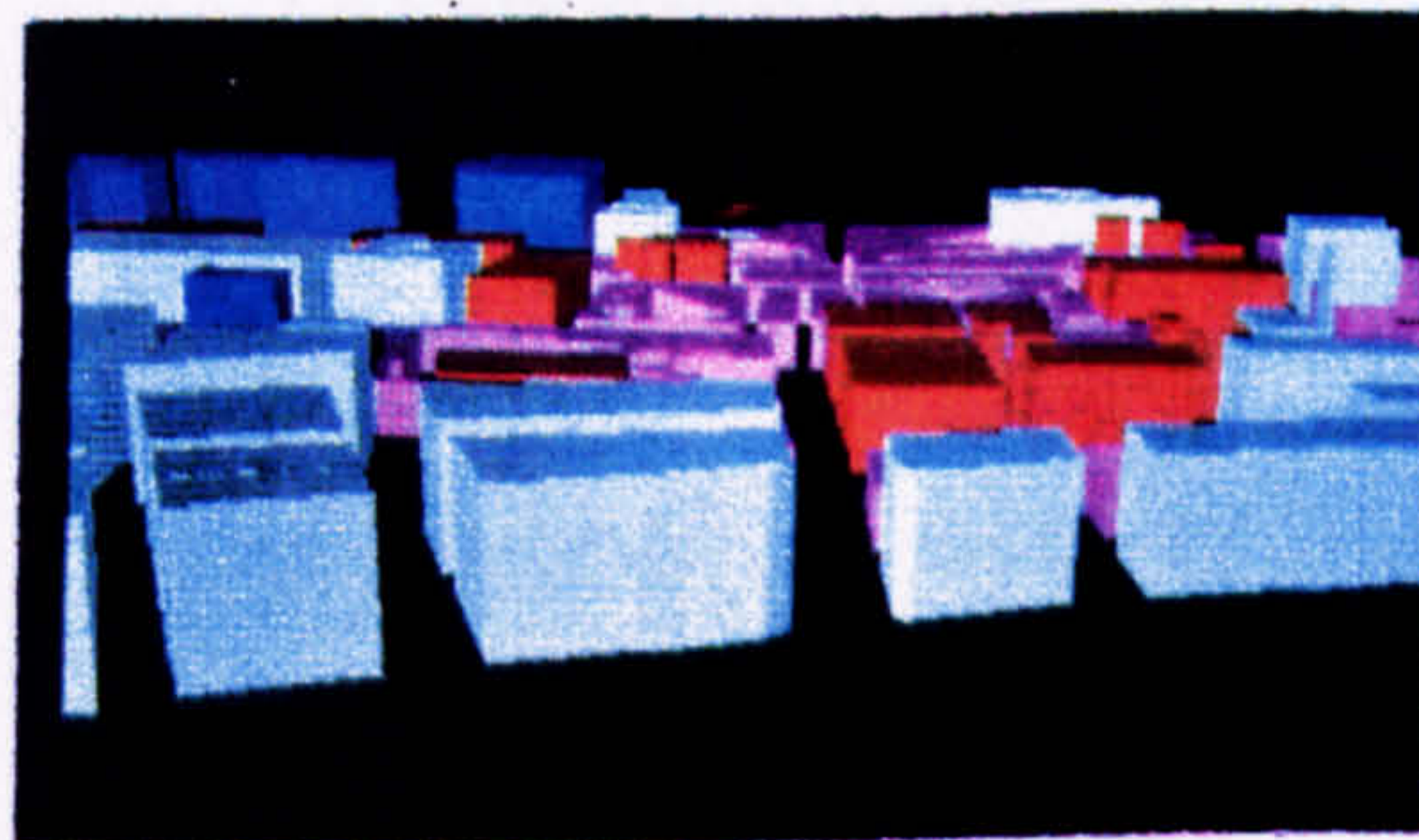
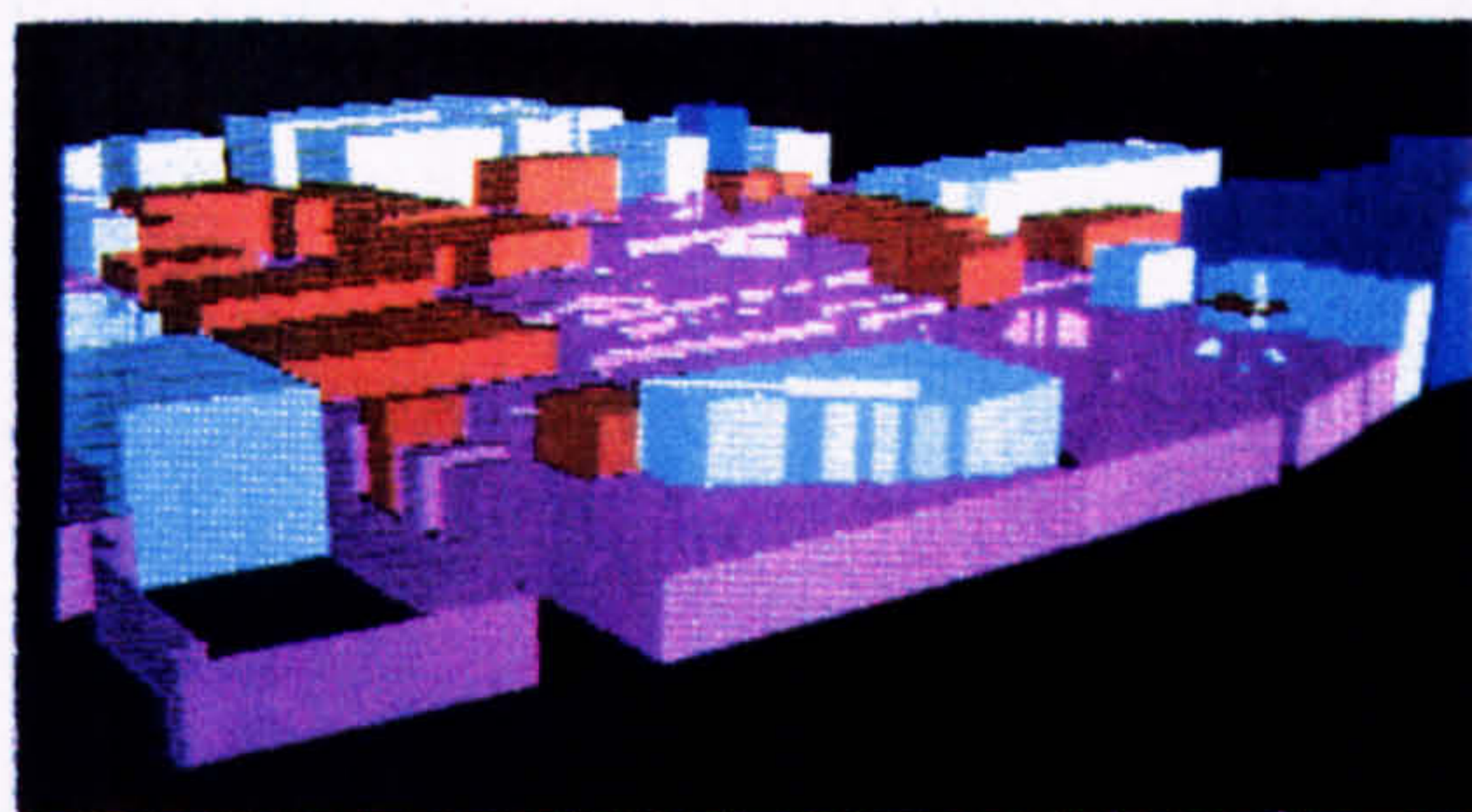
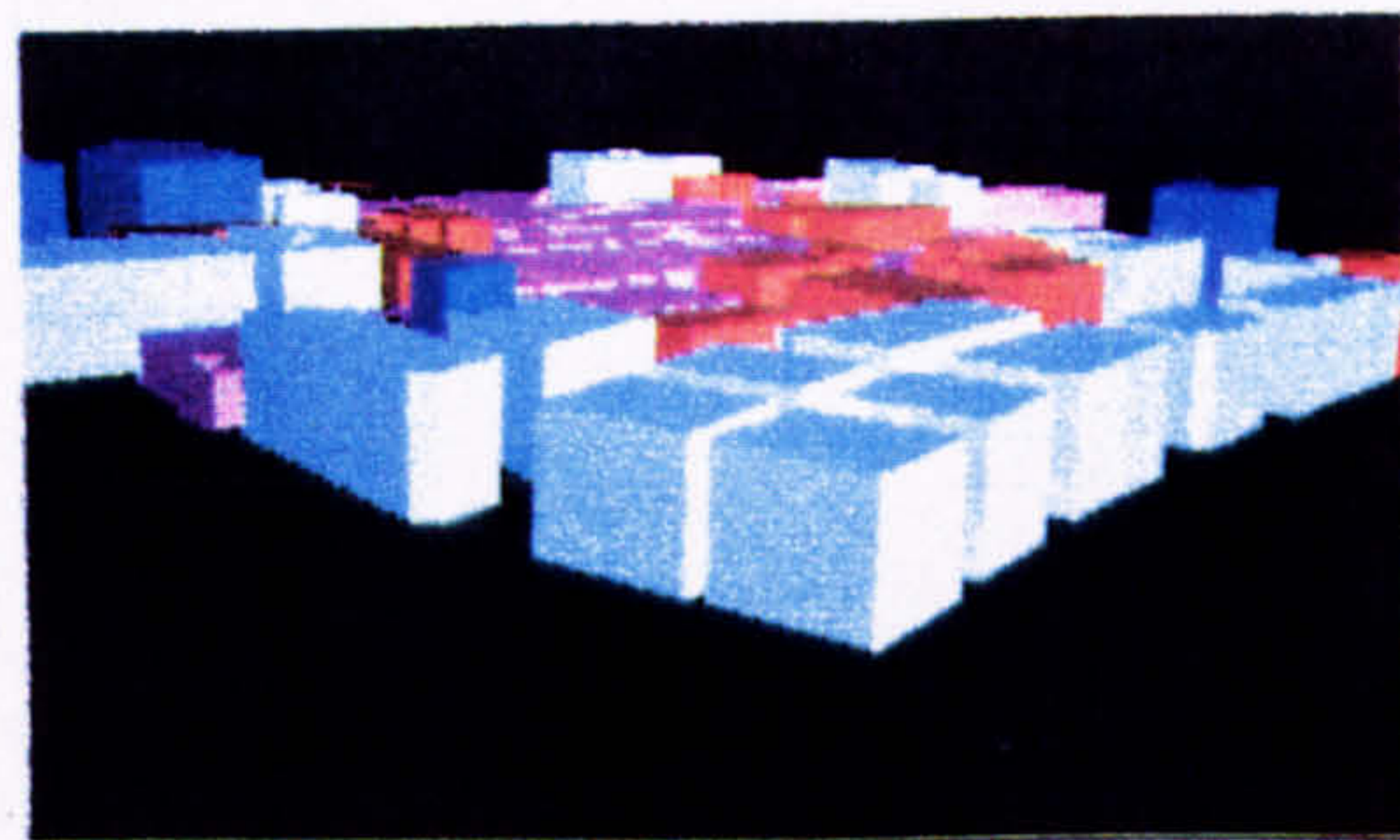
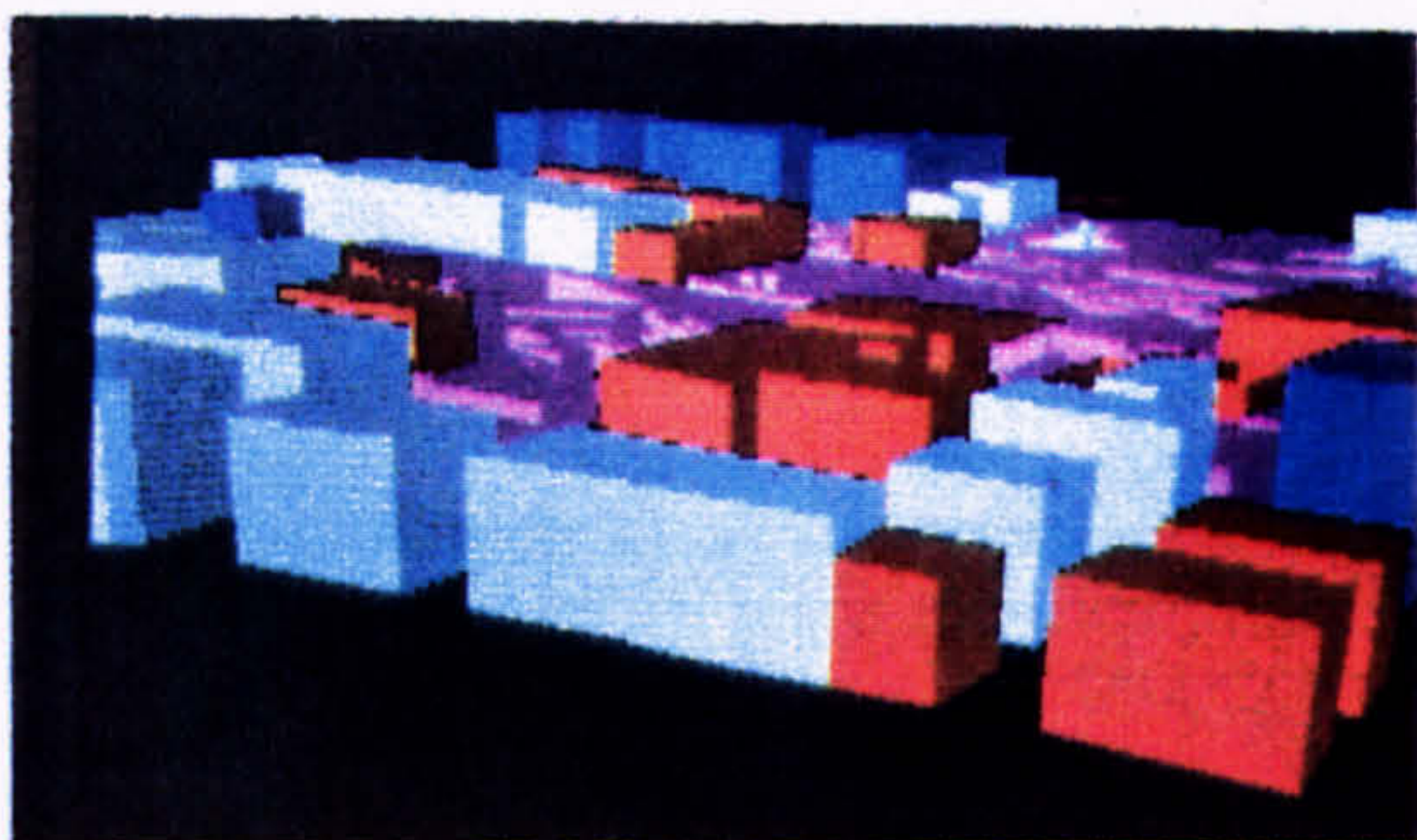
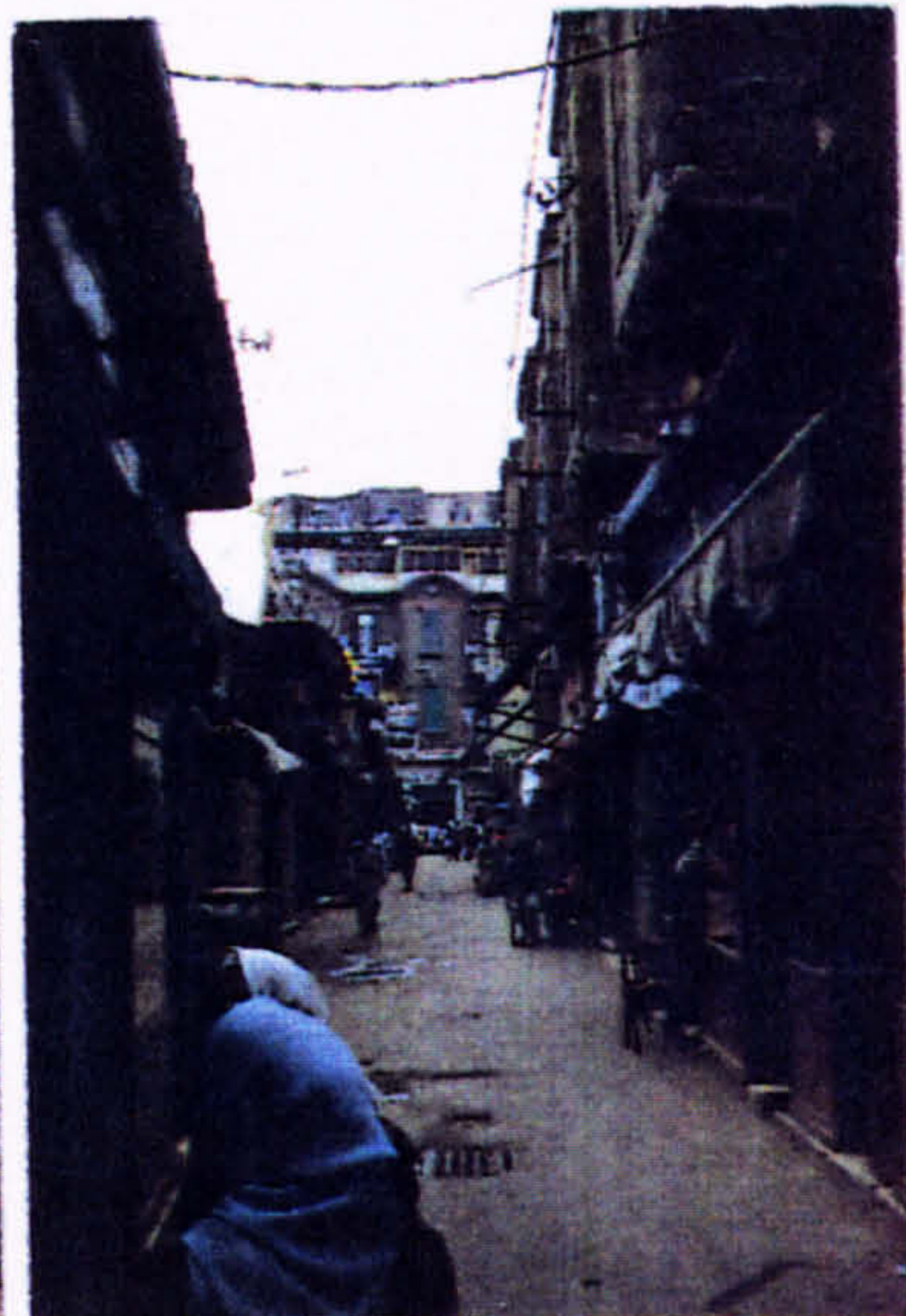
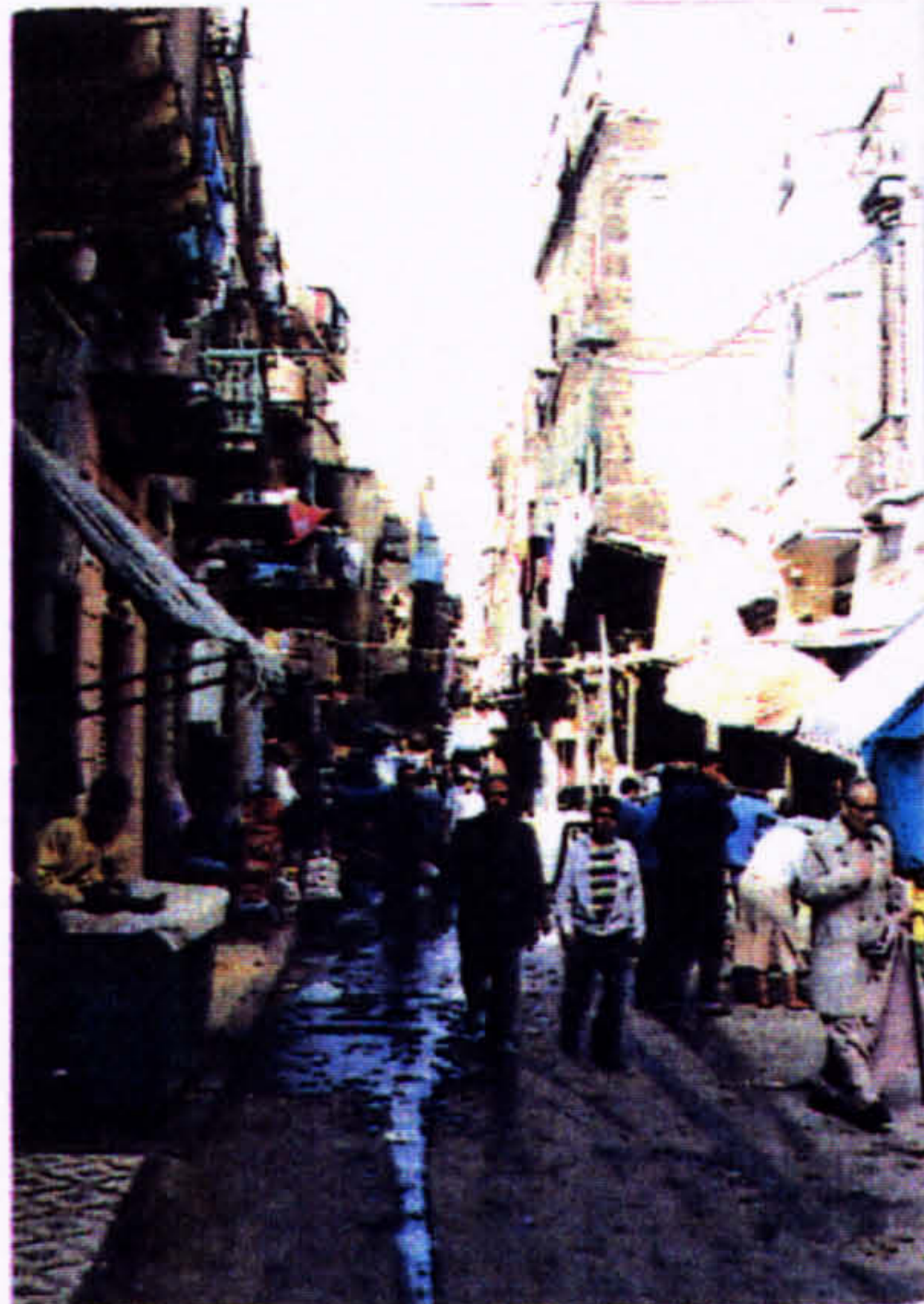


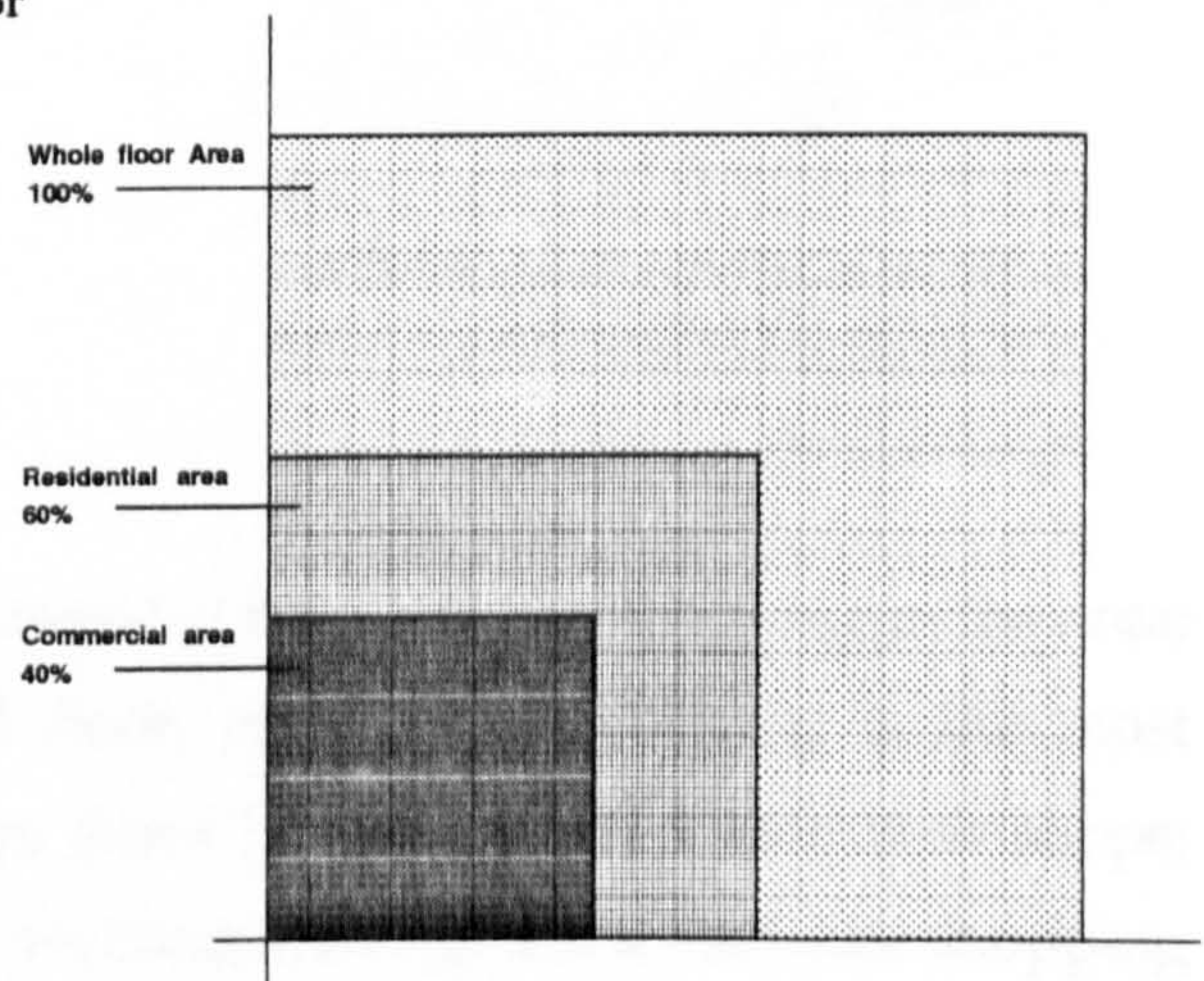
Fig.7-4; A three dimensional model of the area illustrating the physical fabric of the area.

7.3.1. Market dynamics:

As indicated earlier, a prerequisite for any development programme is a careful understanding of the socio-economic structure and the market demand of uses and activities. This will determine the need to maintain, develop or change current activities.

Unfortunately there are no available data or statistics for such parameters. Our analysis will therefore rely almost entirely on the field survey conducted by the author. Two main fields can be identified as the main components of the local market (fig.7-5).

Fig.7-5, the main components of the local market as proportions of the total used floor area.



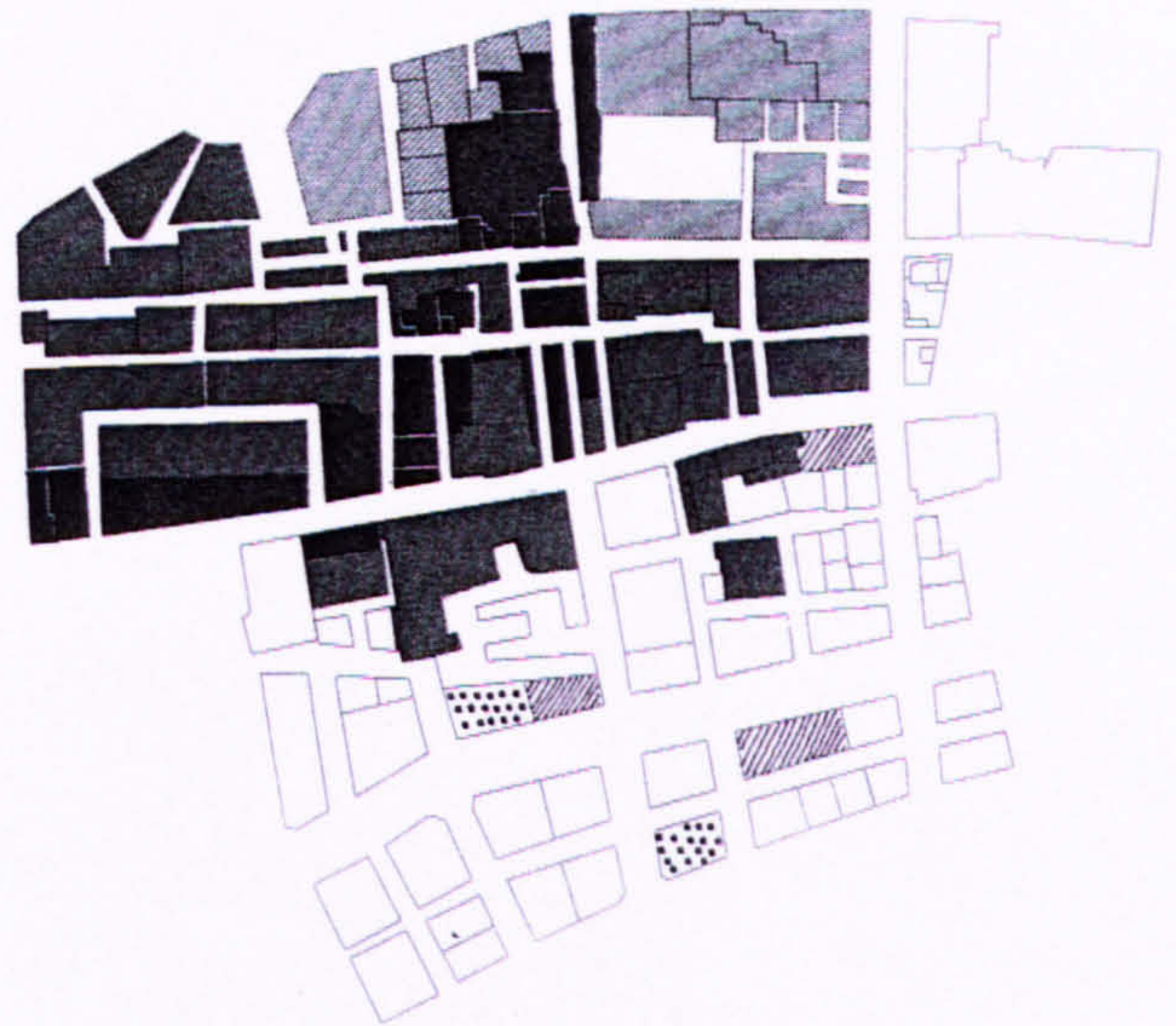
Housing: the need for housing in the area has already been expressed, and yet it has to be clearly specified that there is a need for:

- Provision of more space: with units occupied with more than one family, the need for more units is quite evident. The major demand is, however, for middle and low income housing.
- Reinstating the existing ones: the dilapidating condition, of the existing stock, coupled with the need for 'development', are forming an increasing demand for upgrading (or modernising) the existing units; installing proper sanitation facilities, electrical supplies,.. etc.

Commercial activities: the commercial pattern operates within two different scales: wholesale and small retail. While the former mainly deals with cloth, the latter deals with jewellery, cloth, herbs and food.

Fig.7-6, Ground floor use; due to the complex interaction of activities, the map represents zoning of activities rather than actual individual distribution; i.e. the prevailing activity in each plot is represented, in order to allow for better understanding of the main activities and their distribution.

-  Foods and Herbs
-  Cloth and accessories
-  Jewellery
-  Institutional
-  Wholesale trade
-  Vacancies



An important aspect which has to be noted is the nature of shopping in the area; this has to be recognised. Ground floor, street level shopping is the most dominant pattern, where many shops don't have shoppers inside their shops; rather they do their shopping while walking through i.e. a stall-like shopping (fig.7-7).

Fig.7-7, The nature of shopping; shopping while walking through



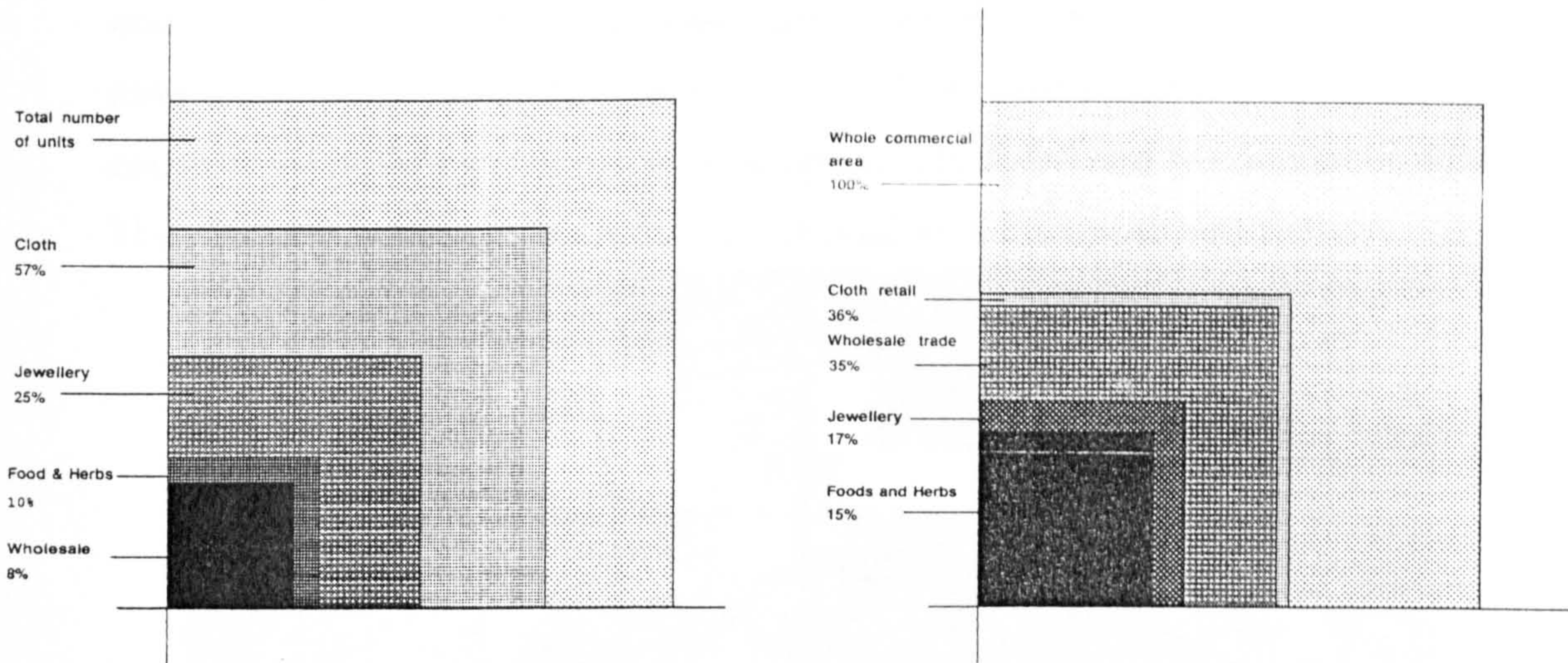


Fig.7-8, Right, The distribution of main activities in the area in terms of area used; Left, the distribution of main activities in terms of units.

From the figures, it is possible to see that cloth retail is the most dominant activity, followed by jewellery and wholesale trade, then food. It is however important to note that wholesale trade is mostly cloth. Both cloth and jewellery activities represent the main thrust of the area's commercial potential, which is further acknowledged at the city level by being a well established and reputed centre for both activities. Accurate figures regarding their share at the city's level cannot be made but, based on the rough indicators of the Egyptian Chamber of Commerce and the field survey, we may estimate that the jewellery activity in AlSagha represents approximately 60% of the total activity in the city, while cloth, both retail and wholesale, represent about 45%.¹

7.3.2. The built environment:

Having toured the area and seen its activities, our main concern is the built environment which accommodates this socio-economic pattern. How to make the most of it in developing the area? what are the limits and potentials for such needed development? Two main criterion need therefore to be addressed: first, the utility of space and its ability to efficiently accommodate required activities,

¹ These figures are compiled from the estimation of total activities in the city, by the Egyptian Chamber of Commerce, and the number of activities compiled from the field survey by the author.

and secondly, the possible accessibility as opposed to the required. The built environment is basically made up of three main components, mosques, commercial buildings (shops, workshops and *Wekalat*) and residential buildings. They largely belong to both the Traditional and Europeanised periods.



Fig.7-9, Buildings according to their date of construction.

In the next chapter we shall be illustrating, at a micro scale, examples of these buildings and their future prospects in the light of their potentials, existing situation and problems, yet the following are some examples of the various parts of the built environment briefly illustrated:

Fig.7-10, *Wekalet* Fatma Khaton dates back to the 18C. (no exact date is known). The ground floor is used for commercial activities (herbs and jewellery), the first and second floors are used for accommodation.



Fig.7-11, The markets as seen from above; a tightly knit structure of residential and commercial activities; building are mainly of bricks, limestone and timbers.

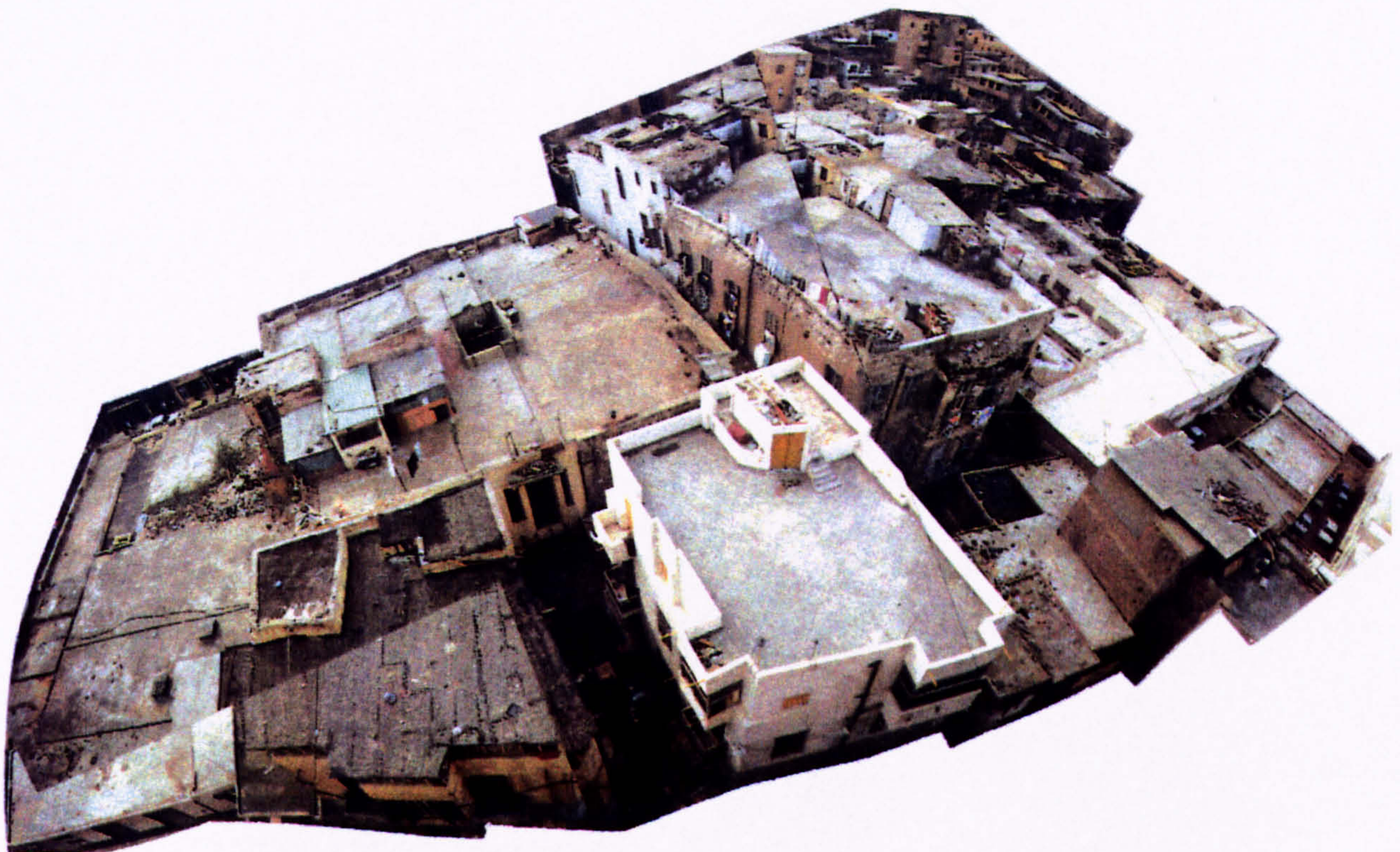


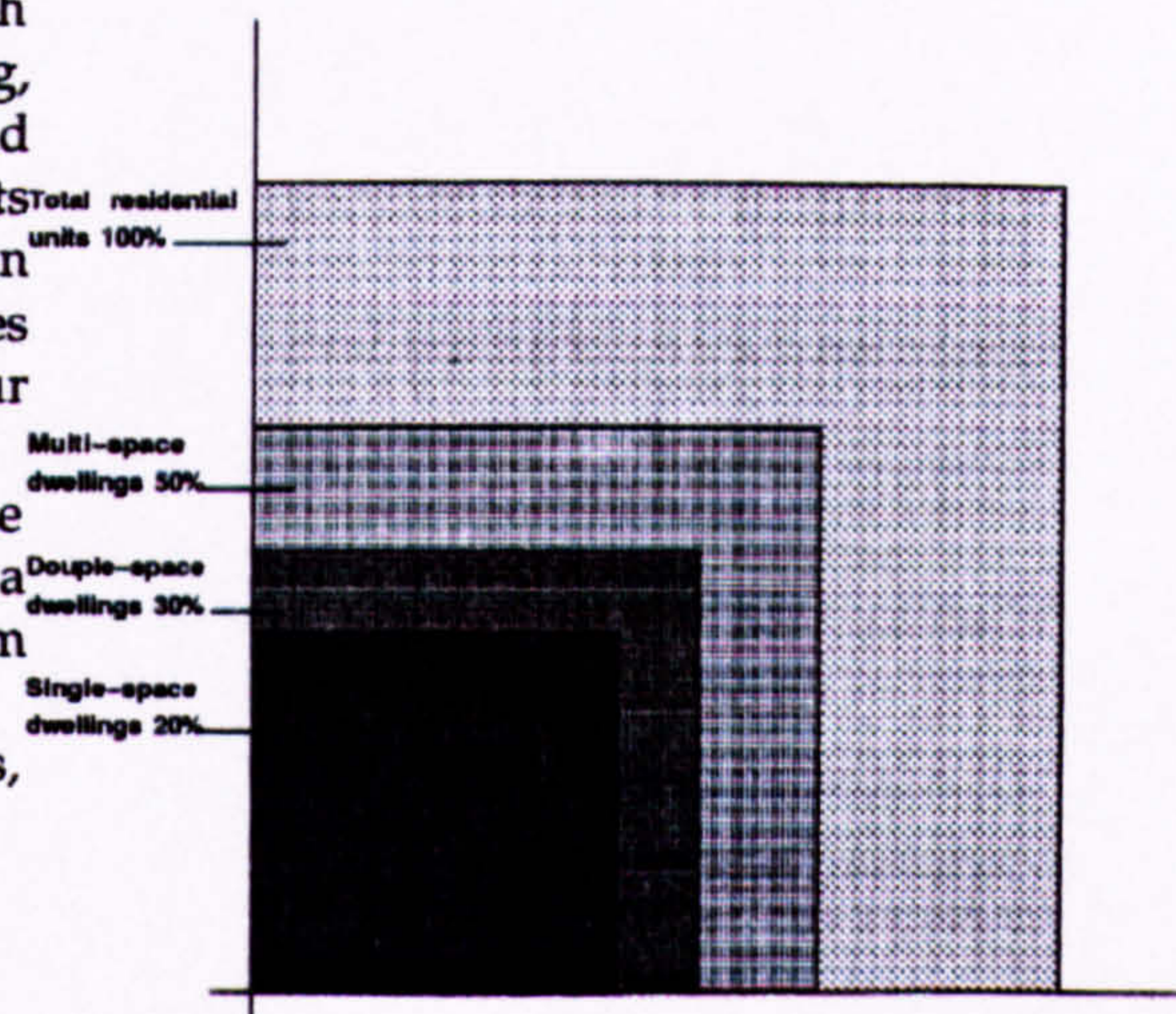
Fig.7-12, Right, European architecture; blocks of flats, dating back to early 20C.
 Below, a common scene; the street front is lined with one storey shops while the inner space is vacant, mainly due to ownership disputes; a great opportunity for development which has to be handled cautiously.



Utility of space: How is a space used? What are the needs of different activities? The answer to this question is naturally related to the nature of use required, and the pattern of 'using it'. There is a need therefore to understand the pattern of space needed. Thus, according to our field survey, we shall attempt to illustrate this as follows:

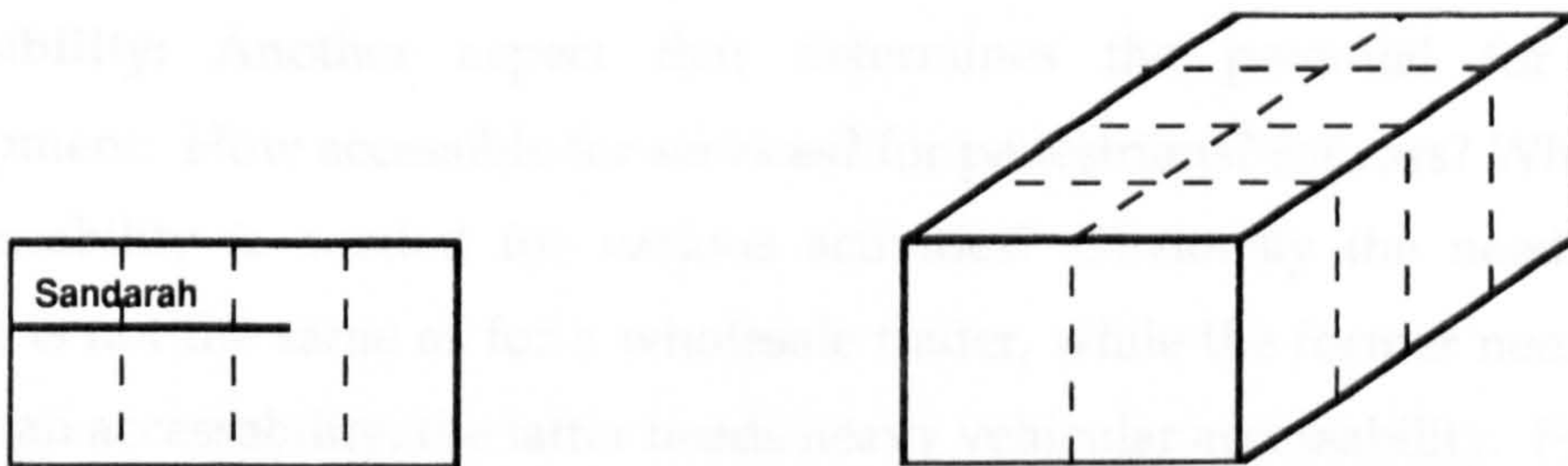
First, Residential space, three categories can be identified (fig.7-13):

- **Single-space dwelling;** one room which accommodates all activities: living, sleeping, studying,..etc., with shared facilities (kitchen and bath); this pattern mainly represented in units where sons and daughter get married and live in the same apartment, including their new families within their rooms, with an average size of four members. (20%)
- **Double-space dwelling;** two rooms, where one is used as the bedroom and the other is used as a living room, and if needed, as a second bed room at night. (30%)
- **Multi-space dwelling;** an average of four rooms, with separate living and bedrooms. (50%)

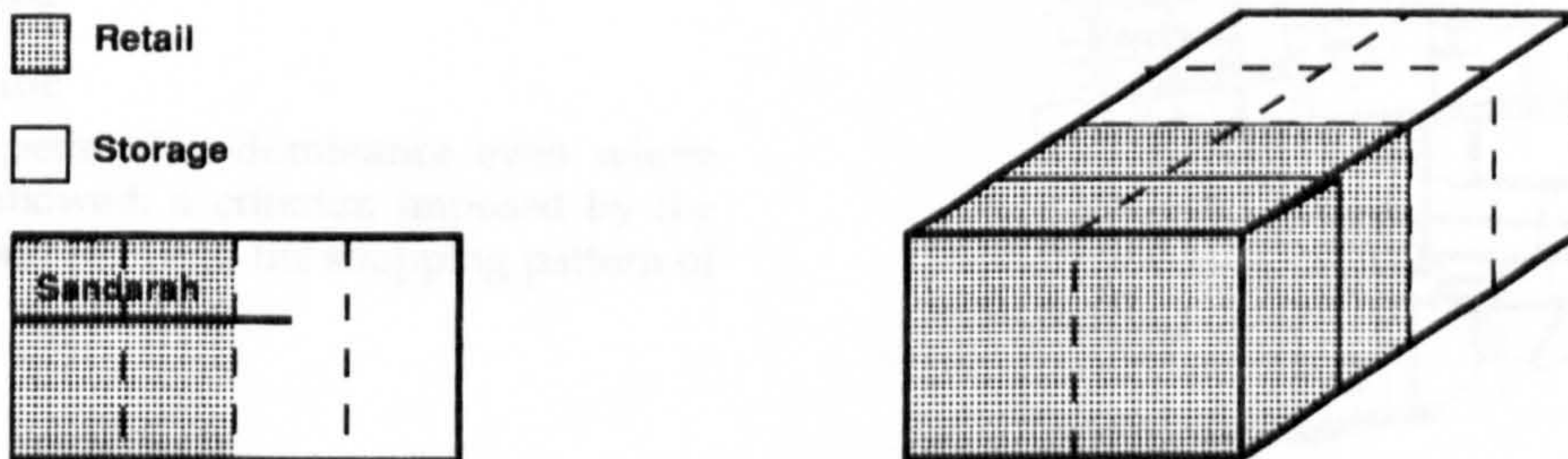


Without repeating what has already been mentioned about housing shortage, these figures emphasize the need for more residential space.

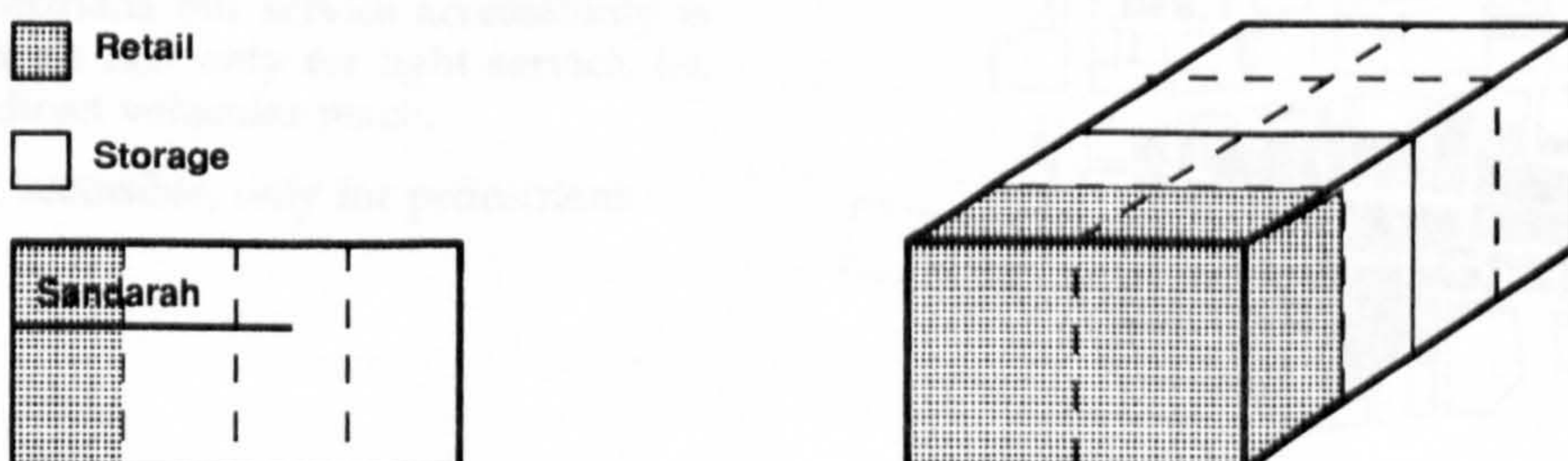
Second, commercial space, with 40% of whole floor area used for commercial activities, an affective utilisation of space is a necessity and an understanding of the actual needed space for effective utilisation has therefore to be achieved. Using a modular model (fig.7-14), the average commercial unit in the area, where the depth varies from half (half module) the street front (one module) to its double (two modules) and a possibility of a mezzanine (*Sandarrah*), is examined against the main retail activities:



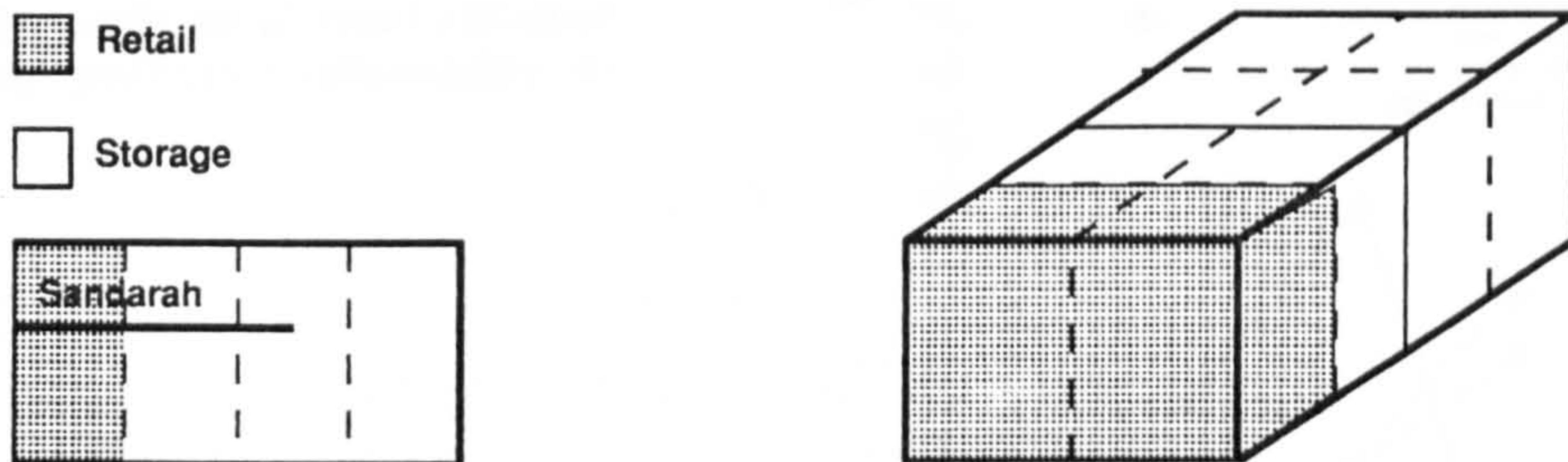
The Jeweller: the ultimate use is for the first 'module', while the use of a *Sandarrah* is of great importance, especially where there is a workshop; back spaces are usually utilised ineffectively (fig. 7-15).



Cloth retail: the prevailing pattern is a small one where the depth is only one module, and which coincides with the shopping pattern of the area previously indicated (fig.7-16).



Food and herbs: only the first half module is used for retailing, while the rest is used for storage (fig.7-17).



Accessibility: Another aspect that determines the potential for future development: How accessible for services? for pedestrians? for cars? What kind of accessibility is needed for various activities? Obviously the needs for a jeweller is not the same as for a wholesale trader, while the former needs only pedestrian accessibility, the latter needs heavy vehicular accessibility. First, we have to identify the different modes of movement (fig.7-18).

Fig.7-18, Modes of Movements;

- Pedestrians
- ▨ Mixed
- ▧ Traffic

Note the pedestrian dominance even where traffic is allowed; a criterion imposed by the commercial needs and the shopping pattern of the area.



Hence, three modes of accessibility can be illustrated as follows:

Fig.7-19, Modes of Accessibility;

- Accessible; for pedestrians, and service vehicles.
- ▨ Fairly accessible; also accessible for pedestrians but service accessibility is difficult and only for light service, i.e. no direct vehicular reach.
- Not accessible; only for pedestrians



Fig.7-20, The relation between different activities and their current mode of accessibility. This indicates that heavy accessibility is needed mainly for wholesale, while small retail activities need only pedestrian accessibility to function.

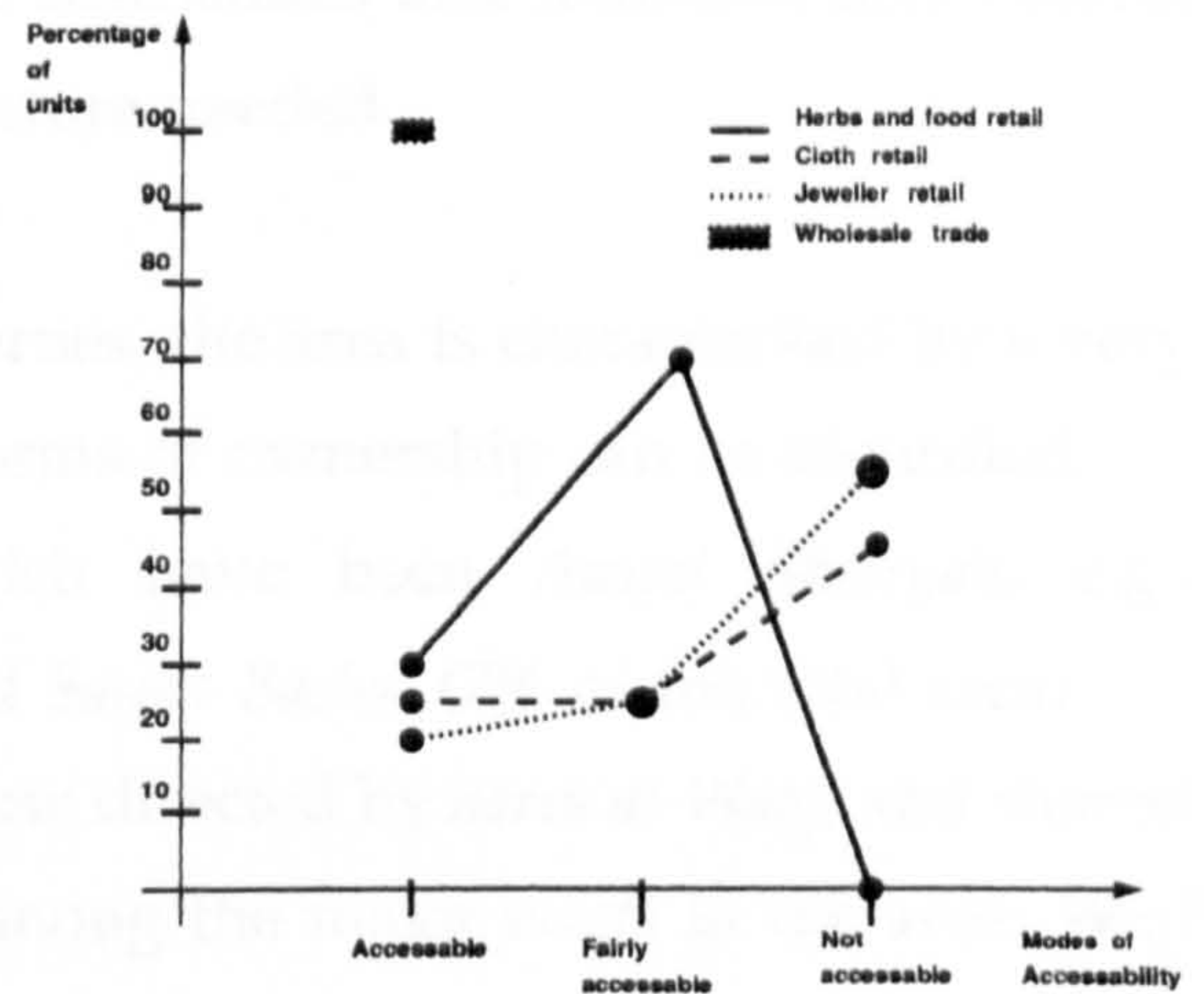
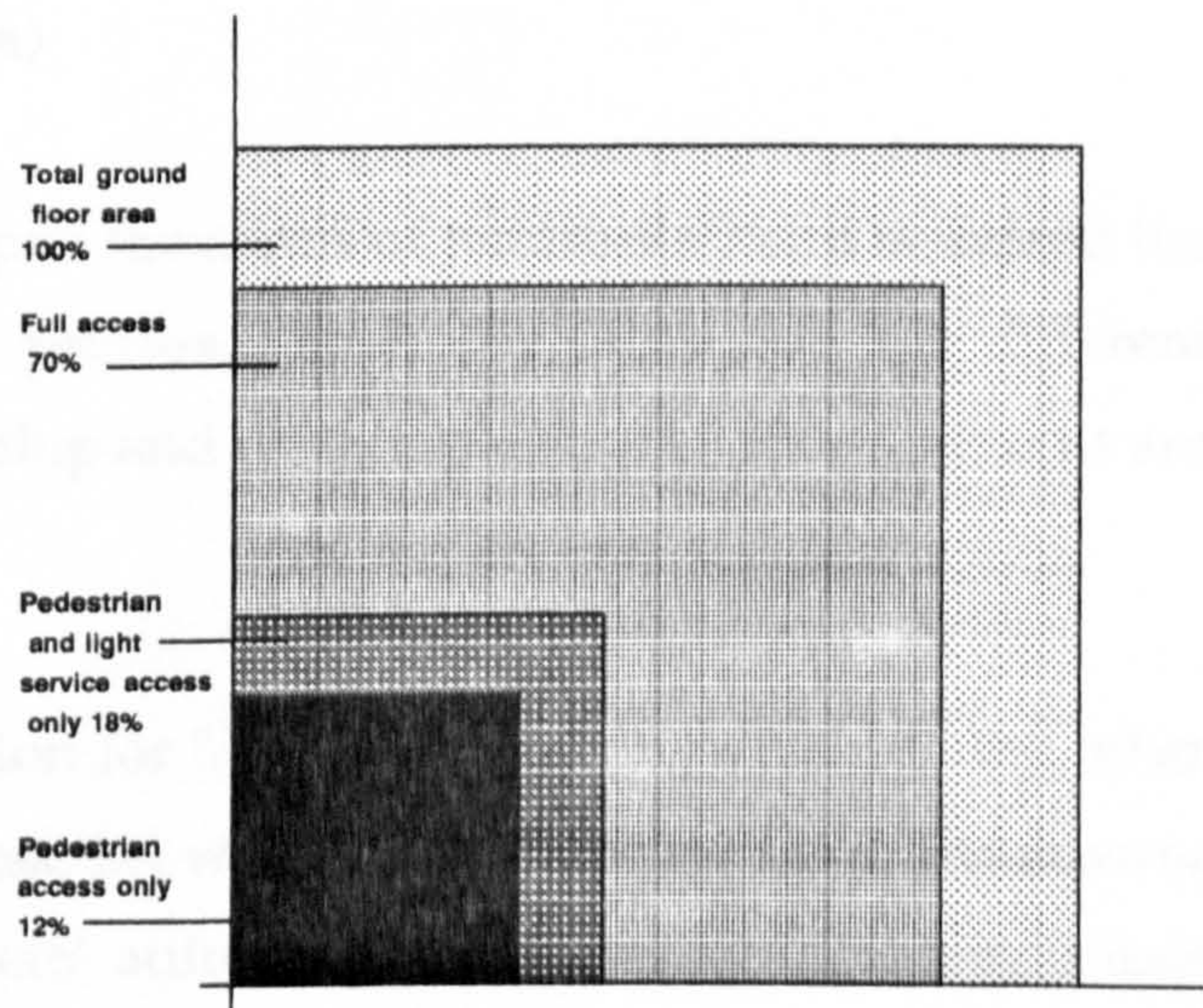


Fig.7-21, Current accessibility rates in terms of area. 70% of the area is accessible for service: a significant advantage for future development



7.3.3. Legal status and ownership

The role of legislations has been previously discussed (see Chs. 3&6) and yet it has to be emphasised that any suggestion for major alteration to the existing system will discredit the practicality of our arguments. However, as has been indicated earlier, municipal legislations for maximum allowed heights and floor

area ratio play a great role in inhibiting large speculative developments; limited amendments in order to toughen these restrictions and maintain firm control over this kind of development are therefore needed.

Being mostly of originally *Awqaf*¹ properties, the area is characterised by a very complex pattern of ownership. Four forms of ownership can be identified:

- *Awqaf*; these are mosques which have been *Awqaf Kheiryah*, e.g.: *AlShourbagi, AlArdi, AlKharatin and Sanan Basha*. (7% of the total area)
- *Ex-waqf*; still called *waqf*, but are now directed by *hares al-Waqf*, and shared among the families' members. Among the major *waqfs* in the area: *Waqf Abou Heif, Waqf AlShourbagi and Waqf Gemaiee*. (40% of the total area)
- Private; owned by individuals or companies² (e.g. Misr Insurance, AlSharq Insurance and AlNil company). (42% of the total area)
- Mixed; these are multi-private ownerships where more than one family is involved. (11% the total area)

On the other hand, this reflects upon the status of tenure-ship and is indeed the most crucial issue in the whole process. Table 7-1, illustrates the different patterns of occupancy and ownership and their implications. Three patterns are presented:

Owner occupied: the ideal situation for "any" intervention, which on the other hand generates another kind of risk, i.e. what kind of intervention? The answer to this relies mainly on the owners' attitude along with any legal constraints which might exist. Public awareness becomes, therefore, an important catalyst in safeguarding the built environment.

Tenant occupied in private ownership: this is the case in all the residential

1 The System of *Awqaf* has been explained in Ch.3

2 Originally they belonged to individuals and as a result of the Nationalisation process in the 60s, they were transferred to these companies

blocks, and with the current housing legislation and rent control previously explained it is unlikely that their present situation of ill maintenance will be changed.

Tenant occupied in waqf mixed ownership: this is the most critical situation; as illustrated later in AlShourbagi case this leads to a situation where it is unlikely for any of the parties involved to maintain any positive attitudes towards the property.

	Owner occupied	Tenant occupied in private property	Tenant occupied in waqf mixed property
Authority and responsibility	Complete authority and responsibility	Owner(s): as a result of rent controls owners practically lose their authority and consequently abandon their responsibilities. Tenant(s): confined only to their own units, i.e. public facilities such as staircases become without any means for maintenance	Owners: as a result of rent controls and the diversity of ownership responsibility becomes completely shattered. Tenant(s): confined to their own units with an unsecured status, minimum attention is given to the well-being of the property.
Potential for development	Very high potential	Potential is always faced with tenants and the need to evacuate them.	Faced with resolving the ownership status as well as the need to evacuate tenants.

Table 7-1, Patterns of ownership and its implications on the pattern of potential for development

This complexity has had an inevitable adverse impact on the built environment, its quality, maintenance and potential for development, will be illustrated in the next chapter. Hence, the effect of this issue is quite evident; while a large amount of money is spent on in individual interiors and shop-fronts, nothing is paid for more public domains like pavements, infrastructure,..etc. which has largely resulted from insecure tenure-ship. People spend their money only on what is theirs and hence it becomes a prerequisite for any intervention to resolve the complexity of ownership status and provide secure tenure-ship.

7.3.4. Political attitudes:

Apparently faced by a deplorable state of affairs we assert the need for action; the main question remains always, in what direction? Officials and politicians are strongly obsessed with the belief that physical 'ordering' is the remedy for all urban ills; physical 'planning' is therefore their answer to this 'unplanned' area. There is little realisation that, although it doesn't correspond to western 'developed' patterns of planning, it is planned to serve its 'own' function. The fact that it still serves a vital socio-economic function in Alexandria as a whole points to the strength of the concepts and culture that have produced it. Power, politics and public awareness are therefore basic elements of the urban process as we have already indicated and yet their role can be clearly identified through the case of AlNasr St. Project illustrated below.

This project is a representative illustration of the disparity between policies and interests involved in the process of urban management. It was started back in 1958 as part of a major planning scheme which involved the opening and widening of many streets in Alexandria. AlNasr Street was to be a link between the Western and Eastern harbours and was to provide a direct, wide, 'modern' and 'tourist attractive' entrance to Alexandria through the main gates of the harbour. It was also meant to save harbour traffic from going through the busy *Manshia* square. The first phase of the project was implemented in the early 1960s by cutting through the fabric of the old town (fig.7-23). In addition to the rehabilitation of large number of residents in other parts of Alexandria, it also involved the replacement of two markets (souk AlKanto and Souk AlManqae); they were given a new site for their markets which proved to be inadequate. Most merchants went out of business and eventually the new site was given away and became the location for the new courthouse. On the other hand the architecture of this street represented the socialist and communist dominated planning policies adopted by the government at that time. However, the second phase, which is meant to go through our study area (fig.7-24), was not implemented at the time mainly because of the political and military situation

of the country¹. In the last two years suggestions by some officials have been made to implement the second phase of the project.

The implementation of the project would involve the destruction of the coherent socio-economic environment of *AlSagha*, the disappearance of *Zanqit AlSitat*, the life-long historical tradition of markets such as *Souk AlAttarin*, *Souk AlKheit*, *Souk AlMagharbah* and *Souk AlAkkadin*, and the demolition of over 60 properties.

The official argument for the project is that it will ease traffic and provide a direct link between the Western and Eastern harbour, mainly for visitors coming by sea. This argument can be strongly undermined as follows: first, the introduction of such a street will inevitably lead to an increase in price for all adjacent land, thus encouraging large speculative developments which would be a source for further traffic needs; in other words, any traffic ease will be a temporary one; second, the need for visitors to have a direct link to the Eastern harbour, which might have existed in the 1950s, does not form a real thrust any more, where sea transport is no longer the main means for travel. Most important, the loss involved is much greater than any temporary gains that it might have, not only its traditional significance expressed by El-Mosly²

".. what is very significant is the urban fabric of the district. By this I mean the network of streets, alleys, open spaces. It is unique to Alexandria. Town planners always think in terms of vehicular traffic but there can be more important things. I am originally from Cairo and Cairenes know two things about Alexandria: the Beaches and Zanqit al-Sitat."

but a great socio-economic loss as well. About 300 businesses and 100 families would be affected and displaced by this project, an anxiety expressed by Karmous³,

1 The country was at war with Israel, all the resources were directed towards the army.

2 Head of the Department of Architecture, Alexandria University, quoted by Clement (1991:52)

3 A merchant who owns a shop that falls within the project, quoted by Clement (1991:52)

"Every merchant here employs four, may be five people. Every family in this quarter means 10 or 13 members. Where are they all going to?"

This prospect has stimulated wide objections from the public and from within the local community; the merchants, the ordinary public as well intellectuals from Alexandria University have expressed their objections, using bodies like the Egyptian Chamber of Commerce and the Jewellers Society to raise their case against the project through appeals to officials, major newspapers and the Egyptian Parliament. In addition there is support from the local M.P. Their views have been made known through national papers and magazines¹, TV and Radio programmes.

Moreover, should there be a need for such a link between the two harbours, other alternatives can be considered, e.g. one alternative is the re-opening of Gate 6 (*Bab-Setah*) for the city centre traffic, since it has already a direct link to the Eastern port through Ismail Sabry St. (fig.7-25); this would not involve any structural intervention, only the diversion of some traffic routes. Indeed the architecture of this street provides a more 'attractive' entrance to the city.

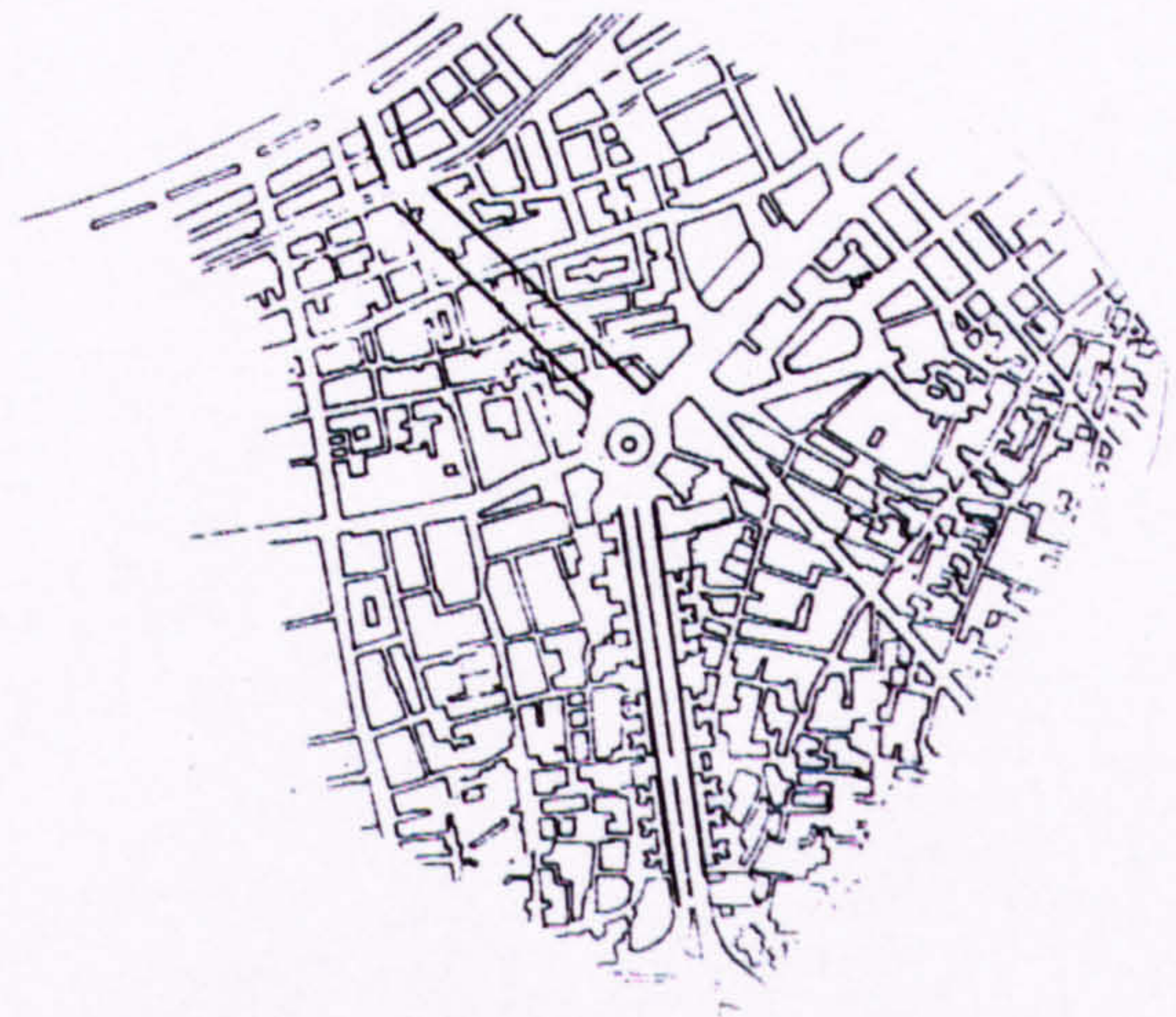


Fig.7-23 : The first phase; Right, the road as planned on the map; Left, the road as implemented, forming a border line (a wall) in the area.

¹ A copy of some of these appeals and articles, as well as an interview by the author with the Member of Parliament, is provided in Appendix G-4.

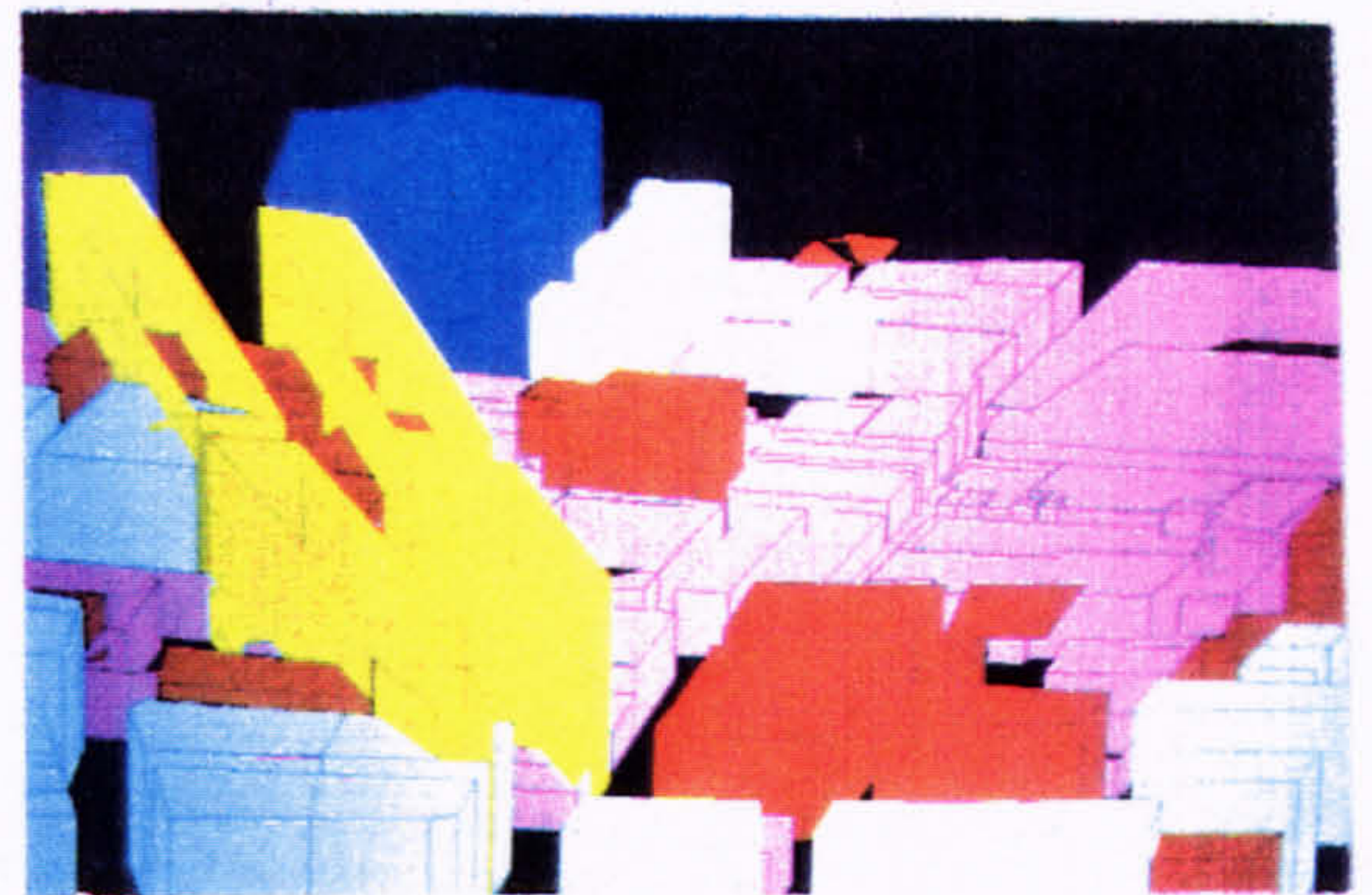
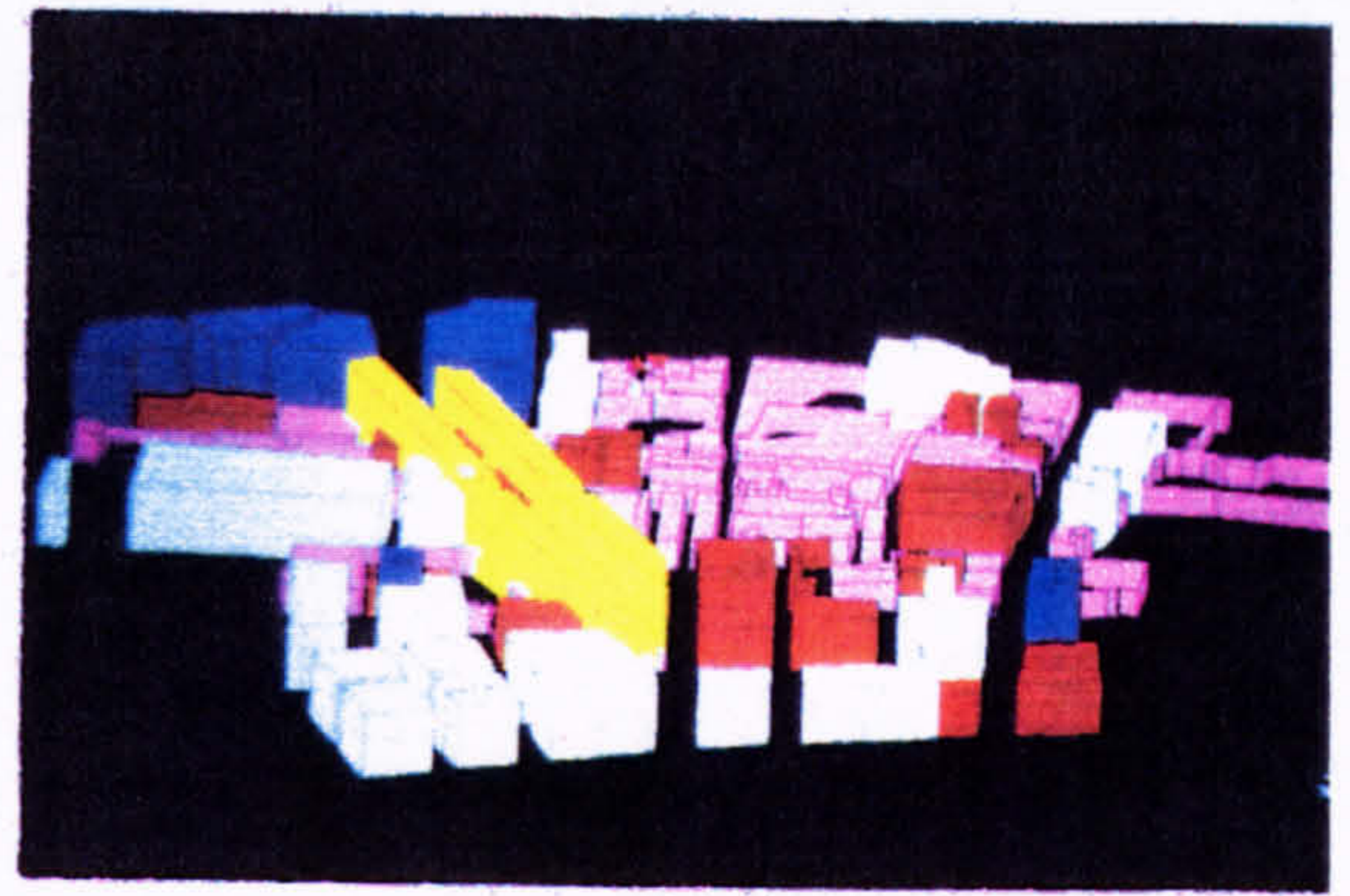
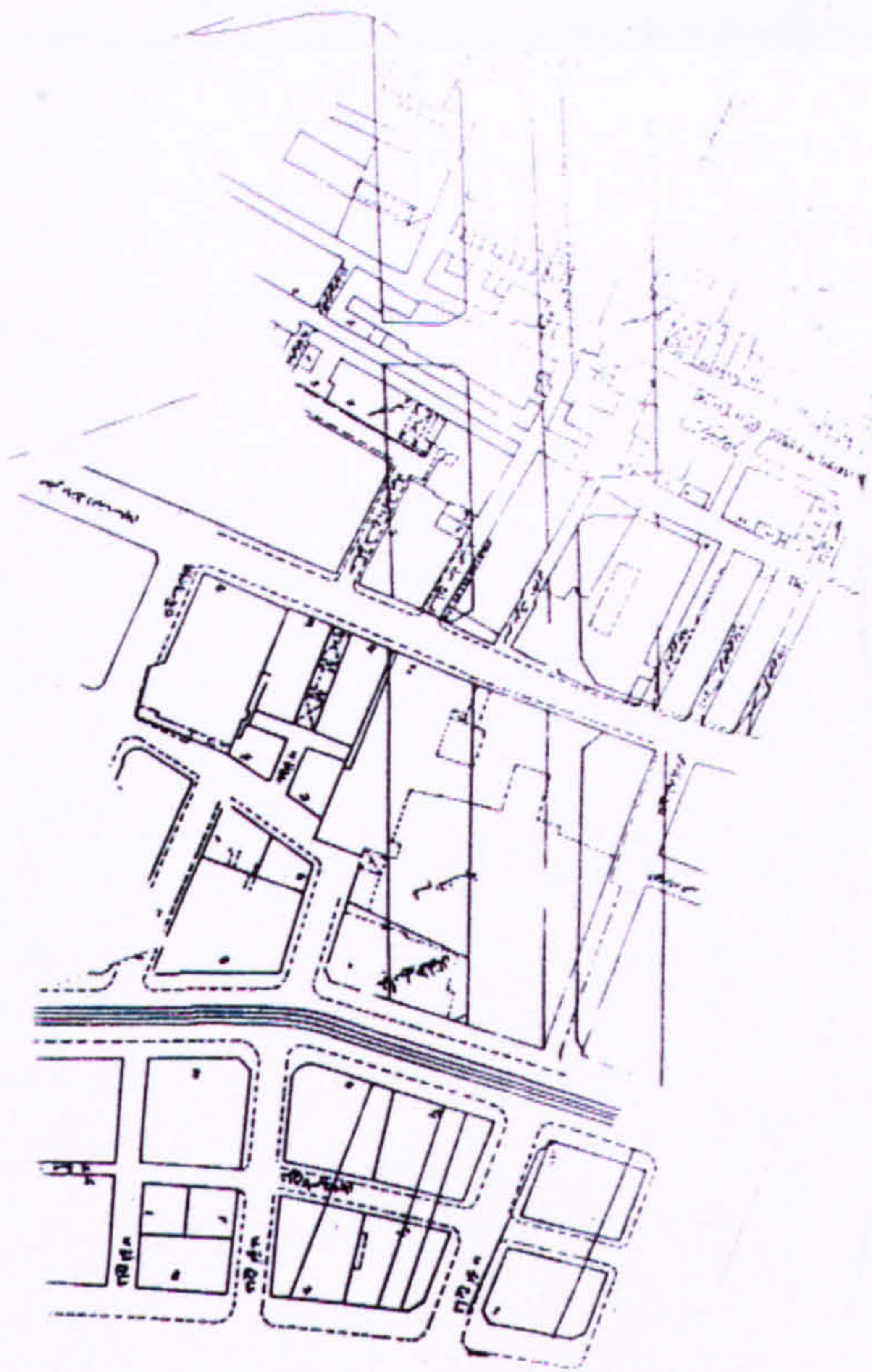
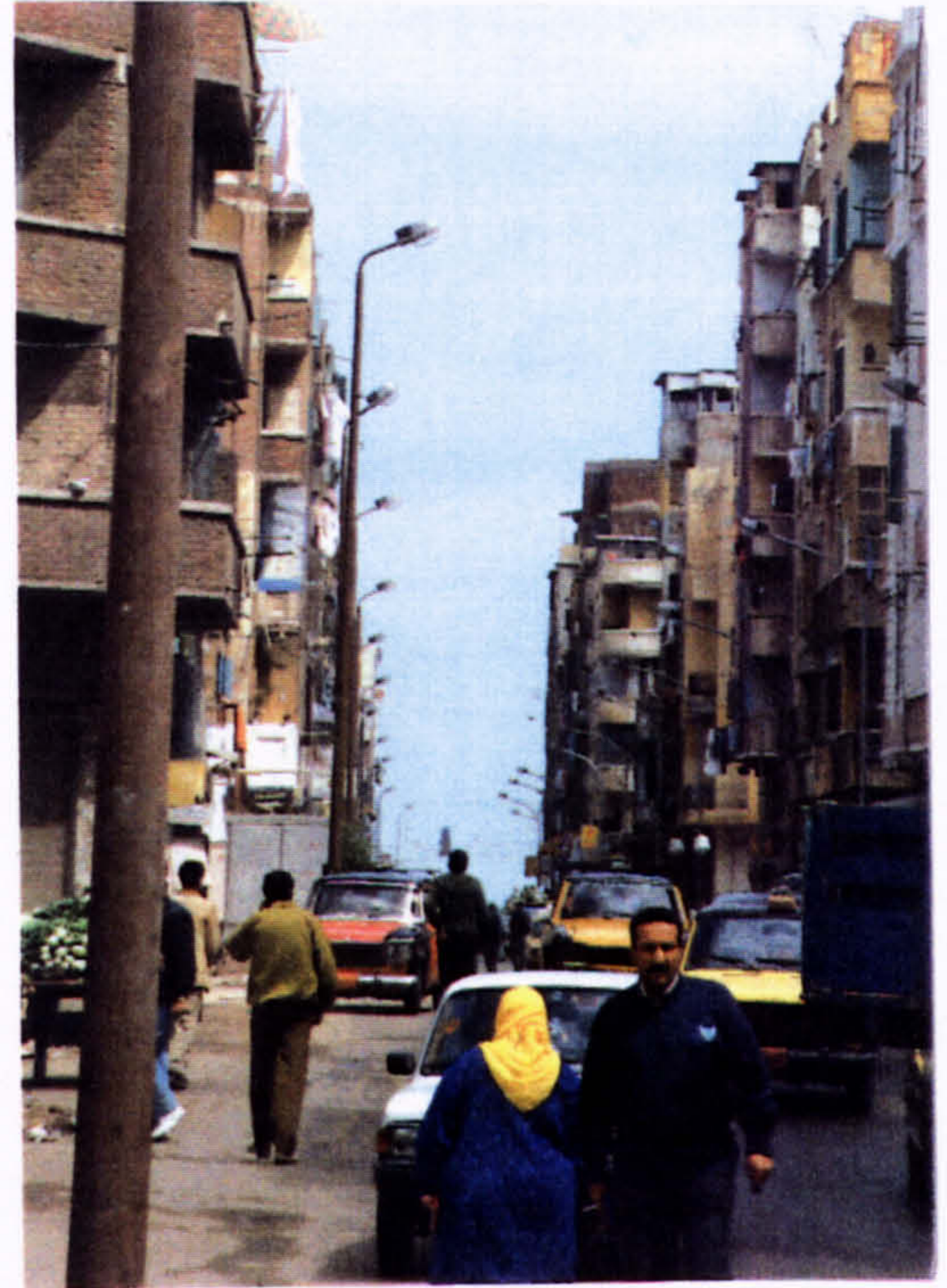


Fig.7-24, The second phase: Right, the project as planned on the map; Left, a computer model illustrating the proposed second phase of the project (by the author).



Fig.7-25: Above; Souk Alkheit on the right side and Souk Mogamaa AlMasajid on the left side at the same time of the day; with less than 1Km distance between both, note the difference in life and activity; while the former has been formed 'naturally' through history and with community needs, the later has been artificially imposed.

Fig.7-26: a possible alternative for AlNasr Street project: utilising the existing link between the two harbours, Ismail Sabry St.



However, this project confirms out the fact that the local community has a high profile in shaping its built environment; the survival of the physical environment is made possible by means of its socio-economic strength. Defending its livelihood, the community is utilising all its means, mainly its financial power, in 'conserving' the environment, where conservation is not merely physical but, more important, socio-economic. It is not the architectural features that are being conserved, it is the whole structure of life. This indicates the need to exploit, capitalise on and guide this potential. On the other hand, as it also shows that where the official attitude is obsessed with the notion of physical ordering and prestigious interventions, there is an equal need to explore means for increasing the official awareness such as media, symposiums, ..etc.

7.4. Potential and obsolescence

Whatever action we take today in the built environment is part of a continuous process of change; a dual action which involves both the building(s) and the activities within. It has been always been aimed at the utilisation of existing assets to meet today's needs; a process which we have previously called 'development'. New activities as well as new forms of existing activities require different physical settings (i.e.buildings), e.g. (as explained later) the change in the nature of trade and merchants' lodgings has altered the way the *Wekalah* used to function.

And it is therefore the building's ability to meet the demand for the inevitably changing nature of users' activities that prevents, or slows, its obsolescence.

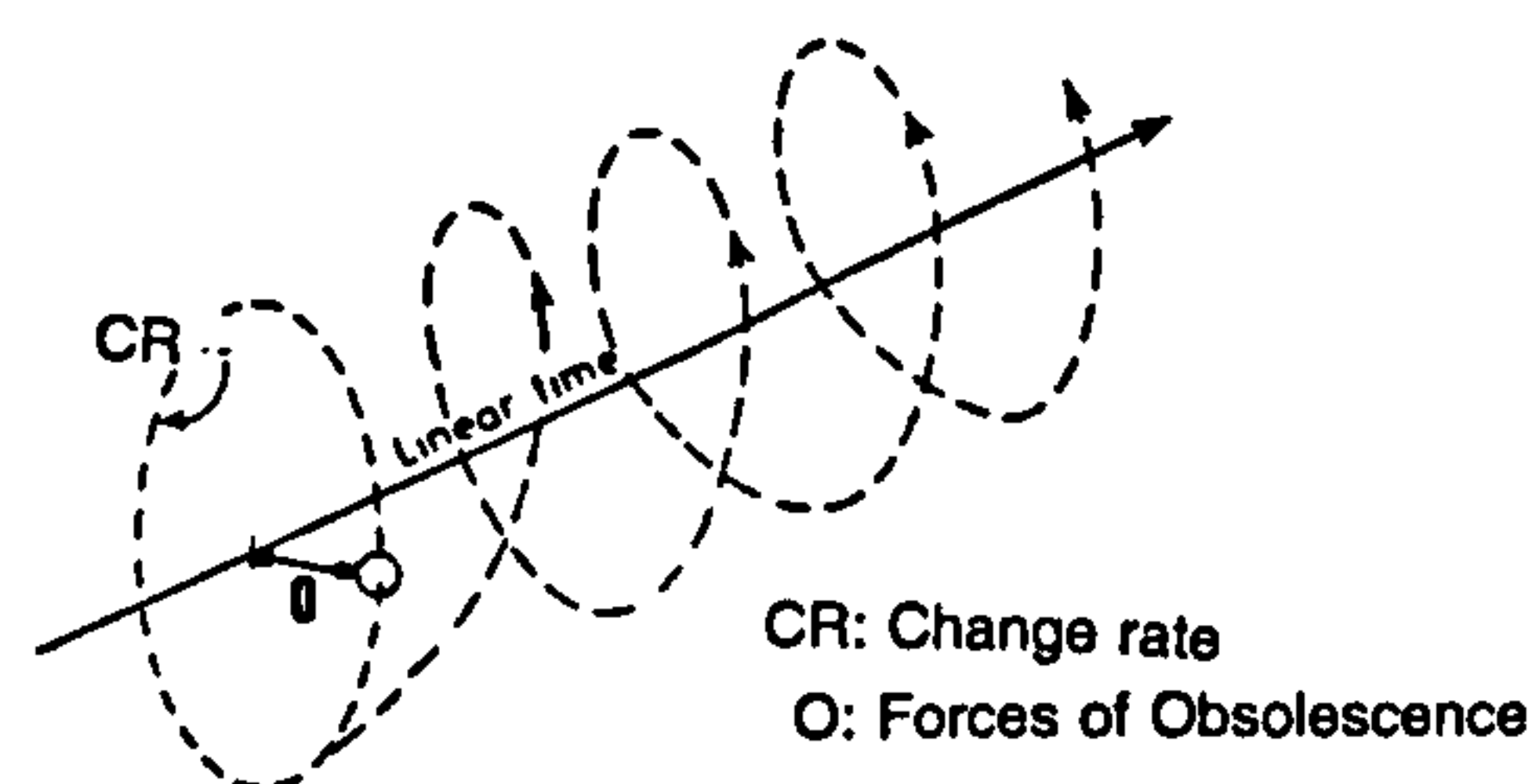


Fig.7-27, the evolution of the built environment; activities and buildings.

This process has been best illustrated by Aylward (1979:1-11), as he incorporates the dynamics of the environment into a useful design analogue. The essence of his model (fig.7-27) is that every building is subject to two main forces, obsolescence which pulls the building towards destruction and which, in order to overcome, requires energy to be exerted (by the orbiting mass; the building) to maintain its desired change rate.

From our discussions in the previous section, we may identify three main components that need to be considered in achieving such balance or synchronise: the nature of activities, the criterion of the physical fabric and the institutional status:

Activities: how is the space currently used? does the current activity allow for re-development to take place? or is it a mosque, for example, where intervention is confined to maintenance and repair? what are the activities likely to take place in this building? Are they the same as they used to be? Do they need new requirements? Or is there a need for new activities as the previous have declined?

Physical fabric: a sound fabric can be either a potential or a constraint; to what extent is the current fabric responding to the requirements of this activity? Is it located in the right place, in terms of commercial potential as well as accessibility? Is this activity the best utilisation of the space available? Or is it an ineffective use of the space? What are the alterations needed for such activity, and are they economically viable?


Institutional and legislative status: who is going to take an action, and why? Who is going to pay the costs involved? Who owns the building and who uses it? What are the costs and benefits involved? What are the legislations concerned, and how do they affect the real implementation of our plans?


Table 7-2,


status	Description of status	High potential	Moderate Potential	Low Potential
Physical	Vacancies, ruins	■		
	Volatile structures		■	
	Sound structures			■
Legal	Owner occupied	■		
	Tenant occupied in private property		■	
	Tenant occupied in mixed property			■
Functional	Commercial small retail business and whole sale trade	■		
	Commercial large scale retail			■
	Residential (existing)			■
	Religious			■
	Redundant	■		

These are, therefore, the major factors in determining the potential (or the obsolescence) of a site or a building. While a mosque is not a potential for development, a vacant site is, table 7-2 summarises the status of 'potential' in relation to these variables. Hence, at this stage, and based on the previous review, we should be able to draw a 'pattern of potential' for the area. Within a scale of three categories, this pattern can be illustrated as follows:

Fig.7-28, The pattern of potential and obsolescence

- 

Low potential (Obsolete): intervention is confined to maintenance, e.g. mosques and residential blocks of flats.
- 

Moderate potential: development can take place but is not likely to, because of various constraints, e.g. for having complicated ownership dispute, as well as being entirely used for residential purposes, or has been inhibited because of a legal or financial problem that could be solved in the near future.
- 

High potential: development is very likely to take place, e.g. vacancies.

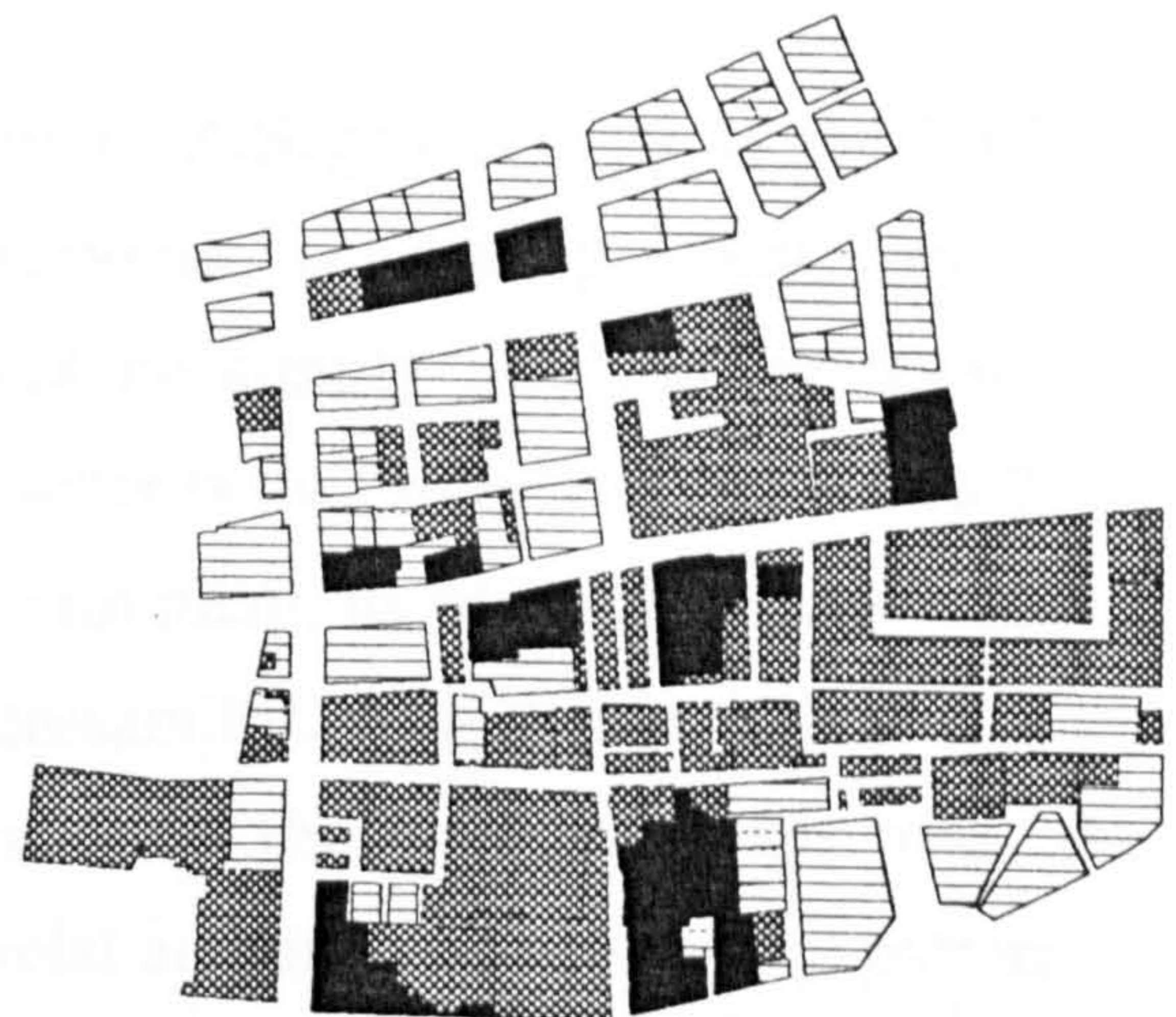
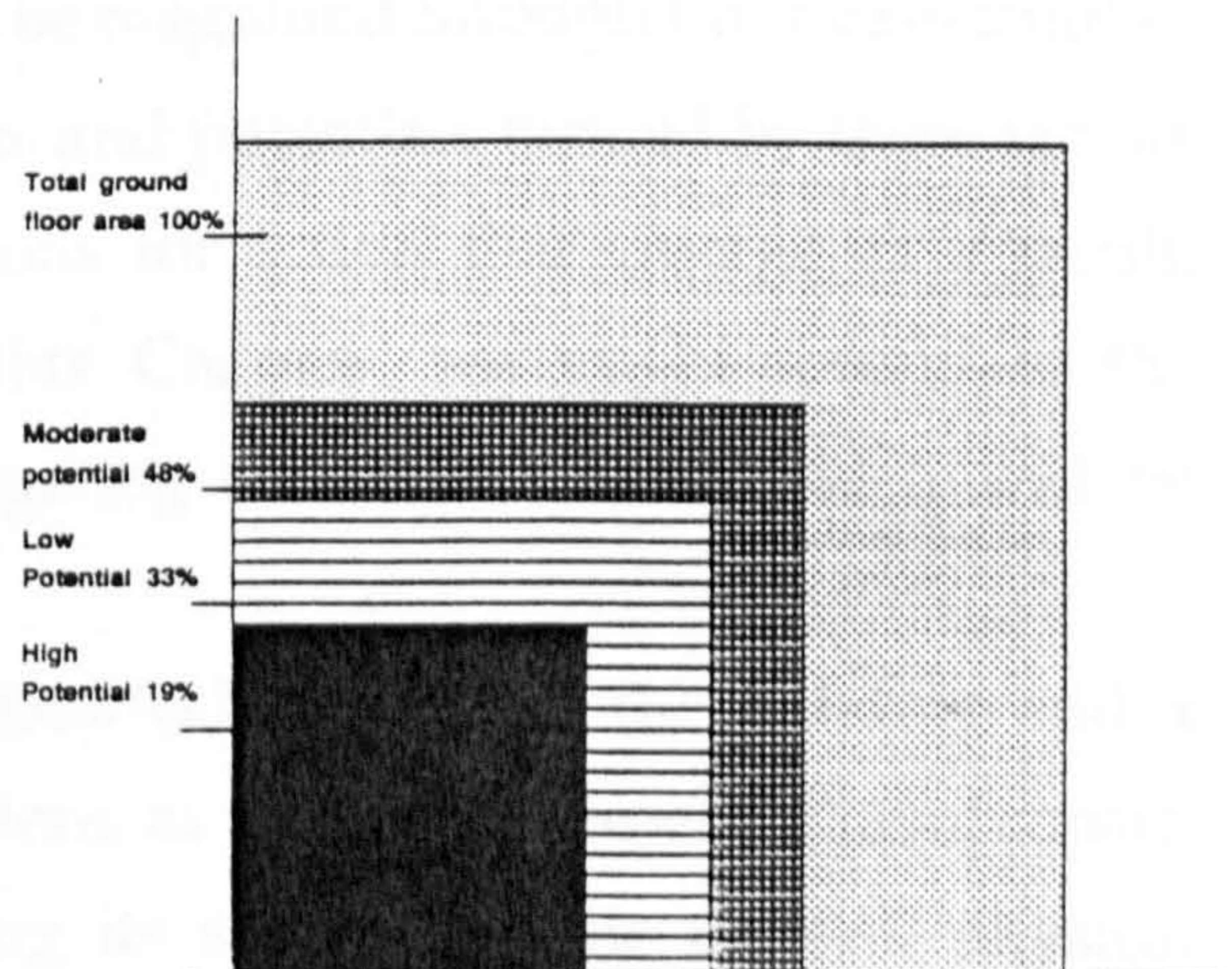


Fig.7-29, Rates of obsolescence as proportions of the total ground floor area: an important figure to note is that 19% of the ground floor area has a high potential for development. In an area with such commercial significance this fact has to be highlighted: why is this the case and what are the consequences?



7.5. Conclusions

At a microscale this chapter investigated the various elements which determine the supply and demand in the built environment. *AlSagha* was chosen as a demonstration to illustrate, first, the problems and issues influencing the built as well as the socio-economic environments of AlSagha as part of the Turkish Town and second, the methodology suggested to identify the supply, demand and possible options to 'develop' the area.

It has been made clear that the problems of AlSagha as well as the Turkish Town in general, are based on socio-economic, cultural, political, legal and administrative complexities which cannot be simply resolved by means of physical 'ordering'. The key question is, what is the "supply and demand"? As for the supply, it is basically the built environment, its physical criterion: space efficiency, modes of movements and accessibility. The demand on the other hand, is mainly to do with market dynamics: the viability of the area, the components of the local market, commercial activities and shopping pattern.

Hence, we were able to conclude a pattern of potential and obsolescence by which three degrees were identified, according to the activities likely to take place, the physical, the legal and the institutional status.

In the next Chapter, these factors are to be magnified through three case studies, the aim of which is to explore the limits and potentials formed by these factors and consequently the alternative options for action that emerge as a result. However, from our discussions in this Chapter, we might formulate the following model (fig.7-30) for investigating individual cases which will be applied in the next Chapter:

- The Survey of the building; a historical account of the building and a description of its architectural pattern, as well as its present state of repair.
- Limits and potential; investigating its socio-economic pattern, physical criterion and legal status.

- Evaluation and decision making; screening the alternative options and evaluating the costs and benefits involved.

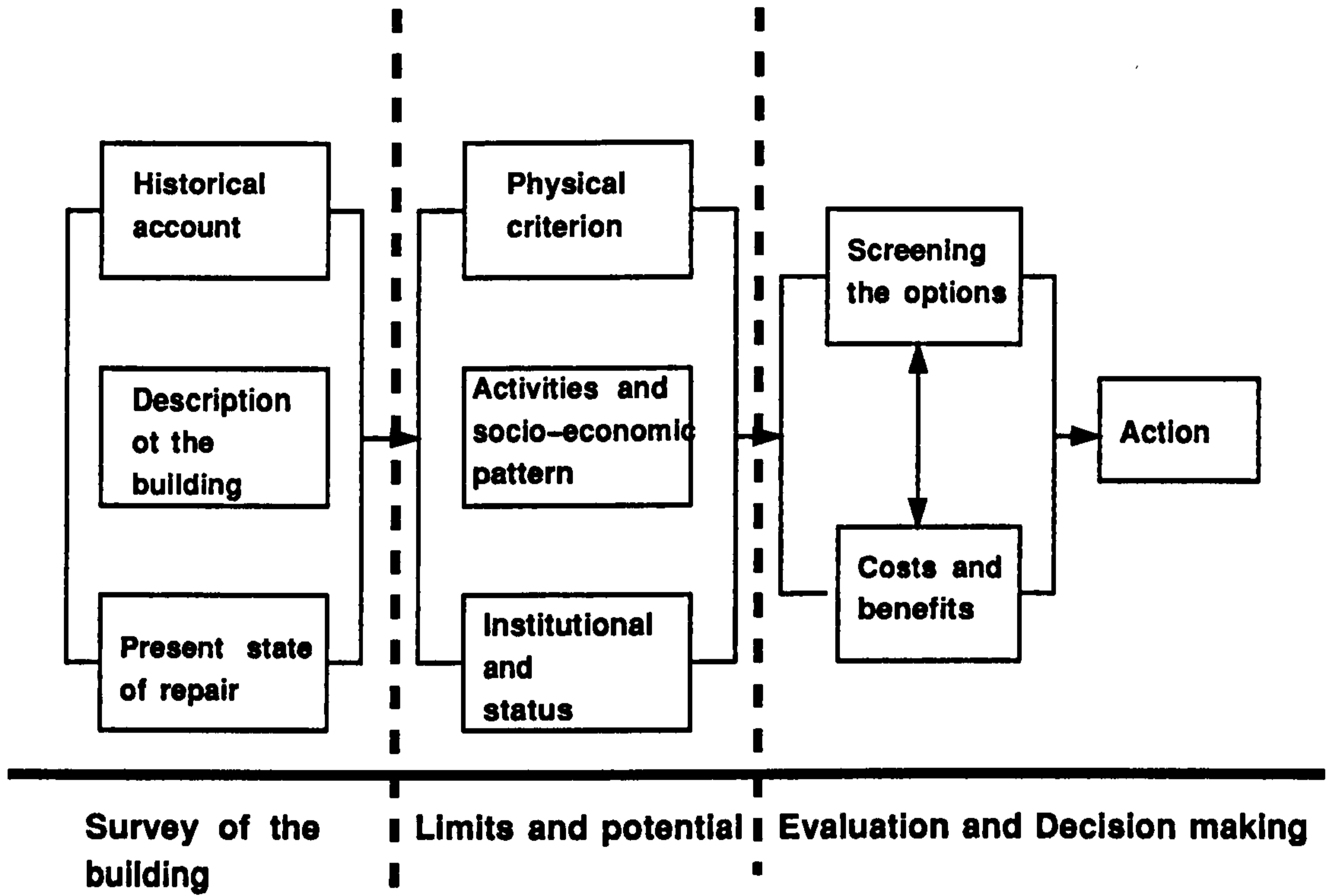
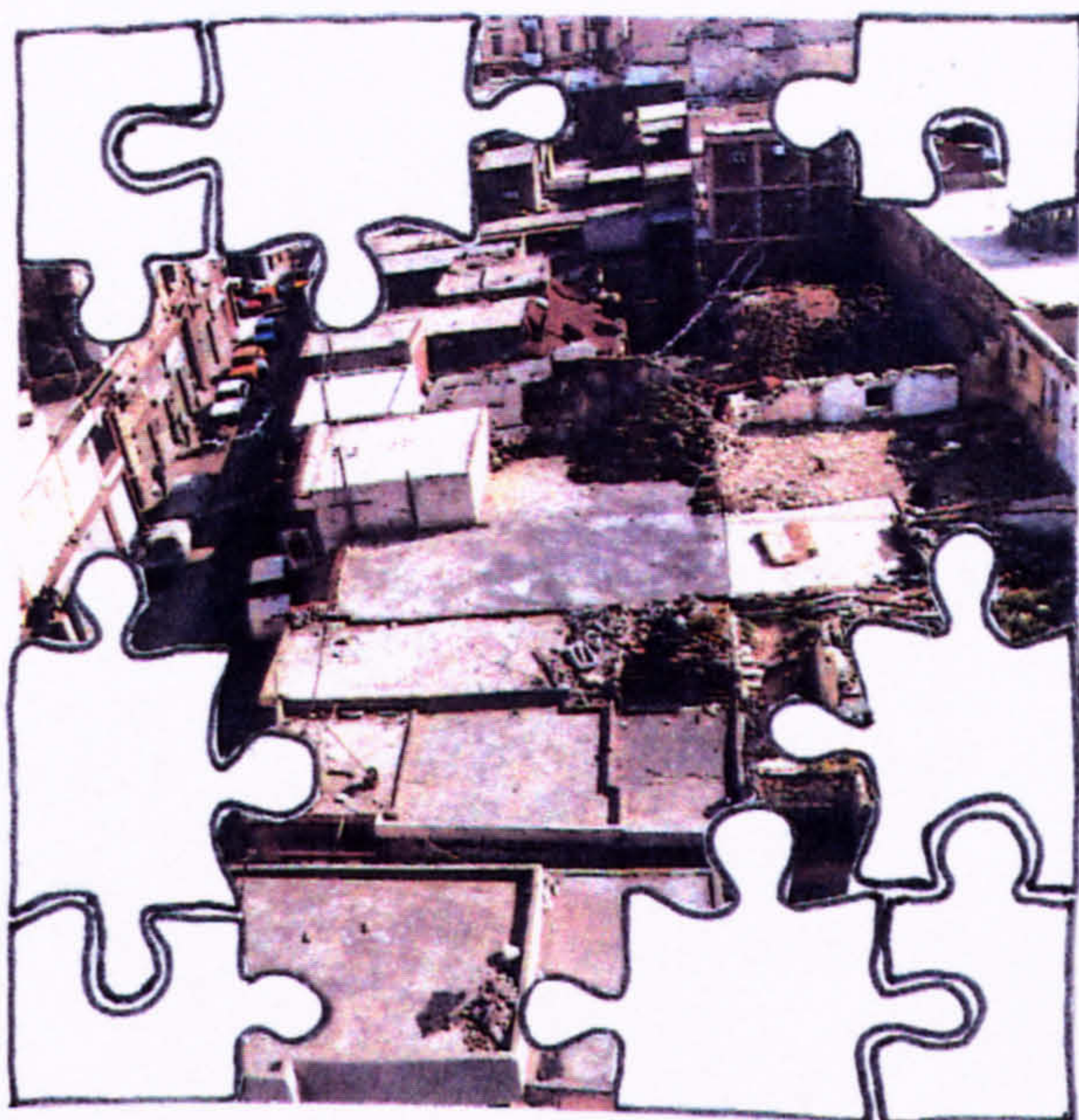


Fig.7-30, investigating individual cases

CHAPTER EIGHT



THE ART OF THE POSSIBLE

THE ART OF THE POSSIBLE

8.1. Introduction:

" Rehabilitation is defined as the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historical and architectural values."
(Fielden,1985:216).

In the previous Chapter, we concluded that the main *argument for change* is achieving *gains*. We also pointed out that these gains differ in nature and according to the benefactor. Our task therefore, as defined by Fielden, is to achieve an optimum balance for the best possible gain.

As the previous Chapter dealt with AlSagha where it identified the pattern of 'potential and obsolescence' in the area. This Chapter aims at illustrating the various aspects of this process at the micro level of individual buildings and sites, the opportunities and constraints, the potential for development and the real dimension for conservation. Using the model formulated at the end of the previous chapter; three case studies will be investigated below. They will be illustrated as follows:

- A survey of the building; an historical account of the building and a description of its architectural merits as well as its present state of repair.
- Limits and potential for future development; an investigation into its socio-economic pattern, physical criterion and legal status.
- Evaluation and decision making; screening the alternative options and evaluating the costs and benefits involved.

They represent the different faces of the problem on various scales: Mosque and Wekalet al-Shourbagi: a multi-functional building, registered by the Egyptian

Antiquities Organisation, with a mixed ownership pattern; **Darwish shop**: a privately owned redundant commercial building, and an early example of steel construction, and **Waqf Gemaiee**: a semi-ruined site with a private multi-owner pattern of ownership and a potential site for an infill intervention.

8.2. Mosque and Wekalat al-Shourbagi

This sadly rundown but valuable building highlights many of the problems facing old buildings in Alexandria; being multi-functional, i.e. residential, religious as well as commercial, it represents the variety of forces, contradictions, opportunities and constraints that could shape the future of many traditional buildings in Alexandria. We want to draw attention to the existence of such valuable examples, the presence of its past and the potential of its future.

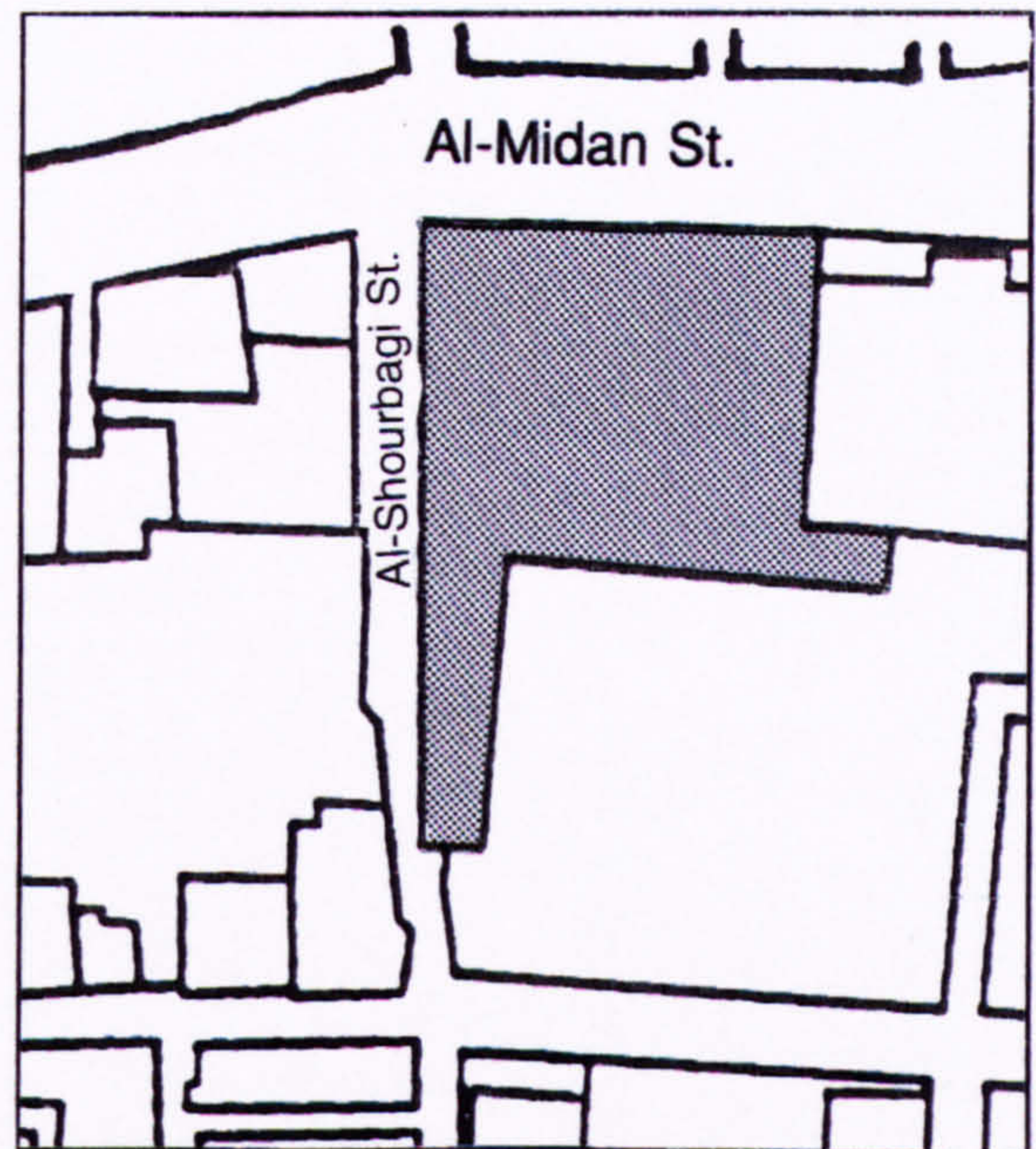


Fig.8-1, the location of the building; facing Al-Shourbagi and Al-Midan streets.

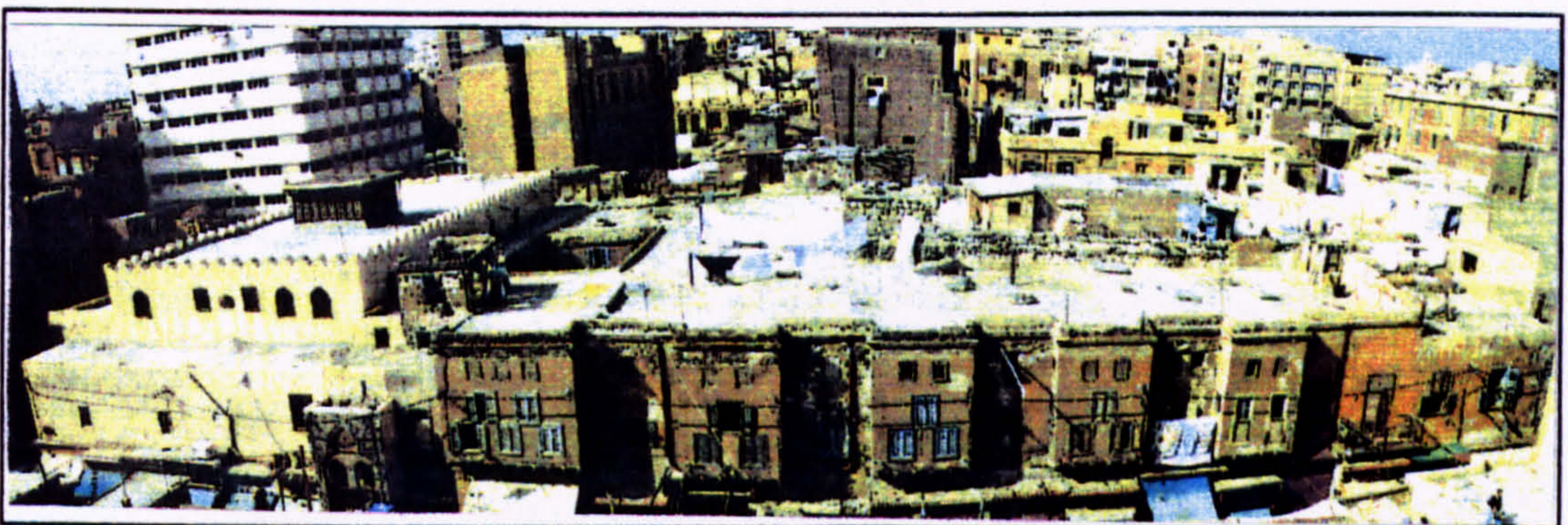


Fig.8-2, The building as seen from a higher blocks of flats; the southern facade: to the left, the mosque and its entrance; to the right, the *wekalah*: shops on the ground floor and five cells on the first floor.

8.2.1. A survey of the building; it was constructed in 1758 A.D. (1171 A.H.) by Abd al-Baki al-Gourbagi, who was a well known merchant, as well as being a *Gourbagi* (a Turkish military rank at that time). He constructed many commercial and residential buildings in Alexandria, few of which remain today. This building stands as one of the most significant and well known. He designated this building, among his other properties, as a *waqf ahli* property while the mosque was naturally a *waqf khairiy* property¹

The building faces two of the busiest commercial streets in Alexandria, Al-Shourbagi and Al-Midan. The latter is one of the biggest food markets in the city (*Souk Al-Midan*) (fig.8-1) while the former is the main street for *alsagha* (jewellery) businesses. On close inspection the building is a fine example of the Ottoman period (1517-1805), it represents the fine traditional form of both Mosque and *Wekalah* architecture in Alexandria.



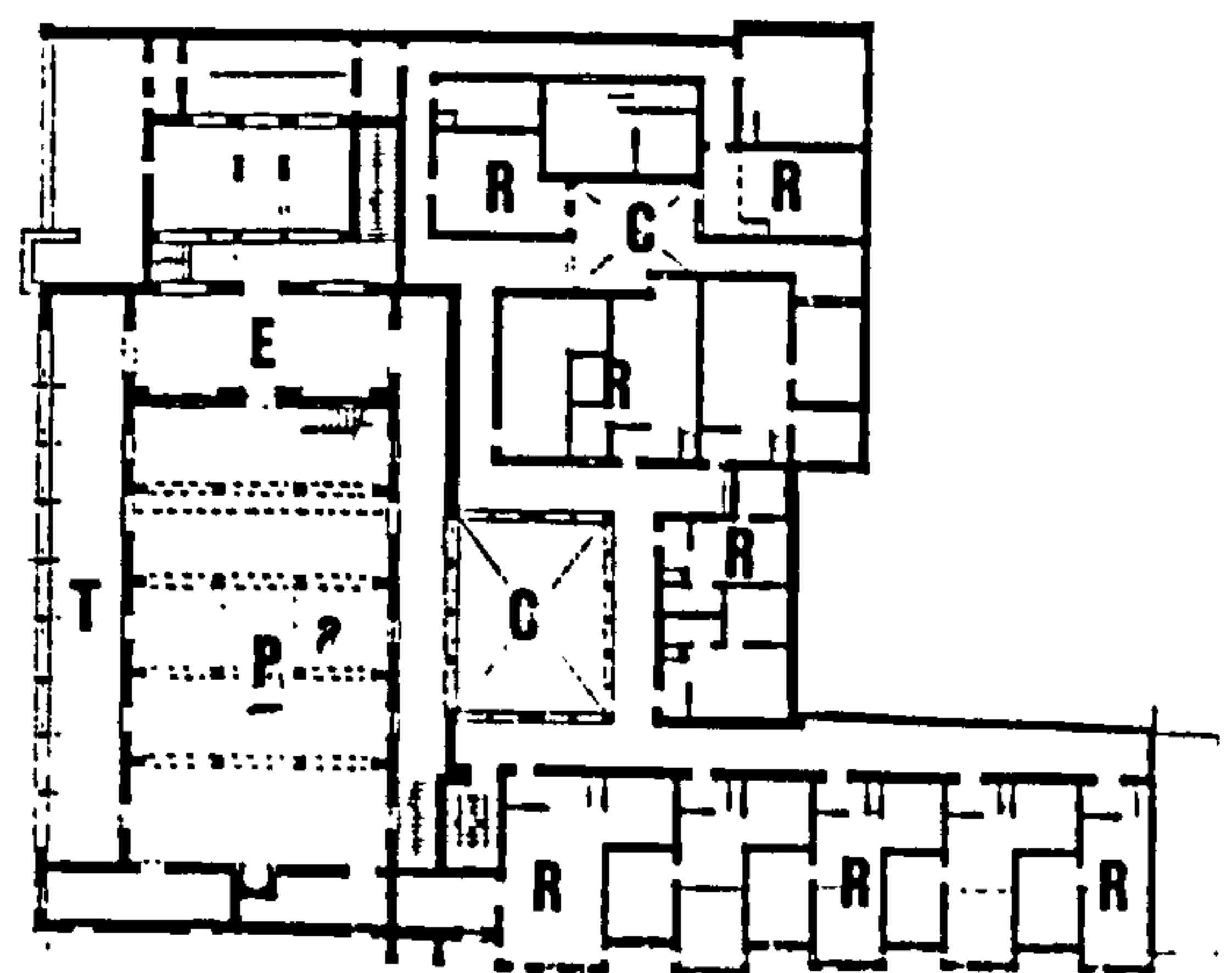
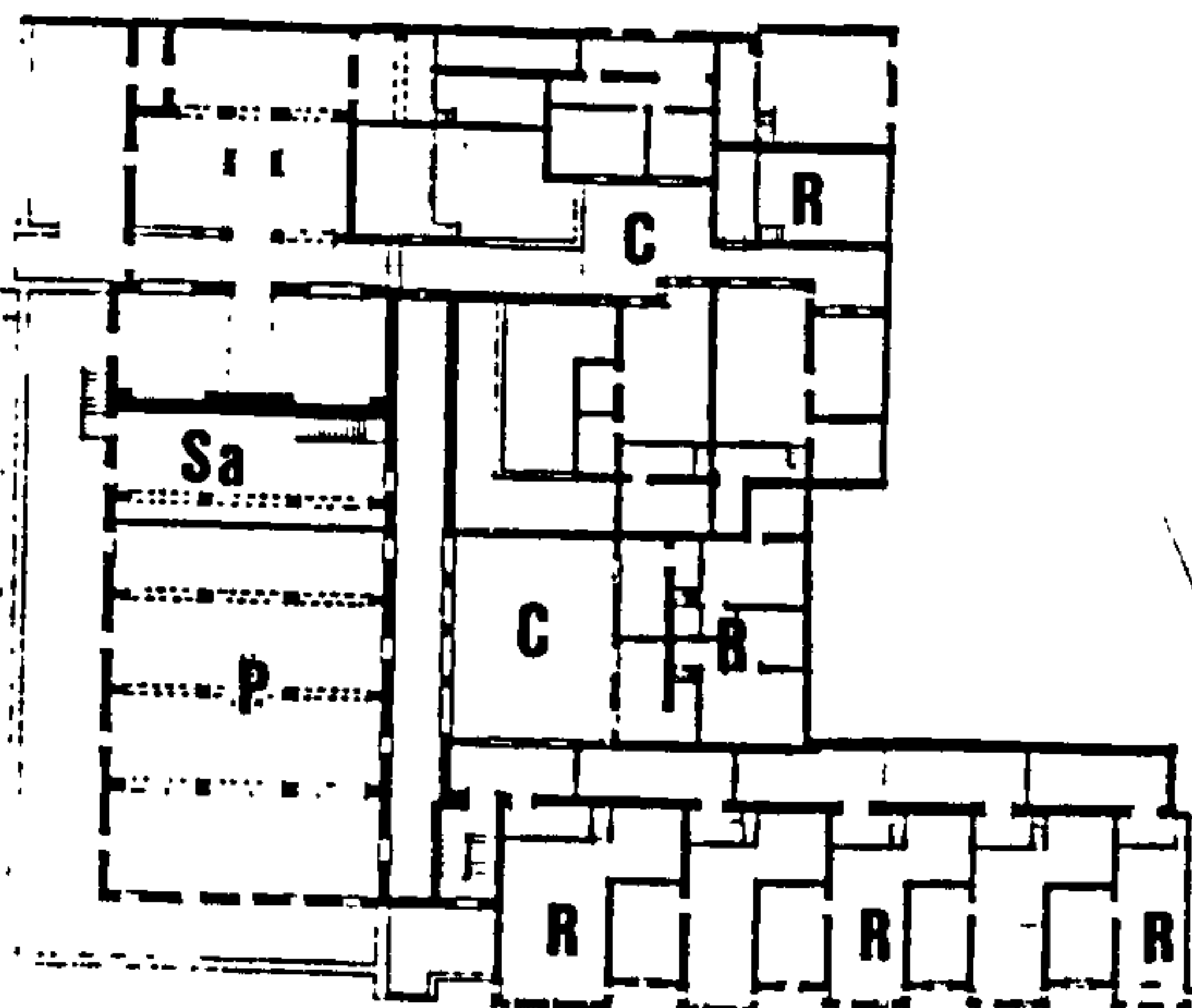
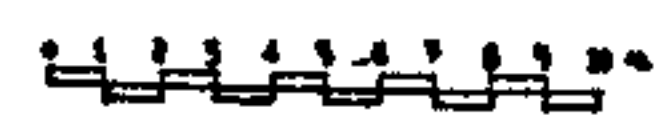
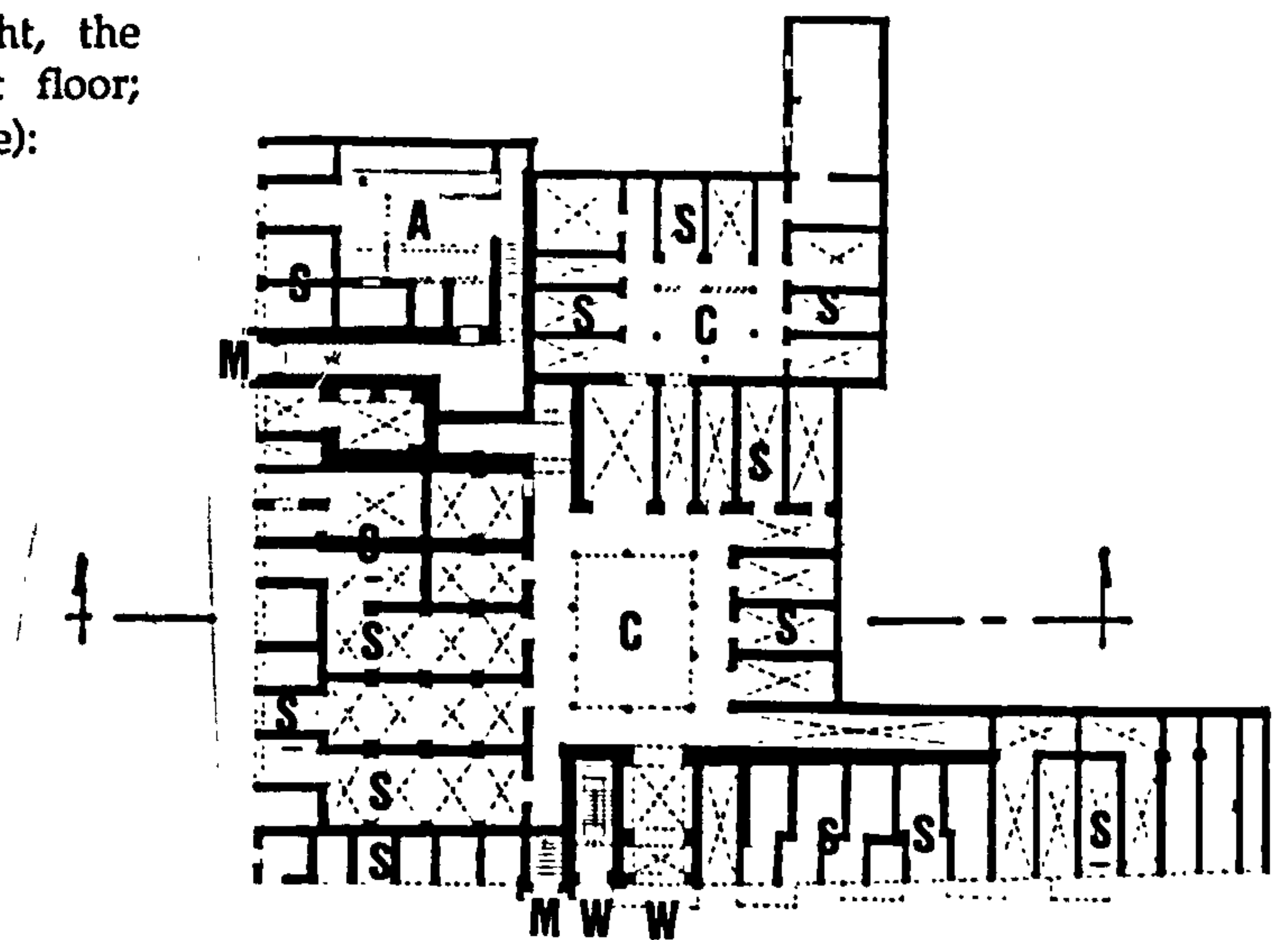
Fig.8-3, To the right, the Eastern facade of the mosque; an arcaded terrace overlooking the street which provides a semi-open extension to the prayer hall; the arches and the use of coloured burned bricks in decoration is very typical to those of Rashid (Rossetta); to the left, Souk Al-Midan; one of the busiest food markets in Alexandria.

¹ Waqf systems have been explained in detail in Chapter 3

The building constitutes three main elements: the religious (the mosque), the commercial (the shops of the *wekalah*) and the residential (the cells of the *wekalah*) (fig.8-4). It is mainly constructed in lime-stone (Max quarry), red bricks and timber. Stone constitutes the major material of the mosque while the *wekalah* is largely built with brick. Timber, on the other hand, as well as being used in the ceiling, is employed as tie-beams in the masonry. The construction is by load bearing walls with an intersected, barrel-vaulted ground floor, while the first floor is ceilinged with timber beams and boarding.

Fig.8-4, Plans of the building; Right, the ground floor; Below right, the first floor; Below, the second floor (the mezzanine):

- A: Ablution area.
- S: Shops and stores.
- C: Courtyards.
- M: Mosque entrance.
- W: Wekalah entrance.
- P: Prayer hall.
- E: Entrance gallery (portico).
- T: Terrace.
- R: Residential units.
- Sa: Sandarah (Women prayer hall).



The mosque follows the traditional pattern of the area, which means it has its prayer hall on the first floor, over the commercial premises sited underneath. It is reached by staircases through two main street entrances; in addition there is a less monumental third staircase from the ablution area with a separate entrance. The main entrances are rather grandly built, supported by two brick piers carrying the arch of black and white bricks that form geometrical patterns (fig.8-5a). Both staircases act as transitional environments from the open street to the closed prayer hall, where they are exposed to courtyards. At the top of the staircases and via an arcaded gallery, there is the entrance door for the main hall, decorated with coloured tiles and the foundation plate (fig.8-5b). The main hall is a rectangular (9 x 15m.) and the spacious area is subdivided by three pairs of twin marble columns, each supporting three pointed arches (fig.8-5c). In the first bay a narrow flight of timber steps leads to a 'sandarah' for women, and at the other end is the *Qibla* wall. In the centre there is a *Mihrab* (prayer niche) decorated with two exquisite marble columns in the form of two spiral branches¹. (fig.8-6A) To the right of the hall there is another arcaded gallery facing the street along the facade with nine arches supported by eight marble columns. The mosque is not really monumental, it is rather on a domestic scale, though its interior hall abounds with sumptuous ornamentation and the walls

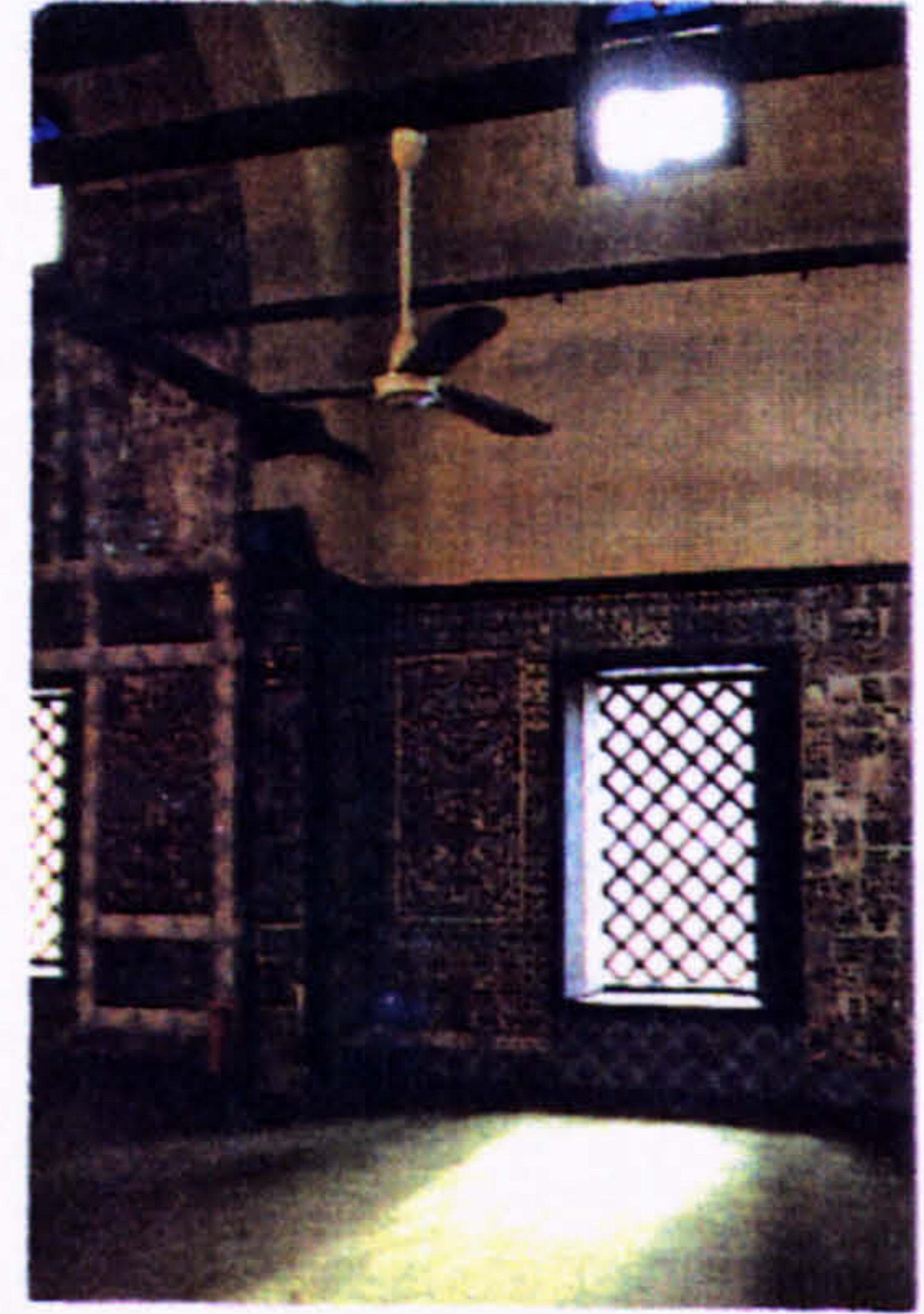


Fig.8-5, a:Right:The main entrances decorated with black and white bricks; **b:**Middle:the entrance door, decorated with tiles, marble and the foundation plate; **c:**Left: A rectangular spacious prayer hall with a *sandarah* for women at the rear.

¹ This shape is a common feature in Algerian traditional architecture (Mechta, 1993:13); it is therefore possible that it has been transferred or copied via Maghrebian merchants.

are all magnificently tiled with white ground and red, blue and green design, probably Iznic motifs (as illustrated earlier). They are to the height of 2.5 metres (fig.8-6C).

On the right side of the prayer niche is a wooden *minbar* of fine craftsmanship incorporating turned wood, finely carved and decorated with ivory and mother-of-pearl. The side and rear walls have wide windows with turned wooden screens (fig.8-6D) and four shutters, while the four walls have upper windows decorated with coloured glass. The ceiling is of timber beams and boarding with a lantern in the middle (fig.8-6E). Another typical feature of the buildings in the area is the re-use of classical columns taken from Greek and Roman temples (fig.8-6B).



A | B | C Fig.8-6, Interior features of the mosque; A: *Al-Mihrab*, the prayer niche; decorated with ceramic and marble; two exquisite columns in the form of two spiral branches; **D | E** B: the re-use of classical columns, a common practice in the Turkish Town; C: walls tiled to the height of 2.5m.; D: a turned timber screen at the rear of the prayer hall with a written inscription: "No God but Allah and Muhammad is his Messenger"; E: the lantern as seen from the roof, it provides air circulation to the prayer hall as well as being an additional source of daylight.



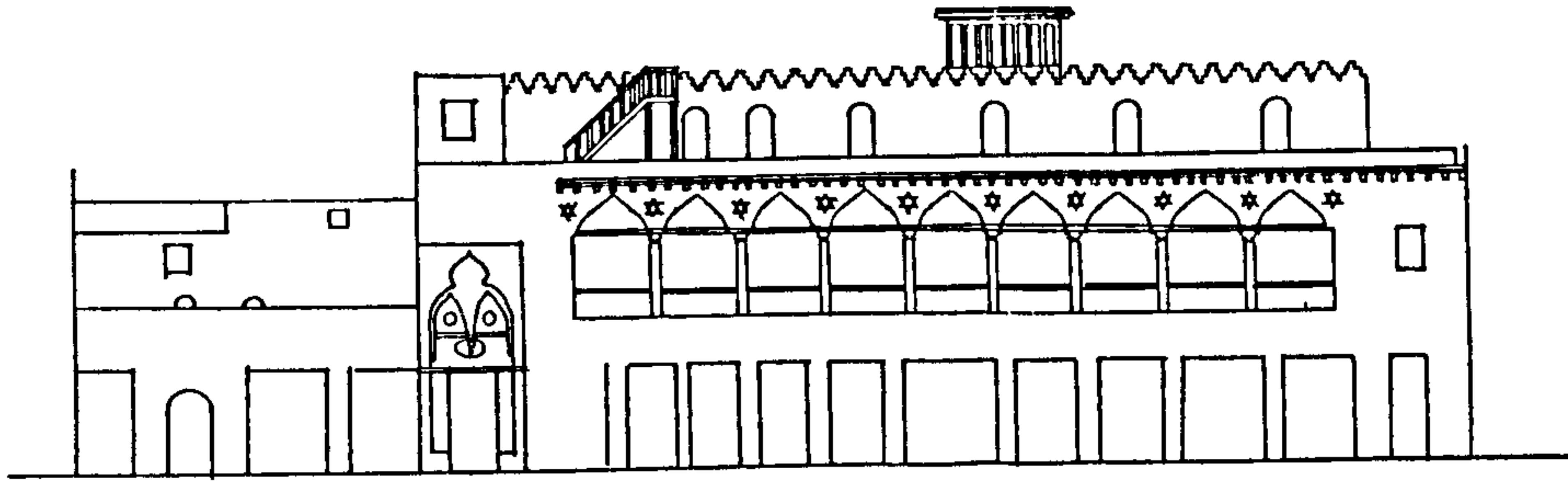


Fig.8-8, The Eastern facade; al-Shourbagi street.

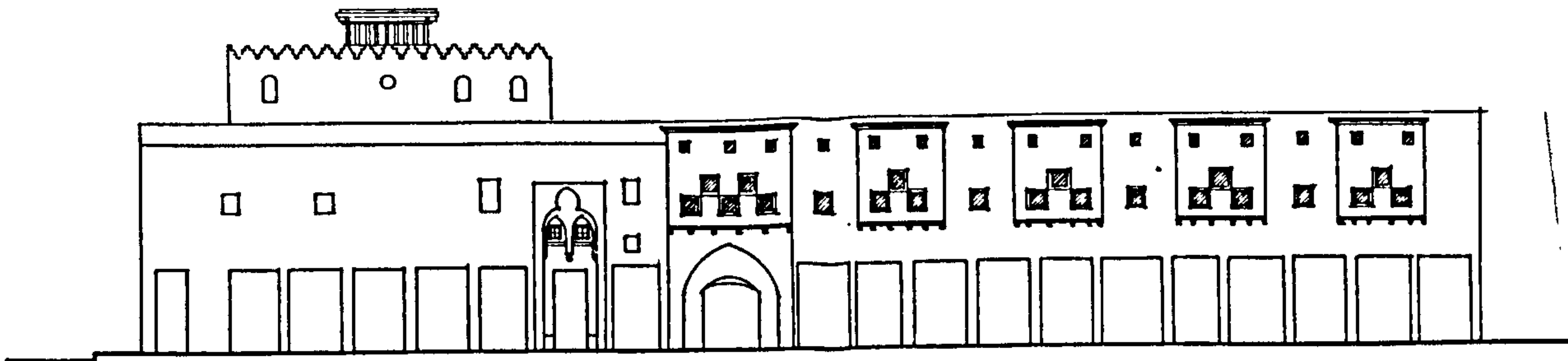


Fig.8-9, The Southern Facade; al-Midan street.

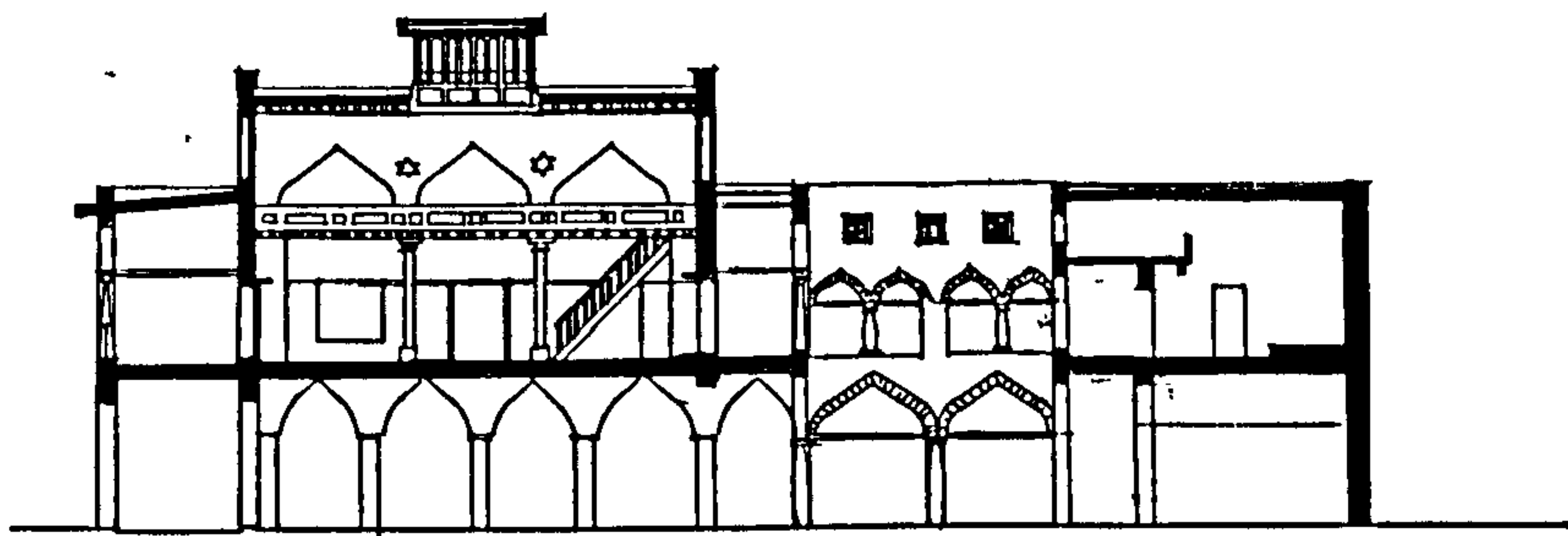


Fig.8-10, A transverse section of the building

There are 49 shops of the *wekalah*: which occupy most of the ground floor; they are jewellers, food shops, workshops and stores; 17 of them face the inner courts while the rest face towards the outer street. Each shop is rectangular in plan, with their narrow ends facing the street. They are all in stone and with vaulted ceilings. The important thing about these shops is the way the community is enclosed within their commercial activities; shopkeepers would gather in front of one of the shops for tea and coffee, socialising and exchanging problems and ideas. This has been the basis of the whole atmosphere of the street environment and activities in the area.

The residential units (fig.8-11) are gained through a separate entrance, by a staircase that leads to a gallery facing the inner courtyard; although they occupied by as many as 16 families, there is still a feeling of privacy in the courtyard, where the doors are normally open and the housewives stand chatting and keeping an eye on their children playing around. Each of these units is divided internally into two levels. These units, according to their orientation, can be classified into outer and inner.

The outer units face al-Shourbagi street; there are five similar cells except the first one is slightly bigger. The inner cells, on the other hand, vary in size according to their location in the building. In all, we can identify the following features:

- Privacy is maintained by avoiding direct entrances from the public to the private space, via an offset entrance *Magaaz* (fig.8-12D). This in turn leads to a *fasaha*, which accesses the rest of the unit.
- The living area is divided by means of a *mastaba* (a higher level); a common practice in Turkish homes;

"In Turkish homes,.... rooms were divided into two parts: the entrance and the actual living part, built on a slightly higher level than the former"
(Vogt-Goknil,1966:139)

- From the *Fasaha* a staircase leads to a mezzanine (*Sandarrah*) with a wooden balustrade (fig.8-12B) which extends to cover the outer corridor (*Turkah*)

(fig.8-12A)

- Windows are at two levels, the lower level is covered by a dense timber screen, which makes it impossible to be seen from outside and also filters the high glare of day light, while the upper has a more open screen to provide the light and ventilation necessary for the room. (fig.8-12C)

These units were originally built for merchant's lodgings. As a result of the change in the nature of trade this function has become no longer valid. It is difficult to identify the exact date for this transformation, but on the basis of interviews with the inhabitants, it is possible to deduce that it began in the second half of the 19C. Since then the residents have adapted these units by adding partitions to create kitchens, bathrooms and separate sleeping areas.

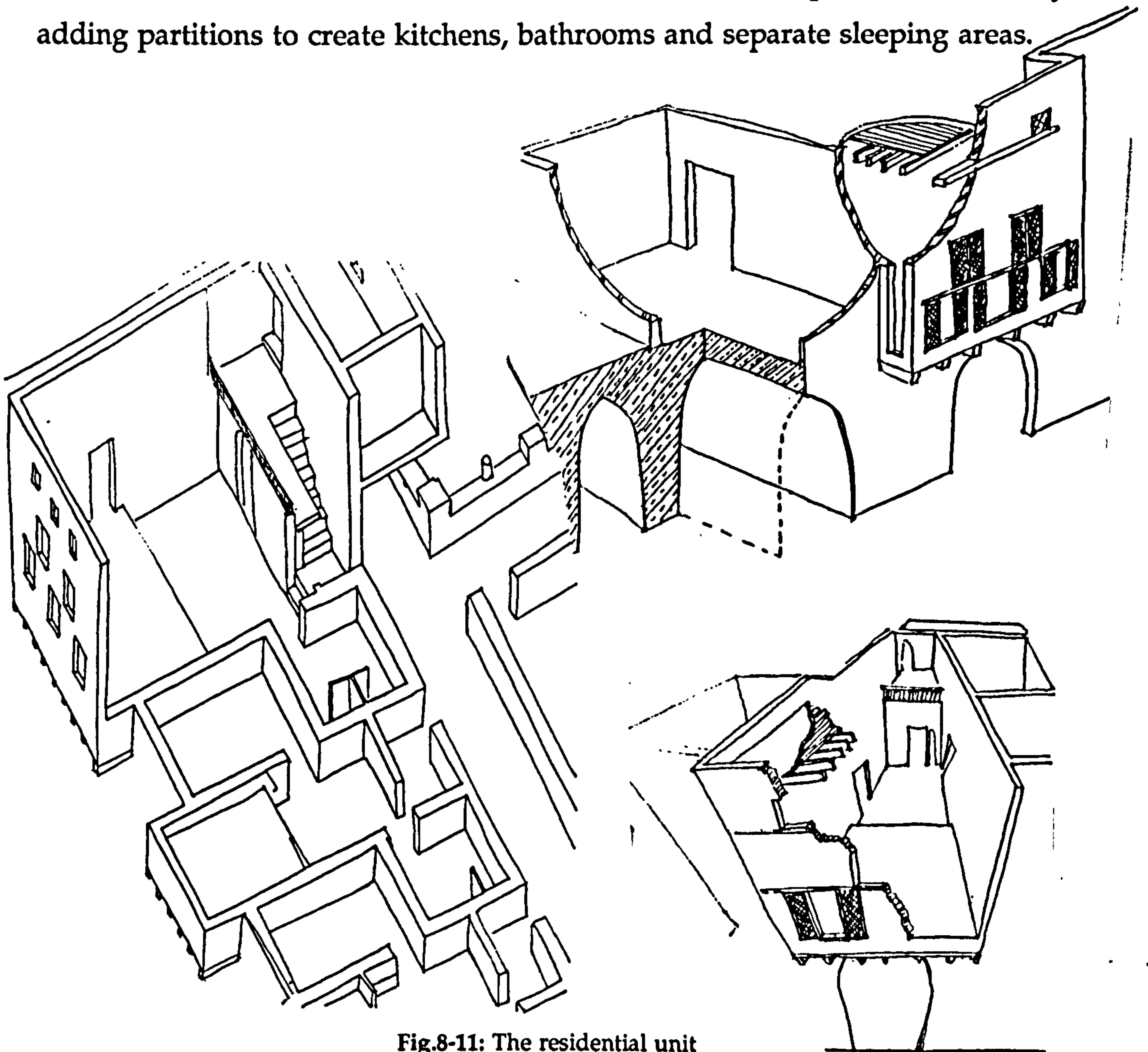
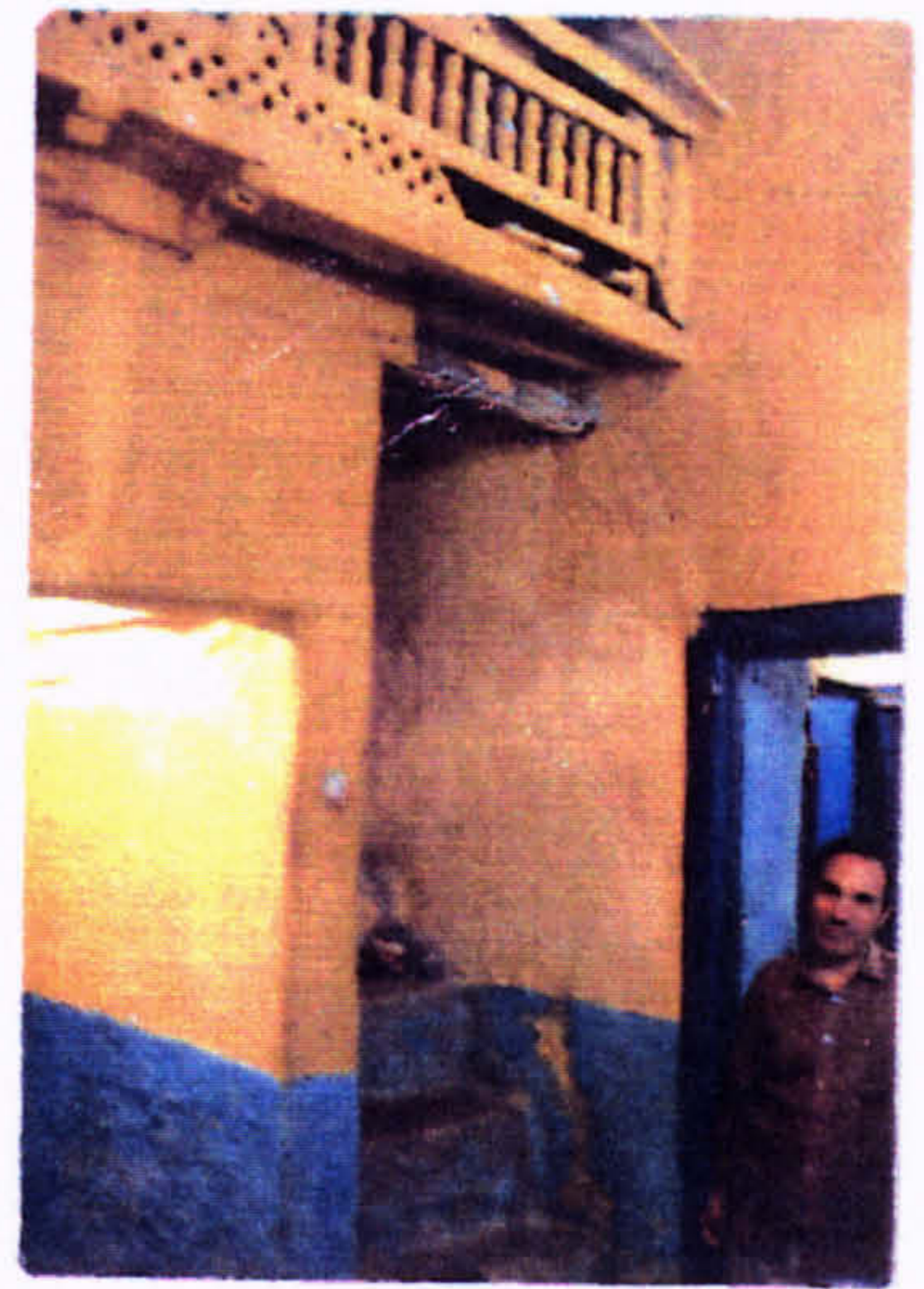


Fig.8-11: The residential unit



A | B Fig.8-12, A: The corridor (*Turkah*) which leads to the residential cells, covered by the
C | D mezzanine; the arches overlooking the court yard. B: The mezzanine overlooking the living space with a wooden balustrade; regular painting is done by the occupant in order to maintain the cleanliness of the place without any control over the colour or the kind of paint used. C: The treatment of windows provides privacy and eliminates the glare from daylight; upper windows provide necessary light and ventilation to the space. D: An offset entrance (*Maggaz*) for the residential cell.

The present state of repair:

I- The building has been subject to various alterations internally and externally:

- Extending the shops into the courtyards by the addition of walls.
- Adding partitions inside the units to provide kitchens and toilets.
- Installing inadequate sanitary facilities to the dwelling units and the shops.
- Alteration to some mezzanines, probably due to their previous collapse.
- The use of various styles and materials for the shop fronts, hence radically altering the identity and the style of the building.

II- Physical decay: A visual inspection was carried out to determine the physical condition of the building, with the following observations:

Masonry work:

- No structural defects appear to have been detected i.e. no major cracks or leanings are apparent. But there is a need for laboratory examinations of the stone work to assess its structural capacity.
- Water staining and decay appears in both stone and brickwork at different spots in the building and along with the deterioration of the timber tie-beams. This is mainly due to inadequate protection of wall heads, copings and cornices, the recent repair of ineffective roof covering and the inadequate rainwater drain system, coupled with the non-durable nature of the stone¹, has lead to:
 - a- The percolation of water into the inner core of the wall which usually consists of mixed rubble, earth and clay. This tends to dissolve the earth and clay, leaving a void, which can result in cracking and eventual collapse.
 - b- Dampness in the upper walls, coupled with the marine environment of Alexandria, has probably caused the formation of a salt solution, which can eventually crystallize in the pores of the stone, disfigure the wall and

¹ A study of the limestone quarried from Max quarry, which is most likely to be the source of the stone used in al-Shourbagi, shows that it has to be considered to be not very longlasting in the marine environment. Abd el-Hady and Laurove, pp.307-311

eventually induce cracking and collapse.

c- The rot and decay of the timber tie-beams.

Plasterwork:

Despite the fact that the building has been frequently re-plastered, the present condition of the plasterwork is poor i.e. damp stains, areas of detached plaster, areas of finishing coats detached from the undercoat, patches of poor repairs and cracks. This condition has been produced by:

- The problems of damp which have been previously mentioned.
- The introduction of new materials over the top of, or as replacement for the old materials, i.e. the use of cement plaster to replace lime plaster. The older materials were more sympathetic to the historical fabric than the new, because they had a greater capacity to assimilate diurnal and seasonal expansions and contractions.

Timber:

Tie beams within the masonry work are in a serious state of decay due to the dampness problems mentioned above. On the other hand, ceilings are in a better condition; no obvious signs of decay or rot attack have been seen. But the obvious problem is that the wrong sort of paint has been used which easily flakes off, especially from the more exposed areas.



Fig.8-13, Right, inadequate rain water system causing dampness to the masonry, plaster, tiles and timber; Left, the courtyard facade; the use of brick and timber tie-beams; are in a very poor state of repair.



Fig.8-14, Right, inadequate installation for water supply and drainage leading to damp stains; unsightly wiring for electricity supply; Left, stone masonry; badly deteriorating timber tie-beams.

Tiles:

Badly deteriorating with much evidence of dampness and salt attack. This is mostly due to:

- Problems of damp and salt crystallization mentioned above, which leads to moisture condensation causing the scaling and powdering of the outer surface.
- Some inappropriate repairs and replacements that have been carried out.

Granite and marble:

The granite and marble columns and tiles are showing marked discolouring and loss of hardness and polish of the surface layer. These phenomena are explained by the weathering process mainly due to (Sodium Chloride) salt crystallization (Helmi,1985,412-29).

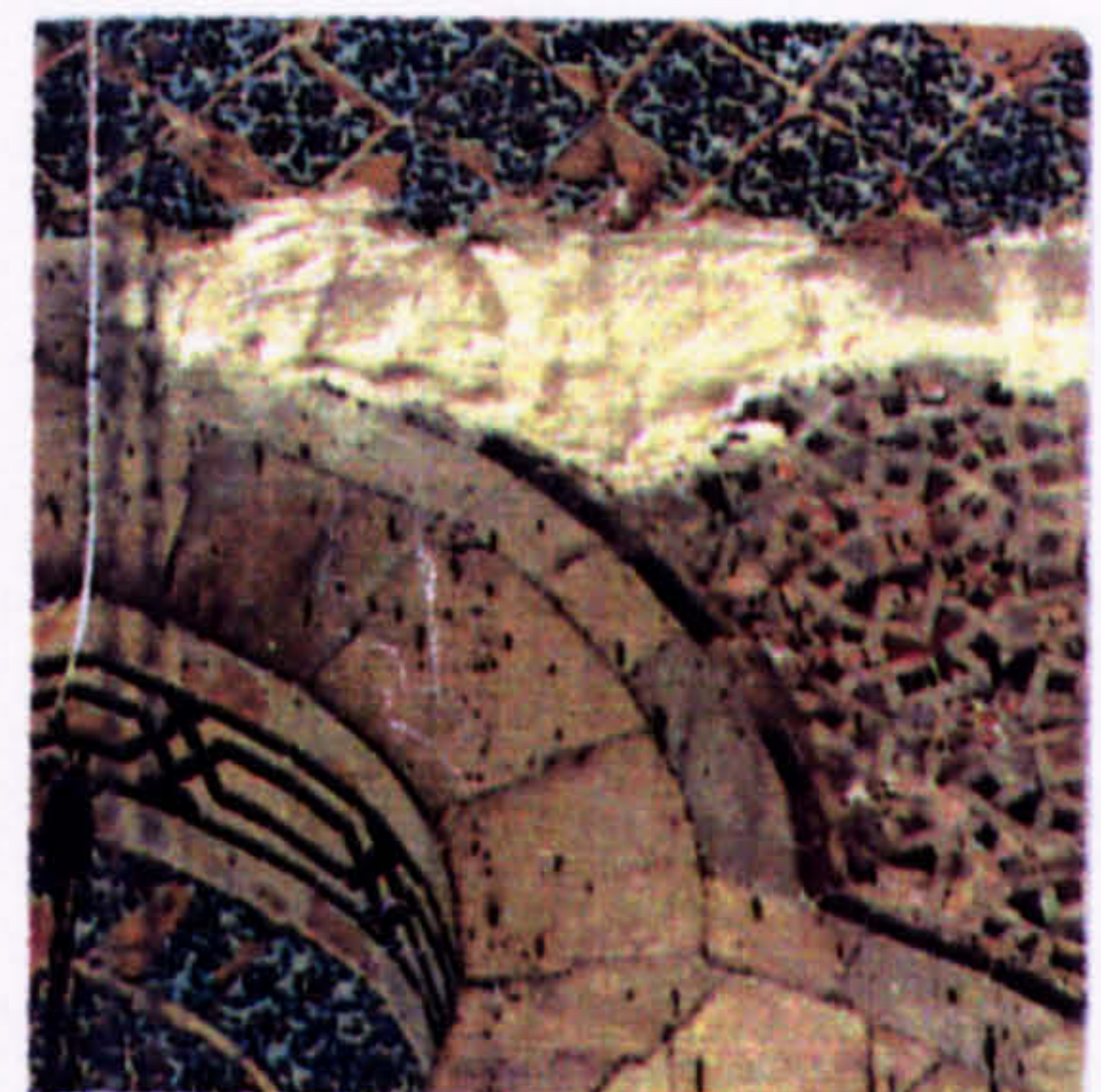


Fig.8-15, Right, improper repair and replacements of tiles; Left, badly deteriorating tiles with problems of salt crystallisation, causing scaling and powdering of the surface; marble tiles, in the middle, are showing undesirable discolouring and the loss of hardness and polish of the surface layer.

8.2.2. Limits and potentials for future development, this section will explore the potential of the building to survive and develop. It will do so by investigating its main components:

First, activities and socio-economic pattern: At present residential cells are occupied by families, which in some cases have 10 - 12 members. They pay less 10 L.E./month to *hares alWaqf*, an amount which has been fixed for over thirty years.

The *Fasaha* and the *Mastaba* are used for both sleeping and eating; further rooms are adapted to become the kitchen, toilet and bathroom, while the rest of the unit is used for sleeping. The living space is sometimes used for sleeping purposes to overcome the shortage of sleeping space. Today these units have become extremely overcrowded.

The commercial activities, are all on the ground floor and sell variety of specialist items such as herbs, groceries, jewellery and confectionary, as well as being used as stores and workshops. This integration of religious, commercial and residential activities physically expresses the complexity of the social and commercial life that this district of Alexandria has inherited from the past and needs to promote for the future. The proximity of the mosque to the working life of the local inhabitants is preferable to a monumental large scale one.

However, the current pattern implies that:

- Residential densities are high in these units.
- The potential for retailing activities represents an integral part of the building's life, as well as of the surroundings.

Second, the physical fabric: In this section we shall be investigating the response of the physical fabric (the supply) to this pattern of activities and its limits and potentials (the demand). Two areas are to be questioned:

- The criterion of the space in relation to the pattern of activities involved:

Shops: The location of these shops is of high commercial potential as they face both Al-Midan St. (one of the busiest food markets in Alexandria) and Al-Sagha (the jewellery market of Alexandria). For the outer shops 'accessability' is easily achieved for pedestrians, but is virtually impossible for cars and of great difficulty for service cars, especially those for food stores; on the other hand only pedestrian accessability can be achieved for inner activities. This implies that, in terms of accessability, small retail activities are most appropriate, where no heavy service is needed.

In terms of 'space utility', three groups can be identified (fig.8-16).

Group A: where the shops are used by Jewellers, the used depth of these shops is limited to only 4 - 5m. of their total depth of 10m., the rear space is seldom occupied. The creation of a back row of shops is therefore a feasible option (fig.8-16) which would add 13 units to group C of inner shops; this will add #m².

In the case of group B; they are mainly food shops, and the space is used more effectively, as the rear areas serve as storage.

For group C: the inner space is used mainly for stores and workshops; the space is entirely used and extended to the courtyards. But the efficiency of the space as a whole is undermined by the nature of some of these workshops. For example, a workshop is used for metal processing; the machinery involved as well as the process itself causes the disruption of the whole fabric, pollution, noise as well as the improper use of the courtyard.

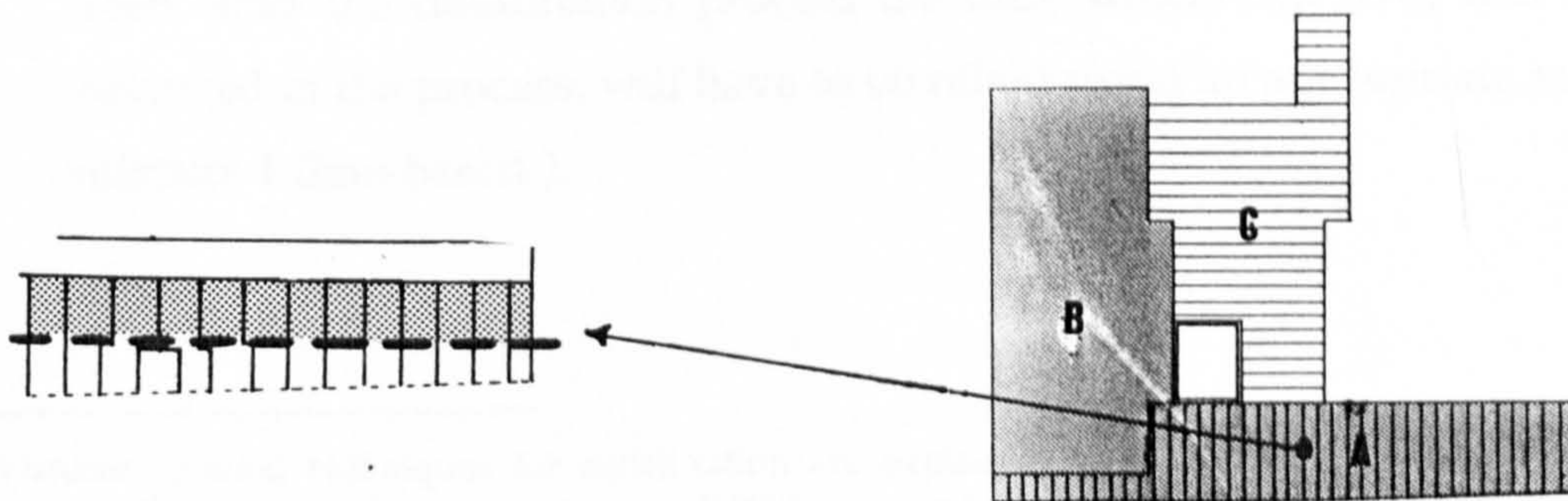


Fig.8-16, Right, schematic classification of commercial space; Left, possible addition of 13 units.

The residential units: the average area for these units is 60m²; they have one living space, a bedroom, a *sandarrah* which is used for sleeping purposes and another room which is has been fitted with a kitchen and a bathroom. As mentioned earlier the densities of these units are high and there is a need for their reinstatement. On the other hand, the efficiency of the space as a dwelling is undermined by the absence of proper sanitation facilities which has caused every occupant to provide his own way regardless of the integrity of the whole fabric.

■ The physical intervention needed for the survival and rehabilitation of the building. The repair work should take place in three phases:

I-Emergency repair:

- Problems of dampness and water penetration water; this should involve:
 - a- Preventing the leakage of rainwater by means of roof and rain water repair and the reconstruction of wall heads, copings and cornices.
 - b- Re-installation of the sanitary system.
 - c- Removal of dampness and soluble salts from masonry (desalination).¹
 - d- Treating timber tie-beams against any rot fungi, then strengthening badly deteriorated beams with new timber²
 - e- As for rising damp, although not an acute problem, it has to be considered in the wider arrangement of infrastructure plans.
- Masonry; a careful inspection of the walls has to be carried out in order to assess the void pattern inside the walls and whether grouting is to be considered for filling this void.
- Tiles; after the desalination process the tiles, which will have had to be removed in the process, will have to be relaid using an appropriate mortar mixture (lime-based).

1 Further detailed techniques for desalination are explained in the English Heritage Technical handbook *Practical building conservation* (1988), volume 1, written by John & Nicola Ashurt, pp.68-72.

2 Ibid, pp.131-134 & pp.301-309.

II-Long term repair:

- Reinststate the dwelling units and install adequate sanitary facilities and a kitchen space.
- Reinststate the shops, stores and workshop and provide them with necessary facilities i.e. electricity and water supply. Industrial workshops which involve the use of heavy machinery and produce a large amount of pollutant residue, i.e. metal processing, should not be allowed to operate.
- Restore the facades to their original appearance and apply a strict control over shop fronts and commercial signs.
- Restoring the original layout of the courtyard by removing all added partitions.
- Improving the access to the residential units by repairing the staircase and the floors.
- The plasterwork will have to be re-done after the desalination process, using appropriate mortar mixtures, i.e. mainly lime-based mortar with coarse grained aggregate to increase the porosity of the plaster.
- Restoring the missing mezzanines 'sandarah' to their original condition in order to increase the available residential area.

III-A system of maintenance:

Routine maintenance is the process by which a building is kept viable for the benefit of its users (Fielden,1982:27); consequently this would save the need for any further major repair. Thus a policy for routine maintenance has to be established, such as keeping the roof in good condition by maintaining the rainwater system, keeping tiles properly cleaned, and repairing faults to the sanitation system. This policy has to be implemented by regular inspections, based on detailed checklists.

Third: Present ownership and legal status: After abolishing the Awqaf in 1952, the responsibility of the mosque was transferred to the Ministry of Awqaf and the *wekalah*, among other properties, became the property of more than one thousand inheritors of the al- Shourbagi family and run by one of them (*hares*

al Waqf).

As it is a unique example of Ottoman architecture in Alexandria, it was considered a 'monument', and was therefore registered by the Egyptian Antiquities Organisation (E.A.O.) as long ago as 1951. Thus, the building is now handled by four parties:

Ministry of Al-Awqaf: responsible for running the mosque as well as the maintenance and up-keep of the sanitary areas, i.e. the ablution area only!! while the E.A.O. is responsible for the rest.

E.A.O.: the building is included in its list for registered monuments and therefore it 'should' be responsible for the maintenance and up-keep of the whole building, except for the ablution area.

Al-Shourbagi Family: the 'owners' of the wekalah, receiving a nominal rent through the "*Hares al-waqf*" who collects the rent from all al-Shourbagi properties and gives every member his share which is for some members only 5 piasters/year.

The occupants: the building is occupied by 16 families in the wekalah cells, in addition to 49 shops and workshops; 20 of them are jewellers and among the rest there is a herb merchant, a metal workshop, and a confectionery.

Thus, we may conclude the situation is as follows:

- The responsibility of this building is dispersed among various parties.
- The separation of responsibilities between the E.A.O. and Al-Awqaf makes it impossible for either of them to conduct any meaningful repair work.
- The open ownership status and the absence of personal interests in the building (due to its very low income) makes it unlikely that the owners will conduct any maintenance programmes.
- Due to the insecure tenure-ship the occupants are unlikely to be involved in any repair work unless they are directly affected (e.g. water leakage in their units).

This situation in turn implies that any action should be preceded by a resolution of this complex matter.

8.2.3. Evaluation and decision making: The building is in a seriously dilapidating state and is facing the threat of further decay due to the contribution of the following interlocking factors:

- The scattered pattern of responsibilities and ownership previously discussed.
- Decline in the practice of the traditional building techniques within the area. This eventually leads to the use of incompatible materials and techniques for repair work.
- Misusing the building by:
 - a- The introduction of inappropriate usages, i.e. a metal processing workshop which involves heavy machinery and produces a large amount of industrial residue.
 - b- Overcrowding of dwelling spaces, thus altering the spatial composition of the dwelling, employing inadequate uses for spaces, losing its architectural values and overloading the structural elements.
- Lack of public as well as official awareness of the importance of routine maintenance and its significance in keeping up the built environment. This is clearly manifested in its current state of repair illustrated earlier and the fact that, apart from some "bad" restoration work to the mosque, maintenance has been undertaken at least for the last ten years, by any of the involved parties. This has been aided by the dispersed horizontal pattern of responsibilities explained earlier.

Hence, having illustrated the building and its various aspects, we might screen the options that practically exist:

Screening the options:

Option one: Do nothing: In other words, leave it to disintegrate until its total collapse. In addition to the loss of a valuable building, a total or even partial collapse might lead to injuries and casualties. Although we had to acknowledge the existence of this option, which in fact is currently dominating, it is our aim to avoid this option as it has been the main cause behind its current situation.

Option two: Demolish and rebuild: Although being registered by the E.A.O. makes it an unlikely option to consider, for the practicality of this argument it will be considered as a possible option; in addition to the losses mentioned above, we need to consider the financial side, both costs and benefits.

It must be explained that a maximum of only four floors can be built in this area; this means that a new building will provide approximately 1800 m² of residential area and approximately 600 m² for commercial use. Given the existing status of the occupants and their legal rights for replacements (see Appendix L-1), they will be entitled to substitute accommodation thus making the net profitable addition approximately 1200 m² of residential space. On the other hand, such an intervention will necessarily involve the widening of the street to allow for the maximum height, which will add to the costs; these include all reimbursements paid to occupants, the expenses of building a new street and the infrastructure installations.

Option three: Restoration and Rehabilitation:

A prerequisite for this option is an applicable redefinition for the role of all parties involved, and which has to ensure:

- A secure tenure-ship for the occupants.
- An accepted technical quality for all restoration work.
- The security of the socio-economic pattern of the building.

The following pattern gives an example of a possible solution to be considered:

The E.A.O.: to act only as a technical consultant to ensure the quality of the restoration process.

Al-Awqaf: to co-ordinate with the local society of the mosque in order to allow them to maintain the whole mosque and not only the ablution area (public assistance and donations for a mosque, especially in this area, is a very reliable source).

Owners and occupants: as we have previously mentioned the 'owners' do not enjoy the real benefit from being owners and the occupants do not have the necessary security of tenure. At this stage we should be considering the financial

aspects as well. This situation can be resolved by forming a housing cooperative¹ of the occupants, which can then get a co-operative loan to purchase and repair the building.

Decision making: Prior to making any decision, we have firstly to recall our main objectives and aims:

- Developing a misused physical and social asset and preserving it from neglect and destruction.
- Maintaining the historical, social and cultural structure of the area by conserving its architectural identity.
- Maintaining the historical and architectural values of the building as part of the town's history.
- Developing public awareness and official support for conservation policies as a means of maintaining our built environment.
- Maintaining the socio-economic structure of the area and its commercial potential.

Secondly, we need to recall the potential and limitations that exist:

- The building is fully occupied by both residents and commercial activities; an aspect which has to be considered in the first two options.
- Some residential units are crowded with large families; to be considered in the third option.
- The building's location is of high potential and provides the accessibility needed for small retail businesses.
- There is an opportunity to add 13 commercial units with an area of about 300m²; to be considered within the third option.
- Ownership and legal status is a major disadvantage for being scattered and horizontally organised.
- There is a high potential within the local community to take care of the mosque, provided that they were given the responsibility.

¹ The system of cooperatives in Egypt is further explained in Appendix G-2

Given the previous inputs we will be able to evaluate these options. Table 8-1, illustrates the various costs and benefits involved in the process; it shows the third option to be the most suitable one. We should be aware however, that being suitable doesn't mean that it is such an easy process as it might seem; on the contrary, it is a lengthy process with a lot of difficulties, e.g. agreements over prices, administering the restoration process,....etc. But the expected results are more likely to achieve our desired objectives.

	Do Nothing	Demolish and rebuild	Restore and rehabilitate
Costs	<p>Physical:</p> <ul style="list-style-type: none"> ■ loss of the building <p>Economic:</p> <ul style="list-style-type: none"> ■ Misplaced money spent by E.A.O. and Awqaf in bad and inconsistent work. ■ Costs for rehousing the present occupants (in case of collapse) <p>Social:</p> <ul style="list-style-type: none"> ■ The disruption of the social pattern of the building (in case of collapse) ■ Loss of jobs, and businesses. <p>Cultural:</p> <ul style="list-style-type: none"> ■ The loss of a unique example of Alexandria's traditional architecture and way of life. 	<p>Physical:</p> <ul style="list-style-type: none"> ■ loss of the building <p>Economic:</p> <ul style="list-style-type: none"> ■ Costs for demolishing and rebuilding. ■ Providing the occupants with new accommodations. ■ Reimbursing occupants for widening the street. ■ Establishing a new street and installing its infrastructure. <p>Social:</p> <ul style="list-style-type: none"> ■ The disruption of the social pattern of the building (in case of collapse) ■ Loss of jobs, and businesses. <p>Cultural:</p> <ul style="list-style-type: none"> ■ The loss of a unique example of Alexandria's traditional architecture and way of life. 	<p>Economic:</p> <ul style="list-style-type: none"> ■ Costs for repair, restoration and the installation of utilities and infrastructure. ■ Loss of possible profit if rebuilt. <p>Social:</p> <ul style="list-style-type: none"> ■ Possible displacement of some of the large families.
Benefits		<p>Economic:</p> <ul style="list-style-type: none"> ■ The profit from selling the building. <p>Social:</p> <ul style="list-style-type: none"> ■ The occupants might get new accommodation. 	<p>Physical:</p> <ul style="list-style-type: none"> ■ Providing secure and well equipped units to the occupants. <p>Economic:</p> <ul style="list-style-type: none"> ■ The profit from selling the building (to owners) ■ The profit from selling the proposed extra commercial space. <p>Social:</p> <ul style="list-style-type: none"> ■ Developing a misused physical and social asset. ■ maintaining the socio-economic structure of the area as well as providing new jobs. <p>Cultural:</p> <ul style="list-style-type: none"> ■ Developing public awareness and official support for conservation policies as means for maintaining our built environment.
Conclusions	A loss in all aspects; an option which has to be avoided.	A marginal economic benefit loaded with high social and cultural costs	Less economic benefit, more social and cultural gains

Table 8-1, Costs and benefits involved in various options

8.3. Darwish shop:

This building represents another category of threatened buildings, i.e. private buildings. It is located in Al-Midan Market Street very close to Midan Al-Nasr and thus near to the city centre. It illustrates a rather uncommon phenomenon in the area; it is redundant despite the commercial potential of the area and being in private ownership. It is therefore important to understand the factors which has lead to the current situation of the building, as it highlights the inevitable interaction among the physical fabric, activities and legal status of the building, in other words, the trade-off between supply and demand.

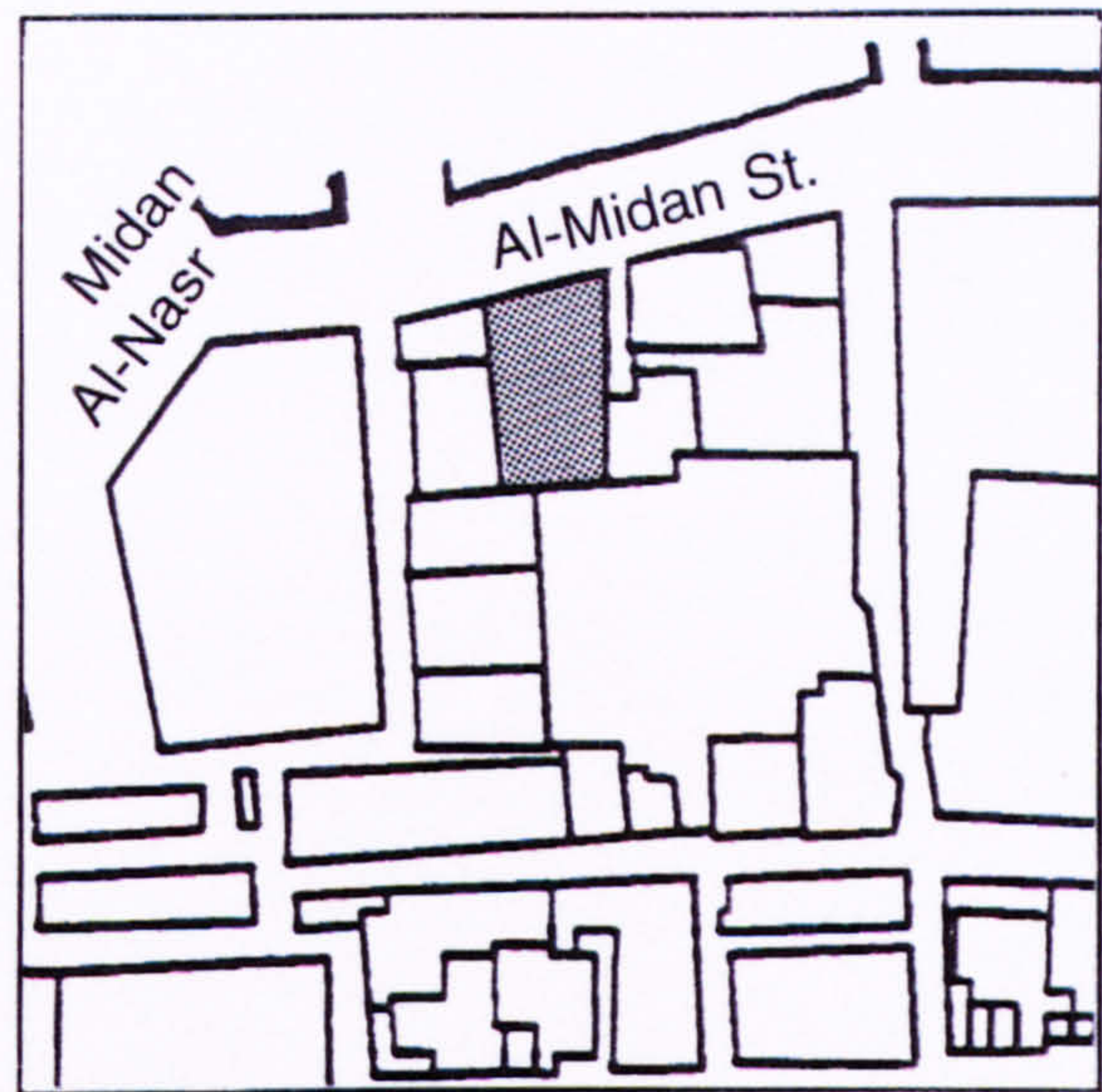


Fig.8-17, the location of the building.

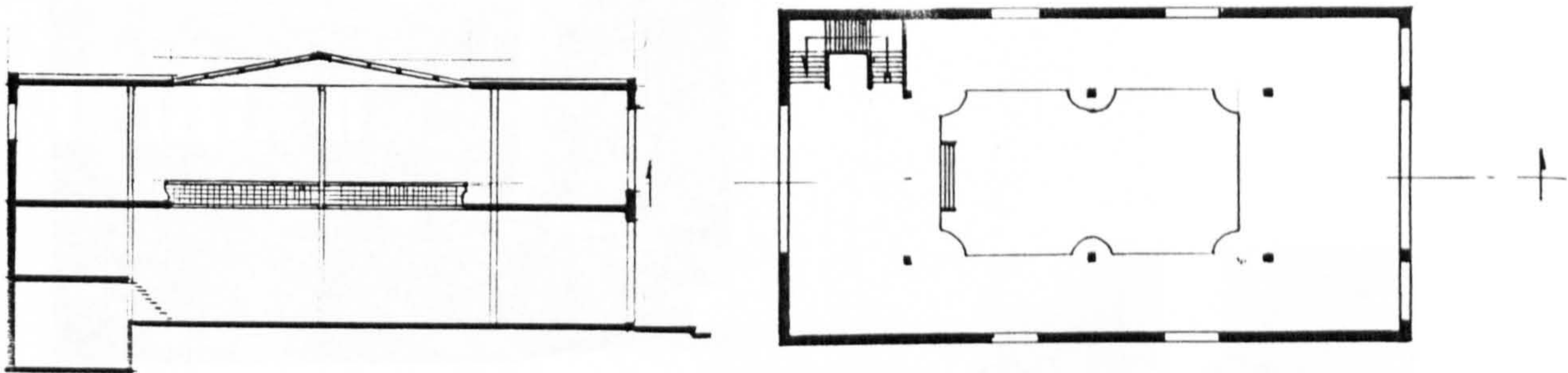
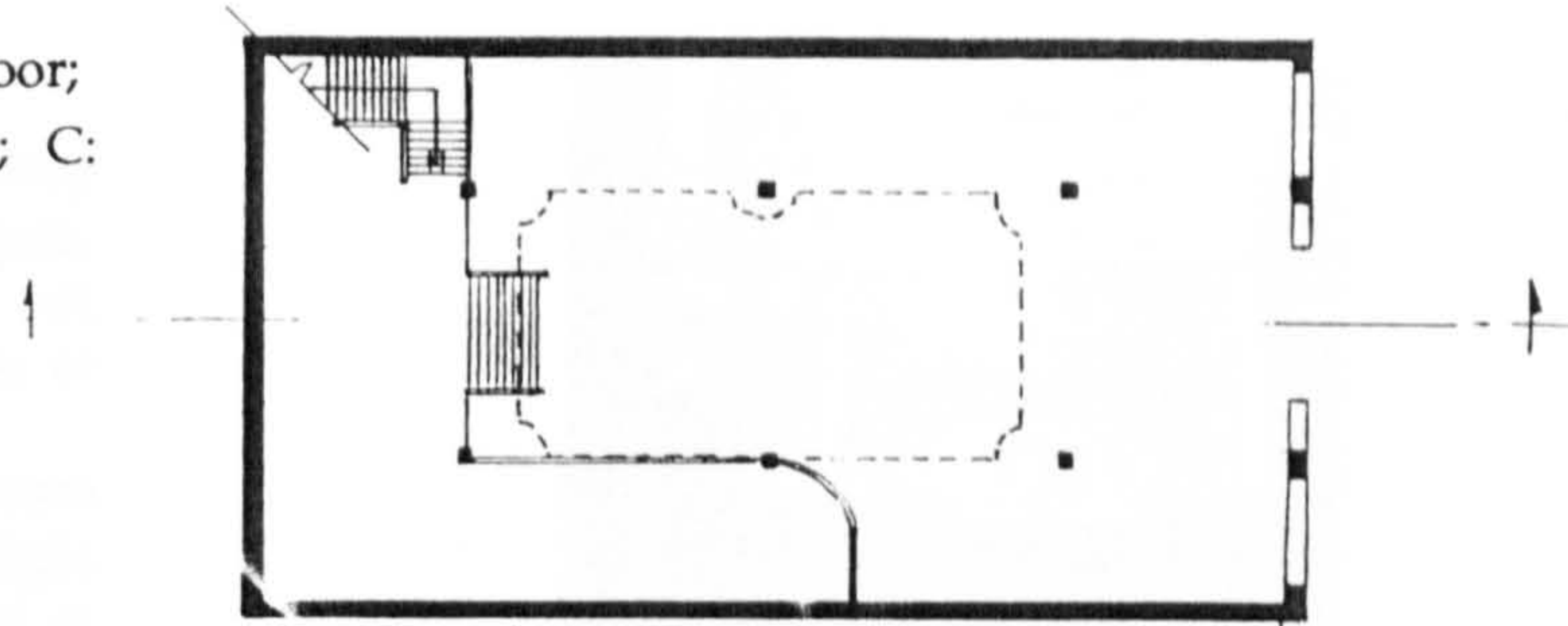
8.3.1. A survey of the building: the building was constructed in 1880 by a wealthy merchant (Darwish) as a cloth shop, converted into a grocery in 1913 and became redundant in the 1980's. A simple rectangle in plan with its smallest end facing al-Midan street as its main entrance facade. It has three main levels; the ground level which is the street entrance level



Fig.8-18, the street facade; a unique example of very "early-modern" architecture in Alexandria

with a slightly lower storage area, the first Mezzanine which covers the storage area at about 2 meters above the ground level, and the second Mezzanine reached by a staircase at the corner of the building. Its main source of day light is the large glazed skylight roof.

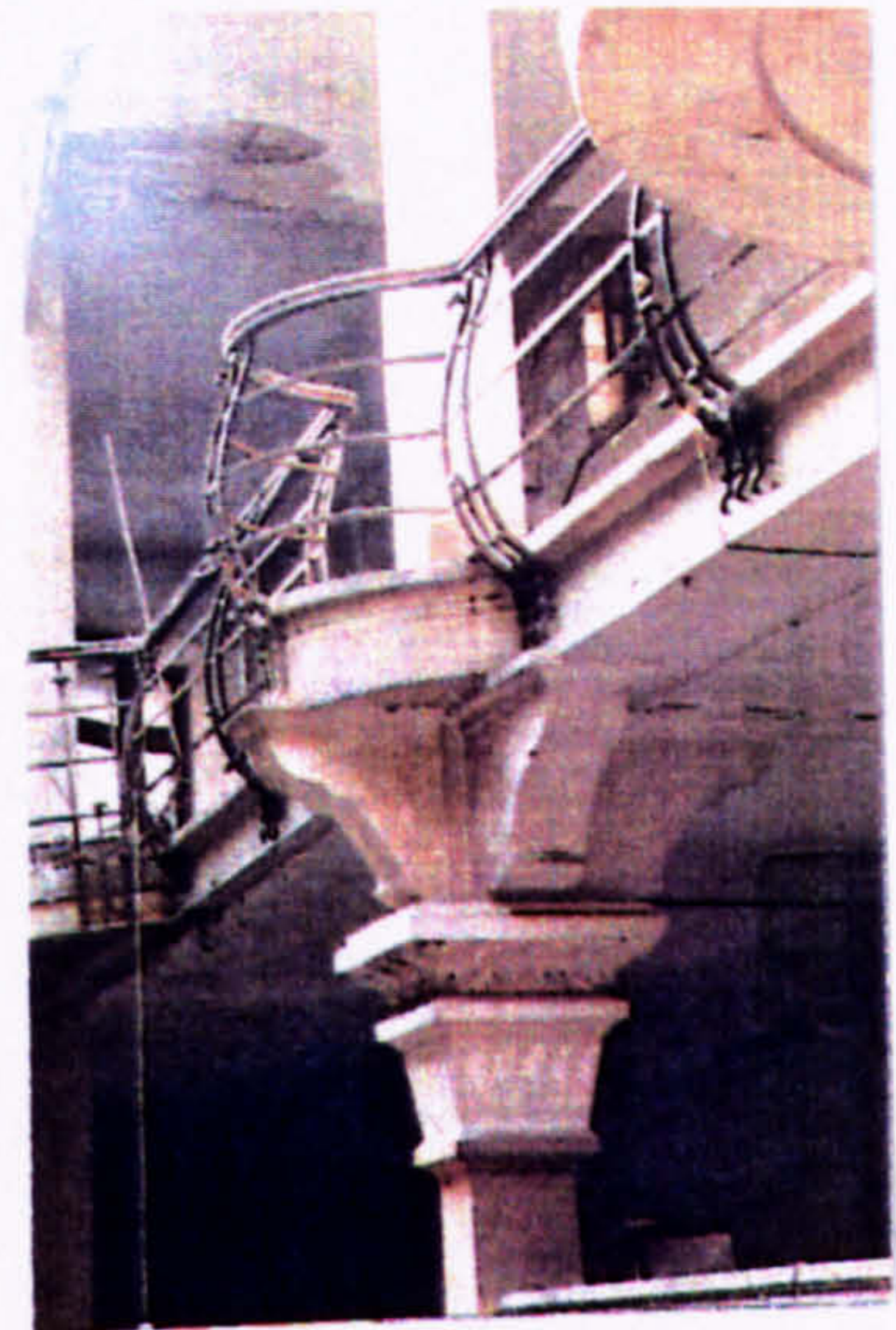
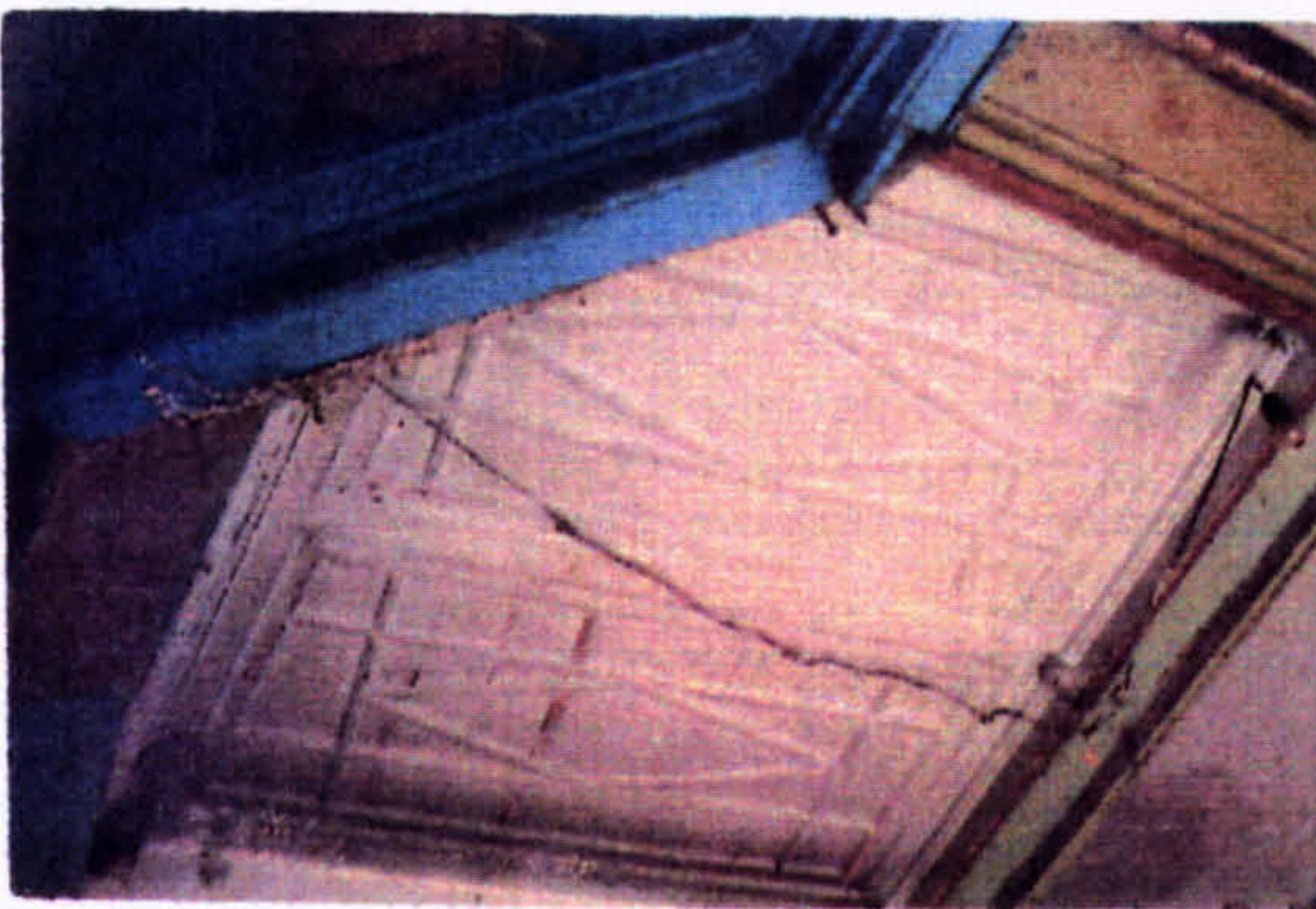
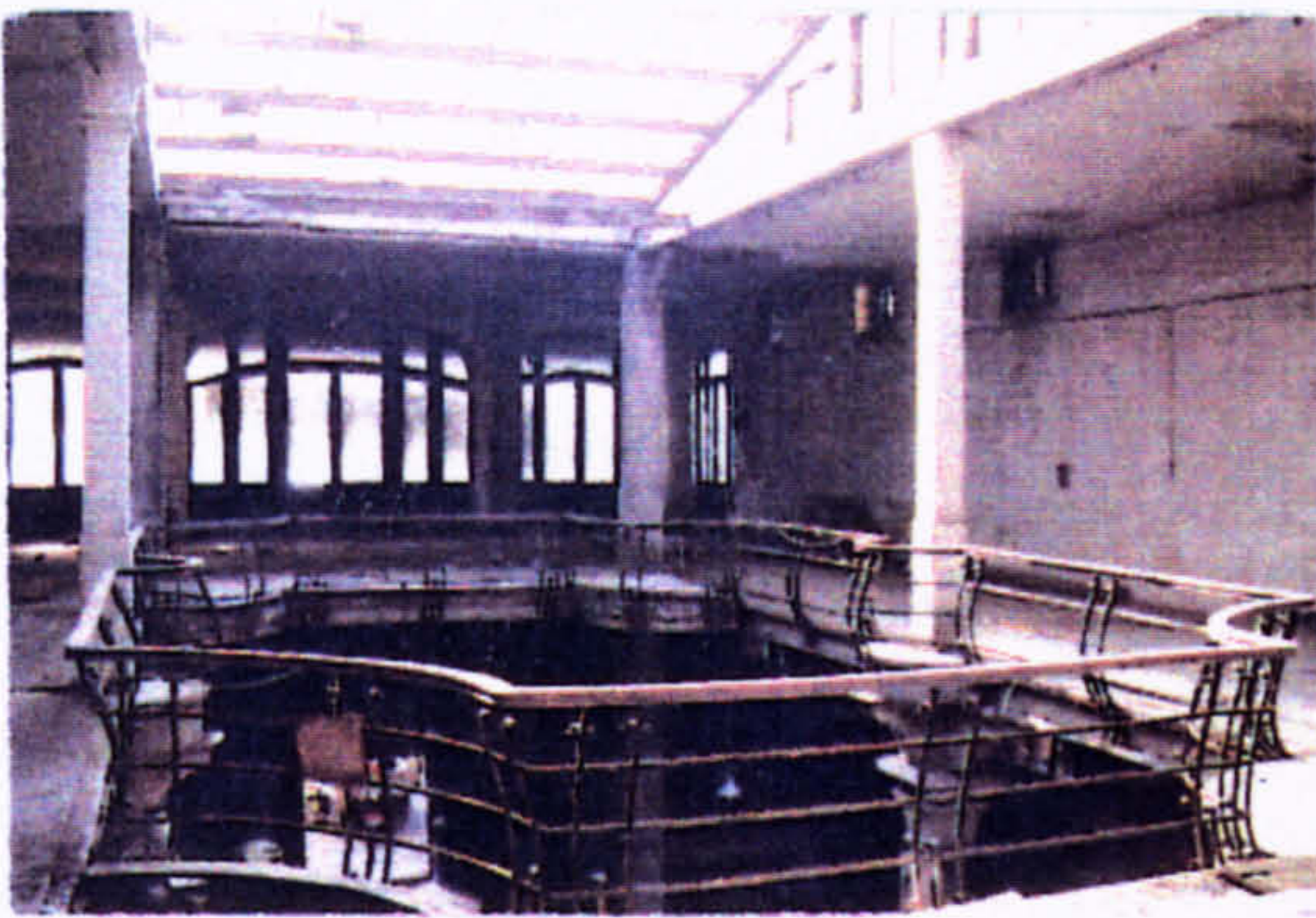
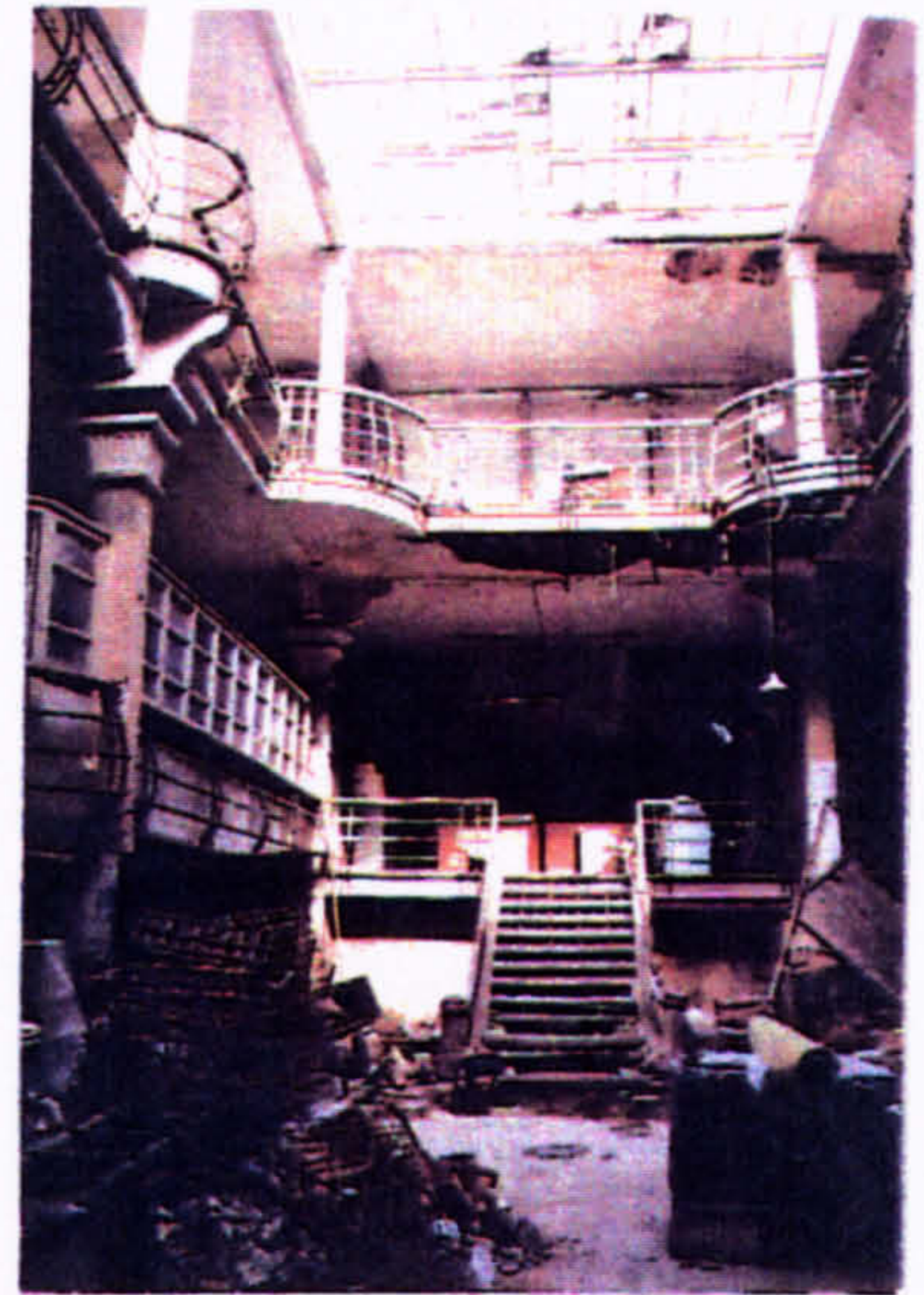
| **A** Fig.8-19, A: Plan of the ground floor;
 C | **B** B: Plan of the mezzanine; C:
 Longitudinal section



The Architecture of the building represents the eclectic style of architecture in Alexandria. The facade is a simple "early-modern" styled one. The interior, on the other hand, is elegantly detailed in a Europeanised fashion. The glazed roof is another unique feature which is not familiar to the area.

The building is a unique example of very early steel construction in Alexandria; the main construction is of steel columns and beams, the outer skin is built of stone; timber is used as a covering material for the ceiling.

A Fig.8-20, A: The new structural
B **C** system (steel) has given the building
D new dimensions in terms of span,
height and accessibility which are not
compatible with the surrounding pattern of
commercial activities.
B: The second mezzanine, with round corners
and an iron balustrade. The glazed skylight
roof provides the main source for daylight in
the building.
C: The column, the capital and the balustrade;
elegantly detailed in an unusual composition.
D: Ceilings are finely detailed



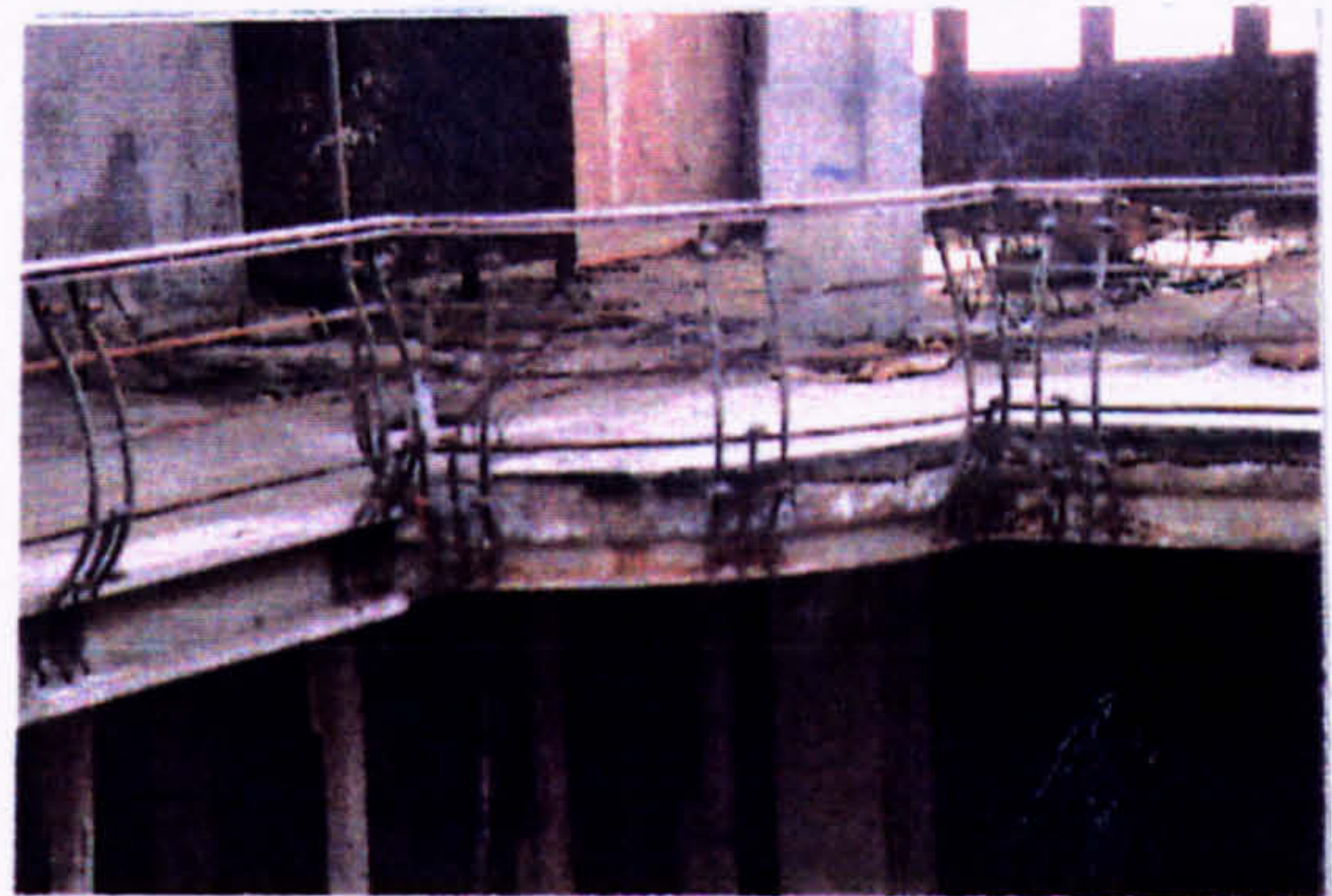
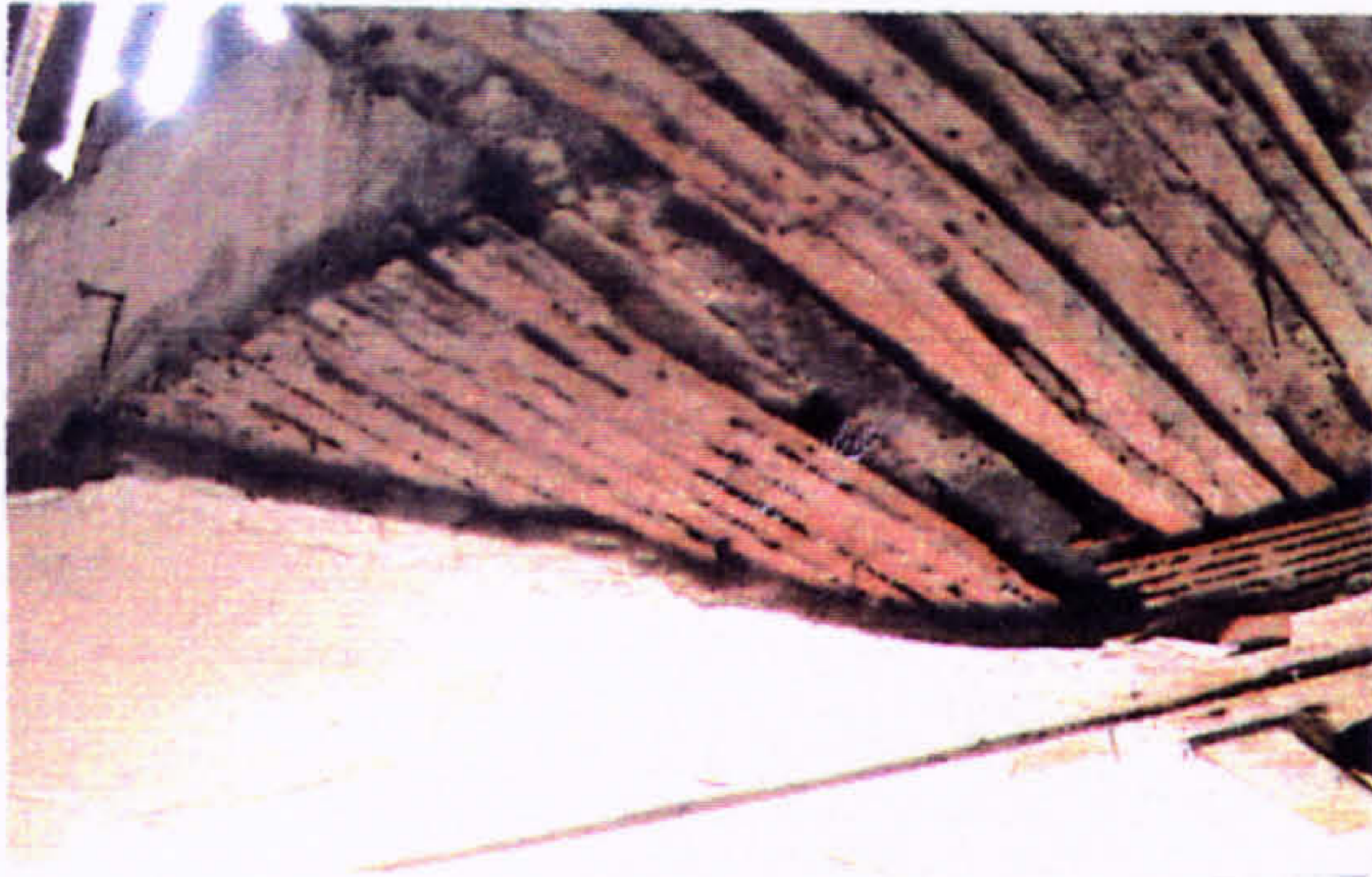
The present state of repair:

The building, owned by the Darwish family, is completely redundant; its physical condition is in a seriously decaying state. In addition to the common problems of dampness and salt crystallisation presented before in the Al-Shourbagi case, the building is facing a variety of problems illustrated below:

A Fig.8-21, A: The glazed skylight roof
B from Above; broken glass, a major
C | **D** source of water problem inside the
building.

B: The interior plastering is falling down in most of the building and needs to be completely replaced. The steel is showing signs of rust and corrosion.

C&D : Redundancy, neglect and misuse have left the building to decay and deteriorate.



8.3.2. Limits and potential for future development:

First, activities and socio-economic pattern: as have been pointed out earlier, the redundancy of the building, despite the high commercial potential of the area is rather unusual. This suggests a careful re-consideration of the type of activities that should take place in the building. The scale and style of the building has made it unable to compete with and/or complement the surrounding shopping environment.

While the shopping pattern of the area is made of small, street level and one storey retail activities, this building is one large, enclosed and multi level space. Hence, considering our previous analysis of space utility in the area we might suggest that a future rehabilitation of the building has to avoid activities that are offered by the prevailing pattern, i.e. cloth, jewellery and food retailing, and should therefore consider types/scales of activities, e.g.:

- A completely different activity such as a restaurant,
- wholesale trade business activities, or
- multi-functional activity such as a specialised shopping mall or a mixture of wholesale, retail and manufacturing activities.

Second, the physical fabric:

- The criterion of the space in relation to the pattern of activities involved:

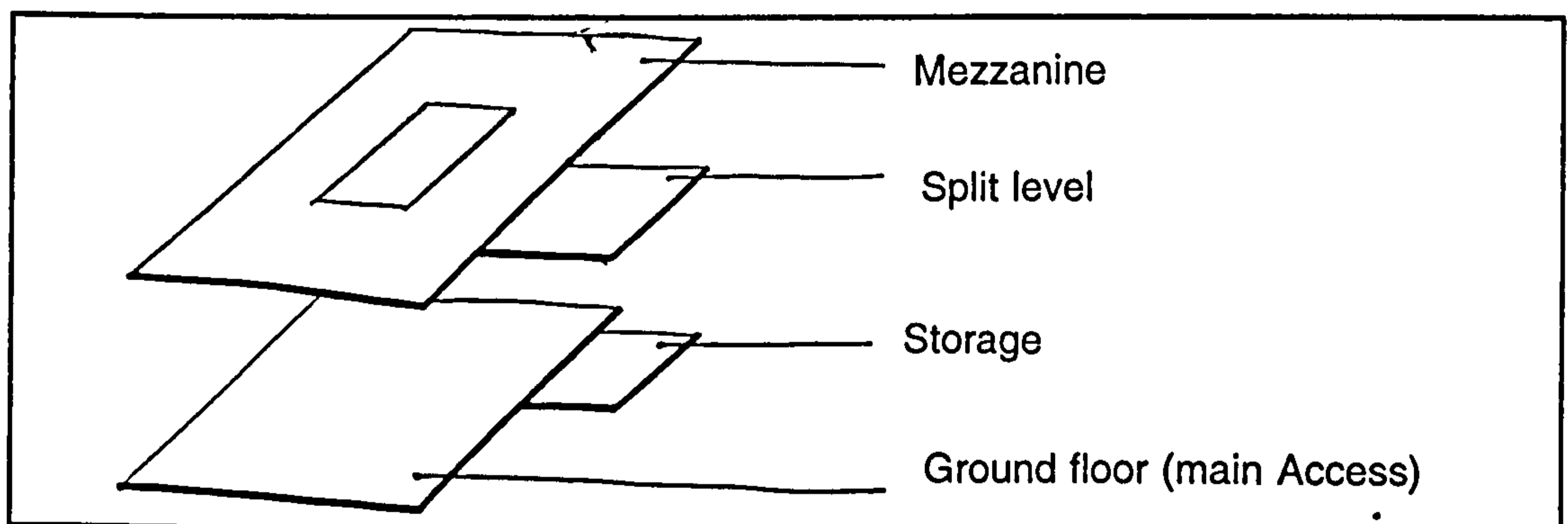


Fig. 8-22, a schematic drawing for the building and its different levels

The space, aided by the construction system, is unique both in scale and proportions. The usable area is 760m²; 380m² for the ground floor, 260m² for the mezzanine and 110m² for the storage area.

The building is well lit, mainly from the roof, in addition to a large window at the front facade. From our previous discussions for future functions, we may suggest the following possibilities:

- I- A restaurant which utilises the storage area for services and kitchen facilities.
- II- A centre for jewellery or cloth businesses that serves not only shoppers, but

acts as a trade centre for local merchants as well, involving wholesale, manufacturing and a craft centre as well as retailing activities; this variety of activities can utilise the different types of space provided by the building: while retail takes place on the ground floor, business and craft activity on the mezzanine level and wholesale storage in the storage area.

- The physical intervention needed for the survival and rehabilitation of the building,
 - I- A thorough inspection of all steel members and the repair or replacement of any member should it fail to meet its required structural function.
 - II- Replacing the glazed roof and ensure its capacity to prevent any possible leakage.
 - III- The replacement of large areas of timber boarding.
 - IV- Re-plastering the whole interior of the building.
 - V- A careful repair of details and decorations.

Third, present ownership and legal status: where in the previous case study the confusion in ownership and tenancy has caused much of its problems, the absolute private ownership of this building is causing another form of threat, i.e. owners have a free hand to 'develop' their property.

8.3.3. Evaluation and decision making: Hence, we may conclude that the building is seriously threatened with demolition as a result of the following contributing factors:

- Its current redundancy as explained above, leading to its gradual physical deterioration.
- The high economic potential of its location that is creating an increasing pressure for its 'redevelopment'.
- Its absolute private ownership which gives the owner a free hand to do whatever he wants.

Screening the options:

Option one: Demolish and rebuild:

In this case it is a very tempting option for the owners: a residential block of flats will no doubt offer a guaranteed and immediate financial return. The 'financial' costs involved are merely confined to the 'demolish and build' processes (about L.E.400,000) while a residential building can accommodate about eight flats with an approximate selling price of L.E.750,000. A convincing justification has therefore to be made for any other alternatives. On the other hand, the costs of this option are paid for by the community; the loss of a cultural asset which represents a part of the city's history and the loss of a possible commercial activity which could have been enriching the commercial life of the area and offering jobs for the community.

Option two: Do nothing: This will eventually lead to the collapse of the building which will bring the first option to reality.

Option three: Restore and rehabilitate: This option is seriously challenged by the costs involved in the process as well as by its previous history of redundancy. As indicated earlier, the pattern of activities has to differ from the surrounding environment of street markets in order to avoid the kind of competition which led to its redundancy in the first place: thus other activities have to be considered as explained earlier.

Decision making: Evaluating these options is indeed a very critical decision; while the second option seems to be the 'ideal' option for the public interest, the first can be considered as more 'ideal' by the owners. Thus the impact on different parties has to be considered; in other words who benefits? and who pays the cost? A thorough assessment has therefore to be made of the various impacts on the different parties involved in order to justify any action. Considering the socio-economic and cultural benefits gained by the community in this case by adopting the first option, a state intervention that enables the owners to undertake the third option has to be considered, e.g. in the shape of long term loans.

	Do Nothing	Demolish and rebuild	Restore and rehabilitate
Costs	<p>Physical:</p> <ul style="list-style-type: none"> ■ The eventual loss of the building <p>Economic:</p> <ul style="list-style-type: none"> ■ The freezing of an asset. <p>Social:</p> <ul style="list-style-type: none"> ■ Loss of a potential source for jobs and businesses. <p>Cultural:</p> <ul style="list-style-type: none"> ■ The loss of a unique example of Alexandria's early modern and steel architecture. 	<p>Physical:</p> <ul style="list-style-type: none"> ■ The loss of the building <p>Economic:</p> <ul style="list-style-type: none"> ■ Costs for demolishing and rebuilding. <p>Social:</p> <ul style="list-style-type: none"> ■ Loss of jobs, and businesses. <p>Cultural:</p> <ul style="list-style-type: none"> ■ The loss of a unique example of Alexandria's early modern and steel architecture. 	<p>Economic:</p> <ul style="list-style-type: none"> ■ Costs for repair, restoration and the installation of utilities and infrastructure. ■ Loss of possible profit if rebuilt.
Benefits		<p>Economic:</p> <ul style="list-style-type: none"> ■ The profit from selling the new building. <p>Social:</p> <ul style="list-style-type: none"> ■ The provision of more housing, that might not be affordable by many. 	<p>Physical:</p> <ul style="list-style-type: none"> ■ Keeping a unique asset. <p>Economic:</p> <ul style="list-style-type: none"> ■ The profit from selling the proposed new activities. <p>Social:</p> <ul style="list-style-type: none"> ■ Developing a misused physical and social asset. ■ maintaining the socio-economic structure of the area as well as providing new jobs. <p>Cultural:</p> <ul style="list-style-type: none"> ■ Developing public awareness and official support for conservation policies as means for maintaining our built environment.
Conclusions	A loss in all aspects; an option which has to be avoided.	Immediate economic benefit loaded with high social and cultural costs.	Long term economic benefit, more social and cultural gains

Table 8-2, Costs and benefits in various options

8.4. Waqf Gemaiee: an infill site,

This is a more flexible case one storey shops at the street front (with an inner vacancy in such cases as this one). It used to be *waqf ahli* till the Awqaf was abolished and the owners managed to sell the individual shops to the occupants. Thus, the present ownership status is a private multi-owner one. The current structure consists of 30 shops lined at the street front with a ruined vacancy in the middle, they are of a mixed nature

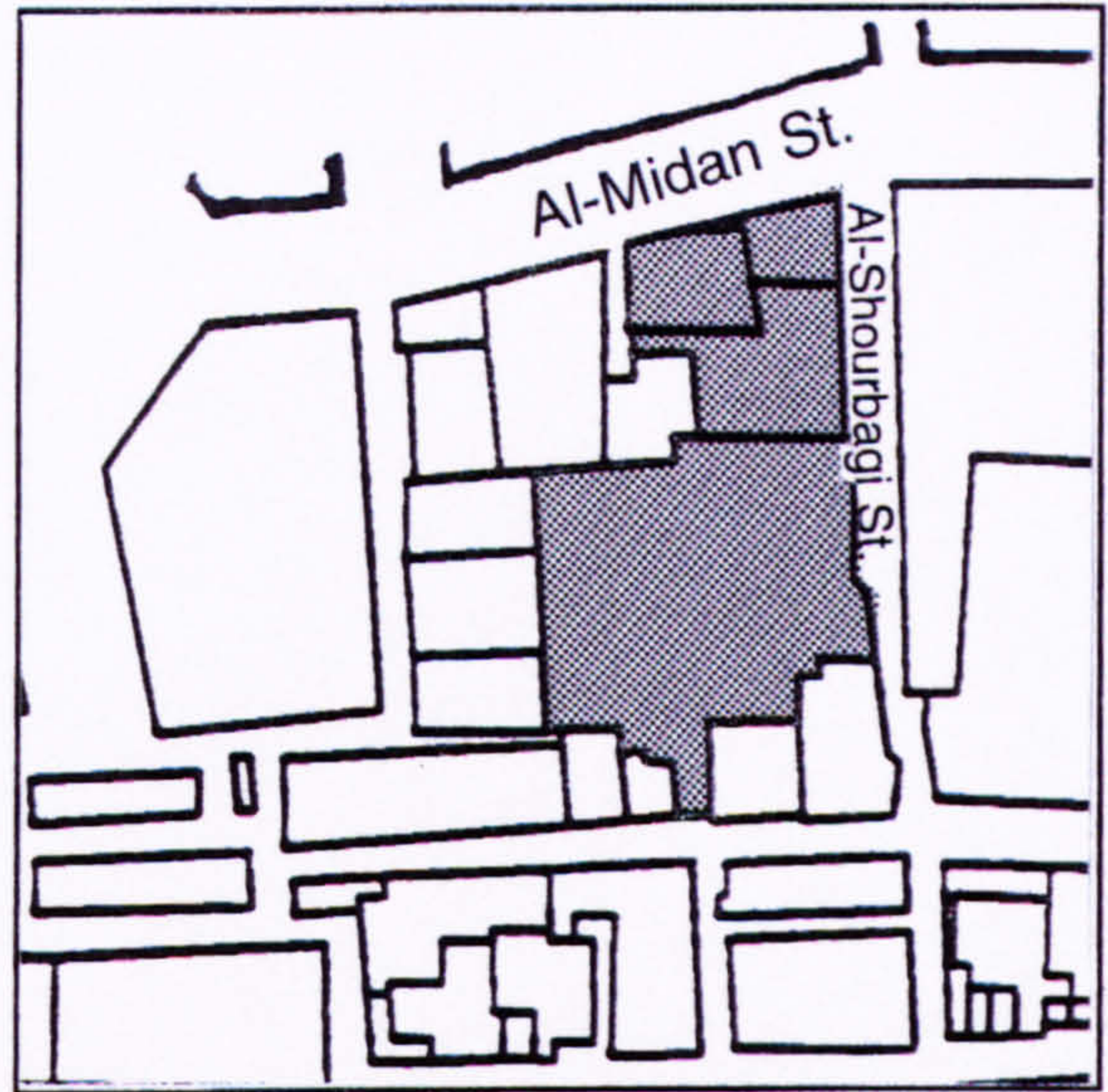


Fig.8-20, Waqf Gemaiee; the site plan

and with no architectural or historical merit. It is therefore a case for high potential for 'development' where resources need to be sensibly utilised



Fig.8-24, Waqf Gemaiee, the present condition: a real waste of resources

8.4.1. Limits and potential for future development:

First, Activities and socio-economic pattern: not to repeat what has been mentioned in the previous cases, we shall conclude that:

- The potential for small retail activities is very high; it has both the commercial potential of its location and the accessibility needed for such activities.
- There is a potential for housing which is supported by a need for housing and the traditional mixed pattern of activities.

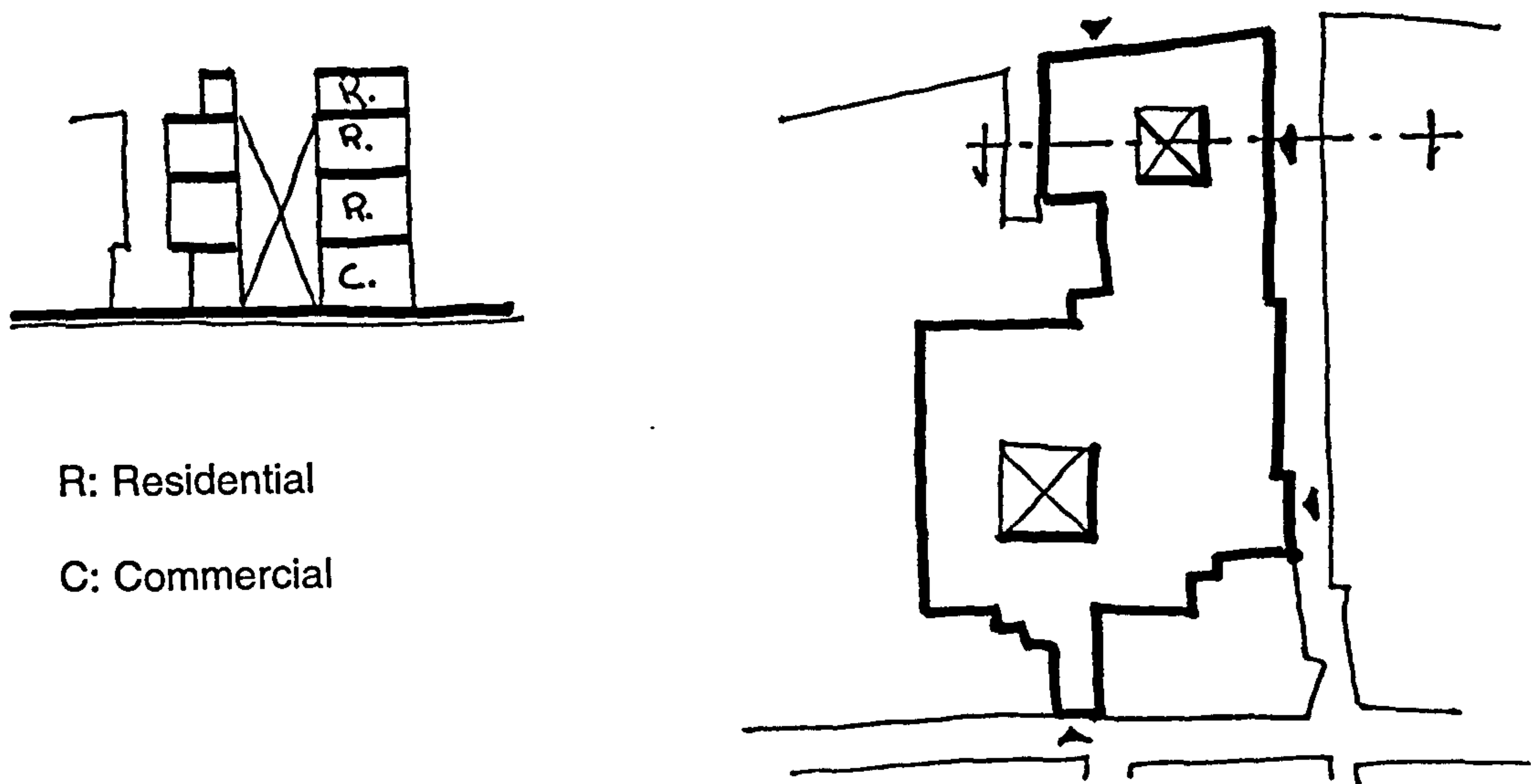
Second, Physical fabric: the site is 2500m², and can be accessed from three streets: Al-Midan, Al-Shourbagi and Souk Al-Akkadin. Any physical intervention would involve the clearance of the site and the construction of a new building which, according to regulations, should not occupy more than 80% of the land, not be higher than 4 storeys and its floor/area ratio less than 5.

Third, Legal status and ownership: in this case, it is perhaps the most crucial issue; various private owners with different financial capabilities, i.e. while one owner may have the capital to invest, another may not. Thus, any intervention has to be preceded by a legal and financial agreement among the different owners; a process which has not yet taken place, mainly because of the lack of 'know how' knowledge on what to do.

8.4.2. Evaluation and decision making: The site is a potential case for infill development, where its current status is not of any economic, social or cultural interest. This situation is caused mainly by its ownership status; thus two main options can be considered in this case:

Option one: Do Nothing: This might be considered as 'safe' by some as avoiding any 'undesirable' form of development, but it is a real waste of resources, not only in economic terms but at social and cultural levels as well; a sensible intervention in this case could positively enrich the urban environment.

Second option: Demolish and rebuild: Realistic but a risky option as well; it is therefore essential to exercise special caution with regard to what is to be built instead; fig.8-25 illustrates a possible intervention which adds about 2000m² of commercial space as well as 5000m² of residential space. This can be realised by forming a "Union of Owners" (*itihad mulak*¹) from the current owners who will benefit, in addition to a new structure for their existing shops, a highly priced saleable area.



R: Residential
C: Commercial

Fig.8-25, a schematic plan for a possible infill

8.5. Conclusions:

The above examples are aimed at illustrating the variety of issues, problems, options and constraints involved in developing our *asset* of building stock. They call for action, but an important question has to be asked: Why should an action take place? In other words, what are the arguments for action? The answer should be that this change is achieving gains (a positive cost benefit balance). We might classify these as follows:

¹ This system is discussed in Appendix G-3

■ **Financial gains:** finance is no doubt the tool that realises 'any' action, and as mentioned above it is the prime motive for developer and owners. Financial gains have two forms: the 'immediate profit' which results from selling units (residential, commercial or vacant plot), e.g. selling AlShourbagi to the occupants would lead to immediate financial profit, to the 'owners', as well as in the Darwish case where a block of flats would gain immediately by selling its units, and 'long term' gain which results from the profits of the rehabilitated businesses and commercial activities, as in the case of rehabilitating the Darwish shop.

■ **Social gains:** it has always been a problem to include social costs and benefits in the bill. However, two fields can be identified: *First*, job creation; as well as keeping existing jobs, is the major gain that is to be achieved by rehabilitating our case studies and all similar cases; and *second*, provision of shelter: another gain that can be achieved by an infill project such as Waqf Gemaiee. On the other hand, there is always the question of who is paying the bill and who is getting the benefit? Proposals made in this chapter were therefore aiming at recognising this fact by not ignoring the benefits which the owner(s) has to enjoy, thus making an action feasible as well as not expecting the state with its large bureaucracy and over-burdened budget to get involved. For example, by forming co-operatives from the users, such as in the case of AlShourbagi where a co-operative loan can be used to buy the property from the 'owners' and help in the rehabilitation process.

■ **Historical interest , conservation and continuity of traditions:** in this case we must also note that the major 'motive' for the locals has not been 'conservation' for its own physical merit, as might have been the case for University intellectuals and outsiders, rather it has been the security of their lives, business and identity. Their regard to history it is not based on the uniqueness of the physical fabric or the beauty of the architecture, it is the continuity of family tradition, memories, the uniqueness of their socio-economic environment and the attachment to the place, whatever the physical qualities were.

Thus, we may illustrate the process as follows (fig.8-26):

- I- A motive to initiate and create an opportunity for development, which has to be verified by its
- II- feasibility through various aspects: technical, financial and legal as well as its various impacts on different parties.

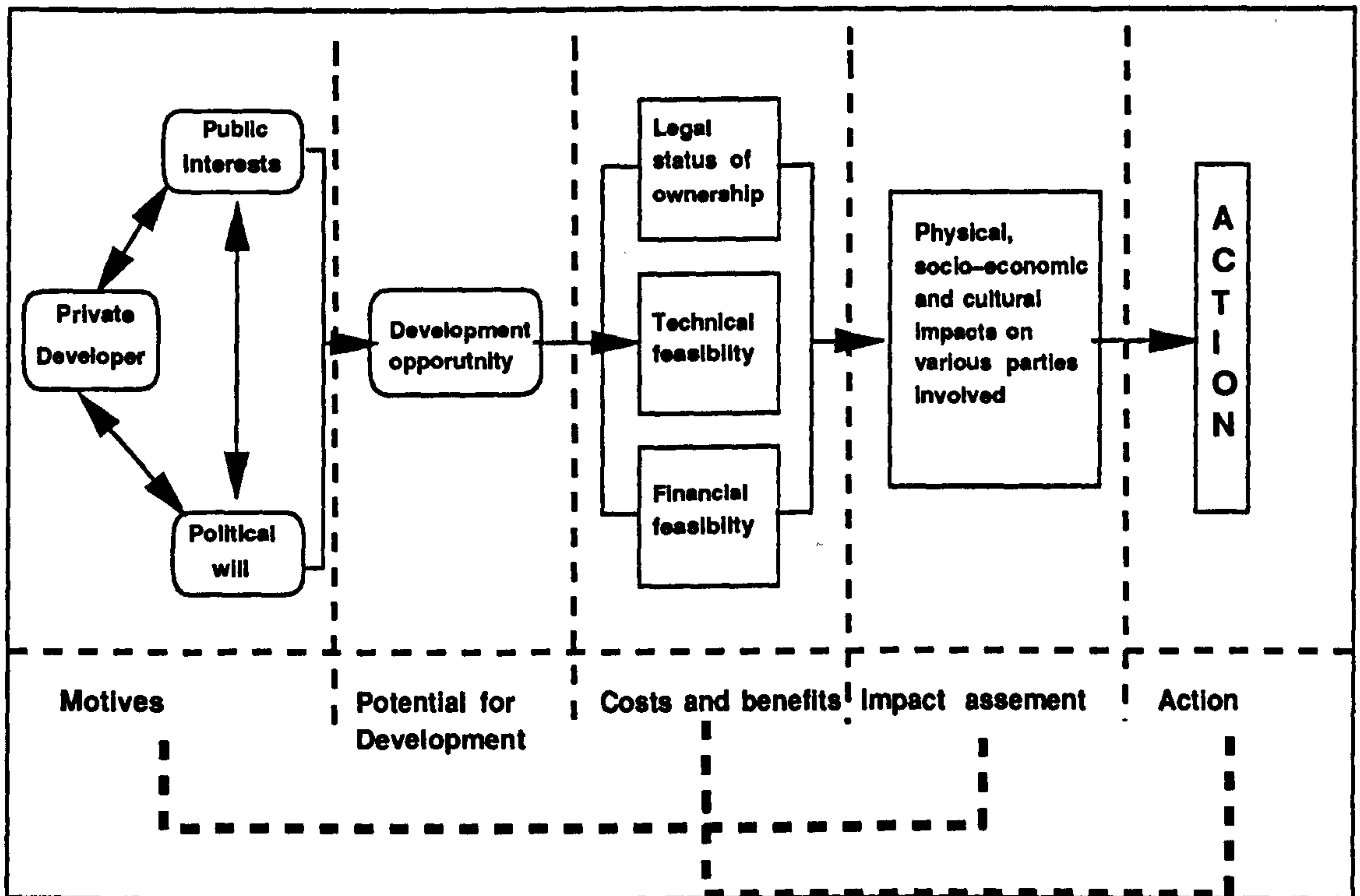
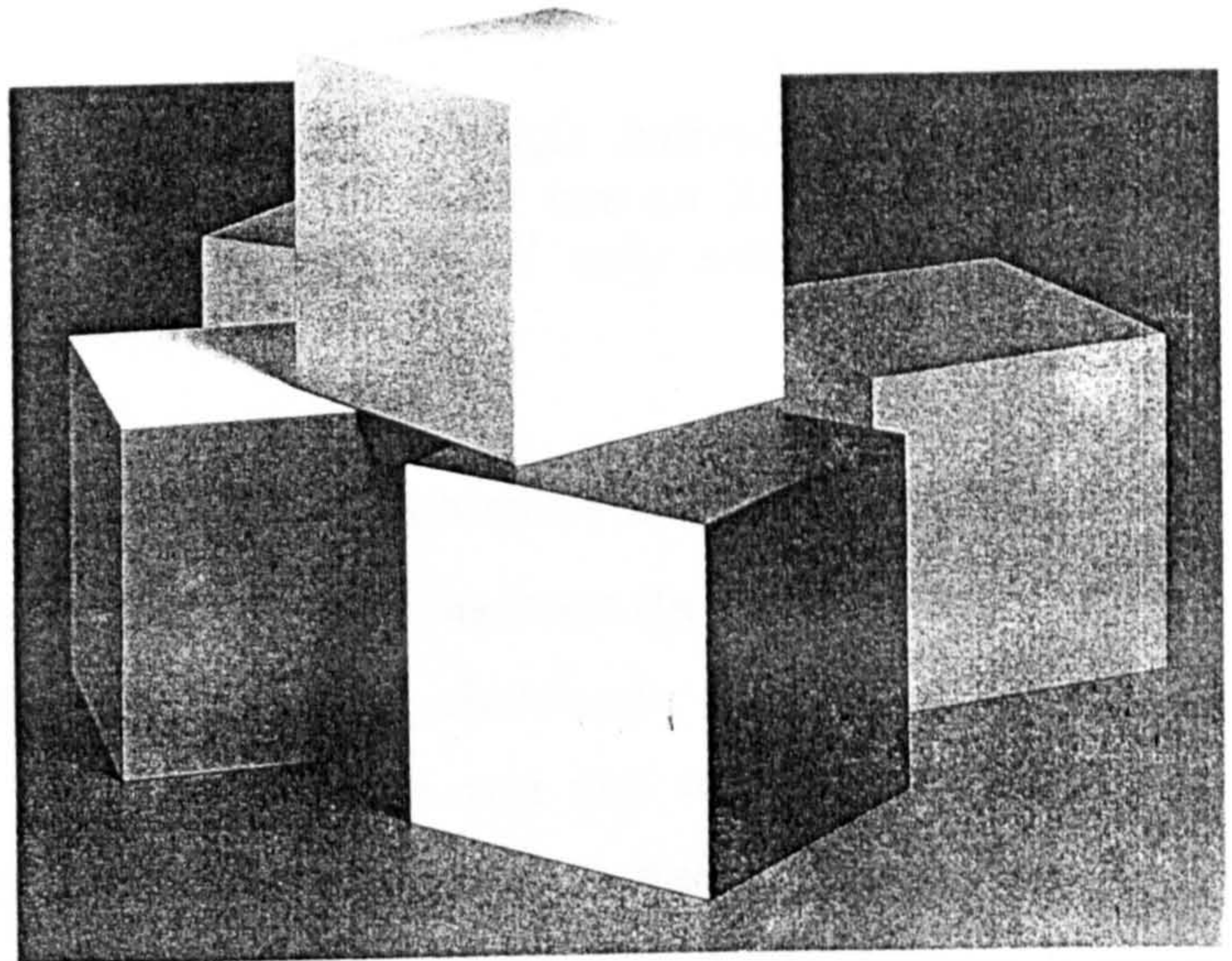


Fig.8-26, The sequence of activities involved developing the built environment.

CHAPTER NINE



SUMMARY AND CONCLUSIONS

SUMMARY AND CONCLUSION

9.1 Introduction

".. we need to match the great dreams of single individuals with the individual dreams of thousands of people. These two set dreams may not always be in harmony and lasting action will only result with their reconciliation." (De Monchaux,1987:23)

In this study, our main concern has been to achieve a better built environment in our cities. The approach for achieving this has been the reconciliation of two interests: the expectations for better living standards and the need for a continuing tradition. The Turkish Town is not the only area that needs treatment; focusing on it has had a dual objective: *first*, achieving the best possible understanding of the problems as well as the available options, hoping that it can be of use in a real life application, and *secondly*, to illustrate an approach that we recommend for other individual cases. In the previous chapter we have deduced the various aspects involved by illustrating their impacts as perceived in the micro scale of individual sites and buildings.

The aim of this chapter, however, is to pull together the conclusions of previous discussions. It will do so in three sections. The first will summarise the previous chapters and highlights their main conclusions, the second will present some concluding remarks and recommendations, and finally some suggestions for future research.

9.2. Summary

Chapter 1 outlined the task of this study: its scope, objectives and methodology of research as well as the general structure of the study. It pointed out the deterioration and structural and mental violence that have been blanketing traditional urban areas with decline and disintegration, and where Egyptian

cities are of no exception. It also cited that the scope of the study would be focused on the Turkish Town of Alexandria, where although it is not a world heritage site, it represents a wider range of socio-economic, cultural and traditional values and criteria that have shaped its physical environment.

Chapter 2 examined the theoretical backgrounds of development and conservation and their controversial relationship. It reviewed different approaches and definitions of both activities: firstly, it examined the concept of conservation, its objectives, trends and role in the built environment; secondly, the concept of development, the need for development, its appropriateness and its part in the city's life.

Finally, Chapter 2 sets the argument for a 'conservation development'. As it maintains that both activities are not aims in their own right, rather they are means to achieve certain objectives, a skilful sorting out of these objectives would enable a reconciliation of both activities. It cited that the key question is: how to employ the inherited resources to our contemporary needs? It also emphasized that there is no single formula that can be universally applied, rather it is the utilisation of locally available resources to meet local needs, aspects that vary from one community to another. A broader definition of heritage has therefore to be established, where value is not confined to universal criteria of history and culture, rather it has to consider local criteria. Chapter 2 ended by identifying the need for a comprehensive concept for the 'management of change', where the actual question is: how to develop our heritage?

Having explored the theoretical background of 'conservation development', **Chapter 3** investigates its practical side; drawing basically on the Egyptian experience it examines the various aspects involved in the process. First, it investigates the question of making policies: it cited that a key issue is defining the criteria of intervention; national as well as international concerns have been largely oriented towards the grandiose scale of large ancient monuments, a view aided by the current concept of conservation where it is regarded as an expensive exercise paid by tourism; it emphasizes therefore the need for more

comprehensive sets of criteria. An additional aspect is the magnitude of intervention; what is the practical scale for intervention? the study argues that small and well defined projects stand better chances than large scale master plans. It then addressed the issue of evaluation: how to decide among alternatives? how are social aspects of equity involved? It also recognised the fact that the evaluation stage is seriously absent from the Egyptian mechanism. A further omission that has been identified is the role of individuals and private developers in the financing of 'heritage' related projects. Public money has been the main source of funding; a very limited source, which has undermined the implementation of many projects.

Having analyzed the various aspects of making policies, Chapter 3 poses the question of "whose policies?"; three parties were identified: the community, the developer and the institutional mechanism. It reviewed their current role while citing that there is a need for exploiting the unutilized potential of both the community and the developer and for coordinating the efforts of various parties involved in the institutional mechanism.

Tourism and traffic were then presented as key elements in the process. While tourism has been largely regarded as the sole client for conservation and a major source for currency, the study called for cautious considerations of the adverse impacts that tourism have on the local culture and traditions. On the other hand, traffic was recognised as a major front line in the 'clash' between development and conservation where there is controversy between the needs and convenience provided by the motor car and the capacity of the urban fabric. Finally, it concluded by putting forward a number of 'lessons to be learnt', among them, it cited that: heritage has to be acknowledged as a resource rather than a burden, conservation should be regarded as a cost-effective use of available resources, the potential of active community participation and the need for realistic approaches. Thus, a methodological approach was then formulated to be applied to the city of Alexandria in the following chapters.

A description of the field work methodology was presented in Chapter 4. It was made up of two main parts: first, the experience of the survey conducted by the author; its objectives, difficulties and the various techniques and tools utilised to collect data for this study, and second, the means for storing, analysing and presenting this data, not only the purpose of this research but to emphasize the importance of such measures in real life policies as well.

It has therefore concluded that an efficient policy making needs accurate, consistent and timely information; the methodology adopted for collecting the data has to consider the context and resources available for such process, only needed data is to be collected, and finally it cited the need for computerised information systems as means for achieving efficient information systems.

Chapter 5 was dedicated to identifying the 'interior' of the Turkish Town through an analysis of its essential elements, its development through the different periods of the city's history, architecture, physical setting and lastly a sociological profile. It cited that the area represents the living history of the city as a continuing tradition of socio-economic activities; it also highlighted the significance of its physical character that has been preserved by its' community's social solitude. Thus it called for action to be taken to overcome the deterioration blanketing the area and the threats made by massive 'developments'.

Having toured the area Chapter 6, considered the realities of the current situation. It did so by investigating the opportunities for and constraints against achieving a 'conservation development'. Four areas of influence were identified: the priorities and needs of the community (housing, infrastructure, and transport), the physical constraints (vacancies, potential and obsolescence), regulatory constraints (authorities and legislations involved) and environmental constraints (air pollution and underground water). It cited that ignoring the existence of these constraints would discredit the practicality of our arguments. Furthermore, another factor is the magnitude of these issues as manifested in the

Turkish Town.

Realising the scale of the problem, and the need to have a practical scale to deal with, both in this study and in real life, Chapter 7 selected *AlSagha* as a demonstrative cluster, where issues, problems and opportunities were explored in more detail. It was cited that the problems of the area are based on socio-economic, cultural, political, legal and administrative complexities that cannot be simply solved by means of physical 'ordering'. The area was therefore analyzed in terms of "supply and demand"; as for the supply it dealt with space efficiency, modes of movements and accessibility, where the demand on the other hand was presented through market dynamics: the viability of the area, the components of the local market, commercial activities and shopping patterns. The chapter summed up these elements by drawing a pattern of potential and obsolescence to the area and finally formulated a model for investigating individual cases within the area.

Using this model, Chapter 8 magnified these issues by exploring three case studies of individual sites and buildings. It illustrated the possible practical approaches to deal with the various issues involved. Each case study illustrated a different nature and/or scale of merits and problems, as well as the alternative options available; it analyzed the costs and benefits involved in each option and the likelihood for its realisation: a complex multi-functional building (AlShourbagi) that highlighted the problems of ownership and responsibility; a simple private redundant building (Darwish shop) that placed more emphasise on the need for the technical aspects of efficiency in using the space, and an infill site (Waqf Gemaiee) which presented the development opportunities and the need to develop appropriate vehicles for achieving more effective means for utilising the assets of the built environment.

9.3. Concluding remarks and recommendations:

- The concept of urban conservation in Egypt and indeed, in many other countries, especially developing ones, has been oriented to the spirit of

monuments recording and preservation. This attitude has been magnified by the fact that decisions as to what, why and how to conserve, are taken by politicians, if not by foreign experts and institutes. Heritage, in the Egyptian perspective, has therefore often been considered a heavy burden, that costs too much to maintain, with the only profit being tourism. Another aspect of the current attitude is that it is regarded as a 'once and for all' process; this has confined the approach to a restoration exercise without much concern for the post-restoration management policies needed for the future survival of the fabric.

Urban planning on the other hand has always been conceived with the obsession of 'physical ordering': grid-iron patterns of wide avenues that tend to destroy existing traditional self-sustaining communities. As opposed to this official (formal) physical planning, an informal system is operating to shape the built environment according to individual and community needs. This duality has created the current chaotic state of cities, not only in Egypt but in most cities of the developing world. Thus we may summarise the main causes of the deterioration of urban areas in Egypt as follows:

- The horizontal plurality of the responsible mechanism for planning.
- The neglect of the informal needs and their role in the process of shaping the environment which has been mainly due to the plurality and confusion of the formal system on the one hand, and to the absent complement of the two systems on the other.
- The abolition of the traditional *awqaf* system and the consequent impacts on ownership pattern; the current Ministry of Awqaf on the other hand has proved to be ineffective in maintaining its properties of *waqf Khairy* (mosques) as its main interest has become the real-estate market and investment.
- Lack of awareness to the notion of maintenance which has been strongly aided by rent control measures that caused maintenance to be unrealistic for property owners.
- Decline in traditional skills which has been caused by the massive urbanisation process and the accompanying drastic social changes.

- Lack of awareness to the significance of cultural and traditional continuity as means of socio-economic survival and development.
- The pressing nature of priorities and needs such as housing and infrastructure.

Thus we may re-define Urban Conservation as the

Careful trade-off between supply and demand in the urban context, and a cost-effective utilisation of resources where existing assets are being used and new assets are being sensibly introduced. This process should allow for the changing dynamics of societies without yielding to them and thus it is not a 'once and for all' process, rather it is a part of the changing life of the built environment .

In Egypt, and in the Turkish Town in particular, it should be realised that:

- The building stock is the most neglected and misused resource.
- Apart from certain artifacts and monuments, "Heritage" and "valuable" should not correspond to a specific historic period, rather to the *utility* value.
- There is a pressing need to address the issue of **ownership and responsibility** in *Awqaf* and ex-waqf properties; the existing pattern has to be resolved in order to ensure:
 - that there is a well defined owner to the property, either an individual or a cooperative, who would be responsible for, and benefit from the property, and as for
 - *Awqaf* properties (mainly mosques), local communities should be given the responsibility to take care of them, with the Antiquities acting as a technical advisor only.
- **Rent control** legislations have to be seriously re-considered, because of their damaging effect on the building stock.
- The **active participation** of the Community has to be promoted, encouraged and directed by means of **education and media**, which are powerful tools that need to be exploited in order to increase public and official cultural awareness, i.e. to demonstrate the cultural, social as well as economic potential that exists

in the neglected and misused building stock. Means to be used should not be confined to formal educational programmes; more effective is *setting the example*, e.g. the cultural park in Cairo.

- **Developers and cooperatives** ought to be considered as viable vehicles for the development and economic regeneration of the building stock, and at the same time state bureaucracies ought to be avoided where possible.

- **Large problems need large solutions** that are not always possible; small and defined problems are therefore more likely to be solved. Any approach to the current situation should avoid master plans and 'comprehensive' solutions, rather, a micro scale of intervention should be considered: individual sites and buildings that can be practically approached as well as offering a 'living' example for similar cases.

- **In the Turkish Town** there is a need to approach local merchants, developers and landlords, illustrate the possible options for exploiting their assets and attempt to motivate them to take an initiative.

- **Studies and conservation plans** should consider the implementation stage; they need to address the questions: who is going to implement these plans, how and why? There is a need, therefore, for more emphasis on the socio-economic aspects, land and property ownership patterns and financial aspects.

9.4. Future research

Examples of topics for future research are listed below:

- *Criteria for values*

This study has emphasized the fact that 'value' is not absolute, that it is in the eyes of the beholder and that it has therefore to be identified by the community. More research is therefore needed in order to understand the factors that influence the process of setting the criteria: the role of history, culture and tradition; the balance between 'cultural' and commercial.

- *The role of the architect in a 'conservation development'*.

In this study we have suggested that conservation has to be considered as a means to aid development rather than an end and is therefore a process that

needs to involve the community as a whole. In Egypt there has been little realisation of this notion and conservation has been confined to physical restoration of historical monuments, and it has therefore not been practised within the architectural profession. Research is therefore needed to explore the possible role of the architectural profession as community developers.

■ *The role of education and media*

This study has showed the importance of active community participation in shaping the built environment. Education and media have an important role in increasing the public as well as official awareness and appreciation of the values, both cultural and commercial, that exist within their surroundings. More research is needed in order to develop the appropriate means to exploit and guide this potential.

■ *The role of AlAwqaf system*

The study has touched on the role that *AlAwqaf* has played in maintaining the built environment and the confusion in the institutional system followed its abolishment. Further research is needed to investigate the various applications of the system in the Islamic world and the impact that its abolition had on the Islamic city, as well as the future of *ex-Awqaf* properties.

■ *Other areas with different values.*

The scope of this study has been focused on the Turkish Town of Alexandria, with a certain set of values that are attached to it. There is a need for such focused studies on other areas with different sets of values, where there would be a scope for developing different approaches.

■ *International organisations*

This study has pointed to the controversy involved in the role of International organisation, especially in setting the criteria of values. There is a scope for further research into their current role and the possibility for the development of this role in order to gain broader views where they can assist alongside

communities and not from above.

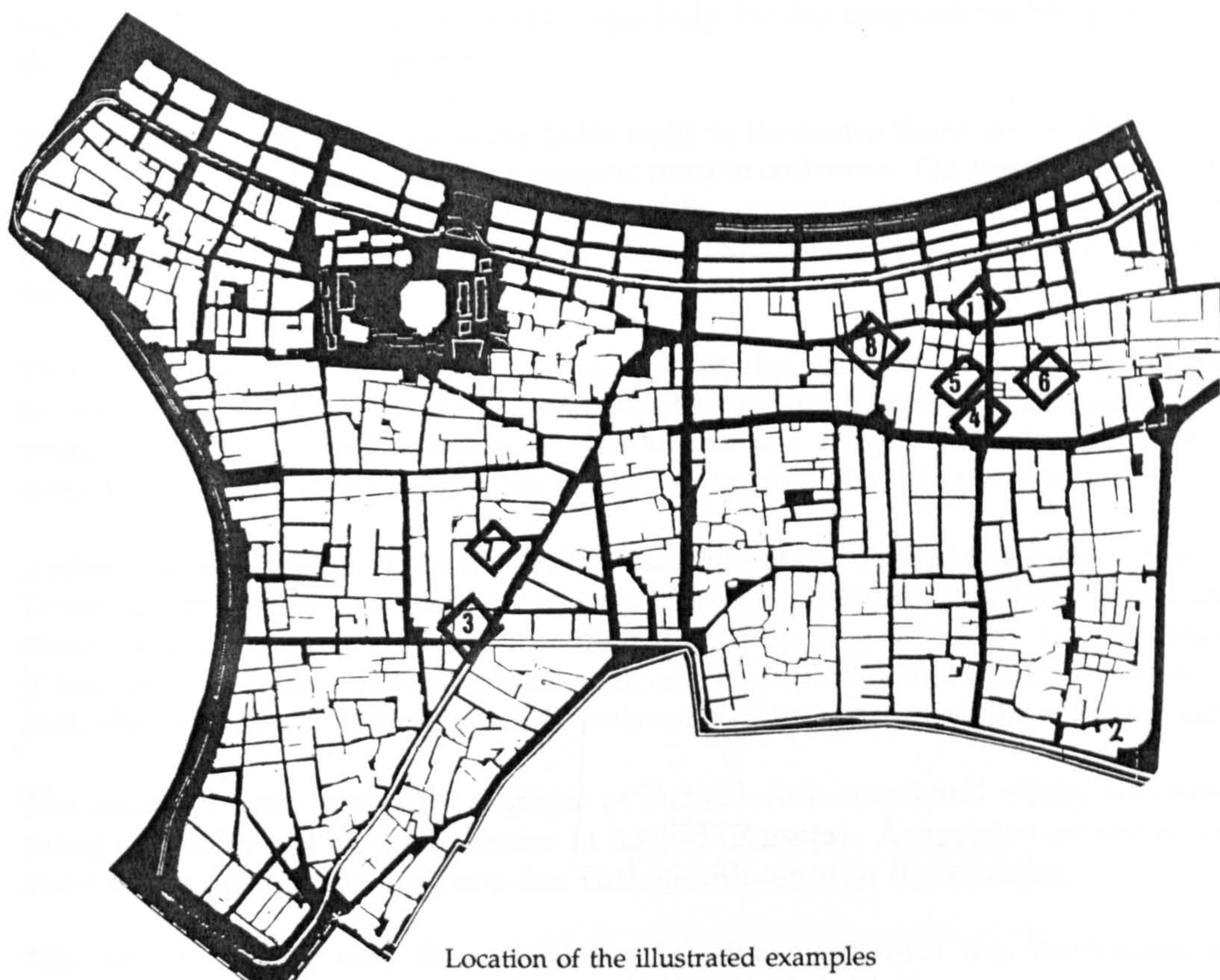
■ *Documentation and data systems*

Research is needed to explore the deficiencies in data and documentation for the urban environment. In this study we touched on the importance of efficient data systems in urban management. A detailed study of this role is needed in order to develop more efficient and comprehensive data systems that can provide needed information for the various levels of management and decision making.

APPENDICES

DOCUMENTARY APPENDIX

The following appendix will illustrate examples of the variety of historic buildings in the Turkish Town:



Location of the illustrated examples

D-1, Terbana Mosque:

Dating: According to the foundation plate it dates back to 1686 A.D.: i.e. the Ottoman era.

Building materials: The building is mainly built in limestone with the association of timber tie-beams and burnt brick as a decorative element for the entrance and the 'sabil'. Granite Corinthian columns from the Graeco-Roman era were re-used as supportive elements. The ceiling of the ground floor is vaulted while the upper ceiling (the mosque) is constructed in timber beams which were beautifully painted and covered with timber boarding and finally rendered with rubble and mortar.

Description of the building: The ground floor follows the tradition of the area: is occupied by shops, stores and the ablution area which is linked to the first floor. The building has three facades; the western which faces 'Sook al-Tabakhin' street is partially recessed with small windows and lower shop-fronts. The eastern lies in a small street with the Minaret and a secondary entrance through the ablution area. The main facade lies on the northern side overlooking Masjid Terbana street with two rows of windows in addition to the lower shop-fronts and a 'Sabil'. It also comprises the main entrances with a minaret on its top.

The entrance door is reached by two flights of steps, either through the main entrance

or through the ablution area. Both flights lead to the entrance portico and consequently to the prayer-hall. The Minaret stands on four granite Corinthian columns at the entrance portico, which is annexed with an arcaded gallery.

Despite the modest appearance of the mosque from the outside, its interior hall is superbly ornamented, and is notable especially for the magnificent tiling which covers the walls with colourful patterns.

The wall facing the entrance is the *Qibla* wall; in its centre there is the *Mihrab*, which is also tiled and decorated with two elegant marble columns. On the right of the *Mihrab* there is the wooden *Minbar*. On the left of the entrance is a narrow wooden staircase which leads to the *Sandarrah* supported by marble columns. It has a balustrade of turned-wood.

The timber beams of the ceiling are also colourfully painted. This ceiling is supported by eight marble columns and parallel pointed arches. The hall is surrounded by two rows of timber latticed windows. The upper are smaller and decorated from the outside in carved stucco, while the lower are large rectangular windows.

Architectural patterns: This is a typical example of traditional mosques in the Turkish Town, despite some unusual features such as the positioning of the Minaret over the entrance landing as an individual structure born by four columns. On the other hand it has many common characteristics such as; the building materials, the raised prayer hall, the style of the Minaret and the existence of the portico at the entrance door.

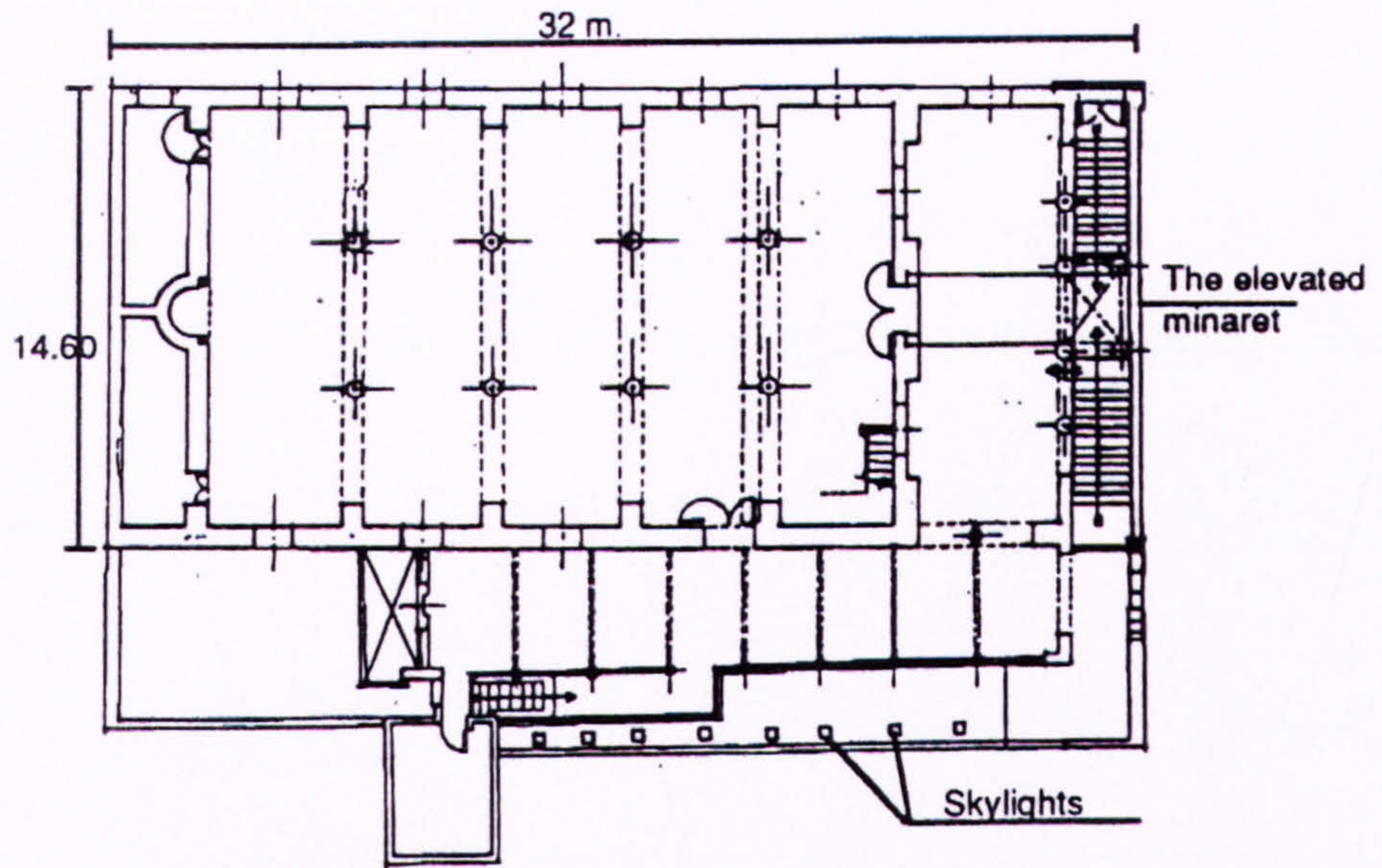
The main entrance is another example of Turkish influence.) and which was present in many examples of Turkish mosques in Rashid (Rosetta). As mentioned above, the tiles used in the interior also express the Turkish influence in the mosque.

The *Sabil* is among very few remaining in Alexandria, and this introduces another unique feature among traditional mosques in the Turkish Town.

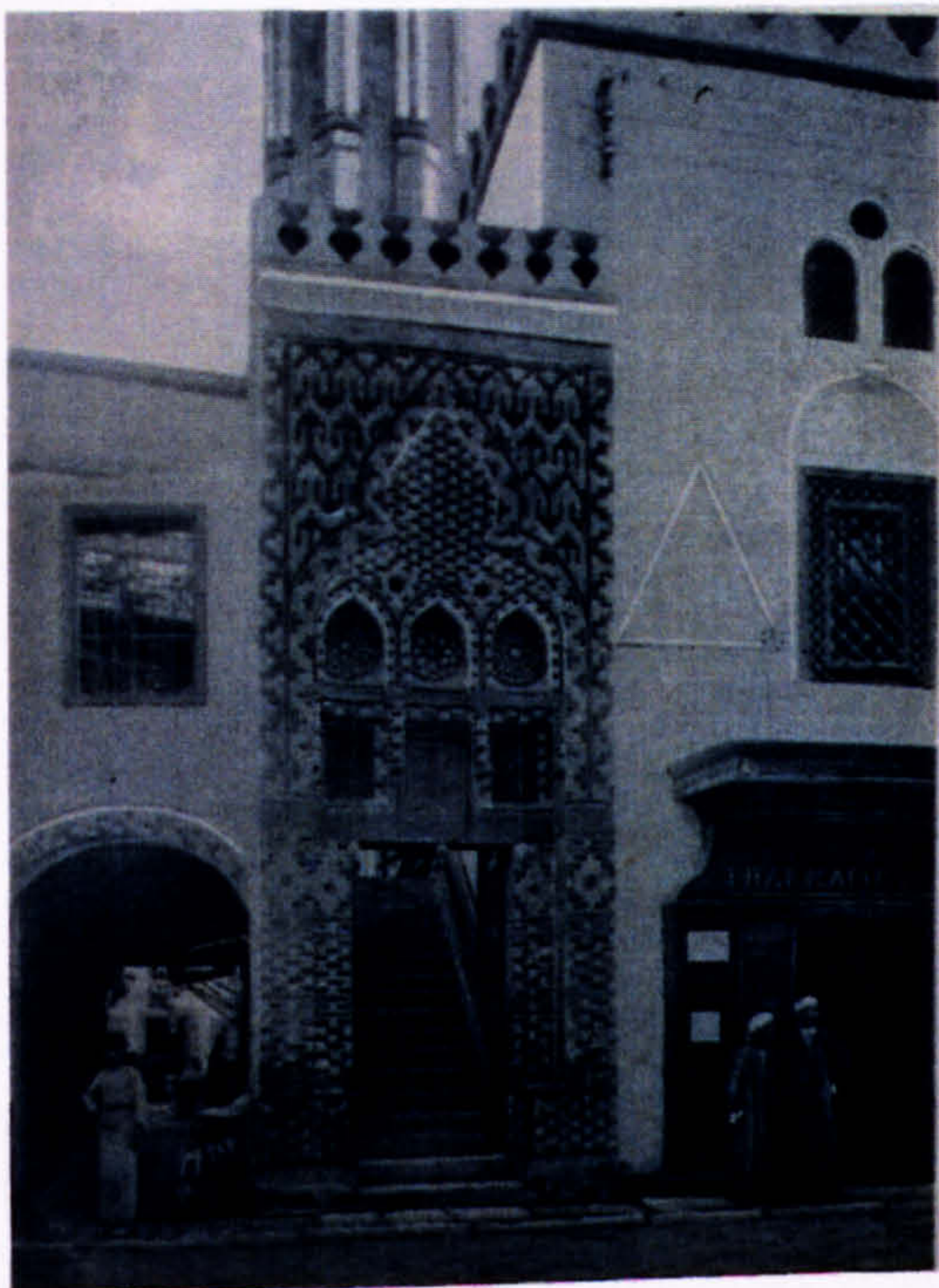
The ablution area occupies the northern corner of the ground floor; it has a small entrance and is joined to the main hall by a flight of steps. In the ablution area there is a small area for prayer (*Mossalyah*) which may be an addition as there is no evidence of its being originally.

Present condition: The ablution area has been recently refurbished, and new sanitation work has been introduced, i.e.;

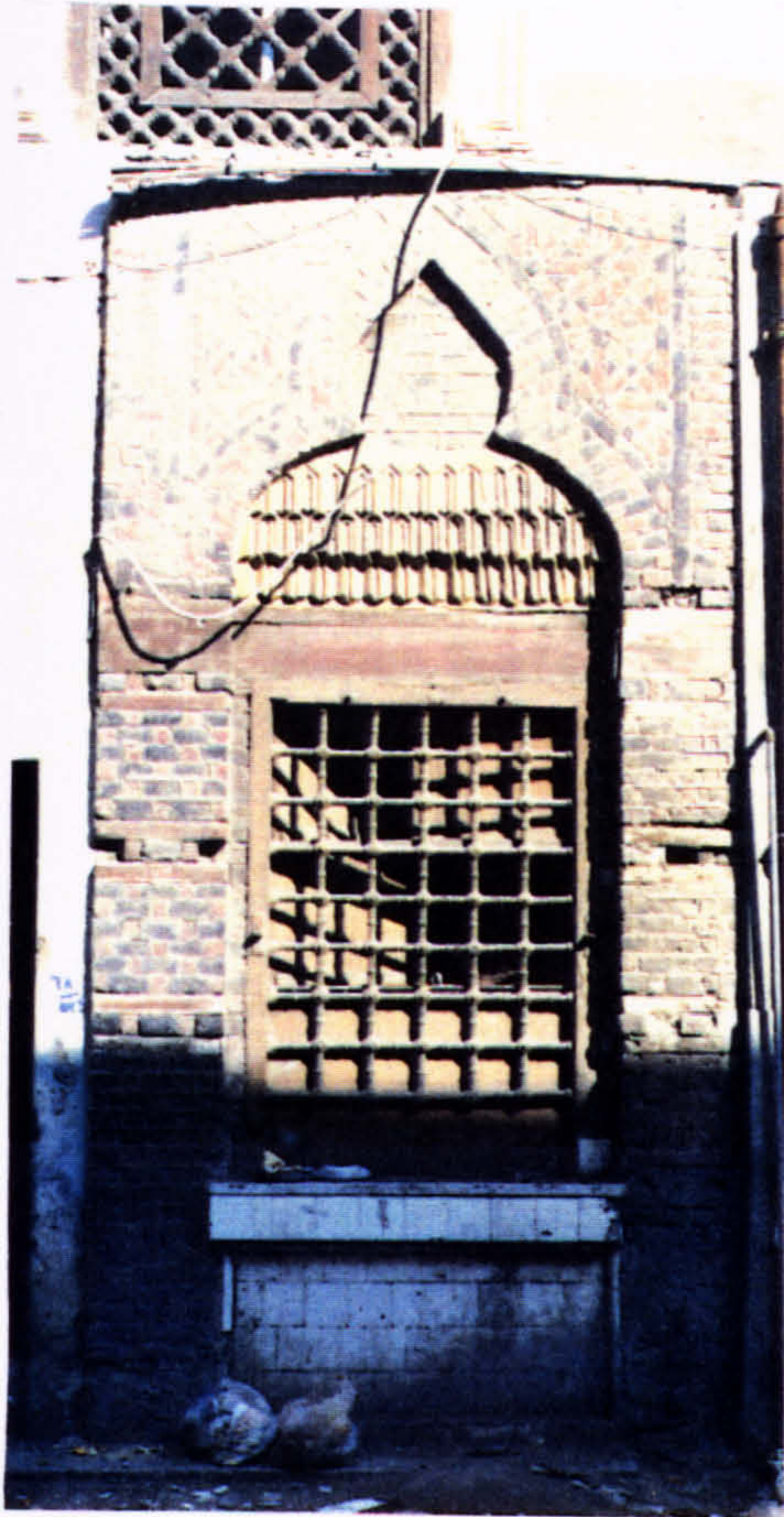
The laying of new tiles, building of new sittings and installing new water-pipes, taps and fittings. Sliding glazed aluminium frames have been fixed to the lower windows of the prayer hall. Electrical fittings such as fans and fluorescent lamps are unsympathetic to the original fabric of the interior. The *Sabil* is not any more in use and as such it has been left to disintegrate until it has reached a very bad state of repair. Paint has been extensively used even on marble columns.



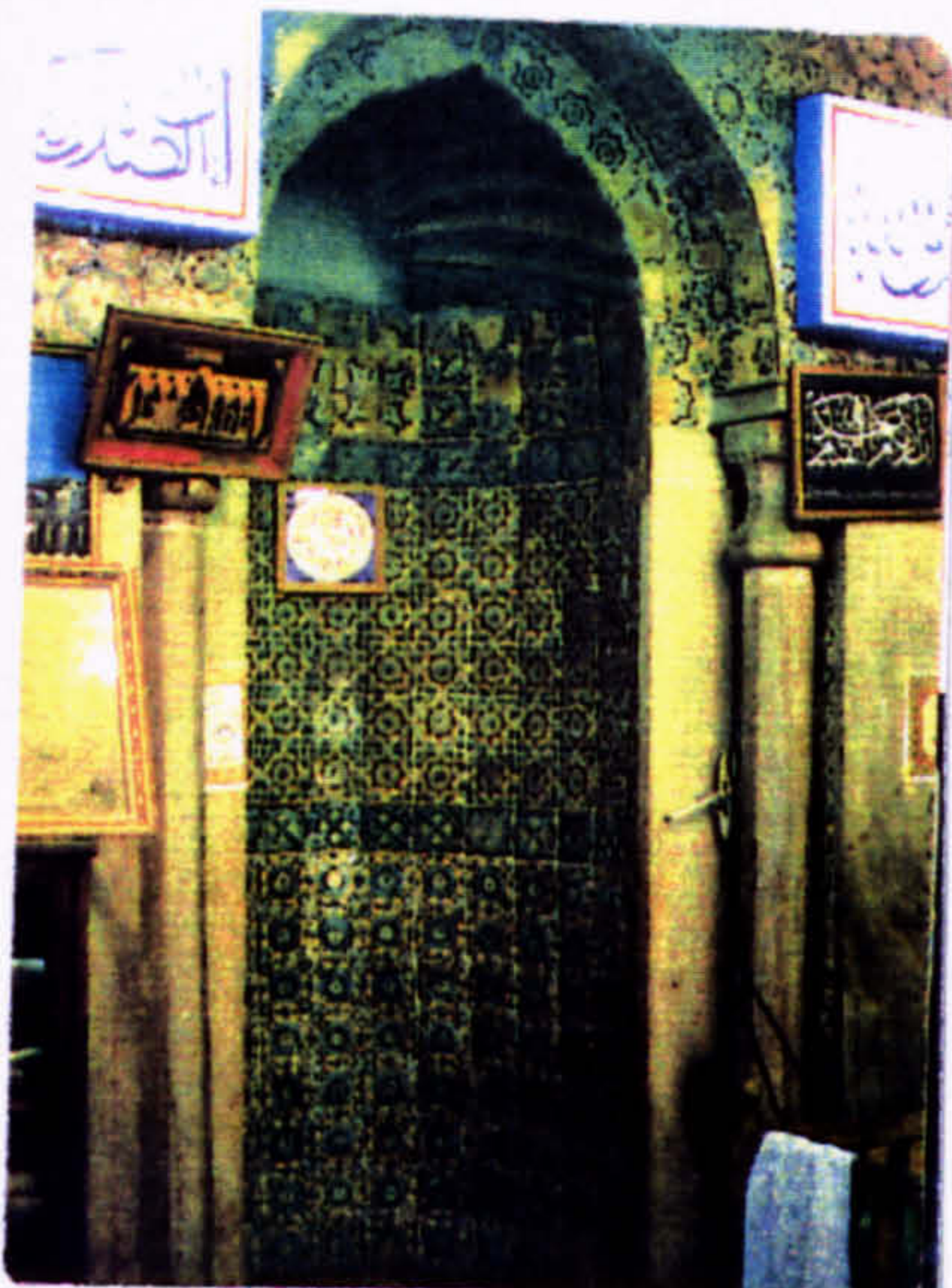
Plan of the first floor of the mosque (Source: Al-Habashi,1993), note its conformity with the traditional pattern of mosque design in the area.



Right, the entrance of the mosque as in 1913 (source: comité de conservation de monuments des l'art Arabs); Left, the exterior of the mosque today.



Right, the Minaret at the entrance and carried by four columns (a unique) feature; Left, the *Sabil*, a rare example of *sabils* in Alexandria



Right, The interior of the mosque; Left, the Prayer-nich (*Mihrab*).

D-2, Abdul-Kader al-Keilany Mosque:

Dating: No concrete dating is available for this mosque but according to stylistic grounds and the history of al-Keilany himself, it can be dated back to the Fatimid period i.e. the 12th century.

Building materials: Built mainly with limestone and a granite re-used column with the help of some timber tie-beams.

Description of the building: The main hall is a simple square covered with four domes supported by a Corinthian column in the middle of the hall. A domed shrine is annexed to the southern wall and the ablution area is attached to the western side of the hall.

The building has only one facade; this is the eastern which overlooks Abdul-Kader al-Keilany street. The facade is very simple with two small windows. Also the shrine faces the street with its small dome.

The *Minbar* is a fine piece of turned and carved wood, but as it shows no sign of aging it was probably added later.

Architectural pattern: The mosque differs than the typical form of mosques in the Turkish Town, and it seems probable it was originally built as a *Makkam* (shrine) and later came to be used as a mosque. It represents the simplest form of religious buildings; a square shelter in which to perform prayer.

Present condition: As a result of its simplicity, it has been able to survive for a long period of time, but still it faces many problems; the decay of plaster, render and the stonework due to factors caused mainly by the marine climate of the area; moisture, dampness, and salts are attacking the rendering and stone work causing them to decay.



The exterior of the mosque: note the dome of the shrine



Right, the interior of the mosque, note the *Minbar* and the Corinthian capital; Left, the decay and deterioration of plaster and render work.



The mosque as seen from above

D-3, Hallabo House:

Dating: There is no documentary evidence available for the dating of the house. On stylistic grounds it can be dated back to the 18th century: the typical Ottoman (Yali) plan, originated in Istanbul on the shores of the Bosphorus in the 17th and 18th centuries.

According to the neighbours this house originally belonged to a merchant "Hallabo". In 1931 the house was converted into a primary school which was closed recently after a fire which led to its partial collapse. Thus, it is now abandoned except for the commercial premises facing the street and is subject to vandalism and decay.

Building materials: The ground floor is built of stone with intervals of brick courses. In the first floor only structural elements are built in stone while the partitioning walls are timber framed with brick infill and covered from both sides by plastered timber-mesh.). The floors and roofs are made of timber beams and boarding on both sides. They are all fully ornamented.

Description of the building: Although the building is partially ruined, it is still possible to have a fairly comprehensive image of the house as it was, depending on the existing parts and descriptive literature of similar types of houses. The building has two storeys;

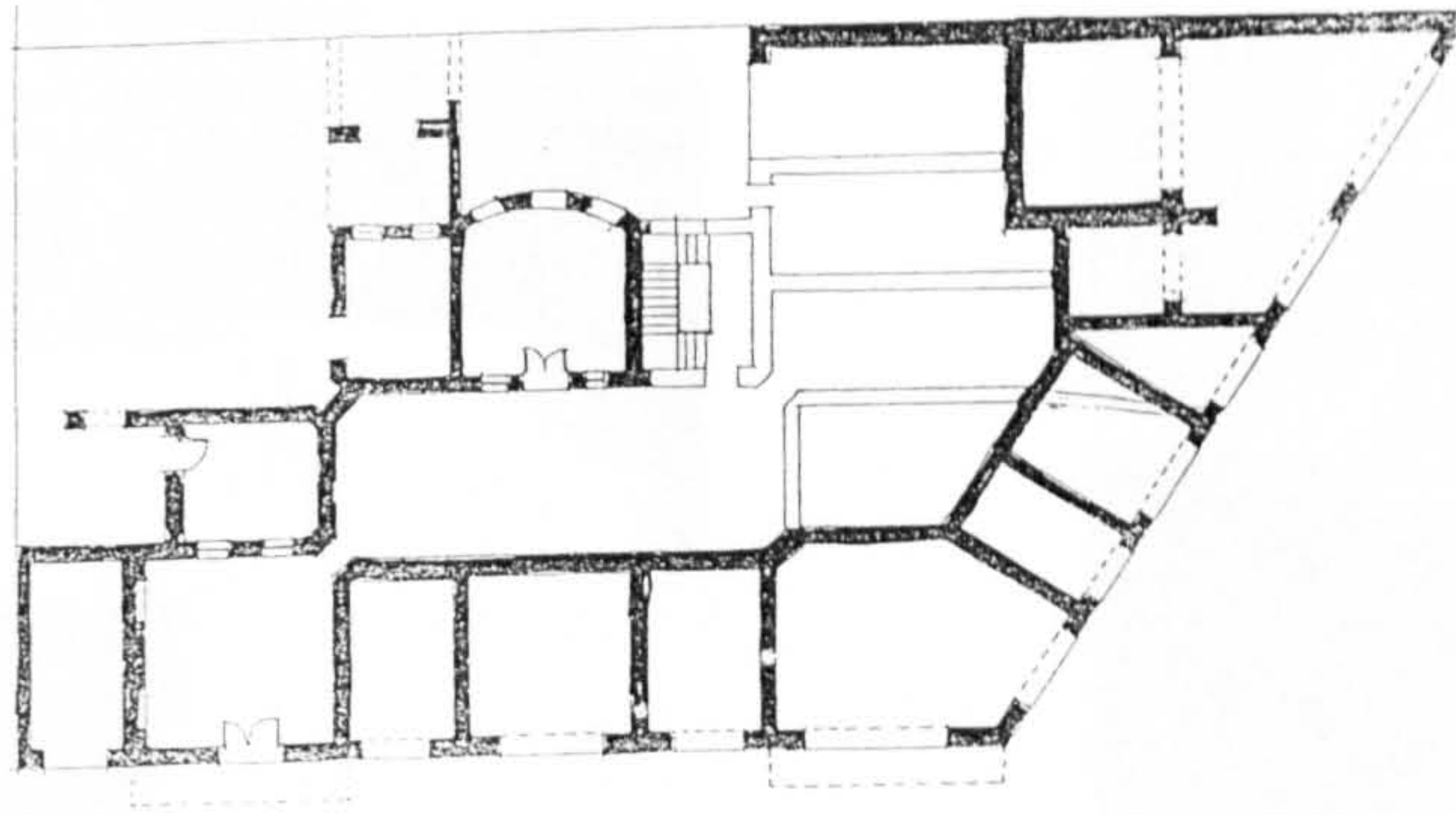
The ground floor: Both western and southern facades are occupied with shops. The entrance opens onto a small vestibule *Magaaz* "A" which reaches the inner enclosure through a small door at its corner. This floor would be occupied originally by the *selamlık* which is linked with the 'Harem' through the staircase "C". The *Harem* must have had a separate entrance with its private staircase. The *selamlık* mainly consists of a long rectangular hall "B" which was beautifully decorated with a marvellous ornamented wooden ceiling. Other rooms also had ornamented ceilings.

The upper floor: This floor is the most interesting, as it is where the family had actually lived. The dominant features are the ornamented timber ceilings, particularly that of the main hall, which is an oval-shaped domed ceiling constructed in timber which had been plastered and beautifully painted.

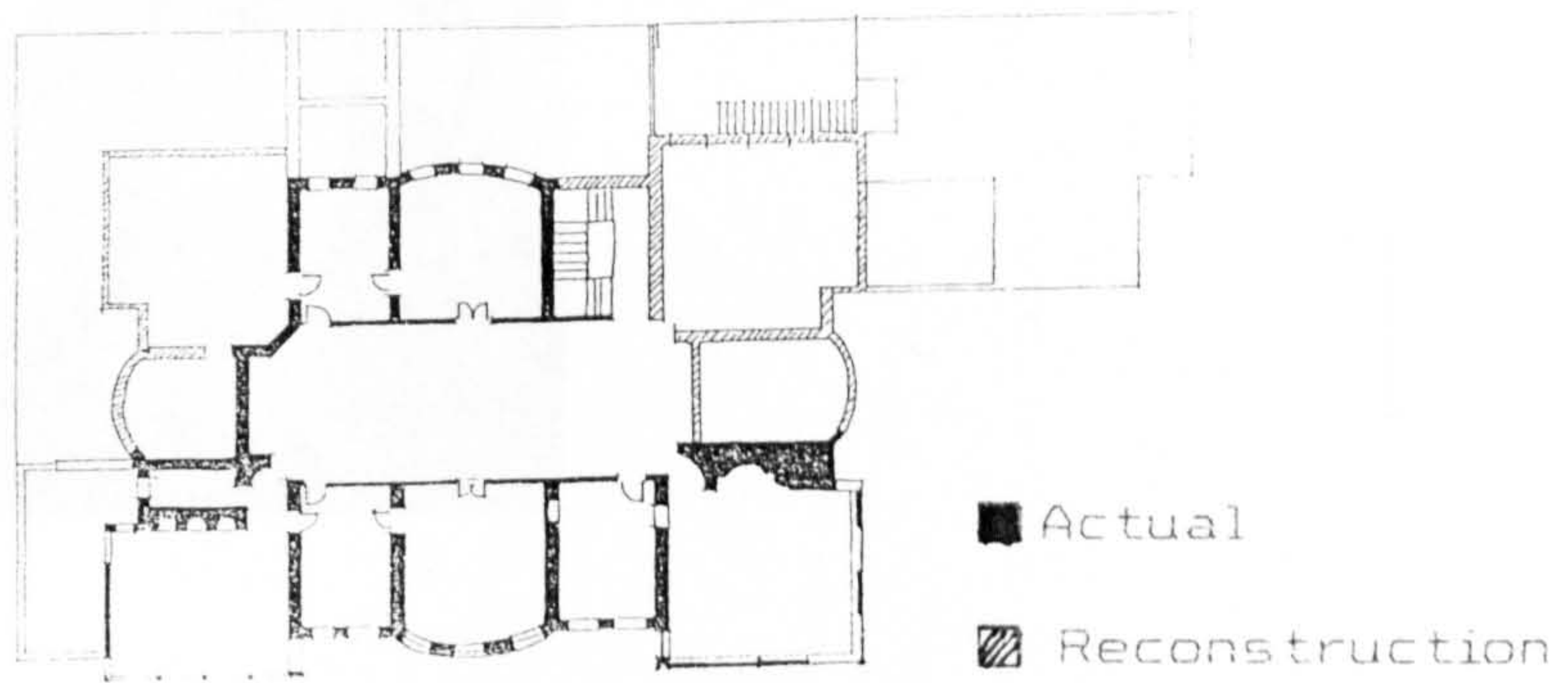
Another curious feature of this floor is that each corner room has its painted niche. Doors, each with its carved ornaments and classic framings, add to the richness of the interior.

Architectural patterns: As mentioned above the building presents an example of the Turkish "Yali" type of house which originated in Istanbul.

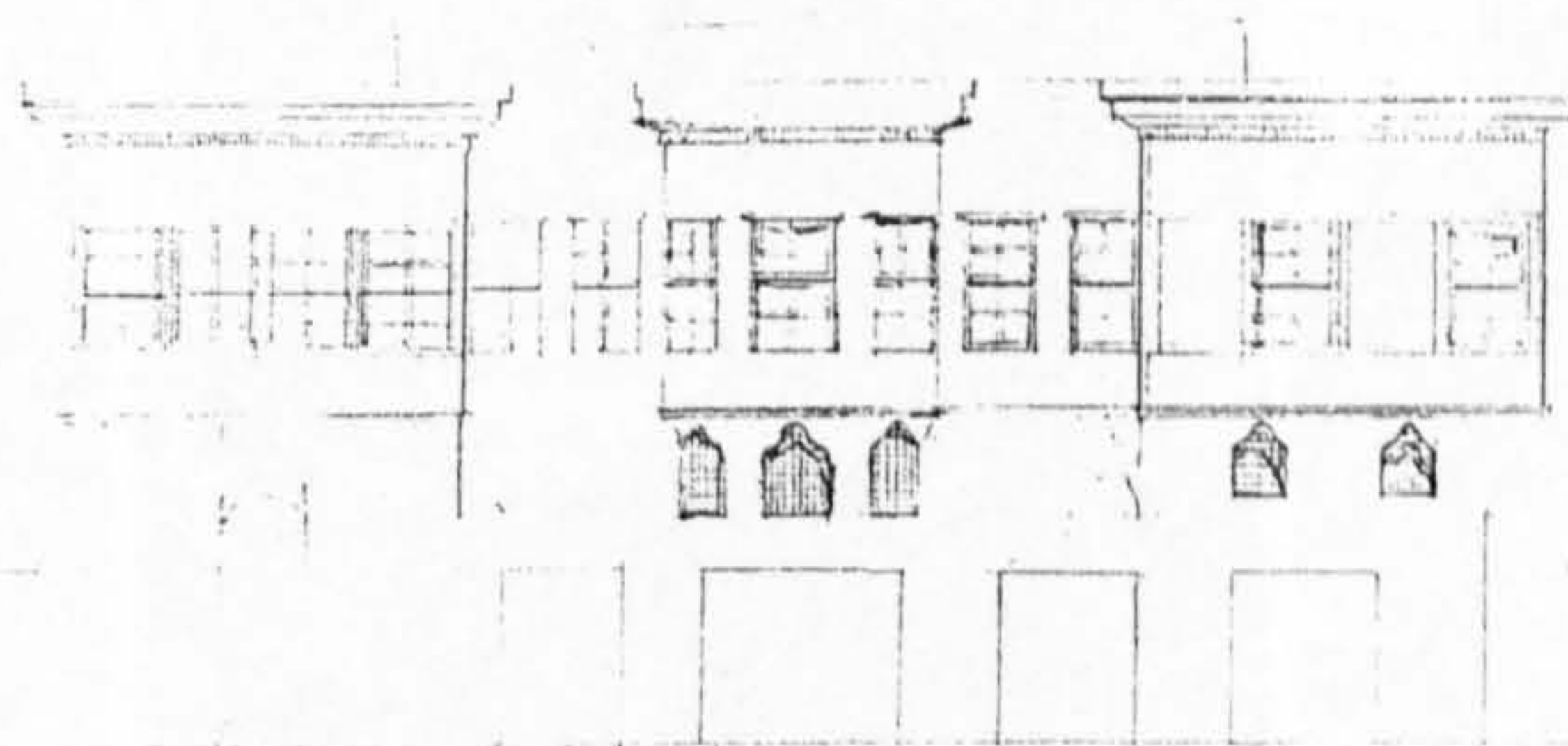
Present condition: The ownership of the building is an unsettled matter, due to the dispute between the Ministry of Education and the heirs of the first owner. As such the building is suffering from severe lack of care which is eventually leading to a real threat of demolition. As mentioned above, a considerable part of the building was damaged in a fire and this has largely contributed to its present dilapidating condition.



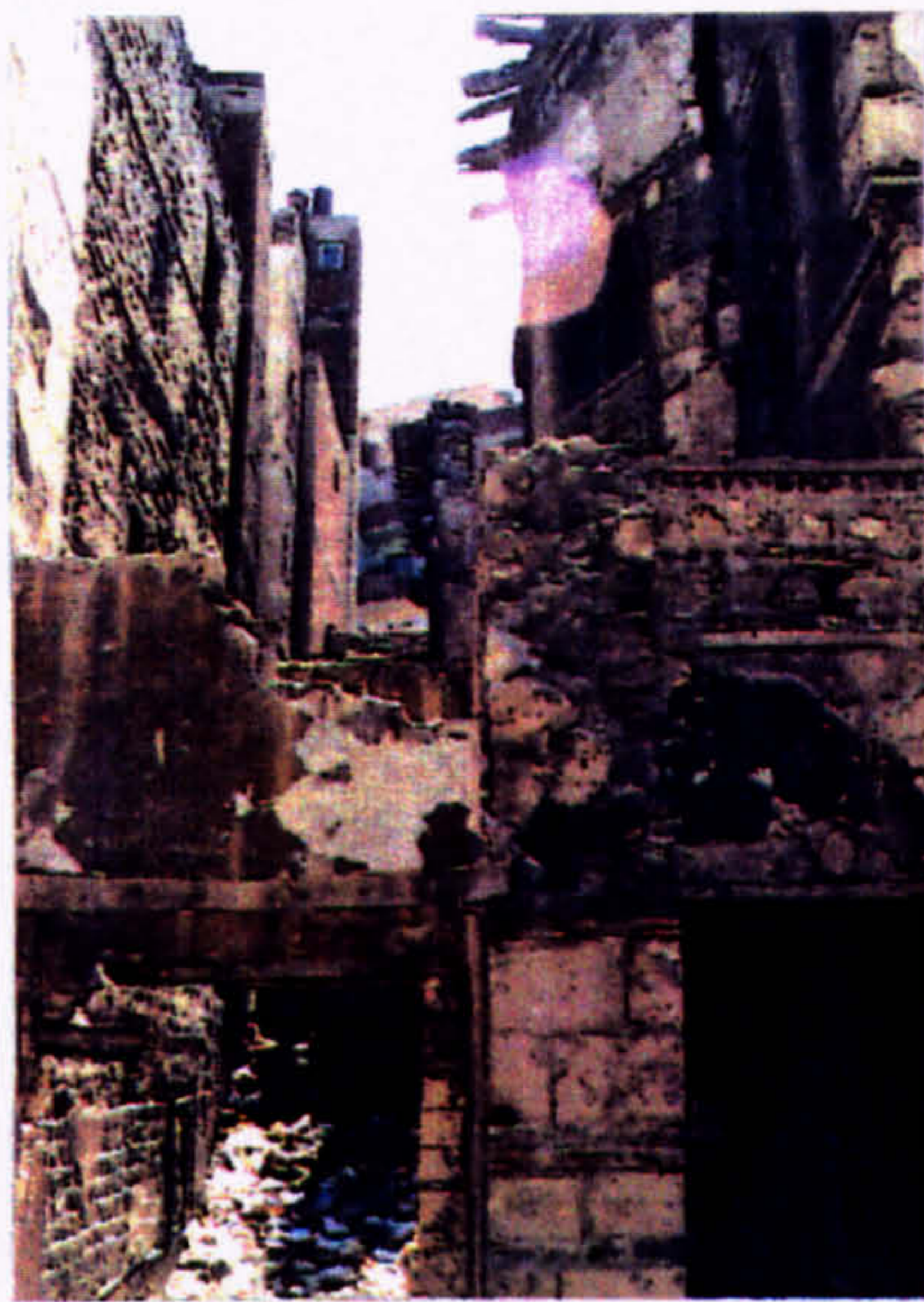
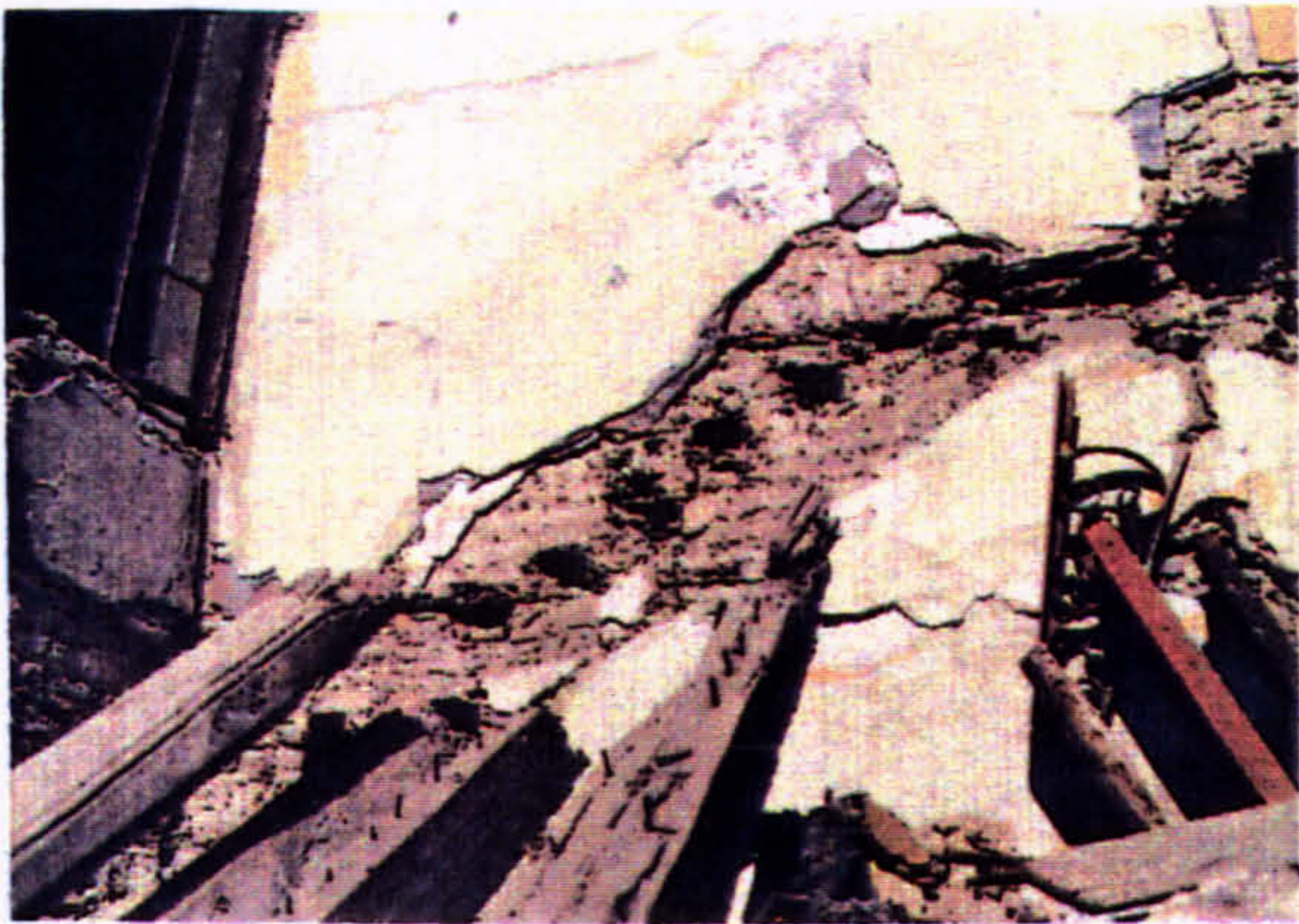
Plan of the Ground floor



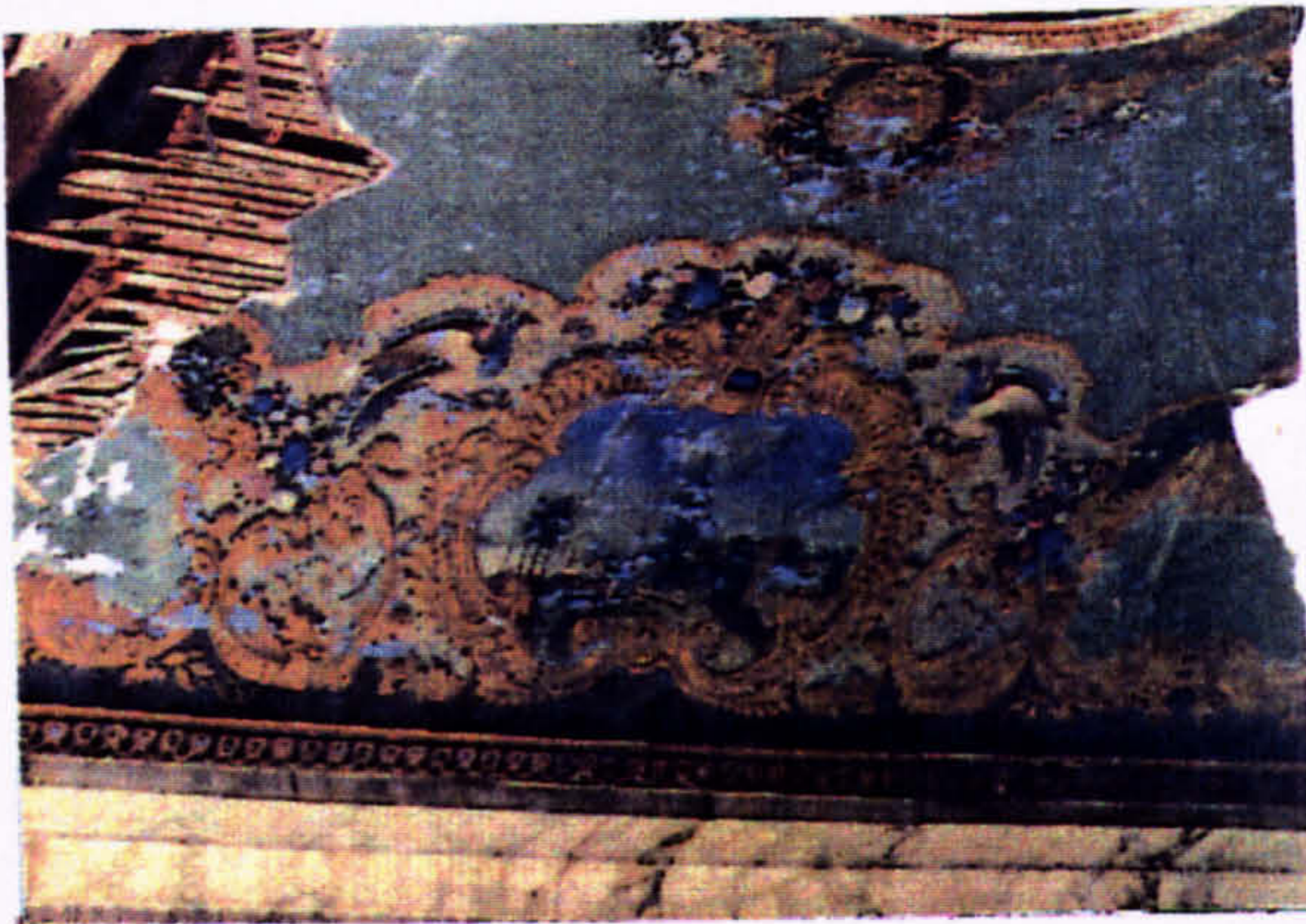
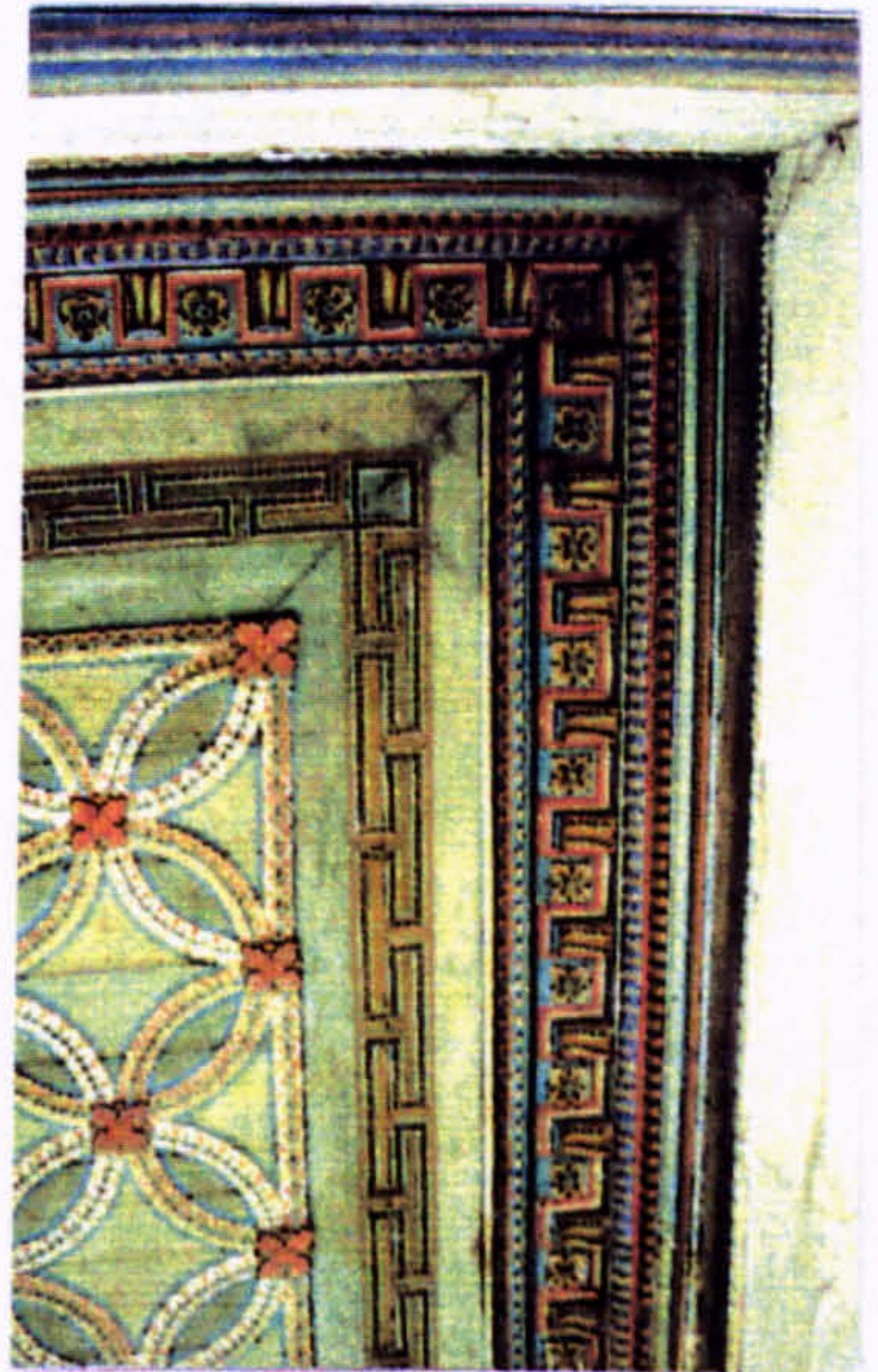
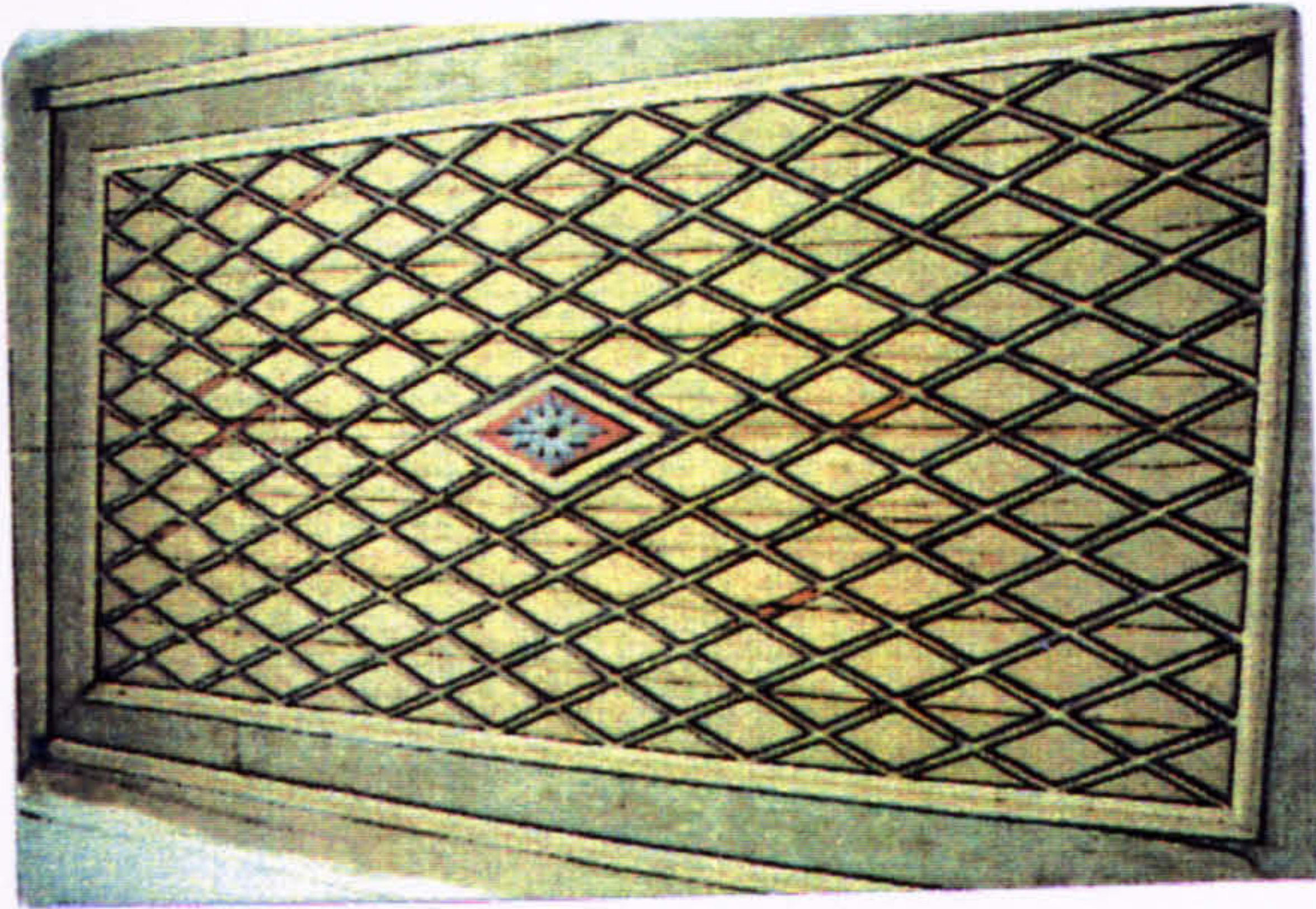
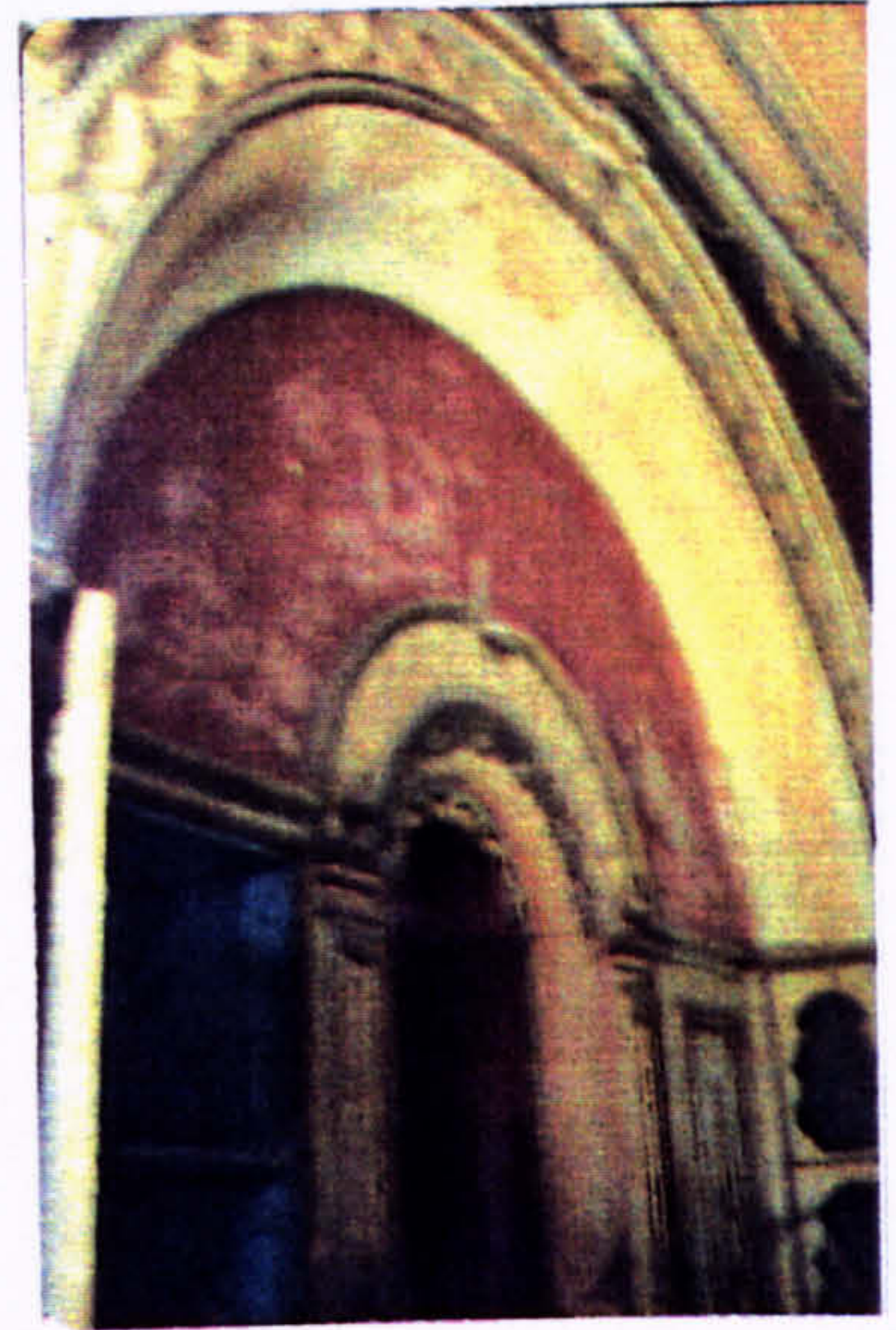
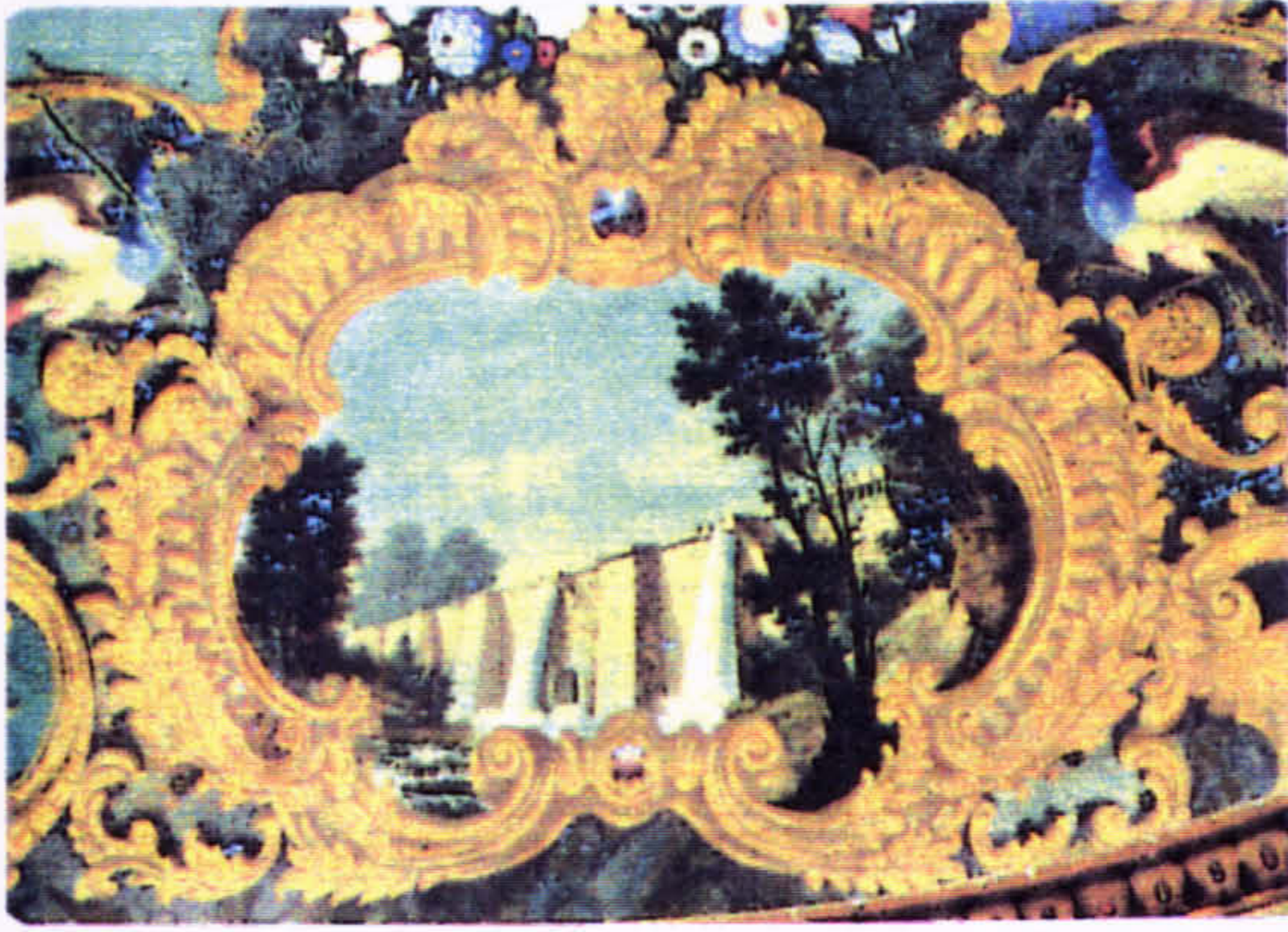
Plan of the first floor



Western facade



The dilapidating condition of the building



The interior of the building

D-4, Wekalat al-Bitash

Dating: Constructed in 1840 by a well known family in the district named al-Bitash.

Building Materials: Walls are constructed of limestone and brick in an alternating order; i.e. a brick course every two stone courses, which are plastered internally and rendered with rusticated stucco externally. The ceilings are made of steel I-beams with brick vaults in between.

Description of the building: The building has two storeys:

The ground floor: Occupied by shops and store-rooms, the plan is symmetrical around two axes, forming four symmetrical quarters. In each quarter there is a staircase which leads to the first floor. The internal courtyard is reached by four symmetrical entrances from each side of the building.

The first floor: Occupied by residential dwellings. Each of the four quarters is reached by a staircase and was originally divided into two flats and which are now divided into more units; i.e. a room is used as a separate dwelling unit.

Architectural patterns: This wekalah has some unique features which differs notably from the other wekalas in the area:

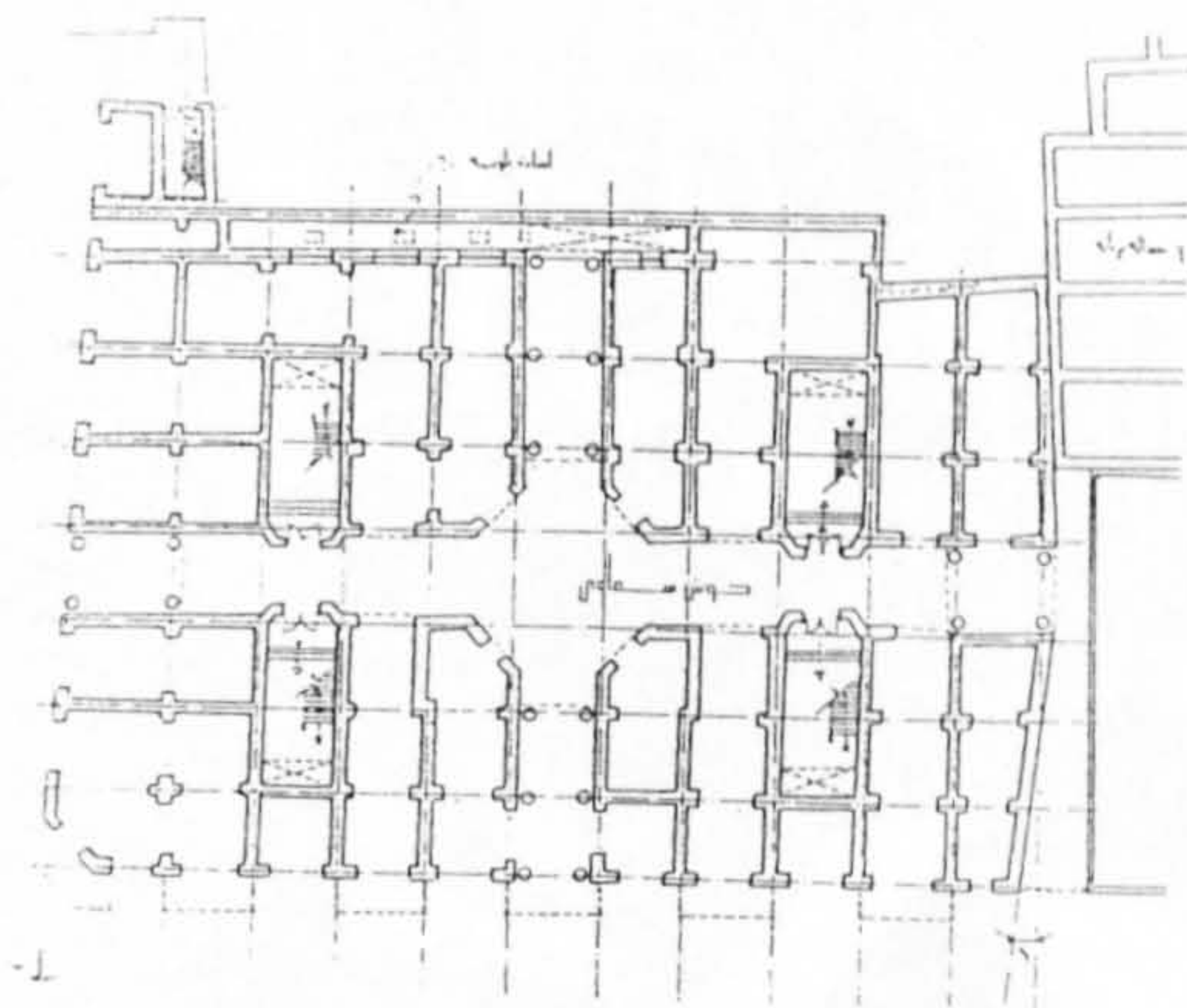
- It has four entrances.
- There are no doors for these entrances.
- The existence of principal external openings and balconies rather than the traditional introvert principle.
- Also the construction method shows the developing European influence by using the Jack-arch. The walls on the other hand have been built with limestone and brick; i.e. a brick course every two stone courses.
- A standard span of 4.00m. can be noted in the whole building.
- The treatment of the facades on the other hand confirms the European influence previously mentioned.
- The straightforward similarity of the plan is another criterion which was not as clearly evident in other wekalas.

The present condition: Although the function of the building has not been very much changed, the physical fabric of the building has obviously been altered:

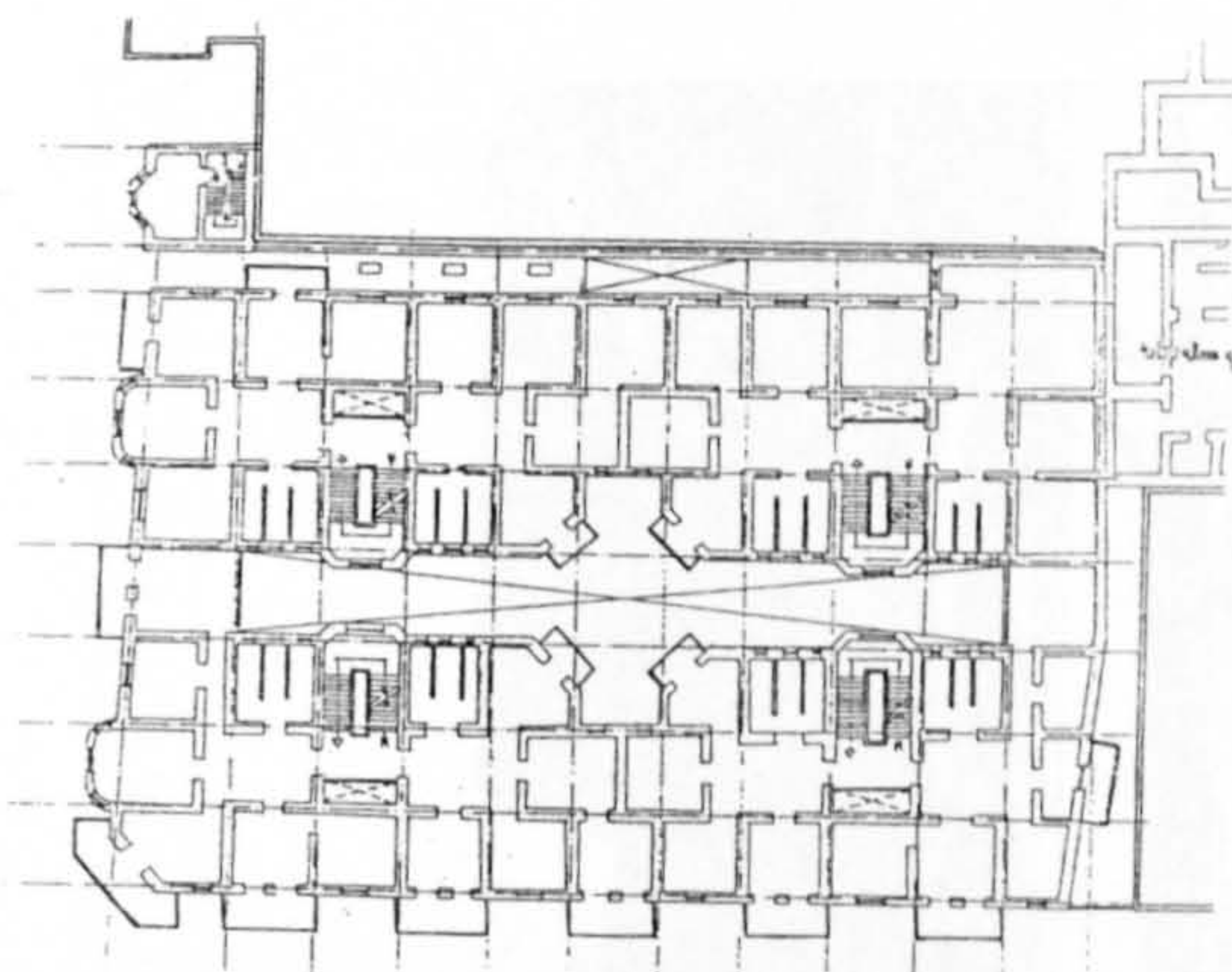
Shop-fronts: A variety of materials, colours and styles have been introduced for the 'decoration' of these shops, each of which has no respect either to the existing fabric of the building or to other shops.

Alteration of entrances: Entrances were used to increase the storing area of some shops by closing them totally or partially.

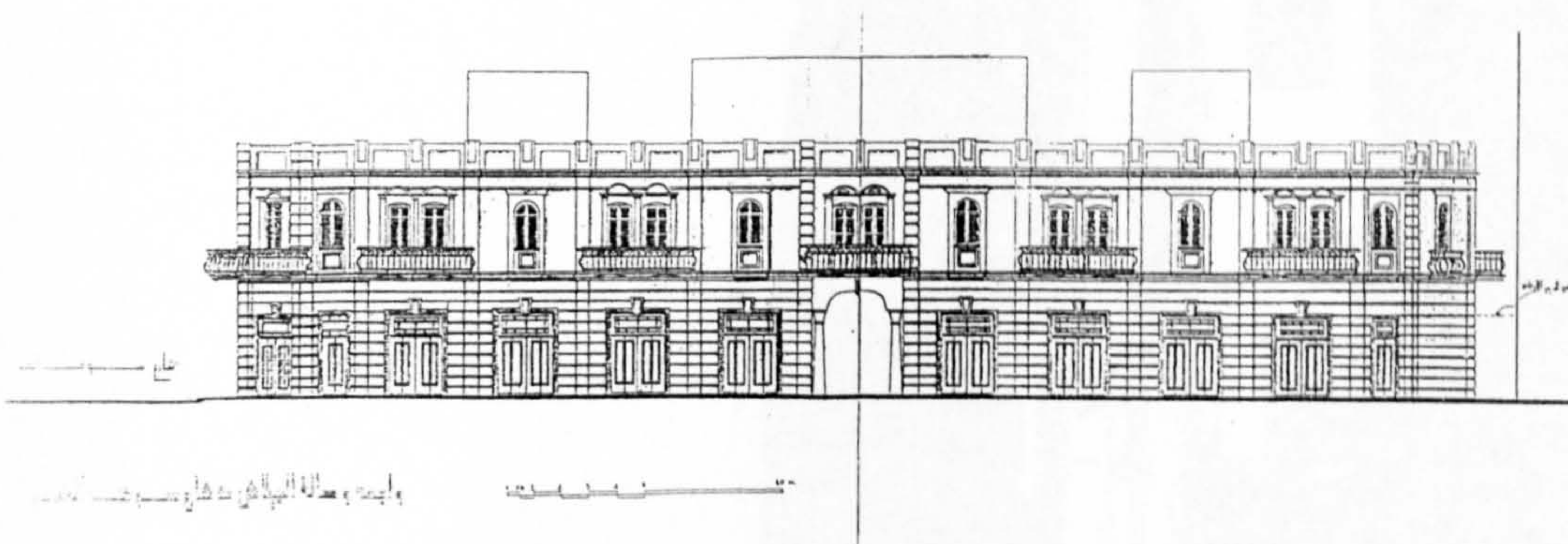
Alterations of accommodations: As a result of the acute housing problem mentioned above, the dwelling units (flats) were re-arranged to accommodate a larger number of families; i.e. a room or two for each family. These adaptations however, involved the addition of partitions and sanitation works.



Ground floor plan¹



First floor plan



Southern facade

¹ Credit to be given to Mr. AlHabashi for these drawings



Above: the street facade
Right: the courtyard



D-5, Wekalat Terbana

Dating: Constructed in 1686 by Ibrahim Terbana; a Moroccan merchant.

Building Materials: It is mainly built of plastered limestone with timber tie-beams. Granite columns were also used in the ground level. The ceilings of the second and third floors are made of timber beams and boardings.

Description of the building: The building has three storeys:

The ground floor: Intersected and barrel vaulted shops, stores and workshops, which face on to an inner courtyard with six marble columns supporting pointed arches

The first and the second floors are used as dwellings units: rooms and flats. These dwellings can be reached from an arcaded gallery set around a rectangular courtyard and this gallery is accessible via the courtyard by the means of two staircases.

Architectural patterns: A traditional form of the wekalah:

-One main entrance which is controlled by pair of timber doors leading to the courtyard.

-The inner courtyard is a main feature of the plan as a typical introverted building.

-The plain rendered facades are a typical form of Turkish secular buildings.

-The structural system is the traditional system of the period; the walls are of limestone with timber tie-beams and the ceiling of the ground floor is made up of vaults while the upper ceilings are of timber.

The Present condition: This building is in a very bad condition compared with the previous:

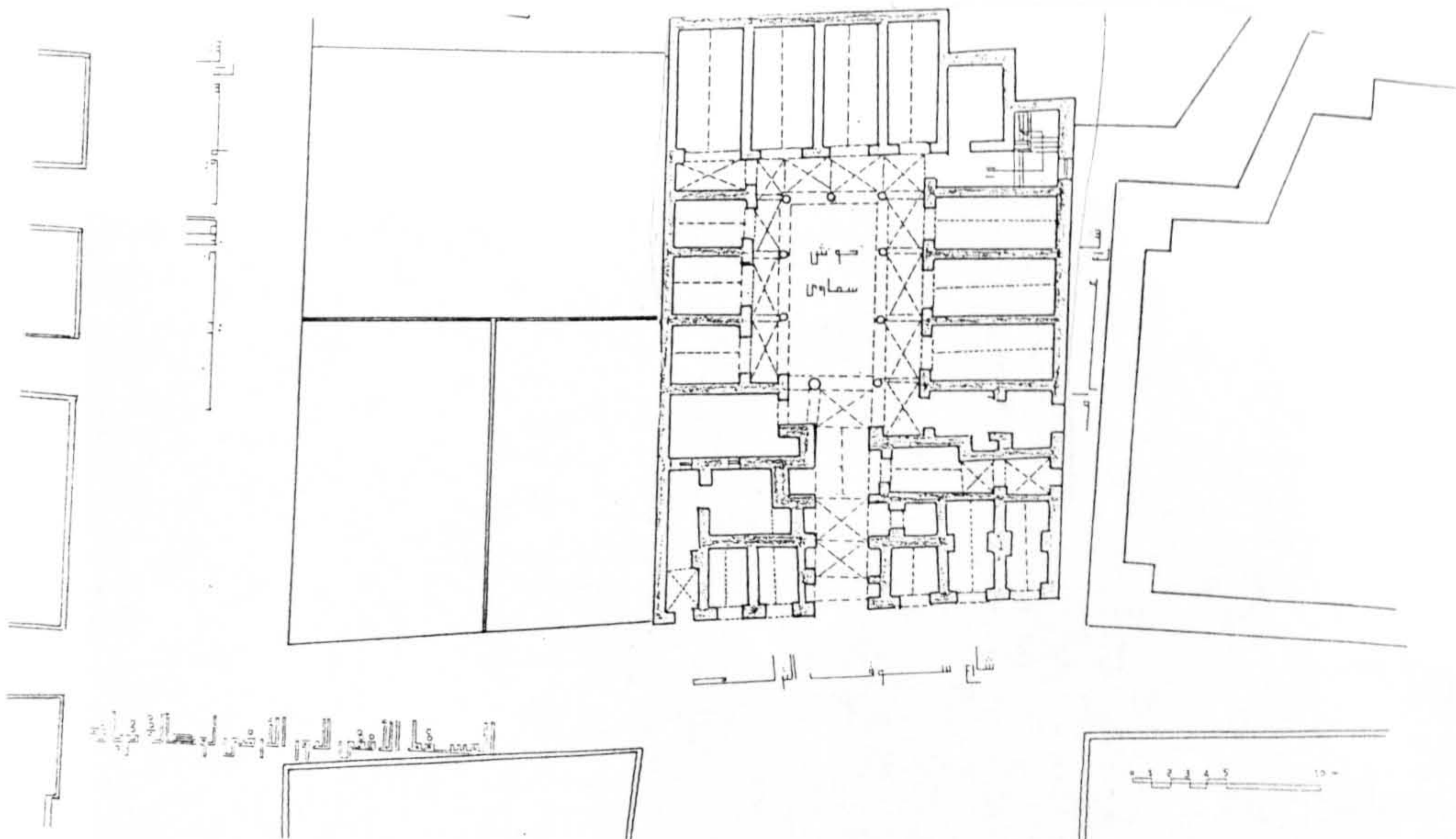
-The courtyard is altered by the extensions made to increase the area of the workshops.
)

-New structures of reinforced concrete and brick were added to increase the residential area.)

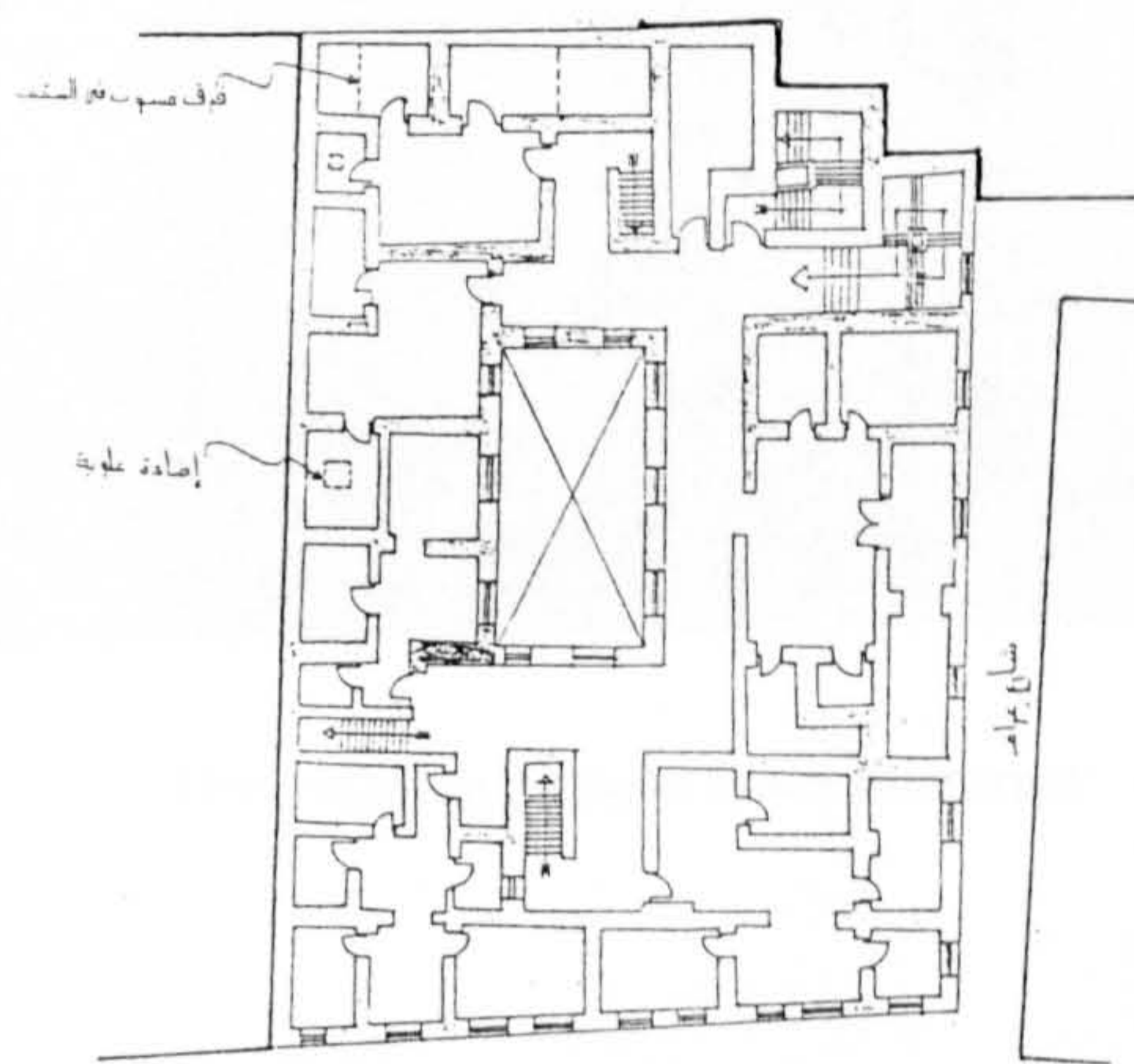
-All the timber work such as doors and windows is in a very poor condition mainly due to the lack of maintenance.

-Poor damp proofing and inadequate sanitation systems lead to serious damp penetration in the stone work.

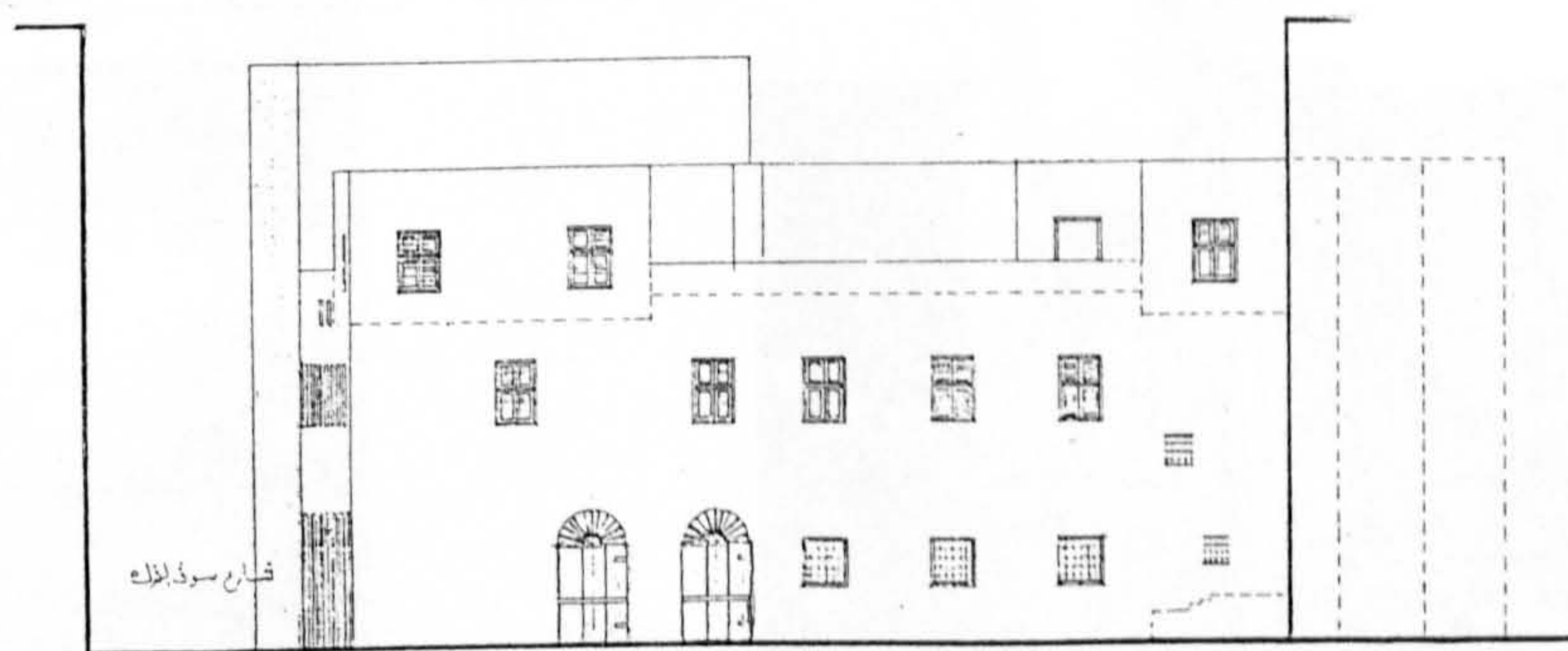
-The main entrance door has been partially blocked with a small kiosk and the door itself is not used any more.



Ground floor plan¹



First floor plan



The entrance facade

¹ Credit for these drawings to Mr. AlHabashi



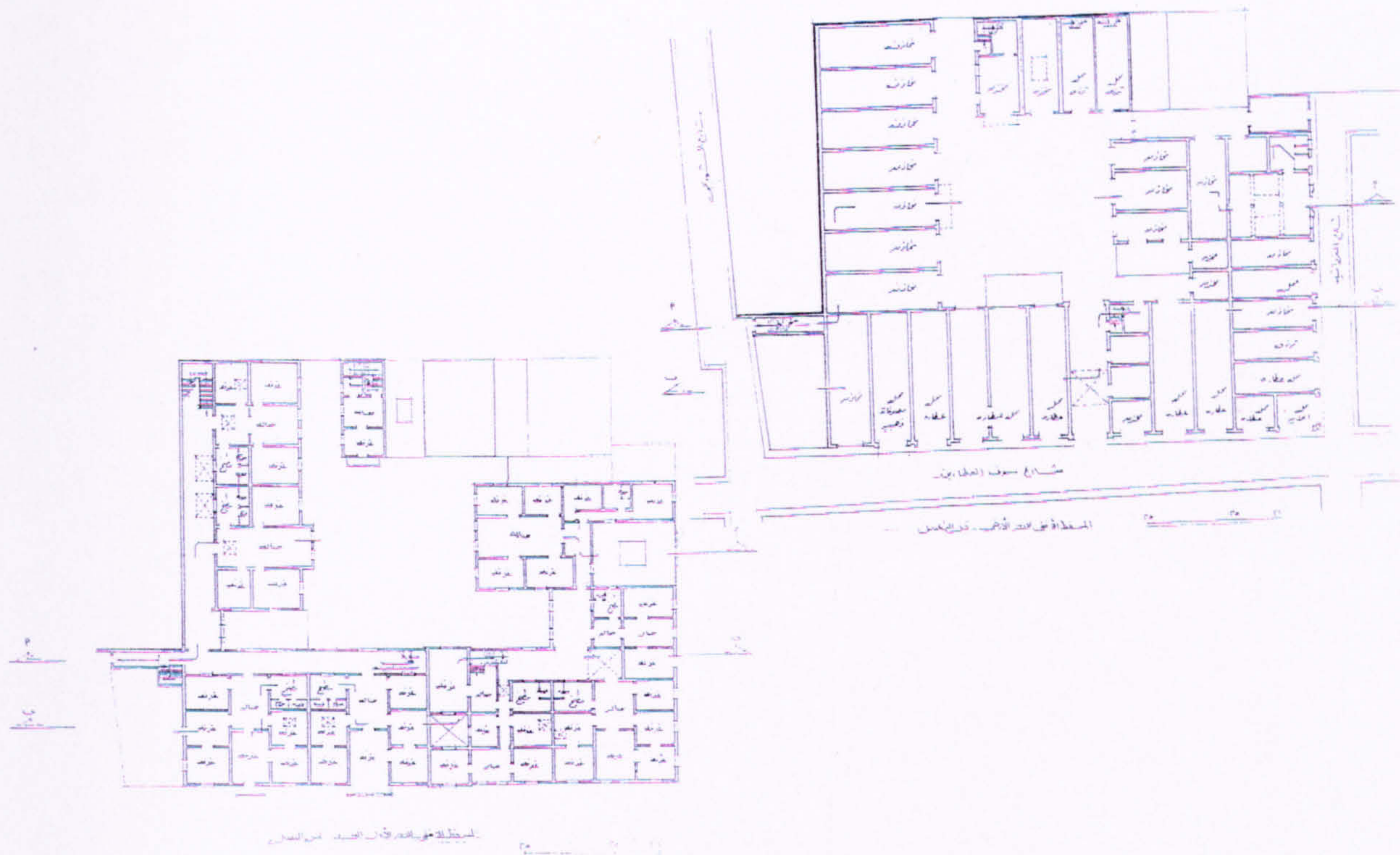
The building as seen from the street



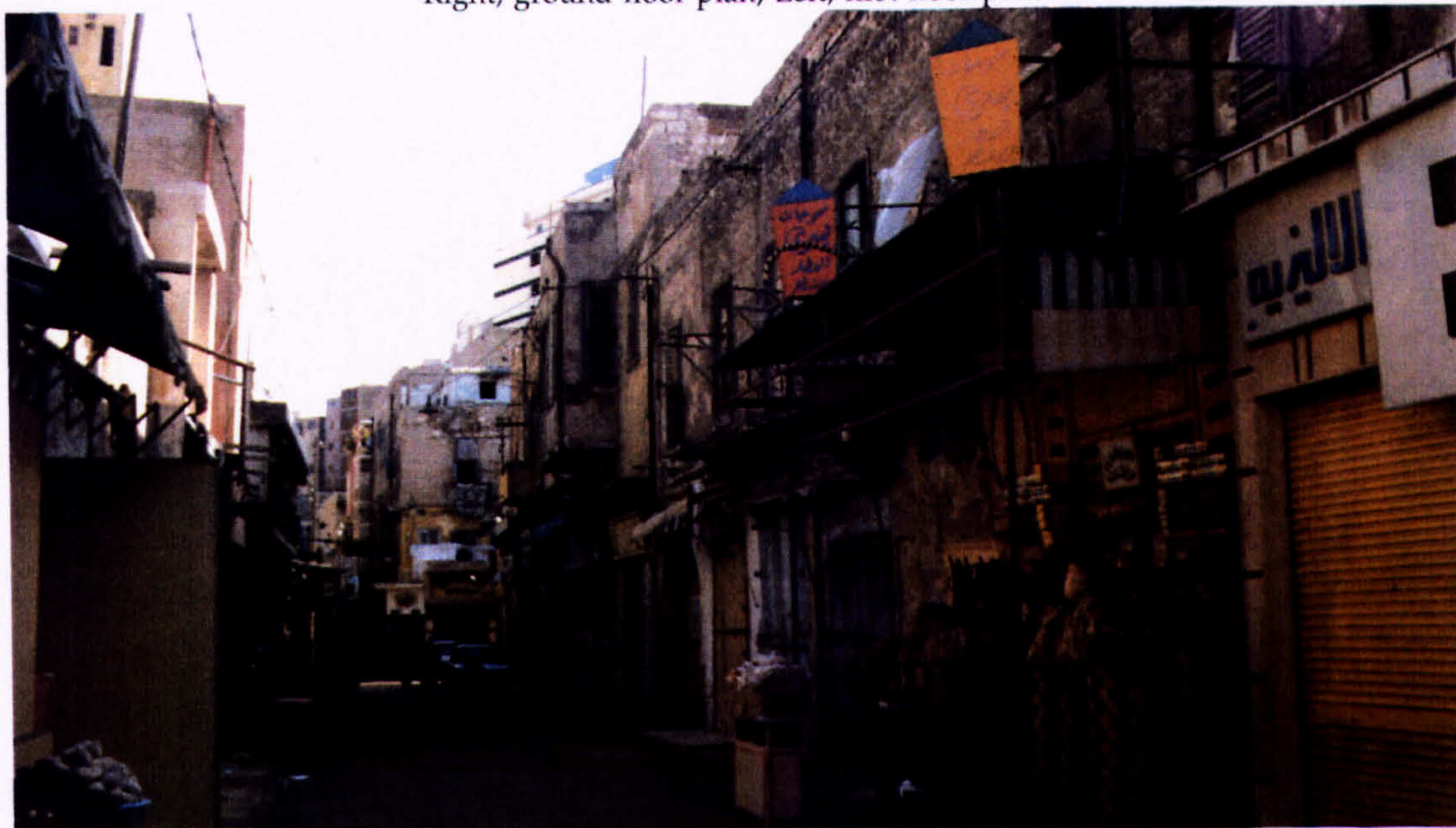
Right, signs of deterioration in the physical fabric; left, new structures of brick and concrete

Further examples¹:

D-6, Wekalet Fatma Khatoun (early 19C): the ground floor is used mainly for commercial activities, mainly herbs and Jewellery and the upper floors as residential units. The building is built mainly of limestone and timber.



Right, ground floor plan; Left, first floor plan



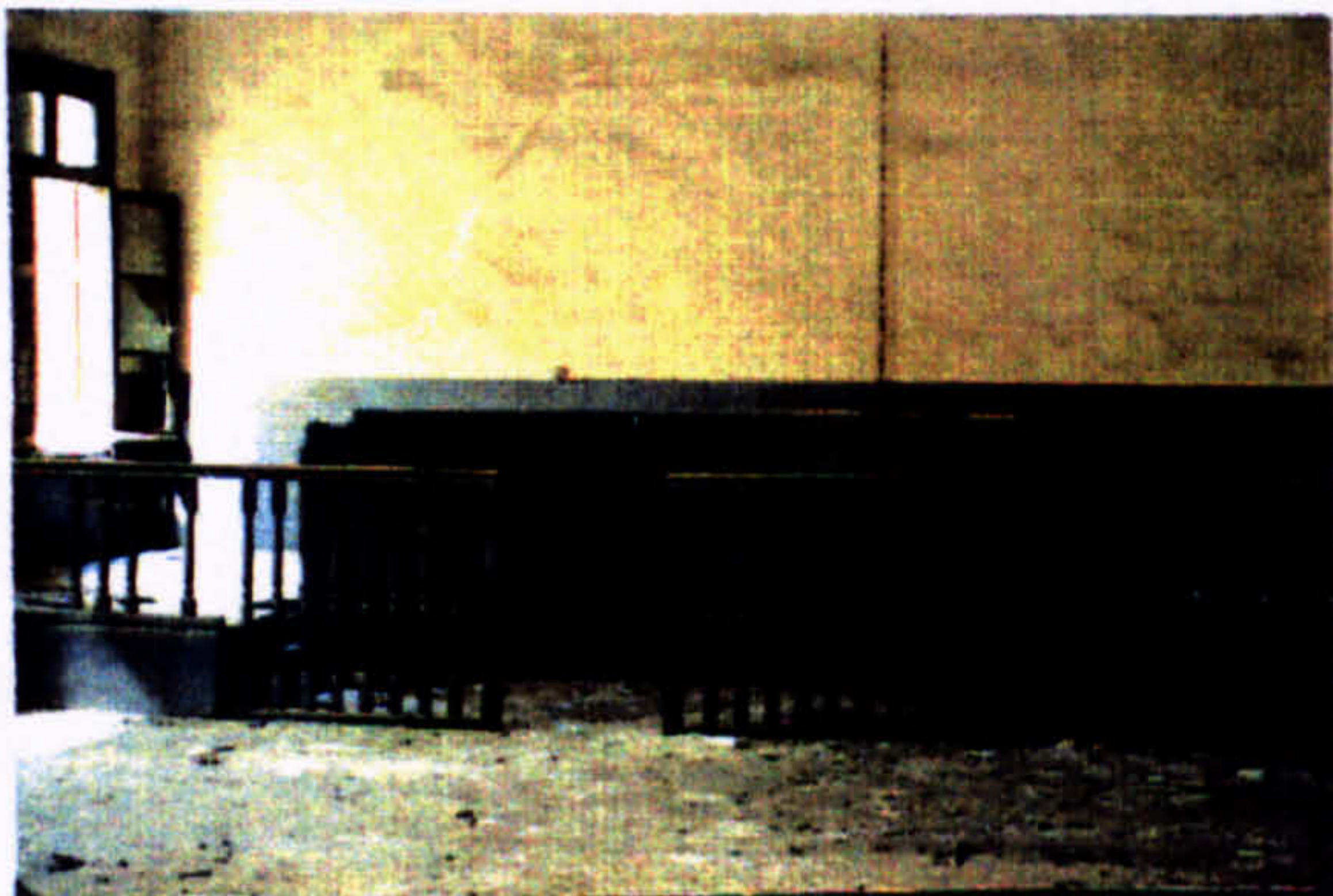
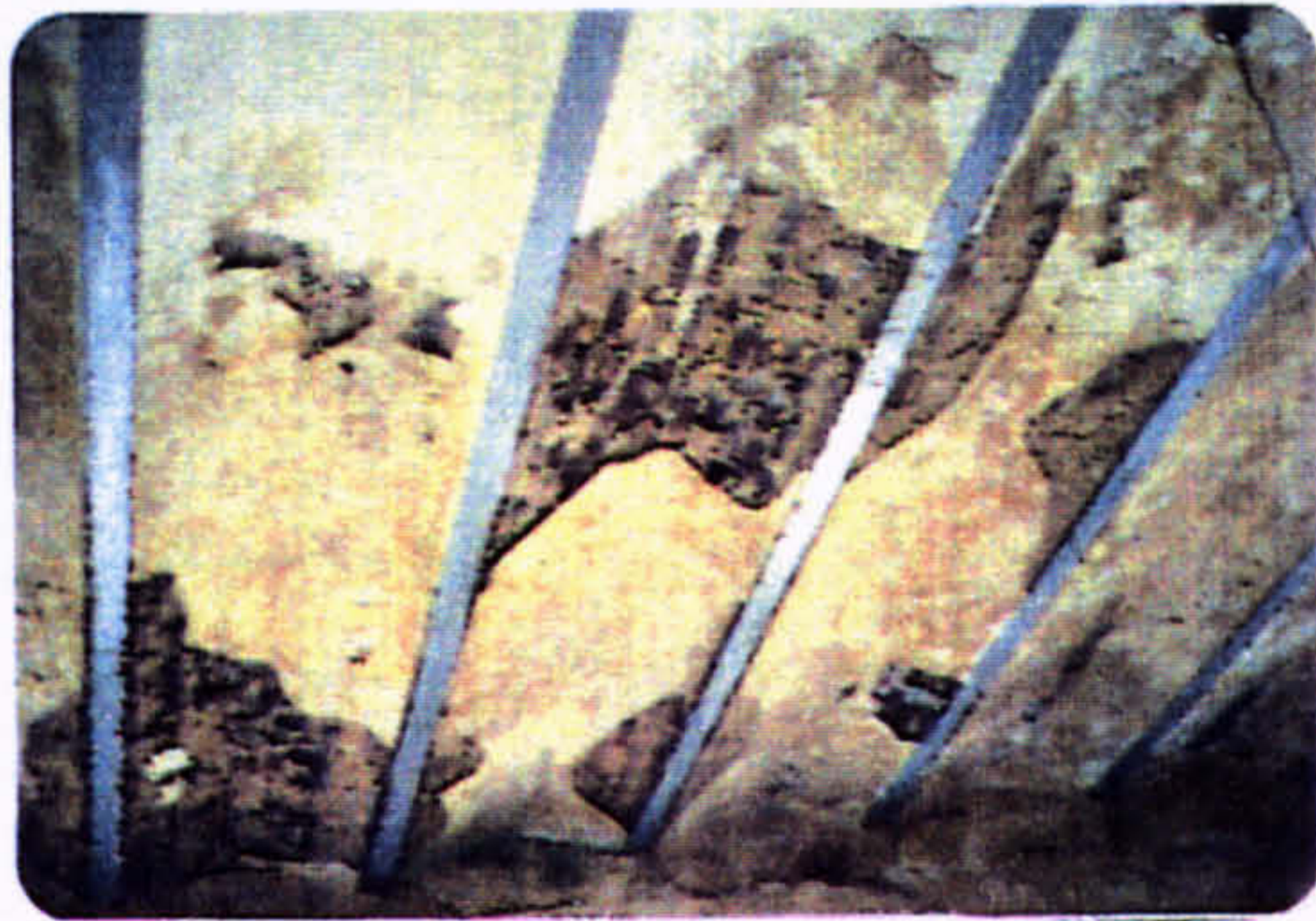
The Wekalah from the street (Souk AlAttarin St.)

1 The following examples are basically illustrated in pictures and few drawings with little description.

D-7, Beyt al-Fakharany: no exact date is known, but it can be approximately dated back to the second half of the 19C.; originally it was a one family house: the ground floor as shops, the first floor for guest and receptions, the second floor for men (*Salamlik*) and the third floor for women (*Haramlik*). Now it is used as a blocks of flats.



D-8, Mahkamit al-Askandaryiah (Alexandria court house), dates back to early 19C. used to be the Court house for Alexandria till it was replaced by the new one on AlManshia square; it is not in use anymore.



GENERAL APPENDICES

Appendix G-1: EXAMPLES OF INTERVIEWS CONDUCTED IN THE FIELD WORK (extracts)

Dr.M.Zahran: chairman, Alexandria 2005 planning commission

The conservation of the historical heritage in al-Gommrok:

The district is one of the biggest in Alexandria and the most densely populated: there is a plan to reduce this density by not allowing for new building permissions in vacant sites or to replace collapsed buildings in order to establish green areas or social services. The absence of services speeds up its deterioration.

Legislations: there is a new housing law (under discussion) to oblige both owners and tenants to maintain their units by increasing the rental value annually and using 50% for maintenance work. This amount will be allocated for services, infra structure, plastering, painting, cleaning,...etc.

Establishing tourist routs for the heritage of the district

The criteria of heritage

A commission will be established to survey all valuable buildings in Alexandria, the criteria will be defined with the corporation of Alexandria 2005, and valuable does not necessary mean old but it might be one year old and with a significant role in the society, i.e. witnessed an important event or a revolution,..etc. and it is not only the artistic value.

Also we will corporate with the E.A.O. to try to apply the law of antiquities on these buildings, and there is also a recommendation to establish a "Fine arts commission"

Un-employment:

This problem has a national dimension: the economic reforms and the limitations of imports..etc. And we hope that the situation will improve with the negotiation with the international bank and the new economic reforms.

Rehabilitation:

This trend has started in Cairo and we hope to catch with them, Alexandria is well behind Cairo in cultural activities. Rehabilitation requires the corporation of many authorities: al-Awqaf

Mr.A.Saleh: Secretary General, al-Gommrok district authority.

The District:

The district constitutes most of the antiquities and tourist attractions of Alexandria: Qait-bey fort, the port, Midan al-masajid, Ras al-Tin palace, the commercial area and its historical character.

It is also famous of some small industries and workshops such as carpentry, blacksmith, pastrami,..etc.

Heavy transport companies are also there to serve the port.

The largest number of mosques: 110 mosque, some of them are historic.

Public markets such as: al-Midan and the fish market.

The biggest number of sea clubs: al-Seed, al-Yacht,..

The famous eastern harbour

A big ship industry: run by famous families in the area.

A large number of schools: 53 primary, 19 preparatory, 4 secondary and 4 technical.

Four main hospitals: Ras al-Tin, Nazely, The Naval hospital and al-Nokrashy clinic.

The district is considered an important link to the western districts and of course it is an important axis for transportation in the port.

Housing

About 75% of the housing stock is very old and is finished.

The high population density which resulted from the limited space. There is no vacant lands for 'economic' housing and as a result, people who need housing are housed in other districts such as al-Maks.

Repair is not practical, people cannot afford the costs.

Mr.H.Abbas: Member of Parliament, Al-Gommrok constituency:

This district is a repository of values, traditions, history and problems: with a record of being the most densely populated district in Alexandria, problems such as housing and infrastructure are inevitable.

The approach to these problems is twofold: while the role of the government is inevitable, there is a basic role for the public, the government cannot and will not take care of everything, it can hardly take care of major policy issues. The role of the public has therefore to have more power, the merchants in this area have set a good example in deciding the future of the area in the case of AlNasr St.

AlNasr Street project: a controversial issue, modernisation and development are undoubtedly essential objectives, but is this development? We are certainly not against development as a principle but it has to be of benefit to the people. Such project will have disasters effects on the community. In effect, the whole community will end: this well established communities of merchants and guilds will dissolve and there will be an enormous loss of jobs, and why? to have an extra street? or to solve a traffic problem? If this is the way to tackle every traffic problem, then the whole city will end up as a wide street, there must be other alternatives to such project which was set out in the s.

Al-Hag Moustafa: Local merchant

Memories:

Your generation is unlucky: we enjoyed every second in our lives, we knew how to enjoy life: you don't. you know only how to run and run, miserable.

My salary was 6 pounds only, but everything was available, I lived like a king

Your House:

We are two families in this house, we came here more than 40 years ago, we lived as one family: when their man is absent, they are my responsibility and vice-versa, if they have a pleasant occasion (e.g.wedding) we all celebrate and if a sad occasion, we are all sad, one family, no day passes without a visit, tea, coffee.. .My son lives in a new block of flats: 20 family, he hardly knows their names. Of course the new building looks nice: concrete..but the family.

pedestrianisation:

Children play in the streets, it is safer without cars but how? is it possible?

Appendix G-2: THE COOPERATIVE SYSTEM: a brief account¹

In 1971 the General Organisation for Housing Co-operatives was established to promote and supervise the development of housing co-operatives. The Organisation gradually expanded until it became the most effective device for providing housing for lower-middle and middle classes. Individual members were encouraged to form housing co-operatives. Major sources of financing housing co-operatives are through savings from members and government allocations. The system can be briefly described as follows: a group of individuals form a Co-operative society, planning and design of units are left to the societies but they have to be approved by the Organisation. The society would then be eligible for a 'co-operative loan' (a long term loan). The Organisation also supervises construction and keeps a reasonable control over the societies.

Appendix G-3: THE SYSTEM OF 'ITIHAD ALMULAK' (union of owners): a brief account:

This system has become more popular since the late 1970s, the general pattern of this system can be described as follows:

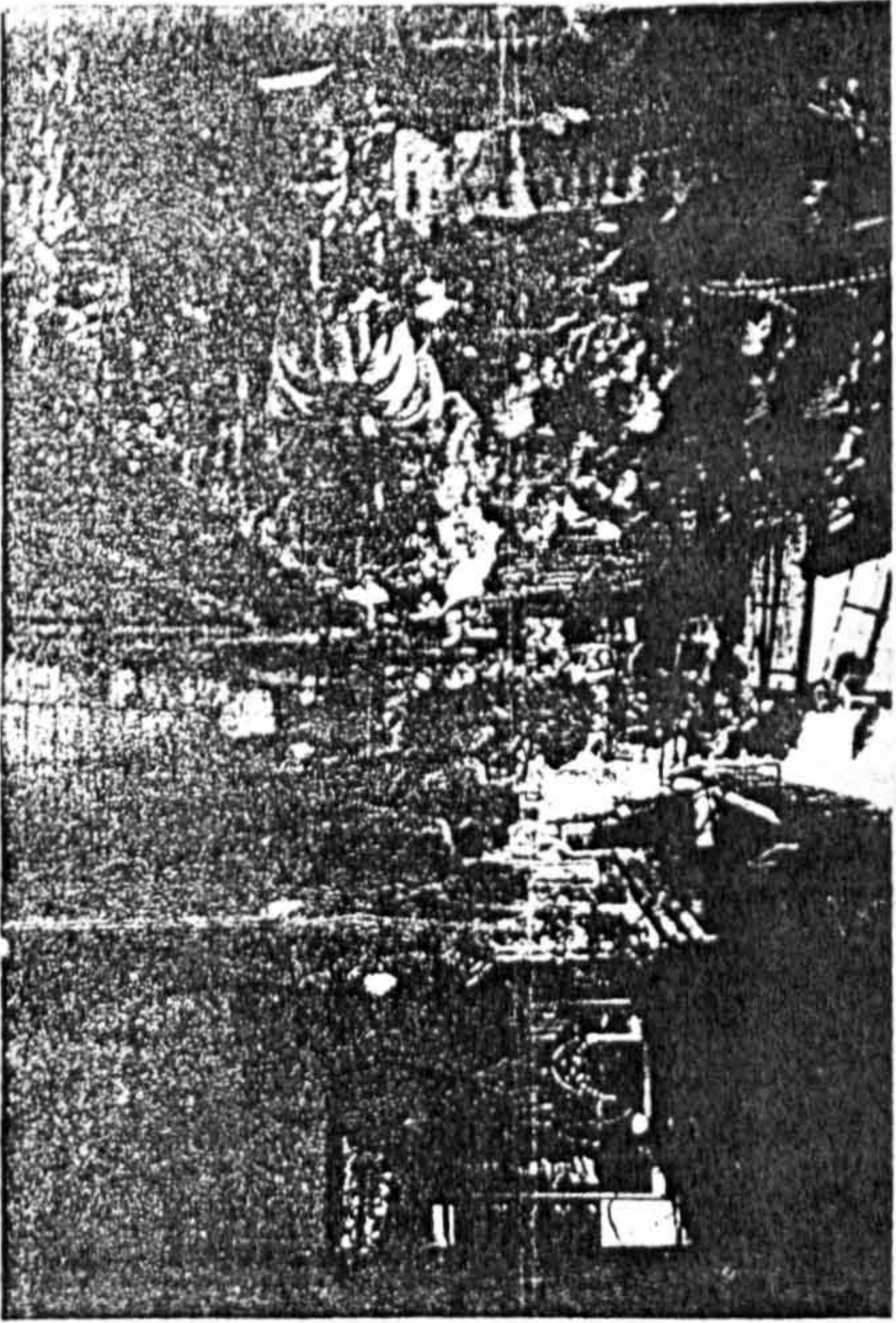
The owner(s) of a land plot start the project by proposing a scheme (block of flats) for sale (before actually building it). Interested parties would buy these (future) apartments and according to an agreed system of payment they will finance the building process. One of the owners, normally the land owners would be appointed as a '*Mamour Itihad*' to administer and supervise the process, with a margin of profit. At the end, each owner will own his flat and a share in the land plot. The advantage of this system is that it allows for investment and development without the need for a developer with a large capital.

¹ Source: Rageh, 1985

THE END OF THE ROAD, a report by Colin Clement, CAIRO TODAY (A monthly magazine in English), Dec.1991 pp.51-52

THE END OF THE ROAD

A unique market is threatened by plans to carve an 18-meter-wide road through its heart



Zanget el-Sittat (literally, the women's squeeze) is a very special market in Alexandria. In an irregular tangle of narrow lanes, the stalls overflow with baubles and bangles, buttons and bows, bolts of material, thread, sequins, hair clips and junk jewelry. Adjoining this squash of fringed areas are other areas specializing in gold and silver,

heavily brocaded Libyan jackets, herbs and spices and sundry other artisans' products. In a town predominantly occidental in urban form this one small area to the north of Mansheya Square represents the only oriental 'bazaar' and, unlike similar markets in Cairo, it has not been taken over by alabaster busts of Nefertiti and clumsily painted papyri. Tourists certainly do visit this place but it is essentially a local shopping center, supplying local needs, which, for the discerning tourist, is an attraction in itself. Unfortunately, however, plans have been recently resurrected which would, if not destroyed, Zanget el-Sittat, then at least alter its character irrevocably.

During the late 1950s, in a flush of revolutionary fervor, town planners wished to construct a major highway, beginning at the recently finished Maritime Terminal, which would cut through the old 'Turkish Town' of Antush and connect with the Corniche. Stage One of this project created the rather ugly Nasr Street which leads from the port gates to the northern extension of Mansheya Square. Stage Two, the piercing of the artery through the market, was put on hold during the wartime crises of the 1960s. Today, standing outside the Amoun Hotel at the roundabout known as Nasr Square, one can see where the road ran out of tarmac.

Now, 25-odd years on, the powers-that-be wish to complete the plan. Dr. Mohsen Zahran, head of the 'Alexandria 2000' town planning scheme, claims "The project will ease the traffic problems and congestion in Mansheya Square, saving time for people and goods transportation. It

December in alex
COLIN CLEMENT

How to get there

Zanget el-Sittat can be found by heading down Mansheya Square on the eastern side as if going to the fort of Qait Bey. As you leave the northernmost end of the square, you enter a street known as Shoro Faransa. Two hundred meters down this street, turn left along any of the small alleys and you will end up in the right area.

The Zanget is part of an agglomeration of different markets specializing in gold, silver, cloth, garments and even sugared almonds. Also of interest is the charming 17th-century Chourbougi Mosque.

will also increase access to and revenue for the shops in the area and the land value of the plots along the new road will rise."

Zahran is quick to charge the opposition with "wanting to portray that the whole district will be destroyed. It is only an 18-meter-wide road, and the area off the new road is so dilapidated it should be pulled down." When it was pointed out that even 18 meters may be enough to shatter the character and break up the community, Zahran countered, "This place is not of historical or touristic interest and (the project) would not be breaking up a special community of strong ties. It is a heterogeneous, urban slum."

Heterogeneity is hardly the point. Since when has Alexandria, the original cosmopolitan town, ever claimed homogeneity? As for dilapidation, Moharem Aly Hegazi begs vociferously to differ. Hegazi has a solid, scrupulously clean, air-conditioned, wood-paneled jewelry shop right slap-bang in the bulldozer's prospective path, and there are many other such establishments under threat. Hegazi believes that city officials have been willfully misleading in their reports as to the overall state of the area and the numbers to be affected by any new road.

Hegazi views the whole development as a prestige project to give those arriving by the port a swanky route direct to the Corniche. As a concept, this may have been valid in the 1950s but, as Hegazi says, "Nowadays nobody arrives by Sittat, destruction, disfigurement or con-

According to Zahran, the proposal, presently being debated by the Maglis el-Shaab (People's Council), consists of an 18-meter-wide street through the heart of Zanget el-Sittat, across Fransa Street, eventually exiting onto the Corniche next to the Swedish Consulate. Figures provided by Aly el-Naggar, chief of the Gomrok District under whose jurisdiction the area falls, reveal that the plan would affect 261 merchants and 100 families resident in the vicinity. El-Naggar also indicated that there was a second proposal before the council which, in addition to the street, would clear a swath of 20 meters on either side to make room for new construction. The numbers affected in this case would rise to 516 merchants and 317 families.

Not surprisingly, there is a good deal of opposition to the scheme, not least from the traders themselves. Salah Karmouz, who owns a material shop that will be displaced, says angrily, "This is an historical area. It is a very special place in Alexandria known all along the coast of North Africa. Every tourist bus that comes to Alexandria visits this market and 'they' want to destroy it!" Karmouz is also quick to point out the human cost of such a disruption. "Every merchant here employs four, maybe five people. Every family in this quarter means 10 or 13 members. Where are they all going to go?"

Certainly, the authorities have provisions for compensation and relocation of homes and businesses. One designated area for the latter is the new complex next to the Abu el-Abbas Mosque which itself could be viewed as an unwanted and inappropriate incursion into the old 'Turkish Town'. Wherever these new trading and housing units are to be found, the fact is that the majority of business and residential owners neither want to be dispersed around the city (Alex, far to the west of Alexandria, has been suggested for housing) nor are they willing to be bought off.

planes on transporters by this route! Certainly, if parking restrictions were implemented, both Ismail Sabry and the parallel Sug el-Tabakhen Street could easily accommodate heavy traffic right through to the Corniche. Dr. Abdel Fatah el-Mosly, head of the Faculty of Architecture at Alexandria University, admits that most of the threatened buildings are not of specific architectural or historic value. "Nevertheless," he continues, "what is very significant is the urban fabric of the district. By this I mean the network of streets, alleys, open spaces. It is unique in Alexandria. Town-planners always think in terms of vehicular traffic but there can be more important things. I am originally from Cairo and Cairenes know two things of Alexandria: the beaches and Zanget el-Sittat."

When quizzed as to whether this appeal to romanticism was valid, el-Mosly responded, "Romanticism can mean many things and not all of them bad. One has to have a certain 'feel' for a city and the places in it. What is particularly bad about this situation is the uncertainty that it creates in the area. People stop renovating, they stop investing. The authorities must either do it or say, 'No, we will never do it' and allow the area to regenerate."

Whatever the ultimate fate of Zanget el-Sittat, destruction, disfigurement or continuity, there are perhaps a couple of related points to be made. Firstly, if there is a genuine desire to solve the knotted traffic problems of Mansheya Square, then a little more enforcement by the police and respect from the motorist of the many flagrantly violated traffic regulations would not go amiss. An end to the constant lane-changing, illegal parking and the running of

traffic lights could definitely ease the flow. And, secondly, if it is believed that Zanget el-Sittat and surrounds are really such a dump, the city fathers would do well to ask themselves how they allowed the area to descend into such an unacceptable state.

THIS IS AN HISTORIC AREA A FITTING SPECIAL PLACE IN ALEXANDRIA KNOWN ALONG THE COAST OF NORTH AFRICA EVERY TOURIST VISITS THIS MARKET AND THEY WANT TO DESTROY IT

HISTORICAL APPENDICES

Appendix H-1: A HISTORICAL RESUME OF THE CITY

Introduction

" If a man make a pilgrimage round Alexandria in the morning God will make for him a golden crown, set with pearls, perfumed with musk and camphor, and shining from east to west"

Ibn Dukmak (Forster,1982:5)

After great resent to the Persian domination, Egyptians welcomed the marching armies of Alexander the Great into Egypt regarding him as liberator.

It was 332 B.C., after seven months of the fall of Tyre when the young Macedonian Conqueror marched South-West to subdue Egypt starting a new Era in the great history of Egypt.

On his way down the Nile from Memphis, where he was crowned Pharaoh, to the temple of Ammon in the Siwan Oasis, he halted at Rhakotis; a village said to be used by the Pharoas as a frontier post defending the northern coasts of Egypt from foreign invasions, a long narrow bay lying between the lake and the Sea, protected by the island of Pharoas, having an easy access to the Nile through the Canopic branch, a perfect climate, fresh water and also lime-stone quarries. Here the Hellenistic splendour would be presented and a capital for his new Egyptian kingdom would be created.

Having given his orders to his architect Dinocrates he left and never had he seen it again. He died only eight years later and said to be buried in his city :*"Alexandria"* (Breccia,1992:96-100; Fraser,1972:17; El-Shayyal,1967)

PTOLEMAIC ALEXANDRIA:

At the death of Alexander the Great, the work had not reached an advanced stage, and it was not until the reign of Ptolemy II [King Philadelphus ,285-246 B.C.] that Alexandria began to prosper as a centre for the civilised world.

Alexandria was planned, following the Greek model for town planning ,as a grid of parallel streets and rectangular blocks, Maps of those streets were derived from excavations and documentary evidence from several archaeologists and historians (El-Falaky,1867; Breccia,1922:60; Fraser,1972:12-14). This grid represented an elaborate water-supply system which consisted of a complete network of underground channels and cisterns connected with the Nile branch. (El-Falaky,1867; Breccia,1922:78)

No standing architecture is left from this period, except for Cleopatra's Needles [Now in London and New York]². In addition there are some underground constructions;the small library and the catacombs at the serabium's (Breccia,1922:110-115) site and also the underground channels and cisterns. From historians' descriptions [mainly Strabo]

2. They were originally erected in the temple of Heliopolis at 1500 B.C., then transferred by cleopatra to be erected in front of her palace in Alexandria. (Breccia E.,1922:p.92)

it is possible to identify the main features of the city at this period. The Heptastadion (Breccia,1922:77; Fraser,1972:21), the seven stade¹ long causeway; a dyke linking the island of Pharos and the mainland and dividing the two harbours; the Great(Eastern)harbour and the Eunostus (Western) harbour; this was a solid construction pierced by two arches which gave access from one harbour to another, and also at that period it had an Aqueduct to the Island. The light house (El-Falaky,1867:94-96; Breccia,1922:108-110), one of the seven Wonders of the ancient world stood on the site occupied now by the Fort Qait-Bey. It had stood until the fourteenth century ,when it was finally destroyed after successive earthquakes .

The City was divided into five main quarters (El-Falaky,1867:127)

The race circus, Brochion(The Royal quarter), Soma, The Mouseion and Rakhotis. And out of which the Royal quarter had formed a third of the city.

ROMAN ALEXANDRIA

A- The Roman Empire: Prior to the Roman domination over Egypt, the Alexandrian war took place in 48 B.C. between Caesar and Cleopatra on one side against Pompey; this caused a considerable amount of destruction to the City, and most of what has been reported about the burning down of the great library of Alexandria took place during this war. Then further destruction occurred during the later fighting between Octavian (Augustus) and Mark Antony.

Having taken possession of Alexandria in 30 B.C., Octavian restored to the town the prosper that had been despoiled of. Also he expanded Alexandria by founding the suburb of Nicopolis (city of Victory (Breccia,1922:2) to the east of the city, in addition to an amphitheatre and a stadium said to have been built by him.

Becoming simply a Roman provincial capital, Alexandria lost some of its political importance, especially by being utilised as a vast imperial granary, since Egypt was the corn farm of Rome at that time. But on the other hand it continued to prosper as a centre of civilisation and a lighthouse of knowledge. Hence it was considered the second city in the Empire after Rome.

Changes in the city can be mainly identified by the eastern extension, and by the celebrated buildings described by historians (Philo),(Salem,1982) such as the temple of Caeserion established by Cleopatra and completed by Augustus, which was converted into a church in 354 A.D. then burned in 912.

Much damage was caused by the Jews in the beginning of the First Century with their revolution during Trajan's reign (115 A.D.). After restoring peace to the city ,Hadrian restored and constructed many of its buildings and temples.

Being a rebellious town ,especially after the introduction of Christianity , Alexandria began to suffer from the successive sackings and dissolution of its institutions, buildingsetc. .

The main remains from this period are:

1. Stade, a unit for measurements: Greek stade= 165 meters; Roman stade= 147.95 meters, El-Falaky, op. cit

The mistakenly called "Pompey's Pillar" which was built as a memorial to Diocletian, who had possessed the town after besieging it for nine months (Breccia,1982:115; Salem,1982), and the Roman Amphitheatre, recently discovered, in Kom El-Dikka.

B- The Christian era: Introduced by St. Mark in 45 A.D., Christianity began to spread in Alexandria, starting a new era of conflict between the increasing numbers of Christians and the Roman State, which practised severe persecution against Christians, especially during the reign of Diocletian which was called by the Egyptian Coptic Church, the "Era of Martyrs" (284 A.D.).

It was not until the reign of the Emperor Constantine (313 B.C.), during which Christianity was made an official religion recognised by the State, that this conflict came to an end, leaving behind a great loss of the fabric and architecture of the city.

Alexandria became a centre of budding Christianity, when the Emperor Theodosius (379-395 A.D.) directed the final blow to paganism by adopting Christianity 389 A.D., and the patriarch Theophilus started to abolish paganism in Alexandria by destroying the temples, the Graeco-Roman monuments and the statues. (Breccia,1922:28-29)

More destruction took place during the following two centuries, i.e. the Fifth and Sixth Centuries, by severe measures taken against the Jews followed by acts of vandalism; also the theological conflict among different Christian factions on the nature of Christ had a great negative effect on the development of the city, many monasteries and churches were demolished by Persian soldiers during their occupation of Alexandria (619-629 A.D.). Recaptured by Heraclius, Alexandria again became a Roman city but for only twelve years.

ISLAMIC ALEXANDRIA

A- The Arab Town: In 641 the army of the Caliph 'Omar (634-642 A.D.), under the command of 'Amr ibn al-As, entered Alexandria. This opened a new phase in its history.

As a result of the successive destructions mentioned above, the city had lost much of its beauty, but the signs of prosperity and history were enough to make the newcomers admire its rectangular street pattern and its great buildings.¹

When Al-Fostat (old Cairo) was chosen as the new capital for Egypt instead of Alexandria (El-Falaky,1867; El-Shayyal,1967; Salem,1982), many of the Roman and Jewish inhabitants left the city. The Nile mouth became silted up preventing the water from reaching the city. All of these factors eventually led the city to decline and made the habitable part far smaller than it used to be in the ancient town.

However, despite the fact that Alexandria had been the gateway for all the rapid and frequent foreign invasions, the city continued to be the second town in Egypt and its first port. Consequently it received a substantial amount of care from all the dynasties

1. See appendix H.2: a message from Amr to the Caliph describing the city, (Forster,1982:61)

and rulers of the Arabic reign (641-1517); Caliphs (641-661), Ommayyads (661-750), Abbasids (750-969), Fatimids (969-1171), Ayyubids (1171-1250) and the Mamluks (1250-1517) until the beginning of the Turkish reign.

During the Arabic period (641-1517), the city had significantly changed its pattern, fabric and architecture. The new walls built by Ibn Toulon were smaller than those of the ancient town, since they enclosed only the inhabited part, had been restored several times during the Fatimid and Ayyubid times. There are still a few remains of the eastern end of the wall (now in El-Shallalat gardens and within the new Stadium).

However, the city had kept its rectangular street pattern although the soil level had been affected by the earthquakes as mentioned above. The ancient lighthouse (Pharoas) was restored at various times after successive earthquakes. Then finally, after being badly damaged, it was replaced by Qait-Bey fort, which still exists. The fort itself was restored in 1949, as it was damaged again by the British bombardment of the city of Alexandria in the year 1882. Many forts and towers were built in different parts of the city ; Sharqi, Dirgham, El-Zuhri...etc. and of which we still have some remains. Large numbers of religious buildings such as mosques, and madrassas (schools) were built during this period (640-1517), but unfortunately most of them are known only through historical documents and nothing much is left of them .We can mention some examples :

Al-Attarin Mosque; which was built on the site of St.Ethnasious's Church in the Eighth Century was regularly repaired until it was totally reconstructed in 1901.

Abu-El-Abbas Mosque; first constructed as the shrine of 'Abu-El-Abbas in 1307, then completed in the Nineteenth Century and completely reconstructed in 1925

Dar al-Hadith al-Takritiyah; built as an educational establishment to teach the Qura'n and religious knowledge in 1298. There is still a part in a small mosque (Abu-Ali) in the traditional centre of the city.

Rebat El-Wasty; built as a place of worship in the Thirteenth Century.

Residential buildings; these were typical Islamic houses and palaces, but nothing substantial survives from this period.

These changes were largely caused by the decline of the city and the decrease in population mentioned above.¹ Also successive earthquakes in 797, 965, and 1325, which caused a substantial subsidence of the soil (6-7 meters in some areas) ,and the submerging of the north front of the Eastern harbour (Fraser,1981:7-12). The frequent attacks and attempts at invasion, especially the devastating campaign of Peter I of Lusignan of Cyprus, towards the end of the epoch of the Crusades (Fraser,1981:64).

B- The Turkish Town: Just before the Ottoman reign Egypt received a blow by the discovery of the new sea route by the Cape of Good Hope, which led to a great loss in the trade income of Alexandria. And as part of the resistance against the Ottoman armies in 1517, Alexandria had to suffer not only from physical destruction but from population decline as well. Eventually, and with a small population of about 5000 ,the inhabited town was confined to the neck between the two harbours, which had silted over the old Heptastadion, forming the only inhabited part of the city for three

1 ".and we were told that in ca.1375 it had a population of about 60,000, " (Fraser,1981:**).

centuries (16th-18th). This new settlement ;" The Turkish Town ",which still exists, was formed out of a narrow and irregular street pattern consisting of houses intermixed with some public buildings like mosques and wekalas, e.g. Mosque and Wekalet el-Shourbagi (1758), Mosque and Wekalet Terbana (1686).

On July 1st 1798, 5000 French soldiers under the command of Napoleon inaugurated the French campaign against Egypt, by occupying Alexandria. Only three years later the French left after being defeated by the British and Turks.

However, the French campaign caused further decline to the town, but on the other hand it produced documentation, descriptions and drawings in the great book *Description de l'Egypte*, which was produced by the French scholars who had accompanied the campaign. Soon after these events Mohamed Ali started a completely new era in the history of Egypt ;"Modern Egypt".

MODERN ALEXANDRIA:

A- Mohamed Ali and his dynasty (1805 - 1952): A new era in the history of Alexandria was initiated by the beginning of Mohamed Ali's reign. He adopted the aim of creating prosperity and welfare for Egypt¹ by modernising it. He and his successors made great efforts and employed all the European experience they could obtain to do this.

In 1816 he started an enormous project to re-link Alexandria with the Nile by digging the Mahmoudiah Canal, which was developed on the line of the ancient canal with a slightly different route at various points. This revived Alexandria, by passing Rosetta and Damietta, which had become the two major international ports for Egypt on the Mediterranean, and eventually replacing them.

In 1834 the first planning authority was established, (Magles El-Ornato), and later, in 1890, the Municipal Council was created. Both had a notable presence of the European community within their membership, who played a considerable role in developing and city management processes.

By 1870 it had become the fourth leading port in the Mediterranean after Constantinople, Marseille, and Genoa (fraser,1981:66). At the same time Mohamed Ali contracted with French engineer, Lefebure de Cerisy, to oversee the deepening of the harbour, the building of a dockyard and an arsenal, and the establishment of a naval college.

Aided by the railway between Cairo and Alexandria which was built in 1854, a large cotton industry developed in Egypt, creating a significant role for Alexandria as a cotton trade market and export centre.

Accompanying these developments and protected by the Capitulations² system, there

1 See appendix H-3: a circular issued by Mohamed Ali to all officials in Egypt.

2 "Capitulations: extra territorial rights granted by the Sultan of Turkey. By them foreign merchants were allowed freedom of trade and worship, freedom from all taxation (except land tax on private property), immunity from arrest, inviolability of residence, and the grant of consular, as opposed to national jurisdiction.", (Fraser,1981:64)

were many Europeans immigrants mainly Italians and Greeks who created growing space and flourishing communities, increasing the population from 8,000 in 1798 to 232,626 in 1882¹

As the town was the home of the foreign consulates, a sizeable foreign population, many active in trade, started to establish itself near the consulates along the Eastern harbour in the quarter called Al-Manshiah or "Quartier des Francs". This quarter was mainly formed around the great square conceived by the Italian architect F.Mancini, Place des Consules (place Mohamed Ali). Its buildings housed the foreign consulate, the Anglican church, the offices of major European shipping lines and many fashionable cafes.

The European centre, badly destroyed in the British bombardment of 1882 entirely rebuilt with the aid of compensations paid by the Egyptian government (L.E.4.5 million) (Awad,1988:2) to foreigners for the loss of their properties.

Mainly designed by Italian architects, the European centre had been developed on the basis of commerce, finance and industry with elegant European-styled streets with impressive public buildings and banks, handsome shops and also private residences e.g. Rue Cherif Pasha.

As Alexandria's wealth increased the suburbs of Antonides, Bolekly, Glemonopolo grew to the east of the city along the sea front (El-Ramleh). The rapid development of these was aided by a railway constructed in 1860's and then transformed into an electric tram-line, the dryness of the climate, proximity to the beach, gardens surrounding the larger housing areas and more recently by the completion of the Corniche (coastal main thoroughfare), built in stages and finally completed in 1934.

B- The Revolution 1952: The 1937 Montreux Convention started the decline of foreign influence in Egypt by annulling the Turkish capitulations; then in the 1952 revolution a final eviction of foreign influence came about through the nationalisation and socialist policies by Nasser, accordingly:

- The Government took over many private properties and transferred them to government agencies and public institutions (offices, schools,...).
- an increasing trend towards industrialisation was adopted, and
- the Government started to control the building market and imposed fixed rents.

All of which has led to:

- The rapid expansion of Alexandria towards the East & South and lately towards the West, filling every green open space in order to accommodate the rapid growth in population caused mainly by migration from the rural areas,
- the spread of squatter settlements by the poor, the building of hundreds of government apartment blocks, private high rise buildings, and commercial buildings,
- a failing ability to maintain all these public buildings, leading to their present

1. See appendix H-4: Table of population of Alexandria 1798-1882 (Reimer, 1988).

degradation.

This evolution have been taking place in four stages:

a- Early 19 C: with the obvious need for a reliable water supply as well as the need for a credible means for transportation link to the rest of the country, Mohamed Ali undertook a major project to re-link the city with the Nile by digging AlMahmoudiah Canal; the city started to develop in two directions: to the North by occupying the Pharos island, and to the South-east to form the European quarter which was marked by the grand square; the Place des Consules.

b- The late 19 C: the city continued its growth as it became a major trading centre, especially for cotton as well as being the centre of the Navy; major developments took place in order to increase the harbour's capacity. This was interrupted by the British occupation (1882); the city was heavily bombarded destroying much of the European centre which was later rebuild. However, this period was marked by three directions of expansion:

- to the South; towards the Mahmoudiah canal, forming busy crowded districts; Kom el-Shokafa, Karmous, and Moharam Bey,
- the East; the expansion towards El-Ramleh was not yet very significant and all the suburbs were still rural-like settlements, and to
- the West; was not very notable and it had only reached "El-Kabari".

c- Early 20 C: In 1921 the Municipal Council carried out a new plan known as the McLean¹ project; a main result was the construction of the Cornich street (the main coastal thoroughfare) between AlMonataza Palace and Ras el-Tin Palace (finished in 1934). This plan had also outlined the future development of the city as well as proposing several projects for squares and streets in the city. However, the city progressed its growth as follows.

- the South; the process continued to fill the gaps, and extended beyond the Mahmoudiah canal forming a new district, Gheit el-Aeinab,
- the West; with districts of El-Maks, El-Wardian, and El-Dekhila, and to
- the East; with further development of the suburbs, aided by the tram-line, forming the new urban districts of: Bolekly, Bakos, Fleimeng, Zizenia,...and also the formation of a new zone "Semouha" in the South-east.

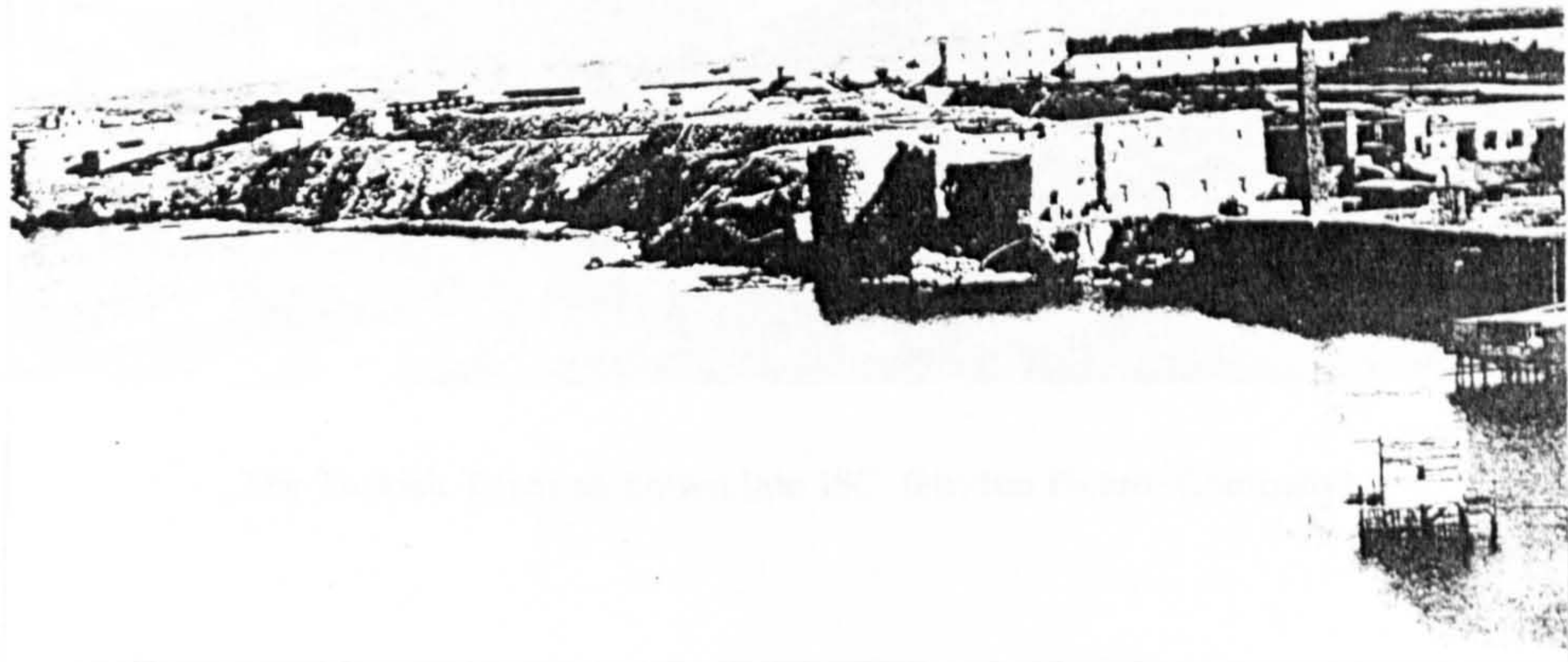
d- Late 20 C: the beginning of this period was marked by the establishment of the University (1942). Following the revolution 1952, the independence 1954 and the Suez Canal crisis at 1956, the social policies adopted by the government and the search for National pride was manifested in grand projects such as the 1958 planning scheme proposed by the Governorate of Alexandria; this scheme involved massive industrial developments² as well as proposing the widening and opening of some major streets as has been previously illustrated. This has eventually led to large migrations from the rural areas which, resulting in a huge increase in the population, from 1 million in 1950

1 W.H.McLean; a British Engineer who was the commissionaire chief engineer of the Municipal Council.

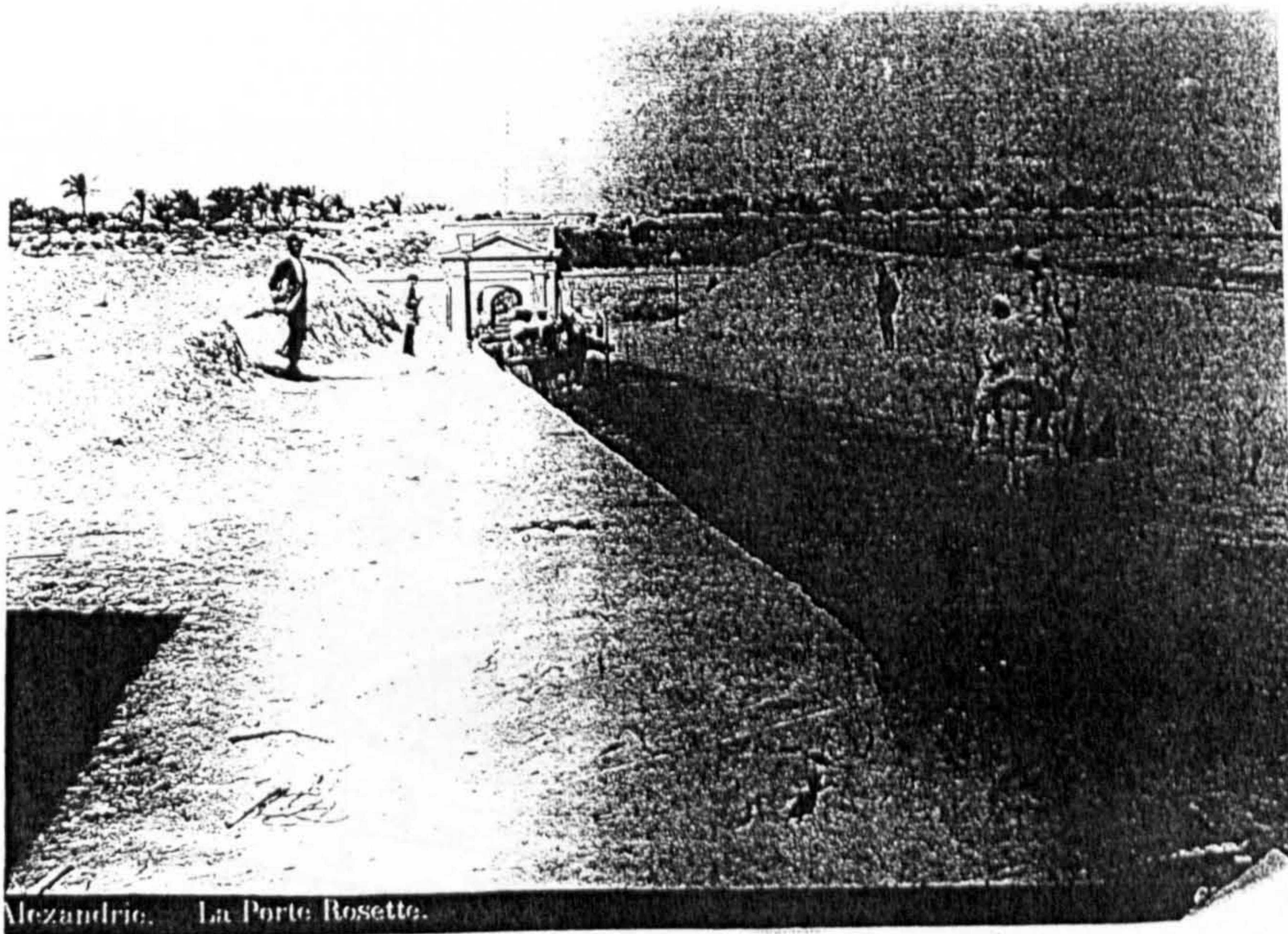
2 Especially textile and food industry which was mainly concentrated in the south and the east of the city.

to 3 millions in 1986. This expansion was mainly towards the East, and South. Lately, the West is considered to be the only possible direction left for future growth.

Appendix H-2: Historic scenes:

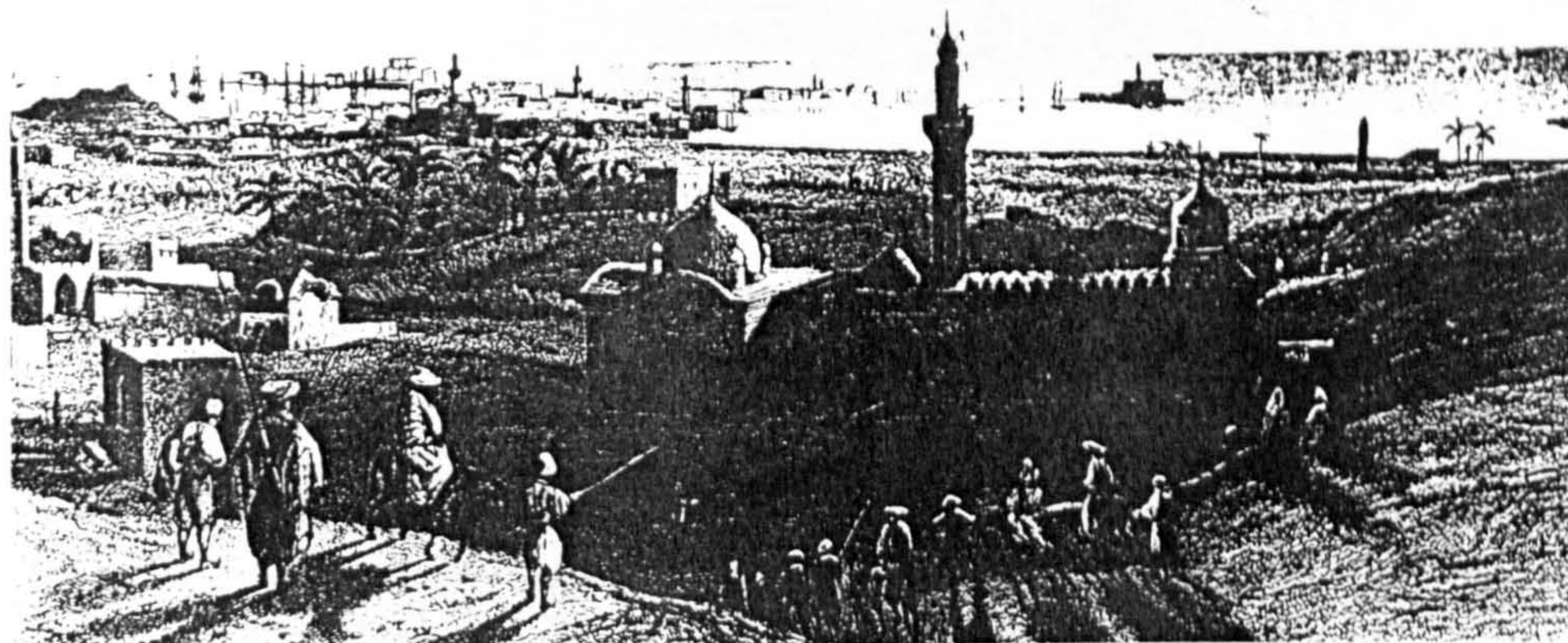


Cleopatra's Needle before being transferred to London, taken 1870 (source: Fraser, 1981)



Alexandrie. La Porte Rosette.

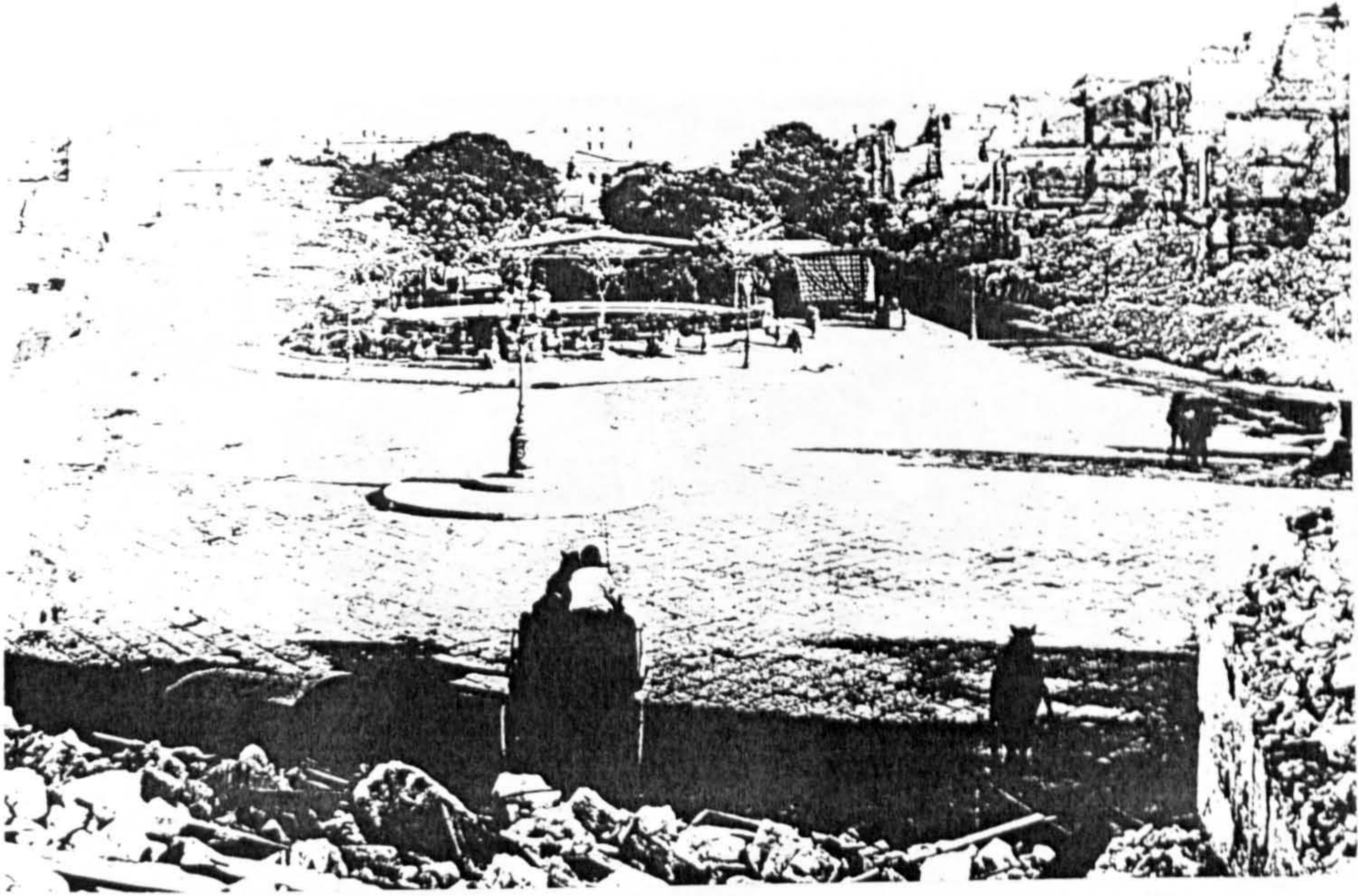
The Rosetta Gate (now Bab-Sharqi): mid-19C. (Hulton Picture Company)



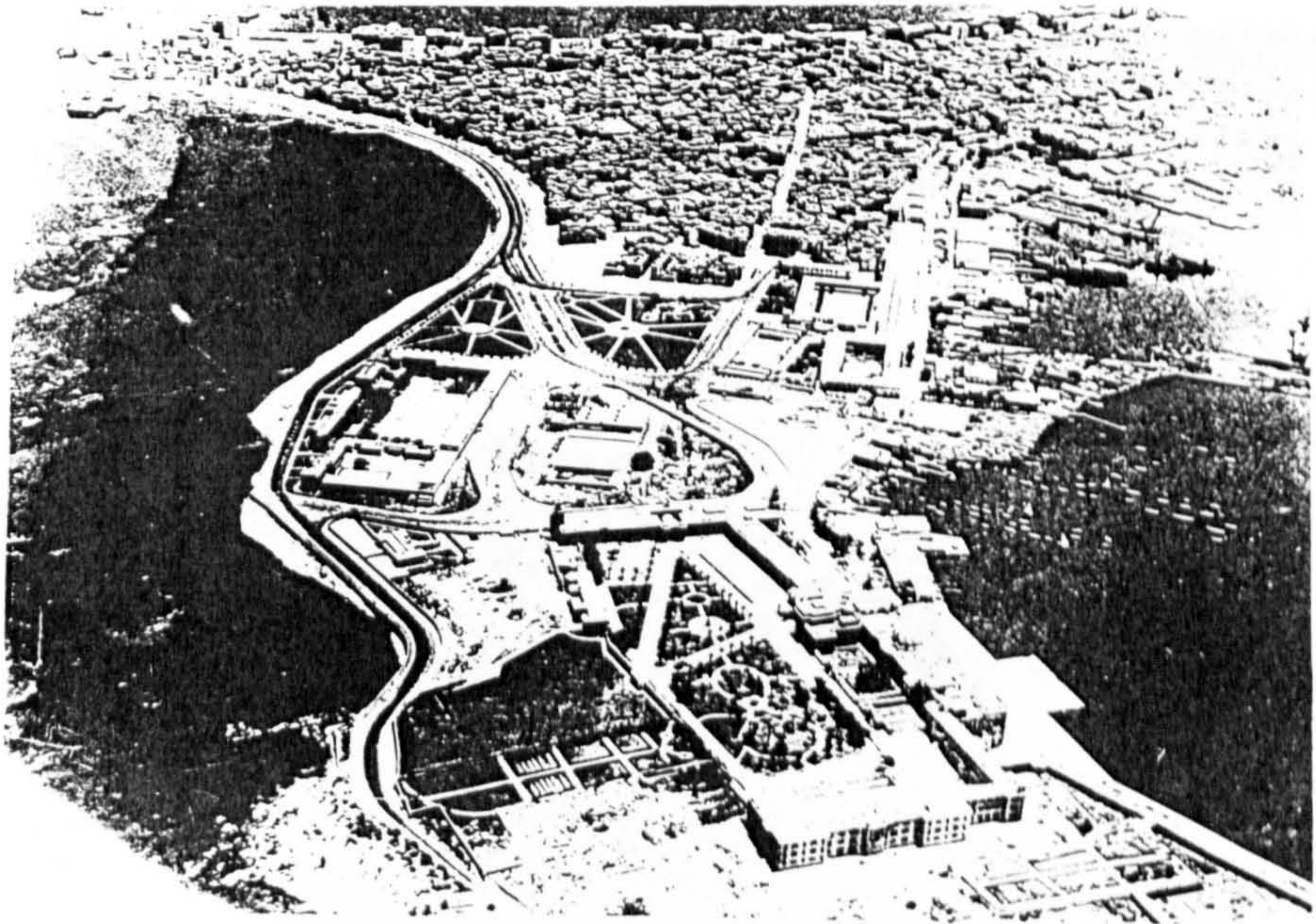
The Turkish Town as drawn late 18C. (Hulton Picture Company)



The European quarter, *Place des Consules*, in 1870s (Hulton Picture Company)



After the British Bombardment in 1882 (Hulton Picture Company)



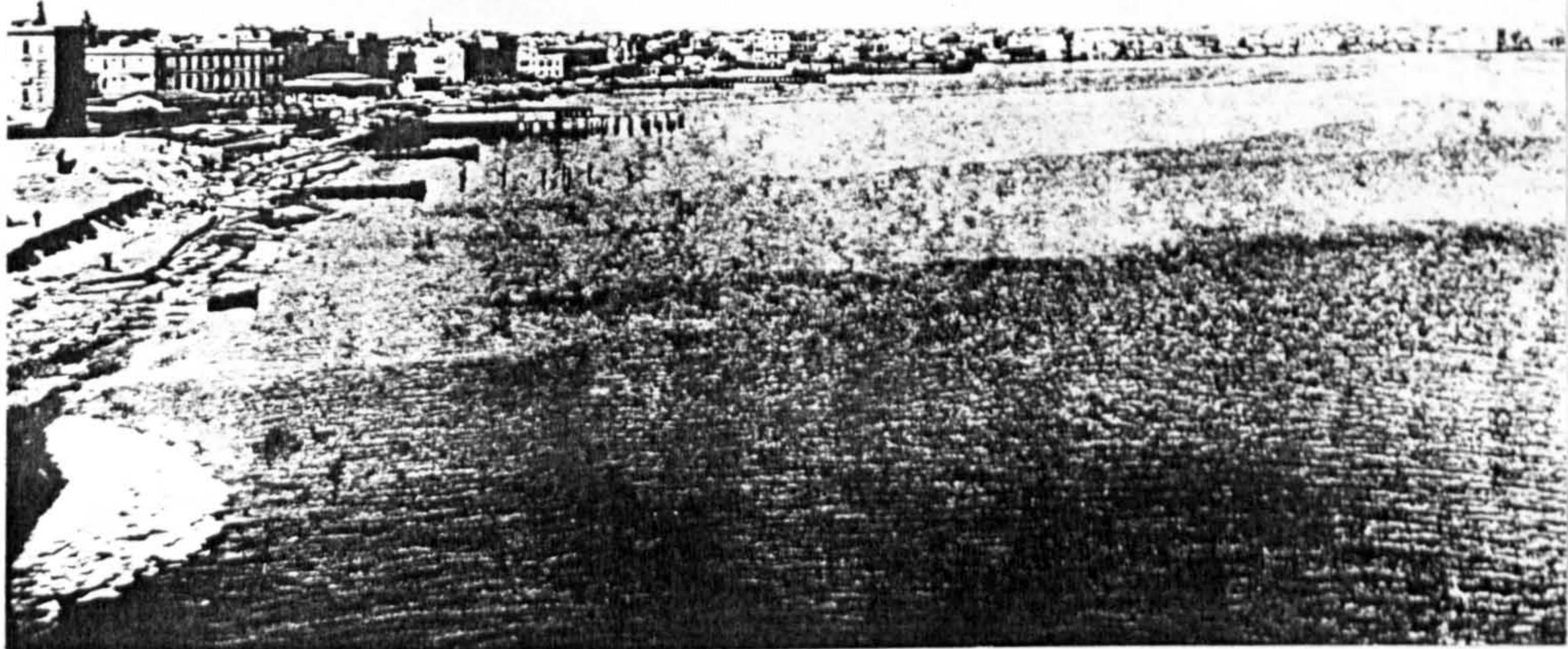
Aerial view of the Turkish Town at the 1930s, note the Ras El-Tin Palace at the bottom



Aerial view of the suburbs 1930s (Feddan, R.)



The McLean Plan 1921



The Eastern Harbour before the Corniche



The Eastern Harbour after the Corniche



Orabi Square, early 20C.



European architecture: Banco di Roma, 1905

Appendix H-3: A MESSAGE FROM AMR IBN AL-AS, TO THE CALIPH'OMAR DESCRIBING ALEXANDRIA:

"I have taken a city of which I can only say that it contains 4,000 palaces, 4,000 baths, 400 theatres, 1,200 greengrocers and 40,000 Jews.."

Appendix H-4: A CIRCULAR ISSUED BY MOHAMED ALI TO ALL OFFICIALS IN EGYPT;

"To possess a land like ours, which has no equal, is our great happiness, and to spare any effort by which her prosperity may be increased would be an act of grievous ingratitude which my heart cannot accept, and in which I will never acquiesce. I must then ever and severely be summoning on you to do your duty so that we may reach the end we set before us..know that I will pursue the well-being of this land even at the cost of my life and the lives of my kindred".

Appendix H-5: POPULATION OF ALEXANDRIA, 1798-1882

Year	Populatio
1798	8,000
1805	5,000
1821	12,528
1825	16,000
1835	52,000
1840	60,000
1863	170,000
1868	200,000
1872	212,043
1882	232,626

Source: Reimer M.Colonial bridgehead: Social and spatial change in Alexandria, 1850-1882

Appendix H-6: FOREIGN POPULATION OF ALEXANDRIA, 1840,

Syrians	5,000
Greeks (Ottoman)	3,000
Greeks nationals	2,000
Italians	2,000
Armenians	2,000
Maltese	1,000
French	800
English	100
Austrians	100
Russians	30

Source: Reimer M. Colonial bridgehead: Social and spatial change in Alexandria, 1850-1882

Appendix H-7, A TERMINOLOGICAL GLOSSARY OF COMMERCIAL BUILDINGS IN THE ISLAMIC WORLD:

Kaysariya: a commercial building showing the character of a warehouse rather than a bazaar. In plan it is a group of covered corridors surrounding a large court, and it consists of shops, workshops, stores, some of them having accommodation facilities on the upper storeys. (Cezar,1982;Lamei,1975)

Bazaar (Sook): a permanent market, usually consisting of shops or stalls where all kinds of merchandise are offered for sale, described by Prof.Cesar as: *"a collection of hans and shops lined along the streets which may or may be not covered"* (Cezar,1982) e.g. Khan el-Khalily in Cairo.

Bedesten: the original form of the word was bezistan or bezzazistan which is a special section of a bazaar where cloth was sold.

Arasta: series of shops lining each side of the street.

Caravanserai: caravan+serai; a building for the accommodation for travellers;
"A kind of inn in the eastern countries where caravans put up, being a large quadrangular building with a spacious court in the middle." (Oxford dictionary)

It was built on the caravans' routes i.e. not within the urban context.

Khan: the same as the caravanserai but the latter word is more used in Arab countries while the first is used more in Turkey. (Lamei,1975)

Wekalah; a twofold purpose building; (a)commercial complex for manufacturing industries containing both wholesale and retail trades together with various crafts, (b)housing and lodging for merchants. Wekalas were built within the urban context and in the commercial area of the city. The form of these buildings differed from one place to another; e.g. Wekalas in Cairo are four to five storeys, while in Alexandria they are only two storeys, the same as the Turkish commercial buildings. (El-Erian,1983;Lamei,1975)

**Appendix H-8: TRANSLATIONS OF DESCRIPTIONS BY FRENCH TRAVELLERS
(P.122/P.132)**

"Les maisons de cette ville sont en general baties en pierre de taille, et ont assez d'elevation" (Arnold,1989:43)

" The houses of this town are generally built of ashlar blocks, and quite lofty"

"Ces maisons, comme toutes celles de levant, ont leurs combles en terrasses; elles sont sans fenetres et leurs jours qui tiennent lieu sont presque entierement bouches par un triellies de bois, saillant, de differentes formes et si serres que la clarte peut a peine y penetrer..." (Arnold,1989:43)

These houses, like all those of the Levant , have roof terraces; they are without windows, and the openings which take their place are almost entirely blocked by wooden trellis, projecting and of differing shapes: so close woven that the light can scarcely penetrate."

"Toutes les maisons susdites sont comprises en deux ou trois rues en long ou au milieu y a un bazar ou lieu de vente couvert pour marchans"

All the houses mentioned above are comprised in two or three streets with, in the centre, a bazaar or covered market for the merchants"

"la nouvelle ville est assez mal bâtie. Les rues en sont petites ou fort étroites. Excepté quelques mosquées qui sont très belles, le reste ne pariot que des nids à rats. Il peut y avoir environ 800 à 1000 maisons",

The new town is quite poorly built. Its streets are small and very narrow. Apart from some mosques which are very beautiful, the rest looks like a collection of rats' nests. There could be from 800-1000 houses.

"La nouvelle ville d'Alexandrie s'agrandit tous les jours et je trouvois que depuis mon dernier voiage on y avoit bâtie plus de vingt oquelles, ce sont Auberges pour loger les voyageurs; et un grand nombre de maisons sans parler de quelques bazars qu'on a rétablis ou faits neuf". (Panzac,1988:85)

The new town of Alexandria grows daily and I found that since my last visit they have built more than twenty Wekalah which are inns to accommodate travellers; and a large number of houses, not to mention some bazaars which have been restored or built new.

LEGISLATIVE APPENDICES

Appendix L-1: SELECTED LEGISLATIVE TEXTS:

-Selected Articles of law No 49, 1977 ¹ (translated by the author)
Concerning demolishing unresidential buildings for rebuilding it, collapsible buildings, restorations and maintenance.

Chapter one:

Demolishing unresidential buildings for rebuilding it in a larger scale.

Article 49: In the case of a building which have all its units rented for unresidential purposes, the owner has the right to notify the tenants officially to evacuate the building for rebuilding, increasing its area and the number of its units, according to the following terms and conditions:

(a)the owner has to get the permissions, consents and specifications necessary for demolishing and rebuilding according to the law, the consent should include building of new units which suits the same purpose of the buildings consented to be demolished.

(b)the total floor area of the new building should not be less than four times the floor area before demolishing.

(c)the new building has to include residential or hotel units with a total floor area not less than 50% of the total floor area.

(d)the owner has to provide the tenant with a similar unit with a similar rent to handle his business in, otherwise he has to compensate him with the difference of rent between the unit which he was occupying and the unit in which he is going to work for five years or until he goes back to the place after rebuilding and pay the same rent-or-he has to pay a sum of money equal to; the rent value of the unit in which he is going to work for ten years with a minimum of L.E.1000 whatever is bigger.

(e)the owner has to specify a date for evacuation which must not be before the end of the longest agreed lease period for any of the units and not less than six months from the notification.

Article 50: tenants do not commit themselves to evacuate unless they all agree with registered letters to the owner including written approval. If all the tenants didn't agree within three months from the notification date, the owner has the right to go to court to get an evacuation sentence, and this sentence has to be implementable after three months from the date of issue. The compensation mentioned in the previous article has to be paid or deposited unconditioned in the court for the benefit of the tenants. and if one of the tenants refused to evacuate on the date which he was notified by and after all approval, or by court sentence, the owner has the right to get a court sentence for immediate eviction.

Article 51: these rules do not apply to buildings rented as; educational establishments either governmental or private under government supervision, also hospitals public or private under government supervision, car service stations, tourist establishments, banks and any building with significant importance for the economy and national security of the state or provide public services to the public and which was determined by the minister of construction and housing after the approval of the concerned minister.

But they apply to other buildings rented to governmental establishments or the public sector in condition that the period of notification has to be increased to three years If the renter asked to benefit from this period for abandoning the compensation mentioned above.

Article 52: the owner has to complete the demolishing within three months from the complete evacuation, and to start rebuilding within three months from the complete demolishing.

If the demolishing hasn't been done within the period mentioned above without an acceptable excuse, then any of the tenants has the right to get a court sentence for re-occupying his unit whenever that is possible, otherwise he'll be eligible to a legal compensation equal to the one mentioned in article 49 in addition to his right to keep the compensation given first when he had agreed the evacuation also keeping his right to demand for any other compensations if so he deserves.

Article 53: if the demolishing was completed and the owner didn't start rebuilding within the period mentioned above, or started and deliberately didn't finish, the governor has the right to brief an establishment to complete the building at the owners expenses according to rules to be determined by the

¹ Source: Abd El-Halim, 1983

minister of housing and construction, and the money paid by this establishment in building or completing has the rights ofaccording to article 1148 of the civic law. The establishment mentioned has the right to hire the building and collect rents till it fulfils all expenses paid including administrative expenses, and the owner has the right to get 20% of this rent monthly.

Article 54: the tenants of the demolished building has the right to occupy units in the new building and the owner has to provide units which suits the same purposes unless any legal restrictions at the time and in this case the tenant is eligible to another compensation equals to the one mentioned in article 49 of this law. The owner has to notify the tenants officially on the completion of the rebuilding within one month of the completion. The tenants has to express his will to occupy a unit in the new building, officially and through registered mail, within one month of the owner's notification, otherwise he will lose his right for it.

Chapter Two

Concerning collapsible buildings, repair and maintenance

Article 55: the rules of this chapter applies to the buildings and structures which are likely to collapse partially or totally exposing people and properties to danger, also if it needs repair or maintenance to secure its safety or to keep it in a good shape. The work considered as repair and maintenance is to be defined through the ministerial decisions of the Ministry of Housing and Construction.

Article 56: the administrative authority for building regulations has to undertake the investigation of buildings and structures and to decide what has to be done in order to secure lives and properties either by totally demolishing, supporting, repairing or by maintaining to make suitable for its purpose. This report has to include the period needed to implement the required work and whether the building has to be evacuated partially or totally.

Article 57 a committee or more has to be formed in each unit of the local government by the appointment of the governor, and it should include two architectural or civic registered engineers, it has to study the reports submitted by the administrative authority mentioned in article 55, and to carry field investigations, and to make quick decisions about it. The way of forming these committees and its operation rules has to be determined by ministerial order from the Ministry of housing and construction

Article 58: The decision of this committee has to be announced officially to whom it concern; owners, tenants,.etc.And a copy has to be sent to the administrative authority for building regulations, If it wasn't possible to announce them because of their absence, the inability to find their address or their refusal to receive it, a copy of the announcement has to be put, in an obvious place on the building's facade, on the announcement's board in the nearest police station.

Article 59: Any of the concerned parties mentioned above has the right to appeal against the decision mentioned above in not more than 15 days from the announcement of the decision. The court has to inform the other parties with the appeal and also has to take a quick decision; either accept or reject the appeal

Article 60: If the concerned parties didn't carry out the repair decided finally, the administrative authority has the right to do the job at expenses of the concerned party.

Article 63: If the repair work need the temporary evacuation, the administrative authority has to notify the tenants to evacuate the building in a defined period, if they failed to do so the evacuation has to be done through force, and they have the right to return to the property after completing the repair without the need to the owner's approval. The property is legally under the possession of the tenant and the owner has no right to alter any part of it.

Article 65: The administrative authority has the right for immediate evacuation to the building and the surroundings if necessary in the case of immediate danger.

Appendix L-2: LAW NO 117 OF 1983: PUTTING INTO FORCE THE LAW ON THE PROTECTION OF ANTIQUITIES (unofficial UNESCO translation)

LAW ON THE PROTECTION OF ANTIQUITIES

CHAPTER I

General provisions

Article 1

An 'Antiquity' is any movable or immovable property that is a product of any of the various civilizations or any of the arts, sciences, literatures and religions of the successive historical periods extending from prehistoric times down to a point one hundred years before the present and that has archaeological or historical value or significance as a relic of one of the various civilizations that have been established in the land of Egypt or historically related to it, as well as human and animal remains from any such period.

Article 2

Any movable or immovable property of historical, scientific, religious, artistic or literary value may, where the Prime Minister so decides, acting at the instance of the minister responsible for cultural affairs, be deemed an antiquity, even though its date of origin does not fall within the time-limits set forth in the preceding article, where the protection and conservation of such property are in the national interest. Such property shall be registered in accordance with the provisions of this law. Every owner of such an antiquity shall be responsible for safeguarding it and may not alter it in any way as from the day he is notified by registered letter with acknowledgement of receipt concerning the decision taken in its regard.

Article 3

All publicly-owned lands which were classified as archaeological lands pursuant to decisions or orders made before the coming into force of the present law, and publicly-owned lands classified as archaeological lands pursuant to decisions of the Prime Minister acting at the instance of the minister responsible for cultural affairs, shall be deemed archaeological lands. Any piece of land may be deleted from the inventory of archaeological lands and their associated service facilities by decision of the Prime Minister acting at the instance of the minister responsible for cultural affairs, where the Organization determines that such piece of land no longer contains antiquities or forms part of the landscaping perimeter of an antiquity.

Article 4

All buildings which were classified as historic monuments and duly registered as such pursuant to past decisions or orders shall continue to be deemed historic monuments.

Every individual or corporate entity occupying a historical building or archaeological site which has not been expropriated shall be required to safeguard such building or site from any damage or loss.

Article 5

The Egyptian Antiquities Organization shall be responsible for the supervision of all matters related to the antiquities in its museums and storage facilities and at archaeological and historical sites and areas, even when the antiquities are discovered fortuitously.

The Organization shall be responsible for exploration for antiquities above the ground, under the ground and in the inland and territorial waters of Egypt.

The head of the Board of Directors of the Organization may, with the agreement of the competent Permanent Committee, issue special licences authorizing national and foreign archaeological bodies to explore for antiquities and discover items in specific areas for limited periods of time. Such licences shall be non-transferable and shall be issued only after the scientific, technical and financial qualifications and archaeological experience of applicants have been established.

The foregoing provision shall apply even where the exploration or excavation work is to be done on land which is owned by the applicant.

Article 6

All antiquities with the exception of religious endowments (wafaf) shall be deemed public property, and the ownership, possession and disposition of them shall be subject to the terms and conditions set forth in this law and regulations made thereunder.

Article 7

All trade in antiquities shall be prohibited as from the date of coming into force of this law. Every established trader shall have a period of one year in which to arrange his affairs and to dispose of his antiquities, after which time such remaining antiquities as he has not disposed of shall be deemed to be in his possession, and he shall be subject to the provisions of this law regarding the possession of antiquities.

Article 8

With the exception of antiquities whose ownership or possession was established before the coming into force of this law or is established in accordance with its provisions, the possession of antiquities shall be prohibited as from the date of coming into force of this law.

Every trader or other person in possession of antiquities shall notify the Organization of the antiquities in his possession within six months of the coming into force of this law and shall safeguard them until they are registered by the Organization in accordance with the provisions of this law.

Anyone who fails to declare the antiquities in his possession for registration within the aforementioned period shall be deemed to be in unlawful possession of them, regardless of other provisions of this law governing possession.

Article 9

Every possessor of an antiquity may dispose of it at his discretion, provided he obtains, in advance, written approval from the Organization in accordance with procedures and principles to be established by decision of the minister responsible for cultural affairs, and provided that no antiquity shall be taken outside the country.

The provisions of this law regarding possession shall apply to every person to whom the ownership or possession of an antiquity is transferred either in accordance with the provisions of this article or through inheritance.

The Organization shall have the right of pre-emption, in return for fair compensation, as regards the disposition of every antiquity. The Organization may also appropriate any antiquity at its discretion and recover, in return for fair compensation, every antiquity that has been detached from an immovable structure and is in the possession of a trader or other person.

Article 10

The Organization may, where the President of the Republic so decides, acting at the instance of the minister responsible for cultural affairs, exchange movable antiquities of which there are several specimens with Arab and foreign countries, museums and scientific institutes.

Antiquities may, where the President of the Republic so decides in the public interest, be exhibited abroad for limited periods. This provision shall not apply to antiquities that are classified by the Board of Directors of the Organization as unique or particularly liable to damage.

Article 11

The Organization may accept the assignment by organizations or individuals of their titles to immovable historical property through gifts, nominal sales or concessions to the Organization for periods of not less than fifty years, where this would be in the public interest.

Article 12

Antiquities shall be registered by decision of the minister responsible for cultural affairs acting at the instance of the Board of Directors of the Organization. The decision by which an immovable antiquity is registered shall be duly communicated to the owner of the antiquity concerned or his authorized representative and shall be published in the Official Gazette. An annotation to that effect shall be made on the title record of the property in question at the Land Registry Office.

Article 13

The following provisions shall apply to the registration of immovable antiquities and the notification of owners in accordance with the provisions of the preceding article:

1. Registered property shall not be demolished in whole or in part, nor shall any part of any registered property be taken out of the Arab Republic of Egypt.

2. Registered lands or immovable property shall not be subject to expropriation; adjacent lots, however, may be expropriated with the approval of the minister responsible for cultural affairs acting at the instance of the Board of Directors of the Organization.

3. No third-party easement shall be lawful on any registered property.

4. No registered property shall be renovated or its features altered in any way, except with the authorization of the head of the Organization, granted with the approval of the competent Permanent Committee, and all work so authorized shall be executed under the direct supervision of a representative of the Organization. Where such work is executed without authorization, the Organization may restore the property to its previous condition at the offender's expense, and the offender's liability to the penalties prescribed by this law.

5. Every owner who wishes to dispose of a registered immovable property shall obtain written approval from the Organization, specifying the name and address of the other party to the transaction, who shall also be notified that the property in question is a registered antiquity. The Organization shall have thirty days after receiving an application for disposal in which to give its reply. Where no reply has been given within that period, the application shall be deemed to have been denied.

6. The Organization may at any time undertake at its own expense any work that it deems necessary for conserving a registered antiquity. These provisions shall continue to apply even where antiquities forming part of immovable property have become movable.

Article 14

Any immovable antiquity or part thereof may be deleted from the register of antiquities by decision of the minister responsible for cultural affairs acting at the instance of the Board of Directors of the Organization and with the approval of the competent Permanent Committee for Antiquities. Every decision to delete an antiquity shall be published in the Official Gazette, communicated to the individuals and corporate entities that were notified at the time when it was placed on the register, and noted on the appropriate registration records of both the Organization and the Land Registry Office.

Article 15

No prescriptive ownership right shall accrue to any individual or corporate entity from the use of an archaeological site, land or structure of historical value, and the Organization shall be entitled to cause such property to be vacated in return for fair compensation where it deems it necessary to do so.

Article 16

The minister responsible for cultural affairs may, at the instance of the Board of Directors of the Organization and in return for fair compensation, secure easements with respect to properties near archaeological sites and historical buildings in order to safeguard their aesthetic features or general appearance. Decisions that are issued in this regard shall state what immovable properties or parts thereof will be affected by the easement or easements, the scope of such easements and the consequent restrictions on the rights of owners or possessors.

Article 17

Without prejudice to the penalties prescribed by this and other laws, the head of the Board of Directors of the Organization, pursuant to a decision by the competent Permanent Committee for Antiquities, may by administrative action, without recourse to the courts, liquidate any encroachment on an archaeological site or property. His decision in that respect shall be enforced by the special Antiquities Police. Every offender shall restore the property to its former state, fail to do so, the Organization shall be entitled to have the necessary work executed at the offender's expense.

Article 18

Privately owned land of archaeological value may be expropriated, and where the President of the Republic decides, such land may be seized temporarily until the expropriation procedures have been completed. Every such property shall be deemed archaeological land as of the date of its temporary seizure. The possibility that it may be found on expropriated land shall not be taken into consideration in assessing compensation.

Article 19

The minister responsible for cultural affairs, acting at the instance of the Board of Directors of the Organization, may issue a decision fixing the landscaping perimeters of archaeological sites and the lands lying inside those perimeters and subject to the provisions of this law.

Article 20

No building permits shall be issued in respect of archaeological sites or lands.

No third party shall build or farm on archaeological lands or other land lying within statutory landscaping perimeters.

The planting or felling of trees or sand, and every other activity on archaeological sites and lands are prohibited without the permission and under the supervision of the Organization.

The provisions of the preceding paragraph shall also apply to land adjacent to the sites, to a maximum distance of three metres in the case of archaeological sites and in other areas to such a distance as may be deemed by the Organization to be necessary for protecting the environment of the site.

The provisions of this article shall apply to the archaeological sites so decided, but where the minister responsible for cultural affairs so decides, by administrative action, the Organization may also apply to desert lands and to

Article 21

Archaeological sites and lands, and buildings and sites of historical importance, shall be taken into consideration when any alterations are made in the plans of the towns, quarters and villages in which they are located. Renovation schemes and the expansion or alteration of archaeological and historical areas or adjacent properties shall not be undertaken, except with the written agreement of the Antiquities Organization and subject to such easements as the Organization may decide to establish.

The Organization shall make its views known within three months of receiving a submission in this respect: where it fails to do so, the matter may be submitted to the minister responsible for cultural affairs for his decision.

Article 22

Licensing authorities may authorize construction in inhabited areas adjacent to archaeological sites, subject to the approval of the Organization.

Licensing authorities shall include in the licences they issue such conditions as in the opinion of the Organization will ensure that no construction will dominate a site or detract from its dignity and appearance, and that due consideration is given to the archaeological and historical setting and to the requirements of its protection. The Organization shall state its opinion in respect of every licence application within sixty days after the matter is submitted to it, and where it fails to do so the application shall be deemed to have been denied.

Article 23

Every person who discovers an unregistered immovable antiquity shall notify the Antiquities Organization of his find, and every such find shall be deemed public property. The Organization shall take the necessary measures for safeguarding the find. Where the find is located on private property, the Organization shall decide within three months whether to remove the find, to initiate measures for expropriating the land upon which it is located, or to leave the antiquity in its place and register it in accordance with the provisions of this law. In assessing the value of expropriated lands, the value of any antiquities they may contain shall not be taken into consideration. Where the Organization decides that a find is particularly important, it may pay compensation to the persons reporting it, the amount of such compensation to be determined by the appropriate Permanent Committee.

Article 24

Every person who fortuitously discovers a movable antiquity or a part or parts of an immovable antiquity, wherever it may be located, shall notify the nearest public authority within forty-eight hours of his discovery and safeguard it until the authorities take possession of it, failing which he shall be deemed to be in unauthorized possession of an antiquity. Upon being so notified, the said public authority shall inform the Organization of the find immediately.

The find shall be deemed public property, and once the Organization has assessed its importance, it may pay compensation to the person who has discovered and reported it, the amount of such compensation to be determined by the appropriate Permanent Committee.

Article 25

The amount of the compensation contemplated in Articles 7, 13, 14 and 16 shall be determined by a committee to be established by decision of the minister responsible for cultural affairs, and the Board of Directors shall be represented on it. Appeal from the committee's award shall lie to the minister responsible for cultural affairs. Every appellant shall file his appeal within sixty days of the date of his notification of the Committee's award by registered letter with acknowledgement of receipt, failing which the award shall be final.

Every claim for compensation which is not filed within one year of the date upon which the award becomes final shall be null and void.

CHAPTER II

Registration and conservation of and exploration for antiquities

Article 26

The Antiquities Organization shall be responsible for inventorying, photographing, making drawings of and registering all movable and immovable antiquities and for entering all data pertaining thereto in records established for that purpose. Antiquities shall be registered in accordance with terms and conditions to be set forth in a decision of the Board of Directors of the Organization. All antiquities which are listed on official records before the date of the coming into force of this law shall be deemed duly registered.

The Organization shall make a complete inventory of archaeological sites and lands, define their boundaries and features and plot their positions on maps, submitting copies thereof to both the local authorities and the Public Organization for Architectural Planning for consideration in the preparation of their general plans.

The Organization shall make a record of all the environmental and architectural data and other factors affecting every archaeological site, in accordance with their respective importance.

Article 27

The Antiquities Organization shall take measures to ensure that registered archaeological monuments and sites and historical buildings can be visited and studied without detriment to their safety and conservation, and it shall endeavour to display their distinctive artistic and historical features.

The Organization shall use the resources of archaeological sites and museums to develop archaeological awareness in every way.

Article 28

Movable antiquities and parts of immovable antiquities whose removal is required by circumstances shall be preserved and kept in the museums and storage facilities of the Organization. The Organization shall arrange displays of exhibits at its museums and administer its museums in accordance with the standards of professional practice. It shall take care of all museum objects and arrange for all necessary conservation and security measures. It shall also sponsor temporary exhibitions at its museums.

The Organization may delegate to Egyptian universities the authority to organize and administer university and college museums, subject to the condition that these museums shall be duly registered and made secure.

All such museums and storage facilities shall be deemed public property.

Article 29

The Antiquities Organization shall be responsible for the preservation of antiquities, museums, storage facilities, archaeological sites and areas and historical buildings and shall provide for their protection by the Antiquities Police and by its own security guards and watchmen in accordance with appropriate regulations. The Organization shall limit the maximum size of every Antiquities Inspectorate to an area such that it can be easily covered and its antiquities conveniently supervised.

The perimeter of every archaeological site which is protected by the Organization shall be established by decision of the Board of Directors of the Organization, which may set an admittance charge not to exceed ten pounds, or the equivalent in convertible currency in the case of foreigners, without prejudice to any fees that may be imposed in accordance with Article 39 of this law.

Article 30

The Organization shall bear sole responsibility for carrying out necessary conservation and restoration work on all registered antiquities, archaeological sites and areas and historical buildings.

The Ministry of Waqfs, the Egyptian Waqf Organization and the Coptic Waqf Organization shall bear the cost of restoring and conserving their respective registered archaeological and historical properties.

The Organization shall bear the cost of restoring every registered historical building that is in the possession of any other individual or corporate body, except when the appropriate Permanent Committee determines that the need for restoration work is due to abuse on the part of the possessor, who shall then bear the cost of restoration.

The head of the Board of Directors of the Organization, with the approval of the appropriate Permanent Committee, may authorize expert organizations and missions to undertake restoration and conservation work under the supervision of the Organization; written authorization for such work may also be given to individual experts.

Article 31

The Organization shall establish an order of priorities for the issue of archaeological excavation licences to missions and organizations, beginning with those areas that are most exposed to environmental hazards and most extensively affected by governmental building projects, in accordance with a timetable and schedule of subjects to be established by the Board of Directors of the Organization.

Article 32

No one else shall undertake archaeological exploration or excavation work except under the direct supervision of experts and technicians assigned by the Organization for that purpose and in accordance with the terms of the licence issued by it.

Authorization may be granted to the head of a mission or his representative to study, make drawings of and photograph any antiquities that are discovered by the mission. Every mission shall enjoy exclusive publication rights in respect of its excavation work for a period of not more than five years from the date of its first find at a particular site, after which time the said exclusive publication rights shall lapse.

Article 33

The Board of Directors of the Organization shall issue a decision prescribing the conditions and obligations that must be taken into consideration and met in respect of the issue of excavation licences. Every such licence shall specify the boundaries of the authorized exploration area, the term of validity of the licence, the minimum work that is to be executed, the performance bonds that are to be posted with the Organization, the conditions under which excavations are to be carried out, including any restriction to specific areas where work is to be completed before the licensee's activities are extended into other areas, and the requirement that finds are to be registered as they are discovered and adequately protected and preserved, and that the Organization is to be provided with a cumulative list of finds and a full technical report on all work executed under the licence.

Article 34

Archaeological exploration and excavation licences issued to foreign missions shall be subject to the following conditions:

- (a) every mission shall undertake to restore and conserve on a find-by-find basis, such immovable and movable antiquities as it may discover, and this work shall be executed under the supervision of and in co-operation with the relevant departments of the Antiquities Organization before the expiry of the term of the mission's contract;
- (b) the proposal of every foreign mission seeking to carry out archaeological excavations in Egypt shall be accompanied by a complementary plan under which the mission undertakes either to carry out restoration work on previously discovered antiquities or, depending on its qualifications, to carry out archaeological survey, inventory and registration activities in the region of its operations or in an adjacent region, with the approval of, or in co-operation with, the Organization;
- (c) the Organization, and not the licensee, shall have the exclusive right to make reproductions of excavated finds after the licensee has exercised its right of publication; the Organization, however, may decide to give the licensee duplicate copies of finds.

Article 35

All antiquities discovered by foreign archaeological excavation missions shall be deemed public property. However, the Organization may decide to compensate outstanding missions which have carried out important excavation and restoration work by donating some of the movable antiquities which they have uncovered to museums of antiquities designated by the missions concerned for exhibition under their auspices, where the Organization determines that the antiquities in question are expendable by reason of their similarity to other items excavated from the same location in terms of their materials, type, characteristics, and historical and artistic origin, and subject to the condition that all information concerning the said antiquities shall first be thoroughly examined and fully recorded.

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(b) transformation of an archaeological building or land or any part thereof into a dwelling, compound, store or workshop, cultivation of such land or preparing it for cultivation, the planting of trees thereon, use of it as a threshing floor, the digging of drains or canals through it, the execution of any other works on it or encroaching upon it in any other way;

(c) removal of rubble, fertilizer, soil, sand, or any other material from an archaeological site or land without the authorization of the Organization, failure to observe the terms of a quarrying licence or introduction of fertilizer, soil, refuse or any other material into an archaeological site or place;

(d) wilful contravention of the terms of an archaeological excavation licence;

(e) appropriation of an antiquity and unlawful disposal of it;

(f) counterfeiting an antiquity with fraudulent or deceitful intent.

Article 44

Every person who contravenes the provisions of Articles 2, 4, 7, 11, 18, 21 and 22 of this law shall be liable to the penalties prescribed in the preceding article.

Article 45

Each of the following offences shall be punishable by a prison sentence of not less than three months and not more than one year and/or a fine of not less than 100 and not more than 500 pounds:

(a) posting of notices or advertising signs upon an antiquity;

(b) writing, inscribing or painting on an antiquity;

(c) accidental defacement of or damage to a movable or immovable antiquity or detachment of a part of such an antiquity.

Article 46

Every public employee who contravenes the provisions of Articles 18, 19 or 20 shall be liable to a prison term of not less than two years and a fine of not less than 100 and not more than 500 pounds and shall be liable for compensation for any damage resulting from his offence.

Article 47

In the case of contraventions of Articles 7, 21 and 22 the antiquities in question shall be confiscated and turned over to the Antiquities Organization.

CHAPTER IV

Final provisions

Article 48

The head of the Board of Directors of the Organization, directors of the Antiquities department, directors, deputy-directors and assistant directors of museums, supervisors and directors of archaeological districts and archaeological inspectors and assistant inspectors shall have the legal standing empowering them lawfully to sanction the offences and contraventions referred to in this law and to enforce regulations made thereunder.

Article 49

Fines that are collected in application of the provisions of this law and the changes contemplated in Articles 29 and 39 hereof shall be deposited in the fund for financing the Organization's archaeological projects and museums, and the Organization shall pay out of these revenues, compensations in amounts to be determined by the head of the Board of Directors of the Organization to every person who contributes or provides information leading to the apprehension of an offender in accordance with conditions and terms to be set forth in a decision of the Board of Directors.

Article 50

All amounts owing to the Organization pursuant to the application of this law may be collected through sequestration procedures.

Article 51

The Organization shall be responsible for co-ordinating its activities with those of organizations and departments responsible for planning, housing, tourism, public utilities and security and provincial councils, with a view to the protection of antiquities, museums and historic buildings from the dangers of mechanical stress, congestion, flooding and pollution, industrial hazards and alterations of historical and archaeological settings, and the establishment of a balance between the requirements of town-planning and those of the conservation of antiquities and the safeguarding of the heritage.

Head of the Board of Directors
Mustafa Hassan Ali

Article 36

The competent Permanent Committee or, where appropriate, the Board of Directors of the museum concerned, shall be responsible for reviewing the results of missions and recommending any compensation.

The Organization may decide to compensate a licensed mission with movable antiquities, which the Organization may select without consulting the mission concerned, provided that the number of the said antiquities does not exceed 10 per cent of all the mission's movable finds, that other pieces of similar material, type, characteristics and artistic and historical origin remain and that the antiquities thus disposed do not include items made of gold or silver, precious stones, papyri, manuscripts, or construction elements or parts detached from such elements.

Every agreement concluded by the Organization in this regard shall include provisions prohibiting commercial transactions in respect of donated antiquities inside or outside the country.

Article 37

Excavation licences issued to organizations and missions may be terminated by decision of the Board of Directors of the Organization where the terms of a licence are violated during the course of the work. Without prejudice to the penalties prescribed for the illegal appropriation or export of antiquities, the Organization may decide to ban any archaeological mission or foreign museum of antiquities from carrying out archaeological excavations in the Arab Republic of Egypt for a period of not less than five years where the participation or collaboration of any of its members in the perpetration of any of the offences indicated in this law is established.

Article 38

The Antiquities Organization and archaeological missions of Egyptian universities shall be exempted from the payment of customs duties on such tools, materials and equipment as they may import from abroad for the purposes of executing excavation work, renovating archaeological and historical buildings or equipping their museums and archaeological sites and their artistic and archaeological exhibitions.

The customs authorities shall also give clearance, on a temporary basis, to any tools and equipment introduced into the country by foreign missions for the purposes of excavation and renovation work and for field studies related to antiquities. Foreign missions shall be definitively exempted from the payment of customs duties if they sell or donate such tools and equipment to the Organization or to archaeological missions of Egyptian universities. Where a mission disposes of its tools and equipment in favour of any other party when its work is completed, it shall be liable to payment of the customs duties assessed on such tools and equipment.

Article 39

The Board of Directors of the Organization may decide to require visitors to its museums and archaeological sites to pay an admittance charge, which for foreign visitors may not exceed ten pounds per site or museum.

CHAPTER III

Sanctions and penalties

Article 40

Without prejudice to such more severe sanctions as may be prescribed in the penal code or any other law, persons contravening the provisions of this law shall be liable to the sanctions laid down in the following articles.

Article 41

Every person who unlawfully exports or participates in the exporting of an antiquity from the Republic shall be liable to a prison term at hard labour and a fine of not less than 5,000 and not more than 15,000 pounds. Moreover, the antiquity in question as well as any equipment, tools, machinery and vehicles used in the commission of the offence shall be confiscated and turned over to the Organization.

Article 42

Each of the following offences shall be punishable by a prison term of not less than five and not more than seven years and a fine of not less than 3,000 and not more than 50,000 pounds.

- (a) theft or concealment of a publicly owned antiquity or part thereof or participation in theft or concealment, in which case the antiquity concerned and any equipment, tools, machinery and vehicles used in the commission of the offence shall be confiscated and turned over to the Organization;
- (b) wilful destruction or damage, defacement, alteration of features or detachment of a part in respect of an antiquity or historical building, or participation in such an act;
- (c) unauthorized excavation or participation in such excavation, in which case the offender shall be liable to a penalty of a prison term at hard labour and a fine of not less than 5,000 and not more than 50,000 pounds where such offender is a government employee supervising or working in the Antiquities department, an employee or worker of an archaeological mission or a contractor or employee thereof who is working on contract with the Organization.

Article 43

Each of the following offences shall be punishable by a prison term of not less than one and not more than two years and/or a fine of not less than 100 and not more than 500 pounds:

- (a) removal or detachment of a publicly owned or registered antiquity from its place without the written authority of the Antiquities Organization;

STATISTICAL APPENDIX:**Appendix S-1: QUESTIONNAIRE FORM:****1- Identity:****BIOGRAPHICAL DATA:**

- 2- Sex:** 1-male
2-female
- 3- Age:**
- 4- Income:**
1-less than L.E.500/year
2-L.E.500-1000/year
3-L.E.1000-1500/year
4-L.E.1500-2500/year
5-L.E.2500-5000/year
6-more than L.E.5000/year
- 5- Academic status:**
1-illiterate
2-can read & write
3-high school
4-university
5-higher
6-other
- 6- Number of persons:**
- 7- Number of families:**
- 8- Number of rooms:**

FIRST: DESCRIPTION:

- 9- The dwelling:**
1-house.
2-flat.
3-court house.
- 10- Area:** 1-less than 50m²
2-50-100m²
3-100-150m²
4-150-200m²
5-200-400m²
6-more than 400m²
- 11- Person/room:**
1-one
2-two
3-three
4-four
5-more than four
- 12- Utilities:**
1-private.
2-shared.

- 13- **Open spaces:**
 1-exist.
 2-dont exist.
- 14- **Open spaces:**
 1-private.
 2-shared.
 3-dont exist.
- 15- **Tenant:**
 1-owner
 2-renter
- 16- **The proportion of the rent (or rates) to the income:**
 1-less than 1/5
 2-1/5-1/3
 3-1/3-1/2
 4-more than 1/2
- 17- **The proportion of the maintenance cost to the income:**
 1-less than 1/10
 2-1/10-2/10
 3-2/10-3/10
 4-more than 3/10
- 18- **The age of the building:**
 1-less than 30 years
 2-30-80 years
 3-80-100 years
 4-more than 100 years
- 19- **The construction system:**
 1-concrete skeleton
 2-bearing walls
- 20- **The materials:**
 1-reinforced concrete
 2-limestone and timber
 3-limestone, brick and timber
 4-limestone, brick and steel

SECOND: OCCUPANT ATTITUDE TOWARDS HIS DWELLING:

- 21- **My house is:**
 1-historic
 2-old
 3-modern
- 22- **My house is:**
 1-with special value
 2-nothing special about it.
- 23- **I consider the condition of my house:**
 1-excellent
 2-good
 3-fair
 4-poor
- 24- **In order to improve my house, I think it needs to be:**
 1-demolished.
 2-repaired.
 3-altered.

- 4-provided with modern facilities.
5-other.
- 25- **What I like most about my house:**
1-good privacy.
2-spacious.
3-good appearance.
4-less maintaince cost.
5-all.
6-nothing.
7-dont know.
- 26- **What I don't like most about my house:**
1-lack of privacy
2-lack of space.
3-lack of modern facilities
4-bad appearance.
5-costs much of maintenance.
6-nothing.
7-everything.

THIRD: OCCUPANT SATISFACTION WITH THE DWELLING AND THE DISTRICT:

- 27- **I'm happy with my house because it is:**
1-close to work.
2-cheap rent.
3-good memories.
4-the surrounding environment.
5-1,2&4.
6-not happy.
- 28- **I'm not happy with my house because it is:**
1-far from work.
2-expensive rent.
3-the surrounding environment.
4-nothing.
- 29- **Moving from my house:**
1-I don't want to move.
2-I want to move to another house in the district.
3-I want to move to another district.
- 30- **My feeling towards my district is:**
1-strongly attached.
2-fairly attached.
3-not attached at all.
- 31- **Concerning my district I feel:**
1-proud.
2-shame.
- 32- **Proud of:**
1-its history.
2-its character.
3-dont know.

- 33- **Ashamed from:**
 1-untidiness.
 2-crowded.
 3-problems.
 4-nothing.
- 34- **The district changed during my life time:**
 1-yes
 2-no
- 35- **The physical changes were:**
 1-very little.
 2-notable
 3-very much
- 36- **I consider these changes:**
 1-good.
 2-bad.
 3-don't know.
- 37- **The social changes were:**
 1-very little.
 2-notable.
 3-very much.
- 38- **I consider these changes:**
 1-good.
 2-bad.
 3-don't know.

FOURTH: OCCUPANT ATTITUDE TOWARDS HIS DISTRICT:

- 39- **I think that the main problem in this district is:**
 1-housing.
 2-transportation.
 3-lack of services.
 4-lack of amenities.
 5-high density.
 6-markets.
 7-unemployment and crime.
 8-nothing.
- 40- **I think that the way to tackle these problems is through:**
 1-governmental influence.
 2-public participation.
 3-both.
 4-other....
- 41- **The water supply system in this district is:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 42- **The electrical supply system in this district is:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.

- 43- **The sewage system in this district is:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 44- **The garbage collection system in this district is:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 45- **The transportation system in this district is:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 46- **The educational services in this district are:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 47- **The health services in this district are:**
 1-excellent.
 2-good.
 3-fair.
 4-poor.
- 48- **I consider the idea of pedestrianizing some streets?**
 1-good but not necessary.
 2-good and necessary.
 3-bad and not necessary.
 4-bad but necessary.
- 49- **If necessary, this should be applied to:**
 50- **Because:**
- 51- **I prefer living in another district with wider streets and higher modern buildings?**
 1-yes
 2-No
- 52- **The Eastern harbour:**
 1-essential for the district.
 2-makes no difference.
 3-a principle source for living.
- 53- **The Western harbour:**
 1-has a negative effect on the district.
 2-essential for the district.
 3-makes no difference.
- 54- **The Navy:**
 1-has a negative effect on the district.
 2-essential for the district.
 3-makes no difference.

FIFTH: OCCUPANT ATTITUDE TOWARDS THE HISTORICAL SURROUNDINGS:

- 55- **The surrounding environment stirs my historical imagination:**
 1-yes.
 2-no.
- 56- **El-Shourbagi:is it worth keeping?**
 1-yes.
 2-no.
- 57- **Because its:**
 1-historical interest.
 2-architectural value.
 3-ornate.
 4-other.
- 58- **I find such building:**
 1-friendly
 2-unfriendly
- 59- **Mogamaa al-Massajid:**
 1-symbol of the history of the district.
 2-a principle focus point.
 3-has no effect on the district.
 4-a religious centre
- 60- **Its development project:**
 1-excellent.
 2-the buildings dont fit with the surroundings.
 3-un-succesful.
 4-necessary for revitalizing the district.
 5-prefer what was before.

Appendix S-2: RESULTS

First: biographical data:

2-SEX	Frequency	Percent
male	88	55
female	72	45
	<hr/>	<hr/>
Total	160	100.0

3-AGE

Mean	38.775	Std err	1.180	Median	35.000
Mode	35.000	Std dev	12.924	Variance	167.033
Kurtosis	.194	S E Kurt	.438	Skewness	1.012
S E Skew	.221	Range	60.000	Minimum	20.000
Maximum	80.000	Sum	4653.000		

4-INCOME

Annual income	Frequency	Percent
Less than 500 L.E.	12	10.0
From 500-1000 L.E.	10	8.3
From 1000-1500 L.E.	30	25.0
From 1500-2500 L.E.	48	40.0
From 2500-5000 L.E.	20	16.7
	<hr/>	<hr/>
Total	160	100.0

5-ACADEMIC STATUS

	Frequency	Percent
Illiterate	40	25
Can read & write	40	25
highschool	32	20
universty	48	30
	<hr/>	<hr/>
Total	160	100.0

6-PERSONS/UNIT

Mean	7.783	Std err	.709	Median	6.000
Mode	6.000	Std dev	7.762	Variance	60.255
Kurtosis	11.611	S E Kurt	.438	Skewness	3.507
S E Skew	.221	Range	39.000	Minimum	1.000
Maximum	40.000	Sum	934.000		

Valid cases 160 Missing cases 0

7-FAMILY/UNIT

Value	Frequency	Percent
1	112	70.0
2	39	24.2
4	2	1.5
6	3	1.8
9	4	2.5
<hr/>		
Total	160	100.0

Mean	1.617	Std err	.145	Median	1.000
Mode	1.000	Std dev	1.583	Variance	2.507
Kurtosis	14.736	S E Kurt	.438	Skewness	3.818
S E Skew	.221	Range	8.000	Minimum	1.000
Maximum	9.000	Sum	194.000		

Valid cases 160 Missing cases 0

8-No. of ROOMS

Value	Frequency	Percent
1	50	31.8
2	10	6.2
3	61	38.1
4	22	13.7
5	8	5
6	5	3.1
9	4	2.5
<hr/>		
Total	160	100.0

9-TYPE OF DWELLING

	Frequency	Percent
house	40	25.0
flat	89	55.8
courthouse	31	19.2
<hr/>		
Total	160	100.0

10-AREA

	Frequency	Percent
<50	43	27.7
50-100	78	49.2
100-150	32	20.8
150-200	2	1.2
200-400	5	3.1
Total	160	100.0

11-PERSON/ROOM

	Frequency	Percent
1	36	22.5
2	46	29.5
3	27	16.9
4	1	.6
>4	10	6.2
Total	160	100.0

12-UTILITIES

	Frequency	Percent
private	134	82.5
shared	26	17.5
Total	160	100.0

13-OPENSACES

	Frequency	Percent
exist	84	52.5
dontexist	76	47.5
Total	160	100.0

14-OPENSACES

	Frequency	Percent
Private	20	12.5
shared	80	50.0
dontexist	60	37.5
Total	160	100.0

15-TENANT

	Frequency	Percent
owner	35	29.2
renter	85	70.8
	<hr/>	<hr/>
Total	160	100.0

16-PROPORTION-OF-RENT-TO-INCOME

	Frequency	Percent
<.2	149	93.3
.2-.3	11	6.7
	<hr/>	<hr/>
Total	160	100.0

17-PROPORTION-OF-MAINTENANCE

	Frequency	Percent
<.1	151	94.2
.1-.2	9	5.8
	<hr/>	<hr/>
Total	160	100.0

18-AGE-OF-BUILDING

	Frequency	Percent
<30	18	11.2
30-80	49	30.8
80-100	54	33.8
>100	39	24.2
	<hr/>	<hr/>
Total	160	100.0

19-THE-CONSTRUCTION

	Frequency	Percent
Skeleton	39	24.8
bearwall	121	75.2
	<hr/>	<hr/>
Total	160	100.0

20-BUILDING MATERIALS

	Frequency	Percent
R.C.	34	21.7
L.S.& T	59	36.7
L.S.&Br.&T.	65	40.8
L.S.&Br.&St.	2	.8
	<hr/>	<hr/>
Total	160	100.0

21-MYHOUSE

	Frequency	Percent
historc	20	12.5
old	121	75.8
modern	19	11.7
	<hr/>	<hr/>
Total	160	100.0

22-MYHOUSE

	Frequency	Percent
withvalue	97	60.5
withoutvalue	63	39.5
	<hr/>	<hr/>
Total	160	100.0

23-CONDITION-MYHOUSE

	Frequency	Percent
excellnt	6	3.3
good	48	30.0
fair	76	47.5
poor	30	19.2
	<hr/>	<hr/>
Total	160	100.0

24-IT-NEEDS

	Frequency	Percent
demolish	25	15.8
repair	78	48.3
altered	33	20.8
provmodrn	13	8.3
other	6	8
	<hr/>	<hr/>
Total	160	100.0

25-WHAT-I-LIKE

	Frequency	Percent
goodpriv.	7	4.2
spacious	52	32.5
all	45	28.3
nothing	13	8.3
dontknow	43	26.7
	<hr/>	<hr/>
Total	160	100.0

26-IDONT-LIKE

	Frequency	Percent
lackpriv	9	5.8
lackspac	27	16.7
lackmodr	27	16.7
badapear	30	18.3
mchmacst	4	2.5
nothing	50	31.7
everything	13	8.3
	<hr/>	<hr/>
Total	160	100.0

27-HAPPY-BECAUSE

	Frequency	Percent
closwork	26	16.7
cheaprnt	25	15.8
godmemor	7	4.2
surrenvi	8	5.0
1,2&4	80	50.0
	13	8.3
	<hr/>	<hr/>
Total	160	100.0

28-NOTHAPPY-BECAUSE

	Frequency	Percent
farwork	24	15.0
expenrnt	12	7.5
surrenvi	31	19.2
nothing	93	58.3
	<hr/>	<hr/>
Total	160	100.0

29-MOVING

	Frequency	Percent
dontwant	77	48.3
anotherhouse	70	43.3
anotherdistric	13	8.3
	<hr/>	<hr/>
Total	160	100.0

30-MYFEELING

	Frequency	Percent
strongatac	107	66.7
fairatac	40	25.0
notatac	13	8.3
	<hr/>	<hr/>
Total	160	100.0

31-IFEEL

	Frequency	Percent
proud	136	85
shame	24	15
	<hr/>	<hr/>
Total	160	100.0

32-PROUDBECAUSE

	Frequency	Percent
history	18	11.7
charactr	124	77.5
dontknow	28	10.8
	<hr/>	<hr/>
Total	160	100.0

33-ASHAMEDBECAUSE

	Frequency	Percent
untidy	24	15.0
crowd	25	15.8
problems	41	25.8
nothing	70	43.3
	<hr/>	<hr/>
Total	160	100.0

34-DIST-CHANG

	Frequency	Percent
yes	151	94.3
no	9	5.7
	<hr/>	<hr/>
Total	160	100.0

35-PHYSICAL-CHANGES

	Frequency	Percent
verylitl	13	8.3
notable	32	20.0
verymuch	115	71.7
	<hr/>	<hr/>
Total	160	100.0

36-CONSIDER-THESE-CH.

	Frequency	Percent
good	57	35.8
bad	63	39.2
dontknow	40	25.0
	<hr/>	<hr/>
Total	160	100.0

37-SOCIAL-CHANGES

	Frequency	Percent
verylitl	8	5.0
notable	11	6.7
verymuch	141	88.3
	<hr/>	<hr/>
Total	160	100.0

38-CONSIDER-THESE-CH.

	Frequency	Percent
good	8	5.0
bad	137	85.8
dontknow	15	9.2
	<hr/>	<hr/>
Total	160	100.0

39-MAIN-PROB.

	Frequency	Percent
housing	81	50.8
transport	3	1.7
lackamen	7	5.8
highdens	24	15.0
unemploy	41	25.8
nothing	2	.8
	<hr/>	<hr/>
Total	160	100.0

40-THE-WAY-TO-TACKLE

	Frequency	Percent
governmnt	72	45.0
publicpa	27	16.7
both	56	35.0
other	5	3.3
	<hr/>	<hr/>
Total	160	100.0

41-WATER-SUPPLY

	Frequency	Percent
excellnt	51.7	51.7
good	26	21.7
fair	7	5.8
poor	25	20.8
	<hr/>	<hr/>
Total	160	100.0

42-ELECTRICAL-SUPPLY

	Frequency	Percent
excellnt	125	78.3
good	33	20.8
fair	2	.8
	<hr/>	<hr/>
Total	160	100.0

43-SEWAGE

	Frequency	Percent
excellnt	122	76.7
good	29	18.3
fair	7	4.2
poor	2	.8
	<hr/>	<hr/>
Total	160	100.0

44-GARBAGE

	Frequency	Percent
excellnt	58	36.7
good	37	23.3
fair	34	21.7
poor	31	18.3
	-----	-----
Total	160	100.0

45-TRANSPORTATION

	Frequency	Percent
excellnt	155	96.7
good	3	2.5
fair	2	.8
	-----	-----
Total	160	100.0

46-EDUCATIONAL

	Frequency	Percent
excellnt	152	95.0
good	6	4.2
poor	2	.8
	-----	-----
Total	160	100.0

47-HEALTH

	Frequency	Percent
excellnt	137	85.8
good	20	12.5
poor	3	1.7
	-----	-----
Total	160	100.0

48-THE-IDEA-PEDESTRIANIZATION

	Frequency	Percent
gdnotnecs	55	34.2
gdnecess	57	35.8
bdnotnecs	40	25.0
bdnecess	8	5.0
	-----	-----
Total	160	100.0

49-PREFER LIVING

	Frequency	Percent
yes	42	26.7
no	116	72.5
	2	.8
	<hr/>	<hr/>
Total	160	100.0

50-EASTERNHARBOUR

	Frequency	Percent
essential	126	79.2
nodifference	29	18.3
asourcelife	5	2.5
	<hr/>	<hr/>
Total	160	100.0

51-WESTERNHARBOUR

	Frequency	Percent
negative	30	19.2
essential	114	70.8
nodifference	16	10.0
	<hr/>	<hr/>
Total	160	100.0

52-NAVY

	Frequency	Percent
negative	72	45.0
essential	49	30.8
nodifference	39	24.2
	<hr/>	<hr/>
Total	160	100.0

53-SURROUNDING-STIRS-MY-HIST.

	Frequency	Percent
yes	65	40.8
no	92	57.5
dontknow	3	1.7
	<hr/>	<hr/>
Total	160	100.0

54-WORTHKEEPING

	Frequency	Percent
yes	150	93.7
no	8	5.0
dontknow	2	.8
	<hr/>	<hr/>
Total	160	100.0

55-BECAUSE

	Frequency	Percent
histintr	82	51.7
archintr	14	9.2
ornate	48	29.2
other	16	10.0
	<hr/>	<hr/>
Total	160	100.0

56-THEBUILDING

	Frequency	Percent
friendly	145	90.8
unfriend	12	7.5
	3	1.7
	<hr/>	<hr/>
Total	160	100.0

57-MOGAMAA AL-MASSAJID

	Frequency	Percent
symbol	44	27.5
focuspoint	77	48.3
noeffct	4	2.5
religious	35	21.7
	<hr/>	<hr/>
Total	160	100.0

58-ITS DEVELOPMENT

	Frequency	Percent
excellent	56	35.0
dontfit	14	9.2
unsuccessful	16	10.0
necessary	48	30.0
before	26	15.8
	<hr/>	<hr/>
Total	160	100.0

Appendix S-3: Selected Correlation coefficients:

PEARSON CORRELATION COEFFICIENTS

AGE	AGE	Q.30	Q.30	.1456	1.0000
	1.0000	-.1515		(.160)	(.160)
	(.160)	(.160)		P=.056	P=.
	P=.	P=.049			
Q.30	-.1515	1.0000	Q.13	Q.13	Q.30
	(.160)	(.160)	Q.13	1.0000	.0456
	P=.049	P=.		(.160)	(.160)
				P=.	P=.310
SEX	SEX	Q.30	Q.30	-.0456	1.0000
	1.0000	-.0901		(.160)	(.160)
	(.160)	(.160)		P=.310	P=.
	P=.	P=.164			
Q.30	-.0901	1.0000	Q.14	Q.14	Q.30
	(.160)	(.160)	Q.14	1.0000	.1673
	P=.164	P=.		(.160)	(.160)
				P=.	P=.034
INCOME	INCOME	Q.30	Q.30	.1673	1.0000
	1.0000	.1963		(.160)	(.160)
	(.160)	(.160)		P=.034	P=.
	P=.	P=.016			
Q.30	.1963	1.0000	Q.15	Q.15	Q.30
	(.160)	(.160)	Q.15	1.0000	.0740
	P=.016	P=.		(.160)	(.160)
				P=.	P=.211
ACADEMIC	ACADEMIC	Q.30	Q.30	.0740	1.0000
	1.0000	.1741		(.160)	(.160)
	(.160)	(.160)		P=.211	P=.
	P=.	P=.029			
Q.30	.1741	1.0000	Q.18	Q.18	Q.30
	(.160)	(.160)	Q.18	1.0000	.1893
	P=.029	P=.		(.160)	(.160)
				P=.	P=.019
Q.9	Q.9	Q.30	Q.30	.1893	1.0000
	1.0000	.1950		(.160)	(.160)
	(.160)	(.160)		P=.019	P=.
	P=.	P=.016			
Q.30	.1950	1.0000	Q.23	Q.23	Q.30
	(.160)	(.160)	Q.23	1.0000	.4517
	P=.016	P=.		(.160)	(.160)
				P=.	P=.000
Q.10	Q.10	Q.30	Q.30	.4517	1.0000
	1.0000	.0027		(.160)	(.160)
	(.160)	(.160)		P=.000	P=.
	P=.	P=.488			
Q.30	.0027	1.0000	Q.29	Q.29	Q.30
	(.160)	(.160)	Q.29	1.0000	.7962
	P=.488	P=.		(.160)	(.160)
				P=.	P=.000
Q.11	Q.11	Q.30	Q.30	.7962	1.0000
	1.0000	.1504		(.160)	(.160)
	(.160)	(.160)		P=.000	P=.
	P=.	P=.050			
Q.30	.1504	1.0000	Q.31	Q.31	Q.30
	(.160)	(.160)	Q.31	1.0000	.4666
	P=.050	P=.		(.160)	(.160)
				P=.	P=.000
Q.12	Q.12	Q.30	Q.30	.4666	1.0000
	1.0000	.1456		(.160)	(.160)
	(.160)	(.160)		P=.000	P=.
	P=.	P=.056			

Q.32	Q.32 1.0000 (160) P= .	Q.30 .4506 (160) P= .000	Q.13	Q.13 1.0000 (160) P= .	Q.29 .0837 (160) P= .182
Q.30	Q.30 .4506 (160) P= .000	Q.30 1.0000 (160) P= .	Q.29	Q.29 -.0837 (160) P= .182	Q.29 1.0000 (160) P= .
AGE	AGE 1.0000 (160) P= .	Q.29 -.2942 (160) P= .001	Q.14	Q.14 1.0000 (160) P= .	Q.29 .0988 (160) P= .142
Q.29	Q.29 -.2942 (160) P= .001	Q.29 1.0000 (160) P= .	Q.29	Q.29 -.0988 (160) P= .142	Q.29 1.0000 (160) P= .
INCOME	INCOME 1.0000 (160) P= .	Q.29 .0158 (160) P= .432	Q.15	Q.15 1.0000 (160) P= .	Q.29 .1150 (160) P= .106
Q.29	Q.29 .0158 (160) P= .432	Q.29 1.0000 (160) P= .	Q.29	Q.29 .1150 (160) P= .106	Q.29 1.0000 (160) P= .
ACADEMIC	ACADEMIC 1.0000 (160) P= .	Q.29 .0853 (160) P= .177	Q.18	Q.18 1.0000 (160) P= .	Q.29 .3475 (160) P= .000
Q.29	Q.29 .0853 (160) P= .177	Q.29 1.0000 (160) P= .	Q.29	Q.29 .3475 (160) P= .000	Q.29 1.0000 (160) P= .
Q.9	Q.9 1.0000 (160) P= .	Q.29 .0632 (160) P= .247	Q.23	Q.23 1.0000 (160) P= .	Q.29 .4509 (160) P= .000
Q.29	Q.29 .0632 (160) P= .247	Q.29 1.0000 (160) P= .	Q.29	Q.29 .4509 (160) P= .000	Q.29 1.0000 (160) P= .
Q.10	Q.10 1.0000 (160) P= .	Q.29 .0991 (160) P= .141	Q.31	Q.31 1.0000 (160) P= .	Q.29 .3436 (160) P= .000
Q.29	Q.29 .0991 (160) P= .141	Q.29 1.0000 (160) P= .	Q.29	Q.29 .3436 (160) P= .000	Q.29 1.0000 (160) P= .
Q.11	Q.11 1.0000 (160) P= .	Q.29 .3558 (160) P= .000	Q.32	Q.32 1.0000 (160) P= .	Q.29 .4298 (160) P= .000
Q.29	Q.29 .3558 (160) P= .000	Q.29 1.0000 (160) P= .	Q.29	Q.29 .4298 (160) P= .000	Q.29 1.0000 (160) P= .
Q.12	Q.12 1.0000 (160) P= .	Q.29 .4265 (160) P= .000	Q.29	Q.29 .4265 (160) P= .000	Q.29 1.0000 (160) P= .
Q.29	Q.29 .4265 (160) P= .000	Q.29 1.0000 (160) P= .			

Appendix S-4: CENSUS DATA

The following appendix states some data extracted from the 1976 & 1986 Censuses:

Table: Densities of different districts in Alexandria; AlGommrok is the highest

District	Densities /Km ²	
	1986	1976
Montazah	5586	2872
al-Ramleh	64038	46957
Bab-Sharqi	22468	21174
Muharam-bey	89326	87589
al-arin	32364	37132
al-Manshiah	65946	78656
Karmous	59479	64485
al-Laban	36835	43651
al-Gommrok	114338	133378
Mina al-basal	17810	13601
al-Dekhila	3329	1581
al-Ameryiah	47	20

Population characteristics:

Male	72542
Female	70264
Total	142806

Illiterate
 Read and write
 Highschool
 University

Average family size 4.3

Buildings

Owner occupied	15%
Tenant occuppies	78%

Date of construction:

before 1940	72.4%
from 1940-59	10.7%
from 1960-79	14.4%
from 1980-	2.5%

Methods of construction:

Skeleton 28%

Bearing walls 68%

Appendix S-5: EXTRACT FROM THE POLYGON ATTRIBUTE TABLE (*.PAT) FOR A ALSAGHA CLUSTER, CREATED WITH ARC/INFO:

2

AREA	=	1808.25953
PERIMETER	=	233.43999
C1#	=	2
C-ID	=	1
A2#	=	2
HEIGHTS	=	10
NOOFSTOREYS	=	2
DATE	=	1758
GROUNDFLOORUSE	=	comm:jewllery/food/workshps
USE	=	residential/religious
F/A	=	2.2
RESIDENTIALAREA	=	1200.00
COMMERCIALAREA	=	1600.00
PERC.OFVOID	=	5
PERC.OFSOLID	=	95
OWNERSHIP	=	mix
BUILDINGMATERIAL	=	stone/brick/timber
CONSTRUCTION	=	bearingwalls/vaulting
METERS/RESIDENT	=	12.0
ADDRESS	=	Alshourbagi&Almidan streets

3

AREA	=	1007.42360
PERIMETER	=	201.42095
C1#	=	3
C-ID	=	2
A2#	=	3
HEIGHTS	=	6
NOOFSTOREYS	=	1
DATE	=	0
GROUNDFLOORUSE	=	comm:food
USE	=	comm.:use
F/A	=	1.0
RESIDENTIALAREA	=	0.00
COMMERCIALAREA	=	1007.00
PERC.OFVOID	=	0
PERC.OFSOLID	=	100
OWNERSHIP	=	mix
BUILDINGMATERIAL	=	mix
CONSTRUCTION	=	mix
METERS/RESIDENT	=	0.0

ADDRESS = Almidan&Soukaltabakhin streets

4

AREA = 1066.32476
 PERIMETER = 152.53983
 C1# = 4
 C-ID = 3
 A2# = 4
 HEIGHTS = 15
 NOOFSTOREYS = 4
 DATE = 1900
 GROUND FLOOR USE = comm.:food
 USE = residential
 F/A = 4.0
 RESIDENTIAL AREA = 3198.00
 COMMERCIAL AREA = 1066.00
 PERC.OFVOID = 0
 PERC.OFSOLID = 100
 OWNERSHIP = private
 BUILDING MATERIAL = stone/brick/timber/
 CONSTRUCTION = bearing walls
 METERS/RESIDENT = 40.0
 ADDRESS = Almidan street

5

AREA = 116.52529
 PERIMETER = 43.57240
 C1# = 5
 C-ID = 4
 A2# = 5
 HEIGHTS = 5
 NOOFSTOREYS = 1
 DATE = 0
 GROUND FLOOR USE = comm.:jewellery/food
 USE = comm.:jewellery/food
 F/A = 1.0
 RESIDENTIAL AREA = 0.00
 COMMERCIAL AREA = 116.00
 PERC.OFVOID = 0
 PERC.OFSOLID = 100
 OWNERSHIP = waqf
 BUILDING MATERIAL = mix
 CONSTRUCTION = mix
 METERS/RESIDENT = 0.0
 ADDRESS = Almidan&Alshourbagi streets

6

AREA = 5.47400
 PERIMETER = 15.63953
 C1# = 6
 C-ID = 5
 A2# = 6
 HEIGHTS = 5
 NOOFSTOREYS = 1

DATE = 0
GROUND FLOOR USE = comm.:food
USE = comm.:food
F/A = 1.0
RESIDENTIAL AREA = 0.00
COMMERCIAL AREA = 5.00
PERC. OF VOID = 0
PERC. OF SOLID = 100
OWNERSHIP = waqf
BUILDING MATERIAL = mix
CONSTRUCTION = mix
METERS/RESIDENT = 0.0
ADDRESS = Almidan street

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