

**REASSESSING THE ROLE OF TRADITION
IN ARCHITECTURE**

by
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**Bachelor of Architecture
University of Engineering and Technology, Lahore
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**Submitted to the Department of Architecture
in partial fulfillment of the requirements of the Degree
Master of Science in Architecture Studies
at the
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ABSTRACT

This study stems from a deep dissatisfaction with contemporary architectural trends in Pakistan today, coupled with an acute awareness that the long-established traditions the society is endowed with remain ignored. It questions the disparity between traditional and contemporary built environments, and seeks to understand the process which led from the one to the other. And in so doing, it attempts to identify the continuities that remained and the changes that occurred.

The study begins with the conviction that traditions still remain important in the society. This hypothesis is supported by a theoretical debate and practical evidence, in an effort to identify the common threads that transcend time and thus form these traditions. The evidence is gathered through an examination of residential environments built in successive time periods - from historical to contemporary - and their comparative analysis. The research is based on original newly discovered data, oral history, on-site investigations, and where available, existing information. The comparative analysis is approached from three angles - architecture, living patterns, and user feedback. And through this analysis emerge the forces of change and the threads of continuities affecting the environment and its use. The traditions thus identified are currently often regarded as contrary to progress, and therefore redundant. This thesis seeks to re-establish their enduring validity by confirming their persistent presence and continued value.

Thesis Supervisor: Professor William L. Porter
Title: Professor of Architecture and Planning

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Dedicated

.....to life.

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A VIEW OF THE HISTORIC CITY OF LAHORE (1852)

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INTRODUCTION

The architectural idiom being currently applied and perpetuated in Pakistan is producing designs that are easily identifiable with, and mistakable for, those being produced internationally. They have little sense of place, of uniqueness to the locale or peculiarity to the distinct set of conditions within which they evolve. On the other hand, a glance at the traditional environments existing in older parts of towns and cities reveals striking contrasts to the new ones. Not only are the forms and typologies different, but also the entire scale and character of spaces created.

For an architect - a self-professed designer of environments and spaces - such a state of affairs raises many questions. Since both the above-mentioned extremes - of traditional and modern architecture - occur in the same society, which of the two is more legitimate in meeting the requirements of its people? Since both symbolise completely different modes of living, norms and values, does either truly represent the current state of society? And, if each is taken as an example of a different time period, one of the past and the other of the present, what were the forces that brought about such a drastic change in that society? Can architecture be taken as a representative of that change? And, if not, what are the tools available to judge the extent to which architecture is fulfilling the social, religious and cultural needs of its users?

This thesis attempts to investigate some of these questions in an effort to clarify this

apparent dichotomy, to understand how architecture and society relate to each other, and to comprehend the responsibilities of an architect, like myself, towards society. Furthermore, it examines this relationship through time to identify those constants involved that have withstood the upheavals of time and transcended change - and which therefore constitute the traditions of a society. For, traditions are defined as established patterns of thought, action, or behaviour that form cultural continuities in social attitudes and institutions.¹

Currently there exist two approaches toward traditions - one, the traditionalist, and the other, the liberal. The traditionalists reaffirm the authority of the past as the only guide for the present, a position that results in the traditionalisation of society and encourages literal imitation and perpetuation of the past. The liberal approach, on the other hand, not only denies the authority of tradition but also its authenticity as a resource for the present, and sees it as an obstacle to progress² to be discarded. Thus both approaches take a predetermined stand for or against traditions. The position that this study takes is instead for a *critical identification* of traditions, evolving over time as age-old values slowly merge with the new. For, traditions constantly undergo a process of change, assimilation and transformation, while still maintaining a sense of continuity; and thus form as much a part of the present as they did of the past.

Traditions are fascinating for their perseverance and obstinacy. In spite of all the upheavals that time may cause and all the changes that a society may undergo, they stubbornly persist. At times their persistence may manifest itself and be visible; at

¹Websters Dictionary. 1986 edition.

² Al-Hathloul, Saleh. *Tradition, Continuity and Change*..... p. 259.

others it may not be directly observable. And yet the shifts in a society that directly influence them may be momentous.

Pakistani society, like most others, has undergone many such moments in history which have affected its basic structuring patterns. Of these, the changes with direct relevance to this study may be categorised into three realms:

i) Shifts in the family structure from the extended to the nuclear family. The extended family was the norm in society until recently, and it was not unusual to find at least three, if not four generations living under the same roof. In a neighbourhood many such families would have been living for generations, and in many cases, even be linked to each other through occupations, religious sects, geographical origins or clans. The patterns of living thus generated were heavily geared towards mutual support and interaction. Today, by contrast, the trend towards nuclear families is on the increase. Moreover, the society by nature has become more transient; people are constantly on the move under job obligations or in search of better opportunities. Therefore, neighbourhoods with stable populations are rare, except for those composed predominantly of owner-occupiers. Yet a closer look reveals many forms of interaction to have survived to this day in spite of their original impetus having become extinct. They survive because they have been translated into social systems to become an integral part of the values of that society. For example, one recurrently finds a delicacy cooked in one household being sent to many neighbours to share with. The borrowing of articles of daily use is taken for granted. One household may have a telephone, and an entire community has access to it as if it were theirs. Such instances point towards the customs of sharing, doing things together, and the implicitly understood rights and privileges of neighbours - persisting as cultural values, rather than necessities.

ii) Changes in the technology of living have made many elaborate rituals for day-to-day activities redundant. Patterns of daily grocery-shopping to ensure fresh food, for instance, are no longer required with the introduction of household refrigerators, that allow groceries to be bought on a weekly basis instead. Household gadgets are also commonly found in all but rare cases. The impact of television on lifestyles has been severe. Not only does it encourage late hours, but also replaces established family activity patterns during evenings. The automobile in turn, has not merely facilitated greater mobility, but has also had irreversable effects on urban forms and architecture. Yet innumerable patterns in daily life and forms of social intercourse remain: a taxi driver reciting prayers while speeding through red lights, the sacrifice of a goat as the foundation of a new building is being laid, are a couple of such cases in point.

iii) The power relations in cities have changed from the traditional, decentralised structure to a contemporary, centralised authority. The traditional residential fabrics evolved with a minimum of rules. Only what was disallowed was specified, everything else being permitted as long as neighbours did not object. The resulting fabric was therefore rich in variety and ingenuity. Each situation presented its own set of problems based on what already existed, and therefore a different set of possible alternatives evolved. Central control was thus minimal, with the maximum decentralisation of powers. Today, the situation is reverse. Urban fabrics develop under elaborate, strictly laid down regulations that specify all that is permitted, all else being designated as illegal. Very little leeway is allowed for deviations or individual interpretations, resulting in environments that are sterile and monotonous. Previously a house was an integral part of the quarter. It gained recognition from it and in turn, contributed to its character. Today, each house

makes an individual statement and stands in isolation. It neither strengthens nor gains strength from the environment it exists in. Centralisation of power seems to encourage minimal inter-dependance for security in a community, by shifting its responsibility to specialised organisations. The previously strong network of inter-communal ties, is no longer needed. It thus encourages the breaking down of society's older structure. Centralisation of control has resulted in the loss of the middle echelon of society and substituted rules for people. What assumes overriding importance is the implementation of regulations for the benefit of those who formulate and exercise them, rather than for those who accept and bear them.

In spite of such fundamental changes, one finds recurrent behavioural patterns which cannot be explained or predicted on the basis of the more liberal norms professed by society. A closer look shows them to be stemming from values that are currently claimed to be outdated and therefore inapplicable. This study sets out to investigate the issue with the following underlying assumptions:

- i) Traditions still remain an important part of our living patterns. They may or may not be consciously manifested or displayed; yet their significance persists. As architects, the self-professed designers of environments for living, it is pertinent for us to recognise and understand them, rather than imposing what we think ought to be or is.
- ii) The discrepancy between requirement and provision, between actual living patterns and their perception and prediction, is among other reasons, due to what remains of traditions in lifestyles. Architecture in Pakistan has 'modernised' more than the society, causing the discrepancy to begin with. People are therefore forced to live in environments that either inhibit their behaviour, or force them to modify architecture. While this is true in other parts of the world also, this study focuses on

the Pakistani context.

Its interest lies in linking the past with the present, and drawing lessons for the future. It deals with traditions in terms of what has been the established modus operandi. It further examines how these modes change over time and under what influences. It then analyses whether these changes are producing the desired results, and, if not, what lessons can be learnt for better effectiveness. The stress is not to shun change, but neither to encourage it for its own sake.

Lahore has been chosen as the case for investigation, not only because it presents an amalgamation of historic and contemporary built fabrics, but also due to my familiarity with the city. Residential environments have been selected as examples for analysis, for they are more intimately concerned with the day-to-day living of the people in a society.

A study of traditions and their manifestations in architecture can be undertaken from a number of different angles. It can deal with the stylistic traditions in the architecture of a certain period, and changes in them through time. It can be concerned with building traditions in architecture and the influences of state-of-the-art technology on them. Or, it can be interested in traditions as found in the culture of a society and reflected in its architecture. It is with the last of these three that this study is primarily concerned, and, while the first two are taken as valid and important related aspects, they are beyond the scope of its primary interest.

Any attempt to understand the role of tradition in the architecture of a society is a complex task, for tradition seems such an unquantifiable element to discern,

measure, and analyse. One possible way to tackle the issue is to study traditions as they are manifested in the living patterns of a society through time, and, in doing so, try to discover in them the common strains that have continued to survive, in spite of all the complex changes in a society that time inevitably causes. This course has been attempted in this thesis.

Modus Operandi

A major part of the analysis is original research, based on data discovered by the author, during her investigations in Lahore earlier this year. To date, it has not been used for any prior study or research.

The thesis begins by establishing a theoretical framework on the validity and importance of traditions. The influences that formed powerful forces of change in the society of Pakistan are then described. Subsequently, the development of architecture and urbanism in Pakistan is discussed by dividing it into three periods:

- a) the transitional - stemming from the above-mentioned forces of change;
- b) the traditional - constituting the period prior to the first one; and,
- c) the contemporary - forming the post-Independence era.

The case studies used as examples of these periods are also introduced in this part. The next part deals with the comparative analysis of these examples, and approaches it from three angles:

I) The architecture of the selected units is discussed, based on the information gained from their drawings only. The graphic examples of transitional and traditional periods used are taken from the recently discovered data mentioned earlier.

II) The living patterns of a typical middle-class household from each period are described in detail, to understand how behavioural patterns relate to the architecture that contains them, and how the changing influences with time effect, but may not produce corresponding changes in, both of them. The approach lays emphasis on the living patterns and how spaces are utilised for different activities; rather than on the architectural elements and a description of their utility, as is generally adopted.

III) The responses of the inhabitants of the selected residential areas are utilised to describe attitudes towards their habitats, in order to learn, what in their eyes are the assets or liabilities of their living environments. The data collection, alongwith the photographic documentation, was done by the author earlier this year.

The last section forms a reassessment of the issues initially raised, and subsequently analysed, in the thesis.

SECTION ONE

1. Traditions - Their Validity and Importance
2. Forces of Change - Periods of Transition

1. TRADITIONS - THEIR VALIDITY AND IMPORTANCE

The issue of tradition in architecture and the validity and usefulness of its study and application has been much debated upon in the recent past. In many countries of the Islamic world, where traditions have deep religious rather than mere social and cultural grounding, the issue is even more complex. For the gradual processes of their evolution and transformation with time have been severed by strong external influences; and today, as these countries face the dilemma of progress and modernity versus traditional norms and values, there seems to be a choice between the two - each mutually exclusive of the other. The question therefore arises as to whether it is necessary to sacrifice one for the other - can they not be mutually supportive instead?

In most of these Muslim countries including Pakistan, diametric thought processes were initially introduced through the colonial powers. In a relationship of the ruler and the ruled i.e. one of subjugation, imported ideas were quickly absorbed. In an effort to gain recognition and favour, the locals willingly adopted not only the foreign language and social graces, but also the lifestyle and architecture. The Modern Movement in architecture made its presence felt in Pakistan not long after the colonists had departed. It was also during the same period that architecture as a profession took its roots in the country. It therefore formed strong allegiances to the architectural trends of that time.

Before I proceed to describe the course of events in the field of architecture in Pakistan and the influences and processes that caused them, I would like to make a slight detour and first briefly describe the concurrent state of affairs as the Modern Movement made its debut in the Western world. Furthermore, I would like to introduce the kind of debates that it generated in the early 1960s, specifically on the role of tradition in architecture - the prime focus of this study. This background is by no means exhaustive; it is in fact a mere introduction to some of the polemics on the issue at that time. It does, however, serve to bring to light the views of three distinguished personalities in the field, which, in turn, have helped me to reinforce and formulate my own ideas.

In the Western countries, the Modern Movement in architecture took its roots with the aim of revolutionising the post World War I international community. The International Style was to create a universally accepted architectural vocabulary and aesthetic, that would turn its back on the past to speak clearly and specifically of the present.³ The enthusiasm for discarding the past did not remain restricted to architects alone. Even a respected historian and critic like Reyner Banham declared: "For the first time in history, the world of *what is* is suddenly torn by the discovery that *what could be* is no longer dependent on *what was*."⁴

In an attempt to break all ties with the past in order to form strong allegiances with technology, aspects like traditions and conventions were looked upon with disdain. "It may well be that what we have hitherto understood as architecture and what we are beginning to understand of technology are incompatible disciplines".⁵

³ Stern, Robert. *New Directions in American Architecture*. 1977.

⁴ Banham, Reyner. 'Stocktaking' *Architectural Review*, Feb. 1960, p.93.

Banham even went so far as to clearly say that technology "represents the converse of tradition",⁶ and therefore "the architect who proposes to run with technology, in order to keep up must discard his whole cultural load".⁷ As aerodynamic theory must change when the speed of sound is attained, so, according to Banham, history too has these points of transformation when a quantitative change becomes a qualitative one. The advent of Modern Architecture represents for Banham such a qualitative change. "The relation of architecture to its grand traditions.....has clearly been broken for good; it cannot hope to regain its Vitruvian innocence."⁸ And yet even Banham was led to acknowledge that "the allegedly anti-traditional Modern Movement has a tradition of its own". For in rejecting the authority of tradition, modern architects unwittingly adopted a new authority - that of technology.⁹

In his critique of Banham's views on the relevance of tradition in architecture, Stanford Anderson poses some important questions: "Even if we were to accept that such a thing as a qualitative change distinguished Modern Architecture from that which preceded it, does this liberate us from the past? Are tradition and technology hostile opposites which cannot work in concert?"¹⁰ He goes on to suggest that to seek answers to such questions what is required is to acquaint ourselves with traditions and then to analyse them. And only through a rigorous analysis would we be able to decide which traditions remain relevant and applicable even today, and which do not and can therefore be done away with. Thus a critical

⁵ Banham, Reyner. *Theory and Design in the First machine Age*. p.329.

⁶ Anderson, Stanford. 'Architecture and Tradition.....' *History Theory and Criticism*....., p.71.

⁷ Banham, Reyner. *Theory and Design in.....* p.330

⁸ Anderson, Stanford. *op. cit.* p.72

⁹ Banham, Reyner. 'Stocktaking', *Architectural Review*, Feb.1960 p.97

¹⁰ Anderson, Stanford. *op. cit.* p.74.

understanding of our traditions is necessary for any rational decision-making.¹¹

Stanford Anderson's arguments are based on Karl Popper's writings. Popper has proposed a preliminary theory of tradition. At its very onset, he points out that there is an established hostility between rationalism and traditionalism. And yet the rationalist, who wants to judge everything independently of any tradition, is himself very much bound by a rationalist tradition. Popper therefore questions how traditions arise - and more importantly, how do they persist? What is the function of traditions in social life?¹²

In analysing these issues, he takes the example of scientific tradition, which is extendable to traditions in other realms as well. In scientific analysis, the attitude of scientists towards their theories (or guesses) is always a critical and argumentative one. With such an attitude, their guesses change in the direction of an ever better account of the observations they serve to explain. Furthermore, such guesses or theories are predictive; they lead to observations that may not be otherwise possible. And, by correlating the predictions with the observed phenomenon, scientists are able to test their theories.¹³ A line of inquiry may thus be undertaken that already has a whole background of earlier developments of science behind it, and be developed further. Progress is made by standing on the shoulders of predecessors; by carrying on a certain tradition. The growth of science therefore takes place through criticism, which destroys, changes, and alters earlier myths and beliefs.

¹¹ Anderson, Stanford. op. cit. pp. 75,77.

¹² Popper, Karl. 'Towards a Rational Theory of Tradition', *Conjectures and Refutations*. pp. 120, 121, 125.

¹³ Anderson, Stanford. op. cit. p.78.

This does not mean that new myths or beliefs cannot be formulated. "You may create a new theory, but the new theory is created in order to solve those problems which the old theory did not solve."¹⁴

Popper goes on to explain that the emergence of traditions in society has a role similar to scientific theories; they bring order and rational predictability into the social world we live in. They give us a clear idea of what to expect and how to proceed.¹⁵ The origin and propagation of traditions therefore lie in man's need to introduce structure and regularity into his natural and social environment. "Our social life is only possible when we can have confidence that certain aspects of our society must be or act in this wise and not otherwise. Out of these needs, traditions arise."¹⁶ Furthermore, like scientific theories, social traditions not only help in creating a social structure but are also subject to criticism and change. However, Popper stresses that there is no reason to accept the belief of many rationalist and socialist reformers, including Plato, in starting afresh to construct a totally new rational world. For there can be no certainty that it would be a happy one. It will very soon need alterations and adjustments. It would therefore be more sensible to begin with what already exists; at least it is familiar, including its drawbacks and shortcomings.¹⁷

The key to understanding traditions therefore seems to lie in a *critical attitude*. An uncritical acceptance of traditions is, many a time, the result of being unaware of

¹⁴ Popper, Karl. op. cit. pp. 129, 132.

¹⁵ Ibid. pp. 130, 131.

¹⁶ Anderson, Stanford. op. cit. p.80.

¹⁷ Popper, Karl. op. cit. p.131.

them. One may not be conscious of their presence until questioned and presented with an alternate way of doing things. Such traditions become a part of the 'implicit knowledge'¹⁸ of a society. On the other hand, a total rejection of traditions merely on the basis of their being such is unwise. What is primarily needed is an effort to first understand their function and significance before any such choices can be made. "I do not think that we could ever free ourselves entirely from the bonds of tradition. The so-called freeing is really only a change from one tradition to another. But we can free ourselves from the *taboos* of tradition, not only by rejecting it, but also by critically accepting it."¹⁹ The merit of traditions mainly lies in their being established. Therefore in order to replace them with better ones, we must remain conscious of the fact that all social criticism and all social betterment must refer to a framework of social traditions.²⁰

Similarly, according to Anderson, in traditions as they relate to architecture, what is required is to formulate a hypothesis within the architectural realm and then to criticise and test them as rigorously as possible. Once critically assimilated into the problem situation, they may then form the hypothetical base for further development. Thus traditions give us something upon which to operate - a means of communication and a body of conventional usages and ideas which are nevertheless subject to criticism and change.²¹ They cannot be overruled for the mere reason of their being such. Neither can Modernism be propagated for its own sake. An analysis of traditions may reveal some traditions to be so resistant to criticism and such a necessary part of a society that one would avoid compromising them; others

¹⁸ Habrakan, John. *Transformations of the Site*. pp. 180-183.

¹⁹ Popper, Karl. *op.cit.* p. 122.

²⁰ *Ibid.* pp. 132.

²¹ Anderson, Stanford. *op. cit.* pp. 79, 81.

might be found to be so susceptible to criticism²² that they could be done away with totally. Yet, without such an analytical basis, any decision could prove to be a hasty one.

"Tradition *per se* has no authority. On the contrary, every aspect of our traditions is open to criticism and rejection."²³ This implies that "tradition is not merely an accumulation of knowledge, an undifferentiated catalog of past events, but rather a vital body of ideas, values, mores, etc. that we have as yet found resistant to criticism."²⁴

In drawing parallels between the scientific method and social traditions, one important related issue seems to have been overlooked by both Popper and Anderson. The continued presence of traditions in a society by itself renders them above criticism; had they ceased to be valid, they could not have persisted. The survival of traditions in a society is thus based on an in-built mechanism of intuitive criticism, whereby those that remain pertinent continue, while others get deleted. Thus the issue involved seems more of an acceptance of their validity and identification of their presence through a critical analysis, rather than testing their validity through criticism.

Moreover, in the entire debate, traditions seem to be dealt with as a rational, intellectual issue, rather than artifacts resulting from complex social processes. For they are heavily dependent on the unpredictable and often irrational human nature

²² Ibid. p.76.

²³ Ibid. p. 81.

²⁴ Ibid. p.82.

which many a time renders them unexplainable. It must also be recognised that in their case criticism and the choice of alternatives takes place through acts rather than rational analysis; they are based in what happens in practice more than what is thought of in theory. Moreover, they comprise patterns of behaviour established over time, and do not lend themselves to impulsive change through intellectual questioning.

Nevertheless, the arguments and analysis put forward by Popper and Anderson are important as a theoretical exercise in understanding the emergence and persistence of traditions. And, taking them as its theoretical basis, this study further attempts to identify their presence and establish their importance in a chosen social context, in a practical effort to refute the current belief of their invalidity.

Since the process of learning, invention and creation - or re-learning, re-invention and re-creation - is a continuous one, there is always a legacy for one generation to pass on to the next.²⁵ Traditions form a part of this legacy.

²⁵ Steil, Lucien. 'Tradition and Architecture', *Architectural Design*, vol. 57, no. 5/6, p. 5, 1987.

2. FORCES OF CHANGE; PERIODS OF TRANSITION

A society is in a constant state of evolution and transformation. As it is confronted with forces of change through time, it may accept and accommodate those it deems suitable and reject those that are totally against its norms and values. However, there are instances when these forces are so strong that they become irresistible, leaving that society with no choice but to accept and endure. They give rise to periods of transition, which, however short, have undeniable importance. For it is in them that new directions evolve and the future is decided.

In relation to architecture also, such periods hold immense value. For it is in these that architecture takes new directions impossible under normal circumstances. Their study therefore not only reveals what the forces were that brought about the change, but also, how society reacted to them and made the adjustments and modifications that determined the future course of events. In Pakistan, this phase of transition, as mentioned earlier, also happens to be the time when architecture emerged as a profession. It therefore formed greater allegiance to this period than the past.

Influences that eventually precipitated as powerful forces resulting in major changes in the society and architecture of Pakistan began as early as the sixteenth century in the then undivided India. It was during Akbar's reign that European traders,

merchants, and religious missions began to frequent the Mughul courts. In the eighteenth century, European settlements at Calcutta, Madras and Bombay had a character marked by a profusion of European architecture.²⁶ Calcutta's development, for instance, could be compared with Georgian London; noble buildings surrounded by a cluster of service buildings in a system of alleys and passageways lying behind.²⁷ Increased self-confidence as rulers was marked by architectural forms intended to as much replicate metropolitan forms as to give a distinctive appearance to the colonial culture, symbolising its dominance. As British political domination increased, there was an increasing adaptation of British life styles on the part of the indigenous Nawabs and Maharajahs, who had now begun to accept British suzerainty.²⁸ This was the beginning of the cultural overlap through which the political domination was in fact exercised.²⁹

Its effects in terms of cultural transfer, as described by King, were intense:

"British fashions in household furnishings had been adopted as early as the 1770s: the Nawabs of Lucknow imported all sorts of European manufactures, including mirrors, lustres, framed European prints and Worcestershire china. Lord Valentia, visiting Lucknow in 1803, noticed that the palace was equipped with English chairs, tables, a service of plates, knives, forks and spoons, wine glasses and decanters. In the South, the Raja of Tanjore had a sitting room furnished with English chairs. In Western India palace walls (were) covered with English prints. Apart from this attachment to Western furnishings, many of the Indian

²⁶ Nilssen, S. *European Architecture in India 1750-1850*.

²⁷ Ottolenghi, Roberto. (1982), as cited by Khan.

²⁸ King, Anthony. 'Colonial Architecture and.....', *Lotus International*. 1982.

²⁹ Khan, Masood. 'Informal Architecture: an examination of.....', 1983, p.63

princes built palaces, modelled on the 'Classical' residences and public buildings of the colonial community in the metropolises and the provinces."³⁰

The eclectic adoption of (stylistic) elements from the uniformly classical buildings which characterised European urban buildings in the first century of British settlement³¹ and first started with the nobility, appears to have filtered down to the richer sections of the urban middle classes who still happened to be living in the traditional physical environment.³² Residential architecture in particular began to be influenced by European concepts from the late seventeenth century onwards.³³ Early influences occurred in Bengal, when the English agents in the Bengali countryside made makeshift adaptations of the Bengali peasant hut - the '*banggolo*'.³⁴ A distinct architectural type, *the bungalow*, thus came into existence. During the seventeenth and eighteenth centuries, this prototype became increasingly stabilized, drawing on European habits and attitudes towards residential space and form. Thus English prototypes, such as the cottage and Neo-classical and Palladian formal images encountered in cities like Calcutta and Madras, became absorbed. The common underlying concept was of a house set in a garden. It became the institutionalised residential form of colonial officers and administrators, and the architectural/spatial unit of colonial urban development.³⁵

1. Bengali peasant dwelling, the Indigenous 'bunggolo', 1813



In the conditions of India, colonial rule produced easy access to urban land for the

³⁰ King, Anthony, as cited by Khan. 1977.

³¹ Ibid.

³² Khan, Masood. *op. cit.* p.66.

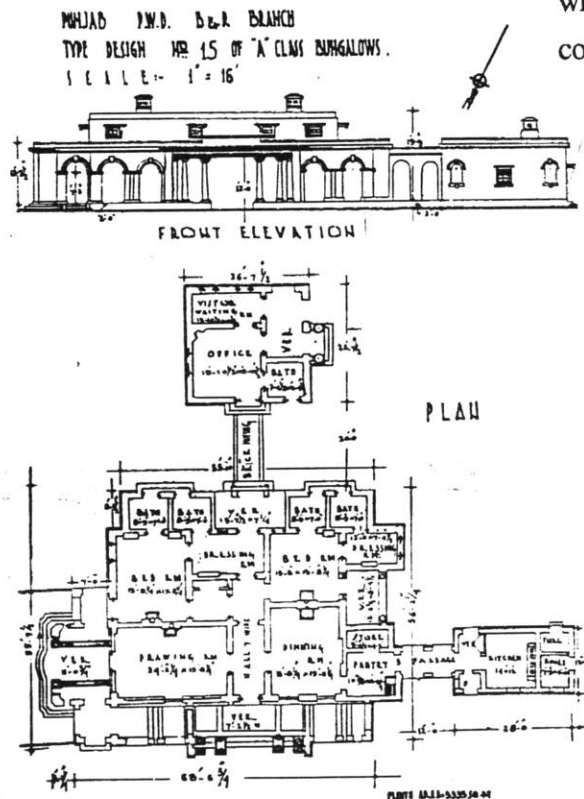
³³ King, Anthony, as cited by Khan. 1977.

³⁴ King, Anthony. *The Bungalow - the Production of a Global Culture*. 1984. p.1

³⁵ King, Anthony. *Colonial Urban Development*. 1976.

vast new low-density urban settlements. Space became not only a symbol of power and well-being as space around a house; it was the beginning of a hierarchy of spaces that eventually separated the house from indigenous culture. Space not only signified power but was also a means of security, physical and psychological sufficient space had to be provided around the house as a visual assurance for the occupants to know that they were safely located in their own cultural territory.³⁶ It also placed them far above the indigenous population and symbolised their stature and well-being. "The development of the bungalow as a culturally distinctive form of dwelling depended, first and foremost, on the secure possession of territory in which cultural choices could be expressed in an environment over which there was considerable, if not total, control."³⁷

2. Colonial legacy: government housing designs, (West) Pakistan, 1956. (Designs of 'A' class bungalows and houses for satellite towns.



³⁶ Ibid.

³⁷ King, Anthony. *The Bungalow - the Production.....*, 1984. p.34,

3. Transformation of the bungalow through application of the 'modern' idiom.



This desire for space was however, not a new phenomenon for the British, for it was already prevalent in Western Culture and signified wealth and power. The suburban model had already begun to filter down to the lower classes as the preferable paradigm to strive for. In the Indian context, however, it was an unfamiliar concept. For in the traditional urban form the wealth of an individual was not necessarily externalised. Though the houses of the rich did cover a greater area and were extremely elaborate inside, but their external manifestation still remained as high facades abutting onto the streets.

The contrast, as further described by King, was uncomparable; "The spacious compound, of 2, 10, or even 20 acres, was a prerequisite for the bungalow's development,....the dwelling depended on the space around for ventilation and light....Thus, the bungalow was in direct contrast to the courtyard house in the 'native city': here, a central courtyard allowed the penetration of light and air; as the houses were three or four storeys high, and there were closely clustered, cellular-structured buildings all around, the lower rooms were dark and cool. Activity in this courtyard house was centripetal: movement was inwards, towards the courtyard. In the bungalow it was centrifugal, outward, on to the verandah and further into the compound."³⁸

The enormous spatial, economic, and human resources consumed in the building, use, and maintenance of urban environments based on the bungalow form, have had crucial long term repercussions on urban development in Pakistan. As new residential areas in the civil stations and the cantonments were laid out in the colonial settlements including Lahore, the bungalow became the basic unit of spatial

³⁸ Ibid. pp. 34,35.

organisation for vast tracts of the new city.³⁹

The colonial residential form was a powerful entity. It had an institutional significance instrumental in enabling the penetration of one social structure by another.⁴⁰ On the other hand, in the traditional part of the city, the indigenous house was a passive repertory of traditional spatial and physical forms as they had evolved through centuries. Up to a certain time, both these house types continued to exist independently in the corresponding traditional and colonial parts of the city. Only around the mid-nineteenth century are the first indications of European influences found in certain additions made to old houses in the walled city.⁴¹

On the cultural level, colonial settlements in the city were instrumental in dividing the society into two spheres. The upper classes aspiring to move into the new colonial areas associated with the aura of prestige and status, while, on the other hand, the rest continued to hold onto their traditional lifestyles. Of the former, those families that did shift, not only adapted themselves to their new homes, but also, at least superficially, assumed the mannerisms and customs of the rulers, in an effort to gain their approval. On the other hand, such elite indigenous families also served the purpose of the British as intermediaries in extending their colonial political control.

In due course, with the rise of the educated middle class, the number of natives aspiring to live in the colonial areas rose further. The growth in population also began to make the lower classes spill out of the traditional areas. Therefore the

³⁹ Khan, Masood. *op. cit.* p.73.

⁴⁰ Castells, Manuel. as cited by Khan.

⁴¹ Khan, Masood. *op. cit.* p.78.

'modern' extensions that were planned for the city were now of two kinds; the low-density areas using the bungalow typology and the high-density settlements using traditional courtyard morphology. In order to facilitate the distinction, zoning and building regulations were adapted accordingly.⁴²

The innovations in the architecture and planning of residential environments adopted during the colonial period became so well integrated, that they continued to be followed even after Independence in 1947. Lahore underwent rapid growth during the early post-Independence days. A number of housing schemes were planned by the Lahore Improvement Trust (L.I.T.) - the public agency for the development of the city. Interestingly, the planning concepts adopted and the regulations adhered to were always based on the bungalow typology, irrespective of the lot sizes the scheme was comprised of. Therefore, the requirement to leave space around the unit, evolved by the colonists for their own peculiar situation, was not only needlessly perpetuated but also made mandatory. Previously, at least in the neo-traditional areas planned for the middle- and low-income groups, the bylaws adopted made the use of traditional typologies possible. Now, with the required set-backs, only a condensed enclosed unit could be accommodated. For smaller lots, the required typology changed from independent units to semi-detached to row houses, with at least front and back set-backs required. The dis-continuation of pre-Independence regulations that allowed the built-up area on small lots to extend to the lot perimeters, thus enabling a courtyard to be created, seems to have been adopted either as an acknowledgement of the possible popular wish to own a 'bungalow', or due to the value frame of the planners and legislators themselves.⁴³ As we will see later, the latter reason seems more probable.

⁴² Ibid pp. 79, 83.

During the same time (1947 - 1960), Lahore experienced a phenomenal increase in population, due to the massive influx of refugees from India as well as rural migration and natural growth in numbers. The unprecedented demand for shelter that was thus created, could not be dealt with by the authorities. Therefore, a large number of informal settlements evolved on privately owned land, a phenomenon still prevalent for many of the same reasons.

The post-Independence period also saw the development of architecture in Pakistan into a profession. It corresponded with the international growth of knowledge based on specialisations and independent professions, and the ease of its propagation beyond national boundaries. During colonial times, the British had resorted to their own experts for government buildings and official residences. And prior to that, the profession was limited to court architects, who designed only complexes built under royal patronage. The rest of the urban fabric was built based on the norms and conventions of building developed over generations that existed as implicit knowledge⁴⁴ among the people. Later, it was the owner-builder team that adapted the existing typologies through formal and stylistic changes into the 'indigenous bungalow'.

In the early years of Independence, apart from a couple of professional firms already established since pre-Partition days, the mainstay of architecture were civil engineers and draftsmen. It was not until the early 1960s that the first professional program in architecture was established. The curriculum adopted was based entirely on the books published and models developed in Western countries. The profession

⁴³ Ibid. p. 107.

⁴⁴ Habraken, John. *Transformations of the Site*. pp. 180-183.

therefore emerged with greater affinity to alien models than the local traditions.

Together, all these influences and forces of change were instrumental in totally transforming society and architecture in Pakistan. Whether the two changed by more or less the same extent to retain a 'loose fit'⁴⁵ or not, remains to be investigated.

⁴⁵ The idea of a 'loose fit' has been propounded by Prof. Stanford Anderson, and explains the relationship between the physical environment and its users. *Streets, Phase 1-2*.

SECTION TWO

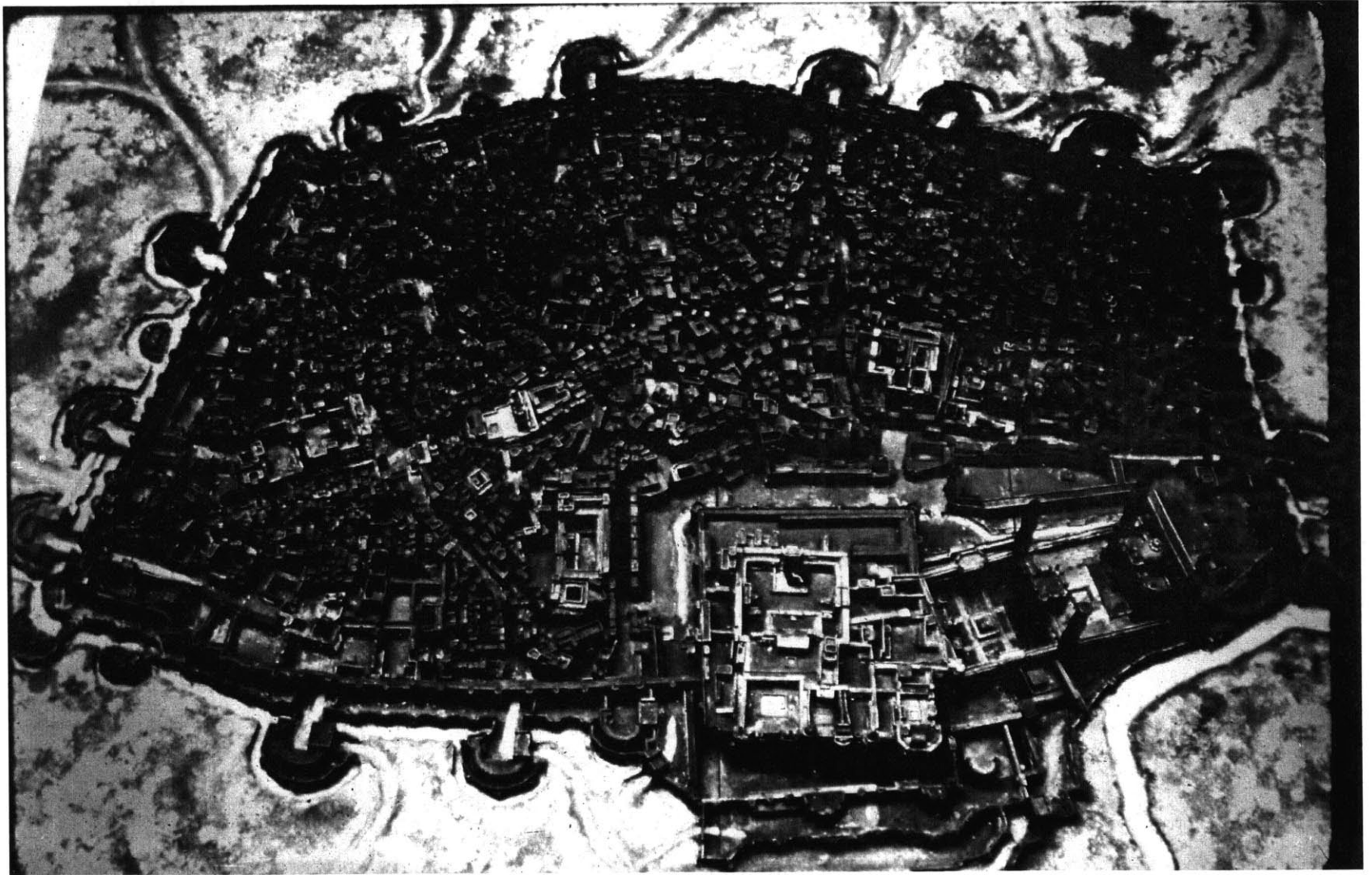
3. Periods and Areas of Study
4. Comparative Analysis

3. PERIODS AND AREAS OF STUDY

The development of architecture and urbanism in Pakistan over time, has been categorised into three periods. The period of transition forms the pivotal role, for it is the time when all the successive forces of change, described in the preceding chapter, began to show recurrent physical manifestations. It is a period in which continuities from the past began to disintegrate, to be replaced by new international trends. It thus forms a turning point between the past and the present. It has therefore been described the foremost of all, to subsequently draw parallels with the other two periods. The era prior to this, and extending upto it, is taken as the traditional period. It is in this time that examples of architecture and urban form, as it existed prior to the influences of change, can be found. The post-Partition period todate forms the third category - the contemporary period. For each period, a brief history of its development is included, to follow its evolution upto the stage, of which specific architectural examples have been included for analysis.

a) TRANSITIONAL

In 1947, as colonial rule in the sub-continent came to an end, it also marked the creation of a new nation - Pakistan - based on the areas with a Muslim majority in a predominantly Hindu land. The partition entailed a mass exodus of refugees from both sides, accompanied by severe riots and public violence. Lahore was one of the cities most severely affected. For, being a historic city, it had housed many Hindu



*4. Model of the Walled City of Lahore,
presented to Ranjit Singh by the British.*



7. Aerial view of the Walled City. The three major commercial schemes: Shahalmi, Azam and Pakistan Cloth Markets are seen in contrast to the rest of the fabric.

8. Views of the extent of destruction caused during the Partition riots.

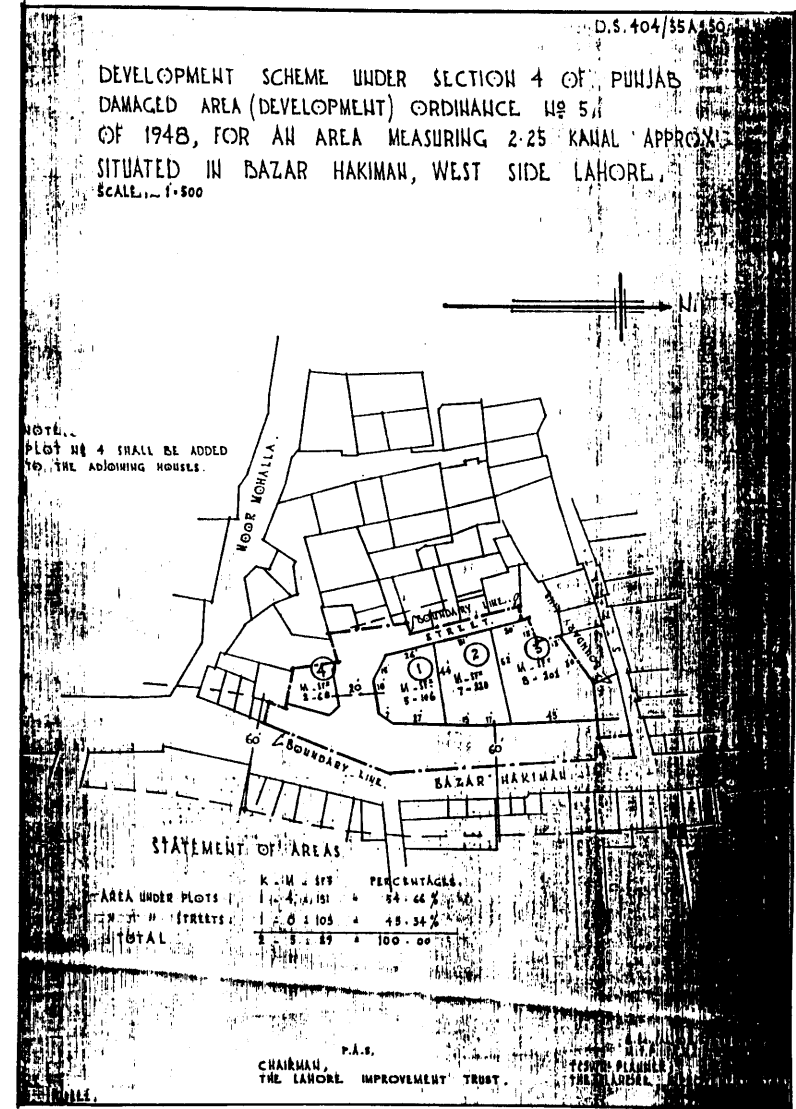


and Sikh families for generations, especially in pockets of areas in the walled city. With the eruption of riots and the mass euphoria they generated, many of these areas known to have been of Hindu or Sikh concentrations were put to the torch. Large parts of the walled city were thus at least partially, if not completely gutted.

i) In the years that followed, a major task for the city authorities lay in the clearing and redeveloping of these areas. In the early fifties, therefore, the areas affected were demarcated and their reconstruction schemes proposed. These schemes were termed as "damaged areas schemes". They were mainly of two types. The major ones, envisaged on the larger parcels of land, were primarily commercial, of which Shahalmi was designed to encourage vehicular access, while the Azam and Pakistan Cloth Markets were based on more dense, single-storey, bazaar-type developments. All three schemes are prominent on the map of the old city as being in striking contrast in scale and morphology to the rest of the fabric.

The second category of the schemes proposed was of residential redevelopments, in the smaller pockets of the damaged areas. These proposals were characterised by axial streets and regular plots. When compared with the plans of the fabrics they were designed to replace, these proposals show the influences of the prevalent planning practices in the newer parts of the city. Not only was axial geometry applied as far as possible, but also the plots proposed were substantially larger than the previous properties and therefore much fewer in number. The bulk of these residential schemes, however, remained unrealised.

The mass immigration of Hindu and Sikh residents from the city at the time of



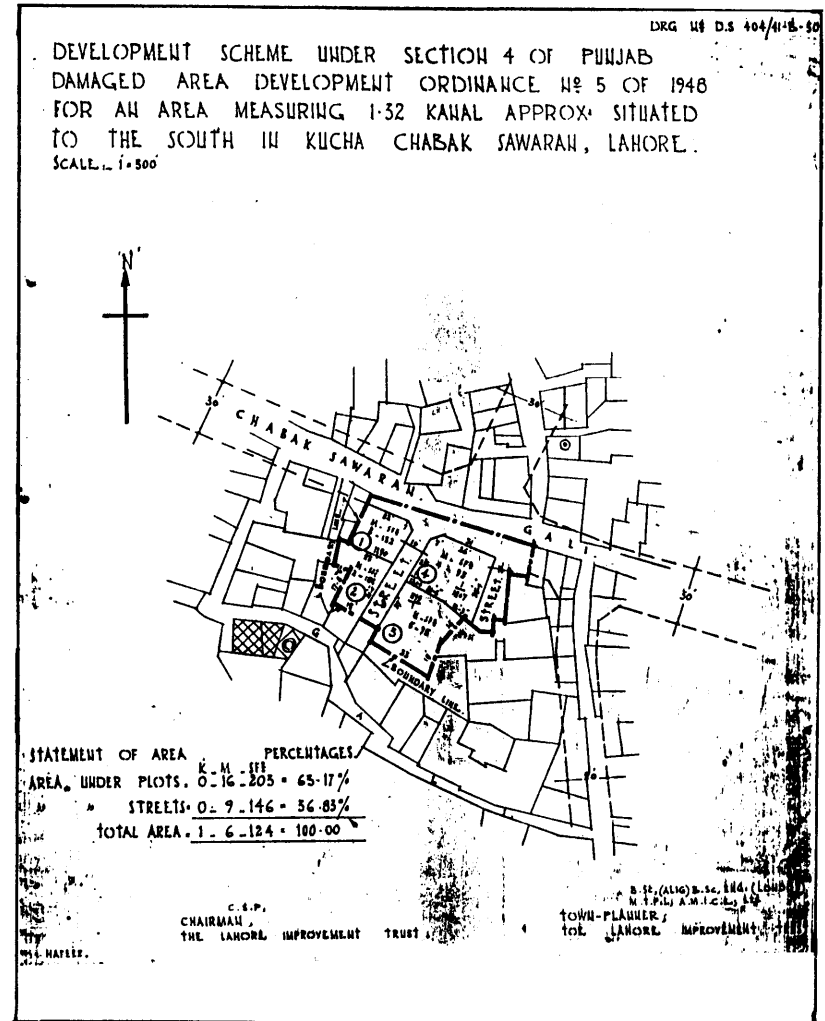
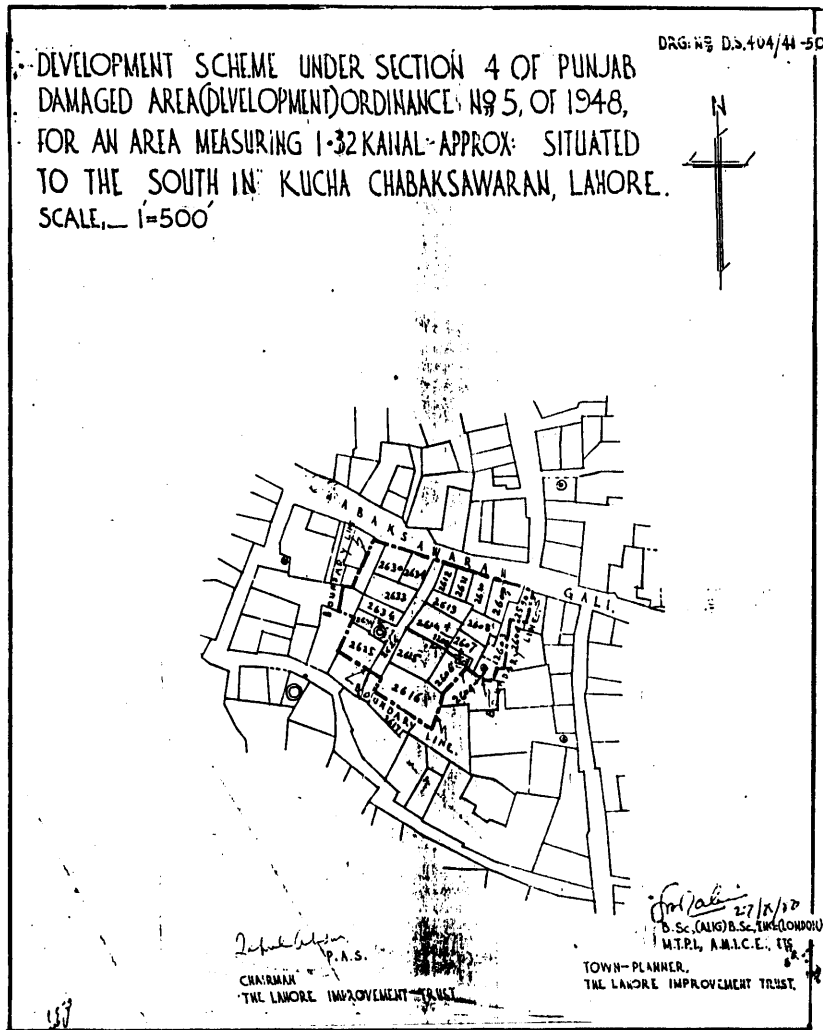
9. Areas severely damaged by fire during the Partition riots.

Partition, was accompanied by an even greater influx of refugees from across the Indian border. Their immediate need was for shelter, which the government of a newly formed state was as yet unable to provide in the required numbers. The properties vacated by the earlier residents were therefore the immediate target of illegal refugee occupation. So also were the partially or completely damaged properties, especially in the residential schemes, which, unlike the commercial schemes, were not government sponsored. In their dire need for shelter, a foothold on any property was a blessing for the immigrants, onto which they could at least erect a temporary shelter. Most such properties therefore became illegally occupied and subdivided, for their demand was acute and the shelterless unable to afford much more.

Another important, though smaller faction of the illegal occupiers was of shrewd locals, who foresaw the rising values of these properties in the future and, taking advantage of the confusing state of affairs, put in their claims of ownership.

Over subsequent years, many of these occupations were legalised through the Evacuee Trust Property Board, and people given ownership rights against claims for property left behind in India. The process, however, was slow, involving excessive litigations such that even today innumerable cases continue to remain undecided.

The net result of it all was that the reconstruction of the residential fabric in the damaged areas largely took place illegally and informally over time, and generally under severe economic constraints. Only a small number of houses were legally



10. The pre-fire fabric (left) in comparison to the post-fire proposals (right).

constructed; they therefore had to be based on the schemes planned by the Lahore Improvement Trust (L.I.T.), for they needed approval by the city authorities. These examples, though few in numbers, are however of immense importance. For they were constructed at a time when the influence of colonialism on local architecture had been firmly established, and those of the Modern Movement and the International Style were beginning to be felt. Yet they evolved within the physical and social constraints of the walled city. They were built recently enough to encompass and exhibit the changed aspirations, if any, of the society and yet exist against the setting of a traditional environment, from which they would have normally drawn inspiration from, and related directly to. They are therefore examples of the phase of transition in the residential typologies of the city.

ii) Another area developed a few years earlier, and therefore falling within the period of transition, is the Krishan Nagar scheme. It has been selected for study because it has interesting similarities and contrasts with the earlier case.

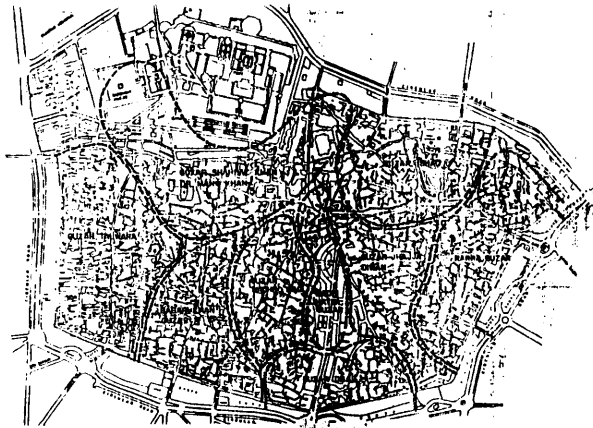
Krishan Nagar was one of the new indigenous settlements planned under the British exclusively for the local population. Built during 1925-1935, it was envisaged to accommodate the overspill of the walled city, along with some of the other schemes planned on similar lines. Once completed, it was mainly occupied by Hindu businessmen and thus gained its name. The settlement was planned on a rectangular grid formed by vehicular access streets. The blocks thus formed are rather small, each containing four to six properties, which are therefore predominantly corner lots.

The people who bought land and built their houses in Krishan Nagar had aspirations that were similar to the first group; they reflected the succession of influences, pre-dominantly foreign, that the society had undergone and assimilated in the recent past. Yet these houses were built under very dissimilar physical constraints from those of the first case. Not only was the entire scheme a newly planned one, but it was also located in a new area a couple of kilometers away from the traditional city. Therefore, any visual or environmental cues that formed the setting for the first case were entirely absent in this one.

b) TRADITIONAL

Lahore is an ancient city with a recorded history dating back to 982 A.D., archaeological evidence of up to 6th century A.D., and conjectures stretching its existence back to 150 A.D.⁴⁶ Whatever the exact date of its establishment, throughout its history Lahore has undergone successive phases of massive destruction and rebuilding. Its location on the ancient route to the East, where it crosses the river Ravi, lent it a strategically important position that made it a prime target for invaders with ambitions of gaining a foothold in the sub-continent, and then using it as a springboard for further expansion. Therefore, between the 12th and 16th centuries, during the Ghauri, Slave, Khalji, Tughlaq, Sayed and Lodhi periods, the history of Lahore is marred by destruction due to invasions, and devastations by famine⁴⁷, interspersing with periods of rebuilding and expansion. It was only under the Mughals (1526-1707) that Lahore came to enjoy continued peace and prosperity. It remained the capital of the Mughal empire for fourteen years, and developed into a centre of culture and learning.

11. Plan showing Guzars. (Administrative districts of Akbar's time), based on the principal circulation spines.



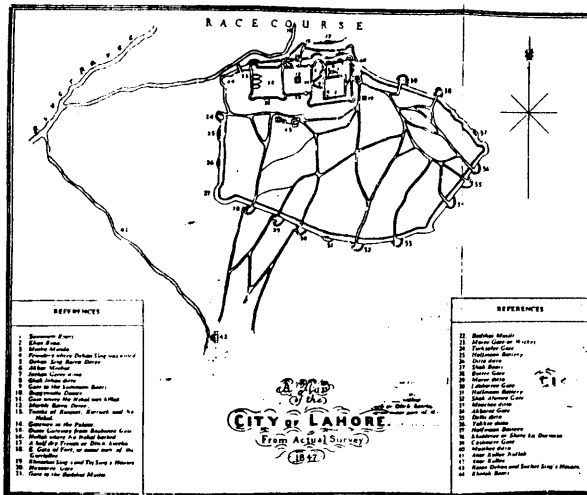
⁴⁶ L.D.A. *The Walled City of Lahore - Monograph*. p.2.

⁴⁷ *Ibid.* p.5.

REFERENCES

1. *Sumnum Boorj.*
2. *Khan Byao.*
3. *Motha Munda.*
4. *Foundry where Dehan Sing was killed.*
5. *Dehan Sing Barra Deree.*
6. *Akbar Meehul.*
7. *Jeehan Geree ditoo.*
8. *Shah Jehan ditto.*
9. *Gate to the Sumnum Boorj.*
10. *Buggywalla Doudy.*
11. *Gate where No Nehal was killed.*
12. *Marble Barra Deree.*
13. *Tombs of Runjeet, Kurruck and No Nehal.*
14. *Gateway to the Palace.*
15. *Outer Gateway from Roshnee Gate.*
16. *Nullah where No Nehal bathed.*
17. *A half dry Trench or Ditch, Kurcha.*
18. *E. Gate of Fort, or outer part of the Gurriallee.*
19. *Khooshal Sing's and Tej Sing's Houses.*
20. *Hazooree Gate.*
21. *Gate to the Badshai Musjii.*
22. *Badshai Musjii.*
23. *Moree Gate or Wicket.*
24. *Turksalee Gate.*
25. *Halfmoon Battery.*
26. *Ditto ditto.*
27. *Shah Boorj.*
28. *Buttee Gate.*
29. *Moree ditto.*
30. *Looharree Gate.*
31. *Halfmoon Battery.*
32. *Shah Alumee Gate.*
33. *Moochee ditto.*
34. *Akbaree Gate.*
35. *Delhi ditto.*
36. *Yakkee ditto.*
37. *Halfmoon Battery.*
38. *Khaideree or Shere ka Durwaza.*
39. *Cashmere Gate.*
40. *Musthee ditto.*
41. *Anar Kullee Nullah.*
42. *Anar Kullee.*
43. *Rajah Dehan and Suchet Sing's Houses.*
44. *Kholah Boorj.*

12:



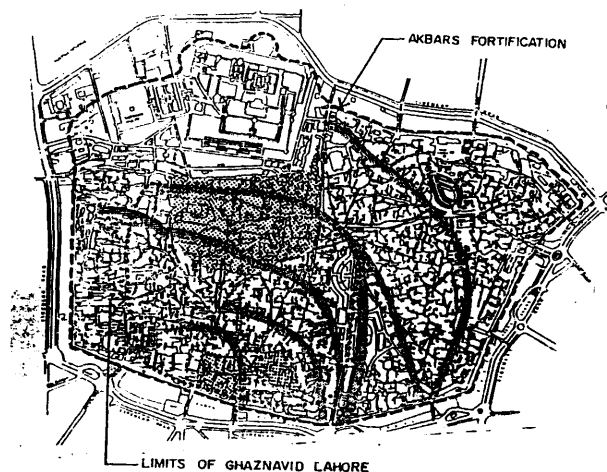
During the same period, under the reign of Akbar, the city also saw a substantial expansion. The areas east of Shahalmi and Rang Mahal previously beyond, were now included within, the city limits and the entire area surrounded by high fortifications. Shah Jehan's period saw rapid infill and densification of empty areas within the walls, as well as overspilling of the city into new *mohallas* ⁴⁸ outside the city.

In the century or so before the British occupation in 1849, except for Ranjit Singh's reign, the city again underwent a period of destruction and pillage of varying intensity. On occupation, one of the first steps undertaken by the British was the demolition of the city walls, mainly for strategic reasons. For an enclosed and defensible local population could always pose for them a serious threat.

Different areas within the Walled City thus have varying age and historicity:

i) The areas east of Shahalmi that emerged during Mughal times, remain the most well-preserved in terms of physical and social structures, and the least affected by the recurrent large-scale destructive processes. The reasons are many. These areas have always had a majority of Muslim population. They therefore remained unaffected during the inter-communal riots and the resulting destruction during Partition. A major part of this section of the walled city has for generations been the religious centre of the Shia sect, a strong minority of the country's population (the majority being the Sunnis). A number of their important *Imambaras* are located here, along with the ancestral *havelis* of many prominent families. Allegiance to these institutions has maintained a stable Shia population in the area occupying ancestral homes for generations. During Muharram, a month of major religious

⁴⁸ For the meanings of all indigenous terms, refer to the Glossary.



13. Growth rings of the city as seen in the street pattern.

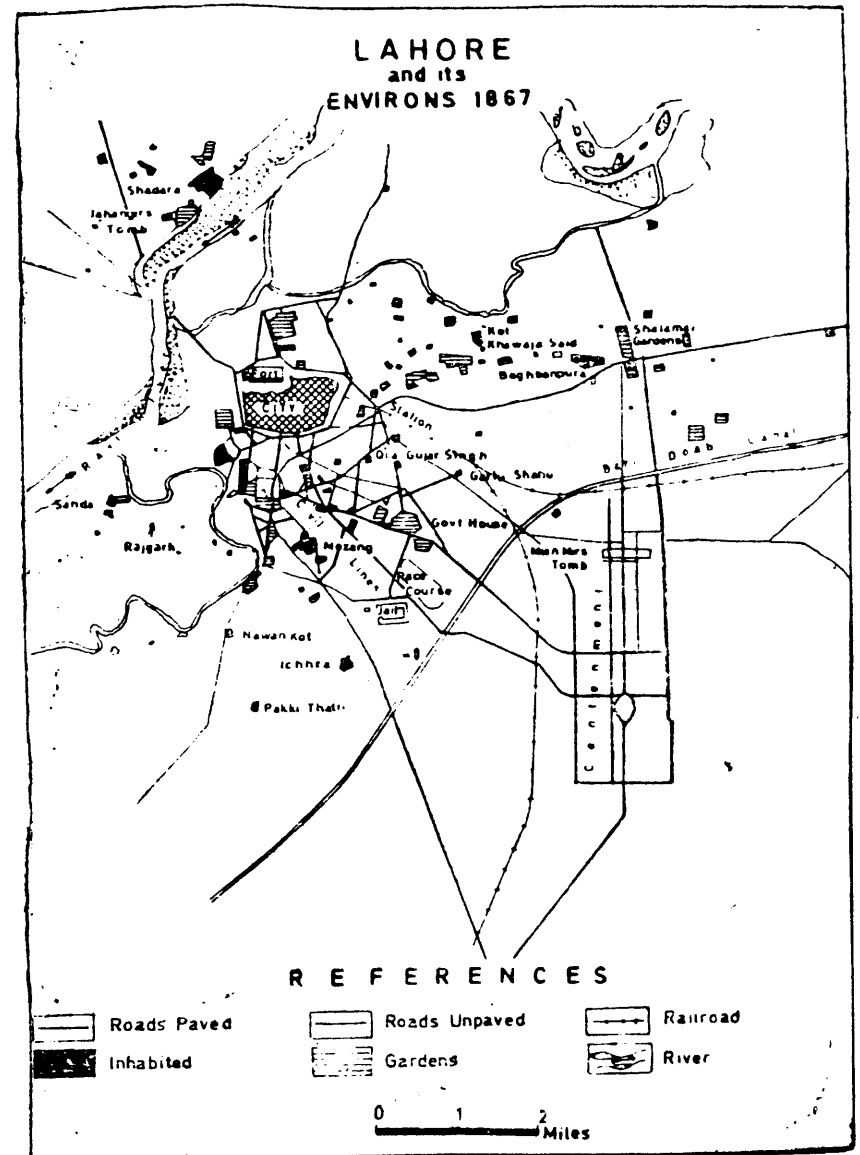
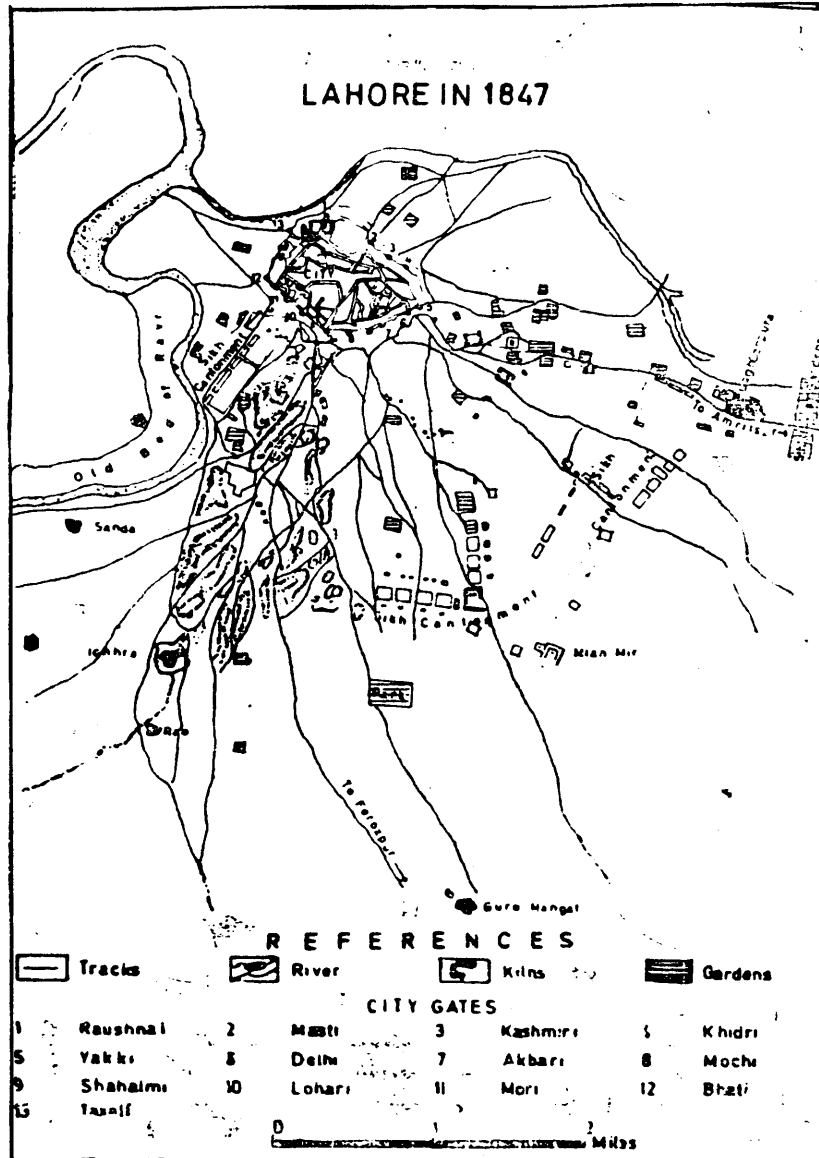
14. Current layout of the main streets in the walled city as recorded through an aerial



events and commemoration, the area attracts throngs of believers from all over Lahore. Certain other neighbourhoods in the vicinity, namely Mohalla Kakezaian and Kashmiri Mohalla, also show similar characteristics pertaining to cohesive communities, though based more on social than religious factors. For, while one houses people of the same *biradari*, the residents of the other come from the same geographic region.

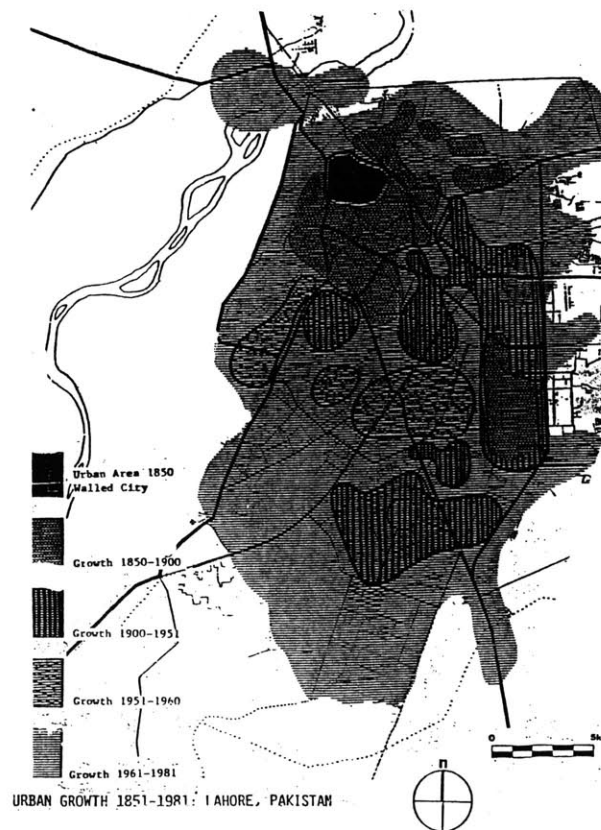
ii) Various accounts date the areas along the western edge of the city to historically be relatively recent. They were not within the city limits during the Ghaznavid period (11th and 12th centuries). Since many of these lie in a depression, they are thought to have been a part of the river bed or at least of its flood plain before the Ravi changed its course and flowed much nearer the city. Whatever their date of initial development might be, these areas have also undergone continual urban renewal. Since they command relatively better access to the rest of the city, they have continued to be occupied by more well-to-do residents, who need not necessarily depend on the work opportunities within or in the vicinity of the walled city. Many properties have therefore been recently built or substantially modified. Few historic houses survive in their original form.

iii) The areas between the Mori and Shahalmi gates, which remained unaffected during the 1947 riots, are some of the most historic surviving areas in the walled city. However, although the age of these physical structures and urban form is the oldest surviving, these areas experienced the maximum amounts of population shifts during Partition. Large numbers of previous residents of these areas migrated out and were replaced by even larger number of refugees from across the border. Since the new residents were poor, desperate for shelter and in large numbers, each



vacated property was occupied by numerous families. Houses were sub-divided into two- to three-room territories. Since the settlers were illegal, with uncertainty of tenure for many years, maintenance and upkeep remained negligible, and the areas became successively derelict. Moreover, the population was an intermix of people from various castes, sects, clans, and origins, with their own customs and traditions. Therefore these neighbourhoods do not exhibit the social homogeneity and traditional stability of the other more stable older areas.

16.

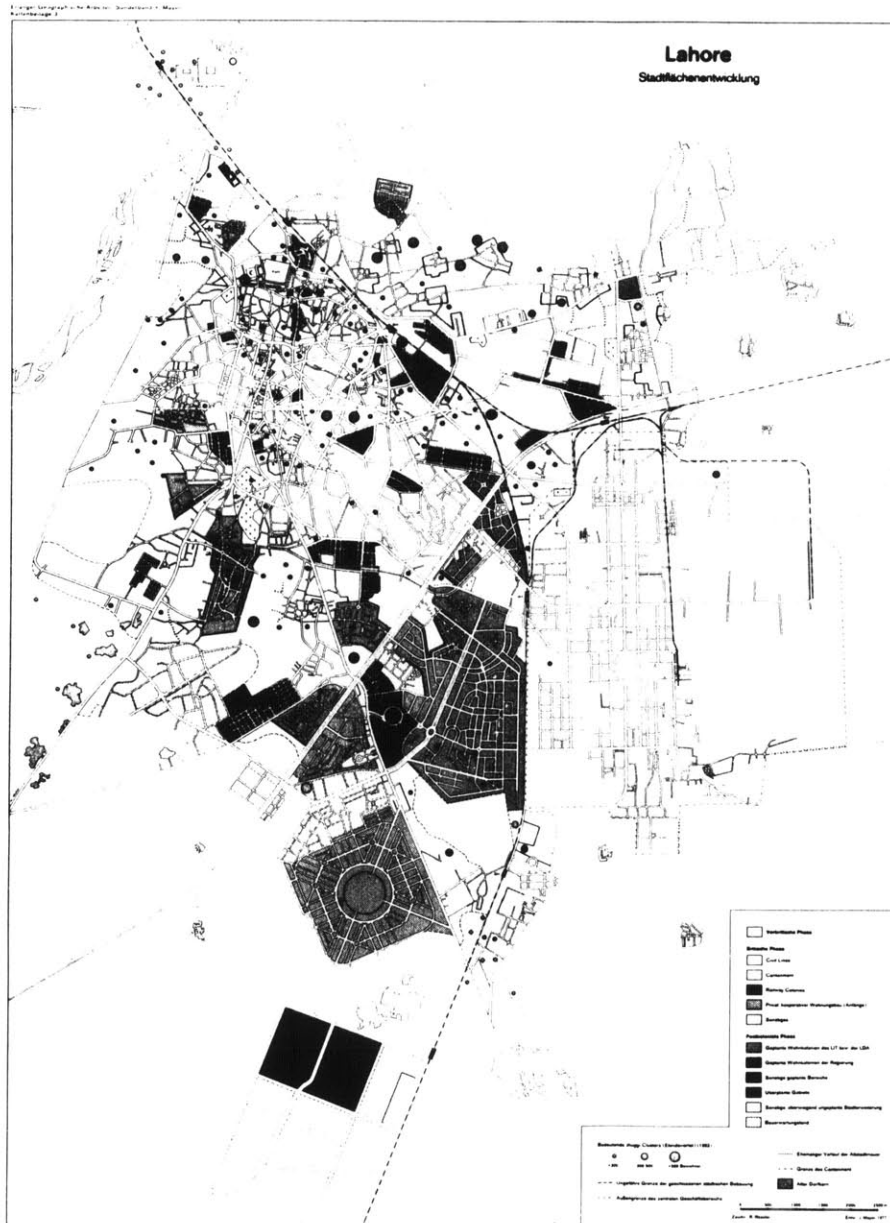


iv) The areas damaged by fires and riots during 1947 that underwent large-scale total or partial rebuilding, have already been dealt with earlier in detail.

As an example of a traditional physical and social fabric, the first of these four areas has been chosen. It not only has the most well-preserved traditional physical environment and structures, but also a stable population that has continued to retain its traditional living patterns.

c) CONTEMPORARY

The post-Independence period since 1947 has seen an immense expansion in Lahore. The city has fanned southward from the original fort, with succeeding zones increasing in area but reducing in density. Thus, immediately south of the fort is the walled city, the densest and oldest quarter of the metropolis with a mix of housing, commerce, and manufacturing activities. Encircling this is the inner-city zone of dense housing and informal commerce. To the south of this is the central business district, with a concentration of major administrative, educational, and



17. The city has fanned southward from the original fort, with succeeding zones increasing in area but reducing in density.

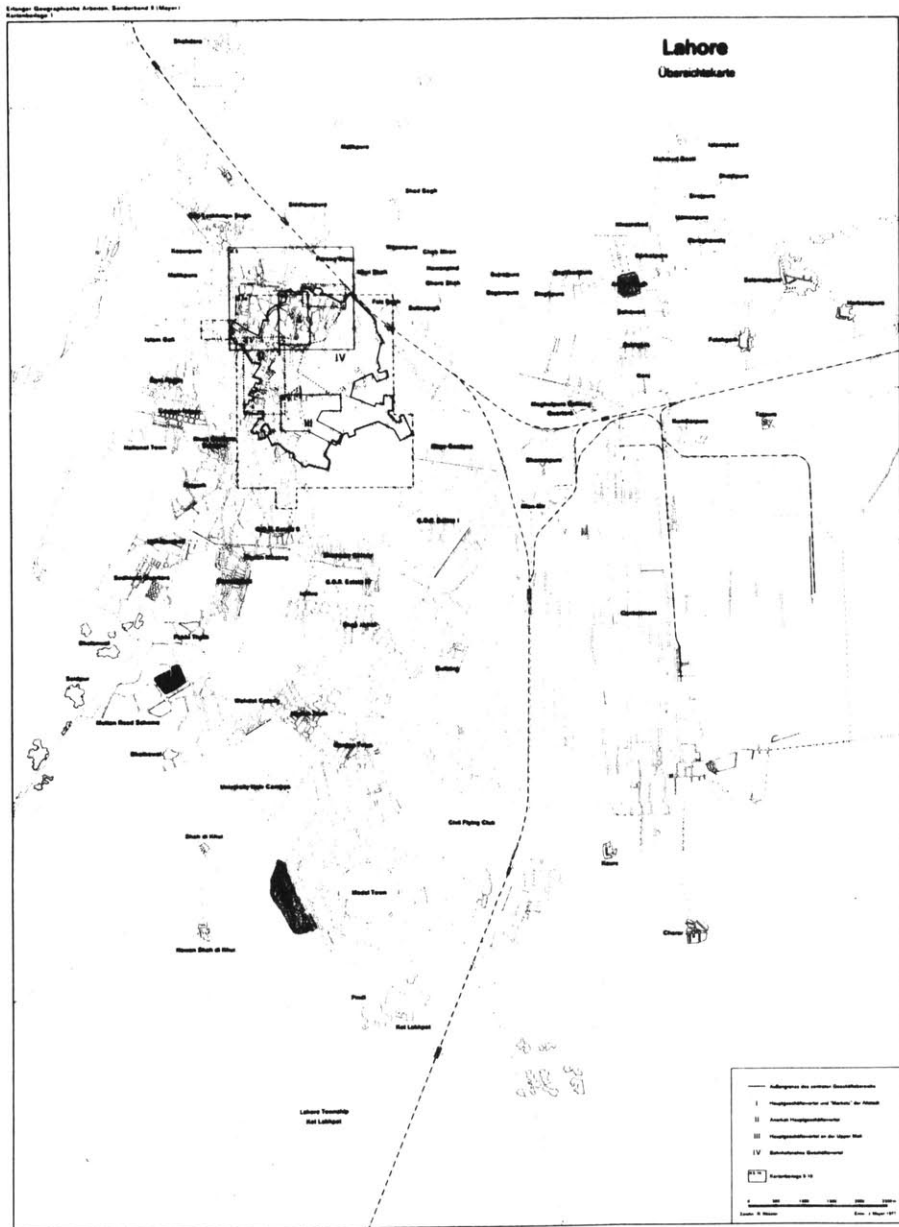
commercial institutions. Beyond it lies a wide belt of primarily low density housing. Apart from the walled city and a few old suburbs, the present metropolis is a product of the British and post-British periods.

The British took over Lahore in 1847, and established their own administrative institutions and housing areas, some distance away from the walled city. After 1857, a large cantonment area was laid out further towards the south-east. The boulevard connecting it to the earlier development formed the Mall, along which were located various public and administrative buildings and from which were accessible the Civil Lines - the residential estates of the ruling gentry. The headquarters for the North-Western Railway, along with major locomotive and carriageworks were also established nearby. About ten kilometers outside Lahore the Model Town was laid out, as a self-contained settlement along the lines of Howard's Garden City.⁴⁹

Since 1936, the Lahore Improvement Trust (L.I.T.), and since 1975 the Lahore Development Authority (L.D.A.) have been responsible for the planning and expansion of the city. Its southward direction of growth has been determined by two factors; the river Ravi and its flood plains limiting development towards the north and west, and the vicinity of the Indian border towards the east. An important feature of the city is a canal cutting across from north-east to south-west. The historical development of Lahore has followed a fairly consistent pattern - fingers of growth along the main routes out of the city, followed by islands of settlement between the fingers,⁵⁰ and subsequent more intensive filling.

⁴⁹ L.D.A. (1980), *L.U.D.T.S.* vol. 1-A, p.ii,4,5.

⁵⁰ *Ibid.* p.6.



18. The Lahore Metropolitan Area indicating the various localities of the city.

Meanwhile, the population of Lahore increased manifold, reaching the three million mark by 1980, with a projection of 6.6 to 6.94 million by the year 2001. The provision of adequate housing for the growing population therefore became a major issue for the city authorities. It was dealt with in two ways: through land development its division and selling of plots, and through built units. The former method was predominantly adopted, and residential areas were planned with pre-determined zoning, and developed with streets and fully serviced lots. A recurrent drawback in most of these schemes was that they turned out to be expensive, and remained inaccessible to the target groups they were designed for.⁵¹ The exceptions were schemes built exclusively for higher income groups. Moreover, the planning principles adopted and the building regulations enforced facilitated the perpetuation of a *bungalow culture*⁵² through the axial layout of roads and plots, the restriction of the number of storeys to two, and required setbacks and free space around the buildings. The distinction of the economic status of the residents was made through changing plot sizes, the planning and building principles remaining constant for all.

Altogether, these planning efforts still fell far short of the numbers of housing units required. The need for new housing in the Lahore Metropolitan area is estimated to be about 20,000 dwelling units a year. Against this, in reality an average of only 1,056 to 2500 plots and/or units per year have been provided.⁵³ Moreover, the provision leans heavily towards higher-income households which comprise a

⁵¹ Groote and Jonge (1984), *Urban Planning in Lahore*. pp. 217,226.

⁵² Ibid. p.218.

⁵³ L.D.A. (1980), *LU.D.T.S.* vol-2, p.i.

minority of the actual population. The result of this lack of, in addition to a lopsided provision, is a profusion of informal squatter settlements all over the city.

The predominant trend in the growth of the city has therefore been vast tracts of land being developed as sprawling upper class neighbourhoods, with pockets of high-density informal settlements evolving to cater for the bulk of the city's population. Clearly such a state of affairs could not be perpetuated indefinitely. As land became scarce and economic constraints more stringent, higher densities became unavoidable. In many schemes, finished units as row-houses and/or four-storey walk-ups were introduced as a result. It was, however, recurrently found that in spite of a severe housing shortage within the city, they either remained vacant for long durations or were occupied extremely hesitatingly. Whether the unpopularity of these high density environments can be attributed to any social or cultural reasons or to their physical designs, however, will be investigated later.

Lahore, as the capital of the province and the educational and cultural heart of the country, will continue to grow. In order to contain the growth of the city, it seems logically imperative not only to densify the existing low-density neighbourhoods, but also to plan the new ones based on higher densities. High-density housing therefore seems unavoidable; whether it is provided through public or private agencies or offered as completed or partially built units remains a separate issue. What is pertinent, however, before they can even be considered, is why they have been deemed as unpopular, unacceptable, or even failures in the past.

The examples of contemporary architecture that have been chosen for analysis are therefore high-density projects for a number of reasons. Their densities correlate

with those of residential developments of the previous periods, which were by nature more dense. Their study, moreover, may reveal not only factors for their failure in the past, but also lessons to ensure their success in the future. Moreover, these schemes are architect-designed with projected rather than real users, and predicted rather than actual user needs.⁵⁴

i) The Allama Iqbal Town is a middle/upper-middle income residential scheme that was developed in the 1970s in the south-west of the city. It is predominantly comprised of blocks of plots of varying sizes for single-family dwelling units. However, to quote a Lahore Development Authority's (L.D.A.) report, "In order to meet the growing demand for housing and keeping in view the paucity of land available at strategic locations in and around central areas, the Lahore Development Authority planned to construct multi-storeyed flats to maximise the use of land. The objective was to provide housing facilities to a larger number of low and middle income families on hire-purchase basis."⁵⁵

The flats were designed and constructed by L.D.A. However, once completed, they did not attract many families to occupy them. Most lay vacant until they were offered to various government agencies for requisitioning them for their employees. They are therefore mainly occupied on a purely rental, rather than a hire-purchase basis, as originally intended. The Chenab block development, which is the area selected for study, contains 432 units, of which 120 are terraced flats and 312 non-terraced. Each category is further divided into both two- and three-room units.

⁵⁴ Another common factor and a criterion for the selection of these schemes is that they are for the middle-class. Low-income housing has been deliberately avoided, for there the economic constraints become an overriding factor for all analysis.

⁵⁵ L.D.A. (1981), *An Evaluative Study - Allama Iqbal Town Flats, Lahore*. p.2.

Within a couple of years of occupation, the scheme generated severe criticism from the occupants on both its architectural and social aspects. The complaints became so numerous that L.D.A. was forced to take an unprecedented step and undertake an evaluative study for the scheme in order to not only ascertain the problems, their causes and cures, but also to "prepare guidelines for planning and designing multi-storeyed flats in future."⁵⁶ The results of the study are incorporated in the subsequent analysis. Its final aim, "implementation of guidelines evolved", however, remains to be carried out successfully, as will be seen in the analysis of similar more recent developments.

ii) The Model Town Extension scheme, which has evolved within the last decade, also has areas designated for multi-storeyed flats. Some of these will be examined in order to establish the current trends in high-density housing developments and to investigate whether the results of the above-mentioned study had any bearing on their designs, since these too are generally L.D.A.-designed and implemented. Moreover, the designs are prototypical and have been replicated in other recent housing schemes as well.

iii) The Anguri Bagh housing scheme was initiated in the early 70s by the government of that time, as part of a program to provide 6,000 dwelling units for the middle- and low-income families. The program was timed such that it would be implemented ahead of the oncoming national elections in 1977, and was thus foreseen more as a political tool than for fulfilling a social need.

The Anguri Bagh scheme was originally planned as a low-income housing

⁵⁶ Ibid. p.2.

development. As part of the conditions of contract, it was made mandatory for the architect to generate the program brief by interviewing the inhabitants of squatter settlements adjacent to the site for their needs, as well as studying their living patterns. For, once built, the scheme was to accommodate these very squatters. The last of these intentions, however, remained unrealised, and the units were actually allotted to middle-income people.

The scheme is, however, unique in being a highly successful scheme in terms of user satisfaction, in spite of its high density. A visit to the area tends to reinforce this belief. In a city where other such schemes, many of which were built after Anguri Bagh, have met with various degrees of failure, it is worthwhile to analyse the factors responsible for the success of this scheme. One obvious reason, important and yet totally neglected in the other developments, seems to be the mode adopted for the design development through user-participation. Although the participants did not eventually become the users, yet the scheme was based on real needs rather than merely projected ones. It has therefore been selected for further analysis to learn what *can* be done instead of what *is* generally done.

The scheme is located in the north-east of the city in the vicinity of Shalimar - the historic Mughal gardens. The site is in a residential area, with a low/middle income housing neighborhood called Sahowari to its south, a squatter settlement separated by a drainage canal to the east, and the now dilapidated Angoori Bagh to the west. It contains 787 dwellings arranged in one-, two- and three-storey blocks grouped in clusters of fourteen, and comprised of two unit types. Since the scheme was initially planned for a low-income population, it is built using almost entirely locally available materials and skills to keep the costs down.

The examples for the contemporary period have been selected with the aim to provide an overview of the current high-density housing situation in Lahore. The examples, therefore, represent a cross-section of the schemes implemented, starting from the Iqbal Town flats which was the very first of such schemes; to the two Model Town Extension schemes, illustrating the kind of prototypes being recurrently used these days; to the Anguri Bagh scheme, which although is a contemporary of the Iqbal Town flats, exemplifies a distinct and uncommon approach of design.

4. COMPARATIVE ANALYSIS

A comparative analysis of the residential units selected from the various areas/periods of study has been attempted in this part, in an effort to not only compare the similarities and differences in their designs and plans but also to analyse the changes in the living patterns of their users that these designs may reflect. The analysis therefore takes both these factors into account as mutually influential, rather than propounding a deterministic stand in favour of any one to propagate either architectural or social determinism.

The analysis encompasses three aspects of comparison:

- I) The first part uses the drawings of the chosen examples to point out and analyse any special features and peculiarities in the designs that these drawings may depict.
- II) In the second part, the living patterns of a typical middle-class household in each period are described in detail, to record the activities of its members, their spatial requirements, and the way these are catered for in the architecture. The approach adopted lays stress on the behavioral patterns and how they relate to the spaces provided. The descriptions bring to light the continuities that remain and the changes that have occurred in the way people have lived through time.
- III) The third part describes the attitudes of the residents towards these housing environments, and their evaluations of various aspects of their habitats.

The three levels of comparison have been dealt with separately to avoid confusion

and repetition. Yet each forms an overlay over the previous one, and, when seen in conjunction, they represent a comprehensive picture of the respective periods.

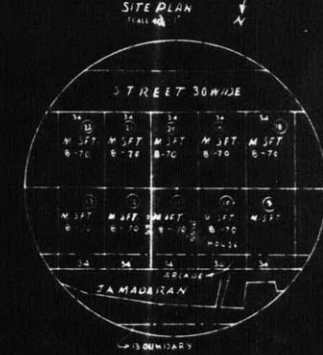
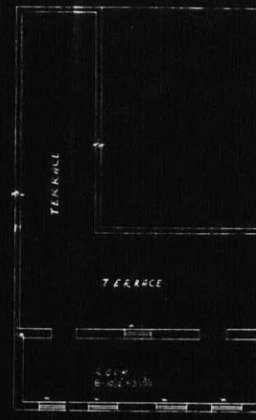
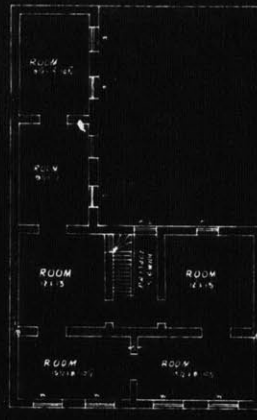
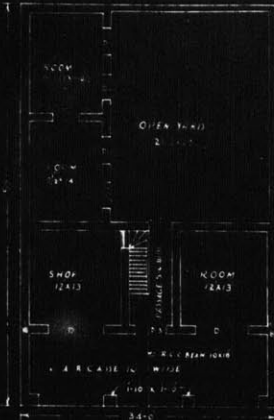
I. ARCHITECTURE

a) Transitional

As specific examples for study of residential units from the damaged area schemes, four houses from the Gali Jamadaran area have been selected. As mentioned earlier, most residential schemes for the damaged areas were never implemented. These examples are therefore some of the very few units constructed under these schemes, and therefore ones for which records were possible to find. To date, these records have not been used for any previous research, since their very existence was not known. The next two examples are from Krishan Nagar, the second constructed on only half of the given plot; yet both are typical of the development.

As the illustrations show, houses built in the transitional period, whether within the walled city or in the neo-traditional communities outside it, are predominantly of the courtyard typology. The courtyard may or may not be central in location, yet it forms the prime multi-purpose space in and around which household activities occur. Its direct link to the kitchen is significant in these plans, for during the morning hours when the cooking activity is at its peak, the kitchen may extend into the courtyard for climatic and spatial reasons. The courtyard therefore gains additional utility, while the kitchen may be kept to a minimum size. The courtyard

PROPOSED HOUSE OF MST SHARIF BEGUM GALI JAMADARAN
 SCHEME LAHORE PLOT No 11 IN CHUNA MANDI LAHORE
 SCALE - 1" = 6'



- REFERENCES
- 1. FOUNDATION - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 2. SUPERSTRUCTURE - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 3. FLOORING - 1" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 4. WALLS - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 5. ROOF - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 6. FINISHING - 1" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 7. PLUMBING - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 8. ELECTRICAL - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 9. PAINTING - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION
 - 10. ARCHITECTURE - 4" CEMENT CONCRETE WILL BE LAID IN FOUNDATION

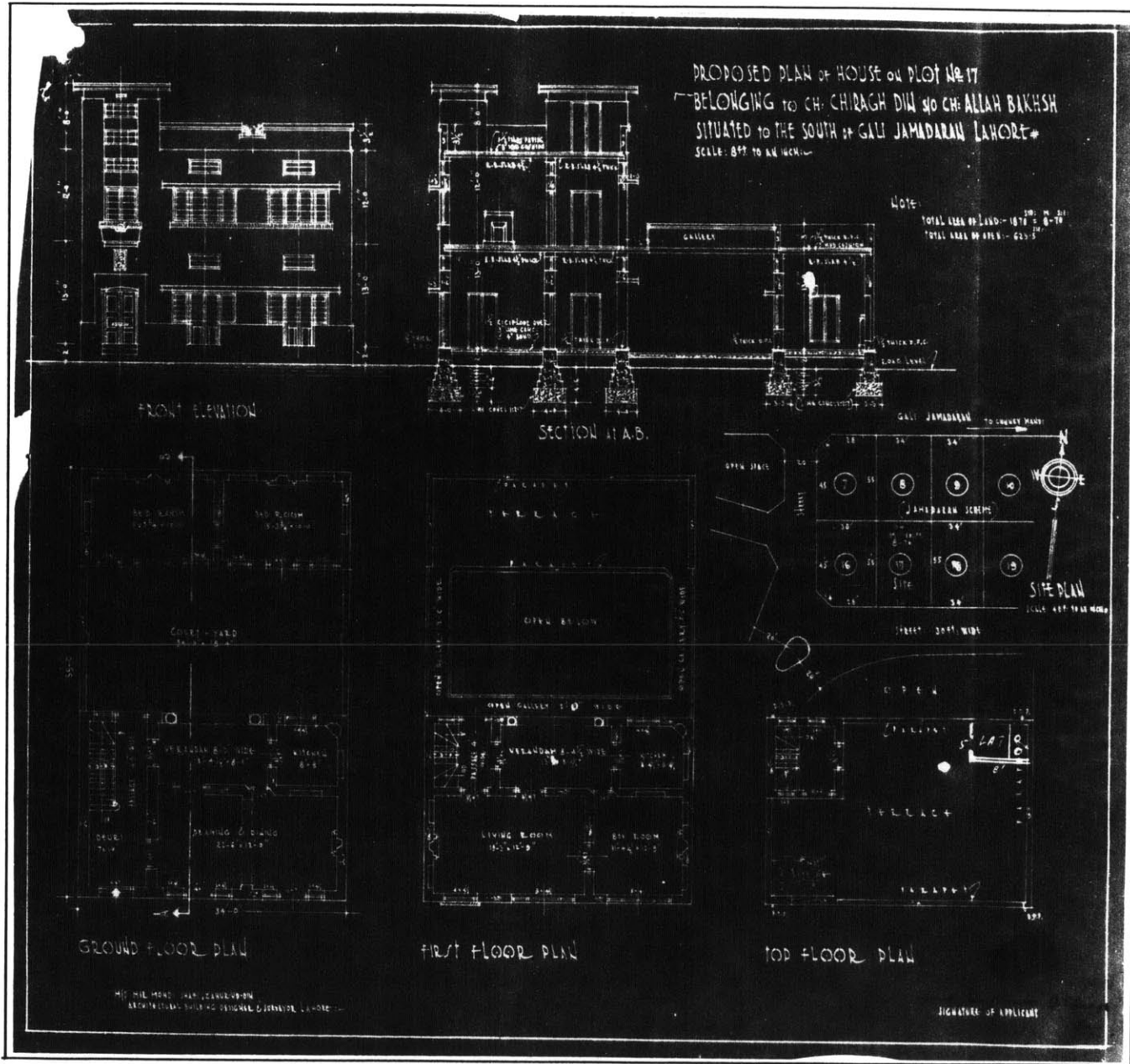
OWNER

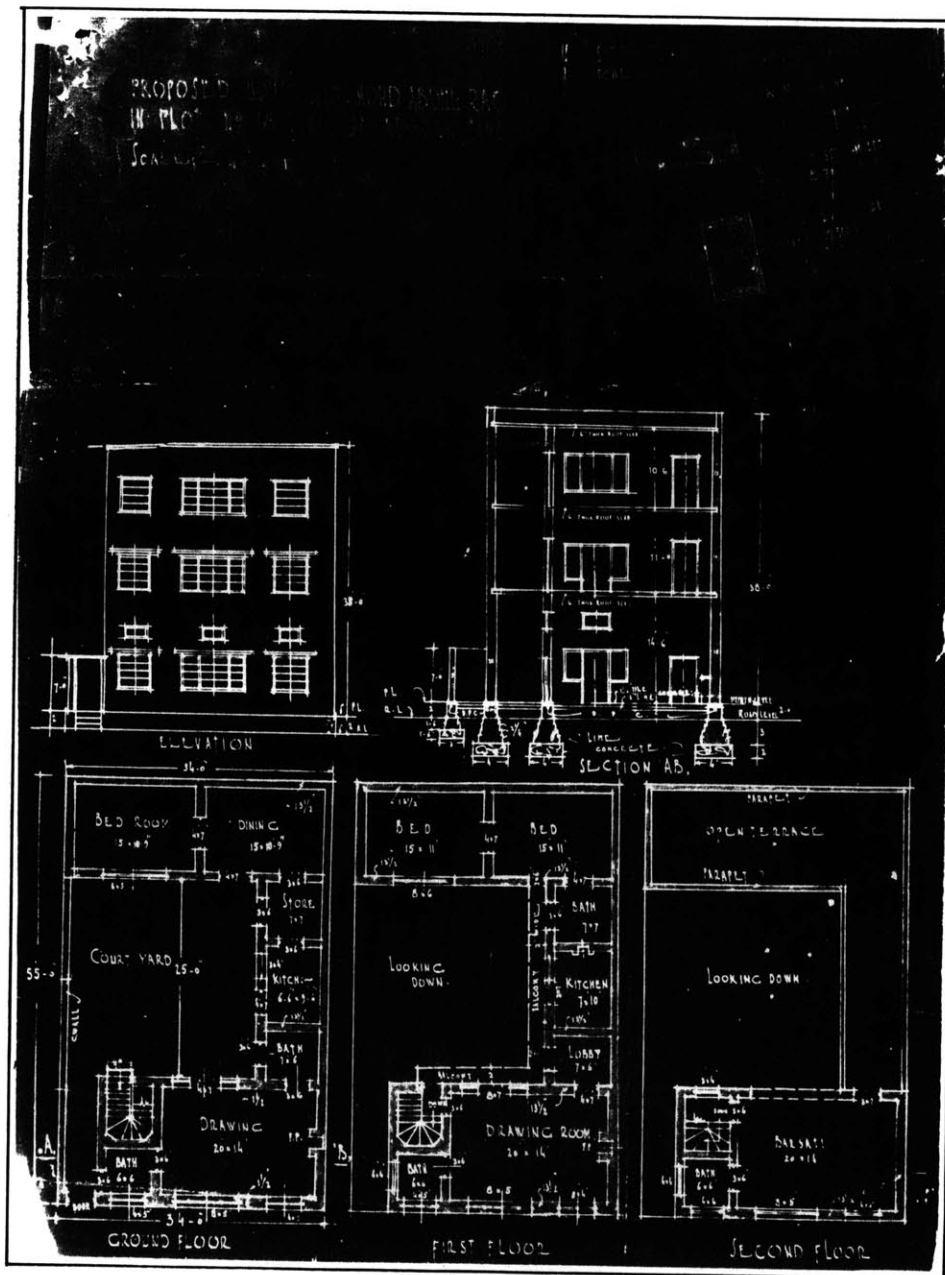
also relates directly to other principal spaces like the bedrooms and the drawing/living room, and forms a direct outdoor extension to their interiors. It also forms the principal source of light and air to the rooms not adjacent to the street, and often an additional source to those that are.

The entrance to the houses is in every case through an independent space or foyer. Apart from being a transitional space between the street and the rest of the house, it also usually contains the staircase to the upper floors. In case the upper floors contain an independent unit, as in house no.19, a further separation is made to provide independent entry to each unit. The drawing room on the ground floor however, retains its own direct access from the outside for visitors, based on the requirements of privacy and the seclusion of family activities from them. However, the combination of the dining room with the drawing room in houses nos. 17 and 19, appears to contradict this norm and raises questions. Either privacy is no longer a driving issue in these households, or the combined dining areas are provided more for use while entertaining and not for the daily use of the family.

Another recurrent feature in each house plan is access to the roof for use as an additional open space, along with a semi-open structure -*the barsati*- on it. The rooftops are for use both in winters during the day and in summers during the night. The *barsati* provides shelter in case of rain, which is a source of relief in summers, and can still be enjoyed without getting drenched.

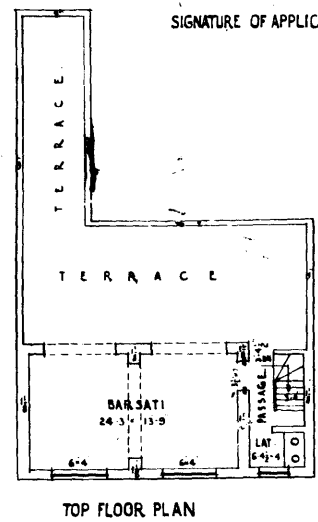
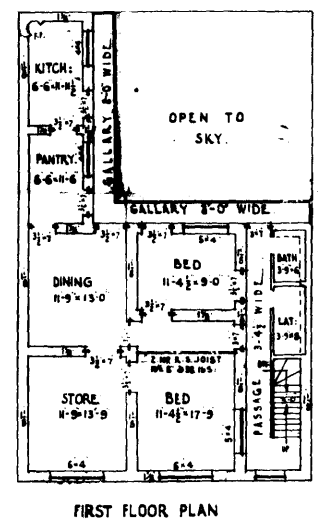
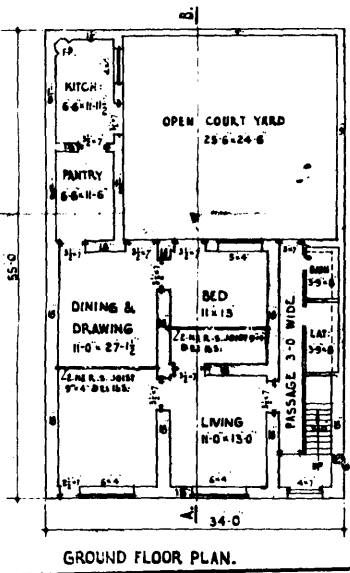
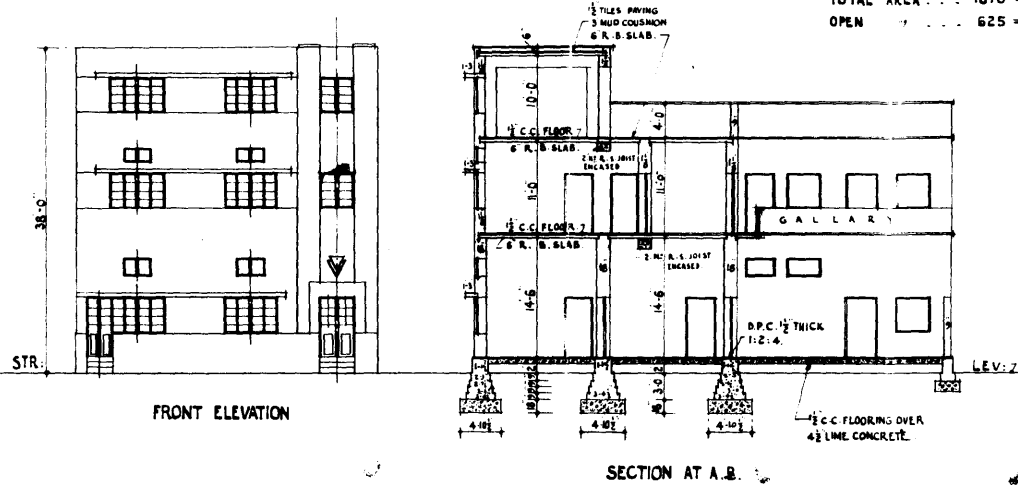
The rooms in these houses are function-specific. Each is labelled according to the function that the space is provided to accommodate. Thus their location also begins



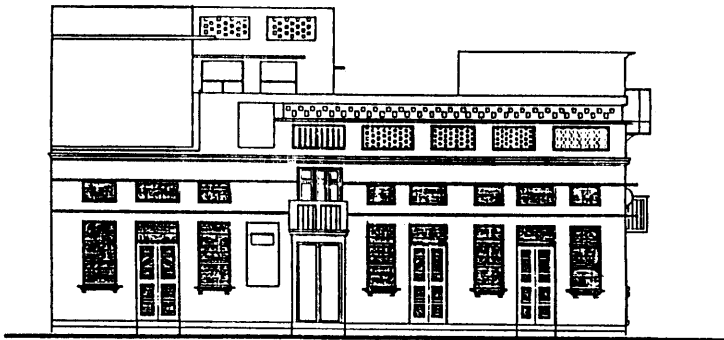


PROPOSED DESIGN FOR THE HOUSE OF S.A. SARFARAZ
 AT PLOT NO. 19 GALI JAMADARAN CHUNI MANDI LAHORE.
 SCALE :- 1" = 8'.

NOTE :-
 TOTAL AREA 1870 = 8 - 70
 OPEN 625 = 2 - 175



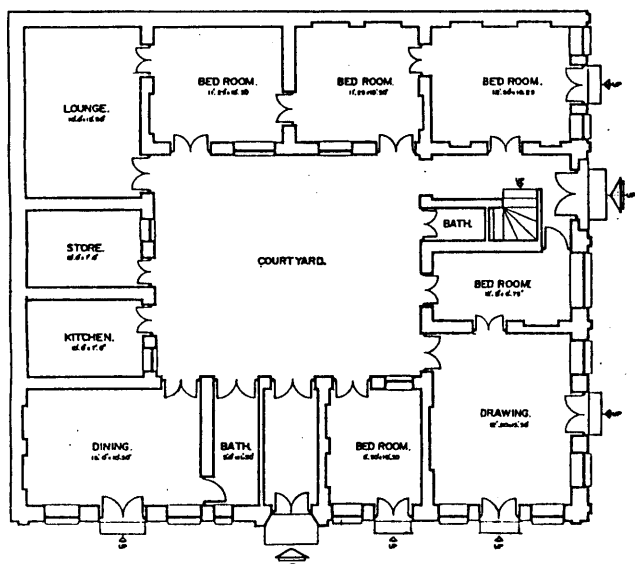
SIGNATURE OF APPLICANT.



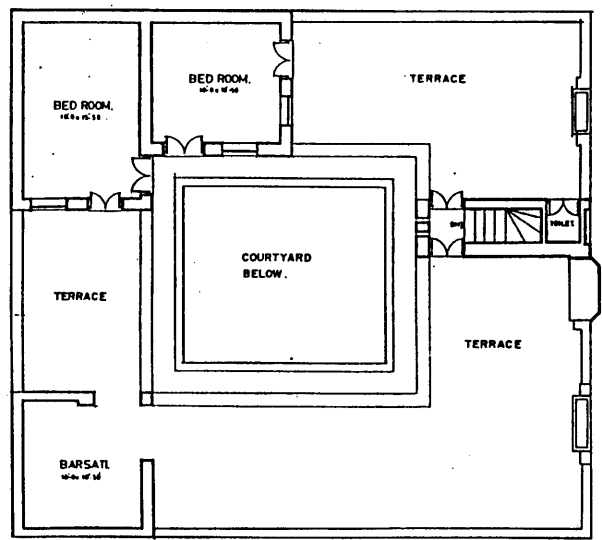
SOUTH ELEVATION



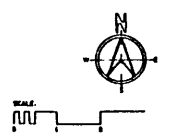
EAST ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN



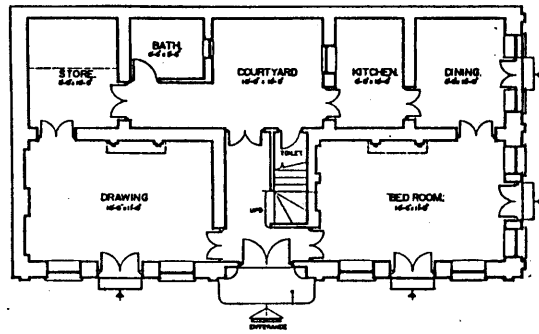
24. Residence at Krishan Nagar.



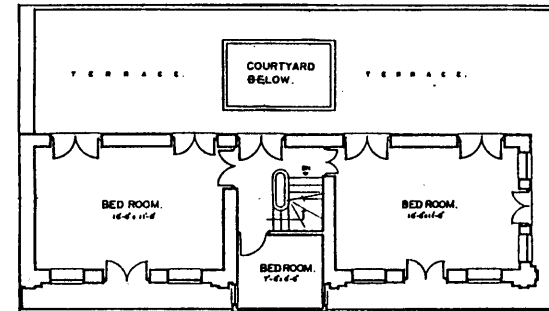
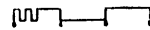
NORTH ELEVATION



EAST ELEVATION



GROUND FLOOR PLAN



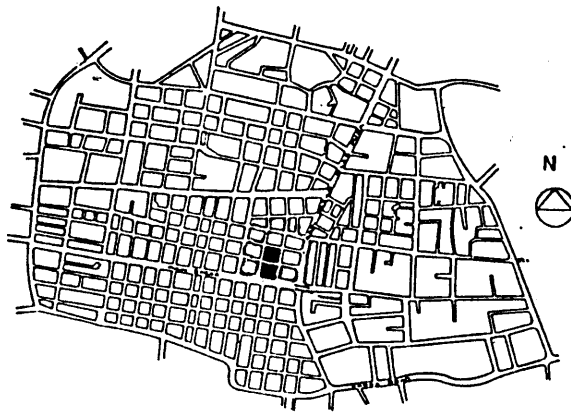
FIRST FLOOR PLAN

25. Residence at Krishan Nagar.

to be determined in context with each other; the pantry must have access to the kitchen and in turn be related to the dining room, since all three accommodate food-related activities. The provision of a pantry (as will be seen in the next section), is a new phenomenon relative to a traditional house. Its influence can be traced from the bungalow, in which it was used as an effective measure to keep the kitchen and its associated local staff away from the main house. It also served as a storage space for the vast amounts of cutlery and crockery required by the newly introduced eating habits.

The property perimeters and therefore the buildings are of regular geometric shapes in contrast to the traditional houses, as will also be seen later. Since they are in planned schemes based on 'modern' planning principles, this is to be expected.

26. Plan of Krishan Nagar with the two selected properties marked.



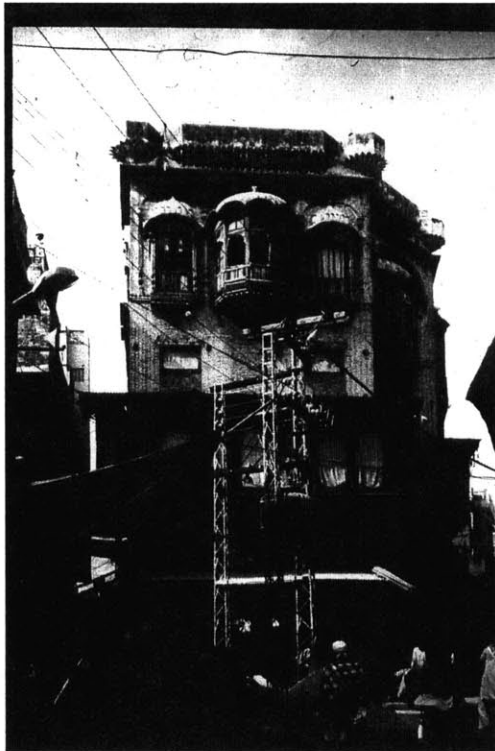
LOCATION PLAN

The houses in Krishan Nagar demonstrate certain additional peculiarities of their own. Since the plots are almost square, the courtyard assumes a central role physically as well. Moreover, the number of access doors from the street to the unit are seen to dramatically increase for no apparent reason. Each major room along the street has an access from it. One is led to surmise this to be possibly an influence from the bungalow, in which every major room opened into a verandah. Here, although the verandah and the surrounding compound are absent, yet the object is replicated without its objective. There exists no evidence for the independence of access to be based on the need for renting out these rooms individually, which otherwise would have been a valid reason.

b) Traditional

For the traditional period, the examples of house units taken for analysis are dated 1887, the earliest period for which original records could be traced. Any graphic documents of houses constructed prior to this time could not be located. It may be mentioned here that the detailed documentation of selected historic houses of the walled city has recently been carried out by PEPAC⁵⁷ in Lahore. However, it records these properties in their current state, which over time, has undergone innumerable modifications and additions in plan and facade. Moreover, the effects of commercialisation are recurrently evident throughout the walled city, particularly so in the properties selected by PEPAC, which are predominantly along major spines. The ground floor plans have therefore been irreversibly altered through major renovations to accommodate shops, and it is difficult to conjecture how they may have originally been.

28. A traditional house in the Walled City.

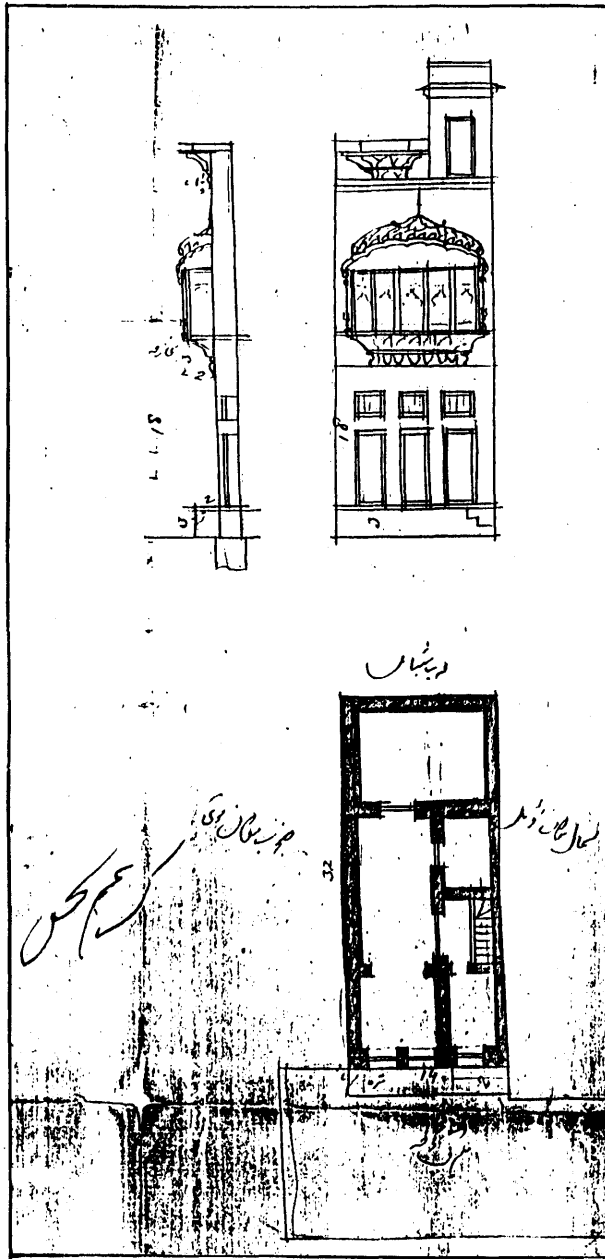


Therefore, rather than depending on the documentation of buildings as they exist today, this study uses original house designs as they were proposed when initially built and occupied.⁵⁸

From these drawings, a number of things are clearly evident, without going into any critical analysis. They contain hardly any details. The major dimensions and at times the room sizes are specified. The wall thickness is occasionally mentioned or the section of an external wall drawn. The rest is left to the imagination of the

⁵⁷ Pakistan Environmental Planners and Architectural Consultants, an autonomous semi-public organisation which is currently working on a Conservation Plan for the walled city. The project is sponsored by the World Bank with the Lahore Development Authority as the client.

⁵⁸ Refer to Notes



viewer. It is possible that at that time the city authorities did not require any details to be submitted. On the other hand, it is also probable that such details were deemed unnecessary to be graphically expressed, for they were commonly known and understood and therefore taken as unquestionable givens. And within these givens existed the latitude for the craftsmens' creativity.

Another important feature that emerges in these drawings is that the spaces are named on the basis of their spatial qualities rather than functional associations. Thus a space adjacent to the courtyard, with openings all along their common edge to form extensions to each other, is called a *dalaan*. Similarly a room occupying a corner between two *dalaans* is termed as a *kothri* or *hujra*. Within the domain of the family, while the *hujra* connotes a very private space, the *dalaan* is much less so. However, no functions are specified for either; therefore a *dalaan*, for example, may be used for a variety of functions. Conversely, each *dalaan* may contain a very different function and yet carry the same name.

Unlike the examples seen for the transitional phase, the traditional houses exhibit a variety of irregular shapes in terms of their property lines. It must however be remembered that as in most traditional Islamic and medieval European cities, neighbourhoods were never laid out as planned areas of streets and plots. This is a more recent concept. Instead, the area for a new neighbourhood was loosely demarcated, and in Lahore under Imperial rule, as generally elsewhere, was allotted or given as a royal gift to one of the court notables or some other royal favourite.⁵⁹

⁵⁹ A quarter, usually named after the nearest gate, may contain 15,000 to 30,000 people. The mohallah on the other hand, can include from a short street to an area of several acres,* and be named after the resident clan or sect. * Noe, Samuel (1980), 'In search of the traditional.....' p.74.

It then developed over time as people of his clan, retinue, or with some other common criteria, began to inhabit it. As each settler arrived, he would be allotted land according to his requirements and to what was available and/or already existing. Areas thus grew through continuous addition rather than predetermined division. The properties therefore exhibit the pre-existing physical constraints in their irregularities of shape. However, it is interesting to note how ingeniously they accommodate these irregularities. In a constant effort to evolve regular and more geometric internal spaces, wall thicknesses and changes in alignment are used to maximum advantage.

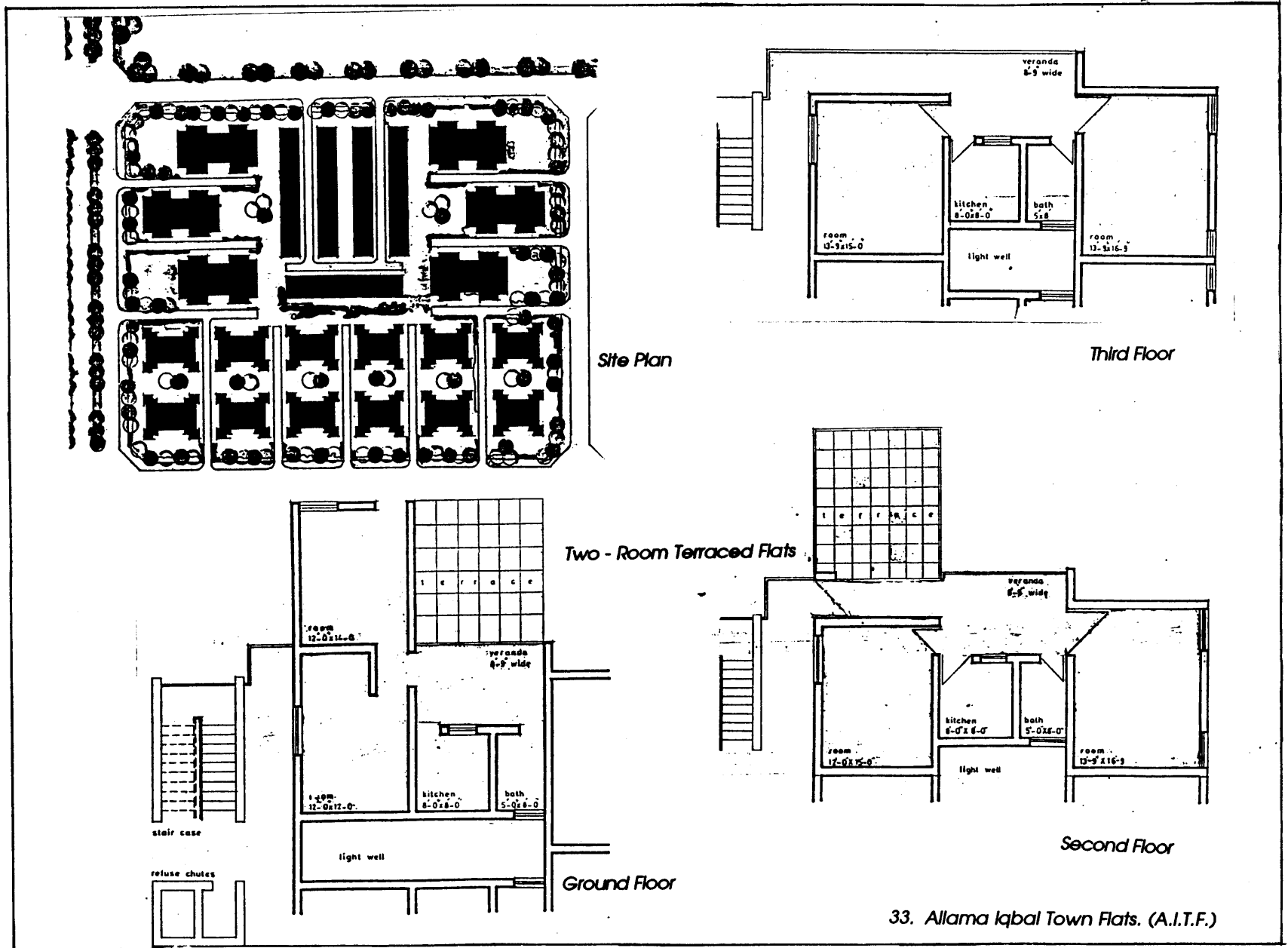
32. *The Internal Courtyard of a traditional house.*



Features like the courtyard and usable rooftop occur as in the previous set of examples. However, the concept of segregating the family from the outside world is much more rigorously applied. There seems a distinct demarcation of the inner private world from the outer public one, through a clearly defined intermediate zone formed by the *deorhi* and the *baithak* - the only two spaces allowed points of access directly from the street.

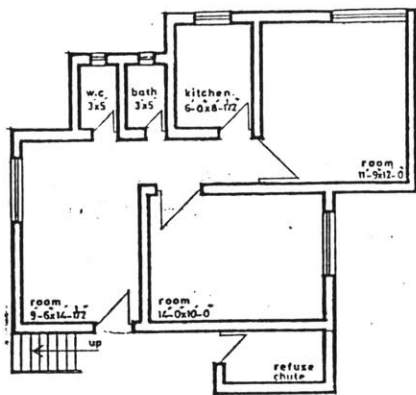
c) Contemporary

In dealing with contemporary residential environments, examples of the more common single family unit have been consciously avoided. Higher density housing complexes have been studied instead, for, as argued earlier, demographic and economic factors have made them a necessity for the future, and thus all the more important for critical analysis.

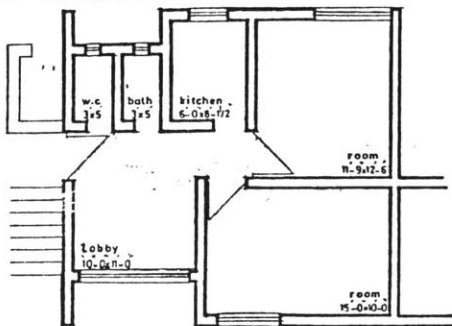


33. Allama Iqbal Town Flats. (A.I.T.F.)

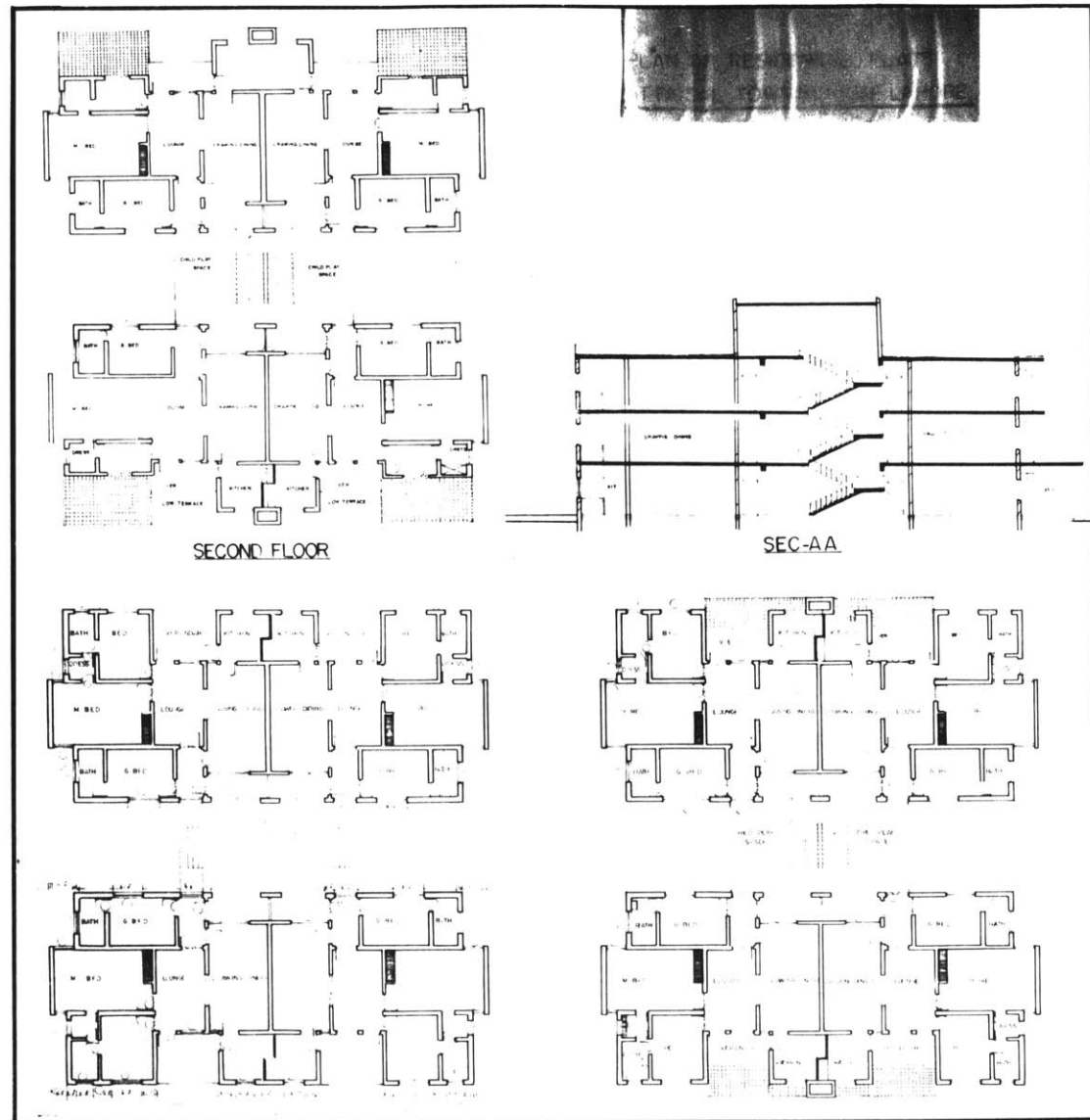
Three - Room Non - Terraced Flat.



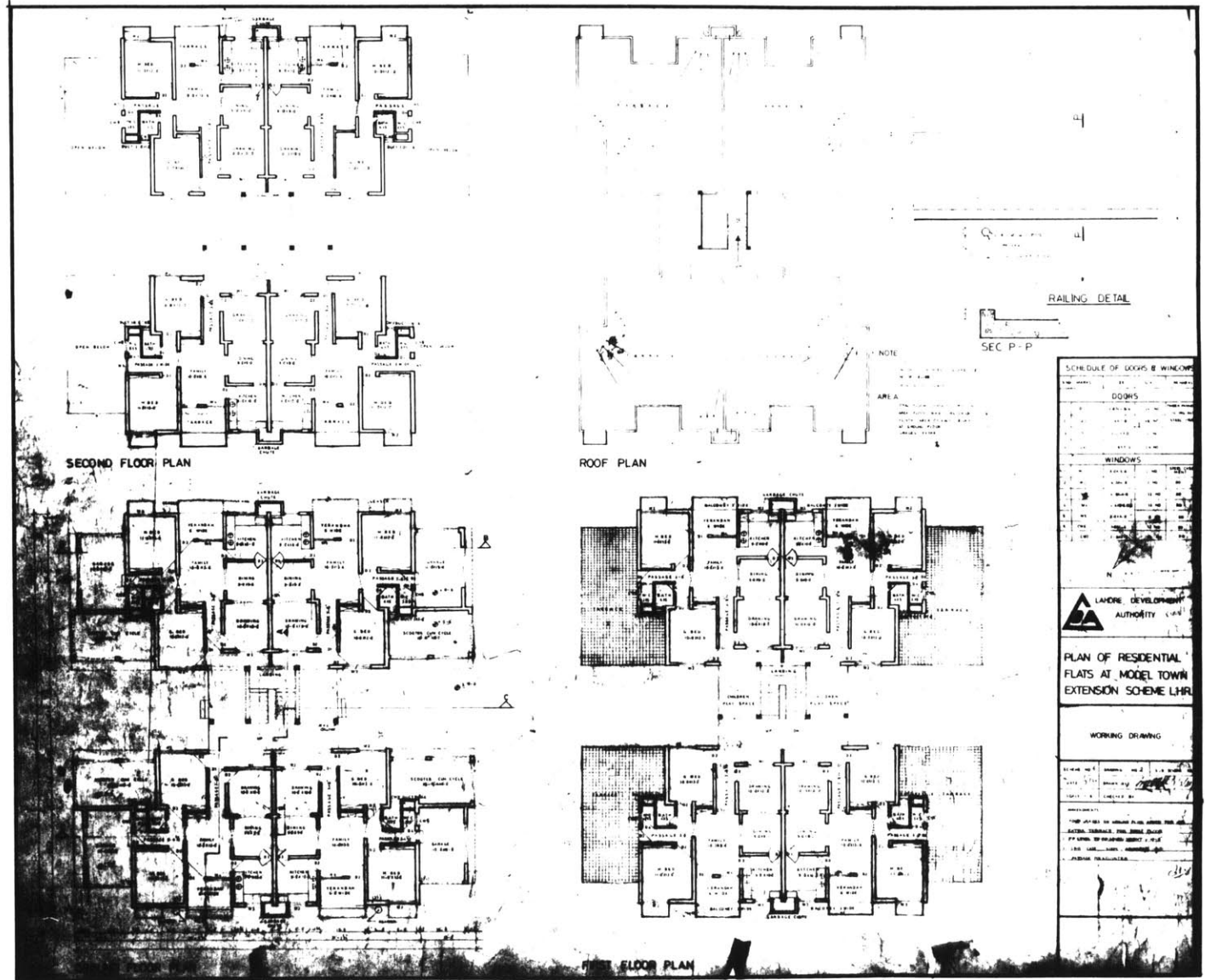
Two - Room Non - Terraced Flat.



34. Allama Iqbal Town Flats



35. Scheme 1.
Model Town Extension Flats (M.T.E.F.)



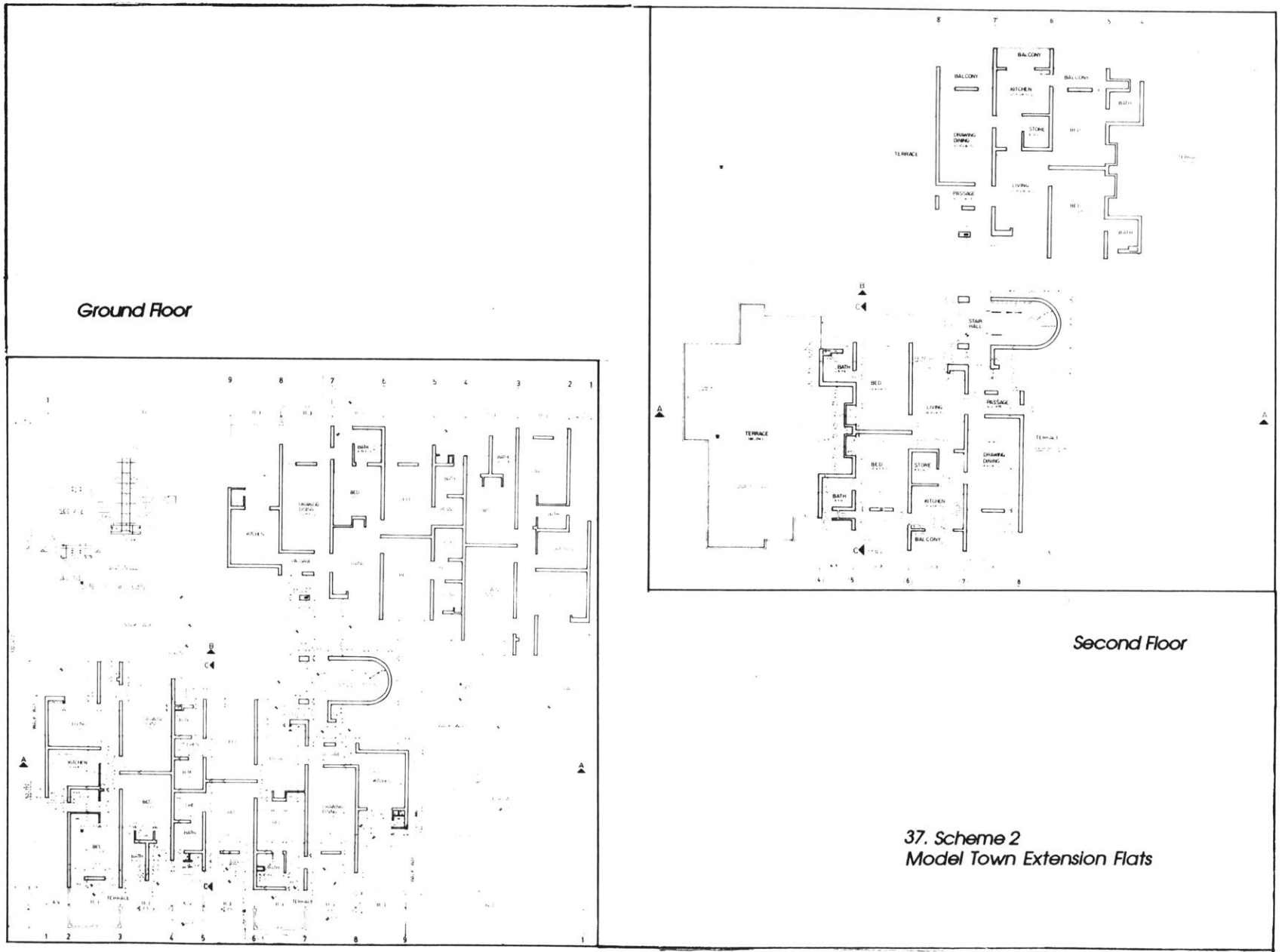
36. Scheme 1. Two - Bed version. Model Town Extension Flats

i) In the Allama Iqbal town development, the units are of two sizes, each further categorised into terraced and non-terraced ones. The former are provided with individual attached open spaces in the form of an open terrace along with a semi-enclosed verandah. Apartments on the third floor do not have terraces attached, but are instead provided access to the roof through the common stairwell. In the non-terraced units, no individual open spaces are given, and the use of the rooftop is to be shared by all.

The unit plans show a striking contrast to those of the previous periods. The rooms are all grouped together compactly. External spaces in the form of terraces, where provided, are more as additions instead of being integrated with the covered ones. The rooms therefore relate to the outside across windows, rather than as physical/spatial extensions of it. This in turn makes the rooms appear smaller than those of the previous cases, although the actual sizes are comparable.

The layout of rooms in the units seems to follow no pre-determined criteria. The entrance to the units is at times directly into a room, at others through a corridor. Similarly internal circulation may occur across rooms, or be designated to separate spaces.

The four-storey blocks comprised of these units are laid out on the site, interspersed with open spaces specified as common play areas for children. These, however, seem more like left-over spaces evolving from the required minimum distances to be kept between two residential blocks.



Ground Floor

Second Floor

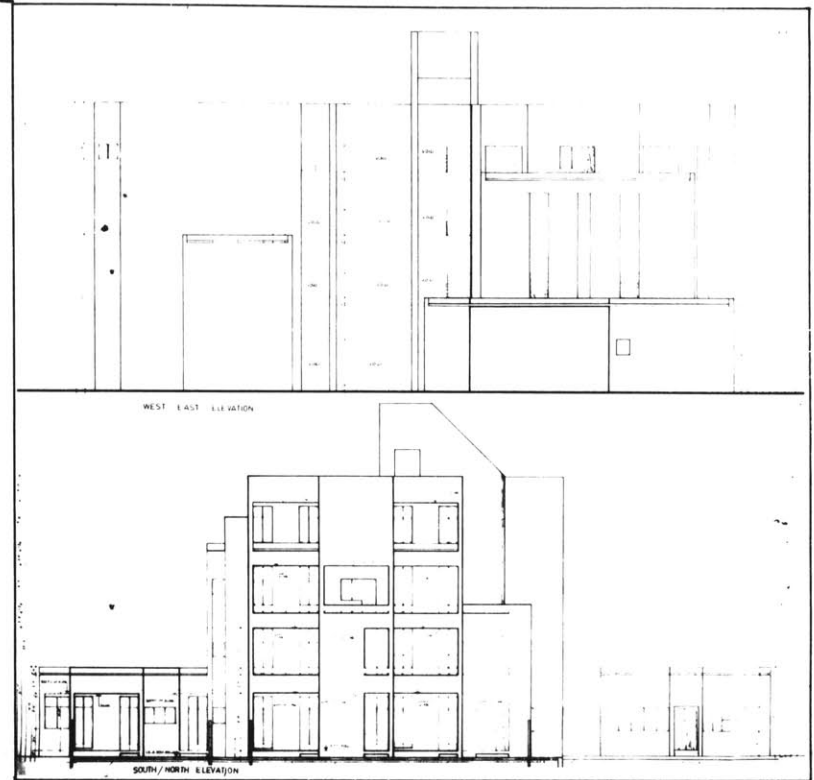
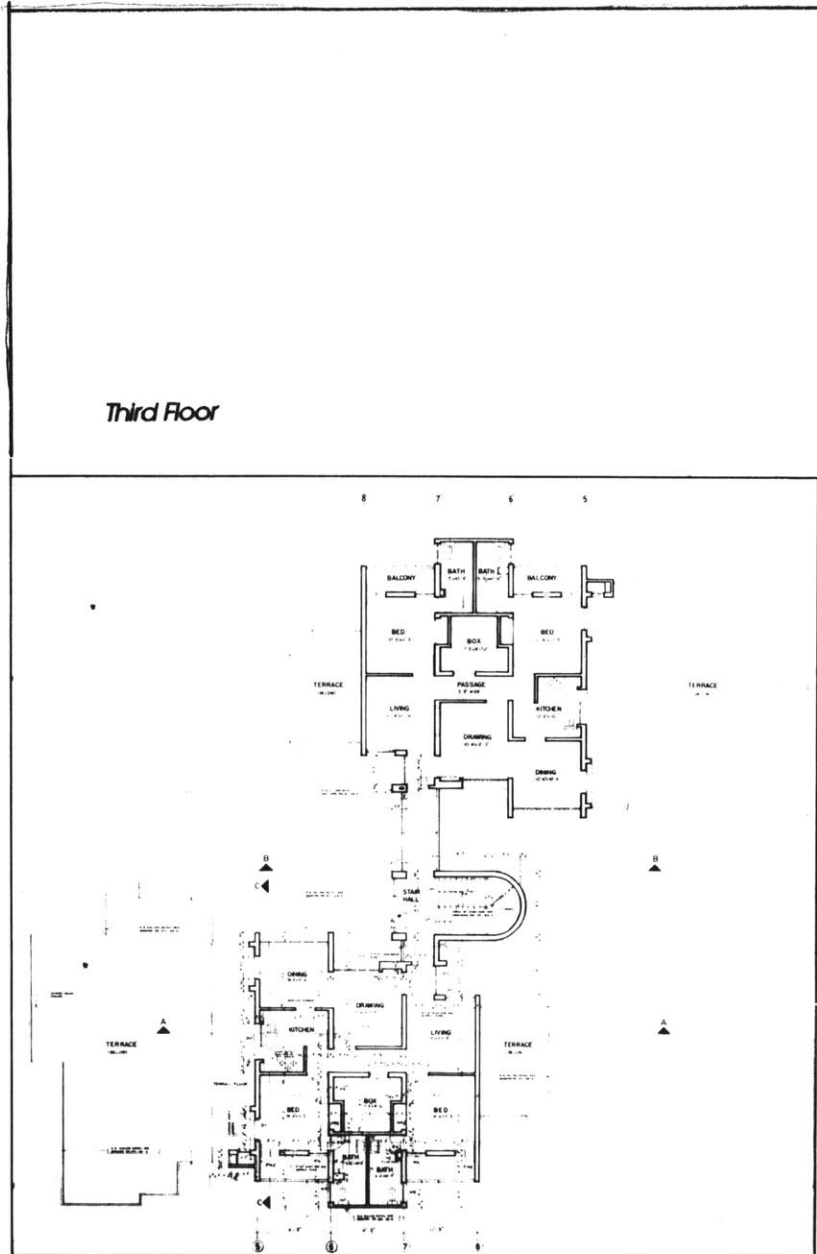
37. Scheme 2
Model Town Extension Flats

ii) The apartment designs taken from Model Town Extension are two- and three-bedroom units for middle/upper middle income families. Scheme-1 has a standard unit, four of which along with the stair core, form each floor, and four floors constitute each block.

The unit exhibits some new features not encountered in any of the previous examples. Not only are the rooms function-specific, but there is even a further specialisation among the same functions. Bedrooms, for example, are already assigned for the master of the house and the guests, and are accordingly provided with the required facilities. Thus the master bedroom has a dressing room attached to it while the guest bedroom is directly accessible from the entrance foyer. Attached baths to the bedrooms are also seen for the first time. A new space has been added in the unit - the lounge. From its central position and accessibility it seems to be a covered replacement for the open courtyard. Whether it functions as such or not remains to be seen. However the concept of combined drawing and dining, introduced in the transitional period, begins to become established here.

The two-bedroom version of these apartments is essentially similar with a few modifications. The rooms are smaller, and on the ground floor, carports are provided that become the open terraces for the first floor units, which therefore gain an additional advantage. The circulation core in both cases is provided with additional space as a common area for each floor's residents.

In Scheme-2 the apartment blocks are a mixture of two and three bedroom units. Each floor has two units connected to the stairs across bridges with the exception of



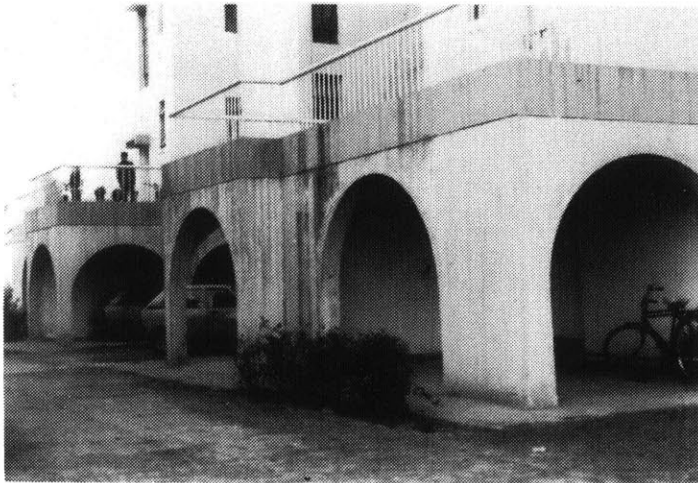
Elevations

38. Model Town Extension flats.

the ground floor. Here, each three-bedroom unit has a two-bedroom semi-independent unit adjacent to it. The roof of this unit forms the terrace for each first-floor unit. On the second floor, one bedroom is excluded to make way for a terrace; on the third floor the room sizes are substantially reduced to again accommodate the deleted bedroom, and a cantilevered terrace is provided. A serious concern for the provision of open terraces is thus discernible, and is fulfilled by resorting to various methods for their provision.

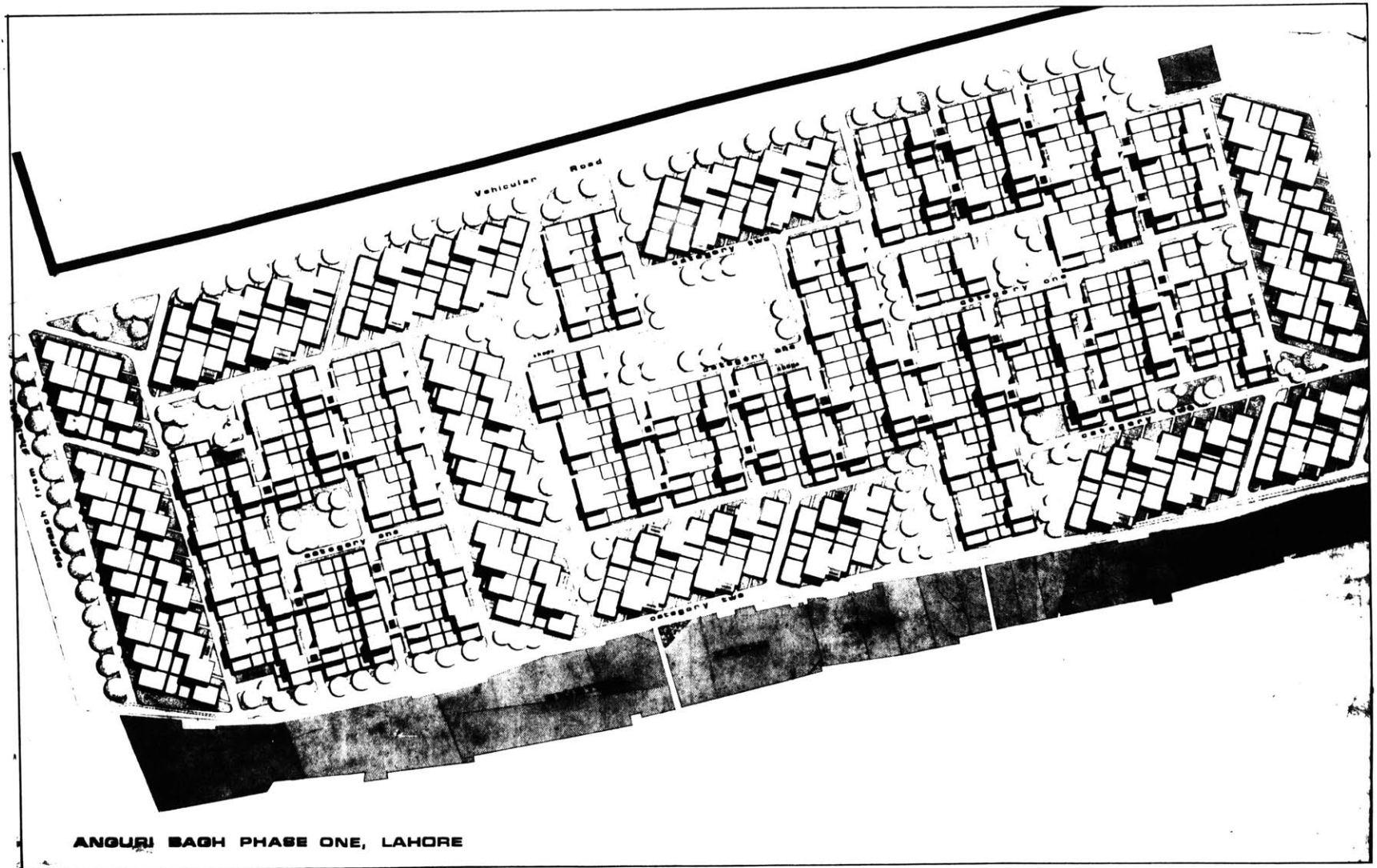
iii) Since the Anguri Bagh scheme was initially planned for low-income people, its constituent units are small. Yet, due to its high degree of success and the fact that it

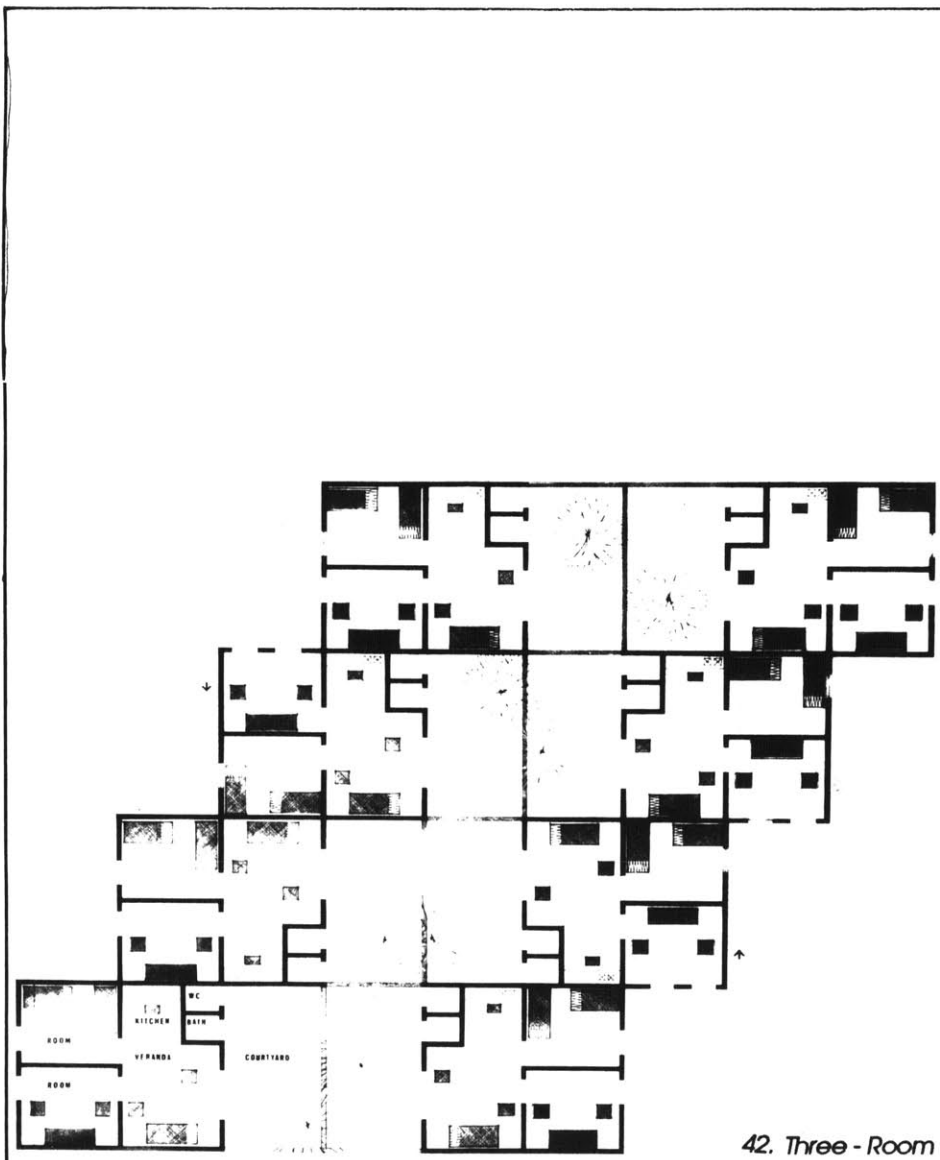
*39. Scheme 1. Two - Bed version.
Model Town Extension Flats*



*40. Angoori Bagh Scheme from the western
encircling roads.*

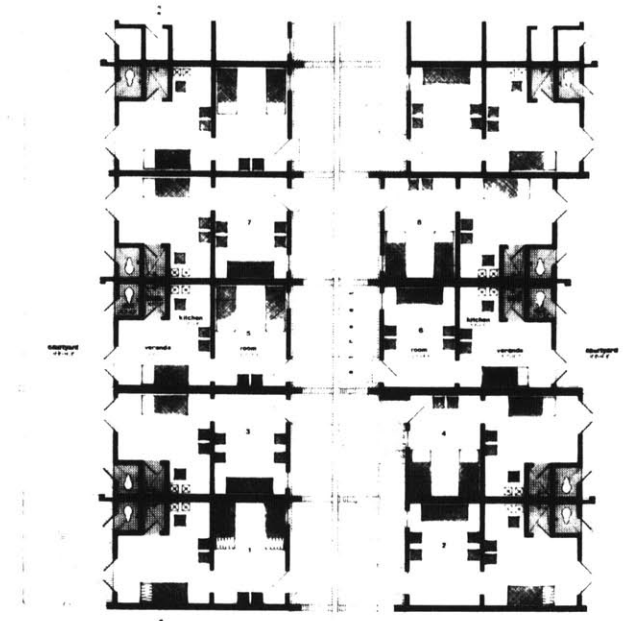






GROUND FLOOR PLAN

42. Three - Room Units

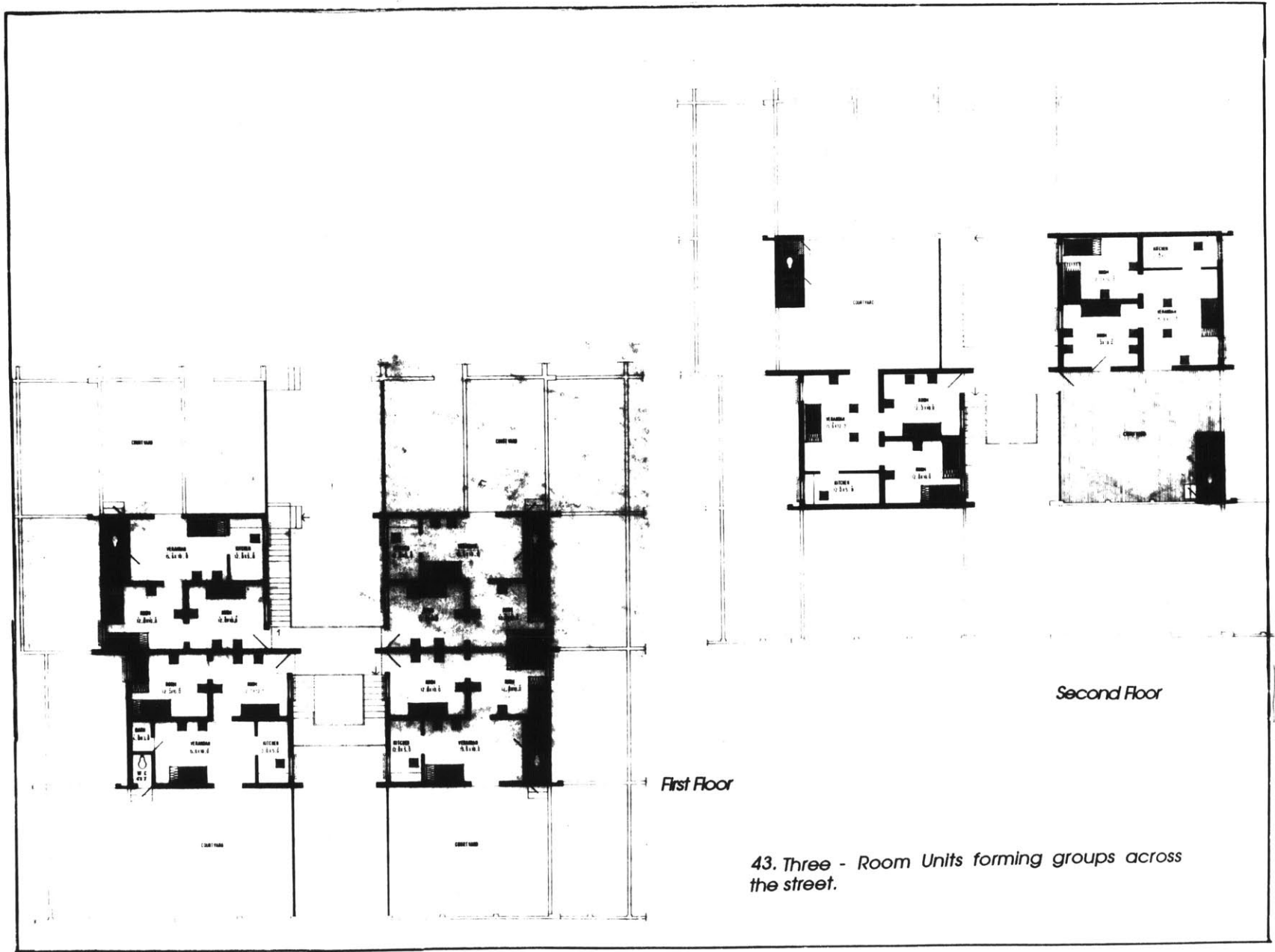


GROUND FLOOR PLAN

Two - Room Units

SECTION A-A

ELEVATION 1



First Floor

Second Floor

43. Three - Room Units forming groups across the street.

was eventually occupied by the middle-income families, it has been included for study. The comprising units are of two types. The smaller has one room, an equally large semi-enclosed veranda and an open courtyard. The larger one consists of two rooms, a veranda and a courtyard. In both cases, the kitchen is a part of the verandah, while the bath and toilet open into the courtyard.

The individual units are straightforward in plan with a hierarchy of covered, semi-open and open spaces, which closely inter-relate and extend into each other. As noticed in the Iqbal Town flats, since the units are small, a multiplicity of space use is perforce encouraged for its optimum utilization, which in the previous examples of larger units, is absent. In spite of the simplicity of individual plans, their clustering together through the interlocking and overlapping of spaces lends the streetscape a complexity and interest value. Moreover, unlike the previous schemes, the access streets themselves are treated as places rather than mere service areas, with a constant dialogue with the adjacent units.

The units form groups of seven on either side of the street. On the ground level the units are arranged in continuous undulating rows with their courtyards away from the street. On the first floor, two units lie side by side, using the roofs of another two below for their courtyards, thus spreading over four ground floor units. On the second floor, there is one unit over the covered portions of the two below. Each such group of seven is linked to another across the street through a common external stairway, forming clusters of fourteen. The staircase rises along one side of the street up to the first floor, then bridges the street to climb further to the second floor. At each level, entrances to the units occur on the open landings. On the site,

these clusters are arranged to form three sub-neighbourhoods, each with a central common space. Circulation on the site consists of pedestrian streets, most of which end in these common areas.

Deductions

It may be mentioned here that the courtyard typology of the older periods comes from a long tradition of courtyard houses in the area, extending upto the Indus Valley civilisation.⁶⁰ It has undergone modifications with time to meet changing social and religious requirements. The extremely high density and close packing of three- to five-storey houses in the walled city, however, has a different underlying reason. Since the city went through successive periods of invasion and destruction throughout its history, its urban form evolved for effective defence and security. In case of attack, the population living outside the walls would also move within. As space became at a premium, a denser fabric resulted. On the other hand its social implications were a greater interdependence in the population and an indifference to its political fate.⁶¹

From the comparison of the drawings of units from different periods, it is remarkable to find how informative these drawings are in relation to each other. Not only do they depict the changing architectural ideas and vocabularies, but also their changing mode of representation and nomenclature. From a simple depiction of the concepts only, thereby leaving the details to the expertise of the craftsmen, representation now includes all kinds of details and specifications. Moreover, from the very local indigenous terminology written in Urdu, one finds a change over to a use of international terms and English as a medium of instruction.

⁶⁰ Noe, Samuel. (1980), 'In search of the traditional.....' p.75.

⁶¹ Rehman, I.A. (1988), 'Cultural Traditions of Lahore' Talk delivered on Jan. 15, 1988.

In terms of design concepts, the houses in the first two periods show more similarities than differences in the arrangement and distribution of spaces. The designs in the contemporary period have more evident contrasts and minimal comparable aspects with the first two. Moreover, growing economic constraints and commercialisation begin to be evident in the Gali Jamadaraan houses. Not only do some properties contain two units, but also, as in house no.11, the ground floor is partially given over to shops. One is led to question whether these contrasts and similarities in architecture in any way reflect the patterns of behaviour that they support, and whether any parallels can be drawn between the two? As will be seen in the next section, a definite relationship among them does exist.

A number of other aspects are also highlighted from these drawings. In the older areas, the units, however small in size they maybe, rise vertically to retain the benefits of having direct access from the ground, as well as maintain a usable rooftop. In contrast, the newer designs show preference for a horizontal rather than a vertical spread.

The units of the traditional period exhibit a concern for privacy by totally segregating the family areas from the outside world through the intermediate spaces of *baithak* and *deorhi*. Yet, while privacy seems a major concern towards strangers, it is minimal within the family, and the spaces in the house are based on an open plan. In the newer units the concept is reversed. Each room is treated as an independant entity - spatially and functionally. Yet the large glass windows and open balconies and terraces provide minimal privacy from the outside.

The introduction and establishment of the concept of function-specificity of rooms is evident from these plans. The multi-functional *spaces* of the traditional house get replaced by function-specific *rooms*. One is led to wonder whether such a deterministic design attitude does not introduce a rigidity in space use as well?

II. LIVING PATTERNS

a) A typical day in the life of a household in Gali Jamadaran or Krishan Nagar may be as follows. The entire family, especially the elders, wake up before dawn for the morning prayers. Most then go back to sleep to wake up again around 6.30 a.m. In summer, this means shifting from the rooftop to indoors, for soon the sun will rise, making it impossible to get back to sleep outside. The oldest generation, the grandparents, may however stay awake to continue to pray and may simply take a short nap. The immediate activities upon waking up the second time revolve mainly around the bedroom and bathroom areas; meanwhile, the housewife gets busy preparing breakfast for the entire family in the kitchen. Soon the concentration of activities shifts to the dining room, where the family gathers for breakfast.

Shortly after, the house quietens down as the husband leaves for work and the children for school. For the wife, it is time to tackle the daily domestic chores, with some help from the mother-in-law. The father-in-law would most likely spend his time reading the newspaper or walking down to a neighbourhood shop to exchange views on the current state of affairs with other elderly men of the area. At home, meanwhile, the cooking for the day must begin. Groceries may be obtained in

several ways. The domestic help might run around to the corner grocer; otherwise the husband or perhaps an older son would perform the task before his departure. The neighbourhood may be visited daily by a hawker with the required supplies, or the grandfather may procure the provisions on his way back. In rare cases will the women venture out to buy groceries. The cooking, cleaning and washing take up most of the morning of the womenfolk. By 2.30 p.m., everybody begins to return home for lunch. Once again the kitchen becomes active, for the bread must be freshly made for each meal and served hot. In winter everyone may opt to eat outdoors in the sunny courtyard.

In summer, after lunch, everyone retires for an afternoon nap, as it is too hot for any other activity. The winter afternoon is spent enjoying the sun in the courtyard or more probably on the rooftop. Winter is also the orange season. And eating oranges while basking in the sun is a favourite pastime for many an afternoon, alongwith reading, sewing or merely lazing around. The boys move off to spend time with friends, frequently in sports in a nearby playground or in the streets. If however, it is nearing *Basant* - the kite-flying festival celebrated during early February - every spare moment is spent on the rooftop practising for the occasion. Most other family members join in. The fervour reaches its peak on *Basant* day when it is a public holiday, and the entire household spends the whole day on the roof. Friends and relatives from suburban areas may also come over to spend the day in the city.

The evening brings a shift in the activity areas from inside to outside or the reverse. In summers, with the approaching dusk, the ambient air outside begins to cool down. Meanwhile, the structures begin to lose the heat accumulated during the day

to the interiors, which now become unbearable. All the doors and windows are thrown open for ventilation and everybody moves out into the courtyard, which once again becomes the hub of activities. But before moving out, the floor of the court, which is usually brick paved, is sprayed with water, which absorbs the heat of the earth and evaporates, resulting in rapid cooling. In winters, by late evening everyone returns to the interiors. The children may get busy with their studies, while the elders at times entertain or visit friends or neighbours. If visitors arrive, the men are shown into the drawing room while the ladies move to another room, or in summers into the court with the rest of the family. By 8p.m. or so, dinner is served and apart from some studious member, everyone aims to be asleep by 11p.m., for the day begins early. In summers, this entails spraying the rooftop with water and laying out of beds and beddings stored in the *barsati*, for nights are extremely pleasant outside, while the interiors still remain unbearably hot.

b) In comparison to this, a day in the life of a middle-class household in the walled city over a century ago would be as follows. The morning activities are very similar to those for the previous period. The breakfast would however be eaten in a *dalaan*, of which the kitchen may be a part, or adjacent to the kitchen in the *sehan*. During the day, apart from the elder women, the older daughters also remain in the house, for formal education is considered necessary only for the male offspring. The younger daughters do attend a religious *madrassa* or an elementary school. But, as soon as they enter their teens, they are considered grown up enough to necessitate seclusion from strangers. They therefore help in the domestic chores, for they must now learn the intricacies of household management in preparation for marriage. An unmarried, or widowed sister-in-law along with her children, may also reside with the family. If there are small children in the family, they may be

allowed to play with their peers in the street, which constitutes a safe and familiar domain.

Food preparation thus becomes a group activity and usually extends into the *sehan*. The cutting and cleaning of vegetables and meat, the mixing and grinding of spices, all takes place here. The laundry may also be done in one corner of the *sehan* which is fixed with a hand pump. The water source is similarly used for washing cookware and other utensils, and ultimately, after the completion of all chores, to wash the *sehan* itself.

44. A Jharoka of a traditional house.



Depending on the weather, the women then may either continue to lounge in the open or move over into a *dalaan* to sew, knit or entertain neighbors over a glass of *lassi* or sherbet. For this is also the time when the womenfolk of the neighborhood freely socialise, because the men are away and the entire house is their exclusive domain. This does not necessarily mean an actual visit; the rooftops provide an area of extended socialising across the parapets, which are a zone of recurrent informal contact between the neighboring women. The latest events and current gossip thus are quickly exchanged and kept updated. Therefore, in a neighborhood that is already socially cohesive, such behavioural patterns add further to its homogeneity.

However much the womenfolk may be able to socialise among themselves, it is nevertheless unthinkable for them to participate in the street life right outside their houses. They may not leave their doorstep unveiled and may not be seen by any strange men. But they may observe the street life from the upper floor *jharokas*, which allow them to see without being seen. Additionally, the *jharokas* also act as climatic moderators, by encouraging ventilation but restricting direct sun into the

interiors. The younger women in particular may spend many an hour here, for the strict social restrictions on unmarried girls leave them with plenty of free time. The afternoons are spent generally in a similar fashion as previously described. In winter afternoons and summer evenings, the menfolk move off to socialise with other men of the neighborhood. The rendezvous may either be a nearby *takia*⁶² or *baithak*⁶³. Alternatively, a male guest may arrive, who would be entertained in the private *baithak*, which when in use by men, is closed off from the internal side of the house and opened towards the street. The passersby, most of whom are neighboring acquaintances or friends, may then stop by for a chat and the group may continue to grow and turn it into a lively event. If the guest stays on until mealtime, he is invited to partake in it, and the meal is laid out in front of him. When the *baithak* is not in use for formal entertaining, its shutters towards the

⁶² Takias were an important feature of old Lahore. Initially they were located just outside the city gates for those travellers to stay in, who may arrive in late evening hours and find the city gates closed for the night. During the daytime, men of neighbouring areas would spend their spare time here. Each takia was provided with a well, public baths, and an area for wrestling practice and tournaments. Men would also indulge in playing chess and cards. Many wedding or funeral ceremonies would also be performed here. Most disputes were discussed, debated upon, and settled at the neighbouring takia as well. These takias were therefore not merely rest houses for travellers, but also clubs and health/ civic centres for the entire area.

Nizami, Masood. 'Takiae', *Naqoosh - Lahore number*.

(Translated by the author.)

⁶³ The baithaks of certain notables in every neighbourhood became the usual places for men to gather every evening. Many would become known for a specific activity and attract related or interested people. For instance, poetry or music recitals, intellectual debates, etc., distinguished one baithak from another, which supported such events as a regular feature. Many established, as well as novice, writers, poets, thinkers, philosophers, singers, musicians - in short the intellectuals and artists of the society - became associated with one baithak or another, or in turn established their own. Baithaks thus became important social institutions in the city.

street are drawn and those toward the interior of the house opened. It then becomes the extension of the private domain to be used by the family, often in conjunction with the courtyard. For the *baithak*, like all the other rooms in the house, contains little formal furniture. The floors are covered with rugs or handmade carpets. Cushions and bolsters line the walls for seating, and low tables or trays are used to serve food and drink. Thus, in addition to being a formal entertaining room and an informal sitting room, it may also accommodate an overnight guest not intimately known to the rest of the family.

Meanwhile, the women tend to the needs of the children. At times, if relatives from another part of the city decide to visit, they come for the entire day. The household activities then mainly revolve around looking after and entertaining the guests.

In the event of a happy or sad occasion, large numbers of people must be catered for. The doors of the *dalaans* and/or the *baithak* towards the courtyard, when opened, extend and unify these spaces where such gatherings can be held. Alternatively, the *baithak* may be extended towards the street to accommodate the men, and the other spaces used for the women guests. Relatives and friends pool their resources to help with the arrangements and logistics, and the event, in all probability, turns into a social event of the entire *mohalla* rather than one household.

c) To extend the comparison further, a day in the life of a contemporary middle class family living in an apartment in Model Town Extension would be as follows. The day begins in a manner similar to the previous two cases. The acquisition of groceries would, however, not be a major concern for the housewife, for they

would already have been bought in bulk over the weekend and stored in the refrigerator. Once through with her domestic chores, she may opt to go shopping with friends, skim through the latest magazines, listen to the radio, sew, knit, occasionally visit a neighbour, or entertain one in the lounge.

After lunch, in summer, the family seeks the coolest room in the apartment to retire for a nap. For by now the heat begins to be unbearable inside, in spite of the fact that all the windows were closed and the shades drawn by midday. The large unprotected windows, provided with little concern for orientation, admit heat freely. In case the family lives on the top floor, it is the worst off. If on the other hand, it is fortunate enough to be able to afford an air-conditioner, it is installed in the master bedroom, whose floor is now covered with mattresses to accommodate everyone. This does not, however, guarantee a comfortable nap, for in all probability there would be a power shutdown, leaving nothing but patience to bank on.⁶⁴

In winter afternoons the lounge becomes the hub of activities, where the gas heater remains in continuous use, making it the coziest room in the house. The long winter evenings are also spent here, mainly watching television. Informal visitors may also be entertained here, while the formal ones are restricted to the drawing room. Since the neighborhood consists mainly of rented apartments, the turnover of residents is high, making the formation of strong associations less likely among them. Thus the visitors are also less likely to be neighbors, and more likely colleagues and friends

⁶⁴ Pakistan is currently facing an acute energy shortage. In summers, when the electricity consumption rises substantially, forced load-shedding is resorted to, with power shutdowns of an average of a couple of hours daily throughout the country.

from other parts of town. The boys may decide to go out for sports, usually a game of cricket⁶⁵ with friends, or a daily jog. The girls may visit their friends or go for shopping.

Summer evenings continue to remain uncomfortable. It is too expensive to continue to use the air-conditioner. Comfort can only be attained outdoors. If the family is fortunate to live in a unit with an attached open terrace, it is now extensively used to sit out as well as entertain. It would preferably have continued to be used as alternate sleeping space also. But its design is such as to allow neighboring units to look onto it, leaving no choice but to resort to indoors at night. It is, nevertheless, an additional asset for winter afternoons as well.

The lounge continues to be used in winters even for dinner because of its comfort. Alternatively, if one of the members of the family is entertaining a visitor in the drawing room, the rest of the family may perforce eat here during any time of the year.

In case the family desires to invite friends over for a meal, they must limit the members to not exceed the capacity of the drawing room. Spaces like the lounge and the open terrace, if available, may be used in conjunction with it, but would necessitate dividing the guests into smaller groups.

Certain variations to this general theme also exist. The wife in some instances may be a working woman, in which case the domestic chores rely more heavily on the

⁶⁵ Cricket was introduced for the first time by the British in the sub-continent, to become the most popular sport in Pakistan today.

mother-in-law if she stays with the family, or the domestic help. In the Iqbal Town flats or Angoori Bagh scheme, since the units are small, activities concentrate and are less room-specific. In Angoori Bagh moreover, since most residents are owner-occupiers, the social interaction among them is greater than in the other schemes.

Deductions

Traditional living patterns, as opposed to contemporary ones, emerge to be intrinsically related to prevalent seasonal conditions. The architecture evolved supports this relationship. Contemporary designs, on the other hand, presuppose heavy reliance on technology and artificial systems of environmental control, negligent of the fact that neither the users nor the country can afford the costs involved.

Another paradox that emerges from the analysis is that, while the economic factor is recurrently blamed for inadequacies in designs of contemporary developments, these very designs are wasteful in space utilization. By making the spaces function-specific, their use is restricted to only the designed activities, and, when these activities are not being performed, the spaces remain unutilised. Conversely, important spaces like private outdoor areas get deleted in the name of economy. Traditional designs, on the other hand, make optimum space utilization by retaining flexibility of use. And that too, was done at a time when economic factors had not attained an overriding importance and units were generally more spacious.

Privacy is seen to remain an over-riding concern even today, however much the society may claim to have 'modernised' and liberalised. Its importance is

recurrently seen in the disuse of outdoor spaces, provided for individual units but lacking in visual privacy. It is also manifested in the separation of the visitors domain - visually and physically - from the rest of the house. Similarly, large glass windows result in shades kept drawn all day.

Individual and directly accessible open spaces remain a necessity, however much technological advancements may theoretically render them replaceable by environmental control systems. Firstly because, as mentioned earlier, such systems are not affordable by the society; but more importantly due to the fact that outdoor living remains an integral part of the lifestyle of a majority of the people.

III. USER REACTIONS

In terms of user satisfaction the severest criticism was recorded from the residents of the Iqbal Town flats⁶⁶. The units were most heavily criticised for the lack of provision for privacy in the scheme. Windows of units opposite each other allow observation of the interiors by the neighbors. The ground floor residents face the maximum problem, for passersby in the streets can easily look into the household. Therefore shades have to be kept constantly drawn, which in turn, negates the provision of windows and adds to the discomfort of the interiors. The ground floor residents, at times, also resort to adding iron grilles to the windows, which provide security in addition to privacy. For the same reason, residents of units provided with open terraces are not able to use them to their optimum potential utility; for these too are easily observable from the adjacent blocks and the units above. As one

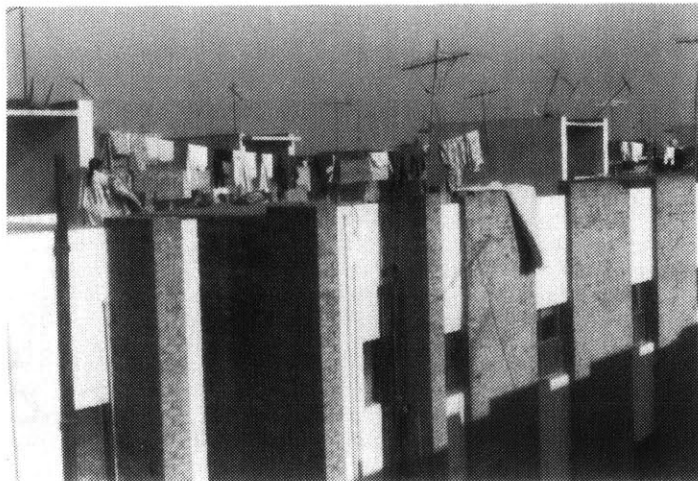
⁶⁵ Refer to notes.

lady remarked, "We try our best not to look into their [the lower flat diagonally opposite] terrace. Yet at times it unconsciously happens." The terraces are therefore most often used to dry laundry, frequently to sit out in winter afternoons and summer evenings, but seldom to sleep during summer nights.

These terraces thus became another aspect that came under heavy criticism. In the blocks of terraced flats, the third floor units are provided with the use of their rooftop instead of an attached terrace. These are the only outdoor spaces which adequately provide for privacy. However, they were also strongly criticised because access to them is through the common stairway, and not directly from the units they serve. In the non-terraced blocks, the rooftop of each block is the common outdoor space for all the residents of that block. During the daytime (in winter) these were seen to be heavily used by women and small children for cutting

*45. The common rooftop of the two - room units.
A.I.T.F.*

*46. Heavy Iron Grilles ensure security and
privacy in an otherwise inadequate design.
A.I.T.F.*

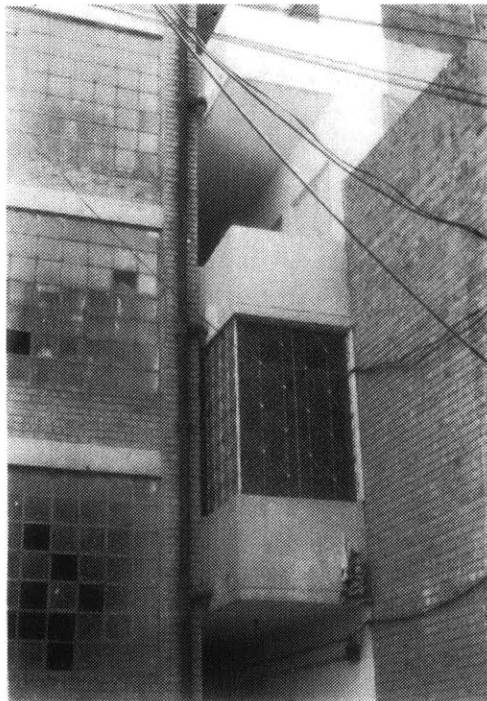




47. Open spaces remain more as leftover areas, rather than usable ones.



49. Balconies provided have minimal utility and serve as mere facade elements. M.T.E.F. Scheme 1.



48. Sporadic alterations are visible inspite of the residents being tenants and not owners. A.I.T.F.

vegetables, flying kites, drying laundry, or merely a chat in the sun. Summer nights, however, again pose a problem of privacy for the women. The men therefore frequently sleep on the roof while the women stay inside. As one old lady remarked, "How can we let our young women sleep in the same area as strange men?" And she went on to add, "Nor can we leave our houses alone. The area is not safe and anything can happen."

This brings us to the third factor recurrently criticised; the lack of security in the scheme. The site is bounded on three sides by roads, which help to demarcate it. But there are no cues provided to discourage strangers from using it as a

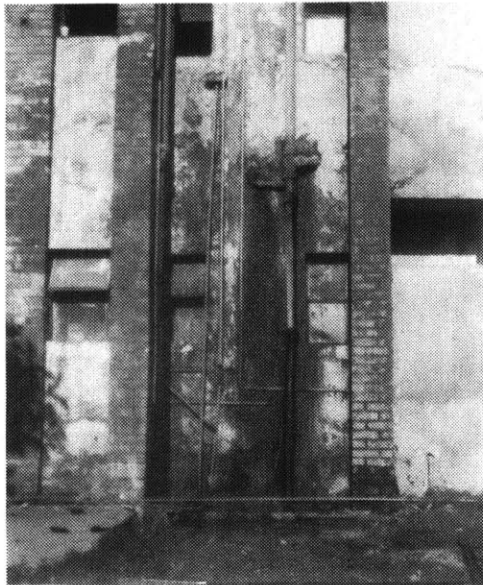


51. Scheme 2
Model Town Extension Flats

52. Lack of maintenance is recurrently evident as no one feels responsible for the area.



53. The semi-enclosed common space in each floor in front of the entrance to the units.



thoroughfare. The spaces between blocks have no assigned group or individual ownership. They therefore remain territories that fall more in the public than in the community's domain. No one feels responsible enough towards them to make them defensible spaces against intruders.⁶⁷ The evaluative study of these flats done by L.D.A. in 1981 also depicts these as the three most severe problems.⁶⁸ It is interesting to note that the same problems are acutely felt even today, seven years after the above-mentioned study. Why nothing has been done to improve the situation is a legitimate question, for it seems to contradict the recurrent complaints.

⁶⁷ Newman, Oscar. *Defensible Space; Crime Prevention Through Urban Design*. 1973.

⁶⁸ Resident responses to the inquiry regarding problems faced by them gave the most severe problems in percentage to be; Courtyard=74.8%, Insecurity=62.2% and Privacy=60.5%

L.D.A.(1981), *An Evaluative Study-Allama Iqbal Town Flats, Lahore* p.35.



54. *The Built Form.*
Angoori Bagh Scheme.



56. *The streetscape, with interlocking and overlapping forms; and external vertical circulation.*

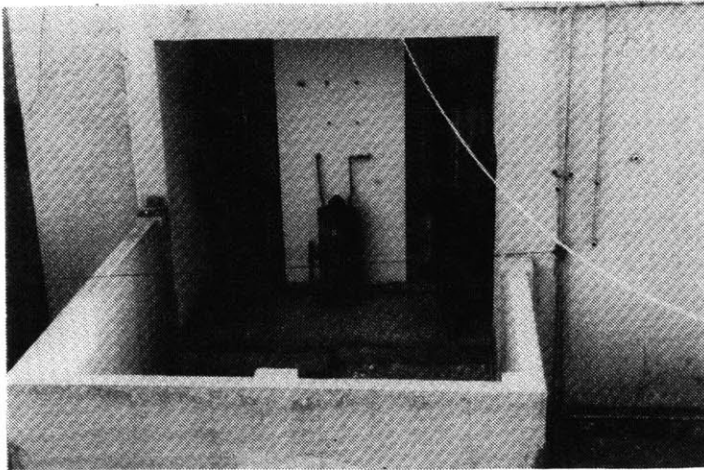


55. *The living room of one of the units that encompasses three, two-room units*
Angoori Bagh Scheme.

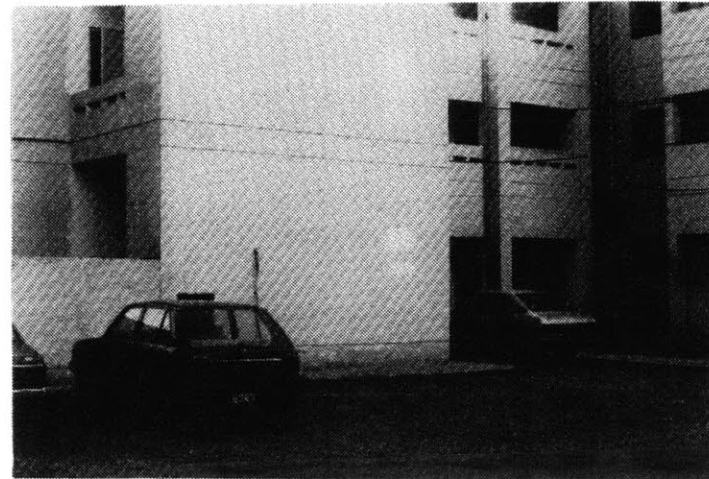
If people were so dissatisfied, this would have been manifested physically through alterations and transformations. This seeming anomaly can, however, be explained by the fact that 74.2% of the residents are government servants⁶⁹ living here as tenants for an average of two to three years. They are not willing to spend their own money, and getting the required approvals from their employers involves too much hassle to be worth the effort. A few alterations can however be seen, as the photographs illustrate, in an endeavor to achieve greater comfort.

The apartments in the Model Town Extension scheme were similarly criticised by their residents for essentially the same shortcomings. The residents of Scheme-

⁶⁹ I.b.i.d., p.9.



58. Gas burners installed in an old kitchen.



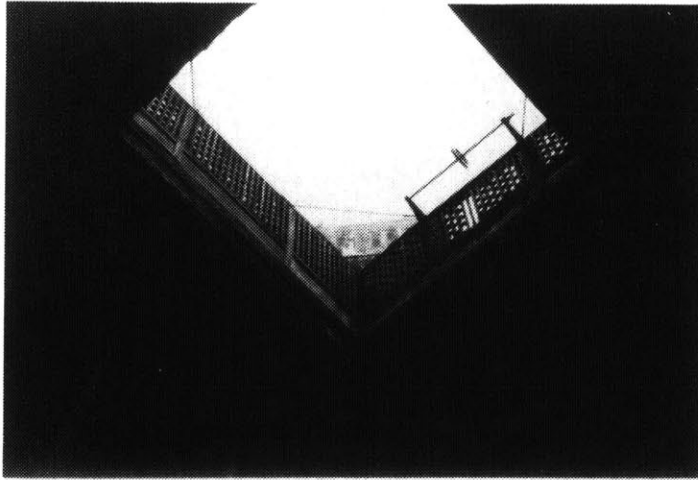
57. The private open space, where provided, lacks privacy, and thus not much used. Notice the large glass windows with curtains drawn (inspite of a sunny winter day).

59. The absence of safe parking necessitates the use of areas provided as recreational open spaces, for parking of cars.



were appreciative of the fact that an effort was made to fulfill the need for providing adequate private open spaces, but they criticised the neglect of the paramount requirement for privacy in them, resulting in their marginal utility.

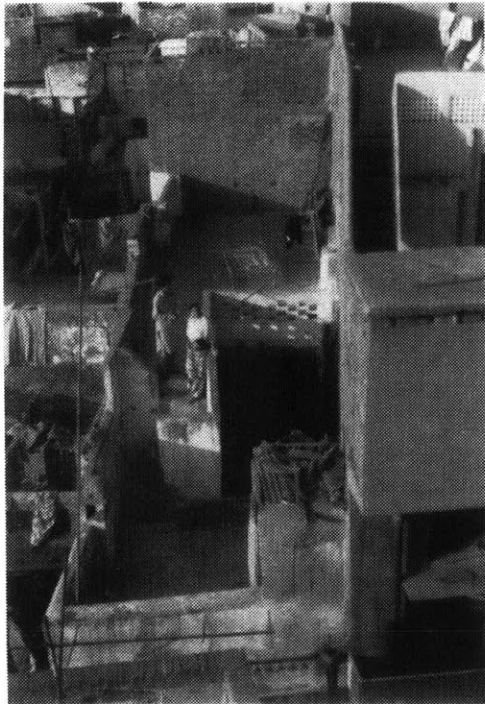
The issue of the provision of combined drawing and dining rooms was also recurrently mentioned. Although it is seen as a 'modern' idiom representing an educated and progressive approach, it is also hesitatingly acknowledged as being impractical and something of a nuisance for the family, affecting its daily routine in the presence of visitors in the drawing room. Certain families have gone to the extent of physically dividing the space by various means. In a more temporary arrangement, this may be achieved by hanging curtains or through cabinets and other furniture. Occasionally one even finds a wall built to separate the spaces permanently.



60. A traditional courtyard.



62. Signs of introduction of modern technology seen in a traditional house.

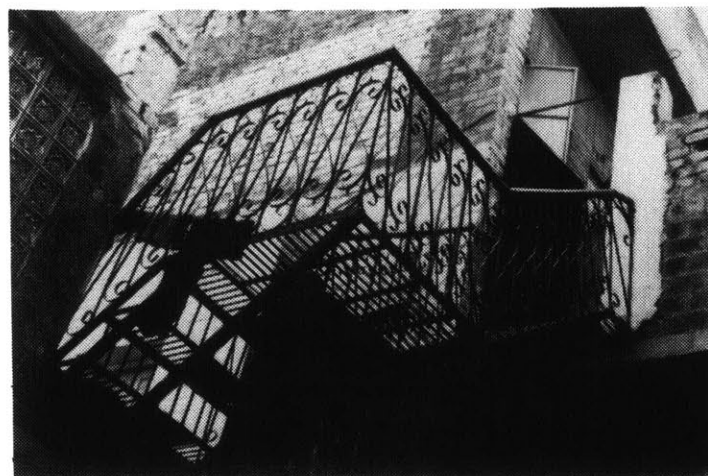


61. The roofscape of the traditional fabric.

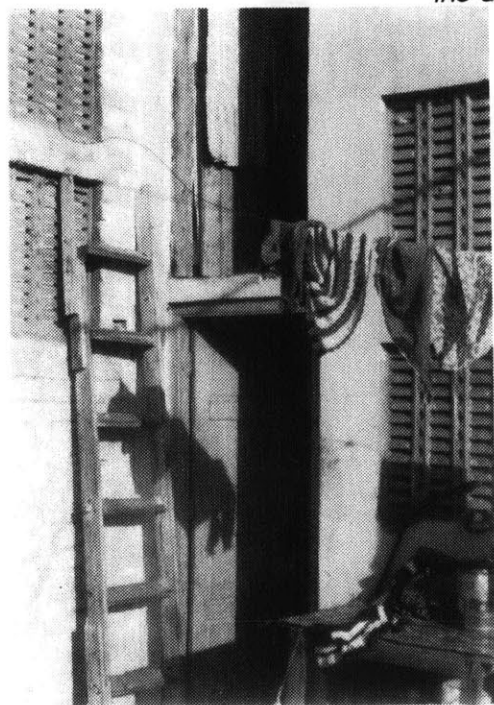
In Scheme-1, the entrance to each unit is preceded by a semi-enclosed space. These, along with areas provided on either side of the staircase, are designed as 'child play space' on each floor. In practice, they meet a variety of requirements. On the ground floor, the residents of the entire block use them to park their motorcycles, in the absence of any adequate alternate provision. Similarly, it is not uncommon to see laundry strung across these spaces to dry. Many households have occupied the spaces directly in front of their entrances by building brick walls to extend their living rooms, or by merely using wire netting to add an additional area to their domain. Apart from this, the unit design gives very little latitude for additions and/or alterations. The structures are load-bearing brick walls that discourage major changes within the units. And there are hardly any adjacent spaces to extend into outside them.



63. The question of a modern image. Here the unit opposite was also occupied by the same family on the third floor.



65. A new access added ingeniously from the mid-level landing to the courtyard so that the front room may remain a visitors' room and not be used as an entrance.



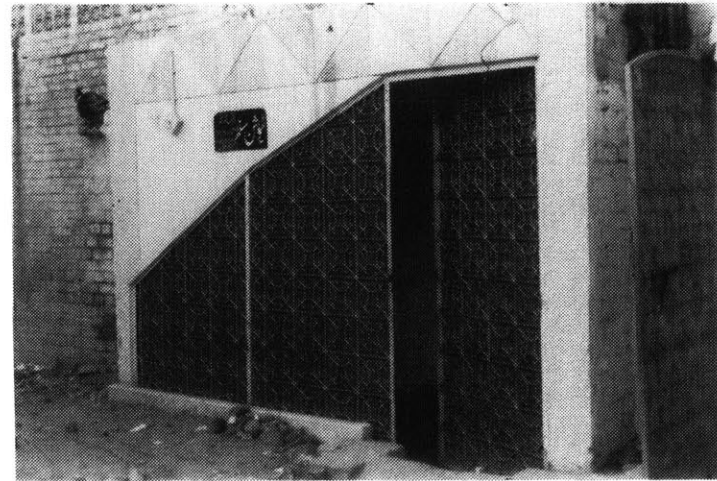
64. Storage space added above the Toilet and Bathroom.

The Angoori Bagh scheme stands out from the rest in terms of user satisfaction. A visit to the area impresses one by its vibrance and vitality, which is vaguely reminiscent of the walled city. For, although the units are small, the articulation of the spaces provided aids in a continuity of the living patterns of the people. Moreover, it is recurrently observed that two or at times three units combine together to form larger ones. Many alterations all over the scheme can be seen, depicting the latent energies expended and involved.

Most residents responded positively to the area. The individual units provide a flexible basic framework for the users. They cater successfully to such important factors like attached individual open space and privacy, even though the unit maybe merely a one-room dwelling. At the neighborhood level, the planning evolves a

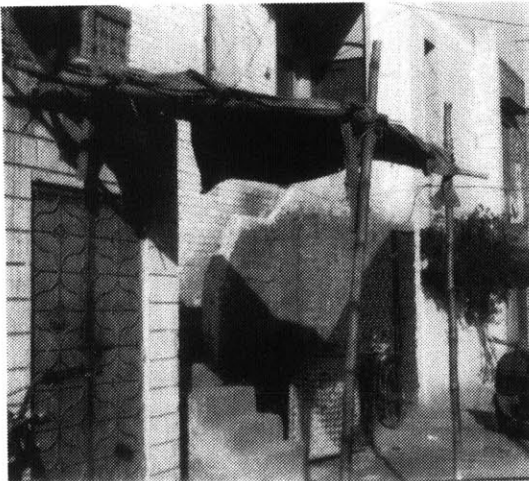


66. Flexibility of use provide leeway to change a unit into a primary school, Angoori Bagh.



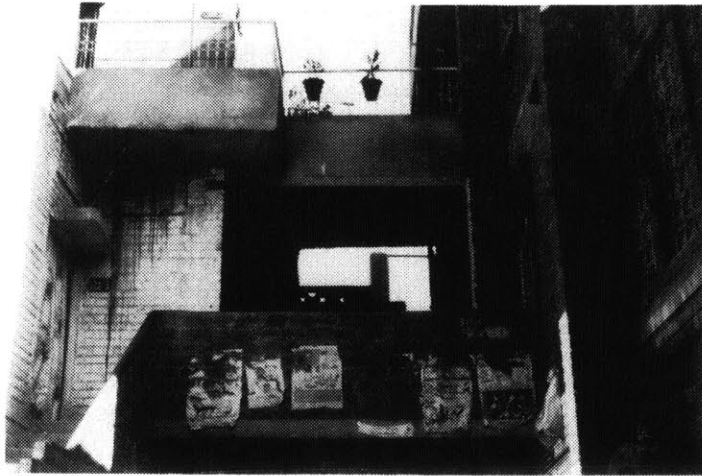
67. The space in front of the entrance covered permanently for better privacy and additional space.

68. A more informal addition.



dense, low-rise fabric with pedestrian access streets. Their scale and environment is made more intimate by the open network of vertical circulation that springs from them at the ground level and creates a variety in the streetscape. This is further augmented by the staggered profile of the units along them. The urban spaces therefore encourage use and interaction, and remain safe from intruders and trespassers. Recurrently one comes across groups of people standing by or children running around.

An important difference between this scheme and the rest is that while the others are predominantly occupied by tenants, this scheme is largely owner-occupied. There is therefore a freedom of action, of doing something practical about any shortcomings of the units provided, and of supplementing and transforming them. This stability



69. Additions and alterations are depictive of the energies expended and involved in the urban fabric.



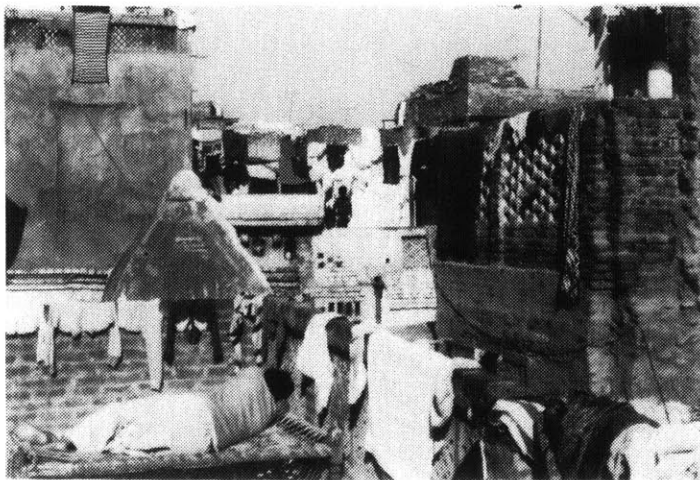
71. Central common spaces directly relate to the surrounding units and are intensively used.



70. Roof of toilet is used to extend the courtyard onto another level.

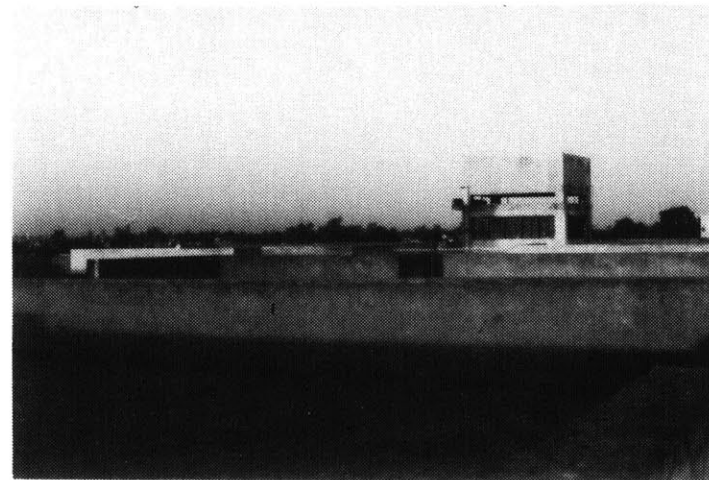
of population also results in a greater intimacy and stronger associations formed among the residents. Thus an event in one household may be celebrated or mourned by the entire community. However, this is not the only reason for the success of the scheme.

The high degree of satisfaction with the scheme is equally attributable to the fact that the users are able to consistently alter and transform their units according to their needs. A pride of accomplishment is therefore involved, similar to that of the owner of a newly self-built house, however inadequate the house may be to the viewer. For it then becomes personalised and is therefore seen in a subjective light. Here too, instead of a criticism of what was given, one finds a pride and self-appreciation of what they have done with it. What matters in the end, though, is the fact that a happy community results.



72. The multi-purpose utility of roof terraces in the traditional fabric.

73. The total disuse of roof in a contemporary design - because they are not integrated in design to belong to any unit/s. (M.T.E.F. Scheme 1)



As opposed to the contemporary residential developments, user responses in the older traditional and transitional areas revolve around a totally different set of concerns. Here, the prime source of distress is related to the image of the area and the attached connotations of lack of affluence and status in the society. A yearning for the more 'modern' environments is therefore discernable in the residents of these older areas. The ultimate aspiration is to live in a *bungla* or *kothi*,⁷⁰ in one of the newer areas of the city.

Nevertheless, when residents were questioned about the problems faced by them, the responses pointed more towards the lack of 'modern' facilities rather than actual limitations in the residential units themselves. There was hardly any criticism regarding the designs of the units in their meeting the needs of the residents. Aspects related to building condition, the adequate provision of services, and ease

⁷⁰ Local terms for bungalow.



74. In the absence of suitable provision for parking, motorbikes parked under staircase.

of accessibility, especially vehicular, to these parts of town were the major concerns recorded, the last of these being especially true for areas within the walled city.

Deductions

It is interesting to note how well the old built environments, especially within the walled city, have adapted to changes in the patterns and technology of living. Almost every household now possesses a television and a refrigerator. Often a washing machine can be found in a corner of a courtyard. The use of gas burners⁷¹ and hot and cold piped water is not unusual. Most rooms in the houses are now filled with furniture where previously rugs, cushions and mattresses did the job and retained their flexibility of use. The built environment is thus seen to

⁷¹ The walled city is as yet not supplied with natural gas, but the use of gas cylinders is common.

posses considerable resiliency to have successfully adapted to new needs as it encountered them through time.

From the feedback of the users, flexibility emerges to be a factor of paramount importance in the built environments, regardless of the period involved. If architecture provides a physical framework capable of adapting and transforming according to changing user needs, it remains successful. If, on the other hand, it is evolved on a rigid predetermined concept which does not cater for the unforeseen, its validity becomes severely limited. The continued success of designs built over a century ago is precisely because they were flexible enough to accommodate changing social patterns. In the current context also, the success of the Angoori Bagh scheme is largely due to the fact that it provides freedom for change and diversity. Thus the endeavor to strive for in the design of environments is not the provision of precise, tailor-made fabrics. Not only is such an ambition difficult to attain, but also would soon be rendered unfit, as requirements change and new needs arise. The stress should conversely be on provision for the present, alongwith a capacity for change to accommodate the unforeseen of the future. The avoidance of a *precise fit* and the provision for a *loose fit*, emerge as important paradigms to aim for in the design of residential environments. However, this does not in any way imply the latter to "be pushed to the point of universal indifference between interrelationships of form, use, and meaning"⁷²; which may render the environment impotent providing no stimulus to use.⁷³

⁷² Anderson, Stanford. *Streets*. 1973 p. 20.

⁷³ Ibid.

SECTION THREE

5. A Reassessment

5. A REASSESSMENT

It is interesting to note that the 'modern' idiom adopted for architecture in Pakistan, and perpetuated thereafter, has produced environments that lack in functionality, whereas one of the original aims of the Modern Movement when initially established was to produce highly functional architecture, to the extent of aiming for "machines for living". Something went wrong in the process from the initial inception of its ideas to their propagation internationally and their final interpretation and implementation.

Perhaps it needs to be clarified here, that although the slogan of functionalism became permanently associated with the Modern Movement, none of its pioneers had functionalist intentions. "It was a fiction that function provided a crucial line of demarcation within Modern Architecture."⁷⁴ Although, "functionalism was the verbalised architectural determinant of the period, the two most outstanding buildings, Le Corbusier's Villa Savoye and Mies's Barcelona Pavilion, clearly went a tremendous step beyond functional considerations per se".⁷⁵ It was the subsequent translation and application of their ideas that evolved function as a driving principle.

⁷⁴ Anderson, Stanford 'The Fiction of Function', *Assemblage 2*, Feb. 1987, p. 21.

⁷⁵ Heyer, Paul. *Architects in Architecture*. p.24.

In Pakistan, when these ideas were initially introduced, the way for their easy assimilation had already been paved. A formerly strict traditional society had already been exposed to the colonial legacy, as pointed out in section I, and, under the unusual circumstances, convinced to look up to and aspire towards it. Within a few years after the British left, the influences of the Modern Movement began to be felt. In its introduction and perpetuation, the first generation of local architects, which had evolved in the meantime, had a major role to play. For their training had either been abroad, or if locally, still based on Western models.

Equally important was the fact that progress was taken to be synonymous with the use and application of the modern idiom. For a young and developing nation it was important to declare its allegiance with progress and modernity. And architecture was an effective vehicle to demonstrate this allegiance. Its most important manifestation is evident in the city of Islamabad, from its conception and planning to its development and architecture. It was established as "a symbol of the new state"⁷⁶ and planned on the most contemporary principles by a foreign consultant. Furthermore, all its major government building complexes were also designed by foreign architects. Shortly after this, Louis Kahn was invited to design the Capitol Complex in Dacca, in what was then East Pakistan. Residential architecture followed closely behind, for to live in a 'modern' house became a status symbol and something to seek and aspire for. In the larger cities, as rapid urbanisation resulted in acute housing shortages, higher-density housing complexes began to be experimented with. The prototype developed in Europe for post-war housing was established as a model to be followed. On the more pragmatic level, the innovations in materials and technology rendered conventional building techniques redundant.

⁷⁶ Doxiadis Associates. *Islamabad Programme and Plan vol 1, 1960*, p.27.

The introduction of international architectural vocabularies was therefore facilitated by the prevalent conditions that rendered society receptive to them. Once introduced, they were perpetuated uncritically. Traditions were understood to be in contradiction to the process of innovation and therefore discarded.

What seems to have been overlooked in the entire process were the social implications that accompanied the adoption of these formalistic idioms. For these forms dictated a certain lifestyle, and the acceptance of one meant a corresponding adoption of the other. A kind of architectural determinism was perpetuated, in which environments that were designed dictated their patterns of use. It was also seen time and again, that environments for human beings could not be successfully produced through a simplistic formula; that certain more abstract qualities were necessary; that architecture after all was both science and art.

The legacy of coupling imported models with progress became so ingrained in the society, that even in theory it became difficult to disentangle the two. At a very generic level, progress refers to the dynamism of a society. A progress- or change-oriented socio-cultural system is essentially a progressive society. "It can be argued that ideally this progress may be rooted in the indigenous ethos of a society, and it does not have to be Western inspired. Modernisation could grow out of tradition."⁷⁷

One of the assumptions this study set out with was that architecture in Pakistan has 'modernised' more than the society has. Whatever the reasons may have been to initiate this discrepancy, it has been uncritically perpetuated, resulting in

⁷⁷ Qadeer, M.A. *Lahore Urban Development.....* , pp. 28,29.

environments that may symbolise modernity but are often deficient in meeting the users' requirements. And one of the reasons for this lack of fit was stated to be the element of traditions still prevalent in the society, particularly evident in the use of residential environments which therefore form the basis for this investigation. Through an intensive analysis of the living patterns of people through time, their interaction with the architecture that contained them and their mutual effects on each other, the endeavor of this study has been to identify these very traditions. The case being put forward is for a regard and respect for them and for a serious reconsideration of their uncritical rejection. For their survival against all odds proves their continued validity, and requires a serious appraisal of the prevalent attitudes of their disregard, if not total rejection.

The analysis therefore deals with the relationship between physical environment and human behaviour, for the form and use of the environment occur within a cultural context. Throughout the analysis one aspect that recurrently surfaces is that while there seems to be a flexibility for adaptation of the behavioral patterns to their given environments, there also exist limits to this flexibility. And beyond these limits it is the environment that needs adaptation. The contemporary residential developments tend to exploit this flexibility to its maximum. For example, when a combined drawing-dining area is provided, the normal routine of the family needs to be altered in the presence of visitors. And yet there are certain aspects of the living patterns which do not lend themselves to adaptation. If privacy is not sufficiently catered for in a recently built apartment, physical alterations are undertaken to fulfill the requirement. For example, if the family receives visitors often, it may result in a permanent division of the drawing and dining rooms in the above case. Such recurrent behaviour patterns seem to be manifestations of some consistent

underlying values.

And it is aspects like these which seem to retain their importance through time, for their resistance to change establishes their continued validity. These are the *traditions* of a society, which may not be consciously safeguarded but can neither be deliberately replaced, for they are internalised by and invaluable to its people. Therefore, any attempt against them is met with resistance and often failure. It is not unusual to find for example, a housing scheme to remain vacant in spite of the acute housing shortage, primarily because it falls short of catering for the norms of living of the people beyond acceptable limits. The Allama Iqbal Town flats for example, are a case in point. They remained vacant for a long time after being constructed, until they were offered to various government agencies to be requisitioned for their employees. Most other middle-income, high-density housing schemes including the Model Town Extension flats, have been similarly unpopular, resulting in occupation by government employees or private tenants, but seldom owners.

A recurrently cited local explanation against units above ground in general, is the inherent love for land and need for its proximity in the Punjabis.⁷⁸ Being an agrarian people, they innately need the security of ownership of the land they live on.

Critics of traditions may still remain unconvinced of their validity in the contemporary world. For there are many who believe traditions to symbolise a redundant mentality which has no place in today's pragmatic and objective world.

⁷⁸ The people of Punjab, a province of which Lahore is the capital. Its economy is mainly agriculture-based, for the land is extremely fertile.



76. Fazlia Colony, a large informal settlement with remarkable similarities in spatial organisation, to the walled city.

77. Traditional urban fabric within the Walled city.



However, they need only glance at the informal architecture in all the major cities in Pakistan to realise their fallacy. Such environments, built by their users and therefore based on their actual needs and values, show remarkable similarities in spatial organisation to those in the walled city. There must be some underlying common factors that still remain in the living patterns to evolve comparable manifestations." Studies of migratory populations have also proved the astonishing hardihood of social patterns and values."⁷⁹

The inherent lesson to be learnt from this study is mainly for architects - the self-proclaimed designers of built environments. The primary concern in their designs ought to be the fulfillment of actual user needs rather than merely anticipated ones. And, if there seems to be a recurrent gap between the requirement and the provision, something is amiss and requires analysis. This is precisely what one of the endeavors of this thesis has been. It begins by questioning the reasons for the

⁷⁹ Lynch, Kevin. *What Time Is.....*, p. 216.

existence of diametrically different traditional and contemporary architecture within the same society, traces the factors for the change, and ends by showing the extent of change to be more formalistic than social. And to discern such deeper layers involved in each situation is a concern architects must endeavor to understand. At a more fundamental level it is a question of what distinguishes one society from another? Does the equation of architecture being the reflection of society hold true even today? And if it does, how valid is the application of global paradigms for unique situations?

Concurrently, many paradoxical associated issues are also raised. If the popular demand is for a certain kind of product, it may be based on a different set of issues and priorities than practical requirements. The image and its associated connotations may rate high in importance, as recorded from the residents of the older areas. How far can an architect then be instrumental in educating public taste? Moreover, in a market economy, the overriding factor is economic. And the supply would always be geared towards the product demanded.

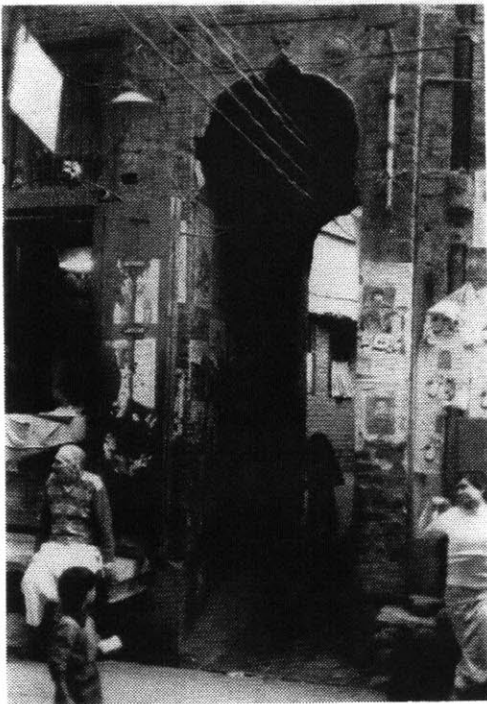
Secondly, how does one cater for the shifts in the basic structure of society? The environments from the past that are so often admired were a product of stable, homogeneous groupings, settled for generations in ancestral *mohallas*. Today's population remains in a constant state of flux in search of better opportunities. Therefore the interaction and intimacy between residents developed with time, so important for the success of any physical environment, is difficult to attain.

The changes in the patterns of power have also been drastic. Previously the urban

fabric evolved through the accretion of decisions.⁸⁰ What could not be done was specified, and the rest left to each individual situation and the persons concerned. The exercise of property rights was heavily contingent upon acceptance or opposition by proximate neighbors.⁸¹ The environments that developed were therefore not only rich in variety, but also responsive and satisfying to their users. Today on the other hand, the regulations applied specify all that is allowed, everything else being a violation of law. They leave little room for variations, resulting perforce in repetitive and monotonous environments. Implied within the traditional process is a reciprocal and possibilistic relationship between form and use, while the contemporary process advocates a determinist approach.⁸² All these

78. Entrance to a neighbourhood; a manifestation of hierarchy of informally shared controls.

79. The richness and variety of fabrics thus generated.



⁸⁰ Akbar, Jamel. *Responsibility and the Traditional.....*, 1984.

⁸¹ Abu-Lughod, Janet. 'Contemporary Relevance of Islamic Urban Principles', *Ekistics* 280, Jan/Feb. 1980, p. 8.

⁸² Al-Hathloul, Saleh. *Tradition, Continuity and Change.....*, 1975, p.iv.



are important issues, some of which have been studied and analysed and various alternatives suggested - some successful, others not so.⁸³

However, in spite of all the limitations to cater for and diverse forces to cope with, there still lies a certain amount of flexibility with the architect. For example, within a given design brief, there is always a possibility for more than one solution, however restrictive the constraints might be. In a design studio course, each project generates as many unique solutions as the number of students in the class. A professional competition evolves similar results, whereby each entry is distinct from the other. Similarly, in a housing project, its constraints, whether physical, economic, or social, are never so severe as to dictate only one possible solution. The Iqbal Town flats and the Angoori Bagh units are comparable in terms of covered areas and social groups to be catered for, whereas the economic constraints were more severe in the latter case. Yet their evaluation reveals a greater success of the latter compared to the former, primarily because the designs were evolved with a greater sensitivity to users' needs. Had it not been for the presence of such a flexibility, the creativity that the profession pre-supposes would have been rendered redundant, and the professional easily replaceable. It is the use of this leeway and the choice still retained by the architect which determines his/her sensitivity and

⁸³ For example, involvement of the eventual users in the initial design process has yielded encouraging results worldwide. The Angoori Bagh scheme has also to an extent used the idea. Experimentation with co-operatives formed on the basis of similar needs or common professional backgrounds have also been successful. (In Pakistan, employees of the same organisations have formed co-operatives and succeeded in getting land allotted for their members for the construction of housing schemes.) Projects that group people on the basis of common family make-up e.g. those with small children, working couples, etc. have also been built. The effort in each case is towards a more homogenous resident profile and more intensive user participation.

ingenuity in design. Propriety demands and prudence suggests that architects ought not to be too self-centered.⁸⁴ Instead of imposing what they think *ought to be*, it may be well worth be the effort to investigate what really *is*.

It must be stressed here that this study is by no means exhaustive. In fact, it is merely one step towards the comprehensive understanding of traditions and their critical analysis. Since its very onset, the recurrent dilemma for this study has been how to distinguish non-tradition from tradition, and how to evaluate the importance of traditions for a society. The distinction that seems to evolve is that while one is based in pragmatic, discernable and quantifiable needs, the other seems to stubbornly persist without any apparent practical requirement, thereby indicating its importance and abstractness. While non-tradition exists for a rational reason, tradition seems to continue for its own sake.

In the absence of similar inquiries as precedents or related data for reference, specially in the context of Pakistan, this study assumes a pioneering role. And in doing so it raises many *evident and implied* issues. It addresses some and hopes further research and studies will tackle others. "For, as in all revolutionary movements, the stimulus provided by new factors often leads to the neglect of some durable ones. In the more relaxed period that follows, this inevitably results in certain reassessments."⁸⁵ Ours is one such period.

⁸⁴ Pasha, Naeem. 'Man and Environment', unpublished paper. Penn. State University, 1976, p.1.

⁸⁵ Heyer, Paul. *Architects on Architecture*. p. 24.

NOTES

1) The house designs discovered in the old records of the Lahore Municipal Corporation have been used to study the architectural characteristics of individual units for the Traditional period, designed and built over a century ago. However, they do not belong to the same area in the walled city. Moreover, their identification in the city became impossible in the limited time available, due to inadequate data on their exact location, for the documents mention only the general area or *mohalla* in which they are situated. In order to study the traditional urban residential environments, and the patterns of living and social interaction that they supported, the better preserved urban fabrics of Mohallas Shian and Kakezaiaan have been used. Thus, while the architectural analysis is generated from the original designs, the user feedback is based on existing fabrics, and the living patterns use both the sources in conjunction.

2) The analysis is also based on field observations and interviews of residents of the selected residential environments, undertaken by the author early this year. For the transitional and traditional periods, the older residents were especially contacted to record their reminiscences of those times. Moreover, they also helped in evolving a more accurate and authentic picture of the living patterns of residents for these periods.

GLOSSARY

- abadi*: a settlement
- baithak*: a place for sitting, male entertaining room in a traditional house; any room or platform for public male gathering.
- bangla*: local term for a bungalow.
- barsati*: a veranda, loggia, porch, or room on the roof used as a shelter from sudden rain.
- bazaar*: traditional retail street.
- biradari*: clan.
- bukharchi*: wooden balcony with lattice or carved wooden screen.
- charpoi*: wood-frame bed, with jute rope interweave.
- dalaan*: room of moderate or large size, with one longitudinal side collonaded, through which it opens into the courtyard.
- deorhi*: entrance hall or vestibule; complex system of entrance spaces, shielding interior from observation, often containing staircase.
- guzar*: administrative districts within the city during Mughal period; primary route in the city which gave its name to such a district; right of way.
- hammam*: a public bath.
- haveli*: large urban dwelling; a palace.
- hujra*: a private room.
- imambara*: a religious gathering place of Shias, the building within which such gatherings take place.

- jharoka*: a projected oreille or other projecting window, with wooden shutters and latticework for privacy.
- kothi*: local term for a bungalow.
- lassi*: a drink made from yogurt; buttermilk.
- madrassa*: a school; school attached to a mosque or other religious institution.
- mohallah*: a neighborhood.
- mugh*: a central opening or light well in a covered courtyard or room.
- sehan*: an open courtyard.
- serai*: a traditional hostelry.
- shahnashin*: masonry platform, often integrated in a roof parapet for seating.
- tharra*: a platform, particularly one which projects out at plinth level onto the street.
- teh khana*: a basement.

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