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THE "SENSE OF PLACE" ITS SIGNIFICANCE, THEORY AND ATTAINMENT

by
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the conditions for the degree of
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V O L U M E I

ABSTRACT

In recent years planners and urban designers have looked upon the "sense of place" as a desirable environmental quality which may be attained by integrating the "human dimension" of space into the planning and design process. However, extensive research in human being built-environment relationships has indicated a complexity and obscurity in the definition, conceptualization and creation of the "sense of place".

For establishing the necessity of the "sense of place" and exploring it as a human and socio-spatial phenomenon, this thesis first critically analyses the impact of development policies on the villages in Iran and the spatial characteristics of the traditional residential areas of Isfahan. The outcomes of these case studies are then used for a theoretical argument to define and conceptualize the "sense of place" and to establish community involvement as an appropriate planning and design process for its achievement. Later in the thesis, the proposed planning and design process is evaluated and its components are elaborated in an historical situation, by analysing community involvement in the Collingwood Housing Estate Redevelopment, Melbourne.

The thesis concludes its argument for achieving the "sense of place" by stressing the necessity for a continuous dialogue to synthesize, in an identifiable situation, the personal and the societal involvement in the planning and design process.

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma in any other university, and that to the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made in the text.

I hereby give consent to the thesis being available for photocopying and loan, if accepted for the award of the degree.

Parviz F. Afnan

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INTRODUCTION

INTRODUCTION

For the past two decades, it has been strongly suggested that the "sense of place", an environmental quality attributed to the relationship between the human being and the environment, is crucial to the creation of the successful urban milieu. Its absence as a spatial quality has been observed to be a main source of today's urban planning and design criticism. Therefore, defining the "sense of place" and its parameters, integrating it as an objective into any urban planning and design process and formulating future policies to achieve it, is now looked upon to be highly desirable.

This thesis initially studies two different magnitudes and categories of existing human-made-environments. By looking at the spatial characteristics and the "modern" development planning policies for villages in three regions in Iran and the traditional residential areas of Isfahan, the thesis has chosen case studies to identify and critically analyse, on different scales, certain features of the relationship between the human being and his/her made-environment, bearing in mind that planning and design are decision-making processes, implemented to accommodate the desired future physical change. It will be an attempt to identify, in general terms, certain important components of the "sense of place", and thus establish an argument for its desirability as an aim in planning and design. It is

envisaged that a certain foundation will be proposed to formulate an alternative general theory of the human being built-environment relationship, the "sense of place" and a planning and design process that considers the former and manifests the latter.

However, one has to stress here that due to the complexity of the subject and the scope of the thesis, further research studies are necessary to evaluate, negate or reinforce what is formulated here. In other words, the author is far from proclaiming the exhaustion of the subject. The author hopes that the subject and argument in this thesis will generate interest and encourage others to critically analyse his claims.

It seems far from being coincidental that similar criticisms are made of research and methodologies in both the social sciences and planning. Some challenges are made to their foundation because, in both fields, knowledge is based on positivism - adopted from natural science to give scientific legality - reductionism (e.g., Gregory, 1978; Cullen, 1984; Thorns, 1976). Since the early 1970s, when the complexity of the urban environment in a capitalist society and the necessity for a close association between social science and planning was realized, this criticism has become more vigorous. It indicates the inappropriate-ness of general model theory, founded on positivism and the classical free market economic theory that may be thought to establish a causal and functional relationship between

the built-environment and the human behaviour (i.e., environmental determinism). Furthermore, it shows that in planning - seen as a means to reduce the imperfection both politically and economically in a free market society - the impact of the human being as a knowledgeable and active agent is assumed to be negligible. In other words, up until now planning methodologies, similar to social science, base their operation on:

1. the application of the positivistic rules of natural sciences;
2. reductionism which considers human behaviour a unit that can be handled mathematically;
3. inductive and/or deductive formulated models, where human behaviour is generalized and functionally related to a certain physical reality;
4. the classical economic theory, assumed to suggest strongly the causal relationship between the market forces and spatial location; and
5. finally the theory of ecological system analysis.

The new direction in sociological thoughts and theories, however, indicates the limitation of positivism both on the personal or microscale (e.g., Heidegger, 1967; Habermas, 1978; Gadamer, 1976) and the societal or macro-scale (e.g., Althusser, 1969; Thorns, 1976). The former's emphasis on the personal knowledge, active agent and purposive conduct of the human being, rejects the notion of human activity as being the result of only the unconscious (cognition) and the forces beyond his/her control and comprehension. While the latter sees human behaviour and

conduct in terms of ideology (i.e., Marxism) or signified rules (i.e., Levi-Strauss). However, they all see a fundamental role of language and symbolism to explain the meaning in human conduct. Moreover, Kuhn's (1974) theories that cast doubt on the empiricist philosophy of natural science (e.g., the concept of paradigm in scientific investigation), have had a profound implication for the social sciences (Barnes, 1982).

Further criticism of the appropriateness and limitation of positivism is explicit in Giddens' (1984) theory of "structuration": the synthesis of the human microscale with the societal macroscale. Contrary to the functionalist theory of Parsons (1966), Althusser's Marxism and Levi-Strauss' structuralism, he argues that societal properties should not be considered only as a constraint, but also a continuous generative means of human conduct, produced and reproduced by human interaction. This synthetic conception further stresses the human aspect, his/her involvement and thus casts doubt on the planning methodologies that are based on universal models and the constraint of the classical free market economy where the human agent is problematic.

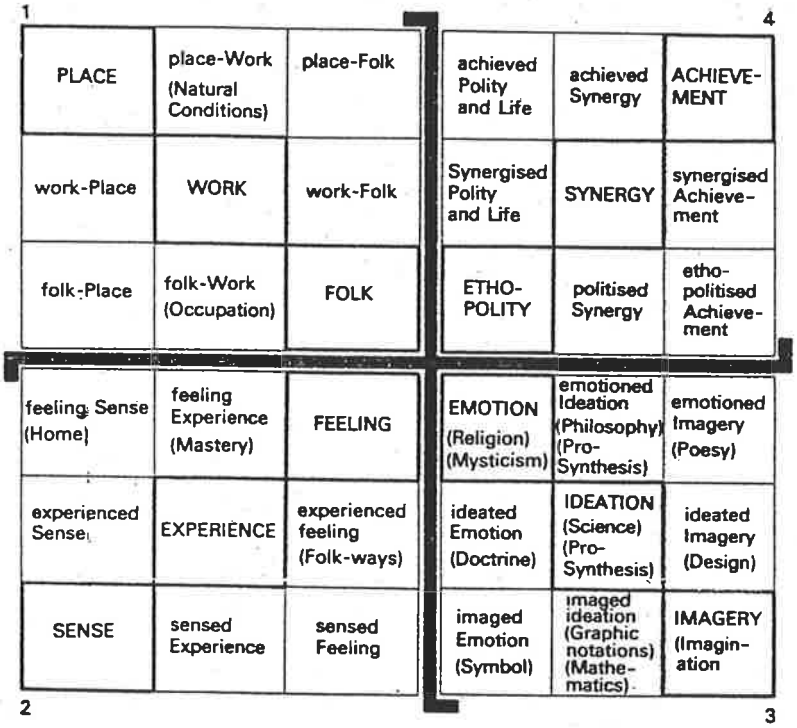
By exploring the anti-positivism arguments, one therefore may question the appropriateness and limitation of the current practice of planning and urban design, as a constraint, to adjust and eliminate the imperfection in the free market, and for defining and conceptualizing the

"sense of place" and its manifestation. Since in the new direction in social science, the human being as a knowledgeable and conscious person has taken a central position, it is paramount to study these arguments and consider them, if possible, the foundation for an alternative planning and design theory. With an emphasis on the recent social theory of Giddens (1976; 1979; 1984), this thesis will explore this new trend and:

1. attempt to formulate a theoretical basis to support the critical analysis of the human being built-environment relationship and the "sense of place", noted in the two case studies: the spatial characteristics and the "modern" development policies in three regions in Iran and the traditional residential areas of Isfahan, and
2. propose a foundation and a basic argument for an alternative planning and design process that may achieve the "sense of place".

In the final section of this thesis, the community involvement planning and design process for redeveloping the Collingwood Housing Estate, Melbourne, will be critically analysed. This study, comprising the upgrading of high-rise flats, terraced housing development and the redevelopment of walk-up flats, will partially test some aspects of the formulated theory, conception and planning and design process and indicate some of the main important constraints and generative components of the operation.

However, the purpose of chapter one is to formulate the aim and objectives and outline the methodology of the thesis. It will define the terms of reference, state an argument to indicate the necessity for an alternative planning and design process that may accommodate the human dimension by achieving the "sense of place" and review some of the main purposes and inclinations in the theory of human being built-environment relationship in general and the "sense of place" in particular.


1
4
PLACE
place-Work (Natural Conditions)
place-Folk
achieved Polity and Life
achieved Synergy
ACHIEVE-MENT
work-Place
WORK
work-Folk
Synergised Polity and Life
SYNERGY
synergised Achieve-ment
folk-Place
folk-Work (Occupation)
FOLK
ETHO-POLITY
politised Synergy
etho-politised Achieve-ment
feeling Sense (Home)
feeling Experience (Mastery)
FEELING
EMOTION (Religion) (Mysticism)
emotioned Ideation (Philosophy) (Pro-Synthesis)
emotioned Imagery (Poesy)
experienced Sense
EXPERIENCE
experienced feeling (Folk-ways)
ideated Emotion (Doctrine)
IDEATION (Science) (Pro-Synthesis)
ideated Imagery (Design)
SENSE
sensed Experience
sensed Feeling
imaged Emotion (Symbol)
imaged ideation (Graphic notations) (Mathe-matics)
IMAGERY (Imagin-ation
2
3

CHAPTER ONE

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I. BACKGROUND REVIEW, THE AIM, OBJECTIVES AND THE METHODOLOGY OF THE THESIS

This chapter attempts to lay down the foundation for the argument in this thesis. At the initial stages, after defining the terms of reference and the purpose of planning and urban design, an effort will be made to indicate explicitly the necessity for the human dimension in planning and urban design and some of the proposed alternatives that would integrate the human dimension into the planning and design process. It will also show the importance of the human being built-environment studies for defining explicitly the "sense of place". Therefore this background will be the basis to formulate the aim, objectives and methodology of this thesis.

I. THE TERMS OF REFERENCE

At this introductory stage, the definition and assumption of certain fundamental terms of reference seem necessary. All through the thesis other definitions will be supplemented to support the relevant arguments.

A. ENVIRONMENT AND BUILT-ENVIRONMENT

In recent years a number of definitions have been given to the environment. Briefly, they are based on the biological definition of eco-system and cybernetics. Margalef (1968) sees ecology as the study of systems where

individuals (e.g., human beings) or whole organisms (e.g., human societies) are considered elements of interaction either among themselves or with an organized surrounding known as the environment. While cybernetics is the self-organizing, two-way controlling and communication system formed by the interaction of the living organisms and their surroundings; most important of which are artefacts, to achieve a state of persistence and equilibrium (Ashby, 1957). In a cybernetics system, the future state and pattern are founded on the present state and pattern, the bearer of information. Therefore, because of the feedback operation (i.e., interaction) between the human being and his/her surrounding, today's environmental information is a priori knowledge for future situations.

Within this contextual framework (i.e., biological science) Ittelson (1974) saw the environment as a surrounding situation cognized as a set of mental images, a function of an unconscious cultural background and an ecological system interacting physically and psychologically with the human being. In this context, he defined a human being as a "passive product" of the environment who not only has an innate pattern of behaviour, but also a goal, motivated deliberately and self-consciously to act upon and be influenced by the environment. He saw the attitude towards the environment as a product of the needs to set a "secure and meaningful" place in it (Ittelson, 1974:18).

Saarinen (1976) took his definition from The American Heritage Dictionary. He viewed the environment as an external situation which influences the "growth and development of organisms". His conception was also based on functionalism and the eco-system model of a homeostasis relationship.

Lawton (1978:41) also conceived the environment as an eco-system that consisted of:

1. the individual;
2. the physical environment, either explicit or implicit. It included the spaces between the human being, other objects and the resources of that environment;
3. the personal environment. He saw this to be the world of others who are important in controlling individuals. Here he included the family, friends, authority figures and small groups;
4. the supra-personal environment. He defined it as the environmental characteristics of the spatially clustered groups;
5. the social environment. It consisted of the institutions that exist independently of the individual.

However, Lawton in his definition has greatly expanded the notion of the environment. By stressing the importance of the supra-personal and the social environment, he has included the economic, political, cultural and social structures of the situation as major components of the environment and the nature of the communication channel (i.e., cybernetics system). Therefore, this definition has surpassed the limitation given to the environment by the biological and ecological sciences. Here the environment

has taken a more general sense to include societal nature and structure.

Rapoport (1977) defined the environment as a series of ordered and patterned spatial relationships among elements and people. Being ordered and patterned it could not be a random juxtaposition of things. He then observed that the environment could be a restraint or could facilitate the relationship between the human being and the environment. Barker (1978) saw the environment (i.e., a behaviour setting) as a function, directing human behaviour to establish, through a feedback process, a "fitting" and an ecological equilibrium.

The above are but some of the definitions and conceptions of the environment. They seem to indicate the environment to be:

1. In terms of the subject of the thesis, the conception of the environment seems to be meaningless unless it is with reference to an organism (i.e., the human being). To interpret human being, Ittelson (1974:81) stated that one needs to know:

   a. a person(s) basic motivation;
   b. whether the basic motives, desires and other properties are "innately determined or largely a product of social and cultural learning";
   c. the nature of the processes underlying such tendencies.

While Giddens (1984), took a more subjective attitude. He considered the human being to be a purposive agent, who both has reasons for his/her activities and can elaborate

and conceptualize these reasons. Apparently this negates Ittelson's and Barker's conceptions of human being. While Barker and Ittelson assumed human being to be an innate product of certain cultural norms, Giddens proposed a new active and subjective one. The implication is that the environment is not only an ordered component of the eco-system and the socio-economic and cultural situation that generate, function and direct the behaviour of an inert human being, but more so a phenomenon that continuously changes due to human purposes and daily routine.

2. The environment, as a surrounding external phenomenon, is interrelated with the human being. People in accordance with their goal motivated action, act upon, revise and use the environment as a resource and restraint to achieve future action and social interaction. Assuming human action is continuous, the environment in terms of social interaction becomes a diachronic process.

3. Due to the diachronic nature (i.e, a dialectic synthesis of historical development and future action), the homeostasis assumption (i.e., equilibrium and certain relation of part to the whole: the characteristics of the eco-system) is debatable. It seems then that an alternative system has to be modelled and its characteristics identified.

Distinguishing between "action" and "interaction" is apparently necessary. Giddens defined "action" as "the

stream of actual or contemplated causal intervention of being in the ongoing process in the world" (1979:75). This seems to indicate egocentricity, self-realization and the awareness of possible courses of action. He also stressed that "action" is purposive and a rational conduct for the application of knowledge to achieve a certain outcome or quality. He finally concluded that "the action is caused by an agent's reflexive monitoring of his intentions in relation both to his wants and his appreciation of the demand of the outer world" (p.84).

Alfred Schutz, on the other hand, defined "action" as a conduct known in advance. In his definition the term "conduct" referred to behaviour and comprised all the subjectivity and meaningfulness of experience (Michelson, 1975).

Parsons' (1966) conception of "action", adopted by Barker, Ittelson and Michelson, was based on functionalism. "Action" was considered a defined and patterned system by which human being forms meaningful intentions and more or less successfully implements them in concrete situations. Parsons implicated "action" meaningful, because it is cultural and the meaning and intentions concerning human acts are in terms of symbolic systems. Parsons went on to say, "both the organism and the cultural system involve essential elements which cannot be investigated at the individual level (1966:6). Parsons therefore ignored what Giddens stressed as an essential component of "action" (i.e., egocentricity, self-realization and purposive

"action"). He also referred the human species and their behaviour to the environmental conditions. In other words, Parsons saw "action" only as an outcome of human behaviour, directed by the environment, and in a cultural context (i.e., constraints).

It is therefore apparent that "action" evolves:

1. intentionality - the formation of an idea, hence creativity;
2. purpose - formulation of aim and objectives;
3. motivation - the goal directed nature of human behaviour;
4. rationality that elaborates the possible courses of action;
5. the choice of alternatives;
6. being - the idea of self-realization.

Interaction, which is continuous, temporal and spatial (i.e., diachronic), refers to future production, constraint and revisions, in the light of subsequent knowledge, experience and situation. Communication (i.e., production and reproduction of spatial, social and temporal meaning), mutuality of orientation, creativity, skills and intentionality, rules, resources and moral and power relation ("structure") (Giddens, 1979; Layder, 1981), are all necessary for an interaction. In an interaction there is a certain system of meaning and "structure", characterized and assessed by certain norms and standards of reasoning

and rationality. The system through a diachronic process creates and re-creates itself.

During the course of this thesis the argument will be advanced that the human being built-environment relationship is that type of system; not the eco-system that is currently assumed.

The spatial and temporal setting that is continuously produced and reproduced to accommodate in space and time human "action" and "interaction" is assumed to be the built-environment. Through its meaning and "structure" it establishes, both consciously and unconsciously, appropriate situations for socio-economic and cultural interactive processes. The built-environment, since it is created, constrained, revised in meaning and "structure", through an interactive process, will differ conceptually from the natural environment where the pre-existing eco-system is dominant.

The meaning and "structure" produced and reproduced in the course of people's interactive life is due partly to an attempt to comprehend or explain the meaning for themselves. Social life of which these attempts are parts, "is produced by its ... actor(s) precisely in terms of their active constitution and frames of meaning whereby they organize their experiences". It implies a certain context of meaning and "structure" (i.e., culture) that specifies an assessment of spatial and temporal conduct and a standard of reasoning in space.

B. PLANNING AND BUILT-ENVIRONMENTAL PLANNING

In the traditional sense of the term, planning is defined as a process of applying a rational method for formulating future policies to achieve certain aims and objectives in the allocation of scarce resources. Planning is an approach to attain better decisions in human interaction. Through mathematical models and simulations it has become a modern decision-making and policy-formulation science. As a result, preference is given to quantifiable or partially quantifiable problems (Dror, 1968; Saafy, 1985) rather than to descriptive ones.

Planners, through their necessary knowledge, tools and the synthesizing nature of their processes, tend to think of themselves as social science engineers. Through their practise, they seem to have great social, economic and political impact, even though their aim is to optimize the scarce resources and recommend objectively, to the politicians, alternative policies. Even though in reality it may be otherwise, their relationship with the decision-makers (i.e., the politicians) is often presented as that between servant and master, operational researcher and manager, system analyst and military staff (Faludi, 1973).

1. The built-environmental planning

Built-environmental planning is defined as a rational process and method for formulating spatial and temporal policies to accommodate in space and time human "action".

This also includes the spatial impact that may stem from other types of planning operations or inter-actions (e.g., economic and social). Whenever the resources utilized are part of the built-environment (e.g., land, buildings, communication system, etc.), or the aim is to achieve a certain spatial phenomenon, or propose alternatives in meaning and/or "structure" in space, the built-environmental planning may be said to be in operation.

In the above definition it has been noted that whenever planning is applied, especially to public resources and policies, it is political in nature. Answers as to how much, where and to whom to allocate the scarce resources and which future policies to adopt, tend to be political in nature. The use of numerical methods for the optimization of future policies (i.e., economic optimization), the nature of the planning methodology (e.g., the intensity of public participation) and the geographic models, which may be based on free market economy and minimization of cost, may tend to be biased against some underprivileged people who have neither the political will nor economic power. Aims and policies of control, revision or future built-environmental change, may favour, in space and time, one group of people more than another. Allocating resources for short-term policies and political gains (e.g., certain resource allocations prior to an election), may prejudice future communities (e.g., today's budget deficit may set an economic burden on future communities). Hence an attempt to bring about an appropriate decision in

any built-environmental planning is subjective and liable to continuous interpretation. This seems to imply that the whole planning theory as an objective science of decision-making is problematic. It also seems necessary to integrate it with a certain theory of justice (i.e., "structure") that is commonly acceptable.

Here the term "structure", as Giddens (1984) and Layder (1981) analysed, is with reference to a generative mechanism which gives rise to certain observable manifestations. Layder classified the "structure" into two distinguishable terms: "contextual structure" and "interaction structure" (1981:94). While the former is external to the interaction, setting the parameter (e.g., political power, concept of justice, cultural values, spatial characteristics outside the setting), the latter is within the situation as the creativity and skills of the actors. This definition of "structure" does not denote an observable framework or a patterned relationship between elements as is defined in system analysis.

2. Design, urban design and city design

In the above definition of the built-environment an attempt was made to establish the importance of the individual, society and their nature. Emphasis was placed on the interactive relationship between human being and human being (in terms of an individual or a group with certain common characteristics), human being and other objects and the relation of two or more objects in terms of

the human being. It was also assumed that people drew, from the built-environment, part of their knowledge to carry out their production, reproduction, conduct and achieve a desired future situation. All these are spatially manifested in space and time and continuously change due to the diachronic nature of social interaction.

The built-environmental design is then the process of configurating these spaces, in time, into settings that may accommodate, appropriately, certain future situations of human production, reproduction and conduct. Internally and in relation to their settings, their spatial elements are organized into a certain order and patterns (characteristics) to give meaning and "structure" to the spaces in terms of an identified culture and because of social change. The meanings are communicative and have symbolic properties expressed in the spatial elements (colour, form, space, texture, surface and, most important of all, "place") and their relationship. Since social interaction is diachronic, one may conclude that built-environmental design is also diachronic. In other words, it is not a product, but a process to be integrated into built-environmental planning and social reproduction. Note that production and reproduction stress both stability and change in society (Giddens, 1979), and in its spatial manifestation and characteristics. The human being is then related to traditional values, routine activities and rate of change. This relationship further indicates the communicative value and the importance of the spatial meaning and

"structure". As such it provides the basis for argument in any built-environmental conservation process.

In this thesis the concept of urbanism is dichotomous to the rural settlements. Urbanism, as the sociologists attempt to identify it, is related to the complexity of social differentiation (both external and internal) and the nature of the production and reproduction of the social organization (i.e., the intensity of the synthesis and social change). It therefore identifies certain characteristics to be observed, spatially, in the meaning and "structure" of the human being built-environment relationship.

Whereas the community of a village is based (Spykman, in Burgess (ed.), 1968), on face to face contact, intimate relationship and spontaneous accommodation within the group, the urban area is looked at in terms of a secondary contact: less immediate and spontaneous social restraint; a new form of social control and relation by the law; specialization and differentiation.

The city seems to be a more difficult concept to define. While urbanism is explicitly identified in terms of socio-spatial criteria, the city may be vaguely described as a geographical manifestation. It is assumed to be a spatial system dependent (i.e., a dependent variable) upon other orders for its definition (e.g., socio-spatial, function, human density and spatial distribution) (Carter, 1981).

Urban built-environmental design (or urban design), is therefore a continuous process that attempts to achieve appropriately an urban spatial manifestation, organization and expression of an urban setting to accommodate continuously for human production and reproduction, in space and time, the desirable future meaning and "structure". Since meaning and "structure" are conceived by the human being and are the outcomes of each culture, urban design is both creative and contextual (or "contextual structure").

II. THE GROWTH OF MISTRUST AND CYNICISM IN URBAN PLANNING AND DESIGN

To appreciate people's attitude towards modern planning and urban design, one has to look back and study the development of planning since the Industrial Revolution, when the need for the profession was realized. In this study one may have to elaborate and understand the post-World War II conception of planning and people's expectation as to what it could achieve in the rebuilding of war-torn Europe. However, a detailed analysis and description of this historical process is far too complex and beyond the scope of this thesis. But, for a stronger argument that shows the importance of the human dimension of space and the "sense of place", a brief description of the above subject is necessary.

"Modern" planning and urban design are the genesis of the intellectual, physical, social, economic, scientific and political changes that occurred in the 19th century due

to the Industrial Revolution (Sutcliffe, 1981; Cherry, 1974). The Industrial Revolution not only changed the means of production, consumption and distribution but also, in a very short period of time, made the European population urban. In the industrial cities it generated housing, health, social and economic problems. They were new historical phenomena, needing for their confrontation and solution, new philosophical and practical approaches.

The 19th century was also marked by considerable intellectual activities in art, architecture, sciences and humanities. The new scientific discoveries affirmed positivism, empiricism and reductionism which in the previous century were argued to be the bases for a scientific methodology. A great number of urban activities generated tremendous enthusiasm for new things that spatially needed new urban dimensions (e.g., the steam engine) and socio-economic adjustment. Later all these became the ground upon which the industrial countries reformed their socio-economic and political activities and thus advanced as modern states into the 20th century. It is therefore safe to say that "modern" town planning, noted by Cherry (1974) to be an essential part of a modern and democratic state, is based on the reactive response to the urban conditions, philosophy, ideology and culture generated by the Industrial Revolution.

The philosophy, culture and urban situation of the 19th century caught the imagination of people such as, Robert Owen, Raymond Unwin, Kropofkin, Ebenezer Howard,

Camillo Sitte Baumeister and many others. In most cases they proposed utopian built-environment and visions of human settlements to accommodate communities protected from disease, vice and ignorance - elements generated in the urban centres because of the means and mode of industrial production. Their work, carried out through the first part of the 20th century, became the first body of literature and the foundation for modern town planning (Sutcliffe, 1981).

Therefore, one may conclude that the "modern" town planning profession has its roots in the Industrial Revolution. Its shaped is moulded by:

1. the intellectual movement in the 19th and early 20th centuries;
2. the new scientific methodology which was later adopted in planning for data collection, identification of problems and proposing solutions;
3. the rapid urbanization of the industrial society and the degradation of the socio-economic and physical conditions in the inner urban areas;
4. the reaction of a number of visionaries and philanthropists to the ravaged condition of the industrial urban areas. Their utopian proposal was to eliminate the housing, health and social problems created by industrialization;
5. the new architectural movement.

The above factors were not only apparent in the initial planning legislation (e.g., the city beautiful influence in American metropolitan planning and the first British planning legislation in 1909) and planners' endeavours in the

early part of the 20th century, but they also became the principles upon which post-World War II reconstruction in Europe was planned (Cherry, 1974).

During World War II the status of the physical planning profession was raised to a publicly-acceptable, profound profession. The planner was looked upon as the person responsible and sufficiently competent to rebuild Europe into a place where peace would be everlasting and the quality of life sustained. This was expressed very well in Barlow's report.

In short, after the war, the planners started re-building European cities with a note of professional confidence. In England, for example, the post-war labour government passed a very important piece of legislation to build new towns and redistribute industries, based on the utopian spirit of Raymond Unwin, Kropotkin and Ebenezer Howard.

The planning process with which Europe was going to be rebuilt was conceived during the war. The methodology was based on the notion of having a comprehensive survey and thus collecting data on the existing situation (i.e., positivism and empiricism). The idea was to build up a comprehensive knowledge, believing that the full range of objective facts would reveal both the problem and the solution. This again seems to be a notion inherited from the forefathers (e.g., Patrick Geddes) of the profession.

However, in the early 1960s all this euphoria about the planning profession and what it could achieve changed into realism, frustration and cynicism. People who after the war saw planning as a profession that had something to offer society, changed their attitude and started seeing the planner as just another faceless bureaucrat. In the 1950s the continuous failure to attain the high expectation of planning became more than a disappointment, both to the people in the industrial world and the professionals (Cherry, 1974). It was apparent that planning is more complex than the utopian notion their forefathers had (Fishman, 1977), and exceeds much more than the causal process that was formulated before and after World War II.

Yet since the early 1960s many articles and research papers in the planning journals have indicated explicitly the growth of mistrust and cynicism toward planning, what it stands for and what it can achieve. Newman (1974), for example, indicated the relationship between housing, planning and design and urban crime and vandalism. Harrison (1983) in the U.K. analysed and found that major factors contributing to the dereliction of Hackney, an inner urban area of London, were shortage of funds and lack of government planning policies for appropriate housing and built-environmental development. Similar conditions lay behind the riots in Toxteth and Brixton. There, the politicians and planners could not agree on the appropriate policies. This resulted in an urban planning decision that further accelerated the problems of bad housing and dereliction (Lomas, 1982).

In the developing countries where scarce resources were needed for economic development and the cultural context was different from the Western one, it was observed that multi-storey dwellings to overcome the urban housing shortage for the poor and for the rural migrant was alien and inadequate. Concepts other than those based on Western standards and technology (the preference of the planners and bureaucrats) were necessary. Places such as the metropolitan region of Cairo (Jenssen et al., 1981) and Ankara (Feral, 1982) which needed a more economic solution, formulated policies based on community self-help and appropriate technology.

It is interesting to note here the work of John Habraken and his contribution to mass housing. As far back as the early 1960s, Habraken, realizing the shortfall of the post-World War II design and planning system, attacked standardized housing: a deterministic design based on functionalism, and a bureaucratic dream looked upon as an appropriate solution for housing the lower, and lower-middle, classes. His aim was therefore to reformulate the design and construction system so as to accommodate in each situation the desires and needs of the occupants (i.e., "action"). It all ended up by proposing the "Stichting Architecten Research" (SAR): a flexible, modular concept that returned, through owner involvement, the control of housing to the user. Thus Habraken rejected functionalism and reformulated his design system on the basis of each individual subject: desires, intentionality and needs.

Since then, the concept has been elaborated and used with some success in several countries (e.g., Holland, Wolien Morgan in Austria, PSSHAK in London, T.E.S.T. in California) (Hatch, 1984).

It is also interesting to note Peter Smith's comment in his article: "Human Right in Architecture" - The Planner (December 1974) on a comprehensive town centre redevelopment, unveiled at a public meeting in Rotherham. Having noticed the scheme's disregard for the old town pattern, as he noted to be the case in many other old cities, Smith remarked, "wherever there is redevelopment there is invariably a sharp decline in the incidence of visual interest. ... The modern aesthetic is pure as laundered sheets and just as dull. ... An increasing quantity of town centre buildings are positively anti-urban" (p.953). By observing that today's architecture and urban planning paid little attention to human beings, especially their psychological and aesthetic needs - associated with the meaning of historical and traditional places, he laid an open "indictment" against the failure of contemporary architecture and planning.

In a similar way, Paddy Kitchen in her book: A Most Unsettling Person (1975) noted, "Over the last twenty years we have seen what happens when planner-economist Gullivers push over old town centres and their peripheral acres of terrace housing without properly respecting the history, folk-lore and community-sense inlaid into the old fabric" (p.20).

Similarly, Pier Luigi Cervellati, in his 1969 master plan for Bologna, Italy, stressed the importance of urban historical preservation in the city centre, its process and political implication in the city council: ruled by a communist municipal government (Hatch, 1984:238-256). Against the main forces of development and speculation, who saw the city core as a source of wealth, he succeeded in indicating the concept of conservation not as a preservation of monuments, but as a complex urban index of human and social existence tied to specific places and activities to establish an intricate pattern of social structure.

The above are but a few comments which further indicate the shortfall of, and reaction to, the post-World War II urban design and planning philosophy, system and practice. However, this does not mean that all the schemes visualized after the war failed. The above note is only an attempt to point out the naivety and misconception as to what can be achieved. Without knowledge of the complexity of the whole generation and the components involved, especially the human dimension in each situation, urban planning and design may create spatial characteristics that are alien to the human being and inappropriate to accommodate spatially and temporally human "action".

Lincoln Allison in his article: "What is urban planning?", Town Planning Review (January 1986), attempted to sum up the reason for the current growth of mistrust and cynicism towards urban planning and design. His argument asserted that the current attitude towards planning was due

to the rise of a conservative ideology, world economic recession, budget deficit and inflation. Apparently these economic conditions redefined government economic policies to discourage the allocation of public resources and encourage private investors to develop the urban built-environment. Besides, the new conservative ideology was seen to be averse to urban planning and design mechanisms and more in favour of market economic forces. Hence, the conservative ideology conceived urban planning and design only as an explicitly stated development control that encourages private development. However, the conservative view of planning and urban design practice (i.e., explicitly stated policies) seems appropriate only if in a highly expanding and lucrative market the status quo and an incentive for private investment is desired. In other terms, planning and urban design becomes only a tool to encourage investment in land as a commodity.

Allison's observation was supported further by Shirvani who saw today's urban design as an activity that "seeks to develop the policy framework within which physical designs are created" (1985:2).

Therefore by being mainly a control of development, Allison saw a limitation had been put on urban planning and design objectives. This control was far from being a mechanism for allocating resources for future situations. Moreover, the preferred comprehensive or "incremental" planning whose aim was to give more flexibility and hence accommodate more appropriately future situations, had

encouraged the new conception and fitted adequately as a mechanism to support, through development control and the status quo the new ideology and economic policies.

If Allison's argument is applied in the context of the recent controversy over the 1986 plan of Adelaide it would unmask the basic reasons for the architects' and developers' reactions to the plan. The plan proposed conservation and limitation on building height (i.e., more control) for enhancing Light's original savannah plan. When the plan was displayed for public comment, developers, because of the recommended limitations, saw a decrease in their margin of profitability. They then took advantage of the national economic situation and high unemployment in the Adelaide area and threatened the City by stating, in the public media, that they would transfer their capital to other cities unless the proposed planning limitations were removed. Therefore, one notices that the developers with their new, conservative ideology, joined by some architects, took advantage of the economic situation to exert pressure for maintaining the status quo and thus securing a better margin of profitability. In other words, they wanted planning, as a physical control policy, to be flexible and deregulated in accordance with their conservative ideology of a free market economy.

One main factor that Allison did not point out, was the previously noted observations for the failure of planning and design, made by Habraken, Smith, Cervellati, etc. ... It is the notion that the urban planning and

design process did not consider appropriately the human being built-environment relationship. However, since the late 1950s, the human being built-environment relationship - the main subject of this thesis - has become an important multi-disciplinary subject for research.

III. SOME ALTERNATIVE URBAN PLANNING AND DESIGN PROCESSES THAT ACCOMMODATE THE HUMAN DIMENSION

Ever since 1958, when Herbert Gans (1968) evaluated the Boston West End slums, the inadequacy of planning, because of its disregard for social phenomena, has been realized. Since then effort has been made to make planning accountable to both the aspects of physical control, and to problems that originated from allocating resources. It included personal, social, psychological and cultural factors and their impact on the planning and design of the urban built-environment.

Since Gans' work, a new conception of planning which incorporated rapid technological advancement and change, and the socio-psycho-cultural diversity and dynamism (i.e., the human dimension) has been seen to be necessary if urban planning and design is to achieve its purposes. Public participation has been proposed and in some cases introduced as an alternative solution to take into account the human dimension and to better implement the Western concept of the democratic process (e.g., Skeffington's report on public participation in planning came about in 1968) (Thornley, 1977). Even though it was a noble gesture and

since then some notable successes have been observed (e.g., public consultation in the redevelopment of the London dockland and (eventually aborted) the Byker housing estate in Newcastle-upon-Tyne), one cannot but notice in the current planning literature the increasing number of disappointments (Duckworth, 1976; Editorial: Town and Country Planning, August 1979; Wiener, 1976). It is apparent that bureaucratic procedure, political implications, lack of an appropriate communication system and cynicism that result in lack of enthusiasm, are but some of the main reasons for the public to be disappointed with participation. This all implies that there may be a need to explore alternative processes of urban planning and design.

Besides Skeffington's notion of public participation, other urban planning and design processes are used to involve the community. Normally, they are classified into two categories: the communication and educational approach that advocates gaming simulation techniques (Sanoff, 1978, 1979, 1981; Behesht (ed.), 1985; Hatch, 1984); and the political activist planner, known as "advocacy planning" in the U.S. and "planning aid" in the U.K. In the former, the users, designer and local authorities become involved systematically in the planning and design process. The planners' and designers' roles are to encourage the participants to reach a decision and to formulate policies of action. In the latter, the advocate planners give their professional skills as a political resource for the people who seek their advice. Their primary aim is to organize and

direct their client (i.e., the community) so that they can establish a political power and understand the bureaucratic procedures in the government institutions.

The above alternatives to public participation recognize the existence of conflicting interests among people. Furthermore, both can be traced to the grass roots democratic theory (Castells, 1983) and social constitution of communities (Suttles, 1972). However, gaming sees the solution to the built-environmental problems through negotiation and consensus, the political activists through political confrontation. Moreover, both indicate the importance of public education and the necessity for understanding the urban planning and design process. Furthermore, both systems of participation, due to their decision-making processes encourage the feeling or sense of community. Since in gaming the users explore and state their personal needs and which policies are necessary to attain them, one can conclude that the technique is creative and predictive.

Another alternative direction for solving the human dimension and the problems of urban planning and design takes its basis from the historical analysis of the profession. Lately some planners have implied that the ideas of the founders of modern urban planning (i.e., Toni Garnier, Patrick Geddes, Ebenezer Howard, etc.) may be a source of inspiration and guidance to the direction and conception that today's planning has to manifest itself (Maskrey, 1982; Kitchen, 1975). Their argument seems to be

based on the notion that these founders place the community and human being as the foundation of their planning and design schemes (Kitchen, 1975; Meller, 1979; Simpson, 1985).

Experiences in the developing countries - for example, Turner in Peru (Turner, 1976), the British firm Clifford Culpin and Partners in Egypt (Davidson, 1981) - further support the importance of community involvement and self-help as an alternative direction. Having shown certain success in the squatter settlements of the developing countries, self-help is now proposed and applied on a limited scale to accommodate housing for the lower income groups in the industrial countries (Kinghan, 1981; Cowan et al., January 1981, May/June 1981; Ward, P. 1982; Ward, C., February 1976). Currently it is seen as a possible solution for the problems in the inner urban areas (Lomas, 1982; McKean, 1978). However, due to the political and economic isolation of the participants from the rest of the economical activities, its implication has been criticized by both the Marxists and those who favour a capitalist economy (Ward, 1982).

Probably the most influential work that explicitly indicated the importance of the human factor in planning is in the research done by Kevin Lynch and Donald Appleyard. Lynch's pioneer work in the Image of the City (1959) explored a new area of human studies before many of today's theories of human being built-environment were formulated. In fact there is reason to believe that his research

methodology became the basis for many of the models in environmental psychology. Appleyard (1976) later adopted and used that technique in his plan for Ciudad, Guayana. He therefore showed its relevance to the urban planning and design process.

Lynch and Appleyard's work was a catalyst for people's participation. It strongly suggested the necessity of incorporating people's built-environmental meanings and geographical interpretations (i.e., comprehension) into the urban planning and design schemes. However, their methodology for obtaining the inhabitants' knowledge and valuation of the urban built-environment was only with reference to the existing situation and if necessary certain proposals for the retention of the desired appropriate meanings (Lynch, 1959). It further showed, in Ciudad, the difference in points of view between the planners and architects and the local inhabitants (Appleyard, 1976). It did not give an overriding mandate to implement one policy or the other. Also it did not explicitly show how this information could be used to indicate future preference.

It seems that one main reason for the above limitation was that Lynch and Appleyard took the visible human attitude and behaviour as a result of existing physical settings and culture, and aggregated the individual to identify societal attitudes. Their "imageability" was a function of a cultural background and the built-environment whose characteristics established the behavioural role. Therefore in their methodology there was no room for a

person or group to negotiate, state any personal intentions (or group intention) and future desirability.

The above alternatives are but some of the main efforts made to integrate the human dimension into the planning and design process. They all seem to stress the importance of the human being as a component to be directly associated with the built-environment. This however requires a better understanding of their relationship at the personal and communal levels. Moreover, it is necessary to identify a theory that synthesizes both levels and thus establishes a holistic system for the study of the human being built-environment relationship.

IV. THE STUDY OF THE HUMAN BEING BUILT-ENVIRONMENT INTERACTION

An historical overview and a detailed comprehensive analysis of the modern conception of the human being built-environment relationship is a very complex and difficult pursuit. Probably detailed knowledge in all fields of environment and social sciences is necessary. Reference has to be made to persons and works such as Freud's theory of psychoanalysis, Engels' and Marx's social theory, Weber's analysis of the city, Carl Sauer's 1925 paper "The morphology of the landscape", Febvre's book Geographical Introduction to History, Gestalt's theory of psychology, Park and Burgess and the Chicago school of human ecology and many others who contributed to the foundation of that field of knowledge. Such a study is beyond the scope of this thesis. However, sufficient

elaboration and analysis will be given to acquire familiarity and knowledge for critically analysing and proposing certain necessary initiatives in urban planning and design to achieve the human dimension in space.

Probably one of the important scientists who initially contributed to the human being built-environment relationship studies, was Skinner (1938, 1953). In his earlier book, The Behaviour of Organism (1938), he described his observation of a laboratory experiment in which a rat reacted and behaved in a repetitive manner in response to a particular stimulus in the environment. His analysis gave him reason to suggest that the environment acts as a stimulus that determines human behaviour. Skinner defined behaviour as "that part of the function of an organism which is engaged in acting upon or having commerce with the outside world. By behaviour then I mean simply the movement of its parts in a frame of reference provided by the organism itself or by various external objects of field of forces" (1938:6). Skinner therefore disassociated behaviour, goals and action. Rather he associated behaviour and its meaning as a consequence of past similar behaviour (1953:86). The reason was to give credit to empirical observation.

The human being built-environment relationship that Skinner (1938, 1953) conceived and anticipated was to some extent based on functionalism, determinism and was causal in nature. Even though he acknowledged creativity, he stated that behaviour is not motivated by the human being.

In his writing, he very much attempted to set a scientific law of human behaviour that is compatible with natural science. He assumed that a similar methodology can establish laws, orders and models, as is the case in natural science. Yet at the same time he saw that the traditional philosophy of human nature is not in error. He therefore realized the fact that human behaviour is extremely complex, but not an unsolvable problem (Skinner, 1953).

One may safely assume that only since the late 1950s, with the work of people like Barker (1963), Ittelson (1960), Sommer (1959), Canter (1961) and Gans (1961), the new studies of the human being built-environment relationship took a defined shape. Later, it developed both laterally to include: psychologists, sociologists, anthropologists and environmental designers, and in depth in each of these fields of specialization. Rarely could one notice a study that synthesized all the knowledge in these specialized fields.

A well known psychologist who contributed to the study of the human being built-environment relationship was Ittelson. His notion, developed during the 1950s and outlined in his book Visual Space Perception (1960), took a different view from the one made by Skinner. In his work, he attempted, through experimental psychology, to define perception in terms of the creative process carried out by the human being (i.e., the "organism"). He appropriately assumed that the individual acted in any situation in terms

of the way he perceived that situation. For him perception became "a crucial process intimately involved in the effective functioning of the individual" (1960:6) and that the "individual structures the world through his experience" (1960:7). He thus proposed the idea of the two-way functional relationship between an individual and his environment. It was conceptualized as perceiving and acting whenever the action was both initiated by the environment and was the consequence of certain goals identified by the perceived environment. Perception provided both "the framework on which action is based and the channel through which consequences of action are experiences" (1960:8). This was the reason for him to state that the environment is a functional conception.

Ittelson in his definition of perception and action suggested that:

1. interaction is a two way system between two systems: the individual and the environment;
2. action is attributed to the perceived and the experienced existing environment;
3. the term perception is the subject matter for inquiry.

His "action" and "interaction" lacked certain components that this thesis previously considered in the terms of reference. This is due to the nature of experimental psychology and its methodologies which only considers the existing situation as the appropriate empirical data (i.e., positivism). One cannot deny the importance of perception. But the other previously stated components of "action" and "interaction" are as important to identify an appropriate

process. Furthermore, the diachronic process and the "structure" of interaction seem to be disregarded. Hence Ittelson's notion of interaction as a component of functional relationship and perception is debatable.

Perception, as defined by Ittelson, is basically to identify people's interpretation and attitude towards the existing environment. When integrated into the urban planning and design process it may be for the retention of some of the desired existing characteristics. It may also indicate the attitude of different individuals. But since the value of the community is different from the sum total of the value of individuals (Holliday, 1977), it would be erroneous to mathematically add perception to determine attitudes of different communities. Furthermore, it lacks the property and predictive mechanism to indicate future proposals and preferred community alternatives.

Gutman and Gans' research into Boston West End, the suburban culture and the neighbourhood of middle class Americans (Gutman and Popenoe (eds), 1970) not only questioned the urban planning and design process, but also strongly suggested the importance of psycho-cultural factors and the collective reaction to spatial conditions of life that identify a community. The housing standards, upon which the low income housing of Boston's West End was classified as slums and thus identified for demolition, were a reflection of the values of middle class professionals. They could not distinguish between rented housing and slums (Gans, 1968). The devotion that the West Enders had

to their houses and streets, the stability of the neighbourhood, friendship and kinship and their behavioural spatial pattern (Fried in Gutman and Popenoe (eds), 1970) were misunderstood and overlooked. The high density, lack of privacy and stair-climbing were seen by the American middle class as harmful. In reality the characteristics of the West End were reflections of the European villages from which the residents came (Gutman, 1968).

Gans, in his research, showed explicitly that the human being built-environment was not a causal relationship. Nor was it deterministic. Other factors (i.e., social environment and cultural environment), were also a significant part of that which its totality may contribute to human behaviour. Hence a new dimension, different from Ittelson's was stressed.

Since the work of Skinner, Gans and Ittelson, extensive research has been undertaken to further elaborate on this new field of studies. The psychologists have taken the view that each individual perceives the world around him/her (i.e., the environment) in a unique way. The perceived and the objective realities guide people's action and the satisfaction they hope to achieve. As part of this process, it is paramount to know how the human being makes any sense of the surrounding environment (i.e., cognition). In this way, some psychologists (Bell and Tyrwhitt (eds), 1972) became interested in the environment as a stimulus or a meaningful setting (this depends upon which school of psychology is followed) that affected human perception,

cognition and response (i.e., behaviour). Besides, the knowledge of these psychological processes was viewed to be important to determine (in a probabilistic way) the spatial patterns of the setting (Barker, 1978). Different methodological models were formulated to identify attitude, needs, values, intensity of simulation (i.e., what makes an environment confusing or boring) and behaviour patterns in different settings. It resulted in conceptualizing certain psychological phenomena, such as:

* Mental map (Gould and White, 1974): They are the personal, subjective and distorted environmental experiences (i.e., cognitions), set mentally in a systematic order unique to each person. By extracting from the individuals within a group the common characteristics, and trying to minimize their internal differences, one establishes the communal mental image, similar to the one proposed by Lynch.

* Territoriality (Brower et al., 1983; Pastalan, 1978): Any individual person needs a defined space for himself/herself to function, survive and establish certain psychological satisfaction. Human being defines a particular spatial boundary so that he/she may have control and thus achieve in a defined space, control over their behaviour.

* Identity (Ittelson, 1974): A person's sense of identity is created by personal orientation, spaces and things that are important to himself/herself. Once there is a loss of value and/or an involuntary removal for a long time from a familiar setting, one tends to lose self-identity.

* Aesthetic quality (Kaplan, 1974): The experience of an aesthetic quality depends on the interrelationship between the perceiver and the situation of which he is part. It tends to vary for each individual in time, culture and intensity of stimulant.

Canter (1974a, 1974b, 1977) defined the "sense of place" as a psychological and hence a scientific phenomenon, a mental map and a mental cognitive system (i.e., a system that exists in the mind) containing information - which may be distorted - about the arrangement of places in space. It was conceptualized, similar to Lynch's "imageability", as an integral part of the interaction between the human being and what the environment defines. Canter, like many other psychologists saw the environment as functional: defining and guiding the role of human being, its meanings, purpose and aesthetic qualities.

According to Canter the "sense of place", as a cognitive system may be explored by observing the human behaviour, describing the relevant spaces, and mapping the images similar to the ones made by Lynch. As a phenomenon of knowledge, it does not contain information about human intentionality and future "action", as defined in this thesis. Therefore Canter's "sense of place" is only an ordered and systemized notion of experiential knowledge and behaviour in a physical setting. Hence, environmental cognition is necessary but not sufficient knowledge for the human being to set up an appropriate future course of "action" and establish a "place".

Parallel to the work of the environmental psychologists at the societal level, a considerable amount of research was undertaken by sociologists and anthropologists. From the time of Engels, sociologists and later, anthropologists, attempted to analyse the urban socio-

spatial and cultural patterns (Castells, 1983; Basham, 1978; Gutman, 1970) using different notions and social theories to outline social phenomena.

Since the notions of cultural meaning, norms and values were not identified, the traditional theories of urban sociologists (e.g., Park and Burgess) were mechanistic and deterministic (Irving in Herbert and Johnston (eds), 1978). Later, when some anthropologists introduced the cultural dimension (Hall, 1956), new components for identifying the urban socio-cultural phenomena were established.

Hall defined culture as the way of life of a people, for the sum of their behaviour patterns and attitudes. He based his definition on the notion that it is "a bio-basic rooted in biological activity" (Hall, 1959:43). Even though Hall recognized the importance of culture, his definition has proven to be erroneous. Today, Hannerz's definition: "a collective system of meaning" (1980:282) is seen as more appropriate by social scientists.

As was stated before, anthropologists and urban sociologists saw the patterns of socio-cultural behaviour quite differently from psychologists. They saw the whole society as a subject for their study. This holistic approach is based on the assumption that society forms an integrated social system. Its culture and spatial manifestations may be analysed apart from any individual (Suttles, 1972; Castells, 1983; Hannerz, 1980; Basham, 1978). In

other words, sociologists and anthropologists indicated that the guidelines for spatial organization in space, time, meaning and structure exhibited a regularity that was associated with an identified set of cultural rules. Rather than basing their theories, models and research methodology on the individual's perception and environmental stimuli, they recognized that the characteristics of the individuals are determined by the culture.

Therefore, spatial and social clustering, location, definition of domain (Suttles, 1972), and the "sense of place" (Hannerz, 1980), took a different approach and level from the theories formulated by psychologists. They became in terms of a different set of criteria (i.e., race, class, ethnic origin, occupation, etc.).

It is interesting to note Hannerz's model of "sense of place". He started by defining the "sense of place" in an anthropological term of reference: "life in a particular bounded space has characteristics different from those prevailing elsewhere, and used this as a meaningful frame for observation and interaction" (1980:90). He assumed that social life comprised "situations" where people performed a standardized mode of "purposive behaviour", called "role". "Role" is equated with consciousness, situation and resources. People, he argued, have many "roles". Their totality in a major social unit (i.e., household, kinship, provisioning, recreation, neighbouring, traffic), was a "role inventory". The "role" of each individual to carry out the daily activities he called "role repertoire".

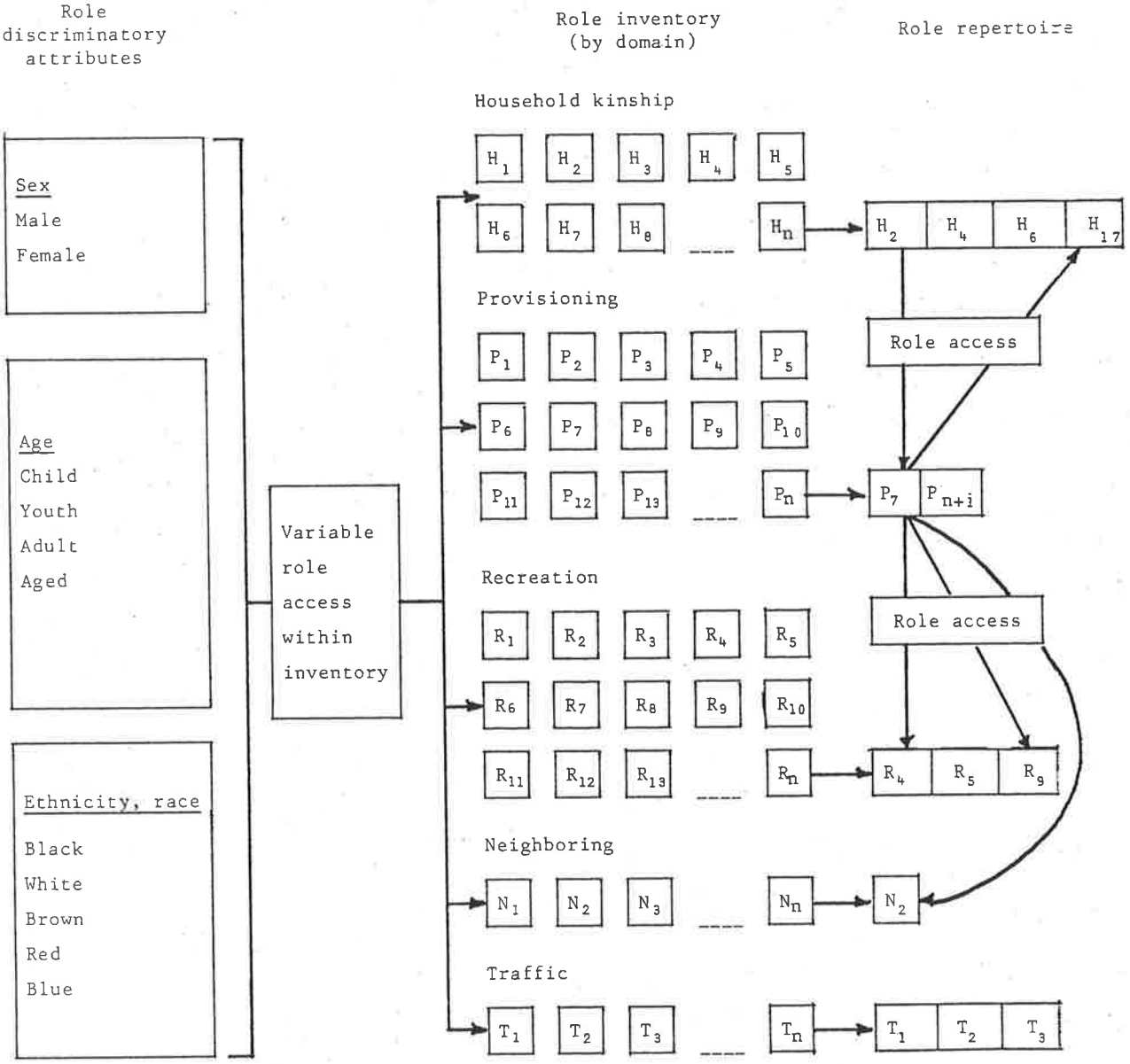


Diagram I-1: A typical deterministic model of the human being built-environment interaction.

Source: Hannerz, U. Exploring the City, Appendix, p.318. Colombia University Press, 1980.

In a hierarchic model people were then recruited into "situations" and particular "roles" on the basis of what Hannerz called "role discriminatory attributes". They were the constraints; culturally defined characteristics of individuals (race, sex, age group, etc ...), apart from particular situations. They were assumed to be among the factors determining the "role" access of each individual.

What Hannerz did, was to set a deterministic model in which personal behaviour was a component of certain cultural constraints (diagram I-1). It was a systematic and a hierarchic way of locating and identifying spaces as "places" whose spatial characteristics were identified not by the human being as an individual, but by certain societal norms. He therefore implicated a model of the built-environment where human "action", as defined in this thesis, had little impact.

One therefore may conclude that an attempt should be made to synthesize the personal and societal conceptions of the human being built-environment relationship, if an appropriate theory is to be formulated. Hence, both the psychological and the socio-cultural studies seem to be necessary for contributing to the urban planning and design process. This, as it will be indicated, generates a different set of problems rooted in the terms of reference and the research methodology that the thesis will attempt to solve. It also establishes the complexity of formulating a holistic model for the human being built-environment relationship.

Therefore, the main goal is to attempt both at a societal and a personal level, a systematic study of the two-way relationship between people and their environment. The objectives of scientists and philosophers are to set up experiments, collect empirical data and build a whole body of theory to identify:

1. the way people form and transform their built-environment;
2. the impact and the extent the built-environment affects people;
3. the mechanism that activates the interaction between people and their built-environment;
4. the critical stage beyond which the interactive process has transformed the spatial configuration into a good "sense of place";
5. the methodology that integrates this knowledge in urban planning and design to achieve the "sense of place".

The search for identifying the above and contributing to the solution of the problems raised, from lack of the human dimension in the planning and design process, is the motive of this thesis.

One person who contributed significantly to this new field of study and attempted to achieve the above objectives is Michelson (1970). In his work, he suggested breaking the urban form into components, and then reviewing systematically the interaction of city form and social life. He divided urban social life into five social dimensions: life style, stage in life cycle, social status, value orientation and personality. In each dimension (or

context) he analysed how people responded to the built-environment, and the way the physical form of the urban built-environment shaped the social life of the people within it.

Michelson's theory of the relationship between the human being and the built-environment was based on the Chicago school of urban ecology (i.e., human ecology), outlined by Park and Burgess (1929) and their behavioural scientists, and Parsons' (1966, 1971) social theory. The theory of the former was formulated on the assumption that urban residential groups, depending on political, economical and ecological factors, are located in concentric circles around the city centre (Stewart, 1972). It was further argued that people set an ecological balance or equilibrium with the built-environment. Clearly Park and Burgess' basic ecological and deterministic assumption was similar to Skinner's.

However, like many others, Michelson did not accept that deterministic theory without criticism. Human ecology, he said, "never studies the interrelationship between social science and the physical environment" (1970:17). His reasons were:

1. "incomplete conceptualization of the environment". In human ecology, space was used as a medium rather than a variable with a potential effect of its own (same suggestion as Skinner);
2. "fixation of aggregate". His argument was that aggregates may change from one community to another. "Restriction of the study to just certain forms of

aggregation may have served to limit the kind of environment investigated to which structural adaptation has been made as well as to the kind of adaptation to be analysed" (Michelson, 1970:19);

3. establishing a disciplinary boundary and formalization of human ecology into a unique discipline;
4. recent acceptance of intervention by different people and authorities to the interrelationship between the human being and the built-environment.

Michelson (1970) revised the theory of human ecology in accordance with the theoretical work of Parsons, known as the "behavioural organism system" and the environmental system. The outcome was a new system, to be found in cities, called the "man-made physical environment" system. His new system was to demonstrate the relationship of variables within an identified framework or context. It was therefore a justification of his research methodology.

His new approach and system became the framework for his congruency model between the human being and the built-environment.

> The model I suggest is not determinism or dominance of one system over the other, but rather of congruence of states of variables in one system co-existing better with the states of variables in another system than with other alternative states. It is an intersystem congruency model.
>
> (Michelson, 1970:26).

This concept of congruency between two systems later became associated with the "sense of place". Similar to Parsons it was a conception that integrated both the psychological behaviourism into socio-cultural context. Its main characteristics were:

1. a biological system to achieve equilibrium with its environment;
2. the variables in each system were taken on their own terms without prior determination of the mode of influence on the variables in the other system;
3. like all ecological systems, the model suggested homeostasis;
4. One important feature of congruency was based on the idea that a human being thinks and imagines. He/she visualizes the built-environment both in their minds (i.e., a mental map) and the physical world. Therefore both "mental" and "experimental" or empirical congruency were necessary, while fundamentally they were different, Michelson saw them complementing each other. "All studies that set out to discover what people want and why they want it are concerned with mental congruency ... Experimental congruency deals with how well the environment actually accommodates the characteristics and behaviour of people."

It is apparent that Michelson's theory of congruency has in it the objective and the attempt to conceptualize the "sense of place": since both the cognitive mental map and the physical world were related to a mental and spatial quality attributed to the human being built-environment relationship. However, Michelson's congruency is a methodological model to achieve a certain equilibrium, while the "sense of place" is that quality of space that one may aim to achieve between the human being and the built-environment.

Therefore Michelson may be criticized on his basic arguments:

1. the simplification of social dimensions in an urban built-environment (i.e., life style, social status, value orientation and personality);
2. the appropriateness of the eco-system (homeostasis);
3. the "mental congruency", which is to identify future preference on existing stimuli and perception;
4. the behaviourism he used ignores human "action" as defined in this thesis. Rather he uses Parsons' conception.
5. the societal level of the human being built-environment relationship is considered a contextual constraint.

Barker (1978), also using the eco-system and Parsons' theory, but with a different terminology, attempted to define the "sense of place", or what he called "behaviour setting", in terms of the characteristics of the behaviour pattern of people (i.e., the human component) in that particular place and the "milieu" to which the behaviour is attached (i.e., the physical component). "There is often a fittingness between the pattern of behaviour and the attitude of place things and time context to which they are anchored" (Barker, 1978:13). He went on to say that the "behaviour settings" as a phenomenon, are both ecological and a pre-determined programme by which a conformity between the events and the unity of the settings are established. Therefore, in "behaviour settings" people are the components and as such they behave in accordance with the requirement of the "behaviour settings", their needs and ability.

Even though Barker is a psychologist, it is quite obvious that he strongly suggests the existence of a contextual structure that shaped the settings and within which a person can satisfy his motives. "Behaviour settings impose obligations on their occupants, too. These obligations are consequences of the intrinsic structure of behaviour settings" (1978:220). As was stated before, it is a notion he adopted from Parsons' social theory to give the settings a function and a cultural context. Therefore the order of the settings is considered the source of the feedback, transmitted to control the personal behaviour and maintain the settings in a state of ecological equilibrium.

The above are but some of the overviews to indicate explicitly that, more and more urban planning and design has to depend on the research work done by the social scientists. It further implies that urban planning and design's aim, objectives and policy formulations, have to rely more on social science's epistemological assumptions and analytical methodology. However, the latter (i.e., analytical methodology), due to its fragmentary nature, seems to be contrary to the synthetic methodology of urban planning and design. While the recent uncertainty of the former (epistemology) is argued by philosophers and social scientists who are questioning and looking at the limitation of positivism in social science (Thorns, 1976; Bleicher, 1982). Their argument is based on the idea that social science cannot substantiate its knowledge only by adopting positivism, which defines as "scientific" the

knowledge which is induced from the events in the visible and tangible environments and rejects completely all the exploration of unobservable entities.

Therefore, the thesis sees it necessary to look at those who argue and assert the limitation of positivism in the human being built-environment relationship. Hence those who object see positivism as a restriction imposed on them so as to make it impossible to investigate the "unobservable entities": exploration of the social actors' "subjective meaning" and exploration of the "structure" or "institutional form of social life" (Hekman, 1983:2). As indicated previously, if this new argument overrules positivism, its implication in the current practice and research in urban planning and design and human being built-environment relationship, will be dramatic. Most important of all, it will explicitly show the limitation of all those theories and concepts that use positivism to define the "sense of place" (e.g., behaviour psychology). Furthermore empiricism, the most fundamental component of positivism is also challenged because it only considers the observable world of facts. It cannot tell the hidden theoretical, human and unobservable mechanisms through which the visible world was brought about.

The limitation of positivism can be identified in the planning activity itself. The activity of planning, which is making decisions today to accommodate tomorrow's built-environment, brings a futuristic world view to bear upon today's interpretation. Such fundamental activity is

directly associated with the subjective aspirations and purposeful "action" of the human being. The empirically observed things in this world are not sufficient for conceiving the desired future situation. Unless its subjectivity is considered, the future world will be meaningless. All this indicates the inappropriateness of the planning which uses positivism and empiricism as its data-collecting technique, rather a methodology which is subjective and sympathetic to the subject is necessary.

Very recently, some prominent human geographers, urban planners and architects saw the new approach as a step in the right direction. They redefined the "sense of place" and attempted to contribute to the solution of many of the urban planning and design problems (Relph, 1976, 1981; Seamon and Mugerauer (eds), 1985; Gregory, 1978; Norberg-Schulz, 1974, 1979; Broadbent et al. (eds), 1980a,b). They used the philosophy of humanity's existential situation and meaning, drawn by people such as Heidegger, Gadamer and Habermas, as a foundation for their critique of the current approach, models and techniques. Their epistemological debate, whether in phenomenology or hermeneutics was to indicate the idea that situations are not universal but locational, and places are qualitatively different in that they are formed in our memories and affections through repeated encounter and complex association with their meaning.

One of the epistemological alternatives that currently is achieving momentum among human geographers, architects

and planners, is phenomenology (Hekman, 1983). By identifying the importance of the subjective meaning of the objects Edward Relph sees it as a process of allowing things manifest themselves. It is a way of thinking that enables people to clearly see the meaning of things that are obscured from us (Relph in Seamon and Mugerauer (eds), 1985). Relph therefore considers important, the meaning which the actor bestows upon his action in the process of interaction (i.e., both social and environmental). Hence the task of social science and any research in urban planning and design is to explain how meaningful "action" of the actor is constituted in the built-environment. This seems to indicate that the alternative is the involvement of the actor in the urban planning and design process.

Hermeneutics and phenomenology are also seen as tools for aesthetic critique (Gadamer, 1976). They are used as a means for revealing, by the people's effort of interpretation the symbolic meanings to comprehend any work of art. Gadamer, therefore, acknowledges the notion that it is not possible to separate the aesthetic form from the culture: the source of symbolic meaning.

Urban design, which this thesis defines in terms of configuration of spatial elements into organized and ordered patterns to give communicative meaning, manifests itself into an aesthetic criterion whose interpretation and creation is in a cultural context. Relph (1976) and Norbert-Schulz (1979) acknowledge this argument in their attempt to define and elaborate the "sense of place".

Furthermore, it questions today's bureaucratically formulated standards and design criteria, and encourages an alternative that is culturally involved (e.g., Cullen, Townscape, 1961; Anderson (ed.), 1978).

Therefore, both Norberg-Schulz and Relph attempted to define the "sense of place" by stressing the phenomenological meaning. Relph, however, questioned the universality of an explicit definition, even though in his analysis he outlined some of the criteria. He, however, explicitly indicated that the "sense of place" is an aesthetic quality of a space that derives its meaning from experience at one end and abstract thought at the other extreme (1976:10).

V. THE COMPLEXITY OF THE HUMAN BEING BUILT-ENVIRONMENT STUDIES

The above overview indicates the complexity of the problems which exist in achieving a comprehensive and systematic study of the human being built-environment relationship and identifying "the sense of place". They are related mainly to the fragmentary nature of the study itself, the methodology of research (i.e., epistemology) and the disagreement between social scientists in defining the role of human "action" and societal institutions. Each social scientist is studying and working on a different level and concept, to contribute more knowledge to his/her specialized field.

While the psychologists consider the human behaviour and cognition as a function of space on the personal level,

the sociologists and anthropologists take societal constraints as the deterministic components within which space forms "place". Furthermore, Parsons' social theory and system of "action" is noted as the dominant argument to integrate the personal into the societal level. Besides, the humanists by arguing the limitation of positivism and empiricism have explicitly indicated the importance of the purposive "action" and intentionality of the subject. They therefore formulated their own methodology of knowledge - that is, phenomenology, hermeneutics, ethnomethodology - for the human being built-environment relationship. Moreover, since Parsons disregards the humanists' subject, his followers rarely consider and systematically integrate the subjective human component into the creation of the built-environment. Therefore this thesis sees it necessary to outline a holistic system and propose a theory that synthesizes those fields that contribute to the human being built-environment relationship studies and the definition of the "sense of place".

These complexities also raise certain doubt on the applicability of the human being built-environment relationship in the urban planning and design process. The collection of necessary and sufficient data for each urban scheme may be impractical and also beyond the capacity of many planners and designers who are looking for a feasible and economical solution. Therefore, achieving appropriately the "sense of place" may be frustrating and hence ignored, or, as Shirvani (1985) suggests, vague and thus is a minor aim. One therefore can conclude that in today's human being

built-environment relationship the following are some of the main problems observed:

1. The studies, currently made in planning and urban design to achieve the objective: the "sense of place", stress the existing visible situation. Their projection into the future seems to be inappropriate for achieving the human "action", defined in this thesis.

2. The current attempt to achieve objectives in the human being built-environment relationship is analytical, while the urban planning and design process is synthetical.

3. Current studies on the human being built-environment relationship are basically fragmented, while urban planning and design takes an holistic approach.

4. Since human interaction is continuous, one has to consider a system that accommodates its dynamic nature (i.e., diachronic nature).

5. Except for the theory of Parsons there seems to be no binding mechanism in the fragmented contribution that each field of social and human science has made to the human being built-environment relationship.

6. A special emphasis and an explicit definition are necessary for the role of societal institution and organization as a generative mechanism (i.e., "structure") who continuously use the rules and resources in the human being built-environment relationship.

7. In the current studies of the human being built-environment relationship, the definition of the "sense of place" is not explicit.

8. The planners and designers take the nature of the human "action" as the first stage of the planning and design process (i.e., formulating the aim and objectives) for establishing the appropriate built-environment, while the social scientists, due to the process of "scientific" research, look at the characteristics of the built-environment as the first stage to justify the hypothesis and understand human action. In other words, the planning and design operation is opposite in direction to the research procedure carried out by the social scientists.

VI. THE AIM AND OBJECTIVES OF THE THESIS

The aim of this thesis is to contribute to the body of knowledge of the human being built-environment studies and the theory, definition and achievement of the "sense of place". This is pursued:

A. Through a critical study of the human being built-environment relationship, the spatial characteristics, the planning and design policies and their implementation in:

   1. the villages in three geographical regions of Iran, and
   2. the traditional residential areas of Isfahan,

through this study the thesis will attempt to identify certain important components of the "sense of place". They are noted to be the necessary objectives (but not sufficent) of the planning and design process so as to accommodate the desirable human needs.

Chapters two and three will outline and propose some of the main components of the "sense of place".

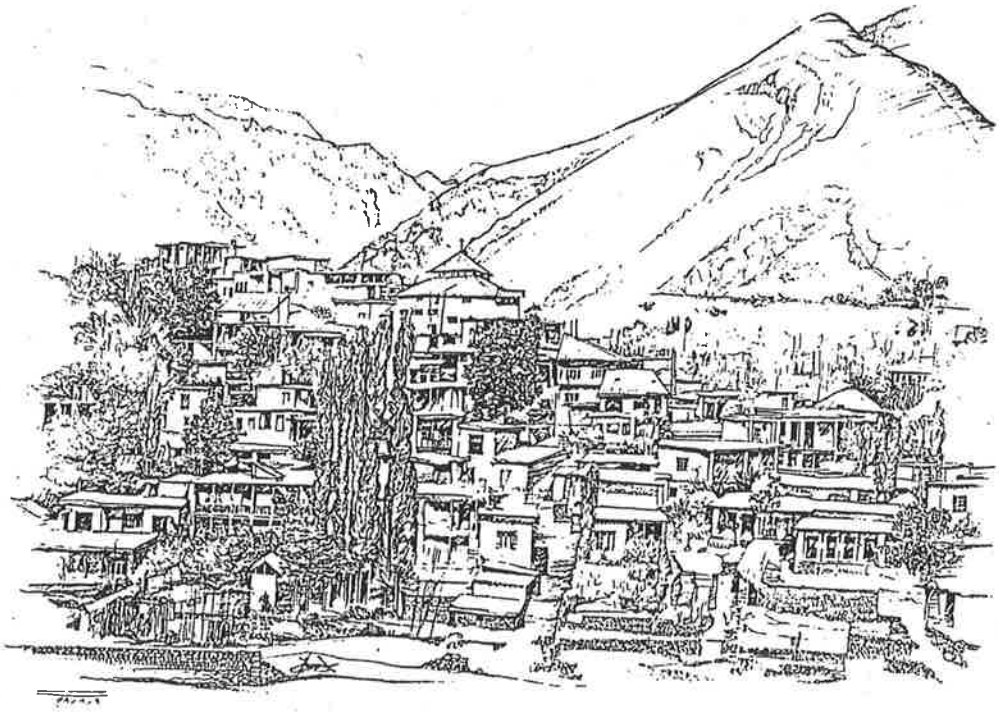
B. The outcome of "A" will then be used as the foundation to

1. argue and propose an alternative notion of the human being built-environment relationship,
2. define and attempt to formulate a theory for the "sense of place", and
3. propose an alternative approach to the planning and design process that may achieve the "sense of place".

This will be argued in chapter four.

C. The proposed planning and design process will then be partially tested in chapter V by critically analysing community involvement in redeveloping the Collingwood Housing Estate, Melbourne.

This thesis by no means has exhausted its subject. It is important to note here that further theoretical and experimental work is necessary to verify, support or negate the subject and the argument carried out in this thesis.



CHAPTER TWO

II. THE BUILT-ENVIRONMENT AND THE IMPACT OF RURAL POLICIES ON THE VILLAGES IN IRAN

I. INTRODUCTION

Up until now the thesis has not defined explicitly the "sense of place". However, its different conceptions, stated in chapter one, show that it may be understood as the human dimension of the built-environment, and that it is associated with space and its characteristics on two main human levels: personal and societal. Chapter one has also established that, on the personal level, one has to consider both behaviour and "cognition", which is a function and experience (i.e., imageability) of the spatial setting, and human "action", which is intentional, purposive, creative, motivational and rational. While on the societal level, one has to understand the cultural norms and institutional organizations (i.e., "structure"), their rules and resources and the mechanism they use as a constraint to create any spatial characteristics. Finally, chapter one indicates the necessity for a theory and a mechanism that synthesizes these two levels of human dimension for explicitly defining and creating the "sense of place".

By identifying in this chapter certain components of the human dimension of space, it is envisaged that the above implicit notion of the "sense of place" will be more explicit and its necessity as a spatial phenomenon

established. Thus this case study will explore the possibility(ies) of integrating the human dimension into the planning and design process.

Without underrating the personal level, the analysis in this chapter will consider mainly the societal level of the human dimension of space and its significance in manifesting the spatial characteristics that are founded within the "sense of place". Thus emphasis will be placed on culture, social institutions, allocation of resources and their organizations. They are noted to be part of the mechanism (i.e., "structure") that interacts with human "action" at the personal level and contribute to the creation of an appropriate built-environment and the "sense of place", as will be theoretically argued in chapter four. Note that in the next chapter, the personal level of human "action" will be explored, in the context of the societal level (i.e. "structure").

In the previous chapter, it was stated that the choice of the case studies in this thesis, were to examine the importance of the human being built-environment relationship and the "sense of place" at a variety of scales and places. It is therefore essential to note that plans for large geographical areas that may contain cultural diversity - planning on the national scale - may require explicit strategies that will accommodate the existing human and environmental diversity that characterizes the interactive process in these regions.

An attempt is made here to critically analyse on the societal level the factors and the processes that contributed to the formation of the characteristics of the built-environment of the villages in Iran before the "modern" rural development. Later this study will explore Iran's modern rural development, the related policies outlined in the third, fourth and fifth national development plans from 1962-1977, and their repercussion on the built-environment of the villages. Therefore this chapter will analyse:

1. The built-environment in three geographical regions of Iran. By considering the climatic, topographic and resources in three regions of Iran, this section will attempt to indicate explicitly some of the main contextual factors that contributed to the spatial identity and components that were attributed to the creation of the "sense of place" in the villages before the advent of modern rural development policies.

2. The socio-economic organization of the villages and its relationship to the built-environment. It is to establish further the societal level, its rules and resources (i.e., "structure") as contextual constraints and generative mechanism that contribute to the creation of an appropriate built-environment and the "sense of place".

3. The rural and national development plans: the policies, implementation and the impact on the villages. In this section an attempt will be made to establish the

necessity for the contextual (i.e., cultural) stability and continuity to create the "sense of place".

4. The contribution the "sense of place" makes to the planning and design process. An effort is made to assert the necessity for integrating the components (i.e., the contextual components) that establish the "sense of place", as aims into the planning and design process.

In this case study, the major data and analysis is descriptive. It is based mainly on the author's personal and practical research and experience as an architect who for ten years practised and travelled extensively in Iran. Moreover, the arguments, wherever seems necessary are supported by data from Iran's Ministry of Plan Organization and studies made by planners and social scientists who contributed or critically analysed the rural and national planning policies of Iran from 1962-1977. Note that since the 1979 revolution, and because of the disruption in the government structure, it is very difficult to obtain different sources of data that can be compared and critically analysed.

II. TERMS OF REFERENCE

To achieve the above objectives reference has to be made to the brief definition of "structure" in relation to the societal level and social interaction. With reference to Giddens (1984) and Layder (1981), in the previous chapter, "structure" was defined as a generative mechanism which creates certain observable manifestations. They were

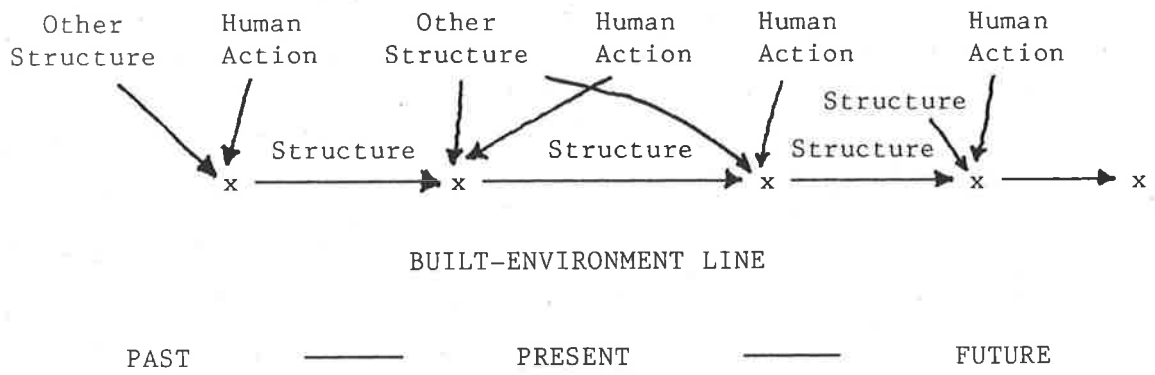
noted and classified into "contextual structure" and "interactive structure". Layder argued that any social interactive process occurs in a hierarchic order and refers to a preconstituted institutionalized "structure". This implies a specific a priori, identified by socio-cultural components, which influence and restrain the human being built-environment relationship.

According to Layder, the "structure" is known to be contextual because it is outside the individual's characteristics. It is born in a society which already has an established and definite organization and a conception of spatial manifestation. It may be "material" (economic relation of production and consumption), "ideal" (law, linguistic items, cultural knowledge) and/or "power" (1981:95).

The "interactive structure" is concerned with the creative capacity and autonomy of the human being to participate in his own "action". It enables him to fashion, organize the spatial elements to achieve the spatial characteristics in which he can carry appropriately his "action" and his ability to formulate purposes, negotiate meaning and plan for that "action".

Anthony Giddens (1979, 1984) elaborates much more on the notion of "structure". He argues that "action" and "structure" are dialectically related in interaction. In his argument "structure" refers to the rules and resources organized as the properties of the social system. However,

social system is composed of human "action" and "structure", and "action", in time and space, "is continuous in the production and reproduction of the social system". Furthermore, his theory indicates that "structure" is not only a constraint but also a resource for the transformation of the actor and society. In other words all "action" exists in continuity with the past which supplies the means of its initiation. Any transplantation may therefore disturb the interactive system. Hence certain continuity has to be carried from the past, through the present and to the future (drawing II-1).



Drawing II-1. The concept of the built-environment continuity from the past, through the present, to the future.

Bearing the above definition of "structure" and interaction in mind, and since Iran is a developing country, it seems quite necessary to define in the same context, the notion of "development" and underdevelopment in order to associate development with a certain built-environmental quality. In recent years, the idea of "development" has created a complex body of theories and models for a progressive transformation of society in the unindustrial-

ized nations, known as The Third World countries or the developing countries. The conception of development today seems to indicate a process of identified policies that create a large scale change in a preconceived direction, utilizing the resources available. In many countries, this process is expressed in the national development plan, and followed by an institutional organization for achieving the desired socio-economic changes formulated in that plan. Hence, in Third World countries the plans for development have acquired great political significance, as is the case in built-environmental planning. This is reflected in the allocation of resources, the process of development and the related national institutions (e.g., the Ministry of Planning, Department of Statistics, bureaucratic power). In other words, "development" and its related institutions seem to be part of the "contextual structure" in the interactive process.

The socio-economic problems in many Third World countries further indicate the complexity of the subject. It has created academically a new field of social science, known as "Development Studies". Basically, similar to built-environmental planning, its theories comprise a synthesis of economics, built- and natural environment, political theories, sociology, anthropology and psychology, all set in the context of an historical process. It is therefore an interdisciplinary approach that cuts along several professional boundaries. Its theories are of great interest but, for the purpose of this research, they are considered to be beyond the scope of this thesis.

However, it is important to note that in development, like built-environmental planning, there is the notion of allocating scarce resources and a value judgement that comprises the overcoming of malnutrition, poverty, and ill health through appropriate housing, social services, justice and many other factors that are related to the quality of the built-environment. Note that the latter two (i.e., social services and justice) are important components of the "structure". They identify the rules and social amenities and scarce resources, how, in what proportion and for whom they are allocated so as to establish a built-environment in which one can accommodate one's "action" and upgrade one's quality of life. For example, in many developing countries the squatter settlements, inhabited by the poor and argued for their appropriate human being built-environment relationship (Turner, 1976), are located near the city centres where employment for the unskilled is available. However, because of the economic value of land in the city centres, and the desire to establish a prosperous, yet cosmetic appearance, some governments, claiming that they are providing housing for the poor, destroy these squatter settlements and relocate their inhabitants in unaffordable, monotonous and environmentally improper housing estates on the outskirts of their cities, where land is cheap and public transport is not available. Therefore, these governments not only destroyed the unique human built-environmental relationship in the squatter settlements, but also prevented access by the poor members of society to their main source of employment.

Thus, integrating broad built-environmental policies and spatial characteristics into the national development plan is recommended by those planners who look at the quality of the built-environment as an essential part of development. Besides, in any rural policies, an attempt should be made to achieve the appropriate built-environmental characteristics (i.e., design) to accommodate the "action" of the inhabitants. Hence, the interactive process between the "structure" (including the built-environment) and human "action" has to be considered to accommodate, in a rural setting, the appropriate spatial characteristics for human "action". Such an objective has to be explicit and added to the economic ones, formulated in a national development plan.

It is therefore quite essential to distinguish between development and economic growth. The latter seems to define the terms of reference that indicate a monetary value and volume change of certain economic parameters in the context of a given institutional condition. It is a quantitative process comprising the extension of an existing economic situation or change to an alternative, more appropriate mode of production. The latter (i.e., development) strongly suggests a positive quantitative and qualitative societal change in all socio-economic, political and built-environmental aspects.

The idea of a continuity of social interaction, implies that development is to be conceived as a continuous historical process that identifies the reasons and cures

for underdevelopment. The distinction between development and underdevelopment points out the means to achieve dialectically the transformation of a given historical process from underdevelopment to development. The relationship between the human being and the built-environment is embodied in this transformation. This strongly suggests an opposition to a static situation of underdevelopment where society is removed from its historical context and the development process is imported and transplanted. The transformation further denotes the necessity for knowledge of the historic reality of development and underdevelopment in a certain defined context.

There is ample evidence to indicate that today's historic conditions and the Third World context are different from pre-industrial Western society. It is therefore apparent that any models and theories of "modern" social science, established by analysing the European Industrial Revolution and socio-economic transformation, have to be questioned prior to their application in Third World or developing countries. In other words, different social science theories and built-environment criteria have to be formulated for each of the Third World countries. The applicability of the models that are developed in a Western paradigm and employed as self-regulating mechanisms (such as market forces), have to be challenged for their appropriateness. In fact, these models, which seem to aspire to universal validity, disregard the critical distinctions between different social organizations and characteristics

of different historical processes and periods. All this indicates that, for a development process, similar to the human being built-environment relationship, space, time and the paradigmatic dimensions of the situation are to be considered.

In this chapter a term that is related to the design of the built-environment of a rural social organization seems necessary. Rural design refers to the process of spatial configuration in time and space of settings that accommodate the social production, reproduction and conduct of a rural social organization (dichotomous to urban). Furthermore, a village is to be defined as a geographical manifestation of a rural social organization. Its spatial characteristics reflect the meaning and "structure" and are related to the "action" of that particular human organization and its historical evolution.

III. A BRIEF PHYSICAL DESCRIPTION OF IRAN

To understand the rural planning policies in Iran, both in substance and context, it is necessary to draw an overall view of the country. This, even though it may be quite general, will give certain background information to this study.

Iran, or Persia, as it is known to many people in the West, is a vast, diversified tableland between the undersea level shores of the Caspian Sea in the north to the Persian Gulf in the south. The country, ribbed by mountain ranges

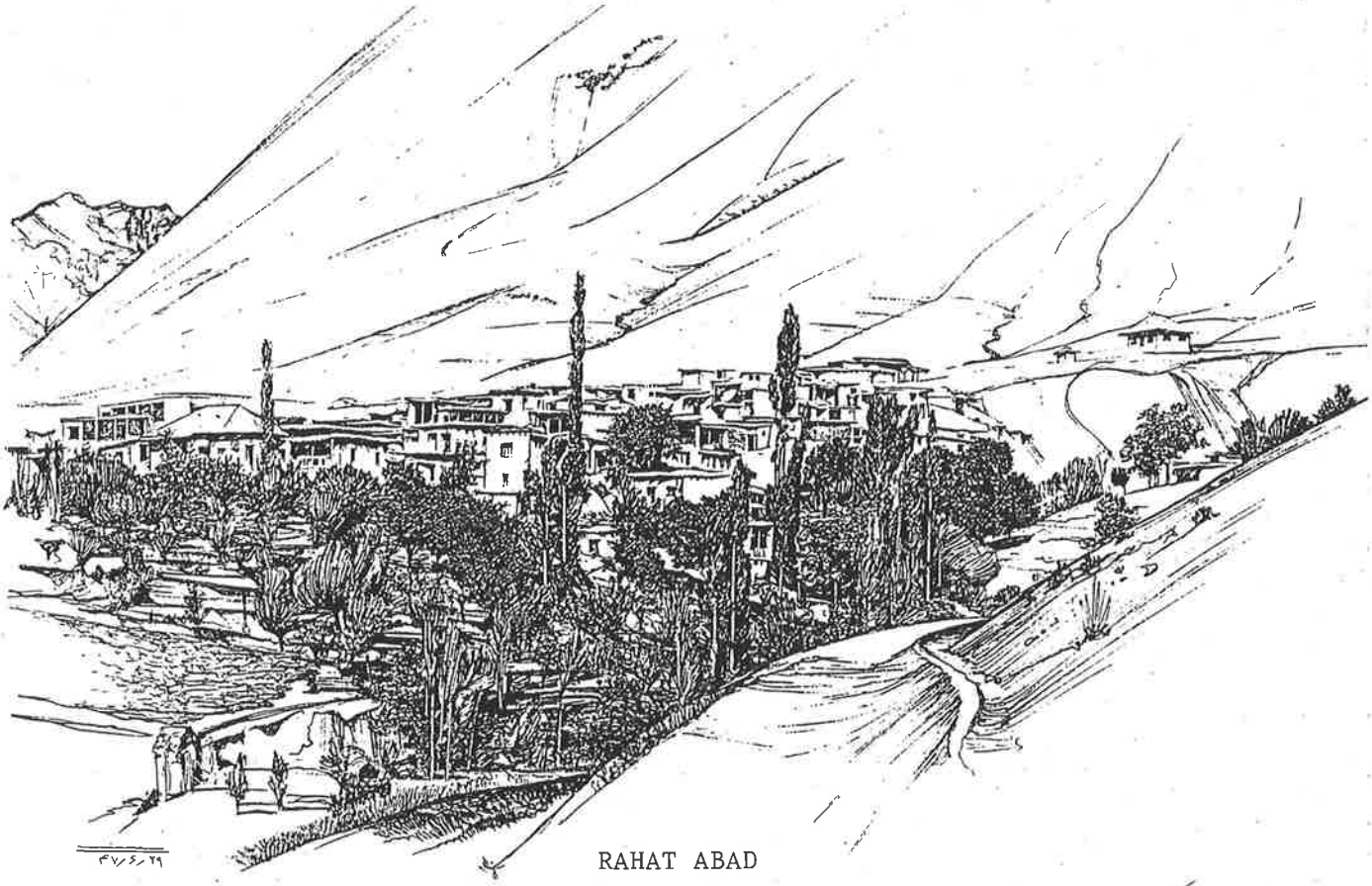
in almost all directions, comprises mainly a vast central plateau 3000 to 5000 feet above sea level, and two mountain ranges: Alborz in the north and Zagross in the west. Having an approximate area of 630,000 square miles, it is known to be the fourth largest country in Asia, or equal to twice the area of New South Wales. Therefore, any national policy has to treat Iran as a subcontinent with many diversified regional characters.

The latest 1986 Census shows Iran to have a population of about 48 million, half of which are rural. However due to the increase in rural-urban migration and higher birth rate in the urban areas, the proportion of the rural population is continuously decreasing.

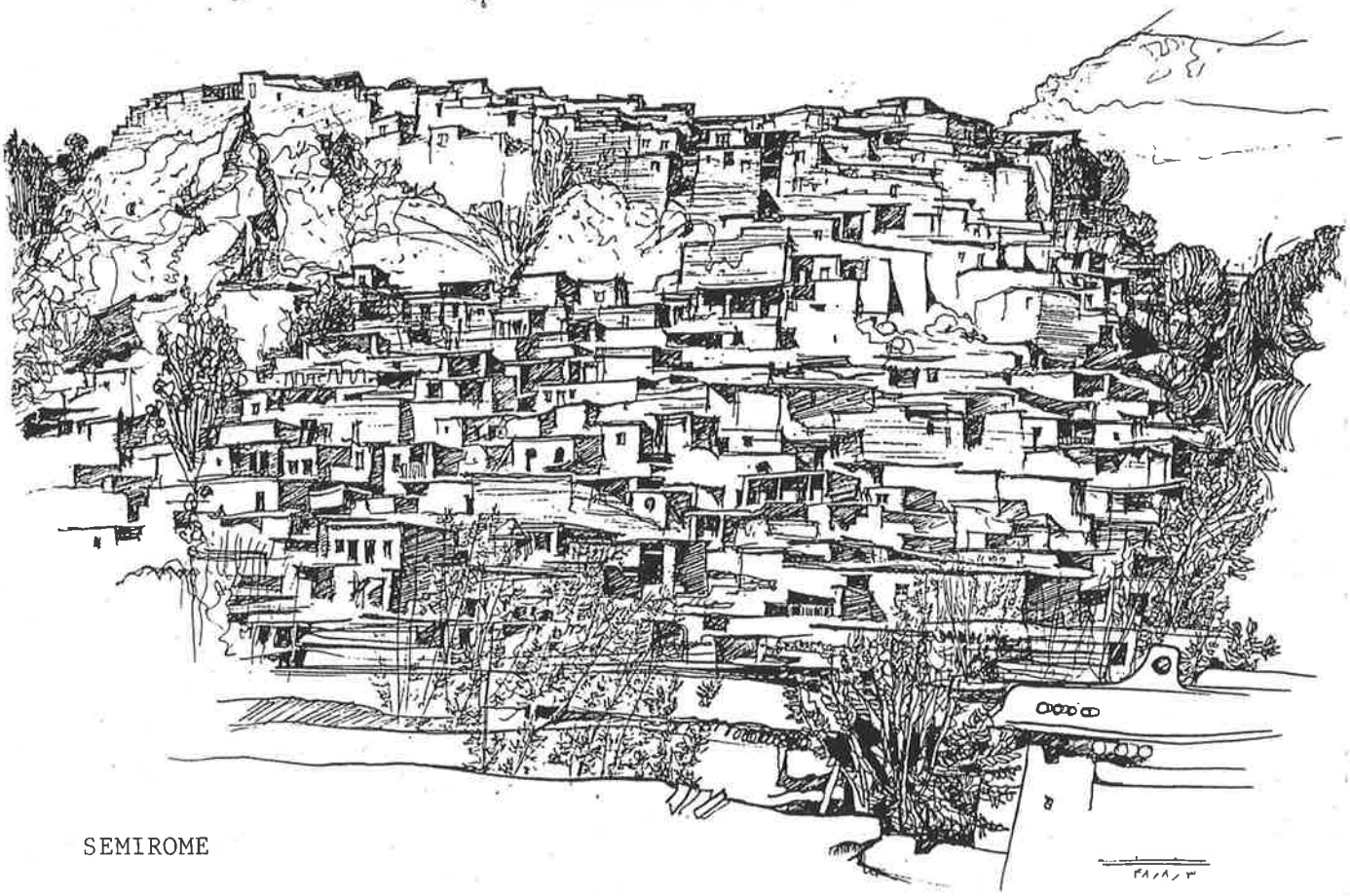
The most distinctive geographical character of Iran is its diversity. High, bare mountains covered with snow most of the year, deep, green valleys, rain forests on the Caspian Sea, a vast, flat inland plateau and arid inhospitable deserts are known to be the main features. Although the whole country lies in the temperate zone, its climate shows extremes of temperature, humidity, rainfall and wind. However, on the whole, Iran's climate can be easily generalized as semi-arid, except on the Caspian Sea (average annual rainfall 100 cm.) and the western mountain ranges. In fact, the central plateau, comprising the deserts Dasht-e-lut and Kavir-e-lut, is generally dry, with a sharp variation in daily and annual temperature (see map).



Drawing II-2: Map of Iran.



RAHAT ABAD



SEMIROME

Drawing II-3: Some scenes from villages in Iran. (Sketched by H. Seyhoun.)

The geographical variety is reflected in the variety of soil. The central region is barren and the narrow strip on the shores of the Caspian Sea, the Khuzestan Plains and the central Zagros Mountains are extremely fertile. More than half the country is desert and wasteland, 17% pastures and forests and only 30% is suitable for cultivation, half of which lies fallow (Amuzegar, 1977; Fisher (ed.), 1968).

IV. THE GEOGRAPHICAL FEATURES AND VILLAGE CHARACTERISTICS

The natural geography, water resources and vastness of the country contributed to the spatial characteristics and design of village settlements. Most settlements are observed to be located where a certain amount of water is available for irrigation and domestic use. They were therefore created:

a) along mountain ranges;

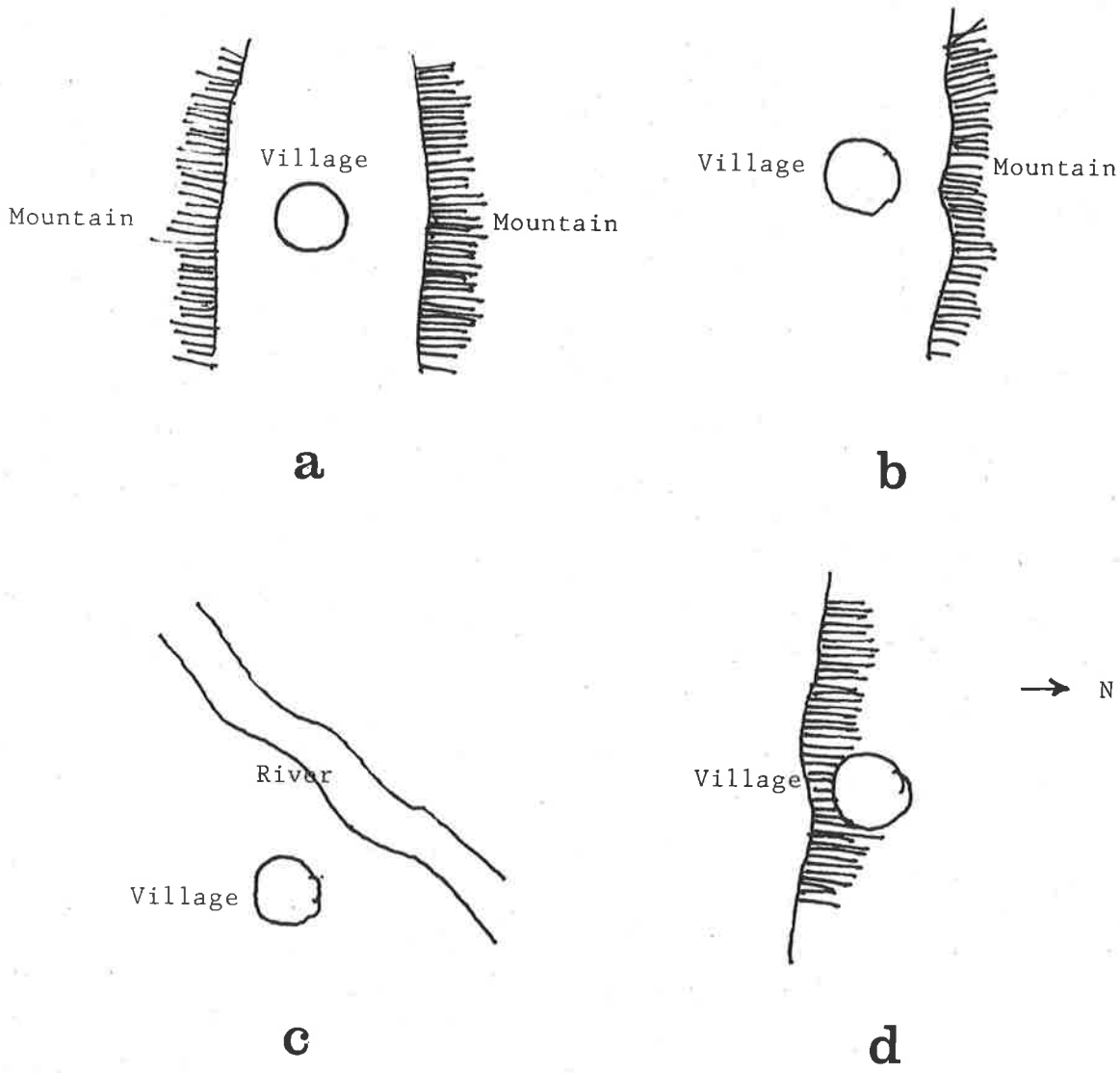
b) in the valleys or plains between mountain chains;

c) along the slopes that descend to the plateau or the sea; and

d) near the scarce rivers.

In the mountainous areas, due to the severe winter climatic conditions, settlements were set on the southern slopes (e.g., Massuleh Village) (Mozayeni, 1978). It seems therefore that water resources and climatic conditions were two of the main factors in choosing the site of a village. They related the village to the natural phenomena (i.e.,

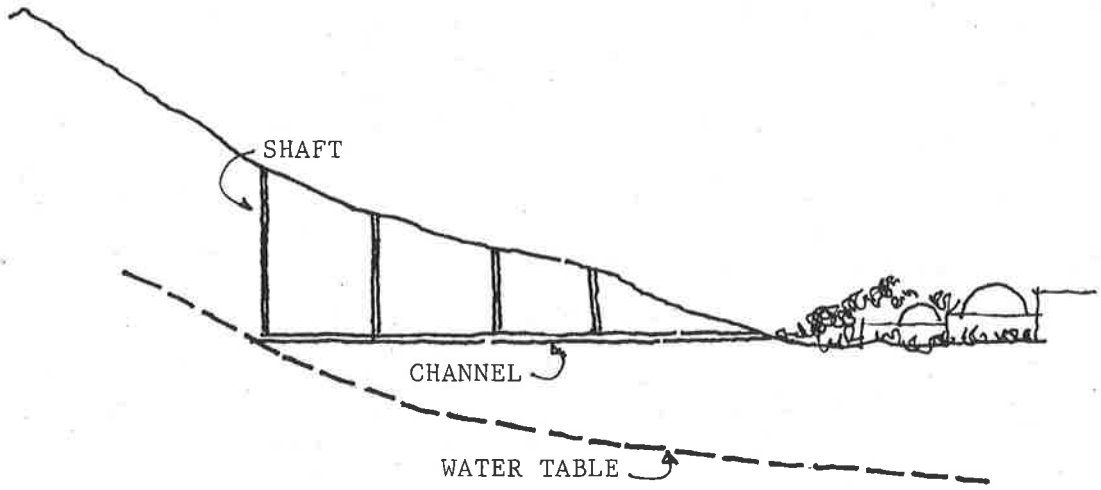
water, climatic conditions and topography) which contributed to the sense of orientation (drawing II-4).



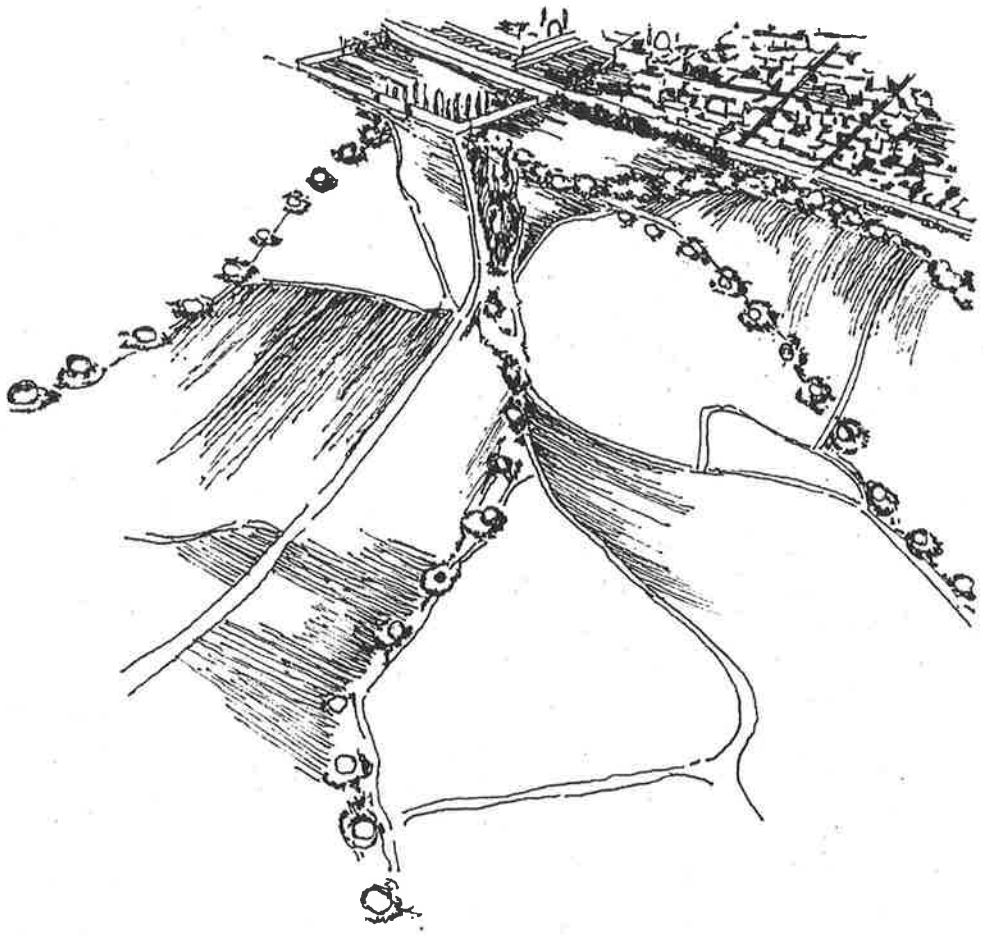
Drawing II-4: Different possibilities of settlement location. Note that site preference, due to availability of water resource, has related the settlement to natural phenomena, contributed to settlement orientation and geographical co-ordination.

Availability of water limited the irrigated land and the size of the settlement. It is quite interesting to note here the traditional system of irrigation: the quanat

(Kamiar, 1983) (drawing II-5). It is one of the principal elements that contributed to the spatial characteristics of those villages which are located on the plateau. At the foot of the mountain, a shaft is drilled to reach the water table. Then a horizontal channel is dug underground to carry the water to the designated place. At certain intervals along the channel, a vertical shaft is drilled for ventilation and removing the earth. Even though this type of irrigation system needs skilled labour (known as moghani), is expensive and requires continuous maintenance, it has been found to be very suitable for the country. Water loss, through evaporation, is marginal. The ecological system is undisturbed by engineering works. The valuable top soil is preserved and the underground water is neither polluted nor drawn in excess to lower the water table (drawing II-5). Maintenance of this system and water-sharing has made a major impact on community co-operation and the survival of the settlement in Iran's harsh climatic conditions.

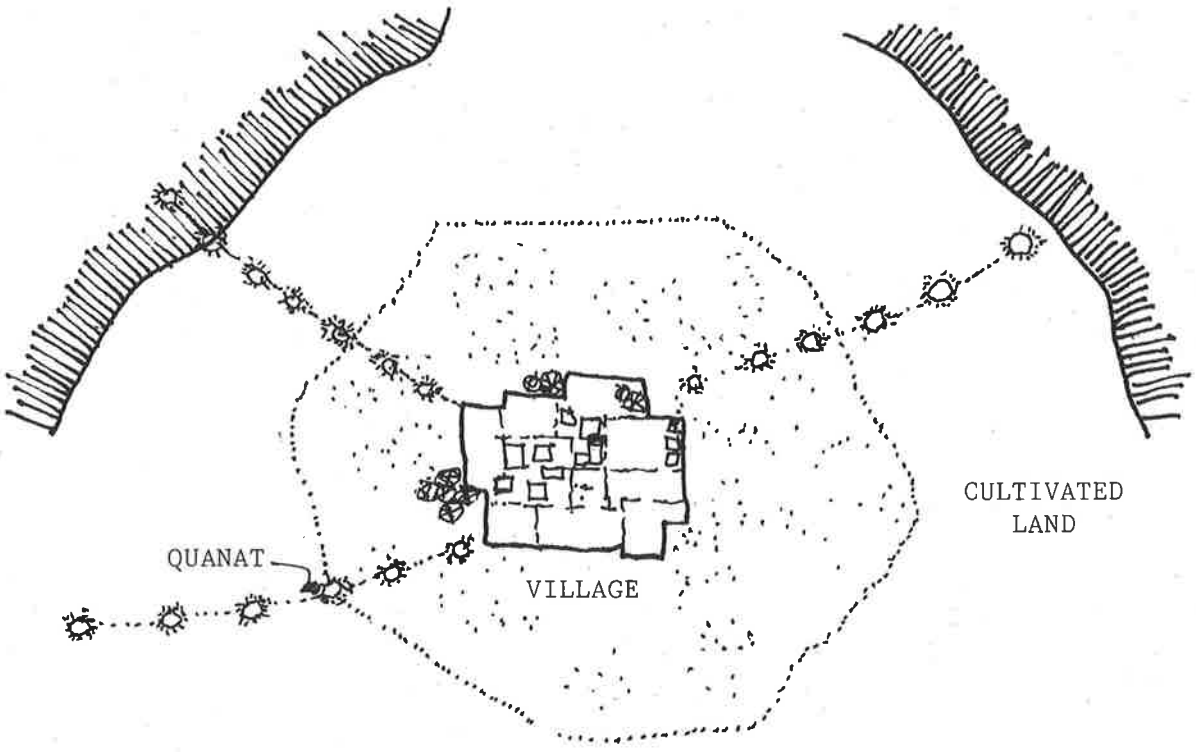


Drawing II-5a: Quanat system in Iran.



Drawing II-5b: Aerial view of the quanat system. In many villages on the Iranian plateau, the quanat system is used for supplying water for domestic and agricultural use.

Up until now, the quanat is considered to be one of the main systems for carrying water for irrigation and domestic consumption in the arid regions of Iran. It is especially suitable in areas where mountains and tablelands are combined. The mountains are used for tapping the water through precipitation, while the tableland is used for cultivation. Sometimes two or more of these quanats are constructed for quite a long distance to supply sufficient water for one settlement. It is explicitly observed by the traveller who flies over Iran, and sees the ventilation shafts in the landscape resembling a string of doughnuts from the foothills converging on the villages (drawing II-6).



Drawing II-6: Typical diagrammatic plan of a village in the arid region of Iran.

On the central plateau the cultivated lands around the settlements have created green, cool and inviting human spatial settings in contrast to the predominant brown, arid and inhospitable, yet sublime and majestic desert (i.e., green belt). All through the history of these villages, the scarce water resources had been not only an economic constraint, but also a factor used creatively to establish certain ordered patterns of spatial elements (e.g., water, cultivation, village form) in space. Water management has been used to generate an order between the built-environment and the natural topography. They are mainly: a harmony in contrast between the cultivated built- and the arid, natural environment; orientation due to the constraint in the location of villages and symbolically expressing the notion that the built-environment is being subdued and under the power of the natural forces. Here one experiences that the human being has not conquered nature, but lives harmoniously with it. These qualities have been, throughout the history of Iran, a source of asserting the symbolic meanings that signify certain cultural criteria for an ideal quality of the built-environment (Ardalan, 1975). They are consciously experienced by travellers who pass through the desert and reach these settlements. In the Australian Women's Weekly (Malcolm, October 25, 1978) a description of Tabas (a town on the fringe of the desert) seems to be an appropriate expression of the experience of these qualities:

> In the years I was living in Tehran, ... we were invited to a remote desert place in the north-east. We travelled in two four-wheel drive vehicles. If you

> break down on the Dash-e-lut - so much feared in Alexander the Great's disastrous return march from India, where he probably lost 60,000 of his army and camp followers - no-one may pass for many days.
>
> Even for modern travellers the remoteness of Tabas, 500 kilometres from another town of any size, is impressive. Mud-walled villages ..., sand howls through ruined caravanserais, small groups of tribesmen move slowly from nowhere to nowhere with their camels.
>
> Our party included a novelist and a mining tycoon, an art historian and an Iranian cabinet minister's wife, but we were nomads too - tents, flatwoven Persian rugs, waterskins cooled by evaporation were more important than the distant comfort of Tehran.
>
> Dusty, exhausted, we rolled into Tabas in the violet evening light. Its mud-brick walls were gilded by the setting sun; the deep shadows were cool and welcoming; friendly words came from passers-by. Tabas is not on the tourist map - 'Go to Tun and Tabas' is a Persian way of saying 'Get lost'. But it was a paradise in the desert.
>
> The mayor welcomed us with the luxury of a visit to the hamam, the tiled bath house.
>
> Then we rested on a precious carpet in a cool underground summer living room ... A sofre, or a highly woven cover, was spread on the carpet and traditional dishes were brought for our delight. ... That night we slept in the mayor's garden, beside a tinkling fountain, heady with the scent of orange blossom and the music of the nightingales. ...

From the above experience, it is quite explicit that the green belt and the spatial contrast have formed the differential spatial quality between the secured "inside" and the arid "outside" environment, or between "here" and "there". The quality of "here", in contrast to "there", is reinforced by the setting of the settlement that manifests the sense of orientation to create for the inhabitants and travellers, personal and communal security. Therefore, one may conclude that the spatial characteristics of a village are to create for the human being a secure "place". In this case it is expressed through contrast, internal unity and orientation.

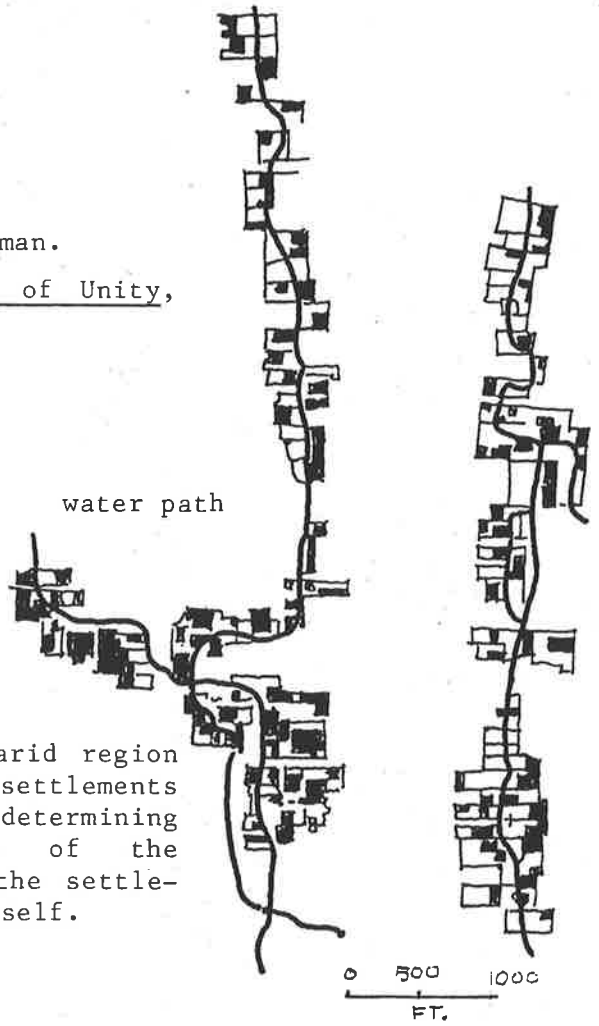
Other important features that created further security in the settlements, were the means of protection. On the Iranian plateau, which was frequently invaded by hostile tribes, the villages were strongly fortified by a thick mud-brick wall. The internal arrangements were often a cluster formation accessible to a main street that started at the gateway and ended up at the village square, where a shop, a mosque and a bath were sometimes located, depending on the size of the village. However, due to the present security in the land, many villagers see these fortifications as unnecessary. Therefore they let the walls disintegrate to become monuments of the past. Moreover, in the settlements whose populations have increased or prospered, their inhabitants look at the walls as restrictions on their expansion. Therefore, one observes that in many places the walls are removed to give the inhabitants the opportunity to build outside the village.

The fortified village cluster of the Iranian plateau (gal'ah) is a square-like settlement. It contains internal courtyard houses, a central public square, a boundary wall, corner towers and a single gateway (drawing II-7a). The houses are juxtaposed along the outer wall to create a honeycomb pattern of solids and voids.

However, in some places, one observes a linear village created along the water pathway. The direction of flow determines the streets and the communal part of the village (Ardalan, 1975). The water which is the main element that characterizes the village, continuously passes in and out

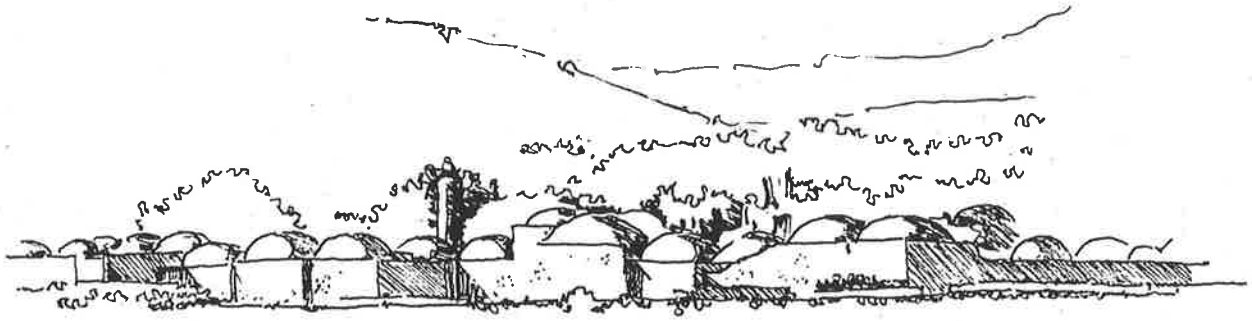
The village of Sehkunj near Kerman.

Source: Ardalan, N. The Sense of Unity, 1975.



b

Some of the villages in the arid region of Iran are linear. The settlements follow the path of the water, determining the spatial characteristics of the village. Hence the unity of the settlement is created by the water itself.



a

Most of the villages in the arid region of Iran are fortified clusters (i.e., gal'ah).

Drawing II-7: The main village patterns in the arid region of Iran.

of the enclosed courtyards to reinforce in a chain-like manner the unity of the village and create a much more hospitable internal environment, in contrast to the outside terrain (drawing II-7b).

Villagers on the Iranian plateau use mainly local materials, such as mud-brick and traditional technology to create appropriately their built-environment. This material, even though it needs continuous maintenance, has proven to be a good insulator that moderates the internal environment of the dwelling. Similarly, it is also used to construct the vaulted and domed roofs. Using the local material (i.e., harmony of colour and texture), the traditional technique for building (i.e., the walls and roofs) and the layout have created a sense of unity in the villages, manifested in the simplicity, purity and harmonic relationship of the surfaces, forms and spaces.

Therefore, if one has to look at the built-environment of the villages in the arid deserts of Iran, one notices the earth-coloured profile, texture, form and the skyline of a settlement, which is changing direction upward, to form different sizes of domes and vaults. It is essentially nothing more than the continuation of nature and the horizon. The skyline is dominated by the minaret and dome of a mosque that, through their social and religious meaning, manifested by the symbolism of their dominant forms, have generated a centripetal force to bind the community spatially and socially. While the surrounding and integrated cultivation and the cluster form of the village,



A scene from the north-eastern Alborz region.

The Alborz and Zagross Ranges are the two main mountain chains in Iran. In these mountains the settlements are usually located on the slopes, leaving the valley floor for cultivation.



A village in the Alborz on the road from Tehran to Chalouze.

Drawing II-8: Settlements in the mountain region of Iran.

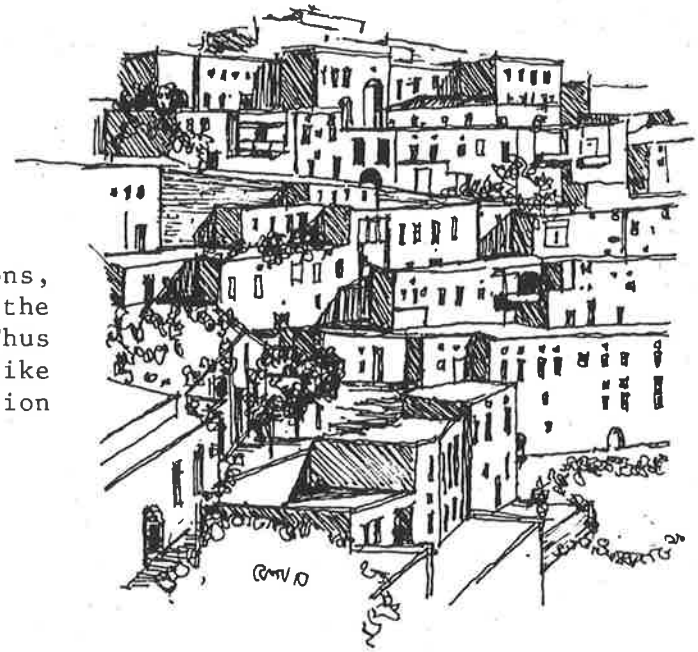


Massuleh in the Alborz Mountains. It is a village built on the terraced slopes of the mountain.

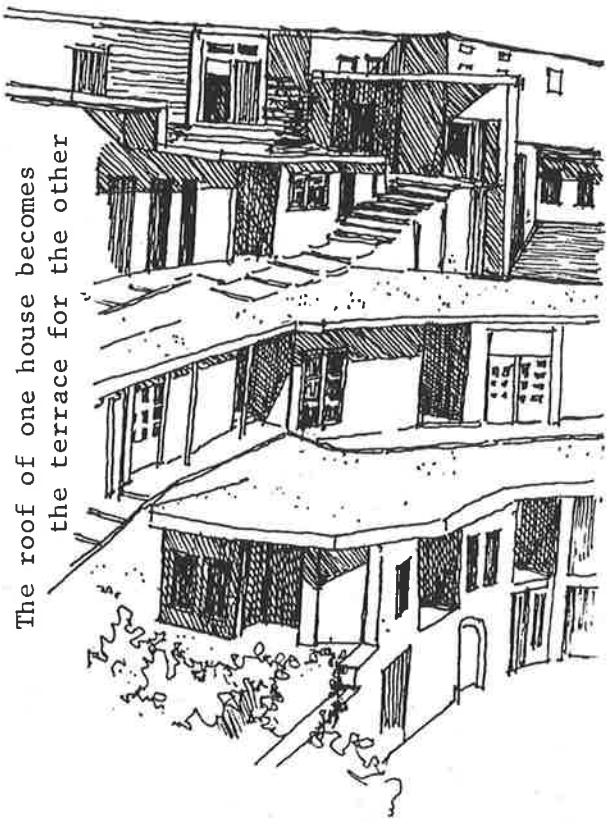
Drawing II-9: Sketches of Massuleh by H. Seyhoun.

Massuleh is a village vernacularly created in harmony with its natural setting and the need of the inhabitants. The horizontal lines created by the terraces and roof tops are the continuation of the mountain slopes.

In spite of different functions, the buildings in Massuleh have the same spatial characteristics. Thus a house and a mosque look alike and the bazaar is a continuation of the terraces and roof tops.



In Massuleh no building stands by itself, each building is a part of the whole composition. This continuity and unity is very well expressed in the facade treatment and the juxtaposition of the roofs and terraces.



The roof of one house becomes the terrace for the other

Drawing II-10.

have humanized the harsh climate and created a contrast to reinforce the internal unity and distinguish it from the harsh arid climate of the desert. The internal unity and contrast have therefore created a tranquil and harmonious "place", orientated and controlled by certain natural phenomena, that is, water, mountain, climatic condition and other regional geographic features. Hence in the villages of the plateau, the natural resources are both constraints and a source of inspiration for the creation of the spatial characteristics and regional identity.

In the mountainous regions (e.g., Alborz Ranges), the villages take different formations to create somewhat the same conception (i.e., security, harmony, orientation and identity). Settlements are located on the slopes, especially the southern ones, and rising above the valley floor to keep the precious fertile valley for cultivation (drawing II-8). These slopes are sometimes terraced and roughly divided by means of dry stone walls to create where possible terraced gardens (e.g., in the volcanic region of Damavand, north-east of Tehran).

Here too, the conception and limitation of the terrain have been a source of inspiration to create the orientation and co-ordination to the surrounding natural form. The dwellings and circulation form (drawing II-9) are made to humanize, through scale, the built-environment and supplement the rugged natural mountain slopes. In fact, looking at these settlements from a distance, one cannot but see the buildings, like blocks of stone regularly piled

and laid side by side to create an internal unity and the necessary harmonic contrast with the surrounding nature. Even though the netting of the built form is generally more loose than that of the central plateau, an ordered pattern through a different type of clustering can be observed. It is highlighted by the picturesque vista that one experiences when viewing the whole settlement from the facing slope or from somewhere along the access road where, suddenly and dramatically, the whole village is experienced. It seems, then, similar to the villages on the plateau, but different in manner, a contrast between the built and the natural, and between the arid and the inhabited has been created to establish, through contrast, a harmony with nature. Through the interrelationship of the spatial elements of the settlement (i.e., between the spaces, form, texture and material) an internal order has been established to signify a collective meaning and a unity of the whole settlement.

Many of the ritual activities that give cultural meaning to the inhabitants, are due to the geographic and climatic condition and the collective experience of the panoramic view of the sublime, rugged mountains. To the inhabitants, the mountains and their seasonal change from the freezing snowy winter to the welcoming spring and its festivities (the beginning of spring is Iranian New Year: Now Rooze, celebrated by the Iranians to mark the creation of nature) and the dry summer, give the necessary change for the realization and co-ordination of their positions with respect to the natural forces that shape the mood of

the mountains. It seems to be another potential conscious experience that contributes to the sense of communal unity and harmony with nature.

Here too the inhabitants utilize the local materials and construction techniques to form the same notion of unity in their built-environment and harmony with nature. While those on the plateau use mud-brick and vault and dome construction, the mountain people use mud-brick, stone and timber and flat and recently sloped roof construction. It seems, then, that different regions use different local materials to create different characteristics and achieve similar spatial qualities.

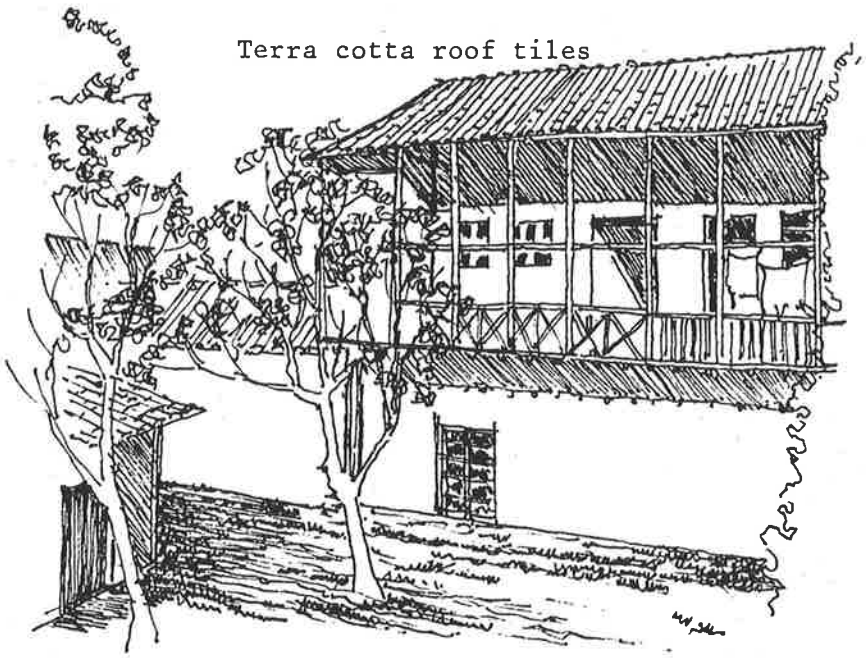
In this region, buildings have taken different forms and shapes. The interior court dwelling of the plateau is seldom made. The slope of the mountains and the need for sheltering animals during the winter, have frequently led to the construction of rather complex buildings. Two storeys, the ground floor for animals and the first floor for living quarters, seem to be quite common. Other places, barns, stables and two-storey dwelling units are constructed around a courtyard. Still in other settlements, where stabling near the dwelling is impossible, separate areas on the outskirts of the village are constructed as animal shelters.

Another, different organization of settlements can be observed along the Caspian Sea. Due to the abundance of rain, the richness of the soil in the plain between the sea

and the rain forest mountains, and the coastal access road, most of the settlements have either taken a linear shape parallel to the sea-shore or loosely-knit scattered buildings between the rice fields (drawing II-10). Here too, one observes the same idea of preserving the precious soil for cultivation (rice is the main crop of the region). Due to its climatic condition, however, in the past two decades or so, many modern tourist villages and villas for rich people were constructed along the coast as summer resorts. This has introduced a new economic factor and has made a dramatic change in the spatial configuration of the region.

The linearity and the loose netting of the settlements are due to the necessity for proper cross ventilation so as to reduce the effect of high humidity: a climatic feature of that region. As a result, a different settlement characteristic is observed along the Caspian Sea.

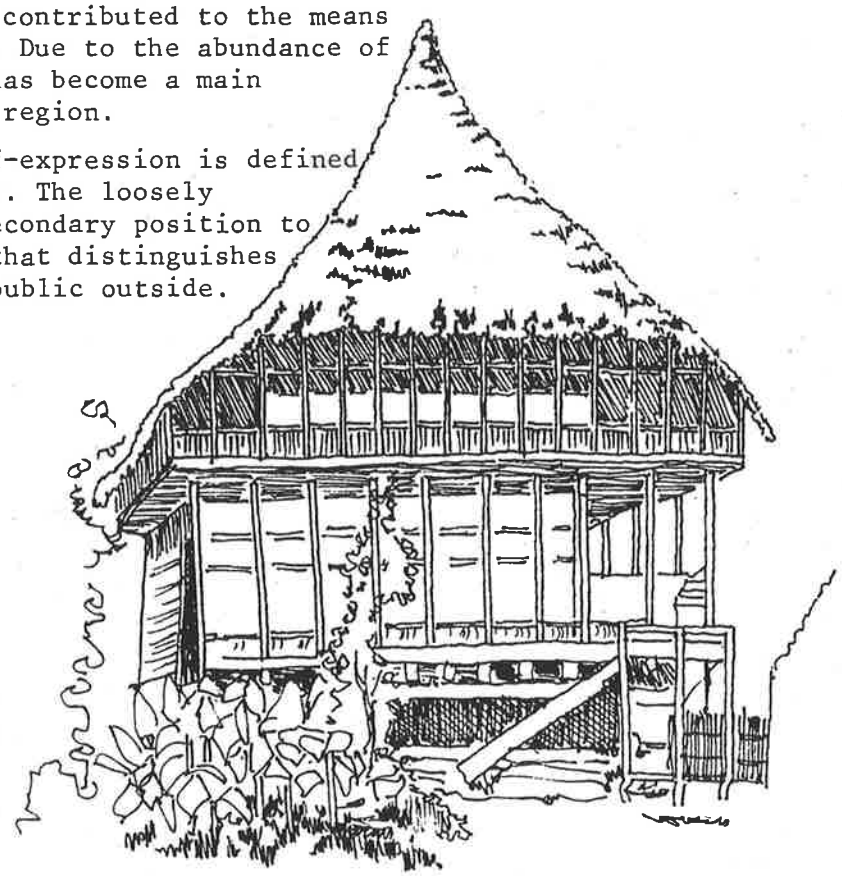
It is observed that the same notions, known to exist in other settlements, also prevail here. By constant experience of the rather inhospitable, but impressive rain forest and mountains, and integrating the loosely netted settlement with the natural environment (drawing II-10), harmony with nature has been created. Note that instead of contrast, harmony is created through integration. Moreover, the mountains, being parallel to the coast, the natural phenomena necessary for the orientation, control and inspiration for the creation of the settlements are realized. It seems that here too similar notions that are seen as



A typical house in the Mazandaran region of Iran.

In the villages in the Caspian region, the climatic condition and resources have contributed to the means for self-expression in space. Due to the abundance of rain, the shape of the roof has become a main architectural feature of the region.

Territorial boundary and self-expression is defined by the area the roof shelters. The loosely defined walls have taken a secondary position to establish the boundary line that distinguishes the private inside from the public outside.



Drawing II-11: The building characteristics in the Caspian region.

paramount in other regions, are achieved through different spatial elements and characteristics. These notions are mainly the sense of internal unity, security, regional identity, orientation and harmony with nature.

The above notions are further reinforced by the utilization of local materials and building techniques. On the plateau mud-brick is used and in the mountains a mixture of stone, mud-brick and timber, here the predominant material is wood. Hence, by using the local materials, which have a specific texture, colour and pattern, other spatial characteristics, typical of the region, are explicit and have supported the desired built-environmental conceptions.

The building techniques on the Caspian Sea, are the result of the regional materials and climatic conditions. For accommodating the humidity, the buildings are elevated to create better cross ventilation and prevent floor dampness. While for the heavy rainfall, a high-pitched roof, made from terra cotta or rice straws is constructed. The result is a spatial characteristic identifiable with that particular region of Iran (drawing II-11).

The above study strongly suggests the diversity of the spatial characteristics that may achieve the same built-environmental conceptions for different regions of Iran. Different local materials, climatic and geographic conditions and features, are observed to be both the limitations and the resources for a creative inspiration to achieve differently, harmony, unity, order, identity and

orientation. Therefore identifying human comprehension and knowledge of the local resources and rules that determine the spatial characteristics is paramount for establishing an appropriate built-environment. Such knowledge necessitates a certain amount of understanding of the regional resources, techniques, technology and, most important of all, the symbol systems that over time became embodied in their vernacular architecture and are used by the local inhabitants in their socio-spatial production and reproduction. However, in the terms of reference of this chapter, it was stated that socio-spatial production and reproduction are the outcome of a continuous social interaction between human "action" and "structure". "Structure", related to the societal rules and resources, was defined as the generative mechanism which creates certain manifestations. Furthermore, human "action" and "structure" are located in a historical situation and a process. Therefore understanding regional context implies the necessity for understanding the historical situation and process of the "structure" - that is, the social context.

V. THE SOCIO-CULTURAL CONTEXT AND ITS IMPACT ON THE VILLAGE SETTLEMENT CHARACTERISTICS

Because of the aridness and vastness of the Iranian plateau, a unique geographical phenomenon has emerged. The city-country dichotomy and relationship, as defined in the European geographical sense to differentiate two different types of land use, is inapplicable. The European geographical notion of country usually implies the lands that

are not part of a city boundary and are usually inhabited by rural people. Therefore, the country begins where the city ends, while the vast deserts and saline swamps in Iran have established barren land and nothingness between isolated settlements. In other words, human activity ends and begins only in and around the settlement where water is available. This has created a different dichotomy noted between the village and the city. Its size, status and diversity of population depends more on the abundancy of water than land use. It is for this reason that most settlements are noticed to be located in the north, west and south of Iran.

The vast emptiness has led each settlement, whether a city or village, to develop and grow into a unique sub-cultural identity. Unless it is accessible and very often visited, the sub-culture has evolved historically with a limited external influence. The isolation has generated a certain inter-social unity and communal co-operation, reflected in their resource allocation, spatial and social management. The more the settlement is isolated, the stronger the internally uniting force and greater its difference from the outside world. However, one observes that due to geographic location, abundance of water and manufacturing industries, some of these settlements (i.e., Isfahan, Yazd, Kirman, Shiraz) grew to become urban in character. They over-dominated the nearby villages to form a network of intra-related settlements and developed a regional identity. Others had their opportunity for

growth or regeneration curtailed as a result of a destructive invasion. These settlements, due to their location for years remained isolated. Even today some have minimal contact with the outside world.

Since the early 1960s, the government has set a certain criterion to classify the settlements. At present all settlements with less than 4999 inhabitants, have a village status, while those above that are noted as urban. This classification ignores the usual socio-economic and cultural criteria that usually differentiate the rural from the urban, and village from city. Furthermore, there seems to be no sub-classification between the different villages. In fact, this classification strongly suggests it is a bureaucratic standard to identify the necessary services and the responsible institution - that is, the Ministry - under which it has to be managed. Note that all urban areas are under the Ministry of Housing and Urban Planning, while the villages are at present under the Ministry of Agriculture, but previously and up until 1977 the villages were under the Ministry of Co-operatives and Rural Development.

This bureaucratic classification gives 60,000 settlements in Iran a village status, of which 48,000 have a population of under 250. Many of the latter are apparently unproductive, underdeveloped and very much isolated. Furthermore, under this classification about 50 per cent of Iran's population is rural.

Modern Iran is populated by a variety of races, cultures and life styles. During its long history, different people at different times invaded different regions. In crucial periods, such as the devastation caused by the Mongol invasion, people left their settled areas and chose the nomadic life style. In the period of internal peace, the nomads who had a relatively healthy life style and increased more than their economic base could sustain, found themselves obliged to settle and form villages (De Planhol, 1968). Later these new settlements attracted those who saw themselves alienated from their own tribe. Note that the central government usually encouraged settling, for the collection of more taxes, and put pressure on the nomads to choose the alternative life style.

De Planhol (1968) saw a difference between the settlements occupied by the nomad tribesmen and the earlier peasants. He observed, as is the case of the Turkamans in Gurgan, that the availability of water was not the criterion for choosing the site. Later studies indicated that this was an exception to the rule. In fact, Whyte's (1974) study in Lurestan, states explicitly, that the tribal village location was very much related to the availability of water.

Besides the climatic, geographic condition and ethnicity, the central political power had a great influence on the spatial configuration of the villages. The historical development, of the social organization, laws and economic distribution of resources in the Iranian villages, are well

documented by Lambton (1953) in her book Land Lords and Peasants in Persia. She thoroughly argues the relationship of the village spatial organization, political system, land ownership and availability of water since the Islamic invasion. The classification of society into the powerful landlords, peasants and the small land ownership was attributed to the taxation system, the type of land ownership and their historical evolution. Never in the history of Iran, has the country had a stable landed aristocracy that transmitted an estate in its entirety from generation to generation. The reason is due mainly to the Islamic law of inheritance the nature of the society and its development, repeated anarchy and dynasty change and ownership change because of the economic situation.

For those who are interested, it is important to note that Lambton (1953) thoroughly elaborates on the development of Islamic Law of land ownership, water, agricultural produce and taxation. She has made a lengthy analysis, discussing the Islamic Civil Code under the Shi'ah School of Law, from which the modern civil code of land ownership in rural areas and the relationship of the means of production are derived. What is essential to note here is that practical reasoning, the idea of share-cropping and traditional customs played an important role. In other words, the right of each individual and community is established by the historical situation and the process of the development of the socio-spatial organization and production in a framework as defined by the spirit of Islamic Law.

The laws of ownership and management of land and water are very much documented in the Islamic tradition. As a Law, water and pasture land belong to the whole Islamic community. It is a tradition generated and reformed by the culture, the climatic, and geographic conditions of the situations. However, the existence of private property is also well documented, recognized and approved of. Land has to be with a permanent tenure and transferable to heirs. In fact under the law, there are different types of ownership. They are mainly: the privately owned land by individuals, the land which the imam (or government) holds on behalf of the community and the awgaf: the land whose benefit goes to the whole community or to a charitable organization. However, there is a law which states that a person loses his right of ownership, if the land is left for three years uncultivated or undeveloped. Moreoever, the one that develops the land has as much right as the owner of the land. Therefore there are many mechanisms in the system to encourage development of fallow land.

Similarly, there are traditional laws for water management and ownership. According to Islam, water is divided into three general categories: rivers, wells and springs. Even though in general terms, water is owned by the whole community, the rights and management of these water categories, depending on the place and abundance of water, are based on certain laws. Water channels, for example, belong to those who have dug and maintained them. Therefore they have the right to buy and sell the water

channel. As far as the right to use the water that passes through the channels, there are Islamic laws for water distribution. These laws of distribution are usually based on daily or hourly rotation of water usage, shares in the dams constructed along the channels or outlets to smaller irrigation channels. Thus water distribution, ownership and management are subjected to traditionally regulated rules formulated for that particular situation (i.e., place of scarce water resources) and are part of the societal institution and organization (Lambton, 1953).

All these traditional laws and rights to resources (i.e., land and water) were part of the Islamic "structure" prior to Iranian land reform. They were the mechanism that interacted with human "action" to establish an identifiable means of agricultural production and village spatial characteristics. In other words, these laws were evolved and formulated historically and traditionally to create societal and individual rights and responsibilities for certain situations in space. Therefore they were the means for security: a pre-condition and component necessary for the creation of "place".

What is also important to note is that prior to the 1962 land reform, land and village management was communal (Lambton, 1953). Its development can also be traced to pre-Islamic and early Islamic periods. Communal organization and dealing with communities rather than individuals was seen, at that time as an administrative convenience, especially for collecting taxes. Note that taxes were

collected from both the peasant and landlord. Early Muslim institutions regarded highly, agricultural prosperity. They realized that if the peasant had some interest in his land and some degree of local autonomy, he would be more likely to cultivate better, produce more and afford to pay more taxes. Whatever the initial reason for this preference, this corporate and communal societal and spatial administration passed down in Iran through time to reach the period before the 1962 land reform. One therefore may conclude that villages, from early time have adopted a communal system. It also became, through time, the social organization in which the basic right of an individual and the community were explicit, and thus the framework for social, economic and political interactions was established.

However, it seems that the system and history have brought with them certain changes to the organization of the village. Apparently the taxation system has placed a burden and unjust demands on the peasants. It made them more dependent on the rich and powerful, who came to play an important authoritative role in the village production. The rich and powerful also saw themselves as being protectors of the peasants, vis-à-vis the provincial and central government and as responsible to carry government policies (Lambton, 1953). These rich eventually became the powerful landlord class in the Iranian pre-1962 parliament (i.e., Majlis).

Before the 1962 land reform, most of the landlords were absentee (Katouzian, 1981), residing in provincial capitals, and part of the urban affluent class. Their agricultural land was not hereditary nor untransferable, as was the case in Medieval Europe. Agricultural land was bought and sold in the market like any other commodity. In fact, during the years, some of the urban merchants became big agricultural landlords. Furthermore, the religious institution order, which managed the awgaf, came to own a recognizable percentage of the agricultural land. It is interesting to note that this phenomenon is many times misunderstood by some social scientists and intellectuals who try to find similarity between Iran and the pre-Industrial Revolution society of Europe or the powerful landlord of Latin America. Their misconception is explicitly indicated in their attempt to analyse, through a mechanistic model or a Marxist model, the Iranian traditional socio-economic and political "structure". It is also important to note that due to the landlord urban status, some of the agricultural surplus in the village used to go to support city dwellers. Keddie (1978) saw that, as a reason for lack of capital accumulation and why capitalism did not develop in Iran. The fact that the rural social organization, the possibility of land ownership and the residency of the landlord in the urban area was different from the Medieval European one, Keddie's deduction of Iran social transformation from Medieval to Capitalism seems debatable.

The village socio-economic organization, before the 1962 land reform, was generally based on the peasants holding either plough land or a share of the water. Both were the bases for share-cropping. The former, known as juft, means either a yoke of oxen or the land that can be cultivated by a yoke of oxen (Lambton, 1953; Keddie, 1978; Katouzian, 1981). One of the most important rights attached to juft or plough land was the right for all peasants to use the pastures and to collect in them, scrub for fuel. This right applied to both the peasant and landlord lands. It encouraged the communal organization in villages, and identified the individual's right within the communal rights: a principle noted in the Islamic tradition. However, as Lambton indicated the right for collecting scrub was later weakened by the power of the landlords.

Another significant communal criterion can be observed in the redistribution, at certain periods, of the rented lands of the landlords. As indicated in the study undertaken by Miller (1964) in the village Hossein-abad and observed by Lambton (1953) and Craig (1978), prior to the 1962 land reform, every three or four years the landlord's representative (i.e., Katkhodah) used to redistribute the rented land. Those who previously had rented unproductive land were now able to rent productive and richer ones. With hard work and a little bit of luck, they had the opportunity to raise their income and standard of living. This seems to be a mechanism integrated into the socio-spatial organization of the community to somehow redistribute the wealth among the peasants.

The communal "structure" can also be traced to the responsibilities of the landlord's representative; Katkhodah and the village elder: reesh-safid. The former, beside redistributing the landlords' land, used to collect the dues, be responsible for order, call the gendarmes (the rural or country police) whenever necessary, settle local disputes and call upon the peasants for any communal work (Craig, 1978; Miller, 1964). After the 1962 land reform, the Katkhodah's power was reduced and somewhat replaced by the representative of the central government: reesh-safid. However, in most villages, the Katkhodah was reassigned as a reesh-safid and thus became the representative of both the landlord and the central government.

In appreciating the communal spirit and organization that has developed through the centuries, one may also look at the psychological development of the Iranians and their relationship to the spatial configuration. Even though it may be quite difficult to explicitly prove, there seems to be some reason to imply that the atrocities of those who invaded Iran (e.g., the Mongols and Afghans) and the despotism of many of its rulers had a certain psychological effect on its people. Some have speculated and said that the anarchy and cruelty during these invasions made the people more individualistic, and fragmented the nation into closely held together communities. These political events were also seen as a main reason for having so much mysticism in Iranian philosophy, art and literature (Haas, 1946; Ardalan, 1975).

The above description does not mean that there was no social stratification in the villages. In fact land ownership among peasants, cultivation and sharing of crops and water were seen to be the bases for socio-economic stratification (Miller, 1964; Keddie, 1978). Among sharecroppers, social stratification was in terms of the organized work team, headed by an oxen owner (gavband). The top class, whose income was from supplying a factor of production and heading the work team, was the gavband. However, the majority within the village, who supplied only their labour, had the lowest income and social status (Keddie, 1978; Katouzian, 1981). Similarly, the abyar (water assistant) had a share in the crop and a social rank in the village social stratification. Note that because the landlord was urban, he was never considered part of the village society.

Pre-1962 land reform crop distribution followed the communal production system (Katouzian, 1981), called buneh. Generally the crop was divided into five parts according to five inputs: land, labour, water, animal and seeds. Those who were entitled to a share of the agricultural output, were the ones who had put one or more of the above agricultural inputs into the village communal production.

There is reason to believe that the above social stratification did not mean that class distinction with an identified class consciousness, based on mode of production did exist. Halliday's (1979) implication of a rural proletariat in Iran, is yet another erroneous synonymity between Iranian and European society.

One therefore may conclude that prior to 1962, the geographical features, availability of resources, the socio-political organization, sharing of mode of production, the right of the individual and community and ethnicity, all contributed to regional differentiation and a diversity of social and spatial characteristics. In each region an appropriate spatial configuration seems to be achieved through an historical situation and a process of production and reproduction in time. In other words, in each locale, different social components and built- and natural environmental elements were interacting differently with human "action" to form a unity, personality, regional identity and harmony of "place". As well, each semi-independent village made its own choice on how to use the available resources and rules (i.e., "structure"), as the mechanisms, to achieve the aims that were integrated into the personal and communal "action". One then can conclude that each village used the contextual and self-generated "structure" - that is, the resources, socio-political organization, sharing the mode of production, individual rights and ethnicity - as both a constraint and a source of creativity for interacting with human "action" to achieve a spatial quality identified by the personal and socio-spatial factors in an historic situation (i.e., paradigmatic dimension).

This does not mean that all Iranian villages shared a developed life style. Studies indicate that under-development was quite common (Keddie, 1978; Golabian, 1978; Miller, 1964; Lambton, 1953; Katouzian, 1981). Lack of

social and health services, lack of investment, poor soil and seeds, scarcity of water resources, inefficiency of agricultural practice and substandard housing were but some of the factors indicating underdevelopment. High mortality rate, illiteracy and disease were very common. However, suppression by a certain class and alienation by another seems rarely recorded prior to 1962. Only some individual moneylenders, as the ones observed by Miller (1964) in Hossein-abad, and Keddie (1978) recorded in his research, and shopkeepers, who sold with inflated prices certain essential commodities to the peasants, were seen as the village suppressors. Any development process, therefore, requires a mechanism that will make available the necessary services, improve agricultural technology and accessibility to capital investment to the peasants, bearing in mind the human "action", "structure" and the historical situation.

VI. NATIONAL DEVELOPMENT PLAN OF IRAN

Current theories of development see capital accumulation, as a major factor for the provision of resources for the process of development, industrialization and economic growth. Since they may contribute to the increase of urban consumption, as is the case in Iran, a certain part of the scarce capital has to be allocated for supplying that consumption demand. However many of the developing countries, initially, cannot supply the necessary commodities with domestically manufactured goods. Supplying these goods is usually done by importing the

consumer product from the industrial countries, until a domestic replacement industry is established both in the urban and rural sectors. Wherever natural resources are abundant (i.e., oil), sufficient capital, in the form of hard currency is obtained to import commodities and establish some of the manufacturing replacement industries - very often linked to the multi-national corporations. In Iran, for example, it was thought that if the replacement industries are planned properly, a sound economic "take off" may be achieved (Katouzian, 1981). Furthermore, it is paramount to look at the rural sector as a potential market and resource for those local industries. Therefore, an increase in the purchasing power of the rural population is necessary. Thus, in the theories and models of planning for development, the rural sector is considered a catalyst, usually activated by the abolishment of traditional land holdings and introduction of a technology that considers the socio-economic, cultural and geographic conditions (i.e., appropriate technology).

Before any brief look at the Iranian national development plans, under which land reform and rural transformation occurred, it is important to briefly note the philosophy under which the planners and politicians formulated the aim and objectives of the plans.

Prior to land reform agriculture contributed 28.7 per cent to the gross domestic product (Amirsadeghi, 1977) and about 50 per cent of the labour force was engaged in rural activity (Looney, 1977). This indicated an uneven distrib-

ution of economic activity and income. The planners, who were Western educated elite personnel (Zonis, 1971), saw the solution for overcoming Iran's social and economic plight, was to become industrialized and to develop its economy and society along the Western concept. To achieve that, they assumed that due to climatic and geographic conditions, Iran's advantage was not in agriculture, but in industries. Furthermore, they thought that the country could always import relatively cheap food from the world surplus (Amuzegar, 1977). It was not until the 1970s, when the bill for imported food took a considerable share of the petro-dollars, that they realized their mistake.

The planners, in their attempt at Westernization saw the old communal society as an unsuitable socio-economic organization for their ideal industrial order. A social transformation that generates a unified labour force and a social consciousness similar to its Western counterpart was seen necessary (Katouzian, 1981).

By increasing the urban industrial output and giving low priority to agriculture, based on the communal mode of agricultural production, the government sought to increase urban employment opportunities, encourage rural-urban migration (Weinbaum, 1977) and change the social organization of the rural population. These objectives were seen to be important for achieving industrialization and Westernization. However, evidence indicated it was a transplantation of a "structure" developed historically in a European context. In fact, a similar Westernization aim was

adopted for the system of education. Newmark (1976) criticized how Western science and technology was being transplanted without any consideration for the traditional context, developed historically through the ages. The outcome of this was that some policies created a 5:1 income per capita, difference between the urban and the rural, and accelerated migration to reach in 1973 an average of eight per cent of the rural population (Weinbaum, 1977).

Some critics saw the national plans of Iran as a political process (Katouzian, 1981; Halliday, 1979) generated by the government as a mechanism to consolidate their centrally based power. Both Katouzian and Halliday tried to show that these policies were an attempt by the central government to create middle and labour classes. It was also seen by many critics, as an effort to reduce and transform the communal social organization into a capitalist one, because the elite that supported the government adopted Western models and argued that the traditional society is a cultural deficiency and the main factor for underdevelopment.

With the idea of Westernization and industrialization in mind, the planners sat down, in 1962, to draw the national plans, bearing in mind the necessity for better statistical information and the advanced training of elite personnel. It may, however, be important to note that many critics of the political system in Iran doubt the government statistical figures. They seem to imply that the

Iranian Bureau of Statistics was an institution created to support the government policies.

There are strong suggestions that modern comprehensive development in Iran started in 1963, with the third development plan (1963-1967). It was the first time explicit objectives, based on reliable statistical information, were formulated. The plan projected an investment of $3.1 billion from the public sector and $2.1 billion from the private sector (Amuzegar, 1977). The expenditures were known to be:

- Transportation and communication	25%
- Agriculture	22%
- Fuel	13.5%
- Industry and mines	10.9%
- Education	9.0%
- Health	7.0%
- Social Services	12.1%

Looney (1977) attributed the success of the plan, 8.8 per cent annual growth in GNP (Amuzegar, 1977), to the planners' recognition of Iran's limitation, its emphasis on the smaller projects, that were capable of yielding a high rate of return, participation of the private sector and the increase of the share in oil revenues.

However, the 22 per cent for agriculture was divided into fishery, forestry and rural development. Hence rural development received less priority than other sectors. In other words, 50 per cent of Iranian population (i.e., the rural population) received substantially less than its urban counterpart, even though land reform was part of the

plan. It was one of the reasons that the rural sector grew only three per cent, urban-rural income per capita ratio increased and rural-urban migration was generated.

Similarly, in the fourth plan (1968-1972) little attention was given to rural development. The $10.8 billion investment, 55 per cent public and 45 per cent private investment (Amuzegar, 1977), generated industrial and mining growth of 13.8 per cent while agriculture was only four per cent, even though during this plan further land reform was done by setting agricultural corporations and agri-businesses in many parts of the country. The increase in urban industrial growth, accelerated the growth of urban population and the demand for consumer products. Since the rural sector could not supply these consumer products, their import from other countries was sought. By the early 1970s the dramatic increase in price of imported goods, made the planners reformulate their aim, stressing the development of the rural sector and the necessity for increasing Iran's agricultural produce.

The fifth plan (1973-1977) was set in accordance with a twenty-year national strategy for development. The objectives were:

a) to raise as much as possible the level of knowledge, culture, health and welfare of the society;
b) to attain a more equitable distribution of national income, with special attention to increase the living standard and welfare of the underprivileged and lower income group;
c) to maintain the rapid and sustained rate of economic growth parallel to relative price stability and balance of payments;

d) to provide productive employment in all regions of the country at a level that would absorb all the new manpower joining the labour market and substantially reduce concealed or seasonal unemployment;

e) to operate fully the established production capacities built under the previous development plans, and to raise productivity and efficiency in the supply of goods and services in the public and private sectors;

f) to improve the administrative order, in keeping with the lofty national aims and objectives, and to strengthen the country's defense capacity;

g) to protect, improve, and revitalize the living environment;

h) to increase Iran's share in the international trade, particularly in the manufactured goods.

(Looney, 1977:23)

This plan, according to Amuzegar (1977), gave a special priority to agriculture. More expenditure was allocated to advance agricultural technology, raise the production of foodstuff and increase the raw material for industries. As well, community based developments, aimed at solving local problems by using local resources and talents, were encouraged. Moreover, it sought "to expand and coordinate basic community services to upgrade overall level of literacy, technical competence and to create local employment by utilizing indigenous material" (Amuzegar, 1977:169). Finally, the plan was to allocate $4.5 billion to agriculture with a projected seven per cent yearly expansion in crops and 8.5 per cent in livestock (Weinbaum, 1977). Amuzegar argued that finally, the planners had formulated the appropriate policies for rural development.

Table II-1: Sectoral Revisions in the Fifth Five-Year Plan
(value added in billions of 1972 rials)

	Original Fifth Plan Targets			Revised Fifth Plan Targets		
	1972	1977	Average Annual Growth Rate	1972	1977	Average Annual Growth Rate
Agriculture	203.0 (16.6)	265.0 (12.6)	5.5	201.1 (18.1)	282.1 (8.0)	7.0
Oil	317.0 (25.9)	554.0 (26.3)	11.8	216.5 (19.5)	1712.0 (48.7)	51.5
Industry and mining	240.5 (19.6)	489.0 (23.2)	15.0	274.4 (24.7)	566.0 (16.1)	18.0
Manufacturing and mining	165.0 (13.5)	336.0 (15.0)	15.3	-	-	-
Construction	56.0 (45.7)	103.0 (48.8)	13.0	-	-	-
Water	2.7 (0.2)	4.7 (0.2)	12.0	-	-	-
Power	16.8 (13.7)	45.3 (21.5)	22.0	-	-	-
Services	465.5 (38.)	802.0 (38.0)	15.5	445.8 (40.1)	953.9 (27.1)	16.4
Gross domestic product	1226.0	2110.0	11.4	1110.8	3514.0	25.9

Source: Looney, R.E. A Development Strategy for Iran Through the 1980s. Praeger Publishers, 1977.

However, the observed evidence indicates otherwise. In the first two years of the plan, agricultural growth was below five per cent. Furthermore, since 1973 the rural-urban migration had averaged above eight per cent of the rural population and was increasing, and the average per income of the urban to rural had grown to more than 5:1 ratio (Weinbaum, 1977).

The sharp increase in oil prices 1973-74 brought with it an increase in the national income of Iran. This was then seen by the government as a great opportunity to accelerate development. The fifth plan was revised (table II-1) and the allocated investment was increased from $35 billion to $70 billion after one year of its implementation. In the winter of 1974, it was rushed to the parliament to get the usual approval. When it was implemented, the country could not absorb this huge investment. The infrastructure could not efficiently and appropriately service the activities generated from this investment. Shortage of the basic material generated a sharp inflation. Bottlenecks in ports prevented the imported goods from reaching their destination on time. Cargo ships were kept waiting for months to increase their surcharge. All this further accelerated inflation. As a result after just over one year of implementing the revised plan, it had to be put aside and many of its objectives were to be integrated into the sixth plan (Graham, 1979).

From the above, one may see a relationship between investment and failure of the rural development: reflected

in the rural-urban migration, growth and income per capita ratio. This deduction seems however to be mechanistic in nature. Other factors, related to the transplantation of the historical situation, the socio-spatial and political objectives and policies are noted to be important for identifying more explicitly the reasons for the failure of the agricultural policies in the plans. This is observed in the following analysis of land reform and rural development policies from 1962-1977 and the impact the policies had on the villages in Iran.

VII. LAND REFORM AND RURAL DEVELOPMENT POLICIES FROM 1962-1977

Previously, it was noted that the approach to rural development, as is the case in Iran, often carries with it the polity of the central government. Many times, Marxist or capitalist ideologies, theories and models, often noted to be reductionist and mechanistic in nature (Bernstein, 1976), are imported by Western educated elite and prescribed for land reform and agricultural development. In other words, a "contextual structure", based on a different historical situation, is transplanted and related to another specific situation, locale and human "action". As was noted before, the traditional (or indigenous) life style with all its implications was looked at, as the reason for underdevelopment, while development was seen as synonymous with Westernization. Therefore Western planning strategies and models were formulated and imported on a national scale without any consideration for the para-

digmatic dimension. Hence, land reform, mechanization and cultural transformation were looked at as the tools for rural development.

These impositions (i.e., Westernization synonymous with development, the necessity for cultural transformation and economic growth as development) were seen between 1962-1977 to be the criteria for generating development in rural Iran. They had, however, a great repercussion on the village development in general, and village spatial configuration in particular. A critical study of them seems quite necessary to identify more explicitly their contribution to the human being built-environment relationship and the necessity for achieving the quality of the "sense of place".

One can safely assume that rural development in Iran started with the 1962 land reform. It was embarked upon by the Shah just before the third development plan. Katouzian (1981) argued that its primary aim was a political manoeuvre to consolidate the central government, to undermine the power of the aristocracy, to create a strong independent rural class allied to the Shah, to modernize Iran's rural economy along Western lines and to show the world that Iran was a progressive country. As was previously indicated these policies were supported further by the bureaucrats and technocrats who formulated the third development plan. They argued that Iran's rural problems were due to the quanat system of irrigation, the primitive mode of the agricultural system, the distribution of rights

and the communal social organization - that is, the factors that, through the historical process, created the spatial characteristics and the "structure" in the village.

The first land reform was therefore carried out by transferring the titles from the absentee landlords, thus reducing their political power, to those who were known to be cultivators. The reform gave priority to the peasants who had an instrument of production (i.e., oxen), rented the land and to the heads of work teams (Keddie, 1978). The policies excluded share-croppers who only gave their labour. Hence about 800,000 families benefited (i.e., 20 per cent of the rural population) (Weinbaum, 1977). One therefore can conclude, that only a limited number really benefited. The rest either received a scattered, dislocated and uneconomic (due to size and place) piece of land or ended up with nothing (Miller, 1964; Keddie, 1978; Craig, 1978). Therefore, this phase of the reform replaced the power of the landlord by placing it in the hands of a few newly created landholders. They became, due to holding the means of rural production and wealth accumulation, the village capitalists. The rest ended up as labourers, to compete in a free market. This points out that, without looking at the historical situation and process, the traditional communal "structure" was scrapped and a Western-style capitalist one was transplanted and imposed to interact with the human "action" in the Iranian villages. The transformation occurred through the bureaucratic institutions and the power of the central govern-

ment. Thus destroying the traditional human being built-environment relationship.

Further support for the political intentionality of the central government for transforming the "structure" into capitalism, is explicit in Katouzian's (1981) analysis. He argued that the capitalistic nature of the objectives and the political connotation of land reform and rural development could be observed in the bureaucracy's absolute rejection of the alternative rural development plan, proposed by Arsanjani: the Ministry of Agriculture prior to land reform. Basically, Arsanjani's strategy, based on the traditional village communal structure, was to remove the landlords and give land to the peasants without going through the process of nationalization, altering the village land allotment and the traditional socio-economic organization. The technocrats and bureaucrats strongly objected because they did not accept it as a solution for reducing and finally eliminating the 35 per cent village unemployment and underemployment: an unemployment figure that Katouzian questioned in terms of its reliability. At the same time the landlords saw Arsanjani's proposal as a means of eliminating their vital economic resource. As a result both the landlords and the bureaucrats undermined the Minister and his proposed Village Development Plan and blocked its passage through parliament.

There seem to be several reasons to present the view that the government encouraged rural-urban migration and the formation of a mobile labour force to accommodate the

capitalist mode of production along a Western social system:

a) the opportunity that the new landowners had for government loans. (This was experienced by the author in the 1970s while working as an architect in the Industrial and Mining Development Bank.);

b) the opportunity that the government gave the absentee landlords to invest their compensatory money in buying shares in nationalized industries or build urban industries that demanded labour, supplied by the rural-urban migration (Katouzian, 1981; Halliday, 1979);

c) the bureaucrats and technocrats undermining Arsanjani's Village Development Plan;

d) the studies, such as Keddie's (1978) which indicated explicitly the surplus labour from unemployment and underemployment in the villages in Iran;

e) the allocation of insufficient resources in the third development plan for the rural sector.

Parallel to the land reform, the central government changed the traditional communal system of justice in the villages (Miller, 1964; Craig, 1978). In 1965 the Katkhodah and the community headman were removed and the village court was introduced. With this act, the government brought all the villages under the national judiciary system. Where for years the Katkhodah settled all local disputes through arbitration, this change made the village court, with its bureaucratic procedure (i.e., paperwork, keeping records and files), handle all cases that did not pertain to criminal assaults or debts exceeding certain figures. Note that members of the court were also the village police and

whenever necessary they called upon the gendarmes for help.

After some time, however, Craig (1978) noticed that the new judiciary system broke down in some villages and the communal system came back. It seems that in many cases the gendarmes, when called upon, abused the village inhabitants (Craig, 1978; Miller, 1964). Besides, no-one understood the explicit aim and advantage of having these courts.

The second stage of land reform was to gather these small holdings - a product of the first land reform - that were unproductive and gave little opportunity for mechanization. Co-operative farming was created under ministerial control, to assure a socio-spatial formation in accordance with the central government frame of reference. The peasants, who owned small fragmented arable land, were expected and forced to become members of these co-operatives. Under this new order, planners sought to provide technical assistance, capital investment and subsidize farm input. In general the co-operative societies had to:

a) arrange the transportation of its members' crop to the market;
b) encourage co-operative farming;
c) provide fertilizer, tools and equipment which the government supplied;
d) arrange local sale of foodstuff;
e) maintain village public area;
f) provide low interest loans.

(Craig, 1978; Amuzegar, 1977; Weinbaum, 1977)

Amuzegar (1977) stated that by early 1977, rural co-operatives under the guidance of the Ministry of Co-operatives and Rural Development, had 2.7 million members in over 2870 societies.

Since the peasants saw that it was their right to own land, they initially avoided affiliation, and membership was rather limited. However, the government by disadvantaging those who refused, forced many peasants to reconsider their membership and join the co-operatives, thereby losing their right to decide for themselves as a community or as individuals.

The success of these co-operatives was very limited. They were mismanaged and could not live up to their expectations. They could not overcome the shortage of storage, transport and marketing facilities. Most co-operatives were poorly funded (Weinbaum, 1977). Their borrowing term was so restricted that they were forced to approach the traditional village moneylenders, who charged very high percentage interest, or the landlord for credit. Besides, the government used to pay low prices for their produce and thus transferred the urban subsidy to the rural population.

The government claimed that these co-operatives were modelled in accordance with the traditional communal organization. Actually, that seemed not to be the case. While the communal organization was a traditional structure, developed internally, historically and through social

interaction, the co-operatives seemed to be another transplanted and imposed contextual mechanism for political control of the village population by the central government. In the traditional communal society, the villagers, in accordance with their traditional rules, resources and their "action", used to identify, organize and create their own intentionality and purpose, while the new co-operatives the government controlled externally the rules, resources and the villagers' personal needs. Hence the peasants were more restrained in identifying, organizing and creating their own intentionality.

There is, therefore, a strong indication that the huge government controlled mechanized co-operative farms were intended to reorganize the traditional village and its socio-spatial organization for a political reason. The destruction of the communal and the transplanting a new inefficient "structure" seems to be a reason for the slow growth, and the increase of income per capita difference and the acceleration of rural-urban migration.

Under increasing pressure to raise agricultural produce, in the early 1970s, planners sought other alternative means to reorganize the unproductive small farms. A third stage in land reform was therefore formulated. Minimum 2000 hectare corporations were seen as a solution to introduce rationalized sharing farm equipment and agricultural practice. In this scheme, farmers gave their land in exchange for stocks in a corporate company. Peasants then had the choice, either to become employees of the

corporations, or seek employment elsewhere (i.e., migrating to the urban areas). A study made in 1976 (Weinbaum, 1977) indicated that most of these companies were hardly successful. It was observed that:

a) the peasants saw they are losing a traditional and meaningful means of land ownership to an invisible and incomprehensible stock ownership;
b) the wages for management and labour was so low that it did not attract the appropriate staff;
c) it was under-financed.

It is quite interesting to note Soltani's (1978) research in the relationship between farm size and farm production in Iran. He explicitly indicated that in many small farms yield/hectare was greater than large farms, provided they were mechanized and used appropriate technology. However, due to labour and rent on machines, costs were higher in small farms. Therefore, net income on large farms was greater, but small farms were much more efficient. As a solution the author proposed, for any increase in rural economy, diversity in land use.

Parallel to the corporations, the government also planned huge agri-businesses. Farmers, as an alternative to corporations, were given the choice of selling their land to establish agri-businesses. Just after World War II, in Khuzestan, south-west of Iran, an initial study was done to utilize the fertile soil. The government invited the Development and Resources Corporation of New York (Stephanides, 1971) to study the possibility of tapping the water resources of that region and developing its agricultural potential. The study, known to be the first regional plan

in Iran, and completed in 1957, proposed 14 dams to be constructed on the major rivers of the region. It was envisaged that these dams could irrigate about 1.2 million hectares of land and generate 6600 megawatts of electricity that might be used for industrialization and service the settlements of the region. The aim of this regional study, however, was to establish agri-businesses geared for the export market. Later, similar schemes were implemented in other regions of Iran (e.g., Dash Moghan, north on the border with Russia).

Under the fifth development plan, these agri-businesses were to account for eight per cent of all rural land in production. They were intended to serve as a model for both crop experimentation and highly mechanized operations and also to give opportunities for local and multi-national companies to participate. In Khuzestan, for example, four companies were formed: Iran California Co.; Iran Shell Co.; International Agri-businesses; and Business Corporation of Iran.

With this scheme traditional village land, that was not affected previously, was confiscated and the inhabitants relocated as labourers in agri-business centres. Virgin land was reclaimed after constructing the dams. Tribes were forced to sell or have their land nationalized. Huge tracts of land were then formed to suit high technology and the cash crop production. It seems that the agri-businesses were geared for the export market (Stephanides, 1971), while shortage of food was felt in Iran.

In these corporations, the decisions and management were undertaken by the foreign multi-nationals. They drew high salaries, while the Iranian peasants were employed on low wages and treated like coolies, as is the case in plantation economy. Besides, the cultural barrier between management and local peasants was so great that communication was very difficult.

As Weinbaum (1977) found out, after five years the performance of the agri-businesses was disappointing in Khuzestan. In fact in many cases, the Iranian government had to buy the shares of their foreign counterparts. Weinbaum saw the failure due to:

a) the cost of levelling for field irrigation;
b) the foreign companies expected early substantial return;
c) the stockholders were asked constantly to bear in the increase in cost;
d) being capital intensive, it absorbed a limited number of unskilled displaced peasants;
e) lack of commitment from managers;
f) the alteration of peasants' life style;
g) and local resentment.

In fact in 1976 it was observed that many of these agri-businesses were going bankrupt.

The latest rural planning policies (just before the revolution) broadly outlined a scheme that will displace many of the villages in Iran. These policies were integrated into regional development plans. In general, the

plan allocated 1500 to 2000 (Golabian, 1978) regions or agricultural poles, each of which, depending on the resource available, had between 8000 to 12000 hectares of arable land (Golabian, 1978). Under this new scheme, villages that are scattered, unproductive and too small to be economically feasible for social services and rural industries (i.e., villages less than 250 persons), were denied government assistance and their population was forced to move to the newly proposed economic units. It seems that for the new scheme to materialize, massive capital investment was necessary to develop the land, build housing, roads and infrastructure and develop the water resources. Besides, much of the rural population, especially those living in villages around the desert, would have been displaced and transplanted to other places.

Besides the envisaged increase in rural agricultural production, the outcome of this regional policy, both sociologically and geographically may have had a quite dramatic outcome. The impact, due to the change in the built-environment, the formation of a new socio-spatial order and the reorganization of the rural population in each of the proposed agricultural poles, may have created a cultural diversity that generated social and spatial disharmonies. However, people of different cultures, develop historically to form different social and spatial identity and understand, utilize and personalize differently the spatial characteristic of the built-environment. Therefore

any peasant, historically and spatially displaced, may have had a hard time to relate appropriately to the new built-environment, unless the new built-environment was produced and based on his/her familiar culture and historical situation. As a result the proposed rural plan either had to accept within the proposed settlements a diversity of spatial characteristics and the "sense of place", or, attempt to create a harmonious social organization that would achieve spatial unity and harmony in the built-environment of the proposed settlements.

Note that the new order was expected to displace the villages that are inefficient in agricultural production, or located around the desert fringe. However, the latter observed to be quite essential for restricting desertification and thus contributing to the environmental conservation. Therefore, once the populations of these villages located around the desert fringe were displaced, further capital would be necessary to invest in soil preservation and the prevention of desertification.

VIII. CONCLUSION

This study explicitly indicates that one of the reasons for the shortcomings of rural development planning in Iran was due to the planners refraining from considering the importance of the regional geographic identity, the local resources, the socio-cultural situations and their significance in social interaction and spatial organization. The slow growth in the rural development was not

only due to lack of proper investment and adequate data, but also due to the imposition of the Western models and capitalist mode of production and organization on a peasants' communal society whose features (i.e., laws, resource management, built-environmental characteristics and symbol systems) have been continuously developed through the ages to establish a certain identifiable historical situation (i.e., paradigm). In each of the regions discussed in this chapter, the historical situation has formed a unique "structure" (i.e., a contextual generative mechanism for spatial manifestation) to interact continuously with human "action" to create unique built-environmental characteristics for each region. The planners incomprehension of the spatial characteristics and the "structure" of each region, contributed to the result of the development falling short of the expected growth. This strongly suggests that it is necessary for the planning and design process to be associated with the historical situation (i.e., with the local socio-spatial identity) and the process that created that situation (i.e., with the process that created the underdeveloped situation).

By viewing the historical situation of the "structure" and the process that created that situation, one establishes the components that identify the contextual mechanism that interacts with human "action" to produce the appropriate spatial characteristics. In this chapter it is observed that the existing built- and natural environment, the availability of resources, the local and central

institutional power, the traditional communal organization, the traditional laws and mode of production are all parts of the mechanism that interacts with human "action" to produce and reproduce the spatial characteristics. These components are not only constraints, but also vital generative factors, utilized to establish spatial unity, harmony, identity, personalization, security and familiarity of the built-environment. The limitation, management and the rights of the whole society and each person within this society are noted features of the communal socio-spatial organization. The traditional communal socio-spatial organization, developed and created through an historical process of social interaction, identifies the means and outcome of spatial design that create and reinforce the personal human situation in the "place" and the societal identity in the "place". Hence in the Iranian villages, one observes that the usual socio-spatial notion (i.e., the "sense of place") is achieved differently in each region. The villages of each region (the plateau, the mountains and the Caspian Sea), in accordance with their historical and geographical situation, resources and social organization organize differently the spatial elements, to create different spatial characteristics for establishing the same socio-spatial notion. Similarly, the capitalist or Western social organization creates different spatial characteristics from those created by the communal social organization, to achieve the socio-spatial notion known as the "sense of place". Transplanting Western social organization and models on the communal society in the villages of

Iran disregards the historical context and the mechanism that created and identified the spatial characteristics in each of the described regions (i.e., then paradigmatic dimension).

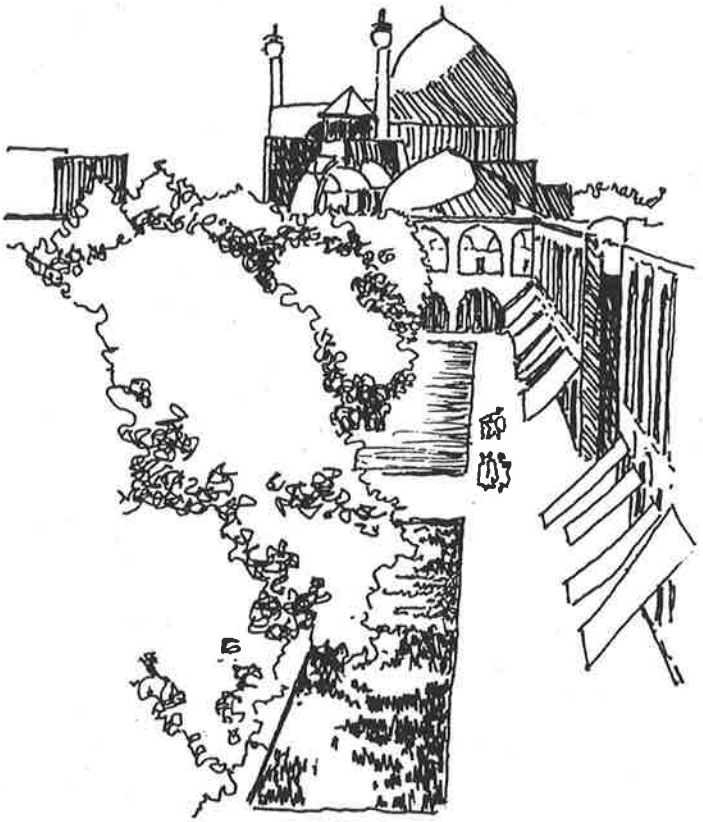
This chapter points out that the social organization, the mode of economic production, the human utilization of geographical conditions and the existing socio-spatial situation and process have a significant impact on the spatial characteristics. Therefore some of the main components of the human being built-environment relationship, at the societal level, are established. It is quite explicit that societal rules, allocation of resources and societal historical identity (i.e., situation and process) are essential for defining and creating the "sense of place".

The transplantation of a capitalist mode of production, such as having stocks in a co-operative company, did not have the symbolic meaning of security, identity and understanding, as was the case in traditional land ownership, production and distribution. The new order, due to its mode of production, created different land subdivision (i.e., vast tracts of land suitable for mechanization were needed). Also, it created a social and communal relationship based on the ownership of means of production which was different from the traditional communal one. Because the new order needed much more water than the quanat could provide, artesian wells were dug and a new system of irrigation was laid out without any attention given to the cultural significance of the traditional system and the

climatic and geographic conditions of Iran. As a result, in many places the water-table came down, scarce water was lost due to evaporation, the quanat and the traditional means of cultivation ceased to exist. Thus a basic element of the communal structure (i.e., distribution of water and land) in Iranian villages was disrupted. Moreover, because of their socio-economic and cultural situation, the peasants could not organize themselves as a labour force to compete in a capitalist mode of production and establish for themselves the spatial organization and social security (e.g., housing, education, medical care, etc.) needed as part of their "contextual structure" that would interact with their "action". All this resulted in a gradual degradation of the built-environment that finally contributed to the decline of the villages in Iran.

The new socio-economic order had a profound influence on the settlement pattern and form. The vast arid tracts of communal land that surrounded the village and expressed the antithesis of the villages, were given to the co-operatives. The irregular and small subdivisions that followed the natural terrain and water sources were replaced by regular ones that were appropriate for the transplanted technology. The traditional and vernacular forms and structures were replaced by prefabricated ones suitable for housing the new agricultural machines. All these restructured and transformed the spatial characteristics of the settlements into a new configuration which was dislocated from its historical context and identity.

To understand better the significance of the societal level in the creation of the "sense of place", the thesis assumes that one has to look more closely at the relationship between culture, as symbol systems and the spatial characteristics of the built-environment. Furthermore, for achieving the "sense of place", the importance of personalization of space as part of human "action" also has to be explored. Therefore prior to the definition and the theoretical study of the "sense of place", the next chapter will be looking at the traditional residential areas of Isfahan to study the relationship between cultural symbol systems, personalization of space and the "sense of place".



CHAPTER THREE

III. THE DEVELOPMENT OF THE SPATIAL CHARACTERISTICS OF THE TRADITIONAL RESIDENTAL AREAS OF ISFAHAN AND THE MODERN PLANNING POLICIES

I. INTRODUCTION

The previous chapter discussed rural development in Iran and identified certain societal components that are associated with the human dimension of space. The organization of scarce resources, the communal organization, the laws and the realization of the regional topographic and historical situation were observed to contribute to the spatial characteristics of the built-environment in the villages of Iran. It was concluded that these societal components were not only constraints, but also the generative mechanisms that gave each village its existential identity.

This chapter will further explore the societal components and their relationship to the human dimension of space. The culture, the socio-economic and political organization of the Islamic society will be critically analysed in a historical situation to establish its contribution to the formation of the spatial characteristics in the traditional residential areas of Isfahan: a provincial capital in Iran. This study will include an overview of the meaning, the Islamic culture and ideology have given, to the notion of an appropriate built-environment and the spatial characteristics that establish the

"sense of place". Therefore this chapter will attempt to define, in the context of the Islamic tradition, the "sense of place".

Besides the societal components, this chapter will also attempt to establish the significance of the personal level of the human component in shaping the spatial characteristics. The relationship between the family, as the basic Islamic societal unit, and the pattern of the dwelling unit will be explored to point out the importance of the personal meaning in the conception of the private personal spaces and the "sense of place".

Finally, this chapter will analyse the dramatic modern industrial changes, the modern planning policies of Isfahan and their impact on the traditional residential areas of the city. This study will be mainly an evaluation of the objectives of that master plan and the dramatic change that occurred due to the transplantation of Western spatial concepts in the residential areas.

It is important to note that the arguments given here are based mainly on information previously collected for a research study conducted by the author for a M.Phil. thesis submitted in 1981 to the Department of Urban Design and Regional Planning at Edinburgh University. Other important sources are listed in the bibliography.

Furthermore, it is essential to point out that this critical study is outside the Western context of quality of spatial characteristics and urban design and planning

evaluation rationale. The relevance of ideas such as those given by Lynch (e.g., node, vista and district) and Cullen (argued in his book Townscape), proposed for enhancing British and American urban built-environmental quality, will therefore be questioned. Critical comments such as those made by Rapoport (1977) that the Islamic architecture in Isfahan "is reversed and inside outside", and Grube (in Michell (ed.), 1978) who states, "It is non-tectonic" and a "negation of architecture", seem to be doubtful physical comparative analyses based on European spatial quality and criteria. Apparently, both want to explain certain spatial symbol systems by using a Western paradigm. In other words, in some Western studies of Islamic built-environmental design in general and Isfahan in particular (Michell, 1979; Hoag, 1977; Scerrato, 1977), certain misunderstanding is observed. "Action" interaction and built-environmental quality instead of being analysed in the Islamic cultural context and symbol systems, is analysed with reference to Western cultural patterns and mechanisms. Hence in this chapter it will be indicated that paradigmatic transplantation may be a refutable approach for a methodology for critically analysing Islamic architecture in general and the spatial characteristics of Isfahan in particular.

Therefore, by critically studying the socio-economic, political and cultural context an attempt will be made to identify the paradigmatic dimension associated with space-time. An effort will then be made to outline the relevant symbol systems that contribute to the desired quality of

the spatial characteristics that establish the "sense of place".

II. THE TERMS OF REFERENCE

A previous definition in this thesis assumed "culture" to be *a priori* and a framework of meanings and symbols. "Culture" was noted to be involved as a "structure" in the interactive process to give meaning to the production and reproduction of the spatial organizations that accommodate human "action". Culture can then be assumed to be the means and outcome of the interactive process. For any study of spatial configurations it is therefore necessary to understand the culture and its symbol systems.

Since Isfahan is a city developed under Islamic culture and tradition, it seems necessary to elaborate and identify the Islamic culture and civilization. A comprehensive study is, however, quite laborious and far beyond the scope of this thesis. Only some main general ideas that are apparently important for the description of the paradigm, the symbol system and the spatial configuration will therefore be given.

A. THE DEFINITION OF TRADITION

Nasr (Foreword Ardalan, 1975, 1981) explicitly indicated Islamic culture and civilization, in its Persian context, as traditional. He defined "tradition" not as a custom, habit, inherited pattern of thought or a mode of economic production, but as a principle and idea whose

essential element is a religion in its universal sense. He further went on to say that any civilization or culture moulded by religion to convey and unveil in all its manifestations a principle of the Divine Origin, Reality and Truth is traditional. Tradition here carries in its essence the idea of transmission of a form of knowledge related to the Divine Knowledge. Thus tradition is the prevailing and dominating idea in identifying the whole life style, law, social structure, art, architecture and symbol systems of that particular people. This indicates that in Islamic culture certain unchangeable religious principles and ideas, which have dominated the whole civilization, have prevailed. Furthermore, these principles and ideas have identified the "action" and the appropriate mechanism (i.e., "structure") to be used in the production and reproduction of the characteristics desired for any socio-spatial organization of elements in space. Hence Islamic art, architecture, urban design and planning are means and reflections of this tradition.

Therefore, it seems necessary to comprehend the ideas and principles of Islamic tradition if a real understanding of the societal generative mechanism and its spatial manifestations is sought. Apparently, Islamic tradition is an important component of the historical situation (i.e., paradigm) that gives meaning to the components, conceptions and patterns used in the urban design of Isfahan in general and the traditional residential areas in particular.

B. THE DEFINITION OF SYMBOLS AND THE SYMBOL SYSTEMS

In any study of a culture one has to understand its symbolic systems. Eco (in Broadbent et al., 1980) has hypothesized that all cultural phenomena are in reality systems of signs that find themselves in each culture's spatial design. Furthermore, the symbol systems that are expressed by a spatial organization have to signify a certain notion and function and be eligible to those who are in that particular cultural context. Eligibility seems to indicate comprehension of the meaning of the symbols. Therefore, it implies that some knowledge of the theory of communication and semiology may be necessary. This again is an interesting field of knowledge that is associated with linguistic studies and which is beyond the scope of this thesis.

However, it is important to note that any understanding of symbolic meanings, functions and their historical processes of change creates the intellectual awareness of certain cultural realities and ideals: a basis for an argument necessary for any urban conservation. Sometimes however these ideals and realities are forgotten. They can be discovered only through a study of the historical process and the cultural patterns. Furthermore, a user's (or actor's) awareness and understanding of the symbols, make the symbols a means of interaction and comprehension of the meaning of the spatial characteristics. Therefore, any spatial organization is conceived in terms of a subject-object relationship. Hence spatial

settings are internalized as part of the subject and unity, harmony and the "sense of place" are in view of the actor and his/her "action". It is therefore important to study the symbol systems as part of an historical situation and process.

The application of the theories of symbolization and semiotics to architecture and urban design seems to stem from Ogden and Richard's (1966) theory and study of the science of symbolism in languages. Semiotics assumes that the symbolizers are the spatial elements (i.e., form, space, volume, surface, texture, colour, etc.) and the symbolized are the notions or ideals identified by the culture of the actor. The meanings of the symbols are expressed in space by the spatial characteristics, and produced and reproduced by the actor through the process of social interaction. Therefore to comprehend spatial characteristics one has to understand the human "action", symbols and culture in an historical situation.

III. TRADITIONAL ISLAMIC CULTURE

Traditional Islamic culture is based on the Muslim definition of religion and the experience that identifies that religion. Briefly, it is all those principles which are revealed by God, through the prophets, to humankind to bind the human being to his/her Origin. Islamic culture is considered to be the application of traditional principles, human experience, perception of the universe and the place of the human being in relation to that Universe. These

principles and applications are revealed in the Quran - the "container" which holds the Message of God - and the prophetic sayings: the Hadith. These provide the laws that govern all aspects, guidance and framework for a Muslim and the Islamic society (Al-Ommah).

In the Quran, there are three types of Messages: the Divine Laws (Al-Shari'ah); the form of Reality and the position of a person in relation to that Reality. While the Al Shari'ah defines the framework for all the laws and the socio-economic and political organizations, the meta-physical latter two are the source of the symbolism manifested in the built-environment (Ardalan, 1975; Bakh-tiar, 1976; Burckhardt, 1976).

With the Islamic invasion the highly stratified structure of pre-Islamic society disintegrated. In its place came a new social order which stressed a very mobile, flexible and somewhat classless society. The most prominent members of the new social order were the learned people (Ulama). Because of their knowledge and interpretation of the Quran and the prophetic sayings the Hadith, they became the spiritual, legal and political advisers and leaders in the Islamic community. The Ulama in Iran became so powerful that they could influence the Shah and the autocratic institution (Avery, 1965).

This appeared to be the case in Isfahan at the time of the Safavid Dynasty (1499-1736). Since that period and up until the present day, a strong government brought the

Ulama and their followers, mostly the bazaar merchants, closer to the ruler. But when the political institution was weak and a gap existed between the monarchy and the people, the Ulama emerged as organizers of protests and even rebellion (Hourani, 1970).

In the Shari'ah, which must not be changed either by time or the historical process, the roles of the individual, family, society and the political institution are determined (Nasr, 1979). Each Muslim generation - as individuals and a society - has to conform to the framework and the teachings of the Shari'ah, and apply its spirit and substance accordingly.

The idea of constancy in the social order has an explicit notion and spatial manifestation in the urban built-environment. The unity that exists in the Islamic social order (Al-Ommah) has created an ideal, predetermined by the religion itself. This, however, does not mean that the same space generative mechanism prevails everywhere. Certain regional variations, due to the climatic condition, geographic features, local material, inter-cultural communication and, most important of all, the regional historic process are observed. Thus one notices certain differences in spatial characteristics between North Africa, the Middle East and Iran. In Iran, for example, a dominant architectural feature the iwan, an interior court, originated in the pre-Islamic Sassanian era, while the Middle East and Turkey are very much influenced by the Byzantine architecture.

The Shari'ah outlines explicitly the laws for human behaviour. Simplicity in external self-realization, family bonds, the importance of the local community and professional occupation integrity seem to be some of the major features of the Shari'ah. Apparently it is for this reason that, in an Islamic urban pattern, one does not notice geographical segregation of residential areas between the rich and poor. Whether the non-existence of spatial class segregation eliminates some of the economic externalities on land value seems to be an important subject for research.

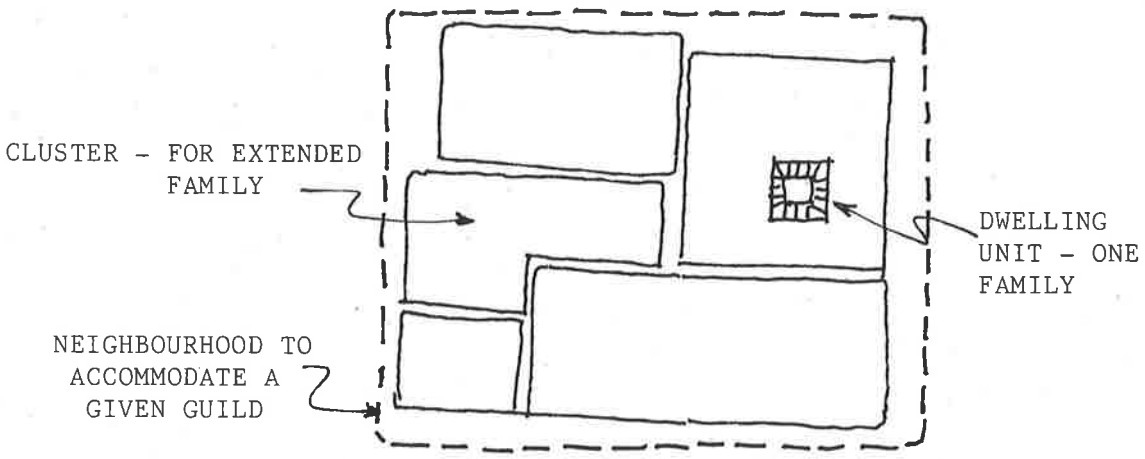
As stated before the Shari'ah identifies the individual as a member of Islamic society (Al-Ommah). It therefore gives more rights to the community than the individual. Also, the individual is enclosed within the basic social unit that possesses property and identity; that is, the family (Hourani, 1970). Thus a person, whether man or woman, gets his/her identity from the predetermined position, relation and rights in the family. The right of the family to live undisturbed in an enclosed private place is then a major law that identifies the spatial notion of the residential area. The family's right to privacy has been a main reason for the inward-looking concept of dwelling and cluster where everyone is related either by blood or marriage and can live, develop and die within the basic social unit of an Islamic society. In other words the social hierarchy in an Islamic society is based on the family unit.

In an Islamic society one has to consider the collective intentionality and purposive "action" of the family as the personal human dimension in space. The identity of each person can be identified only within the family's self-expression in space. Thus any personalization of space is created by the internal central court and the family room (i.e., andaroun), not by the individual sleeping room.

To turn to another aspect of the Islamic society and its hierarchic residential pattern, one has to look at the classification and organization of trades and guilds in the bazaar. The bazaar is defined as the spatial socio-economic organization of traditional, urban Islamic society. Each member who belongs to a trade (i.e., guild) occupies a specific location in the bazaar and lives among his fellow tradesmen (i.e., merchants, master craftsmen, craftsmen and students) in the same neighbourhood (Avery, 1965). In the past the duties of these guilds consisted of specific social as well as commercial activities such as pricing, standard of manufacturing, inspection, competition and so on (Avery, 1965).

For years the political and social organizations of guilds have been stratified in a hierarchic order. At the top of this order are those guilds that contribute significantly to the urban economy. Their political and economic power is reflected in their hierarchic location in the bazaar and the traditional residential areas. Therefore the powerful guilds have their residential areas nearer to the

city centre, while members of the least powerful guilds are situated at the periphery of the city.



Drawing III-1. Social hierarchy of a typical traditional residential area.

The basic social unit is a family living in a private house where the man and woman form the unity of the household.

Several related families form an extended family that have the right to a private domain (i.e., cluster).

Different size of extended families generates different clusters.

Several of these clusters are economically and socially associated to form an identified trade, guild or an ethnic minority. Starting from the city centre, their residential location is ordered hierarchically in accordance with the economic power of their guild.

Based on the metaphysical messages in the Quran, Islam has indicated that all aspects of life and all cosmic and universal manifestations are governed and united by a single Universal Principle: the unity of all cosmic elements and relations into a single order. The unity is based on the realization of the relationship between the human being and the Universal Order, and the nature of things, particularly the Divine Nature. It is deducted from

the main principle of Islam, - Unity, (Al-tawhid), explicitly indicated in the Al-Shahadah which states: "There is no divinity if it be no Divinity" (La-I-Laha Ill-a-Allah) or, "There is no reality if it be no Reality". This Islamic Universal law defines the nature of the Absolute, the profound oneness of all existence and the relative relation and the way to integrate everything into the whole (Nasr, 1979).

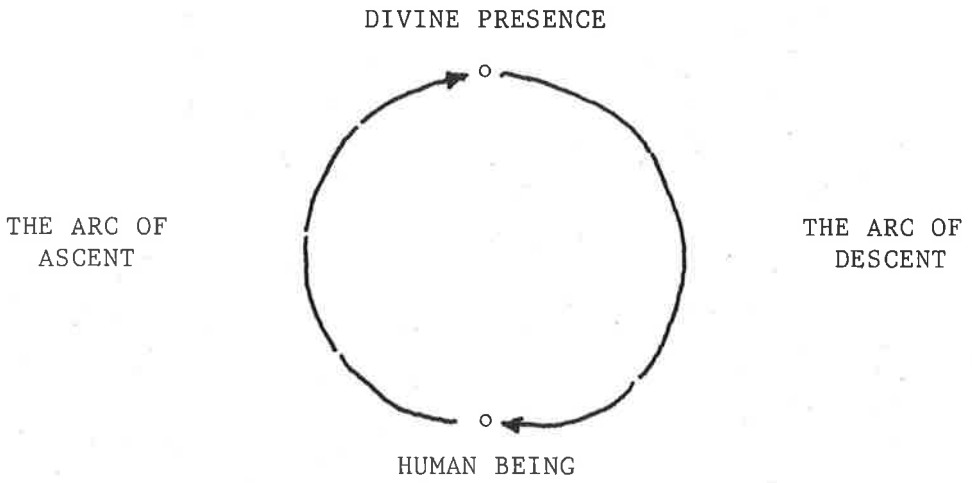
Traditional Muslim culture is also based on the belief that the Holy Quran is a reflection of that unified Universal Order. Similar to the physical world, the Quran makes the human being realize the whole world and its constituent parts that are in continuous change to a constant law and pattern. Therefore, an analogy is created between the Universal Law and the Quran. By abiding by these laws, the urban built-environment becomes a part related to the Universal whole (Afnan, 1981; Ardalan, 1975; Bakhtiar, 1976; Burckhardt, 1976). This implies that Islamic art, architecture and urban design take their notion, ideals and symbols from the laws and principles noted in the Quran and its analogue, the unity of the Universal Order. Islamic urban design is noted to be a synthesis of the spatial patterns and elements that symbolize Universal Unity and Order. Some verses and chapters of the Quran are regarded as the sources of inspiration for the arabesque while others, such as the last chapters, are an inspiration for symmetrical, rhythmical and geometrical architectural forms (Nasr, 1979). Spatial characteristics,

through their symbol systems, seem therefore to symbolize and conform to a Universal Ideal and Order and transmit an ontological knowledge which is contemplative in nature, metaphysical in essence and defines the existence of Being.

Therefore, nature and the built-environment have become an order with two levels of knowledge: the physical and the metaphysical, or epistemological and ontological. Nature and the Quran have become a source of inspiration and the symbol systems to be embodied in the spatial characteristics of the urban environment and thus achieve further harmony between the natural and the built-environment, or the human being and nature.

It is important to note that in Islam the human being is given the freedom of choice, but he/she is to be true to his/her primordial nature (fitrah), namely a Divine Form, created to reflect God (Nasr, 1979). Thus the human being is judged not by physical abilities but by how true he/she is to his/her nature. The human being through knowledge (Marifah), integrated in him/her as intelligence, will, and speech (Divine qualities), is able to know himself/herself and his/her nature and thus lead himself/herself back to God. This definition, gives an existential and spiritual dimension (i.e., "being") to a person, and corresponds to the one outlined in chapter one (i.e., "being" as an agent of "action"). In other words, a metaphysical dimension is supplemented to human "action" so that the actor can express spatially his existence. This further indicates

that both the ontological and the epistemological knowledge are necessary in the production and reproduction of space. The metaphysical conception and objective of the traditional Islamic human being is therefore an important factor in the spatial symbol systems, the human dimension of space and the creation of the "sense of place" as a manifestation of personal existence.



Drawing III-2: The Arc of Ascent and the Arc of Descent. Through Revelation the Divine and Absolute Truth is given to the human being. The human being reaches his Creator through the symbol systems by the Arc of Ascent.

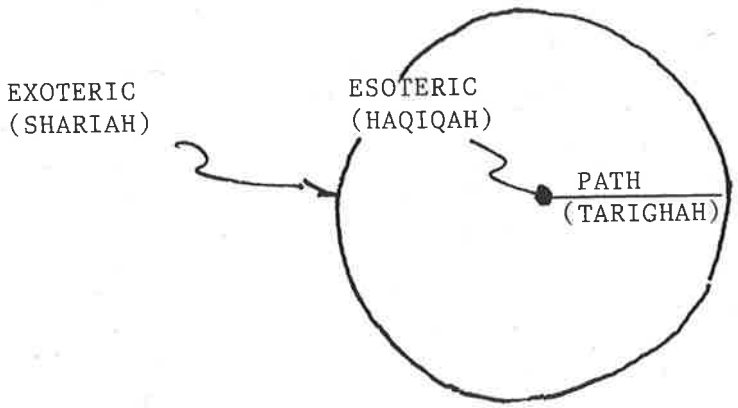
One of the principal schools that has a considerable impact on art, architecture and science is Sufism or mystical theology, which started in the eleventh century under the Seljug Dynasty (1037-1157).

This period in Persian history is considered to be somewhat of a renaissance (Pope, 1965; Godard, 1965). A dynamic creativity in art, architecture, philosophy and

literature was observed. Since then, Sufism progressed to influence all forms of knowledge taught in the traditional schools (madrasah) and artisan trade guilds in the bazaar. Throughout the history of Iran great Sufis were teachers, intellectuals, counsels and spiritual instructors. They also founded the Safavid Dynasty (1499-1736). The Sufi monasteries (khanagahs) were often contributors of stability and great centres for education. Many of their mystical doctrines that combined technical and spiritual knowledge, were associated with architecture and city planning (Isfahan Colloquium, 1974). In short, up until the present day, the Sufi orders in Iran are the most important contributors to Islamic culture. Hence, a brief outline of their theory is necessary if the spatial characteristics of Isfahan are to be understood.

Sufism, whose ideas are also derived from the Quran and the prophetic sayings the Hadith, is considered for those who refuse to be tied down to only the externalities (exoteric) of religion. They rather seek for the mystical knowledge (esoteric) (Marifah) of Reality, Being and God. This goal is known by the Sufis to be much higher and more difficult to achieve than obedience to the exoteric rules and laws of the Al-Shari'ah. It is achieved by passing through certain mystical stages of "being" where the soul, the spiritual element in human being, returns to its source: God. This mystical journey relies upon the contemplation and understanding of the symbols associated with Divine reality, grace (barakah) and oneness (Al-tawhid); the principle of Islam (Burckhardt, 1963; Stoddart, 1976).

In Sufism, however, the two concepts esoteric and exoteric have a definite relationship (drawing III-3). This relationship is properly described by an analogy to a circle, where the exoteric concept (Shari'ah) is the circumference, the totality of which comprises the laws that govern the whole Muslim world. Accepting and abiding by the exoteric concept is a prerequisite of any Sufi. While the inner truth, or Haqiqah, the esoteric heart of religion, is the centre of this circle. Each radius (and there are infinite radii) symbolizes the path (Al Tarighah) that leads from the circumference (Shari'ah) to the centre (Haqiqah). Just as the point is the generator of the circumference, it is the Haqiqah that generates the path (Al Tarighah) and the laws (Shari'ah) (Stoddart, 1976). The aim of the Sufi therefore is to seek the centre: the Origin and Reality of all things. Partly this aim is achieved by understanding the meanings of the spatial characteristics and the symbol systems of the built-environment and the Quran (Ardalan, 1975; Bakhtiar, 1976; Burckhardt, 1976; Critchlow, 1976).



Drawing III-3: The exoteric and esoteric concept of Sufism.

Contrary to Tafsir, the literary and exoteric explanation of the Quran, Ta'wil is the methodology used to derive the esoteric meaning of the symbols in the Holy Book and the Universe. Ta'wil is based on the notion that everything has an externally (Zahir) and an internally (Batin) manifested reality. The Sufi who lives and experiences the external must seek the internal if he is to reach the Origin. This is done by being mentally transformed by all Quranic and the analogue Cosmic symbols - that is, in all realities. It is apparent that this notion of search, penetration and mental transformation by the symbols in all realities is the basis of traditional Islamic science, art, architecture and urban design. Identifying an inner metaphysical meaning in all things seems to be contrary to the Cartesian natural and social science developed by Western civilisation.

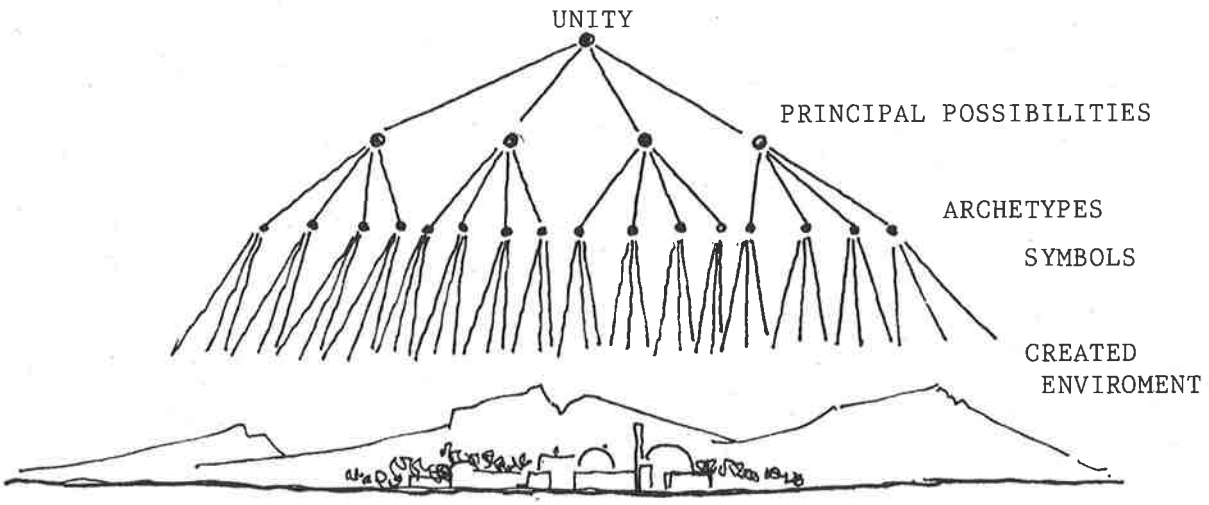
The Sufi doctrine is based on the Unity of Being, derived from the previously stated Al shahadah, the principle of Islam. By this principle the Sufi also distinguishes the relationship between the relative and the absolute, between the finite and the infinite and between other than God and God Himself. By using the Al shahadah the Sufi defines Unity or Oneness as a "positive content of every distinction" (Burkhardt, 1963:61). Since in each "being", there exists the relative of the absolute or oneness (a positive quality), it creates a certain qualitative distinction apart from the reality of the physical distinction of "being". The Sufi therefore distinguishes

between things by their relative positive quality in relation to the Absolute Unity. Hence all "beings" are associated with the Universal Reality and Unity. Moreover, any aesthetic quality, including the one in the built-environment, is related to the Universal Quality and conforms to the Cosmic Order. Thus the quality one experiences in the spatial characteristics is the reflection of the Divine Beauty.

> Oh Lord thou knowest that even now and again
> We never gazed except at Thy beautiful Face
> The beauties of this World are all mirrors of
> Thy Beauty
> In these mirrors we only saw the Face of the King
>
> Awhad Al-Din Kirmani
>
> [A leading Sufi who died in 1337-8. He belonged to the Shahidbazi: The contemplation of the Divine Beauty in earthly form. The above rubaiyat is translated by B.M. Weischer and P.L. Wilson - Heart Witness, Tehran 1978:168-169.]

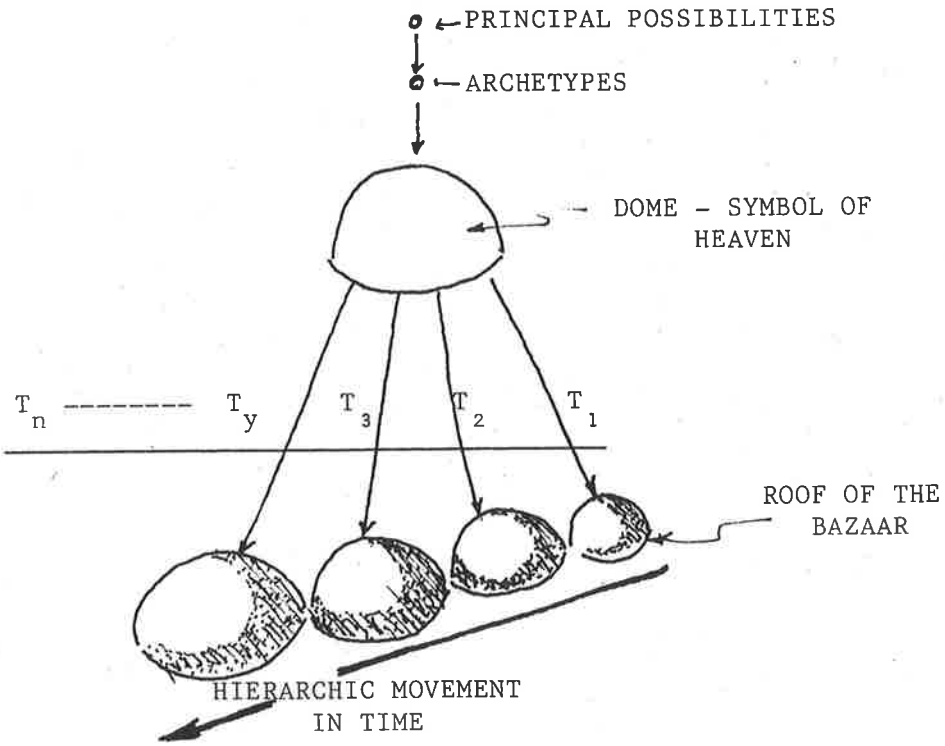
Sufism explains the creation of the world as a manifestation of God to Himself (Burckhardt, 1963). Moreover, the Sufi sees human creation with full consciousness of God's creativity, not in competition with Him, but submission to His Universal Order, as a Divine Model (Nasr, 1981). Beside being functional, human creation is a metaphysical knowledge that is revealed so that the creator may know himself/herself as a "being". In both cases (i.e., Divine and human creation) a dichotomy; the creator and the created form a unity. Furthermore, in both cases of creation, there are the "Principal Possibilities", known as the qualities of the Creator and conceptions of Unity, whose Archetypes are symbolized by the symbol systems in

the created. Unity in any creation is therefore achieved by the symbols that symbolize the Archetypes (Afnan, 1981) (drawing III-4).



Drawing III-4: The Principle and Unity of Creation.

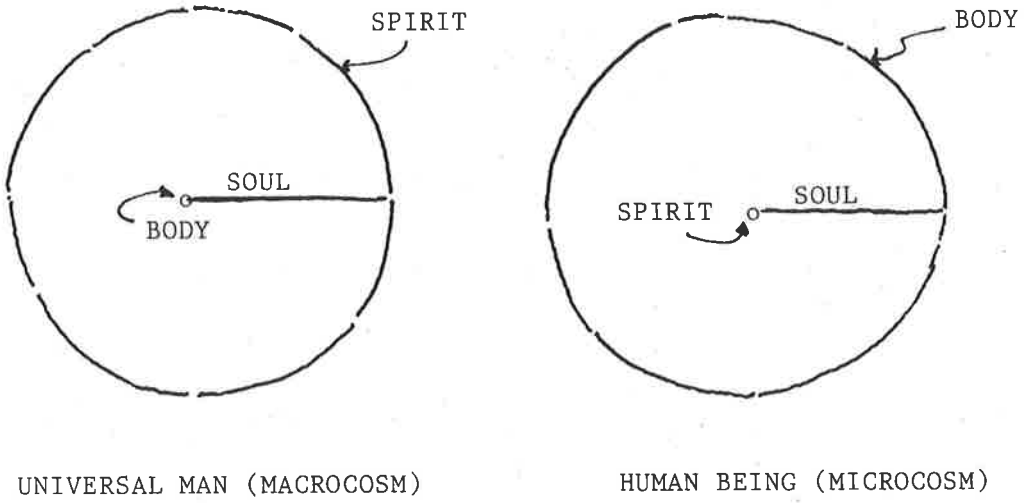
Another Sufi notion of creation is based on the renewal of creation at each instant. According to the Sufi the Principal Possibilities are never brought to existence. Only through symbol systems that symbolize their continuous, inexhaustible relative modalities are they experienced (Burckhardt, 1963). When these two theories of creation are synthesized a theory of Islamic rhythm and harmony, based on space-time creation, is apparent (drawing III-5).



Drawing III-5: Renewal of Creation at each instant and the space-time theory of Creation.

The repetition of a dome in time, with a slight change due to difference in the quality of Creation is a theory of creation that has produced rhythm and harmony in the bazaar.

The analogy drawn between the Cosmos (the Macrocosm) and the human being (the microcosm) is another aspect of the Sufi doctrine. It is based on the notion that, the human being, has in his mind a conception which virtually includes all things. "Through stimulating forms he can conceive both forms and spiritual essence" (Burckhardt, 1963:90). The human "perception" of the physical world represents, on this level of consciousness, a complete vision of the whole universe. Hence the human being the microcosm and the Universe the Macrocosm are the exact reflections of each other (drawing III-6). The Sufi calls the universe a "Big Man", or a "Universal Man", and the human being, a "little universe".



Drawing III-6: The Macrocosm and the microcosm.

The Sufi doctrine then goes on to explain that the "Universal Man" has one body and a gradation of heavens, corresponding to degrees of "being". He has a soul (nafs) whose power is in all the organs of the body and moves outward from the earth to reach heaven where the spirit dwells (Nasr, 1954) (drawing III-6). The same analogical concept of "Universal Man" is given to human being. Whereas the "Universal Man" has the earth as his body, the human being has his/her human individuality as the external form. Therefore the soul (nafs), identified with the essence of the human being, is an inward reality moving toward the centre where the spirit exists. The human being, according to the Sufi therefore, has attained in this world, a central position, and through his/her realization of the totality of the nature and the Universe, he/she is able to realize truth, reality and his existence (Nasr, 1979). These beliefs - that is, realization of nature and the

universe - made astrology, astronomy and mathematics important. They were reflected in many spatial characteristics of the built-environment. For example Ghiyath Al-Din Al-Kashi (d.1420), a mathematician and astronomer, used his knowledge to write a treatise on the mathematical proportion for buildings.

It is interesting to note that the concept of the Macrocosm, as Ardalan (1975) has indicated, is symbolized in the Persian pavilion garden, while the microcosm - the inward-looking little universe - is symbolized by the interior courts. In both cases it is the soul which is moving in time and space in search of the spirit.

Prior to any further study that will indicate the impact of the Sufi doctrine on the spatial characteristics of the built-environment, the definition of cosmology in the Islamic cultural context seems necessary.

Traditional Islamic cosmology and natural science are closely associated with the metaphysical and philosophical ideas that manipulated Islamic civilization (Nasr, 1976). Cosmology is based on the "interrelationship between things, their synthesis and the vision of the whole within which the parts can only have meaning" (Nasr 1976:28). The human being, if he/she wishes to attain an ideal quality of life, has to attempt to co-ordinate his/her life and society with the harmonious and ordered universe. Cosmology, then, is not only related to physical harmony and order, like modern ecology, but also to the spiritual

and qualitative aspect of "being" and the Universe. Therefore cosmology is used to establish the spatial existence of the human being. This science has used in its synthesis diverse sources such as, the Quranic symbols; the principle of Unity in Islam; mathematical and numerical symbols. The cosmological schemes are therefore to relate each aspect hierarchically to the Unity and thus further clarify the Macrocosmic picture.

It is observed that the city in Islamic tradition has been conceptualized organically and its patterns are systemized hierarchically so that one can perceive the Macrocosm, and its analogue the microcosm. It seems to be yet another symbol system that contributes to the human being built-environment relationship.

IV. THE SPATIAL ELEMENTS AND THE CREATION OF THE ISLAMIC SPATIAL CHARACTERISTICS IN SPACE

In the first chapter it was stated that the spatial elements (surface, shape, form, space, colour, texture, etc.) are organized in certain patterns to identify in space the spatial characteristics of the settings to achieve the spatial situations that may accommodate human "action". At the beginning of this chapter arguments were given for assuming that the spatial characteristics in space are created to carry the meanings given by the symbol systems. The symbol systems were noted to be the identification of certain cultural patterns. Hence, culture contributes to the spatial characteristics in space to

accommodate appropriately the human "action" and the existence of "being".

Therefore, having described briefly the traditional Islamic culture and some main aspects of its symbol systems, it now seems necessary to critically review the spatial elements, their organization and the creation of the spatial characteristics.

Note that the cultural and metaphysical stress in this thesis is not to prejudice other factors such as local material, climatic conditions, geographic location and function. The importance of these elements, as noted in chapter two, is obvious. Only when necessary, are they integrated into this argument.

In the study of the culture, the traditional Islamic built-environmental aesthetic, as a quality of the spatial characteristics, is observed to be a means of knowledge for the realization of Reality. It is conceptualized as traditional due not only to the object and function, but also to its conformity to the Unity of the Cosmic Order, to its symbolism, to its reason for its creation and to its hierarchic style and relationship. In traditional Islamic architecture and urban design the designer creates his built-environment and gives meaning and characteristics to its spaces, fully aware that he/she is expressing the symbolic meanings and transforming the form from the material level to reflect the Archetype and the existence of Being. In other words, the designer attempts to trans-

Number	Geometry Static	Geometry Dynamic	MACROCOSM		MICROCOSM		MATHEMATICAL ATTRIBUTES
0			Divine Essence		Divine Essence		
1	•		**Creator**	One Primordial Permanent Eternal	**Creator**	One Primordial Permanent Eternal	The point The principle and origin of all numbers
2	——		**Intellect**	Innate Acquired	**Body divided into two parts**	Left Right	One-half of all numbers are counted by it
3			**Soul**	Vegetative Animal Rational	**Constitution of animals**	Two extremities and a middle	Harmony First odd number One-third of all numbers are counted by it
4			**Matter**	Original Physical Universal Artifacts	**Four humors**	Phlegm Blood Yellow bile Black bile	Stability First square number
5			**Nature**	Ether Fire Air Water Earth	**Five senses**	Sight Hearing Touch Taste Smell	First circular number
6			**Body**	Above Below Front Back Right Left	**Six powers of motion in six directions**	Up, down, front, back, left, right	First complete number The number of surfaces of a cube
7			**Universe**	Seven visible planets and seven days of the week	**Active powers**	Attraction Sustenance Digestion Repulsion Nutrition Growth Formation	First perfect number
8			**Qualities**	Cold, dry Cold, wet Hot, wet Hot, dry	**Qualities**	Cold, dry Cold, wet Hot, wet Hot, dry	First cubic number and the number of musical notes
9			**Beings of this world**	Mineral Plant Animal (Each containing three parts)	**Nine elements of the body**	Bones, brain, nerves, veins, blood, flesh, skin, nails, hair	First odd square and last of single digits
10			**The Holy Tetractys**	First four universal Beings	**Basic disposition of the body**	Head, neck, chest, belly, abdomen, thoracic cavity, pelvic girdle, two thighs, two legs, two feet	Perfect number First of two-digit numbers
12			**Zodiac** Aries, Leo, Saggitarius Taurus, Virgo, Capricorn Gemini, Libra, Aquarius Cancer, Scorpio, Pisces	*Fire, hot, dry, east* *Earth, cold, dry, south* *Air, hot, wet, west* *Water, cold, wet, north*	**Twelve orifices of the body**	Two eyes, two nostrils, two ears, two nipples, one mouth, one navel, two channels of excretion	First excessive number
28			**Stations of the Moon** (divided into four quarters)	Each quarter equals one week, seven days represent seven planets	**Twenty-eight vertebrae**		Second complete number

Drawing III-7: The cosmological quality of numbers, based on the cosmology of the Ikhwan-Al-Safa, described in Nasr: An Introduction of Islamic Cosmological Doctrines. The spatial characteristics of an individual number form part of the whole concept. Two is the first number and three is the first odd number, while six is considered the number of the body (Jism), and the first definition of space (Ardalan, 1975).

Source: Bakhtiar - Sufism, 1976.

form the matter in the form into a formless essence so that it may comply with the cosmic order in the Macrocosm and its analogue; the microcosm.

Transformation of the matter and the form and identification with the Divine Essence is therefore achieved through symbols that reflect the Divine Archetypes. However, according to the Sufi teaching, the human being cannot create these symbols. The symbols are there for the designers to discover and transform through mathematics, geometric patterns, harmony and rhythm that exist in nature (Bakhtiar, 1976). Hence the designer copies the process of nature and uses its symbols to express the Islamic notion of Unity.

Therefore, in this culture, the designer adopts the role of a forger who takes matter and, through a certain process, a priori knowledge noted in the Quran and the Universe, and conscious state of mind, creates the characteristics to achieve certain metaphysical objectives that convey certain existential and spiritual knowledge related to the Cosmic laws and the principle of Unity. It is an ontological process that seeks to transform the object through the conformity to the nature of its material and the subjective spiritual world view of the Universal order. Hence, two complementary realities are considered as part of the process: matter in its traditional concept and mathematics: known by the Sufi as the Divine Language of the intellect that has created the natural order and thus its understanding is paramount. These two combine in any

Point: A symbol of Unity and the source. It signifies the controller of all forms.



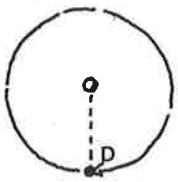
Line : A point moves in a certain direction. Since direction is a traditional cosmic space, it is qualitative. "When a point moves outside and away from its original position, it symbolizes the polarity of existence" (Critchlow, 1976, p.9).

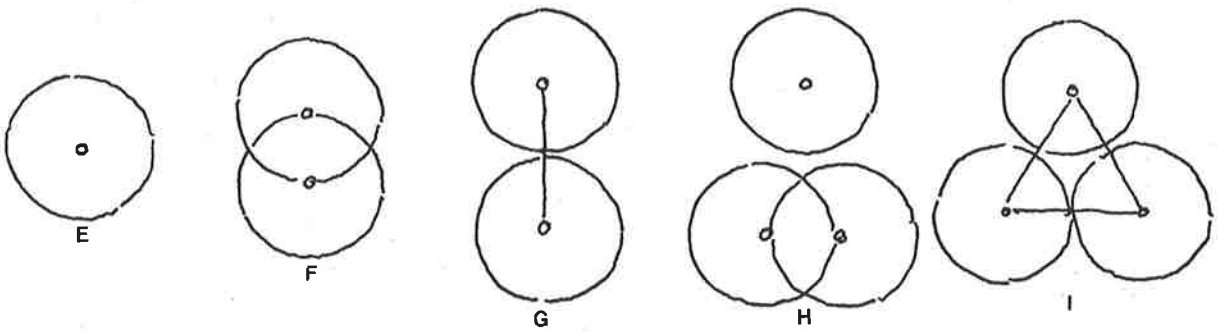


Arc : The third movement that forms a boundary is the arc. The arc is controlled and dominated by the centre.



Once the circle is complete, Unity is formed. The circle is the symbol of eternity, and the basic element in the formation of a polygon.

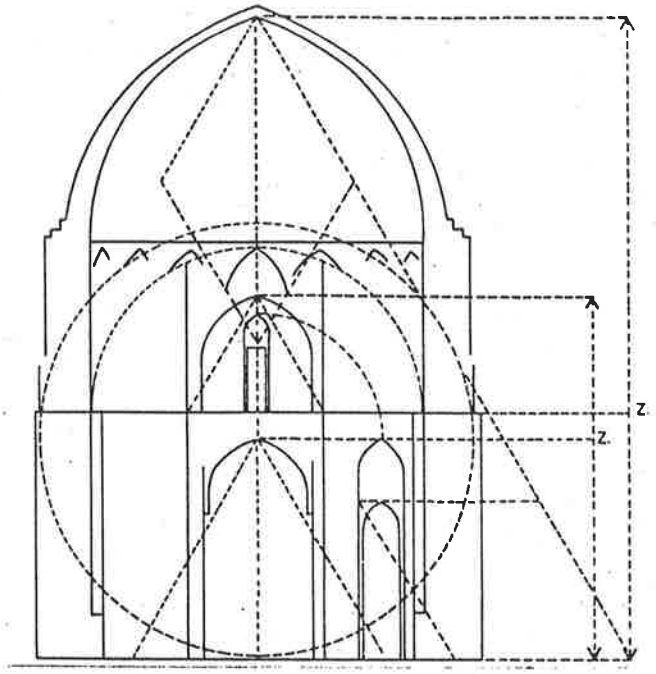




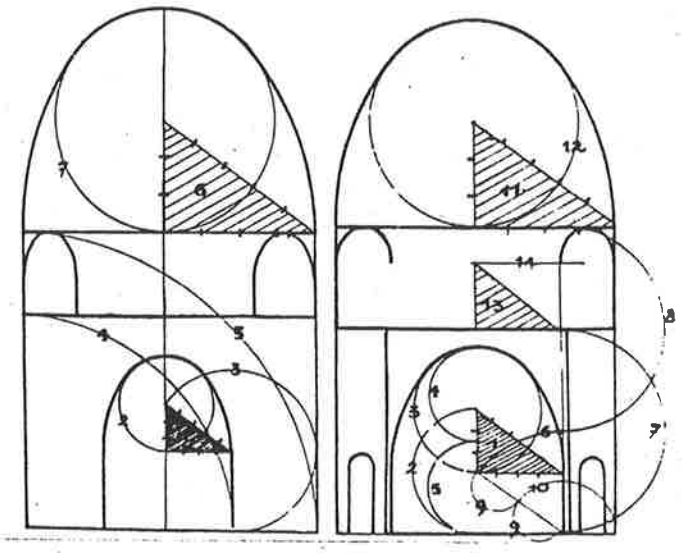
The movement of a circle forms a triangle to a tetrahedron. Indicates the circle as the Archetype from which all forms can be produced.

Source: Afnan, P. Urban Design Isfahan, 1981. Adopted from the studies by Critchlow, K. Islamic Pattern, 1976.

Drawing III-8: The creation of Multiplicity from Unity and return of Multiplicity to Unity.

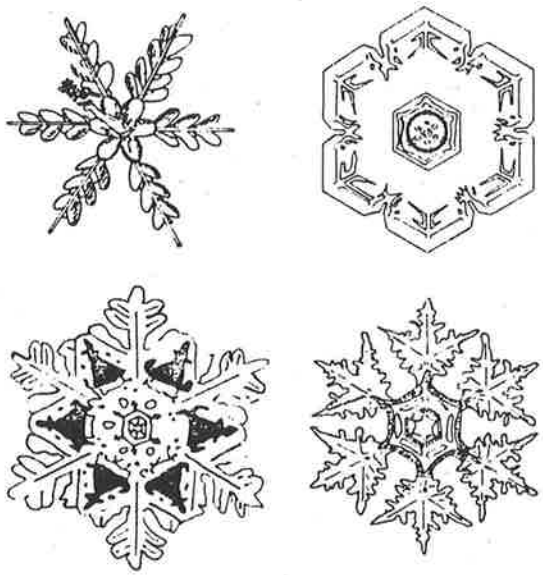


The human body is the unit of proportion in traditional Islamic architecture.



Drawing III-9: Laws of proportion in the Friday Mosque, Isfahan. Note that all the dimensions are derived from the height and width of the mosque.

Source: Ardalan, Sense of Unity, 1975.

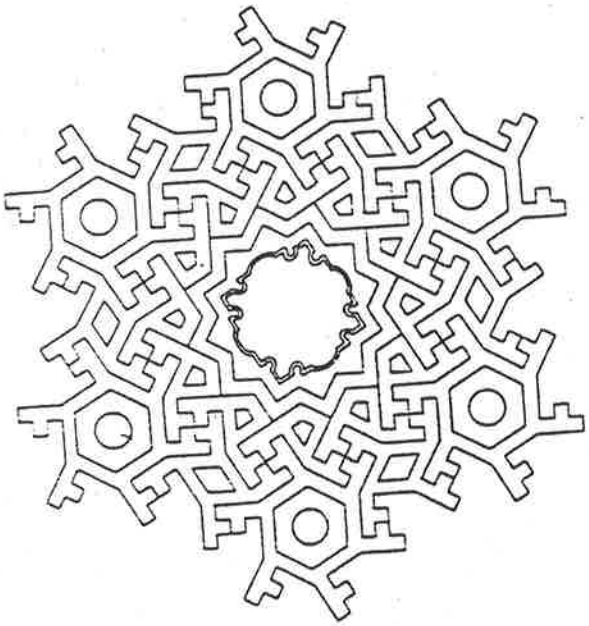


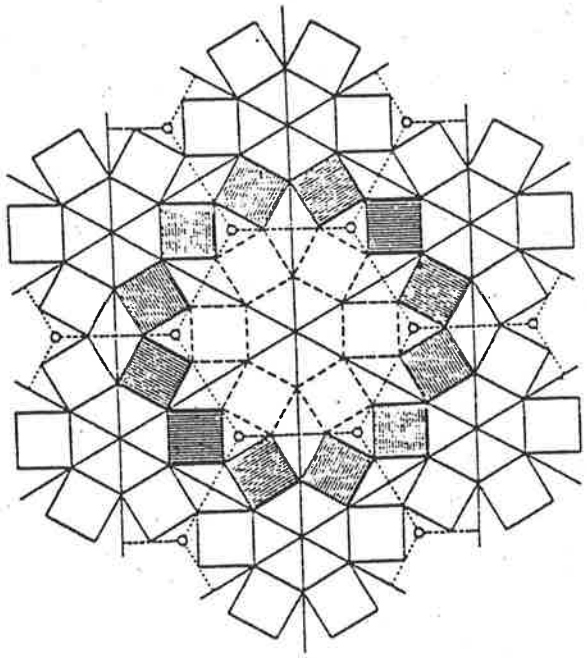
Drawing III-10: Geometric patterns in nature. Natural mathematical proportion, the symbol of ideal beauty and Cosmic Order, has given the designer the means to generate the Universal Beauty: the essence of the Creator.

Source: Ardalan, Sense of Unity, 1975

Islamic patterns inspired by the natural elements.

Source: Nasr, Islamic Science, 1976.





creative process to become the bases upon which all spatial manifestations take shape and assume character. They are therefore the foundation, harmony and rhythm in the cosmic and the built-environment. As a result, before defining the spatial elements and characteristics that attempt to achieve in space the desired criteria, it is necessary to review mathematics as the language of the intellect and matter in its traditional concept.

A. MATHEMATICS, THE LANGUAGE OF THE INTELLECT

Critchlow (1976) explicitly indicated how, in Islamic culture, mathematics and geometry as its physical manifestation are associated with the concept of Unity established in the Al-shahadah: the principle of Islam (There is no divinity if not Divinity) (drawing III-8). Through mathematics, unity, harmony and rhythm in nature are explained (drawings III-9, III-10). Thus, for the traditional Muslim, mathematics takes three forms of reality: in the Divine Intellect as Archetypes, in the world of the mind as scientific aspects and in the external world concrete qualitative numbers and figures (Nasr, 1976). It is for this reason that one notices that quite a number of mathematicians (e.g., Khayyam, Ghiyath ad Din Kashi, Al Biruni) and astronomers have contributed to the Islamic culture. Thus mathematics for the designer is a means for expressing the symbols that shape and assume the characteristics of the built-environment. Unity, through rhythm and symmetry, inspired from the natural order is established. Continuous cycles of harmony to create Unity of multi-

plicity are created. Rhythm, as Burckhardt (1976) indicated, does not belong to space, but the qualitative measurement of time. It is therefore by an act of movement that rhythm is established in the spatial dimension (Afnan, 1981).

B. MATTER IN ITS TRADITIONAL CONCEPT

According to traditional Islamic culture, natural matter in its traditional concept (i.e., fire, air, water and earth) is a passive substance upon which mathematics is imposed by the Intellect, to create a form. Ibn-Sina (a Persian thinker, d.1199) stated that the qualities of all bodies (Jism) are not the material but the form given to them (Nasr, 1964). Hence, matter is created for form, and its purpose is to have a form imposed on it. Furthermore, the reality of the material does not end with its exterior appearance but, as stated before, it has an inner essence or a symbolic reality associated with Unity. For example, water, beside its physical and chemical properties, is cold and wet, the symbol of the Giver of life. Through water the Muslim purifies his soul and, symbolically, he/she is reintegrated into his primordial state (Nasr, 1964). Therefore mathematics, matter and the symbol systems are synthesized to form the spatial characteristics and the relationship of the spatial elements in space. Hence a review of these elements is necessary.

One notes, however, that historical documents and architectural drawings which explicitly indicate the integ-

ration of symbol systems into the spatial characteristics are very scarce. It is only in the past decade or so that research has been undertaken (see bibliography) to try to understand the above synthesis. The following, then, is an attempt to contribute to that research and emphasize the importance of establishing design criteria for cities, created under the Islamic culture.

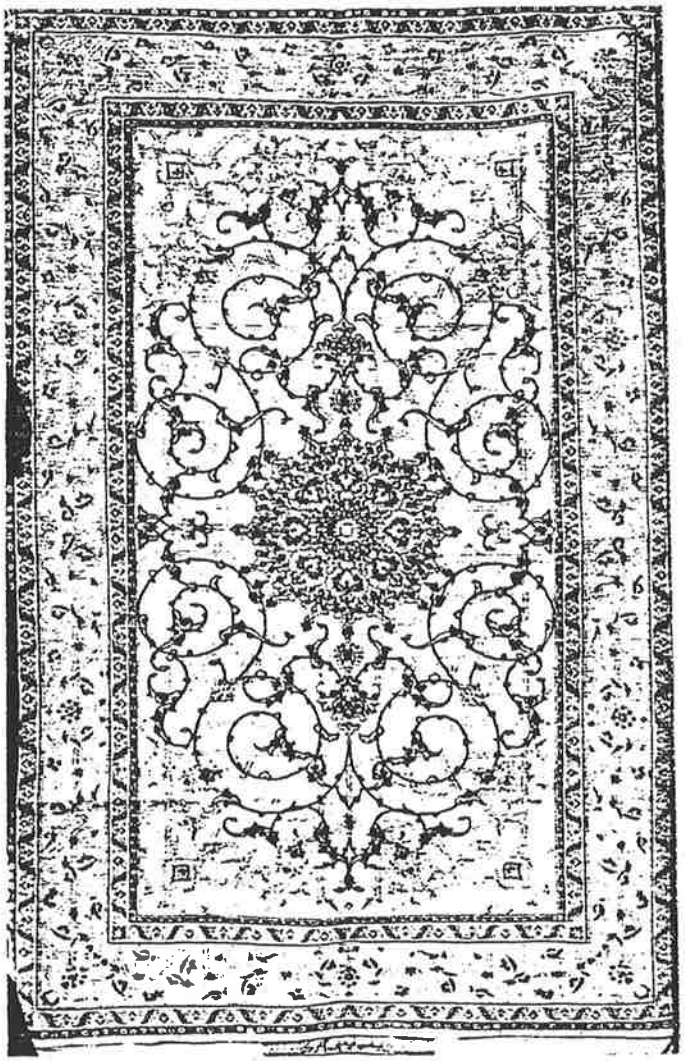
C. SURFACE: THE BASIC SPATIAL ELEMENT IN THE BUILT-ENVIRONMENT

Surface is assumed to be the necessary basic spatial element that forms shape and frames a space. Through surface decoration, its spatial quality uplifts the soul to a higher state of "being". This metaphysical quality is achieved by the symbols, created through the synthesis of the geometric surface patterns, the nobility and richness of material itself and the design patterns inspired by the essence of nature and the cosmological order. According to traditional Islamic art, only through surface treatment can matter lose its heaviness and be transformed into an eternal artistic reality (Ardalan, 1975). Hence, the floor with its decorative patterns symbolizes the earth upon which one stands, while the wall, the transcending third dimension of space, is where the soul ascends into a higher state of "being". Finally the roof, through the symbol of the dome, is where the soul reaches its spirit (Afnan, 1981; Ardalan, 1975). By attempting to indicate the symbolism on these surfaces the artists and the architects could display their imagination, originality and genius.

1. Carpet decoration, the earth: the body in the Macrocosm (drawing III-11).

2. Wall decoration, the third dimension of space, the symbols of which ascend the soul to a higher state of being.

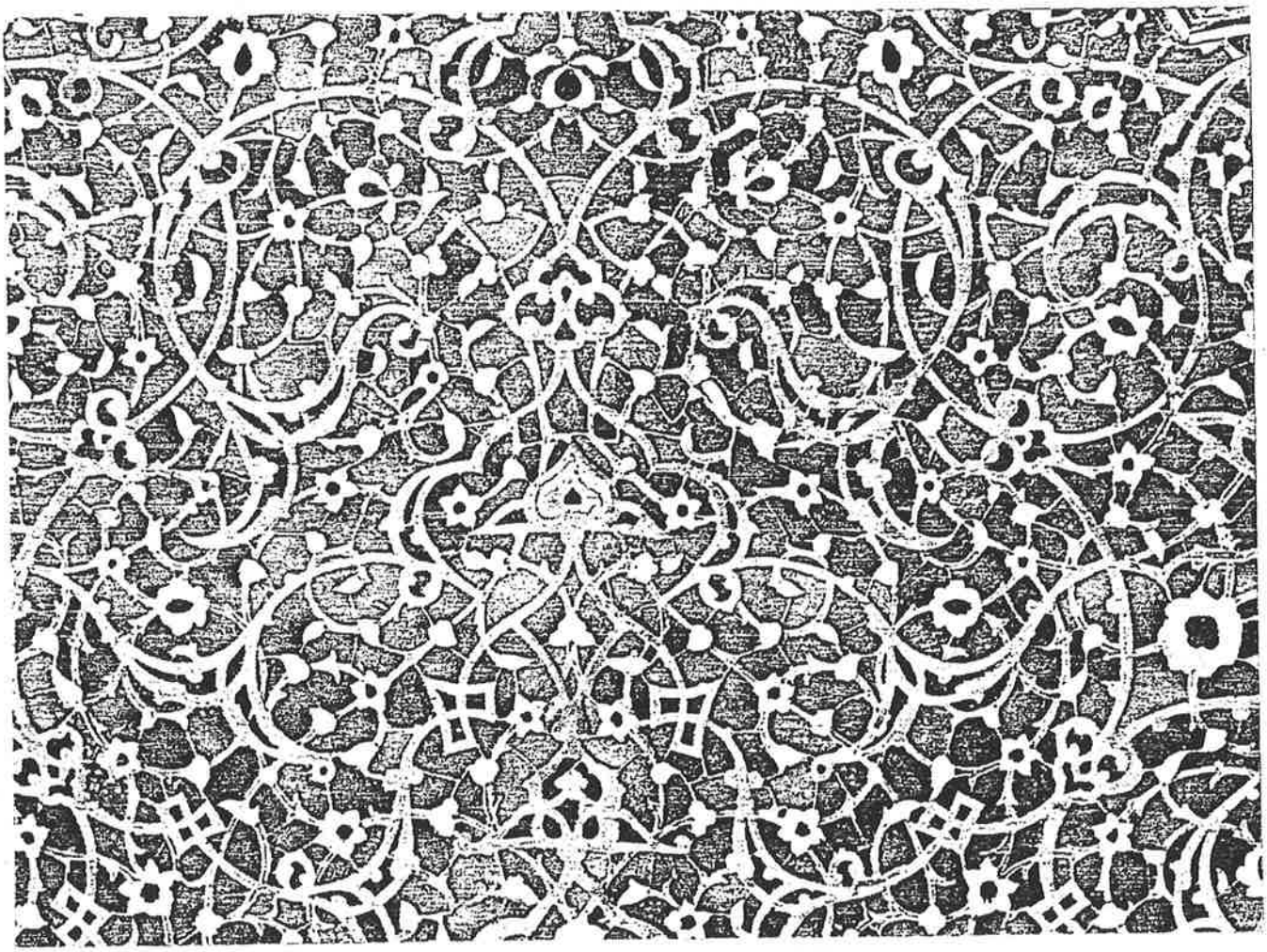
    a. Drawing III-12 Arabesque
    b. Drawing III-13 Calligraphy
    c. Drawing III-14 Brick wall pattern
    d. Drawing III-15 Wall opening treatment
    e. Drawing III-16 Wall opening treatment
    f. Drawing III-17 Tile work



Drawing III-11: A carpet made for floor decoration. The surface that signifies the Earth, the body in the Macrocosm, and the surface upon which the human being, the microcosm, stands.

The Arabesque pattern in Shiekh Lutfullah Mosque in Shah Square, Isfahan.

Source: Ardalan, Sense of Unity, 1975.

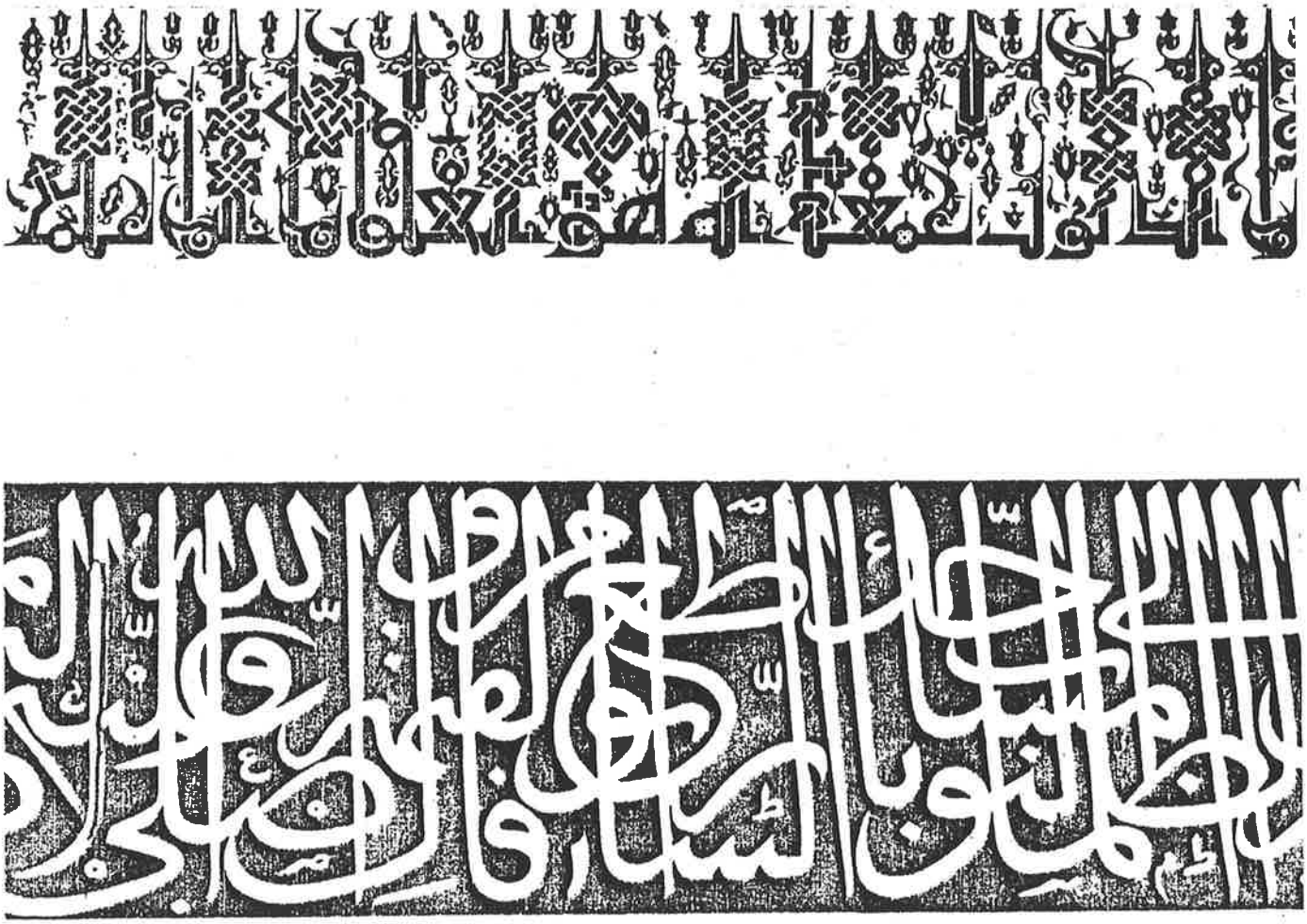


Drawing III-12: Arabesque.

Arabesque is composed of:

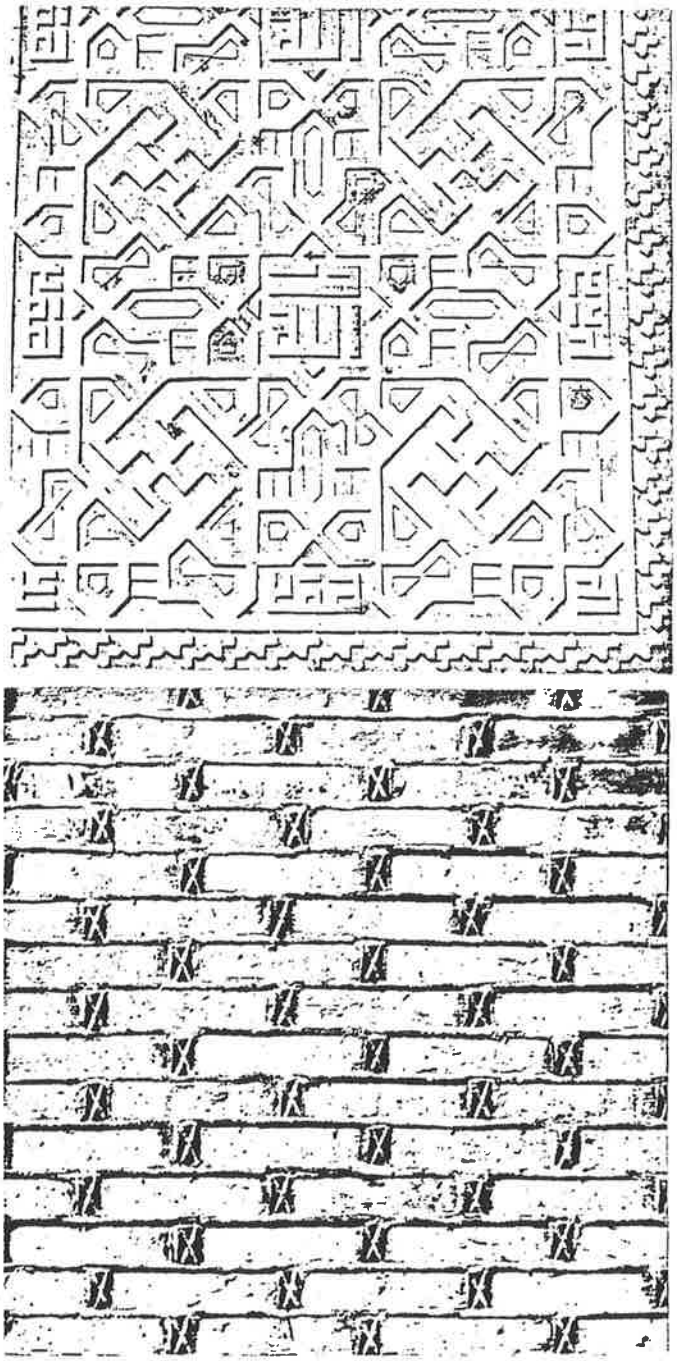
1) the stylized plants that symbolize nature and its rhythm;
2) the geometry which is integrated into nature.

The combination of both is nature. The idea is to combine a restive mass - the background - with an active decoration to express Multiplicity within Unity. As a result the background and the decoration complement each other.



Drawing III-13: Calligraphy.

The words of the Quran are sacred in form and content. In the art of Calligraphy, the passive background and the active pattern complement each other to symbolize the Islamic doctrine of Unity.

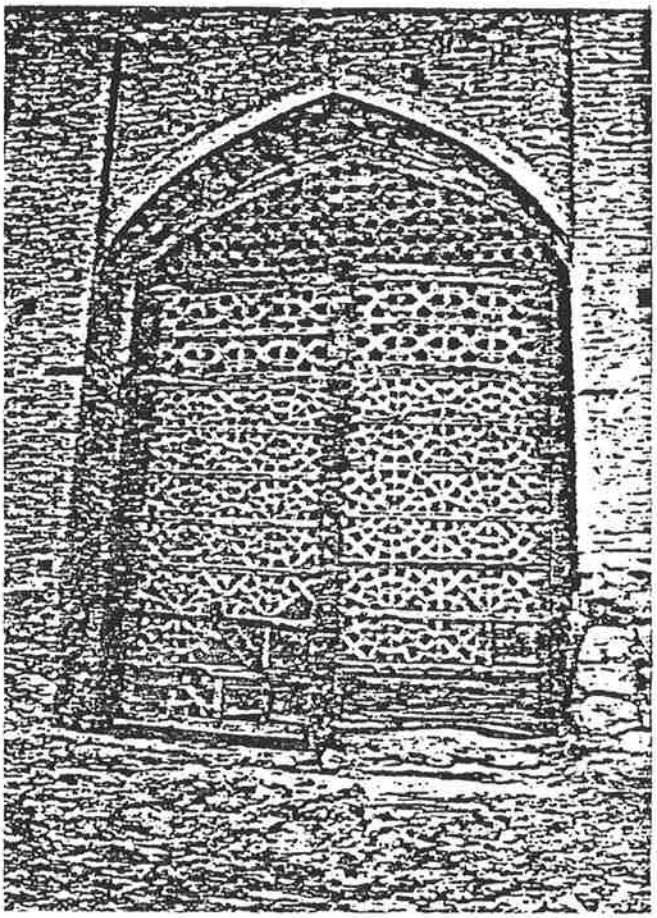


Drawing III-14: Brick wall pattern.

The size and plasticity of brick have made the brick an appropriate decorative material. Here also the decoration is part of the surface, not an applied ornamentation.

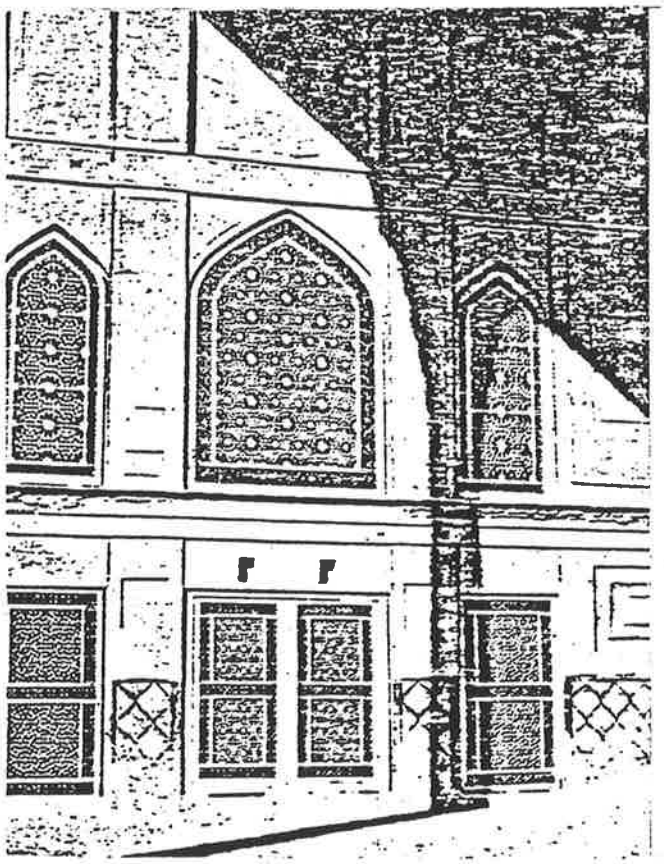
Source: Ardalan, Sense of Unity, 1975.

To achieve more surface harmony, all openings are treated with grating that has the same design as the surface. Hence windows are not treated as voids in contrast to the solid surface.



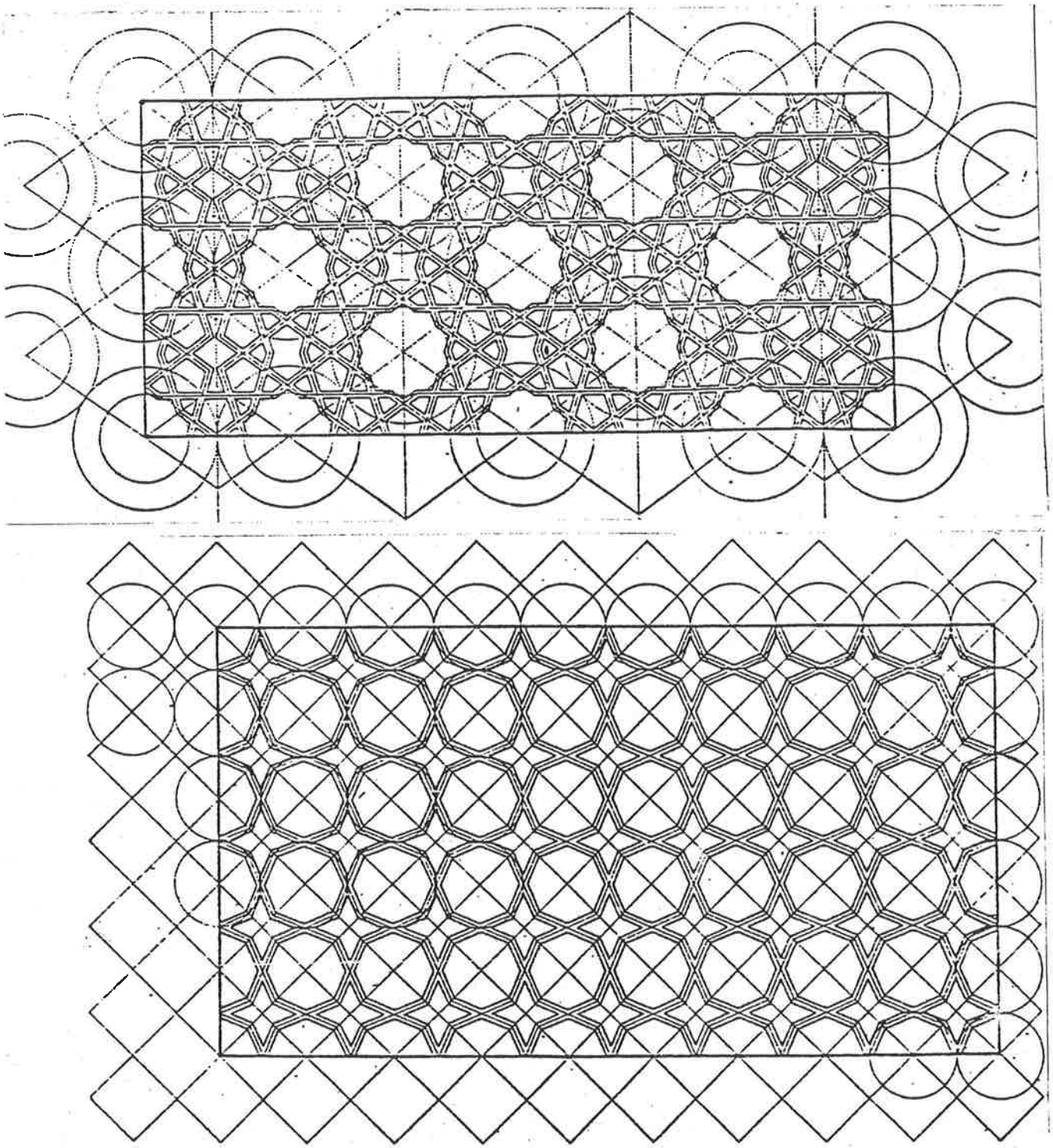
Hasht Behesht Pavilion Gardens in Isfahan.

Source: Orazi, Wooden Grating in Safavid Architecture, 1976.

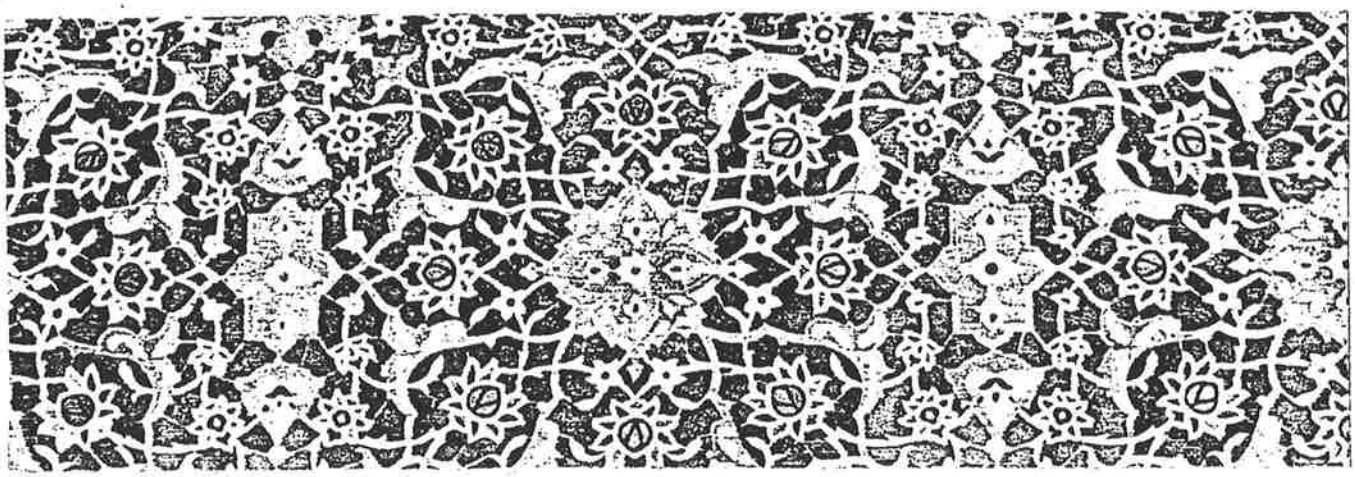


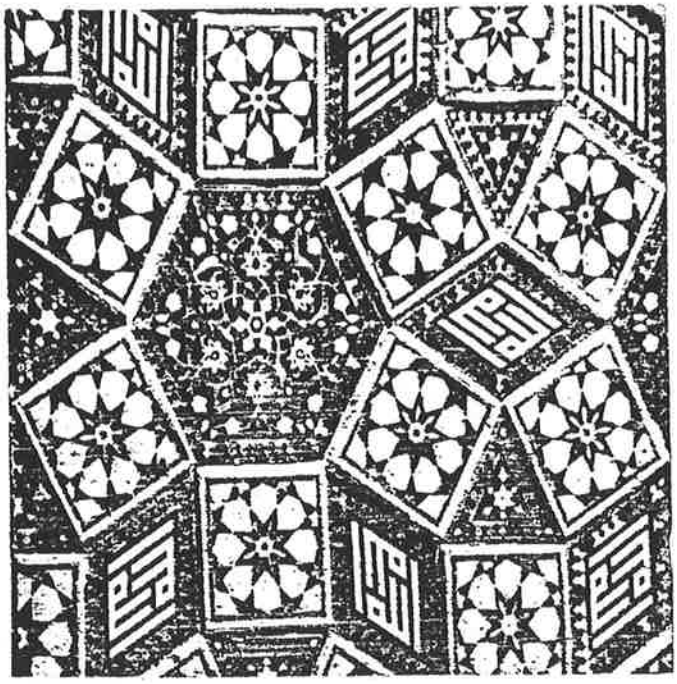
Drawing III-15:

All opening treatment.



Drawing III-16: Wall opening treatment.





Drawing III-17: Tile work. Since the eleventh century, tiles have been used for wall decoration.

Source: Blunt, Isfahan the Pearl of Persia, 1974

D. SHAPE: A SYMBOLIC QUALITY THAT SIGNIFIES THE ARCHETYPES

It seems that in this culture shape is defined with reference to the mathematical configuration that has manifested a certain symbolic quality to the object. "The square, the most externalized form of creation, represents the earth, while the circle is heaven. The integration of the two is through a triangle which embodies both aspects" (Ardalan, 1975:29).

Ardalan further indicates that the square as four and the cube as six, are the most stable, static and uni-directional shapes. As stated before, they symbolize the earth in the Macrocosm and man in the microcosm. Besides, both the human being body in the microcosm and the earth in the Macrocosm are symbolized by the cube, while the sphere, due to its bounding shape symbolizes Unity. These geometric shapes (square, cube, triangle and sphere) therefore are with reference to a certain cosmological order both in the Macrocosmic and microcosmic scale.

E. FORM: THE ORIGIN OF WHICH IN THE UNIVERSE IS THE INTELLECT

Burckhardt (1972) stated that in the Islamic culture all creation of form is through the intellect imposing an ideal on a plastic matter to create a certain content which that particular form contains. The traditional human being knows that the world is composed of forms, perceived with a priori knowledge by the five senses. These forms contain

symbols referring to the Archetypes and Cosmic Unity. The symbols are the result of the geometry applied on matter to give quality, identity and meaning in conformity with the traditional principles. According to the traditional human being, therefore, the symbols of a specific form are a link between the qualitative abstract world of the imagination and the existential, quantitative, measurable and functional spatial settings. In other words, form is a reality of an object, on the material level and through its essence and quality, a reflection of the Archetypal realities. For example, the notion of a dome does not refer to size, construction material or technique, but to the symbolic quality generated by the form and its content. Based on that, Ardalan (1975) has indicated that certain "generic forms" (dome, minaret, garden, courtyard, platform or socle, porch and gateway) were historically created as building blocks symbolizing the Cosmic Order. Furthermore, to give a new form (e.g., a mandala or chahartag) to a new symbolic meaning, one can synthesize two or more basic "generic forms".

F. TIME: A QUALITATIVE AND QUANTITATIVE MEASUREMENT OF MOTION

According to Ibn-Sina (Nasr, 1964) motion is defined as going from a potential to an actual state in time. An object moves in time because it still has in it a certain potential, and therefore imperfection. However, an object seeks a state of perfection as part of the total purpose of the Universal Order. "Motion depends not only upon the

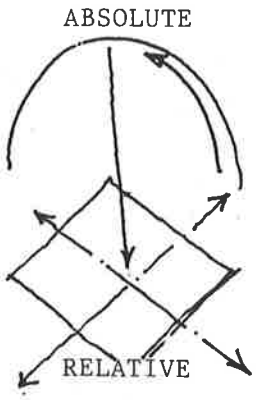
mover and the moved, time and space, but also upon Origin and the End" (1969:22) that is, its historicity and objectivity. Furthermore, the concept of the movement of the soul towards the spirit both in the microcosm and the Macrocosm has given time - the measurement of motion - a qualitative and metaphysical quality. While the motion of the sun and the notion of the "renewal of creation at each instant", have given a cyclic order to time. Therefore, the traditional time is both a qualitative and quantitative measurement of motion through space. It started at a certain point in the past and then with a spiral order of motion, will end at a point in the future. Moreover, since time is assumed to be qualitative, the motion in time takes a hierarchic notion.

G. SPACE: THE DIRECT SYMBOL OF BEING

According to Ardalan (1975) the traditional human being sees space as both the direct symbol of Being and the controller of the Universal Soul that determines the Macrocosmic creation and the microcosmic self. Space is the symbol of the soul in the microcosm and the Universal Soul in the Macrocosm. Hence space is conceptualized as a cut out from material form and defined by the void and the inner surface of that form.

Nasr (1964) has indicated that Ibn-Sina saw six directions to space: left, right, front and back as the relative on the horizontal plane, while up and down (zenith and nadir) the absolute that corresponds to heaven and

earth. Therefore, the sphere (or dome) specifies the high and low direction in an absolute sense (drawing III-18).

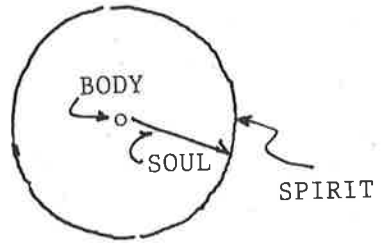


Drawing III-18: The upward direction corresponds to the ascending arc to Heaven, while the radius, the descending direction from Heaven to Earth. When the qualitative aspect of space is formed with reference to Heaven, the quantitative and functional aspect follows.

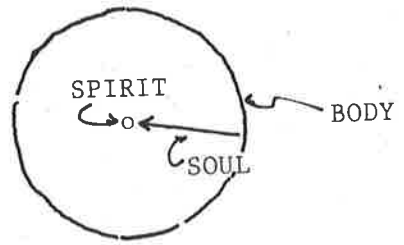
One can note here that in the traditional Islamic built-environment design, even though shapes make the form, spatial characteristics of space are more important. One main reason is the notion that space is the symbol of "being" and the soul in the microcosm, and the Being and Universal Soul in the Macrocosm. Therefore space is the generator and producer of the qualitative aspect of the form (i.e., the body). Note that the importance of space (i.e., the interior space) is also due to the arid climatic conditions and the social organization that significantly stresses the family unit.

Therefore, in this built-environment, one moves through spaces rather than between solid forms. Because of

its space-time hierarchic continuum, space has acquired positive and dynamic qualitative spatial and temporal characteristics expressed by the quality of the material, the design of the surface, the shape and the form and the socio-spatial activities. At the beginning and end of each space a complementary, transitional space usually exists. Its characteristics symbolize the preparatory stage where one has to condition oneself to a transformation from one state of spatial existence.



MACROCOSM



MICROCOSM

Drawing III-19: Space is the symbol of the soul. Its direction is hierarchic toward the spirit. In the microcosm the dwelling is the body and the form in which the space of the interior courtyard is cut. While the pavilion in the middle of the garden is the symbol of the body in the Macrocosm.

H. PLACE: WHERE THE SPIRIT RESIDES AND WHERE THE SOUL ATTEMPTS TO REACH

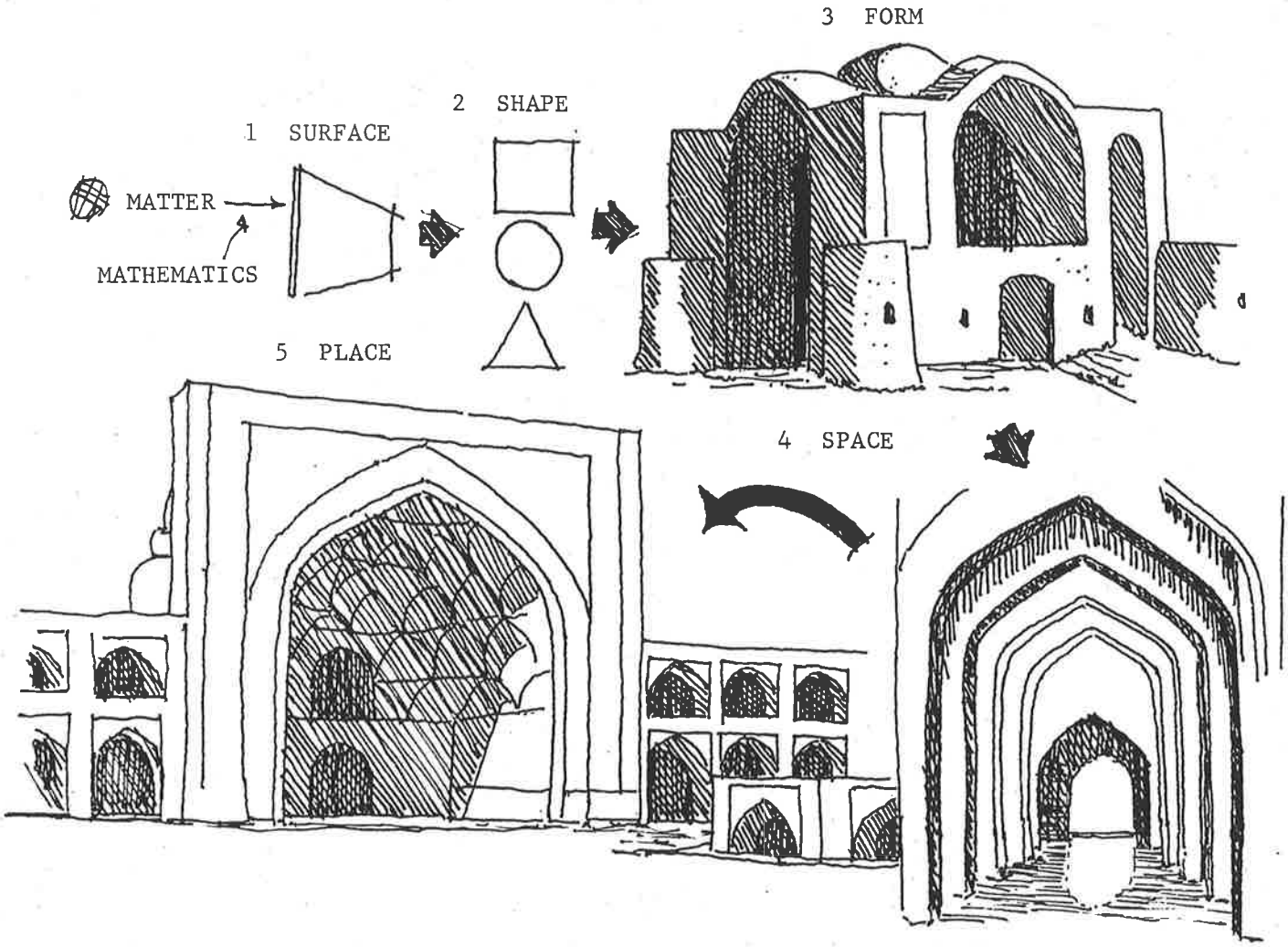
In the traditional Islamic built-environmental design, "space" is transformed to a "place" (makan) when the latter is secured, defined, familiar, orientated and its qualitative movement in time has reached its final stage. Metaphysically, "place" is where the movement of the soul in "space" terminates and reaches where the spirit resides in the microcosm or the Macrocosm. The "sense of place" therefore, is a conscious experience of existence, where the traditional human being can identify within a boundary (the container), his/her physical and mental self-expression, (i.e., his/her content), and thus achieve harmony with the environment.

"Place" as defined in this culture is a synthesis and an order of the spatial elements in space to create the spatial characteristics necessary for attaining an organized and ideal state for the existence of human being. It is therefore a static world, where the Unity of the cosmic order and its relation to the beholder is experienced. If the world is in a constant state of movement and change, human being could not attain that "sense of place". "Place" is where, through their comprehension and realization, all the symbolic meanings, created by the spatial characteristics, have transformed the interpreter to a state of "being" where Unity is experienced and co-ordination, harmony and security are achieved. The Persian world rahat (meaning ease, tranquillity and repose), is an expression

of that state of consciousness when a person senses that "place".

It is interesting to note that many of the scholars who critically studied Islamic architecture in Iran, were surprised to discover that the interior courtyard and four iwan plan (a pre-Islamic order) was used for the dwelling, mosque, caravanserai and school (madrasah) (Grube, 1979). However, they looked for their rationale and critical study at the Western order, where function and its reflection in the form is paramount. They failed to understand the importance of "being" and the metaphysical symbol systems in this culture. If one considers the historical situation and process, the continuous dialogue between the human being and the built-environment and the importance of the symbol systems, one may clearly argue that the reason for that particular plan (i.e., interior courtyard and four iwan), is because the spatial characteristics create the ideal "place" for the Muslim.

Therefore one can observe how, within this culture, the characteristics created by the spatial elements in space are forged by the cultural patterns to carry the symbol systems of that culture. One also observes that, as indicated in drawing III-20, the spatial elements are organized in a hierarchic manner to give each its relative state with reference to space and "place". The surface, with its decorative elements, the shape and the form are all part of a unifying whole. For example, the study of the arabesque as a surface decoration in isolation is



Drawing III-20: The hierarchy of spatial elements.

1. Matter through mathematics and its nature form the surface.
2. By the application of simple mathematical objectives, a surface forms a shape.
3. Shape when a relative and absolute criteria is contributed to it, it forms form.
4. Space is a hierarchic and positive movement through form.
5. Space turns into "place".

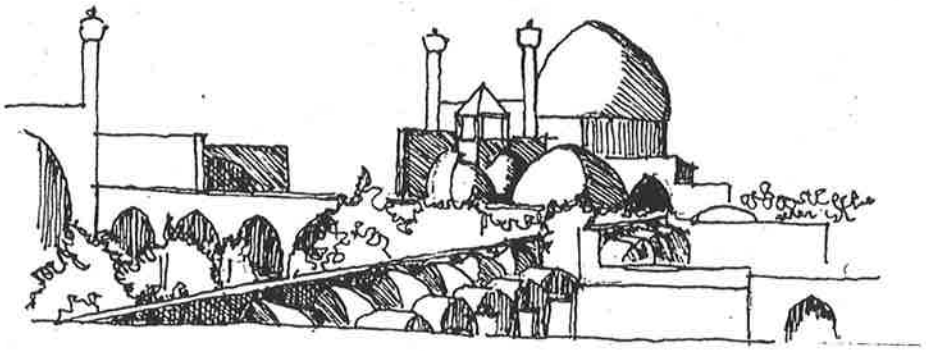
erroneous. Hence in any study all of the elements, as a vocabulary of a particular language, have to be considered.

I. COLOUR AND SHADES AS SPATIAL ELEMENTS

Because of the climatic conditions in Iran, light, shade and colour have become important determinants of form in the creation of the built-environment. Ardalan (1975), Bakhtiar (1976), Burckhardt (1976), Isfahan Colloquium and Afnan (1981) have all discussed the contribution of Sufism in designating certain symbols to these spatial elements. According to the Sufi light, the symbol of Divine Existence, has to be complemented by darkness, the symbol of the physical world. Between light and darkness there exist many shades of shadows that are analogous to many states of "being", both in the microcosmic and Macrocosmic order. The notions of light and different shades of shadows are explicit in many geometric surface patterns.

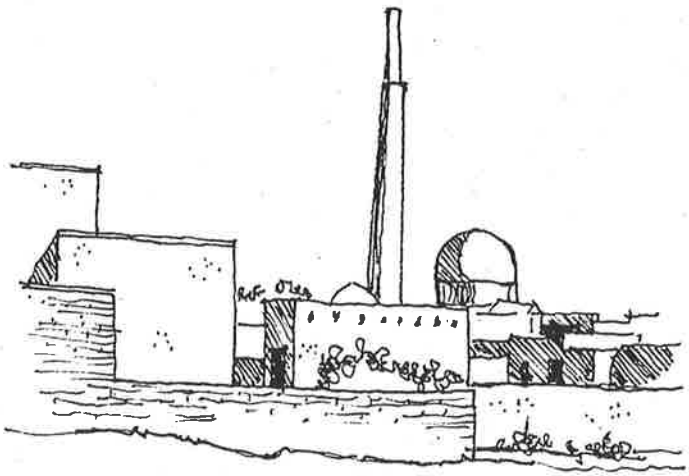
In a similar manner colours as different manifestations of light, have become symbols of the Archetypes. Through the inspiration of nature, the tile maker (kashi kari) prepares his harmonious colour schemes to be used for wall and dome patterns (Afnan, 1981).

It was stated previously that Ardalan (1975) has conceptualized certain "generic forms", used as symbolic buildings blocks, to create unity and harmony in the urban built-environment. Some of the main forms assumed to be important in urban design are:



Drawing III-21: The Dome.

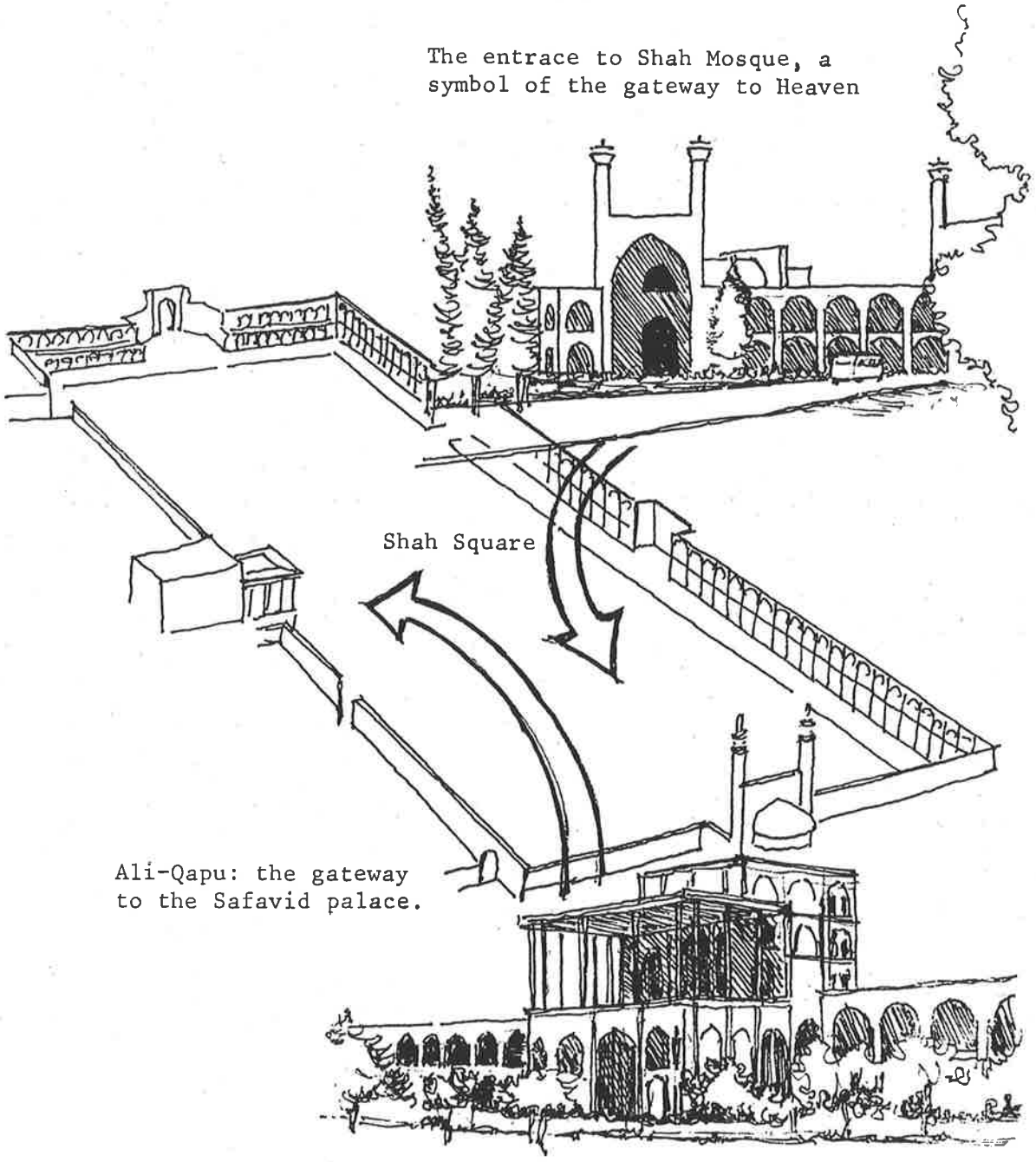
It is the symbol of authority in the Islamic society that bridges between the material world and Heaven. Through a symbolic meaning of a sphere, it is the "place" of the Divine essence. Many domes have created landmarks to give orientation and contribute to the "sense of place".



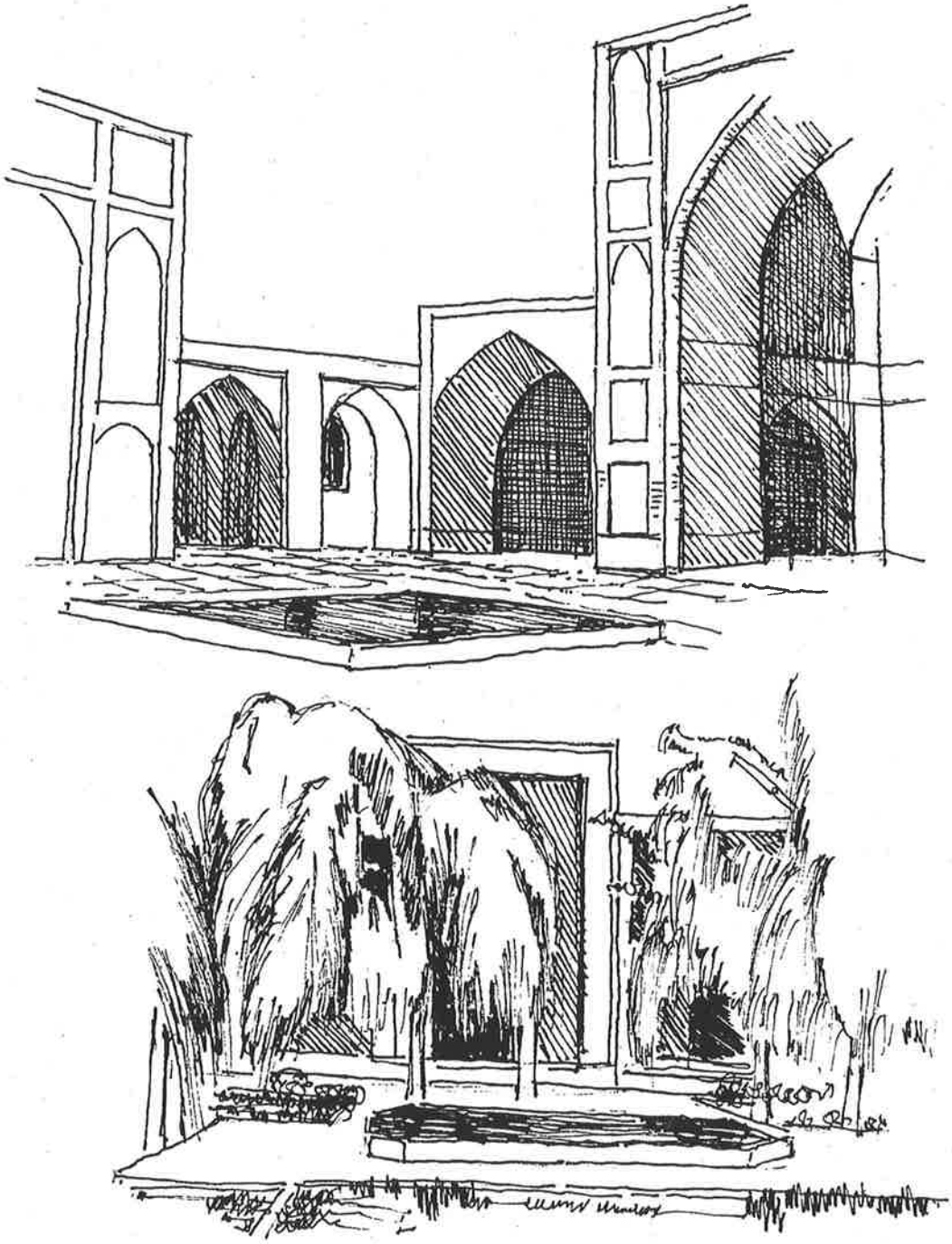
Drawing III-22: The Minaret.

According to the Sufi tradition the minaret symbolizes the mystical transcendence of a human being to a higher state of being.

Similar to the dome, the minaret has become a landmark, and an object for orientation in the city scape. Furthermore, the minaret has given a vertical direction to balance the urban horizontality.



Drawing III-23: The gateway is a defined transitional space that separates one space from the other. It indicates the end of a journey in space and the entrance to a "place".



Drawing III-24: The interior courtyard.

The interior courtyard is a manifestation of the "sense of place" (Makan). It is a symbol of the microcosm and its analogy, the Macrocosm. The interior courtyard is a reflection of Unity in the cosmic Order. Being a green garden in contrast to the arid desert, it has come to symbolize Heaven and the "place" where the spirit resides. The notion of Heaven is further reinforced by the pool which is the symbol of purification.

By repeating this "generic form" in the built-environmental design a certain unity and harmony is achieved.

1. The dome .... drawing III-21
2. The minaret .... drawing III-22
3. The gateway .... drawing III-23
4. The courtyard .... drawing III-24

In conclusion, the characteristics and hierarchic organization of spatial elements in this culture have acquired and created spatially pre-identified symbol systems to create appropriately the situation that may accommodate the "action" and the existence of "being". Moreover, the spatial characteristics that carry the symbol systems have formed order, harmony and unity in the whole urban built-environment. In a traditional Islamic city the parts are therefore meaningless unless related to that whole. Hence any study of a traditional residential area has to be undertaken with reference to the symbol systems, the principles that created Unity and the whole hierarchic city Order.

However, in chapter one it was argued and assumed - as part of the terms of reference - that the relationship between human being and the built-environment is diachronic (i.e., continuous and part of the historical development in a situation). The spatial organization of an urban area is an outcome of an historical process and a synthesis of human "action" and "structure". "Structure" was defined as a generative mechanism (e.g., social organization) that creates and steers certain socio-spatial manifestations. Therefore it is <u>a priori</u>, developed, continuously re-developed and circumscribed by the socio-economic, political and cultural evolutionary process with reference

and great influence of the means and outcome of the human "action". Therefore, a study of the historical process and spatial organization of Isfahan may clarify the main components and nature of the structure that continuously interacted with human "action".

With reference to Giddens (1979), this thesis argued that the built-environment is an important part of the "structure". The built-environment is utilized continuously in the social interactive process to create and re-create future built-environment. Since the "sense of place" is a spatial manifestation, in the built-environment, of the social interactive process, its quality is assumed as a component of both the "structure" and the human "action"; continuously produced and reproduced in a historical situation. This is to suggest that there is a certain historical continuity of the built-environment and the "sense of place" from the past to the present and then to the future. For achieving then the future "sense of place" it is necessary to view the historical process that created its past situation (i.e., the "sense of place"). Therefore a critical analysis of the spatial characteristics and structure that continuously and historically achieve the "sense of place" is necessary.

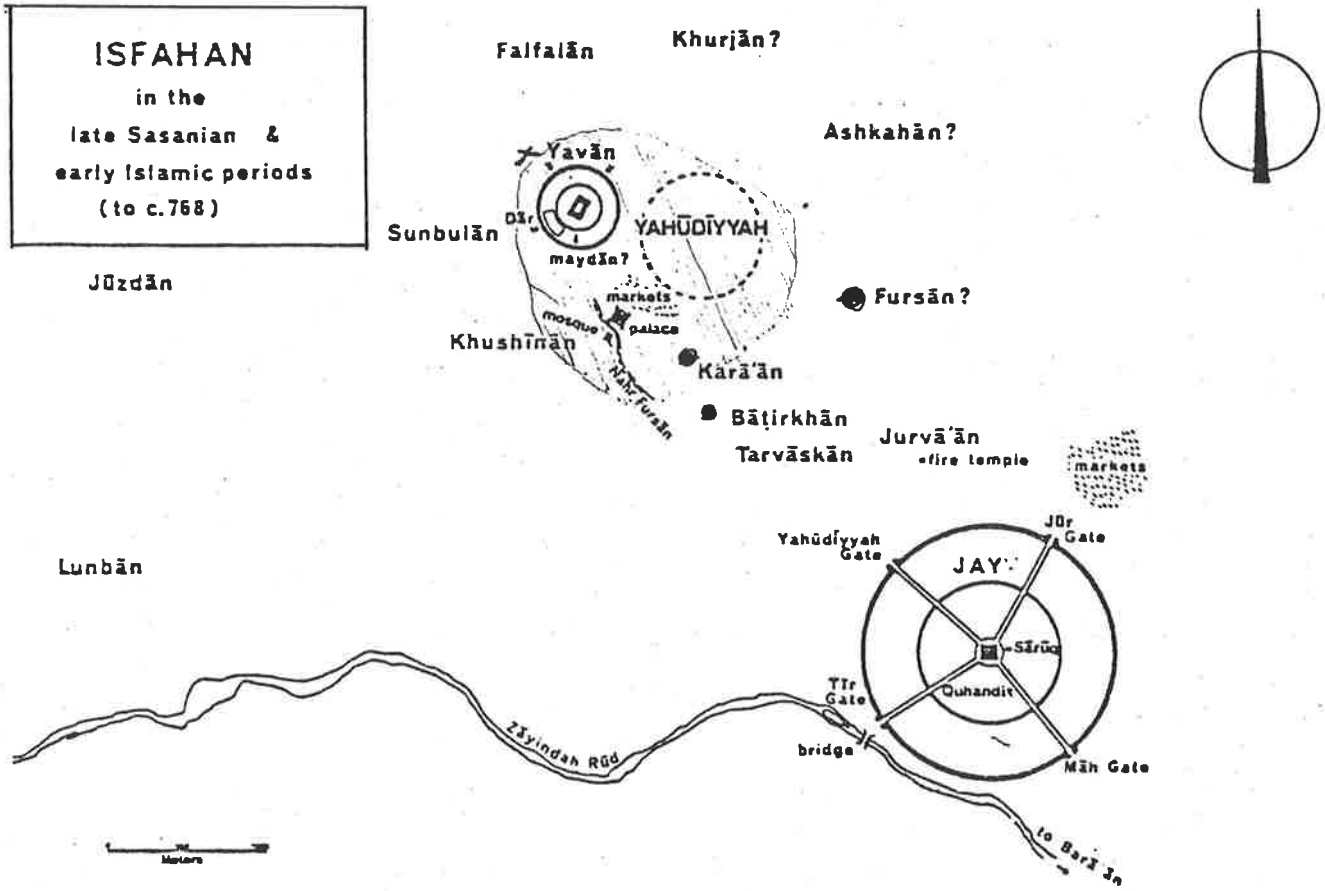
V. THE HISTORICAL PROCESS IN THE TRADITIONAL RESIDENTIAL AREAS OF ISFAHAN

The historical factors and processes that contributed to the creation and development of Isfahan and its tradit-

ional residential areas are the micro-geographical conditions, its strategic and economic location on the intra-regional trade routes and the cultural evolution of its people. The fertility of the soil in the Isfahan basin, the Zayandeh River and the mountain range to the west made that part of the Iranian plateau appropriate for sufficient agricultural activities to sustain settlements. By locating the settlements at a distance from the river, they utilized the fertile land for agriculture. Later, when the population increased and more settlements were formed, water, through the quanat system, was brought in to irrigate more land and further increase the industrial activity of the region. Besides being on the east-west and north-south trade routes, Isfahan developed and increased its manufacturing industries and became a fortified town with multi-commercial activities.

The strategic and political status of Isfahan was another factor of its growth. Since pre-Islamic time Isfahan has been an army garrison, a provincial capital or a capital of an empire. The little evidence that exists from the pre-Islamic era indicates that several settlements were created there, the most important of which was Yahudiyah. For their defence and survival these settlements mainly depended upon the garrison town Jay.

The Arab (i.e., Islamic) conquest in 642 A.D. and the cultural change that resulted from it was another important factor in identifying the spatial characteristics of Isfahan. Even though the Caliphate continuously encouraged



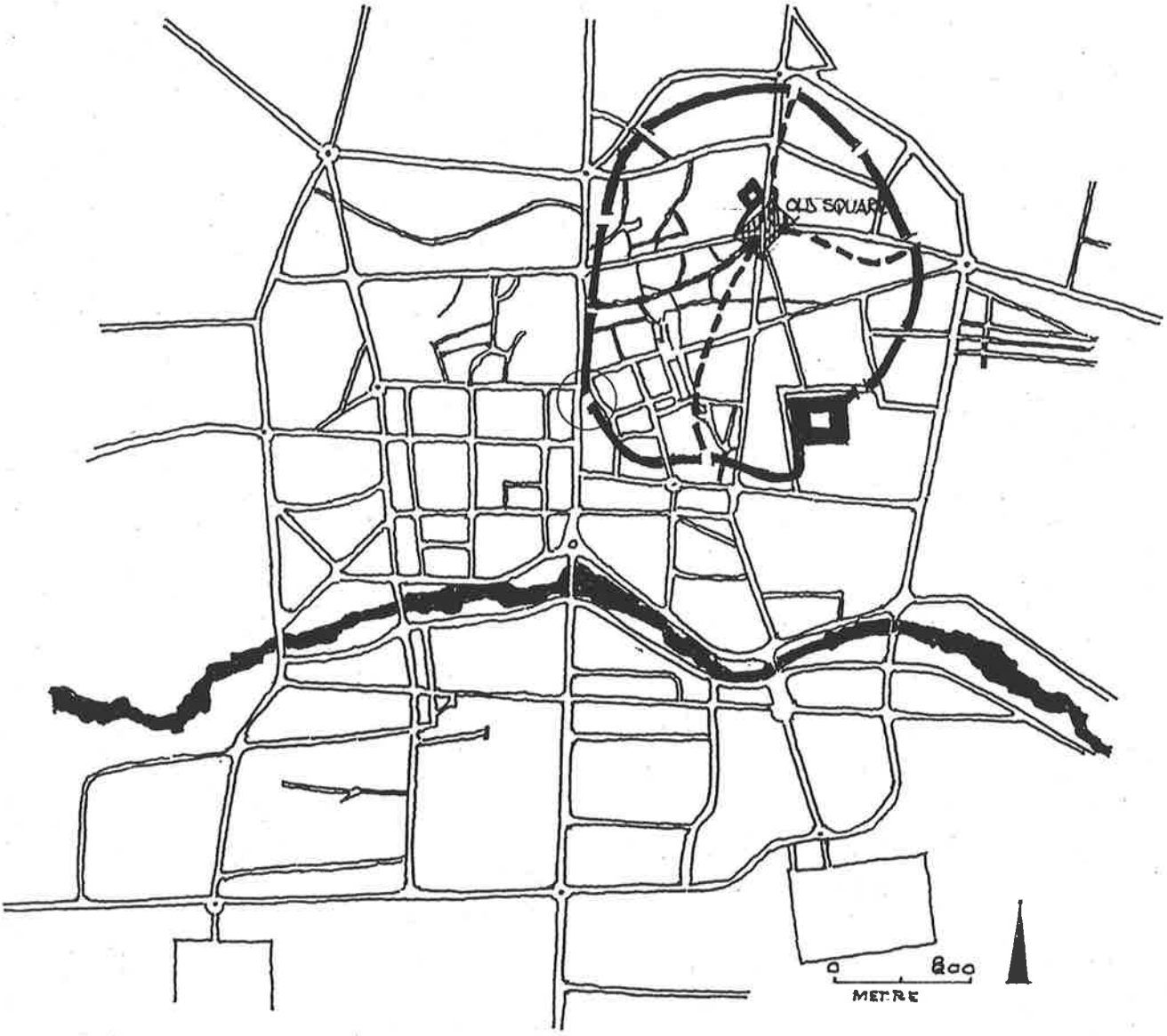
Drawing III-25: Isfahan, early Islamic period.

Isfahan at that time was called Jay. It had an inner and outer wall and four gates located so that the sun rose and fell in the two nothern ones during summer and in the southern ones in winter. Since that time cosmology was a feature in the city.

Source: Isfahan Colloquium, Studies on Isfahan, 1974.

trade, industries and population growth, it was not until Ayob-ben-Ziad's (an Arab general) initiation that the settlement started to take a specific spatial form and character. According to Honarfar (1965), it was near the settlement Yahudiyah on the River Forsan, that this general built a palace, and a bazaar and joined the two settlements Kushinan and Yahudiyah to form a square. Later in 770 A.D. the Friday Mosque was built facing the square. Thus the Islamic socio-economic, political and cultural ideals were introduced (drawing III-25). This civic construction created a focal point and a gravitational force to unify all the surrounding settlements. Each of these settlements became the basis for the traditional residential neighbourhood (mahalleh). People of different ethnic origin and working in different trades inhabited and identified each of these neighbourhoods (e.g., Yahudiyah was inhabited by the Jews). Later, each settlement according to their trade occupied a certain section of the bazaar (market). Thus Isfahan and its residential areas took their basic form and characteristics.

There is some historical evidence indicating that it was during that period (eighth to tenth century) when the spatial patterns of Isfahan were created (Blunt, 1974; Isfahan Colloquium, 1974). The construction of the new square, with its palace and mosque - an indication of the new power - generated the urban hierarchy and symbol systems that up until now are the main features of Isfahan. The Square established the nature of the growth pattern (i.e., radial) and set the relationship between the



Drawing III-26: Tenth century Isfahan. Note that the square Darwazeh Dowlat is where the gate to the Safavid Place was located (gate 10).

Source: Isfahan Colloquium, Studies on Isfahan, 1974.

residential neighbourhood, as a part and the city, as a whole. The newly introduced symbols (i.e., the Islamic culture) signified by the mosque, gave the meaning to create, in the new order, the spatial unity and the harmony of the city. Thus, the new order transformed the spatial characteristics and created a new Islamic conception of a residential area by a synthesis of the new culture and the spatial characteristics of the historical situation.

Many of the spatial notions and characteristics of today's traditional residential areas were formed at that time. The present neighbourhood (mahalleh) seems to originate and develop from the pre-Islamic village's spatial characteristics. In the early Islamic period, the notions of space became the result of the synthesis of the principles, power and mechanism (i.e., "structure") set by the new Islamic order, the existing built-environment and the "action" of the inhabitants at that time. However because of the impermanence of the building material (most probably mud-brick), today's knowledge of the early Islamic spatial characteristics and patterns is implicit. But, one can assume safely that they were similar to the existing villages on the Iranian plateau. Note that this assumption disregards the importance of the historical process (i.e., space-time dimension of the interactive process). The assumption however, implies that the old village communal centre became, after urbanization, the neighbourhood (mahalleh) centre for social activities. This communal centre comprised a square, surrounded by important buildings and the local bazaar. Later, when the Islamic

tradition was established, most probably a mosque and a traditional school (madrasah) were added to become the primary place of the neighbourhood (mahalleh) communal activities. The above speculation also implies that the urbanity of the settlement was also the result of change (i.e., the "structure") generated by the central square, the Friday Mosque and the bazaar. No other spatial configuration that may have alienated or stratified society into a class structure (e.g., developing a residential area for the rich and noble class) was created. Except for the mosque and school no change occurred in the spatial configuration of the neighbourhood. Thus the dramatic change introduced, took into consideration the importance of the continuity and relationship of the spatial setting of the neighbourhood, and its inhabitants, and the environmental qualities, implicit in the "sense of place".

Therefore, the components that were considered in the transformation of the settlements and their spatial characteristics into the new Islamic order were the characteristics of the existing settlements, the ethnicity of its communities, their economic activity, the new order and its power. While the mechanism that generated the synthesis of these factors and the transformation into an urban built-environment was the institutional power reflected spatially in the new square, the palace, the bazaar and the Friday Mosque.

Under the Seljug Dynasty (1037-1157) Isfahan became the capital of an empire. Palaces, gardens and monuments

became common features. The era is known for its unique architectural style (Scerrato, 1977; Hoag, 1977; Pope, 1965), which was created through a synthesis of the creative thoughts of the eastern part of the Islamic world (i.e., Iran, Afghanistan, Transoxiana and India). In Isfahan, this architectural legacy can be seen explicitly in the existing Friday Mosque (Masjid-i-Ja'meh), built on the ashes of the previous one set up by the Arab general, Ayob-ben-Ziad.

During this period an intellectual regeneration occurred in Iran, which had a great impact on Islamic culture and civilization. Mystical religion (i.e., Sufism), shaped the work of many philosophers, poets, mathematicians, astronomers and artists such as Ibn Sina, Omar Khayyam and Ghazali. Seljug statesmen such as Alp Arsalan, Malikshah, Sultan Sanjar and politicians such as Nizam-al-Mulk encouraged intellectual achievements. Schools (madrasah) and mosques to promote all aspects of traditional education were therefore founded. Spatially they became a dominant feature in the urban built-environment.

However, one of the most important spatial impacts that this period had on the built-environment was the re-introduction from pre-Islamic Sassanian time of the interior court four iwan plan (e.g., Masjid-i-Ja'meh of Isfahan). The plan was used for mosques, schools (madrasah), caravanserai and residential units. It may be quite coincidental that this plan, its symbolic implication and the Sufi doctrine were established at the same time.



Drawing III-27: North of the Square is the Friday Mosque (Masjid-i-Jameh), while on the south is Ali Mosque. Both still exist and are known landmarks. The palace on the east is not there anymore. Today's bazaar, most probably, existed at that time on the western side of the Square.

Source: Isfahan Colloquium, Studies on Isfahan, 1974.

What seemed important however was that the idea of the "sense of place", as defined by Islamic tradition, was manifested in Iran by the four iwan interior courtyard. It was therefore used in all the built-environmental settings irrespective of their functions. Therefore in this culture one can observe that "being" - as a traditional self-realization of existence - was important and the creation of the "sense of place" in all building was essential.

The Seljug Dynasty further integrated the Islamic culture into the urban built-environment of Isfahan. The newly constructed Friday Mosque (Masjid-i-Ja'meh) as the main city landmark, the bazaar as the main economic institution of the city, and the palace were all accessible to the focal point of the city - the old square (drawing III-27).

Surrounding this square were the residential areas. Their names, which were associated with wall gardens, indicate the existence of green spaces in the neighbourhoods (mahalleh) inside the fortified city. The existence of open spaces in the fortified city is supported by the historical fact that the site of Shah Square - built by the later Safavid Dynasty - was a Seljug garden named Nagsh-i-Jahan. Chardin, a European traveller who visited Isfahan at the time of the Safavid, mentioned the existence of these gardens in the residential areas behind the city walls.

Except for the continuity and reinforcement of the Islamic tradition, no dramatic change was recorded historically in the residential areas. The new palaces and

gardens, built for the aristocracy and rich, were located outside the city wall near the Zayandeh River. They rarely interfered with the previously established characters. In other words, the agricultural land which was initially important for the existence of settlements had become the new, private playground for the rich. This implies that in the capital of the empire, the means of production had changed from agriculture to industry and commerce, located in the bazaar and administration in the palace. Thus the changes in urban activity had little impact on the existing residential areas, and whatever change occurred due to the means of production did not destroy the existing "sense of place".

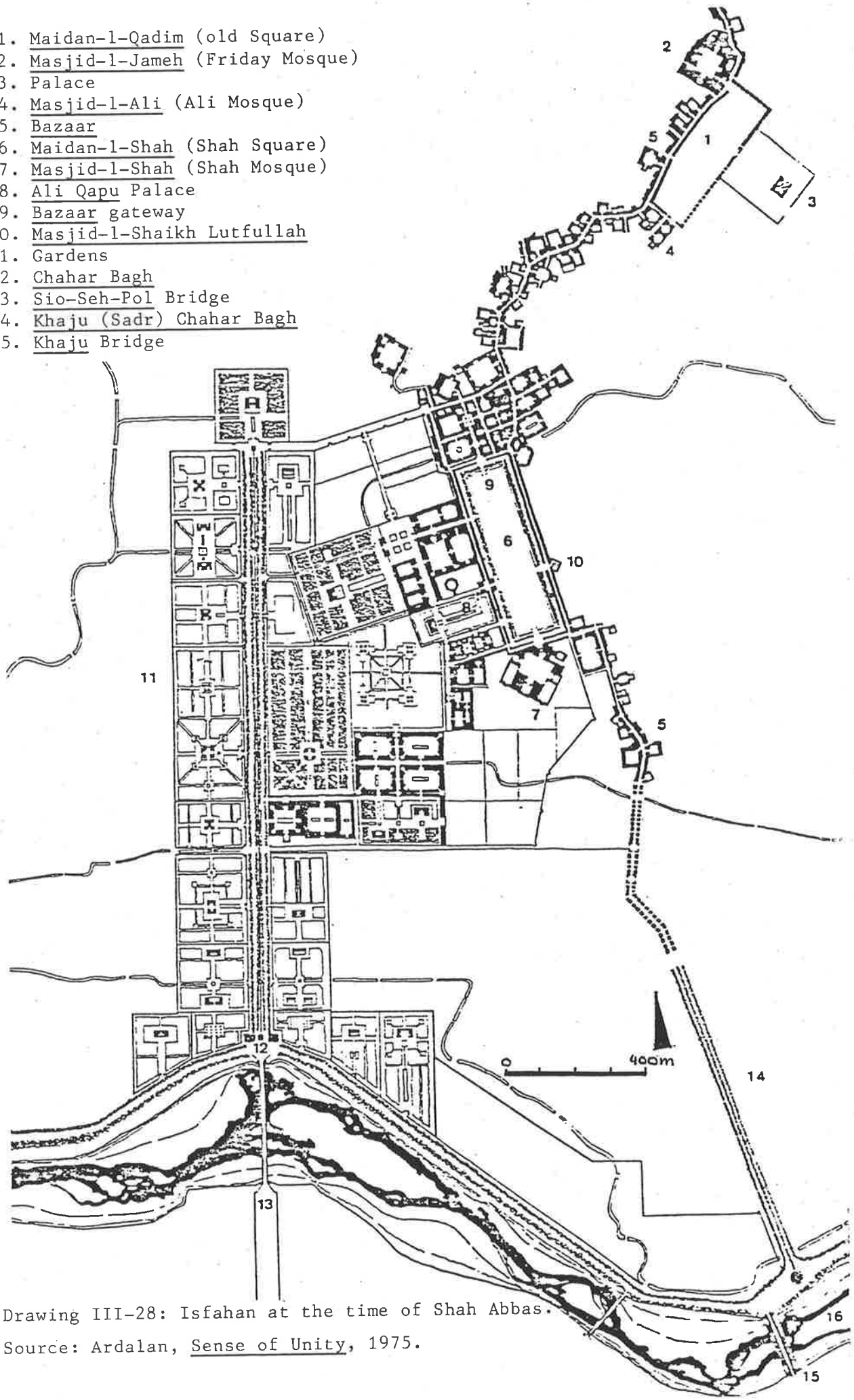
It is important to note that the palaces had different concepts from those in Europe. The information available today (especially on those which were constructed in later years - e.g., Cheh Sutan and Hasht Behesht), indicates that these palaces were pavilions located in walled gardens and used only for festivities. Apparently the rich and noble class usually resided among the lesser rich in the traditional neighbourhoods inside the walled city. The reason was that the nobility, even though they may have been landlords, were associated usually with urban activities, such as administration. Their daily presence in the city was therefore necessary. In fact there is reason to believe that the nobility lived in one neighbourhood near the main city square (Isfahan Colloquium, 1974). This further supports the implication that the pavilions (i.e., palaces

outside the city wall) were used only for special occasions and annual holidays, such as the Now Rouze.

Therefore, one may conclude that, similar to the previous era, this period also based the reproduction of the built-environment on the idea of consolidating the existing spatial characteristics that accommodate the settings for human "action" and their "being". The city landmark (Friday Mosque), city focal point (the main square) the pattern of the residential areas and the bazaar were all created to support the previously established hierarchic and harmonious order. Changes such as the pavilion gardens or expansion, were in places that did not come into conflict, both spatially and socially, with the existing spatial order. In other words, the continuity of the spatial characteristics from the past, to the present and into the future was considered in the traditional residential areas.

Probably the most important era of Isfahan was the Safavid period (1499-1736). Shah Abbas (1589-1627), the fifth and most important Safavid shah, chose Isfahan as his capital. His decision started a century of prosperity for the city. The population increased to about 500,000 and gave Isfahan the form that one observes today. During his reign, Safavid architecture and urban planning reached their peak in expression and form. Although some may argue that Shah Abbas' period did not contribute and achieve great architectural innovation and was not considered the peak period of Persian architecture (Pope, 1965), his

1. Maidan-1-Qadim (old Square)
2. Masjid-1-Jameh (Friday Mosque)
3. Palace
4. Masjid-1-Ali (Ali Mosque)
5. Bazaar
6. Maidan-1-Shah (Shah Square)
7. Masjid-1-Shah (Shah Mosque)
8. Ali Qapu Palace
9. Bazaar gateway
10. Masjid-1-Shaikh Lutfullah
11. Gardens
12. Chahar Bagh
13. Sio-Seh-Pol Bridge
14. Khaju (Sadr) Chahar Bagh
15. Khaju Bridge



Drawing III-28: Isfahan at the time of Shah Abbas.

Source: Ardalan, Sense of Unity, 1975.

contribution in planning and urban design was considerable.

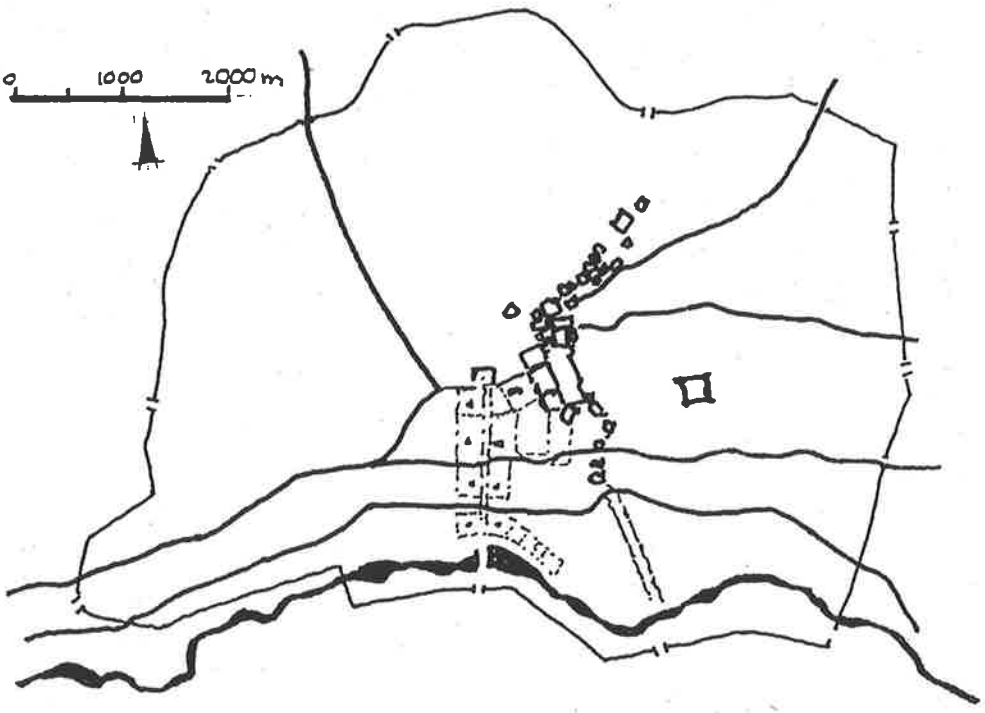
When Shah Abbas came to Isfahan the city's focal point was the old Seljug Square and its landmark was the Friday Mosque. Shah Abbas decided to build a new square, the Shah Square (i.e., the new focal point of the city), at the eastern part of Nagsh-i-Jahan garden. He then relocated all the city activities and created a new order and patterns with reference to the new square. On the western side of the new square the palace compound was built. On the southern side he located the main city mosque, the Shah Mosque, which became the new city landmark. He then re-routed the bazaar to lead from the old Friday Mosque, around the new square to join the southern route that led to the Zayandeh River by a wide, tree-lined avenue (the existing Chahar Bagh Sadre Avenue (drawing III-28).

The royal palace compound, west of Shah Square, was an addition to the palaces and pavilions built by the previous Saljug and Timuri Dynasties. It is important to note that Brown (1965) indicated that many European travellers who visited the court of Shah Abbas were not impressed, probably because palaces lacked the grand vistas and settings that expressed the power of the monarch, as was the case in Europe. The fact that it did not have an external facade, as was the case in Baroque Europe, was considered to be an anti-architecture. It is apparent that those travellers evaluated Isfahan during the period of Shah Abbas on European architectural and urban design

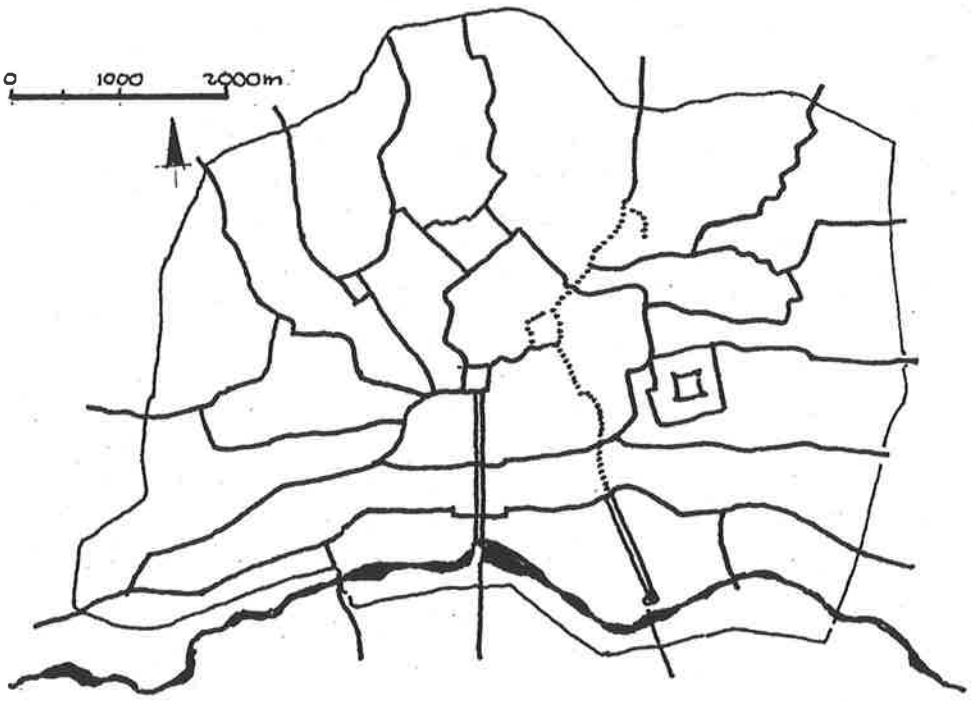
criteria which highlighted vistas, axial design and self-expression in form. Isfahan however, was an expression of Islamic tradition, with different spatial conceptions and characteristics. Vistas, self-centred perspectives, axial design and external expression of form were meaningless in the Islamic tradition. Hence they could not be the evaluative criteria. These differences of values between Europe and Islam explicitly indicate the importance of the cultural pattern that establishes the spatial meaning and the historical situation (paradigm) of the spatial characteristics.

West of the palace a ceremonial road or linear garden called Chahar Bagh was built, which started on the north, from a small royal pavilion called Jahan Namah, went directly south, to cross the river by the Allah Verdi Khan (or Sio-Seh-Pol) bridge, ending up in the royal garden Hezar Jarib: the site of today's Isfahan University. As indicated in drawing III-28, on both sides of this road, the garden pavilions for the rich and the noble men were located.

Similar to the palace compound, the design of the Chahar Bagh also puzzled the European travellers. Being the main access and ceremonial entry to the city they expected it, like its European counterparts, to create a vista or end up in a square or palace that symbolized the power of the institution. Here too one can point out the paradigmatic dimension as a reason for the Europeans' incomprehension and surprise.



Sixteenth century Isfahan.



Circulation channels in the sixteenth century.

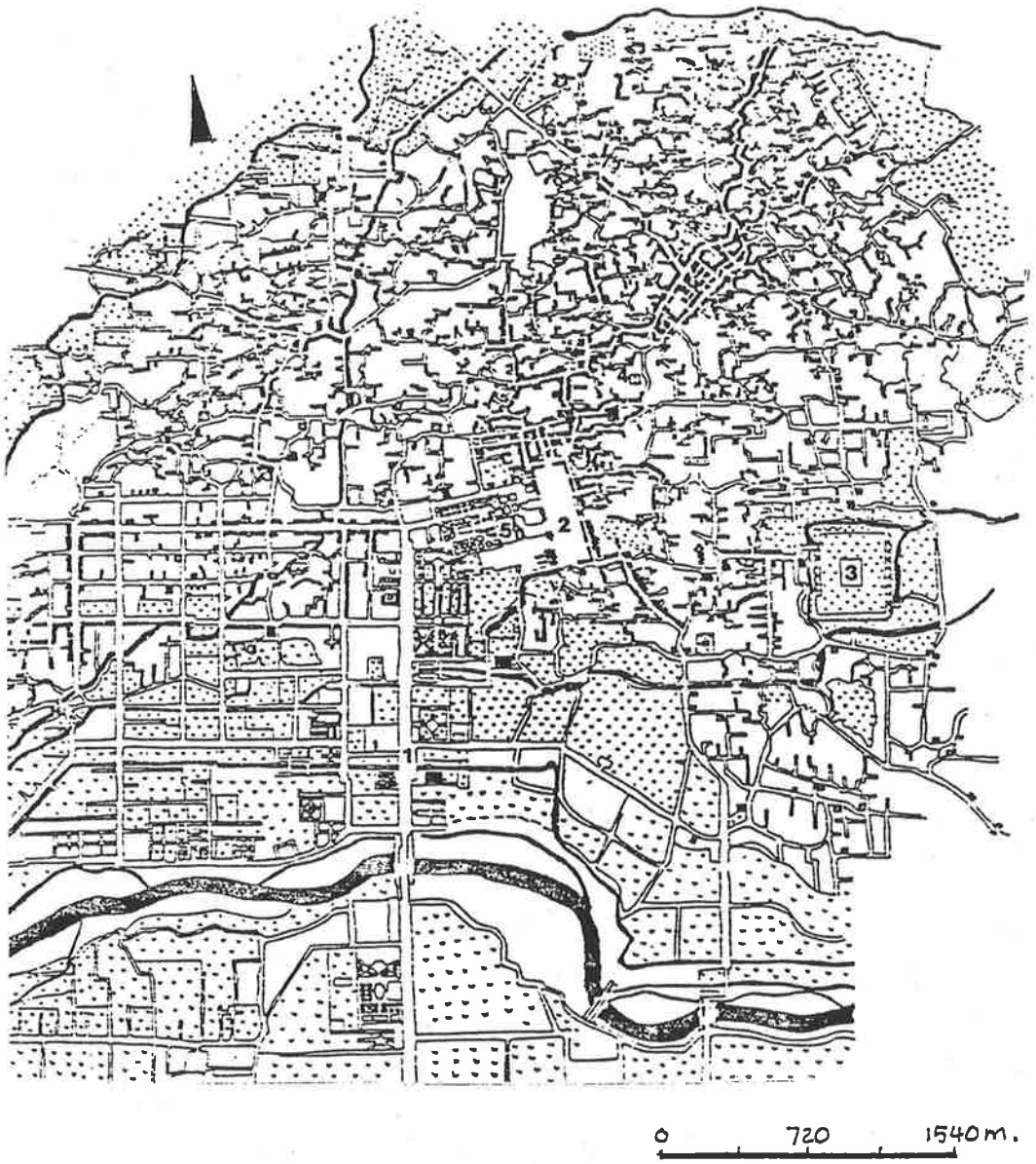
Drawing III-29.

Source: Ardalan, Sense of Unity, 1975.

The new residential areas to accommodate the population growth were mainly west of the Chahar Bagh and Jolfa; south to the Zayandeh River. In the former the Azerbayjanis resided while in the latter, the Armenians. However, the area along the river was left for the walled gardens, pavilions and public parks (drawing III-28).

Besides the elimination of the old Seljug Square, Shah Abbas did not alter dramatically the Seljug and Timurid residential areas (Brown, 1965; Blunt, 1974; Honarfar, 1965; Cambridge History of Iran, Vol.6, 1986). Apparently in the walled city of Isfahan, the new developments were only houses, baths, mosques, caravanserais and schools that fitted the existing spatial characteristic. They were all built on the traditional Islamic conception, mainly the interior courtyard, to accommodate the different activities of each neighbourhood (mahalleh).

Therefore, the re-design of Isfahan was not only for the monumentality of an imperial capital as featured in the new square, Shah Mosque and Chahar Bagh, but also for practicality, reflected in the new schools, mosques, caravanserai and the new residential development. Shah Abbas made considerable effort not to destroy but to conserve the characteristics of the existing spaces and patterns. His development stressed the continuity of the historical situation within a cultural context. Any previously established place was respected and sustained by the new development. Thus the economic, institutional and social changes under Shah Abbas were spatially accommodated



Drawing III-30: Isfahan at the beginning of the twentieth century.

Source: Brown, K. Architectural Review, Vol.159, No.951.



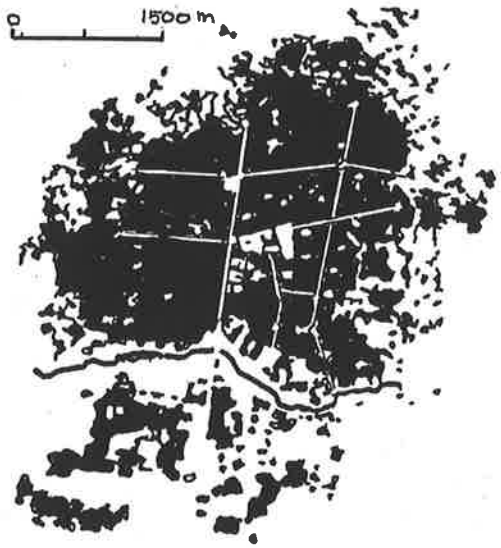
Isfahan - the Seljuk period



Isfahan - the Safavid period



19th-century Isfahan



Modern Isfahan

Drawing III-31: The historical growth of Isfahan.

Source: Organic Consulting Planners.

by developing new urban areas and by reinforcing the existing spatial characteristics of the traditional places.

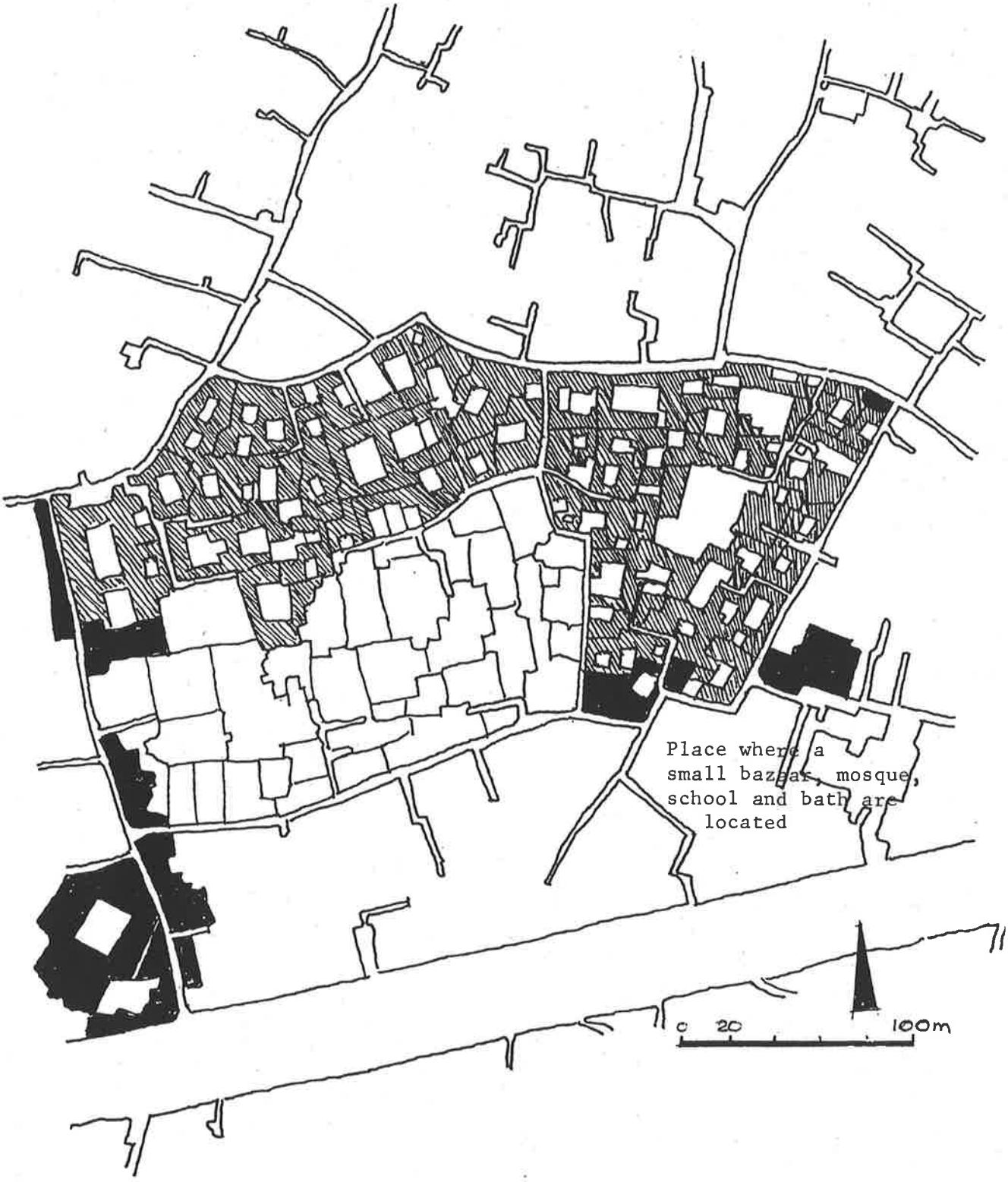
After the Afghan invasion in 1721, and the destruction of certain areas of Isfahan, except for deterioration, nothing dramatic occurred to change the Seljug and Safavid urban pattern and spatial characteristics. When Brown visited Isfahan during the latter part of the nineteenth century he only recorded the dereliction that had been bestowed upon the city due to years of government neglect. Thus one can safely assume that the inheritance of the modern industrial twentieth century is, as indicated in drawing III-30, the traditional Islamic spatial symbol system created by a traditional civilization and manifested mainly during the Seljug and Safavid periods.

It is important to note that this brief historical analysis does not only give legacy to the traditional urban pattern and quality of the built-environment of Isfahan, but also gives a certain implication to the urban planning and design process that created that pattern. Ever since the urbanity of the city was generated by the Arab general Ayob-ben-Ziad, four important factors seem to recur historically: the importance of the existing spatial characteristics, historically developed through an interactive process; the symbol system that identified the culture; the interactive process of development and the desired quality of the built-environment; and the institutional power that carried out the process of development.

In Isfahan these four factors are observed to be part of the mechanism for the spatial production and reproduction. Even though the historical situation and the cultural symbol systems were very much integrated and could not be explicitly separated, the former dealt and established the continuity of the process while the latter, the symbol systems, introduced the paradigmatic dimension. Apparently they were the main factors in creating harmony, unity and the quality, known as the "sense of place", that establishes the existence of "being". However, the third factor (i.e., the institutional power) had a dominant role to play. Thus, as indicated in drawing III-31, the growth seemed to be when the institutional power in Isfahan considered, respected and ensured the continuity of the existing historically processed, spatial configuration and hierarchic pattern. As a result they made sure that any new development did not create conflict or overrule the existing pattern. In other words it seemed that the institution had the power to synthesize and harmonize the new with the old and accommodate the "sense of place".

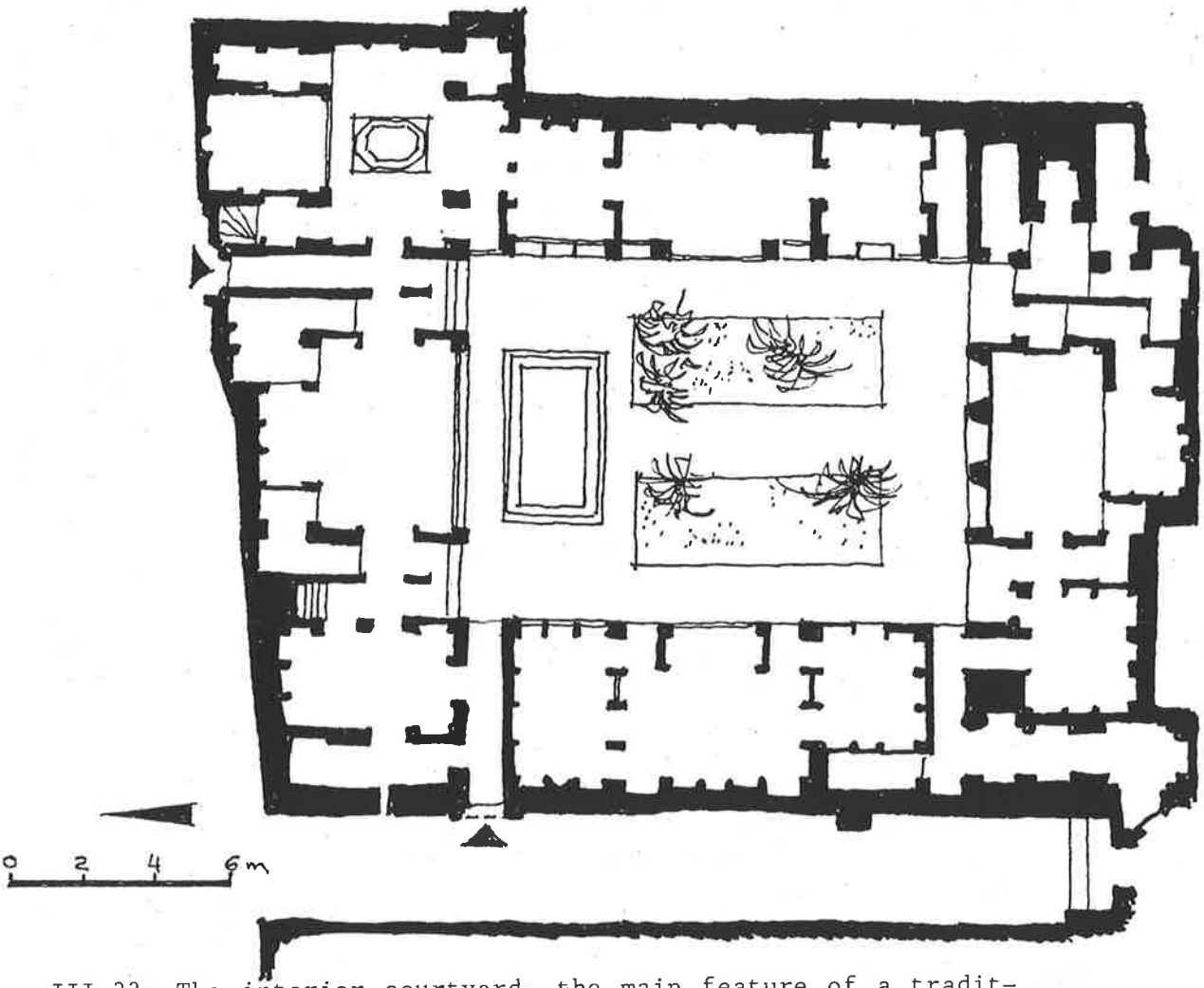
VI. THE STUDY OF A TYPICAL, TRADITIONAL RESIDENTIAL AREA

Prior to discussing modern change and the impact of modern planning and design on the traditional residential areas of Isfahan, it seems necessary to review critically a typical, traditional residential neighbourhood (mahalleh) bearing in mind the above-stated historical, cultural and institutional factors.



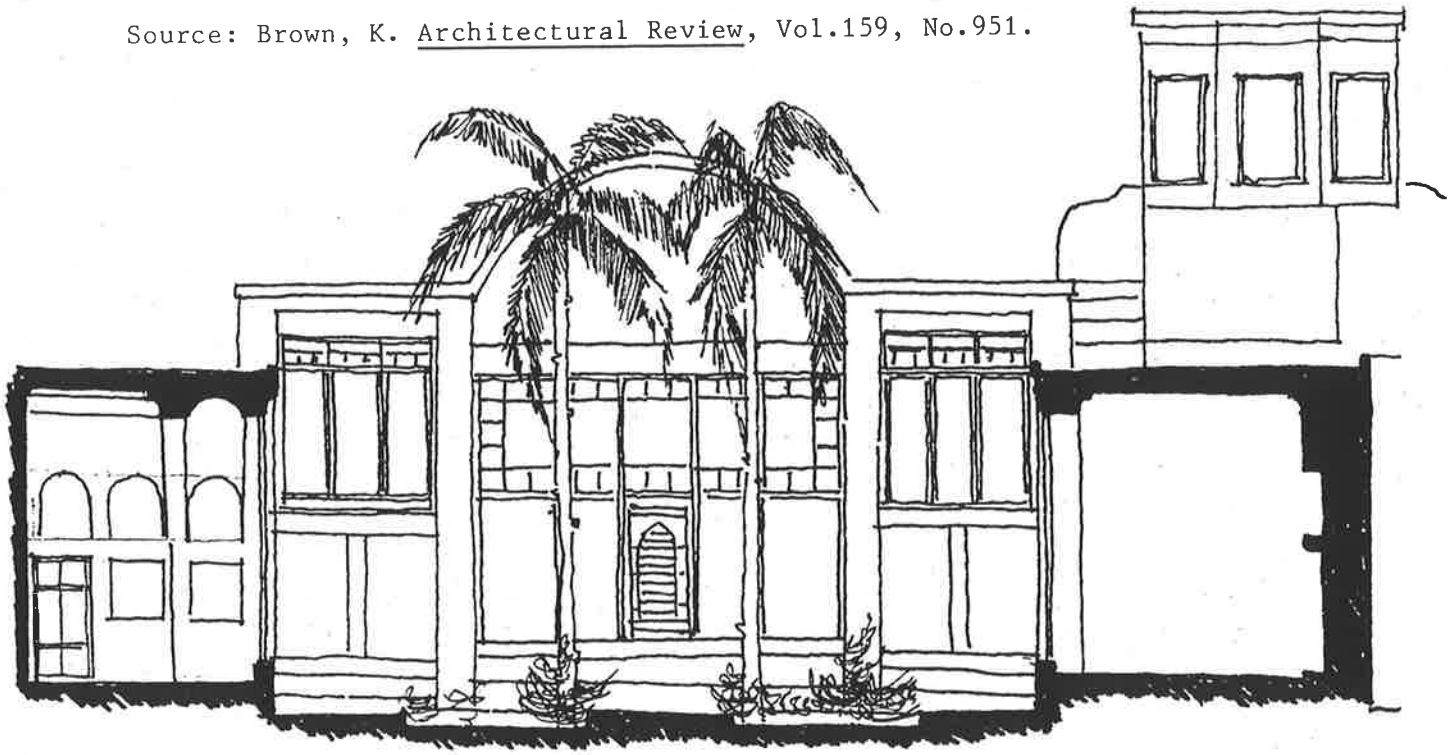
Drawing III-32: In a typical traditional area, the following are observed:

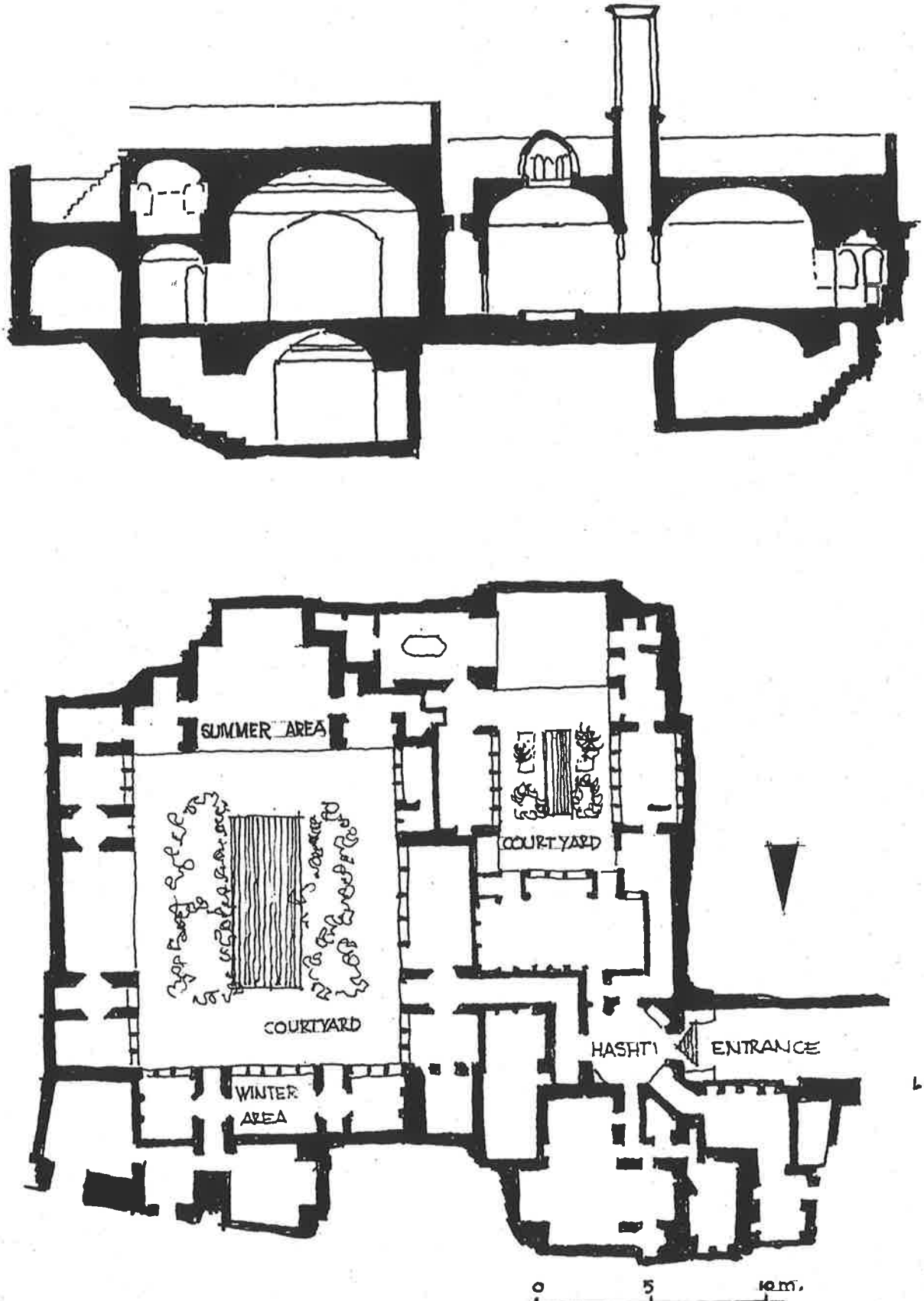
1. The fortified residential island is repeated in different forms.
2. The circulation pattern looks to be organic.
3. The irregularity of the plot shape.



Drawing III-33: The interior courtyard, the main feature of a traditional house, is spatially cut off from the outside environment. The rooms, as the secondary spaces around the courtyard, depend on the courtyard (the major space) for their existence.

Source: Brown, K. Architectural Review, Vol.159, No.951.

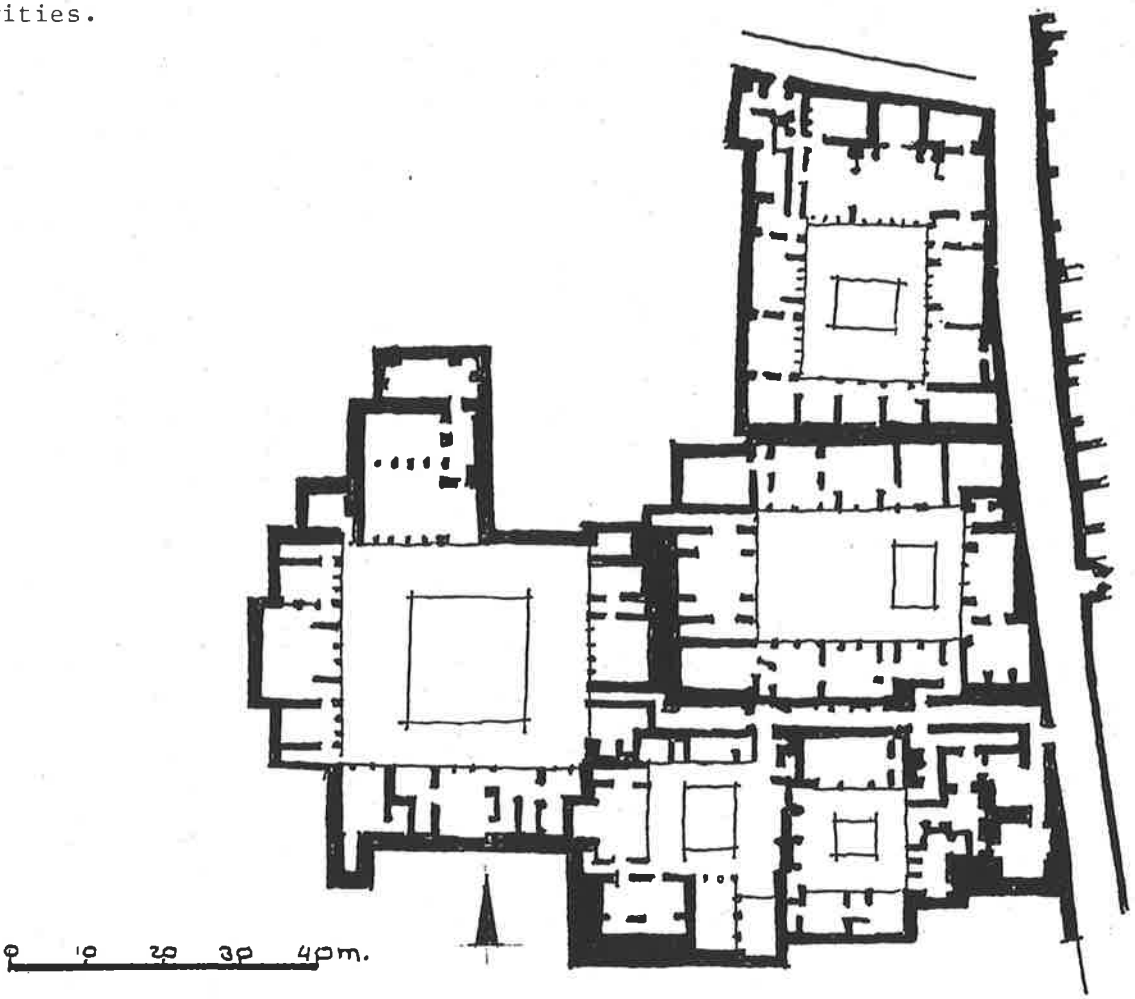




Drawing III-34: Sometimes the traditional dwelling has two courtyards, and a living area in the basement, utilized during the hot summer days.

Source: Kowsar, Ekistics , No.256.

Drawing III-35: The cluster is made up of a group of residential units around a cul-de-sac. While walking along the road and due to the mass of the buildings, one is not aware of the interior private activities.



Drawing III-36: The circulation channel. Its features are the elaborate gateways that lead into the transitional space between the public outside and the private inside.



Since, in this tradition and society, the family was noted to be the basic socio-economic unit, the thesis sees it necessary to start with the basic built-environmental unit (i.e., the setting) that accommodates the family: the dwelling.

A. THE TRADITIONAL DWELLING UNIT IN ISFAHAN

One observes that the dwelling unit in the traditional residential areas of Isfahan is based mainly upon the concept of an inward-looking and interior courtyard plan. This seems to be the main generator of the spatial characteristics that have established unity and harmony in the urban built-environment. As argued before in this thesis, the spatial characteristics are the result of the cultural symbol systems, the socio-economic organization and the family's personal "action" (drawings III-32 to 36).

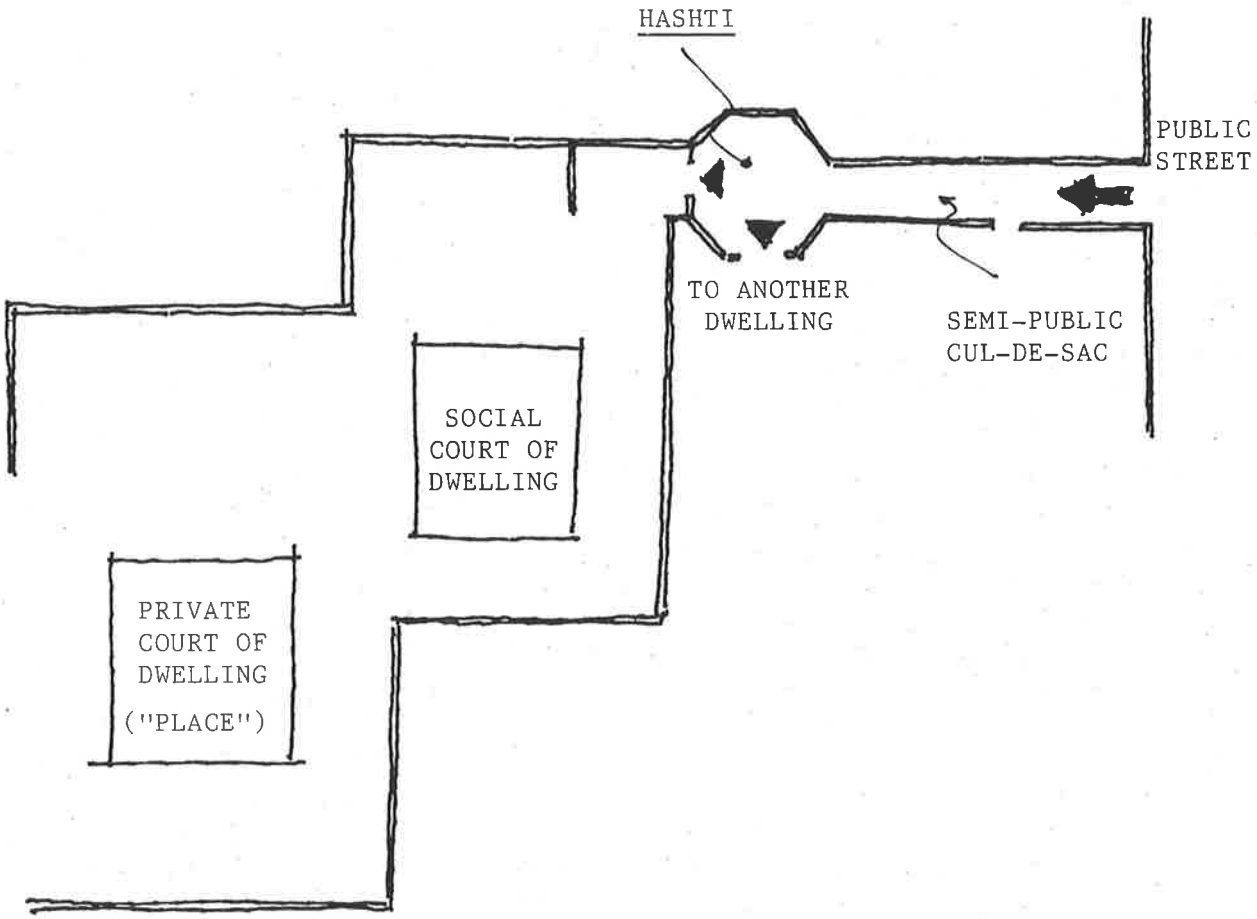
The dwelling through its exterior, blank mud-brick wall (Khesht-wa-ghel), has become visually, physically and climatically isolated. The material and thickness of the exterior walls, have provided both the thermal insulation, necessary for Isfahan's harsh climatic condition, and the sound protection that reinforces the family's isolation from the public environment. The isolation has thus established a symbol that indicates the privacy and the status that traditional Islamic culture has given to its basic social unit, the family. In this tradition isolation has reinforced family identity, the right to privacy and

family ownership and created the space where the family can express its existence (i.e., "being").

The isolation is further achieved by directing the vision from the surrounding rooms (secondary spaces) upon the interior courtyard (primary space or "place") where the garden and pool have brought nature into the domestic life and provided a cool, shaded, and outdoor living area in contrast with the arid climate of the region. The culture symbolizes the garden and water configuration in the courtyard, the spirit of the family in the microcosm and paradise in the Macrocosm. Thus the courtyard increases isolation, privacy and the realization of family "being", by converging the vision, integrating nature into the built-environment of the family, relating, through the symbol systems, the human being and the cosmic order and achieving the principle of Islamic tradition: Unity.

Note that many of these traditional dwellings have two courtyards: the first, the exterior one, for public socialization, while the second, the interior for private family activities (drawing III-37).

The hierarchic configuration of spaces between the most public street to the interior courtyard, the most private "place", is notable. From the public street space one passes through a gate and a transitional space to a semi-public space; the cluster road (i.e., cul-de-sac). From the cul-de-sac space one passes through a gate and a semi-private space (hashti), to enter the first interior



Drawing III-37: The hierarchy of spaces and symbols in the microcosm.

courtyard: public socialization of the dwelling unit. Finally, from the first interior courtyard, one passes through a transitional space to enter the most private place of the dwelling. The "sense of place" is achieved in this interior court by the hierarchic system of spaces, the isolation from the outside environment, the symbols in the spatial characteristics of the courtyards (see definition of space), the defined north-south orientation, the human scale and most important of all the static character of the space. This "sense of place" is directly related to the realization of the family's spatial existence and the subject-object relationship that materializes to the subject (i.e., the family) that sense of "being".

B. THE CLUSTER, THE BASIC URBAN UNIT

A group of these traditional dwellings, varying in size, surround a cul-de-sac to form the basic urban unit, the cluster (drawing III-35). People who inhabit a certain cluster are usually related either by blood or marriage, and most probably work in the same trade. A survey (Glombek, 1976) has explicitly indicated that these clusters change in size and population in accordance with any economic or demographic family change. Whenever a son is married, a child is born or reaches a mature age, a whole spatial readjustment takes place in the cluster to accommodate a room or a private family dwelling. Hence the cluster grows and changes (i.e., organic change) in accordance with the nature and realization of the family, its individuals, its "action" and "being". In other words, the built-environment in the cluster continuously interacts with the family's "action" intentionality and "being" to create the spatial characteristics that achieve the "sense of place".

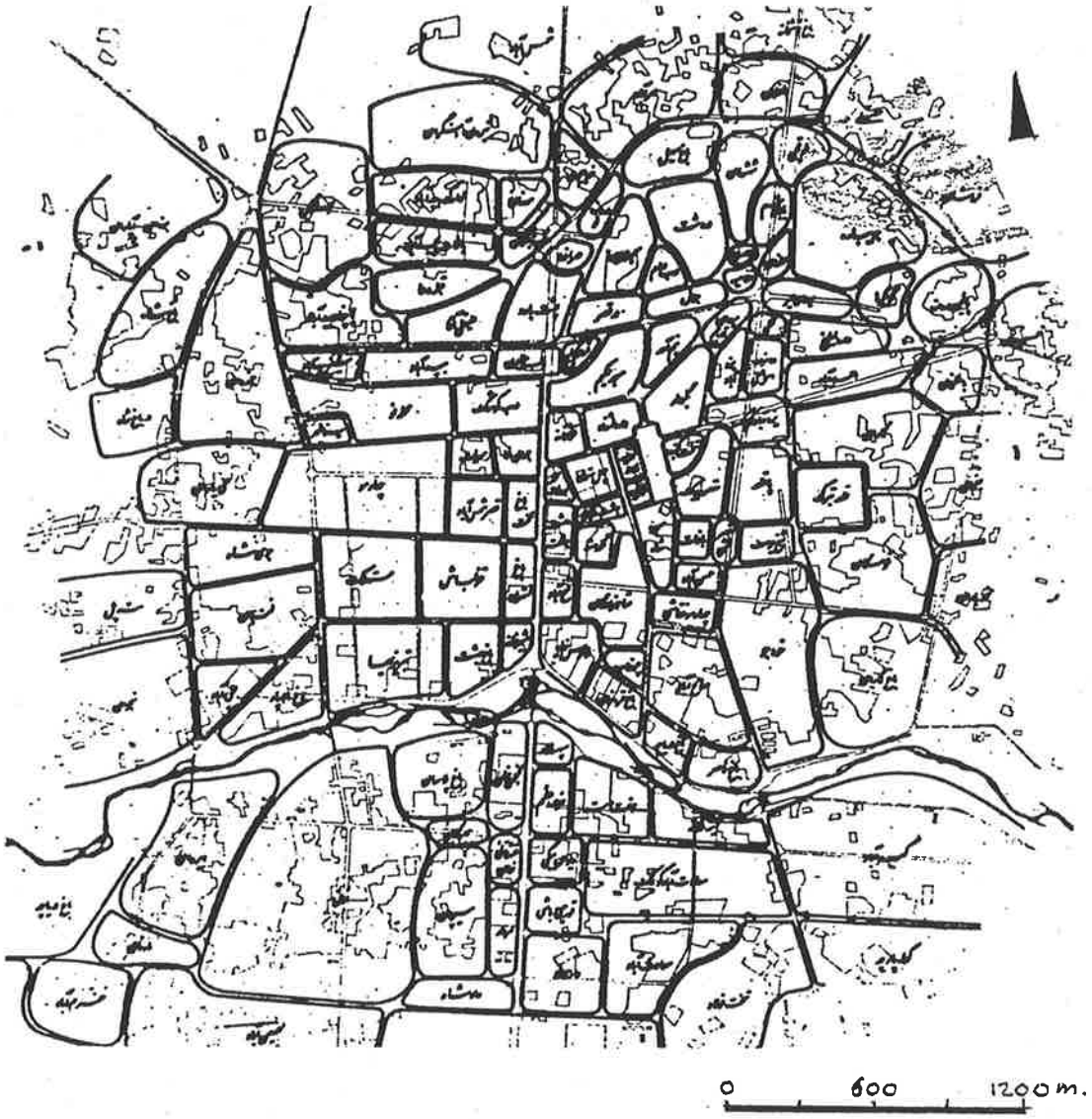
The cluster and the cul-de-sac access road are traditionally owned by the family. This ownership creates a certain interesting problem with today's land title which stresses individual ownership. Research to identify the relationship between the rights under ownership, land title and the civil Islamic law, where daughters inherit and have the right to land ownership, yet they have to leave and reside with their husbands in another cluster, is necessary. Another problem, is the complexity of land subdivision

in relation to the change in family need for space. The highlight of this problem is to identify a mechanism for the change in the area of the land in accordance with family characteristics (i.e., the subject) instead of the municipal laws and institutions that define a minimum allowable land title and subdivision.

In the cluster, the cul-de-sac is the traditional, privately owned circulation space between the hashti (the entrance hall of the dwelling) and the public circulation system of the neighbourhood (mahalleh). The hashti's size (1.5 to 2.00 metres wide, 2.5 to 3.00 metres high and of variable length) and spatial position have made it the basic and smallest unit in the hierarchic urban circulation system. Being privately owned, most of the culs-de-sac have doors which are locked at night to keep out intruders. The entrance gateway makes the cul-de-sac a transitional semi-public space that connects the public exterior neighbourhood to the private interior dwelling. Today it is sad to see that many of these spaces are unpaved, badly lit and derelict. However, before the revolution the Municipality of Isfahan initiated a scheme to encourage upgrading of the culs-de-sac.

C. THE SPATIAL CHARACTERISTICS OF THE NEIGHBOURHOOD

In a previous section this chapter presented the cultural and historical bases of the traditional neighbourhood or mahalleh. It was observed that this type of spatial configuration was not identified by size, population or



Drawing III-38: The neighbourhoods of Isfahan.

Source: Organic Consulting Planners.

physical boundaries, but by cultural factors reflected in the trade practices of Islamic traditional society. Therefore, the neighbourhood or mahalleh is a spatial reality comprising several residential clusters whose inhabitants are identified by a common socio-economic factor. It is usually surrounded by a circulation channel to form a private island repeated throughout the traditional residential areas of Isfahan (drawings III-32, III-38).

A considerable part of Isfahan is still based on the traditional neighbourhood. In each neighbourhood the spatial characteristics seem to be the expression given by the cultural symbol systems of the local community, the place of their social activities, the channel of circulation, the dwelling units and their synthesis and relationship to the urban hierarchic system.

The area of local communal activities comprises shops, or a bazaar (drawing III-37), a mosque, and a school (madrasah) which face a local communal square, a bath and sometimes a caravanserai. The bazaar is usually located along and at the intersection of the neighbourhood channels of circulation. Spatially it is a covered, repetitive, dome-like, linear and dynamic space under which certain local trading takes place. On both sides of its main space, shops that have acquired static "places" are created. At the intersection of two bazaars a node is created by a larger volumetric space, called timcheh. The covered bazaar is noted for its shaded, comfortable, and cool place, in contrast to the climatic conditions outside.

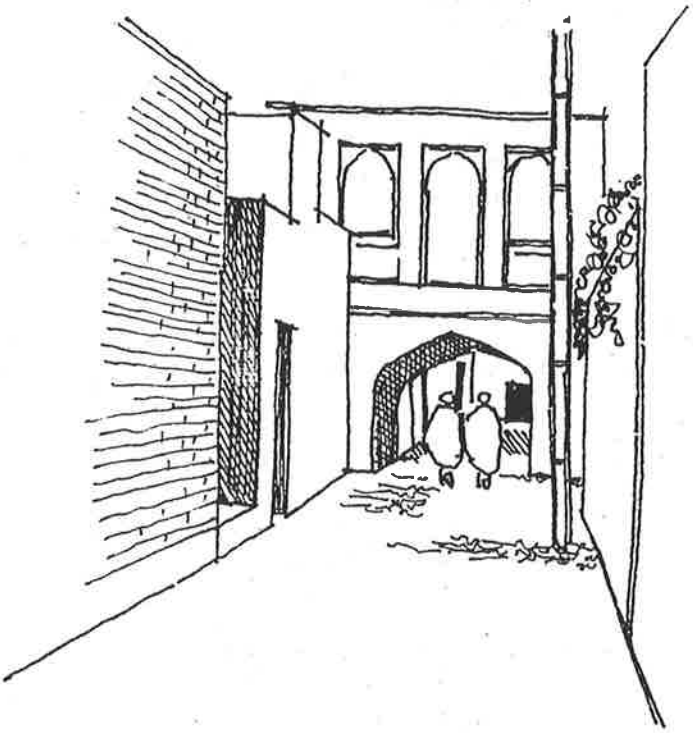
From the dynamic spaces of the bazaar, one passes orthogonally through an elaborate gateway and a transitional space, hashti, into the static well orientated space (i.e., "place") of the neighbourhood square, where political and social activities take place. At the centre of the square there usually exists a pool to generate a centripetal force that converges the vision and thus isolates further the square from the outside environment. All along the square, four iwans on each side are integrated with the repetitive and rhythmic Islamic geometric patterns to create a traditional courtyard where harmony and order have established a microcosmic world. Usually one of these iwans is the gateway and transitional space that leads into the mosque or mosque's sanctuary. The highly decorative external form of the dome above the sanctuary, or a minaret, has created a local landmark, orientation to the neighbourhood and square and symbolically related the relative horizontal to the vertical absolute. Finally, from the local bazaar to the sanctuary, one experiences the hierarchic order of the spaces. In general all these spatial configurations are set so that one can realize his/her spatial existence and "being" and thus achieve the "sense of place" of the square and the neighbourhood.

Surrounding the walled neighbourhood (mahalleh) is a four to five metres wide channel of circulation. It connects hierarchically the cul-de-sac to the local community centre and the main centre of urban activities:

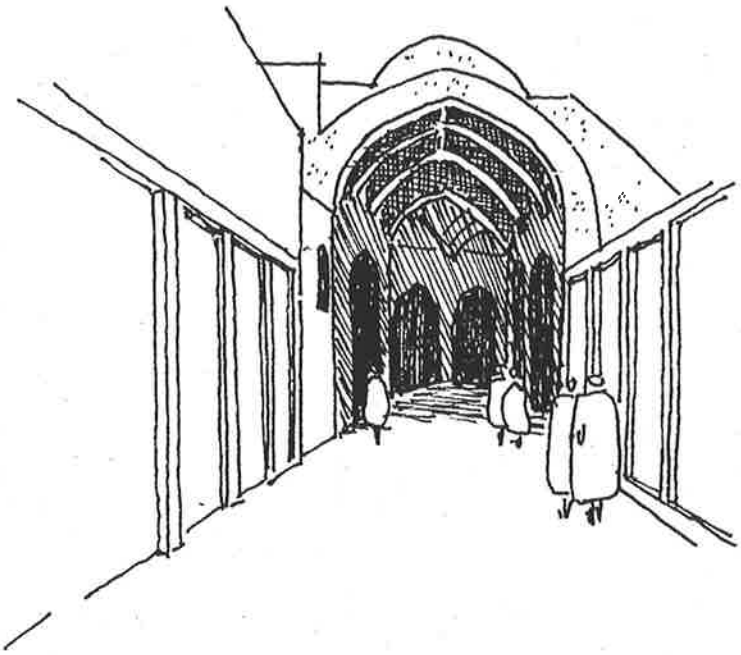
the bazaar. These channels of circulation are not pre-conceived streets, but grew up with the residential area naturally to end up as leaf-like, organic patterns spread all over the historical area of Isfahan. At certain intervals one notices elaborate gates that take a person through the cul-de-sac and hashti to the residential units. Between these gateways the walls are blank with no pre-determined rhythmic patterns. In these circulation channels, harmony and unity are only achieved by the appropriateness of the ratio of the width to height of their spaces (approximately 1:1). In these channels simplicity and lack of details have turned the space into a purely functional circulation channel that only encourages movement. That quality (i.e., to encourage movement) is completely in contrast to the neighbourhood square and the notion of the "sense of place".

While walking along the circulation channels one notices the external form of the dome or minaret of the local mosque overdominating other forms in the neighbourhood. One also makes a similar observation when one looks at the skyline of the neighbourhood. The imposition of the dome on the skyline has created a landmark, identity, sense of direction, orientation and thus contributed to the "sense of place" of each neighbourhood (drawing III-41).

Another important feature of the traditional mahalleh is its elaborate entrance gateway and transitional space that isolates spatially the neighbourhood and contributes to the privacy of its internal spaces (drawing III-39).



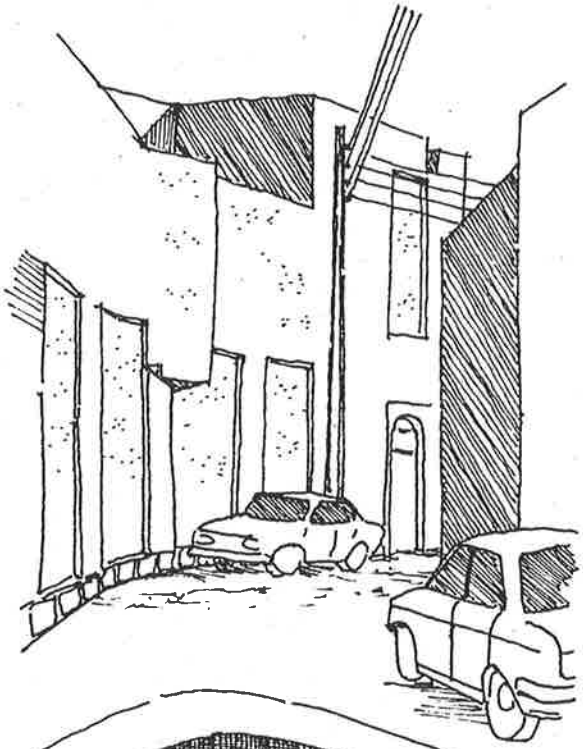
The gateway of the traditional mahalleh. It has created privacy and a "sense of place" in the neighbourhood.



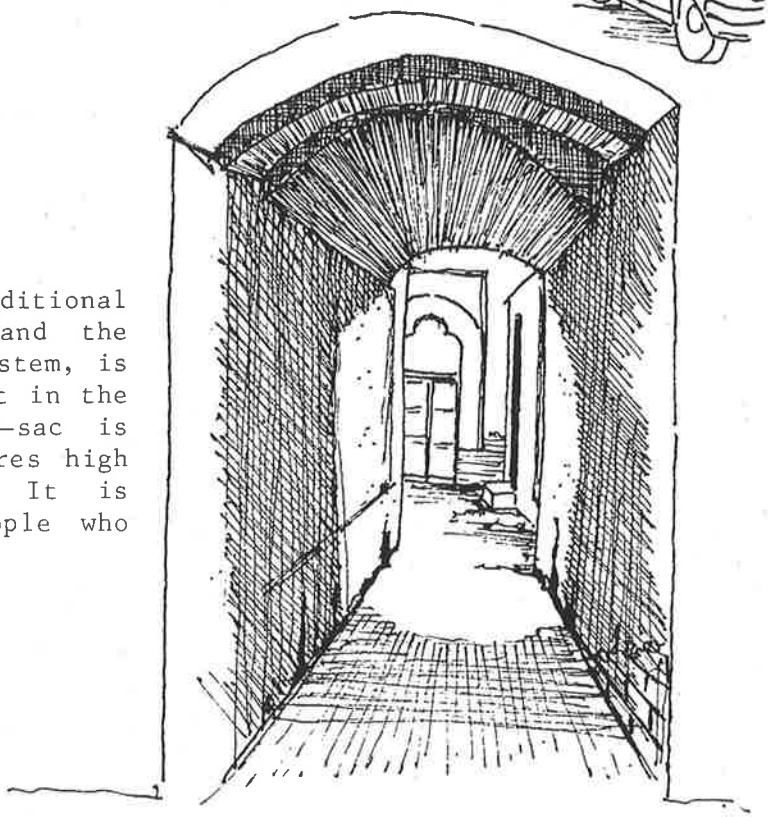
The local bazaar where daily shopping is done.

Drawing III-39.

A four to five metres channel surrounds the walled traditional neighbourhood. They are not pre-conceived, but grew up with the residential area naturally to end up a leaf-like pattern spread all over the traditional residential area of Isfahan. Harmony and Unity are achieved by the proportion of the space created. Simplicity and lack of facade details have turned this space into a purely circulation channel. Furthermore, the controlled perspective has created anticipation and reinforced movement in space. Note that since it is created as a pedestrian movement, cars are out of place.

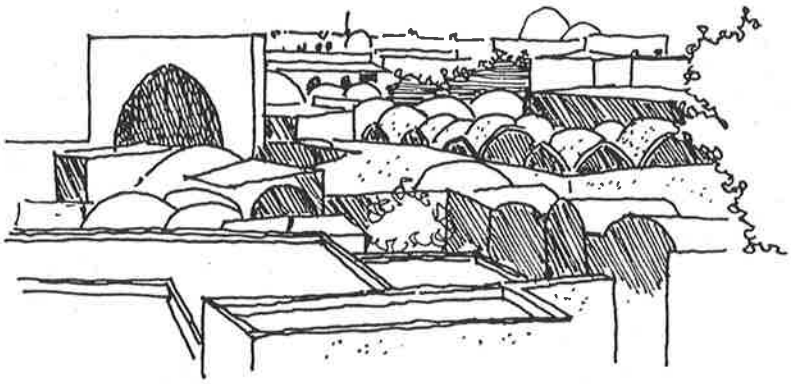


The cul-de-sac, the traditional space between the hashti and the neighbourhood circulation system, is the smallest circulation unit in the city hierarchy. The cul-de-sac is usally covered, 2.5-3.0 metres high and 1.5-2.0 metres wide. It is privately owned by the people who have access to it.

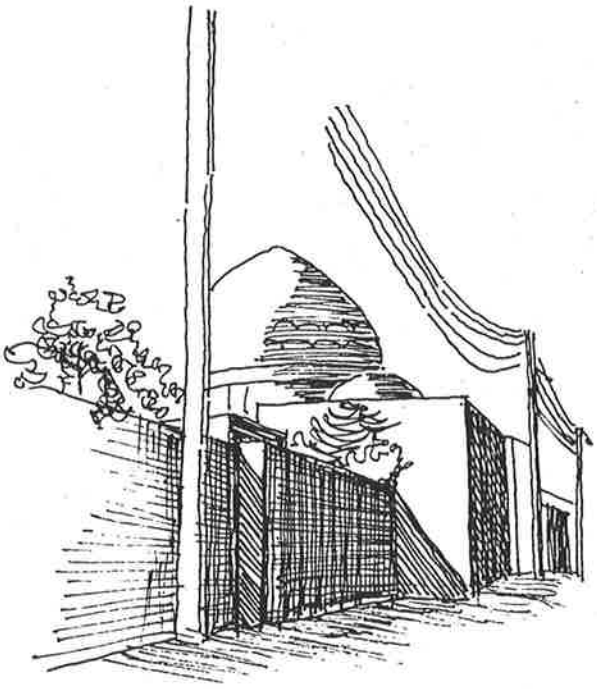


Drawing III-40: The circulation channels in the traditional neighbourhood.

Entrance to a local mosque



The skyline of a typical traditional neighbourhood. Note the integration of the community centre. Besides the landmark, no other form dominates the skyline of the neighbourhood.



Each neighbourhood has an external form (dome or minaret) with which to identify itself. The dome is the neighbourhood landmark. It establishes orientation that contributes to the "sense of place". Drawing III-41.

Both the entrance and transitional space are incorporated to form a spatial division between the familiar, co-ordinated and well-defined inside and the public outside. Therefore at a different hierarchic level, spatial characteristics similar to the dwelling and the cluster have been created.

The above view explicitly indicates that to achieve the "sense of place" as defined by this traditional culture, the same principles are used at different hierarchic stages. The symbol systems manifested on the surfaces and their organization, the forms, the spatial relationship of spaces and their explicit hierarchic configuration are all paramount for creating unity and harmony in urban organization, and privacy and personalization for achieving the spatial realization of existence ("being") and the "sense of place". While in a traditional dwelling and neighbourhood community place is explicitly defined by the spatial characteristics and symbol of the interior court what [Ardalan (1975) defines as the "container" and "content"], in the cluster and neighbourhood (mahalleh) "place" is more implicit. Both in the cluster and the neighbourhood, "place" has been expressed by the hierarchic configuration of spaces to correspond to the hierarchy of the Macrocosmic order, the transitional spaces, the gateway and the landmark. Similar to the dwelling unit, the neighbourhood and cluster differentiate between the unfamiliar outside space and their familiar, co-ordinated inside "place", between their internal micro-

cosmic unity and harmony and the external Macrocosmic unity and diversity and between the private and the public. In other words at each hierarchic level the "sense of place" is achieved by the spatial contrast and harmony between the relationship with the higher and lower level, by the landmarks at that level and the symbolic realization of the microcosmic spatial existence of the human being and the Macrocosmic Being.

VII. THE MODERN CHANGES IN ISFAHAN

The industrialization that started as early as 1920 in Iran and picked up rapidly after World War II, brought with it a rapid urban growth. Oil revenue and foreign investment were the chief generators and accelerators of urban industrial development. They increased the income per capita of the urban population and therefore became a cause for generating rural urban migration. Urban population as a proportion increased from 31 per cent in 1956 to 39 per cent in 1966, to 47 per cent in 1976 and reached 53 per cent of 47 million in 1986 (1986 population and housing census). This expansion, plus the war with Iraq since 1980, has brought with it a great shortage of urban housing.

Before the 1978 revolution the industrial development, urban population growth and massive investment of oil revenue generated a huge and dynamic construction industry. According to the World Bank (1980), from 1960 to 1977 construction grew by 16.1 per cent annually. The outcome was that cities accelerated their expansion with an annual

growth rate of 3.5 per cent. Even though there is no publicly known figure there is reason to believe that, because of the lack of national development policies since the Islamic revolution, cities have been growing at a much faster rate while the construction industry has declined due to uncertainty and a lack of resources.

Right from the beginning of industrialization public transport could not cope with that urban expansion. The private car which later became the symbol of the middle and upper classes became increasingly important. This further accelerated the problems in the cities. To solve them, in the early 1960s plans and building regulations were proposed for all major cities. Since there were no experienced urban planners, foreign consultants were invited. One such consultant was F.H. Kocks, K.G. Consulting Engineers who in 1961 proposed a master plan for Isfahan. Their aim was to prepare a twenty-five year physical development plan and an urban management scheme (Appendix A).

With the urbanization of Iran came a wave of cultural change. In 1906-7, a constitutional revolution took place. With it came ideas for a new socio-economic and political order. The merchants of the bazaar, the Ulamas, the landlords and the intellectuals who were mostly educated in Europe united temporarily against the monarch demanding a legislative house and a constitution. Many of the Ulamas, who wanted the new order to be based completely on Islamic law Al-Shari'ah, turned against it right from the first

parliament session. It was due to the adoption of Western ideals by the intellectuals (Kasravi, 1961). This marked the first time that a non-traditional force had gained certain power in Iran.

However, the real dividing line between tradition and secular (i.e., modern) in Iran came in 1921 when Reza Khan (who later became Reza Shah Pahlavi) came to power. Backed by the army, he challenged the traditional forces who opposed his style of Western industrialization (i.e., Westernization). Education which was taught mainly in the traditional schools (madrasah) was taken out of the hands of the religious class and put under the newly established Ministry of Education. The new intellectuals, who became the elite, outlined their method of education to ensure Western knowledge and encourage Western life style (Zonis, 1976). Besides, students who went abroad for higher education came back with a world view foreign to Iranian society (Avery, 1965). They joined their Iranian counterparts (i.e., Iranians educated in Iran on Western lines) and became the political elite and the new urban leaders (Zonis, 1976). With their new modern banks and businesses they became the new government and an important force outside the bazaar and traditional institution. In Isfahan their location was in the new commercial area along Chahar Bagh Avenue and the river. They were the major force behind both the introduction and acceptance of Western urban built-environmental philosophy and the abandonment of the traditional.

Another factor which weakened traditionalism was replacing the Islamic law Al-Shari'ah with a new civil law, modelled on the French code and constitution (Avery, 1965). This replaced the religious judges with professional civilian judges.

During the period of industrialization, in the urban built-environment, Western notions were considered for spatial configuration and characteristics. Residential areas with new forms, based on Western design principles were introduced to accommodate those with the new life styles. Modern commerce, as the result of the modern industrial system, needed appropriate spatial settings, a means of communication and an urban infrastructure. The bazaar, which could not provide the above, lost its position and power to the new urban leaders.

Probably the most significant change was the introduction of Western spatial qualities to the residential built-environment. The centripetal internal courtyard and its microcosmic order which used to achieve the "sense of place" was no longer accepted. It was replaced by the terraced house concept whose courtyard became the southern part of the land, while the house was transformed into a functional dwelling to accommodate the life style of the new elite.

In general the new spatial conception for the residential area brought with it the following spatial characteristics:



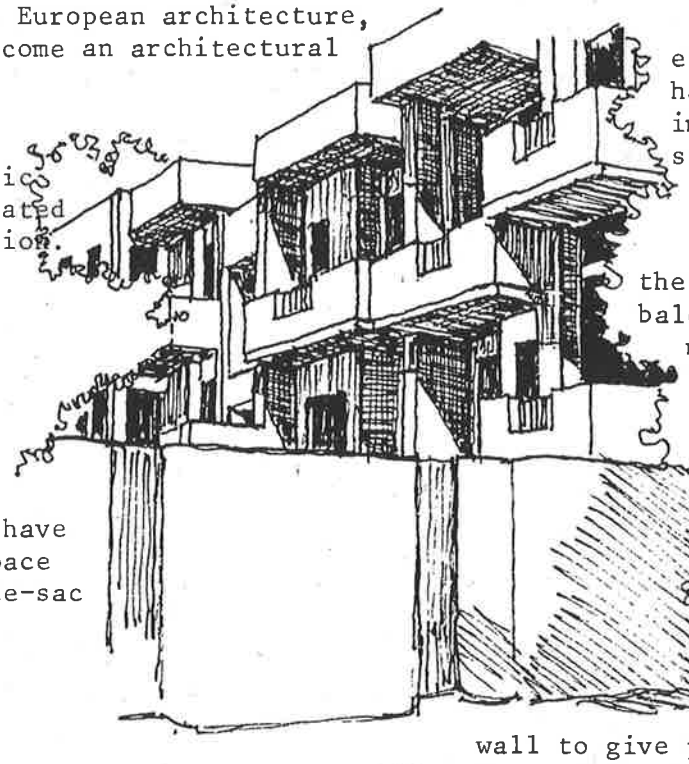
Drawing III-42: The modern residential neighbourhood.

The following characteristics are observed:

1. regular street pattern
2. the private courtyard has become part of the public street
3. the land has become regular in size, form and orientation
4. the covered cul-de-sac as a transitional space has turned into a street
5. the east-west streets give access to residential units
6. there is hierarchy of channels of circulation.

1. As is the case in European architecture, the facade has become an architectural expression.

2. Through external windows, the public outdoor is integrated into the composition.



elaborate facade has created an impact on the street

the cantilever balcony is a new modern concept

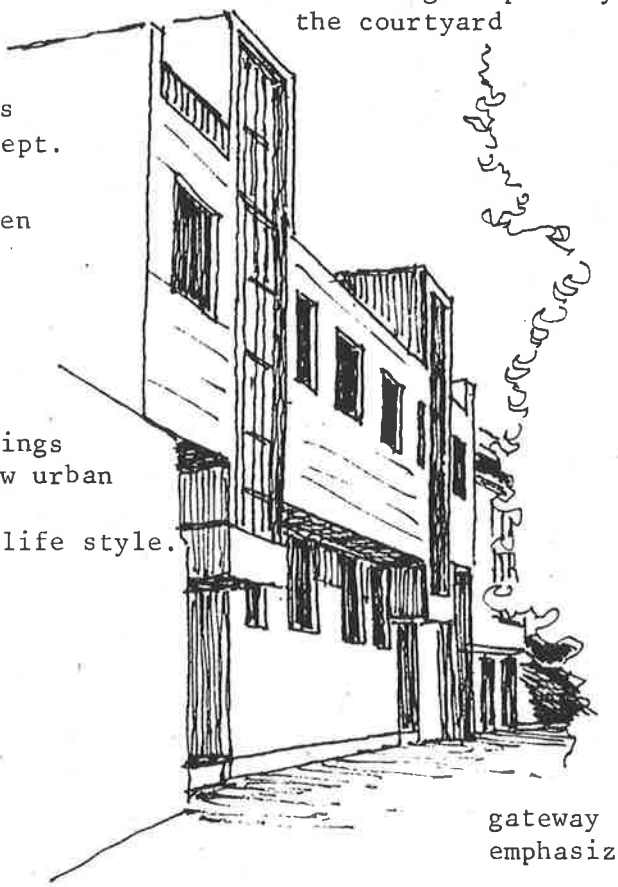
3. Buildings do not have a transitional space such as the cul-de-sac and hashti.

wall to give privacy to the courtyard

4. The traditional cluster as a basic residential unit does not exist in the modern concept.

5. New building material has been introduced.

6. The modern residential buildings are the expression of the new urban elite who have adopted the European symbol systems and life style.



gateway is not emphasized

Drawing III-43: The modern residential buildings.

1. A new concept of space, expressed by the open perspective to the outside world. The traditional restriction of the viewer's perspective of the central courtyard where the microcosmic self was symbolized and the "sense of place" was achieved by the characteristics of its space, was overruled.

2. By integrating the exterior with the interior spaces, through windows, the traditional "sense of place" became very obscure. The privacy, security and identity of being that one felt by the isolation from the outside environment was no longer there. The harmony with nature, manifested symbolically in the courtyard, was also lost.

3. The new terraced houses had an exterior form and facade whose design proportion and treatment became important. Besides, new forms such as the exposed on three sides balcony was introduced (drawings III-42, 43) to complicate the overall form, while in the traditional architecture balconies were spaces cut from a defined geometric form to achieve more protection and "sense of place".

4. The traditional cluster and its idea as a basic residential unit, was not accommodated in the new spatial conception.

5. To accommodate the terraced house, well ordered rectangular north-south orientated land subdivision was seen to be appropriate. The new subdivision was suitable to

the climatic conditions. It favoured the south-facing exposure.

6. However, in non-traditional residential areas due to the building regulations, development control and similarity in urban spatial conception, certain uniformity, unity and harmony have been achieved. The building regulations reflect the new non-traditional life style of the middle and upper classes. Mostly, they are located near the Zayandeh River and the newly developed southern residential areas.

The spatial characteristics of the new terraced houses have manifested a new neighbourhood order. The cul-de-sac of the cluster and the main circulation channels of the traditional residential areas, are replaced by a grid system with different spatial characteristics and concepts. The neighbourhood centre, gateway and landmarks that have given the traditional areas the "sense of place" are eliminated. Furthermore, the explicitness of the hierarchic concept is now vague. In short, a new spatial pattern whose characteristics differ from the traditional now prevails.

No more than half a century old the new residential order has generated identifiable and explicit spatial characteristics of its own. Most of the streets now have their identity defined by the dominant trees, the regular street pattern, the deep perspective, the vistas and the articulate facade treatment of the adjacent buildings. While the buildings themselves have attained their features

through the new design principles, new material and the new middle and upper classes' culture, ideology and "action". The dominant new order in the new residential areas is therefore created by the spatial characteristics that express the new elite and the spatial existence of the contemporary human being.

All these changes, dramatic as they seem, are only skin deep. The Islamic tradition and symbol systems, even though weakened, are still quite dominant in the traditional areas of Isfahan. Yet at first the new elite saw that the modern European built-environmental theories and principles are necessary for creating the environment for industrialization and modernization. The spatial elements whose relation and characteristics were based on traditional conceptions were therefore ignored. New ones were proposed. They had a dramatic effect on the traditional residential areas. The traditional environment which had survived and shaped through an historical process and cultural context had become the victim of the newly adopted philosophy. The new elite did not consider the existing traditional factors as a necessary cultural dimension of the relationship between the human being and the built-environment. The new elite's planning and re-development of Isfahan were contrary to that of the Seljug and the Safavid who apparently saw the necessity for asserting the historical process and cultural dimension.

Therefore, the 1961 master plan of Isfahan was proposed (Appendix A) and in 1968 revised to accommodate

urban growth and development along Western ideas. The plan envisaged a population growth to the year 1990 (1,250,000). The 1968 master plan stated the following (Appendix A):

1. In 1968 it was estimated that if each family were to have one dwelling by 1990, Isfahan needed 200,000 dwellings.
2. If 130 persons per hectare were to be considered the average density to accommodate 1,250,000 inhabitants, the area of Isfahan had to grow to reach 116 square kilometres. This was three times the existing area. Hence the 1968 master plan proposed the following:
   a. Due to the mountainous terrain to the south and the agricultural land to the east, north and north-west were the most favourable directions of growth.
   b. All areas should be homogeneous and equally accessible to all services.
3. The existing radial city was to be altered into a linear one. Furthermore, a uniformly distributed grid system was proposed to replace the existing one.
4. Rehabilitation, mixed population and reduction in the existing density were proposed for the historical areas of Isfahan.
5. Satellite towns which had mushroomed around Isfahan were discouraged.
6. The residential area of the city was proposed to be divided into units (i.e., neighbourhoods) surrounded by a vehicular circulation system. Both the 1961 and 1968 plans stated that it should be carried out in the new and traditional areas of Isfahan.
7. In each of these neighbourhoods, depending on its population, the following were proposed:
   a. light industry
   b. health service
   c. playing area and parks
   d. parking
   e. schools

8. For the traditional residential areas, since they were populated by lower income groups, a more homogeneous society was proposed. This meant attracting middle and upper income classes who were usually part of the neo-elite.

All these proposed changes and regulations had a quite dramatic impact on the traditional residential areas. The new vehicular through accesses such as the ring road, carved its way through the traditional city (drawing III-38), without any consideration for the traditional pattern, leaving behind a path of destruction and derelic-tion. The new through traffic circulation channels attracted many of the activities that were part of the traditional neighbourhood social system. Many of the trades in the local bazaar were relocated along these avenues leaving behind abandoned bazaars and communal places. Therefore, one can conclude and state that these access roads which were created to accommodate private means of transport, destroyed the cultural components that gave each traditional neighbourhood its spatial characteristics, and the "sense of place".

The proposed circulation channels and city form, even though the master plan claimed otherwise, disregarded the traditional urban system of hierarchy. The grid circulation system, imposed roads, without any real consideration for the existing organic pattern, and ignored the Shah Square and Shah Mosque as the main node and landmark of the city. Therefore the dynamic and hierarchically integrated spaces that contributed to the "sense of place" in the Shah

Square, were changed by the uniform spaces proposed by the master plan. The proposed master plan disregarded the symbolic meaning of Shah Square, as the main city landmark, and the criterion that historically has bonded all the urban components into an identified unity. Thus the Macrocosmic order that established unity, harmony and the "sense of place" in the city was becoming irrelevant.

Furthermore, to accommodate the car in the traditional residential areas the master plan proposed access roads and group parking, instead of individual parking, for each neighbourhood. Preference was given to the former to reduce vehicular traffic while, at the same time, attracting middle and upper income groups. It was to encourage the middle and upper income groups, the new elite, to reside in the traditional urban areas so as to reduce the percentage of the economically underprivileged class and create a more harmonious socio-economic configuration. However, this policy would have introduced the European spatial conception in the residential areas, which in principle, was different from the existing tradition.

In the early 1970s building controls and new land subdivision regulations were outlined. In the mid-1970s the master plan was revised and a development control document was outlined (Appendix A). The aim of this document was to legislate planning laws for urban land use, while the objectives were:

1. Preservation of the historical areas and the architectural monuments of Isfahan.

2. To safeguard private property from adjacent development by formulating building relationships and co-ordination criteria.
3. The physical features that are the reflection of any important social relationships must be appropriately reinforced.
4. Regarding land use, built-up areas, rates, equal rights and treatment should be given to all property owners.
5. Regulations should be formulated to safeguard the rights of all citizens and the municipality.
6. Bearing in mind the historical importance of the city of Isfahan, an appropriate building height is to be indicated.
7. Harmony of physical forms and spaces is to be created.
8. Appropriate services and commercial activities should be evenly distributed.
9. In all parts of the city built-up area, floor area ratio and density is to be controlled.
10. A hierarchy in circulation systems is to be adopted and pedestrian movement encouraged.
11. The derelict traditional areas are to be rehabilitated.
12. Areas of special economic and social characteristics are to have special services.

A closer study of the proposed development control indicates that it was mainly a zoning regulation, an allocation of activities and resources and legislation. The development controls do not give an explicit guideline to identify the configuration of the spatial elements, their relationships and their characteristics. The only exception was for any development near historical monuments (Appendix A). Hence achieving the "sense of place", in the trad-

itional sense, seemed to be unimportant. The development control encouraged architects and planners, part of the new elite, to follow and base their proposals in the traditional areas on Western spatial conceptions. Therefore the uniformity recommended in the master plan would be spatially achieved by disregarding the traditional and adopting a new Western notion: a new paradigm. In short the master plans and the development control seem to have attempted to transform Isfahan into an international city with no sense of the traditional "place".

However, in the late 1970s just before the Islamic revolution, a new revival of the traditional characters was apparent. The master plan was revised again to become sympathetic with the traditional character. Some government departments (i.e., the Ministry of Culture) rehabilitated a section of the traditional area to accommodate some parts of their organization. Furthermore, the derelict traditional dwellings were to be upgraded and converted into student housing. As well as this, Isfahan Municipality was working on a scheme to encourage those who lived in the traditional areas to redevelop their own built-environment. After research into the traditional built-environment, a new generation of architects and planners saw the necessity for developing their notions taking into consideration the outcome of their research. They therefore established the importance of the paradigmatic dimension and the continuity of the historical process (i.e., diachronic). The result is reflected in the Habitat Code, presented by the government

of Iran to the U.N. Conference on Human Right Settlements, held in Vancouver in June 1976 (Appendix B). The Habitat Code was the last thought and attempt made before the revolution to establish urban design criteria for the residential areas of Isfahan.

VIII CONCLUSION

This chapter, by considering Islam as a specific cultural context of Isfahan's built-environment, attempted to define and elaborate the importance of the symbolic interpretation of a world view (i.e., the paradigmatic dimension) in the human being built-environment relationship and in the spatial quality of space known as the "sense of place". The symbol systems, as cultural phenomena manifested in the organization of the spatial elements, their relationship and characteristics in space, were stressed as a spatial expression of human existence and "being" (i.e., the "sense of place") and thus noting its necessity as a tool for the organization of a setting (i.e., traditional) to achieve a desired human "action" (i.e., traditional habitation). Hence the "sense of place" was a desired quality of the interior court plan, the cul-de-sac and the neighbourhood to give personal meaning to the existence of the family.

This chapter also indicated the importance of the historical situation in the creation of the "sense of place". At the societal level of the human dimension of space, the spatial characteristics of Isfahan were very

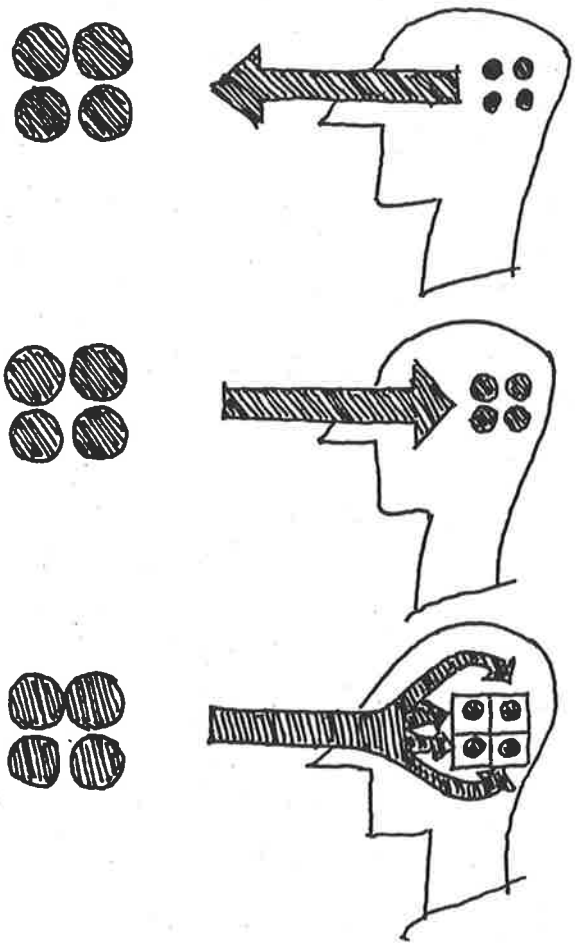
much a product of the institution (i.e., the power of different dynasties), the urban leaders (i.e., the Ulamas) the existing built-environment and the culture. They were all defined, according to Giddens (1979) and Layder (1981) to be the "structure" that interacted with human "action". One observes that the Arabs, when they conquered Isfahan, synthesized the institutional power, the spatial characteristics of the existing (historical situation) settlements and the new Islamic culture with the inhabitants' "action" to re-create new spatial patterns to accommodate future "action". Similarly, during the Seljug and Safavid periods, the historical situation was used for future production and reproduction of space, and thus the existing built-environment became the means to re-create a new built-environment. Hence, any spatial characteristics created at the time of the Arabs evolved and passed through generations to the present day. As a result the present traditional neighbourhoods still carry in their spatial characteristics the essence of pre-Islamic settlements. Through their evolutionary development their characteristics (i.e., symbols) changed to accommodate continuously the change in human "action" and the spatial realization of "being" in space.

One may note that in the case of Isfahan, industrialization and modernization disrupted the synthesis that continuously considered the cultural, the traditional societal organization and the historical situation in the city. When the first master plan was drawn, the methodology adopted disregarded the traditional symbol systems and the

spatial characteristics of the existing built-environment. In many ways the master plan transplanted a built-environment that reflected the modern industrial West. In other words, the new elite and institution envisaged the future spatial characteristics and symbol systems without any consideration for their appropriateness for those who still maintained the traditional culture. Therefore, in many parts of the city they could not accommodate the desired physical setting for human "action" nor create the spatial realization of the existence of those who lived in traditional areas. As a result inter-urban migration and the dereliction of these areas were observed. Whenever a vehicular access road was built through a traditional residential area, a reorganization of the socio-spatial pattern took place. The new road attracted traditional, commercial activities, outside the spatial traditional framework, leaving behind abandoned bazaars. The result was a cycle of migration, dereliction and failure of the planning schemes.

Finally, this chapter suggests that the "sense of place" is a spatial quality and the bringing of meaning to a space to accommodate certain human self-expression. It is a meaning given by the spatial symbols and confirmed by the spatial characteristics of that space to accommodate human "action", realization of "being" and establish a creative and generative mechanism for a continuous interactive process between the human being and the built-environment. By looking at the process that created traditional Isfahan

this chapter pointed out that one of the main components that created the "sense of place" was the continuity of the historical process that synthesized the existing built-environment, the culture and the socio-economic elements and the institution in the interactive process so as to integrate the appropriate spatial meaning into any future spatial characteristics. This goes to suggest that the planning and design methodology which aims to achieve the "sense of place" may have to consider the above suggestions. One has to stress here that further research is absolutely necessary and observations in other socio-economic, political, cultural and historical contexts are vital for further expanding our knowledge in this field of studies. However, this is beyond the scope of this thesis. Therefore, knowing the limitation established by the framework of this thesis, the next chapter takes those spatial components - noted in the the previous and this chapter - as a foundation upon which it attempts to formulate a theory and a concept of the "sense of place".



CHAPTER FOUR

IV. A THEORY OF THE "SENSE OF PLACE" AND THE PROCESS OF ITS CREATION

I. INTRODUCTION

In this chapter an attempt will be made to achieve objective "B" of this thesis. Based on the analysis in chapters two and three, a notion, theory and definition of the "sense of place" will first be sought. They will be founded on the synthesis of the personal and societal level of the human being built-environment relationship. Later on, an attempt will also be made to identify an alternative planning and design process, based on continuous and direct human involvement. It will be noted as an approach to a methodology that may achieve the "sense of place". The framework of the identified process will be a system in which the built-environment is integrated as an essential dimension of the social interaction of human beings.

Chapter one briefly reviewed the work of a few psychologists and sociologists to indicate the difficulty of integrating the personal and societal levels into the study of the human being built-environment relationship. While the sociologists and anthropologists carry out their studies, assuming that the individual is defined by certain cultural norms, the psychologists are concerned with the attitude and the perception of the individual. Note that both base their methodology mainly on positivism and functionalism. Their attempt is to define the "sense of

place" without looking at the subjective meaning associated with "action".

Chapters two and three of this thesis analysed two case studies to attempt to define and clarify some of the important notions of the "sense of place". Chapter two - the analysis of the villages and the rural development policies in Iran - tried to relate the identity of a "place" to the spatial characteristics that stem from the socio-economic organization at the societal level, the historical and geographical situations. It was observed that the forms, patterns and spaces of the villages were directly related to the regional climatic conditions, the management and resources available (e.g., water), topography, soil condition, the local building material, the degree of isolation of the settlements, the social organization, the laws, and rights of the society and the individual. Each of these components was identified as a context and a source for inspiration, creativity and limitation that gave the built-environment its unique quality to accommodate the human "action". They were also noted to be important components for establishing the spatial characteristics that identified and created in each region of Iran a unique meaning of the "sense of place". Ignoring this uniqueness and transplanting Western ideas of development, was observed to be a main reason for the rural policies not to achieve their expectations.

Chapter three critically analysed the traditional residential areas of Isfahan and looked at the relation-

ships between culture, as a symbol system, personalization of space and the "sense of place". By stressing the concept of spatial meaning and the cultural pattern as a context (i.e., the paradigmatic dimension), it introduced subjectivity into the definition. "Being", as a new spatial conception that associated the "traditional" person with the personal microcosmic and the universal Macrocosmic order, through the symbol systems, was integrated with human "action" to give a metaphysical conception to space. (Note that, as was indicated in chapter one, Giddens also integrated "being" with human "action".) Therefore, the "sense of place" was defined in terms of a metaphysical human relationship with the built-environment, and the meaning given by the subject (i.e., the traditional person) to the object, so that the spatial setting might acquire that quality and those characteristics necessary to accommodate human "action" and establish spatially the traditional "being". Disregarding "action" and "being" seems to be an important reason for the failure of the master plan of Isfahan. While "action" was defined in chapter one, it is very important to define here the meaning of "being" in a personal and a cultural sense, if one aims to achieve the "sense of place".

Both case studies strongly suggest that the "sense of place" is very much related to the cultural context within which that quality may be identified. In other words, both stress the importance of *a priori* context or the historical situation of the subject in the planning and design process. Transplanting a process and the applicability of a

universal methodology in planning and design are discredited. It is therefore necessary to formulate a methodology where, in each planning and design scheme, the "actions" of the subjects can be objectified. But, note that in the planning and urban design process, there are usually three main active subjects: the actor as an individual; the supra person which, relates the actor to his societal system and the planning and design institution, which attempts to propose and accommodate a course and a setting for the person and societal "action". Each of these subjects may have their own "action" (i.e., need, purpose and intentionality), "being", cultural context and symbol systems for the human being built-environment relationship.

The idea that different societies and institutions (i.e., social and government systems) have their own impact on human "action" and the realization of "being", suggests the importance of the rules and organization of resources (i.e., the "structure") used as a generative mechanism to physically manifest human "action" and "being". The "structural" components are the result of the communal organization, the resources, the built-environment and the geographical features, as indicated in the Iranian villages. They are the material, associated with modes, means and relationship of economic production and consumption (the industrial change in Isfahan), and the institutional norms associated with the laws, culture and distribution of power. Power is assumed to steer the "structure" in a certain direction and thus control the interactive process. Therefore, appropriate knowledge of

the nature of the "structure" and its context seems necessary in the planning and design process.

The reviewed case studies, strongly suggested the importance of the historical situation, geographical locale and continuity of the "structure" and human "action" for establishing the "sense of place". In the study of the historical situation and process in Isfahan, the knowledge and evolution of the existing "structural" components were given. The knowledge included the understanding of the cultural norms, the rules, the social organization of the resources and the spatial characteristics that established the "sense of place" in that context. Through its continuous interaction, as a "structure", with human "action", the knowledge of the historical situation was understood, transferred and utilized for re-creating the spatial characteristics that manifested in other times the "sense of place". The master plan of Isfahan, by ignoring the historical situation and the process, failed to establish in the traditional residential areas the appropriate spatial characteristics that manifest the "sense of place". One therefore can conclude that knowledge of the historical situation and process is necessary to establish the means within which social interaction is continuous.

Thus the two case studies explicitly indicate that:

A. The "sense of place" is not only derived from a spatial quality to accommodate human "action", but is the spatial realization of "being". Therefore in achieving the "sense of place" one has to define and acquire

knowledge and integrate "being" into the planning and design process.

B. The definition and knowledge of "being" seems to be a subjective knowledge. Spatially, it is identifying the built-environment with the existence of the human-being, as a person and a supra person, in a social interactive process.

C. The subjectivity of "being" implies certain relativism in the "sense of place" and the planning and design process.

D. To achieve the "sense of place", the planning and design process has to be historically situated (i.e., paradigm) and continuously contributing to the historical process of social interaction.

E. The historical process, being a synthesis of human "action" and "structure", implies that the planning and design process is also a synthesis of human "action", "being" and the "structure".

F. For knowledge of the "sense of place", one has to understand, explore and synthesize the human being built-environment relationship on the personal and societal level. Each level contributes certain components that are essential for acquiring those spatial characteristics to establish that state of mind and activities associated with the "sense of place".

The above are some of the important components, used in this chapter, as a foundation for a theoretical formulation, definition and an outline for identifying a

planning and design process that contributes to the creation of the "sense of place". However, one has to stress that these components may not be sufficient for an indisputable theory. Further empirical observations and conceptual arguments may be necessary for understanding the subject, refining and revising the theory stated here. It is envisaged that the critical observation made of the planning process in the Collingwood Housing Estate, Melbourne, will be a test, thus identifying other important components of the "sense of place" and establishing reasons for a revision of the theory. Other such revisions and tests can always be a subject for future research work.

II. SOME GENERAL THEORETICAL BACKGROUND FOR THE "SENSE OF PLACE"

Both case studies in chapters two and three implied that the "sense of place" is associated with the human being built-environment relationship. This basic assumption is reflected in the terms of reference of this thesis and supported by studies made in social and behavioural sciences (see chapter one). Therefore one may conclude that the relationship of society and the built-environment is axiomatic, and that each is paramount for appropriately analysing the other.

One also needs to define whether the human being and the built-environment are two interactive systems (i.e., the human being as a sub-system and its environment as a system: an organic system) or an integrated system (i.e., the human being a system and the environment the sub-system

integrated into the human system, therefore a social system). The former - the interactive system - implies that the human being is a component of the environment, while the latter - to be noted later as an integrated system - stresses the environment to be a component of the human being. This is an important theoretical argument which has to be resolved if the "sense of place" is to be more explicitly conceptualized. To do this the thesis will be looking at society and social theories. Since social theories conceptualize human and societal "action" of organization, it is assumed that the social organization may provide an insight into an appropriate process of planning and design.

III. A BRIEF OUTLINE OF THE "SOCIAL THEORY"

A comprehensive study of social theories would require thorough research into most branches of human sciences (i.e., social sciences and philosophy). The study would also require a critical analysis of the schools of thought that contribute to the subject. Therefore a comprehensive analysis of the social theory seems to be far too difficult a task for a treatise in planning and urban design. Hence, this study will attempt to give a critique which is brief, simple and yet would not prejudice the subject of the thesis.

The brief social theory to be outlined here is based on the work of a recent school of thought founded as a critique of positivism, which includes people like Marx,

Levi-Strauss, Habermas, Heidegger and others who have seen certain limitations in adopting, for social science, positivism and the research methodologies of natural science (see chapter one). The outline here is not meant, however, to be a critical analysis of social theories. In fact this study will explore only Giddens, Layder and those who, over recent years, have been the sources for certain important built-environmental theories.

As was stated in chapter one, in recent years many social scientists have criticized the limitations of positivism in social sciences. This criticism is outlined mainly in what is known as the "critical theory": a philosophical argument regarding the theory of knowledge (Layder, 1981; Bleicher, 1982; Thorns, 1976; Bauman, 1978). Hekman (1983:123) puts it, "critical theory sees a gap between thought and reality - or between theory and practice - to be a central problem of social theory". Positivism problematique, argues Habermas (1978), is based on defining the relationship of theory and practice in social science, in terms of technical manipulation of social theory by theoretical enquiries. Apparently this is to give the knowledge in social science similar credibility as in natural science. "Critical theory", according to Habermas, looks at positivism to establish its theoretical enquiries, bearing in mind the importance of the "practical intent" of the human being. He notes that practical intent shifts the enquiry from the visible object, as is the case in natural science, to the conscious subject. It therefore

relates social enquiry to human "action". Thus a study and proper definition of human "action" is paramount to establish the human being built-environment relationship at the personal level and thus the "sense of place".

A. THE ROLE OF THE INDIVIDUAL AS AN ACTOR

In chapter one of this thesis, the individual or human agent was defined in terms of "action" or the "acting subject". This definition, adopted from Giddens (1979, 1984), set "action" as a continuous flow of conduct in space (i.e., the environment) and time. In his theory of the "acting subject", Giddens outlines human knowledge as belonging to the unconscious - the source of perception and cognition, as defined by behaviour psychologists, the practical conscious - the source of knowledge for carrying out everyday social activities, and what he called the "discursive consciousness" - the knowledge with which one conceptualizes certain purpose for himself and knows the reason for carrying out certain activity. These three sources of knowledge establish understanding of one's activity and the personality of the human being. "Action" therefore involves unconscious imageability and a certain practical realization of interest for the material transformation of nature and expressing the environment with meaning. Therefore the knowledge for personal "action" exceeds the cognition, the psychologists have indicated.

The definition in chapter one stresses the association of intentionality and purpose in human "action". In a

phenomenological sense intentionality is regarded as the act of formulating purposive ideas. It is not the expression of the mental visual experience as implied in behaviour psychology, even though it may be influenced by it. In this context intentionality and purpose implicate a certain creative capacity and social interactive skill that make the human being come to terms, and fashion, the social realities while pursuing personal objectives. Intentionality is, as Layder (1981:15) states, is associated with "the theoretical axiom that mind and action are indeterminate, that is, they cannot be accounted for in terms of physiological or environmental factors". In other words, the intentionality of a person is the routine feature based on his ability to negotiate in a dialogue, create purpose and plans for his "action".

It is important to note again Parsons' (1971) "action system". Parsons' action system, adopted by Barker and Michelson, constitutes four sub-systems: social, cultural, personality and behaviour. Except for the social, the other three are a constituent of their environment. In Parsons' notion creativity is attributed to the cultural sub-system, while the adaptive, is associated with the behaviour sub-system. Parsons' goal attainment of action is located in the personality sub-system. This implies that in achieving a certain goal, one has to adapt either his behaviour to the environment or change the environment to accord with certain deterministic cultural norms, or both. Therefore, according to Parsons' conception, a person does not have an

internal creative capacity to form ideas of his/her own and accordingly change the environment.

Besides defining the actor in terms of his intentionality in "action", there is also the notion of "being". The definition of "being", with all the difficulty in defining it explicitly, is based on Heidegger's (1967) idea that human existence in the environment (i.e., his world) is determined by personal understanding of existence in the world. This understanding is a necessity continuously arising from the fact that the human being wants to exist (i.e., Being-in-the-world). In defining this idea, Heidegger considered a philosophical conception that has been debated since Plato to establish the essence of human existence. Heidegger goes on to argue that, human existence in this world is not made up of bits of empirical evidence of the visible object. In fact the phenomenon for existence is based on a priori conception (i.e., "basic concept") of the world as the human subject knows and understands "Being-in-the-world". The "basic concept" will determine the way in which one will get a pre-understanding of the subject. Therefore, through the notion of the "basic concept", Heidegger considers the object (e.g., the built-environment) integrated, relative and an essential part of the existence of the subject (i.e., the actor as "Being").

> Basic concepts determine the way in which we get an understanding beforehand of the area of subject-matter underlying all the objects a science takes as its theme. All positive investigation is guided by this understanding. But since every such area is itself obtained from the domain of entities, the research signifies the interpretation of the entities with regard to being. (Heidegger, 1967:30)

Heidegger's notion of "being" therefore stresses a priori condition of understanding "being". He is here exploring the ontological foundation of the understanding which an actor reaches by the mere fact of "Being-in-the-world" (Bauman, 1978). This understanding is essential for the personal experience.

In his ideas, Heidegger strongly suggests that the built-environment is an essential and inseparable part for understanding a person as an individual entity. It is integrated into the person to identify certain characteristics of his/her essence. That implies that the built-environment is a component integrated into the human being as the space dimension of the social system. One can go a step further and argue that in the urban pattern of Isfahan, the spatial characteristics of the spaces are similar, because they are the essential components to identify the "being" of the Muslim in the microcosmic order.

The new feature of the actor (i.e., "being") is therefore complementary to intentionality to give the actor a personalistic metaphysical attribute. Personalism, as Layder (1981) indicates, characterizes the basic structure of social life. The social world is made up of interacting persons, conscious of their "being", through being conscious of other people, and pursuing their own intentionality. This view is reflected in the basic societal unit: the family in Isfahan. The family is conscious of its "being" as an existential and personalized unit, which

having a certain consciously known societal position, is manifested in the spatial characteristics, the stability and change of the dwelling unit. The family realization and knowledge of the microcosmic being (i.e., similar to Heidegger's "Being-in-the-world") is the means and outcome of their realization of the "sense of place" in their dwelling. Therefore an important part of personalization has to do with creating and understanding the means and spaces that in them the "sense of place" has materialized. Alternatively, part of creating the "sense of place" is personalizing that particular space.

To elaborate on the meaning of existence and "being", Heidegger (1967:32) introduces a term he calls "Dasein". "Dasein" is defined as the entities that establish the existence of "being". Through an historical enquiry into the entities, one can identify the meaning of the existence of "being". In other words, the meaning of "being" can be established by explicating the historical development that creates its entities. Furthermore, any actor sets his own meaning as a priori for any of his "actions". Through understanding the pre-action meaning one can acquire the knowledge to identify human "action" in a certain situation.

Heidegger is only one of a stream of philosophers (e.g., Gadamer, 1976; Habermas, 1978) who has stressed the idea of a priori meaning and the importance of the subject in a social science enquiry (Bauman, 1978; Bleicher, 1982). Taking Kantian philosophy as the basis for their theses,

these philosophers outlined phenomenology and the new hermeneutic philosophy and sociology. Basically, phenomenology and hermeneutics conceptualize the idea that the subject shares the world with his object and has a pre-understanding which guides his/her purpose. According to these authors, apart from the physical and visible property of an object, the object depends on which attributes and metaphysical meaning are given to it by the subject (i.e., the actor). Note that hermeneutic sociology and philosophy, phenomenology and other methodologies, such as ethnomethodology, criticize the limitations of positivism in social sciences.

Since phenomenology has been brought to the built-environmental design and theory of "place" (Norberg-Schulz, 1974, 1979; Relph, 1976, 1981; Seamon and Mugerauer (eds), 1985), it seems important to have a brief look at it. Similarly, the thesis will later examine hermeneutics to see its possibility for identifying the "sense of place".

The phenomenologists, their theory initially developed by Husserl and Shutz, see the world as a product of the human actor. The world has no existence apart from its individual members' "action" and the meaning they bestow upon it (Lally, 1976). Here, "action" is distinguished from behaviour. In "action" there are the elements of intentionality, purpose and "being" (i.e., "being" as defined by Heidegger). They are unified by the actor's bestowal of meaning upon the object, yet they cannot be aggregated. Meaning, which is a communicative act, is considered to be

on two levels: the meaning which is within the consciousness of the individual (i.e., personal meaning), and the meaning which is formed due to the process of social interaction. Exploring the first level of meaning, which Shutz defines as meaning in its primordial state, involves examining how the individual reflects upon experience and how experience becomes meaningful through the process of reflection. The second level of meaning, in which actors directly experience each other, is where shared meanings are established and thus become the proper subject matter of social science. From the shared meaning, due to common experience, the common sense knowledge of the actors becomes typified knowledge. It is the initial point where the ideal types, the "raw data" for analysis, occur. At this initial point the social actor continuously checks his/her meaning and knowledge by participating in the social interaction. However, as Giddens (1979) indicates, according to Husserl knowledge is intentional, conscious and has no significance except when meaning is given to it. It is for this reason that subjectivism assumes a central part in this type of enquiry. Moreover, it is the intersubjectivity between these two levels that identifies the private domain of the actor, a priori gives meaning (i.e., made of the individual and shared meaning) and a meaningful context defined by the concept of the situation (Hekman, 1983).

In conclusion, phenomenology is the study of meaning, in a context, built on the subjective interpretation and intentionality of the actor. This implies that an

individual's personalization cannot help but bring along all the prejudice, tradition, cultural constraints and social pressure as a priori. However, this actor's continuous participation in social interaction, continuously revises, in a certain context, his/her meaning, personalization and all the preconceived prejudices.

As was noted in chapter one phenomenology has recently expanded its domain into the field of geography, planning and architecture to identify the "sense of place" (Seamon and Mugerauer (eds), 1985; Relph, 1976, 1981). It therefore has incorporated the human subjective dimension and attempts to give an alternative meaning to "place".

It is interesting to note that Relph (1976), by associating the notion of "place" with the subjective geographical experience, indicates that there is a link between "place" and phenomenological geography. He also points out the limitation of positivism in geography and attributes this to its incompetence in identifying both levels of consciousness: the meaning due to societal interaction and personal meaning. However, by introducing the unconscious, he seems to contradict phenomenology and its philosophical foundation. He does this by turning to the object and saying that the meaning of "place" or its "essence" lies in the unselfconscious that defines place as profound centres of human "experience" (1976:43). However, later in his writing, Relph (1985) refers to Heidegger to undervalue the unconscious and thus revise his own initial definition of "place". Therefore in his latest argument, he

states that "place" is constructed in our memory and affections through repeated encounters and associations (i.e., experiential meaning). He therefore takes Heidegger's idea of "Being-in-the-world" to conceptualize the notion of "place-in-which I live as the centre of my world". Relph's efforts seem to draw a similarity between Tuan's (1974) "topophilia" and his own "world view" or "he as the centre of the world".

Mugerauer (1985) also follows the same basic line of argument. Besides using phenomenology to indicate the limitation of sensory positivistic environmental information - a noted psychological methodology for defining the "sense of place" - he similarly to Relph, attempts to elaborate within phenomenology the notion of "place". He however takes different properties and relates "place" to intimacy and comprehension of the meaning of a "place".

The above arguments of meaning, subjectivity of "action" and phenomenology, explicitly indicate that the knowledge acquired through positivism and census data to elaborate on the human being built-environment relationship is limited. To define the "sense of place", the visible objective criteria, human behaviour and cognition due to the function of the space, are not sufficient. Acquiring the subjectivity of the subject-object relationship seems an essential part of the knowledge to establish the "sense of place". However certain problems are apparent. Besides its complexity, and the notion that phenomenology ignores the role of the societal institution and organization, some

sociologists have cast doubt on its basic philosophical rationale (Giddens, 1976; Hekman, 1983; Layder, 1981). One such important doubt stems from the notion that phenomenology only considers, as a subject of study, the phenomenal world of a person's everyday life. Phenomenology cannot construct laws regarding social organizations, institutions and ideals about the world. However, both Giddens and Layder explicitly indicate that in human "action" (intentionality and "being"), there certainly are conceptualized ideals different from the concrete particulars of everyday life. Moreover, these ideals cannot be the sum total of objects or events in everyday life. Hence Giddens concludes that phenomenology cannot establish human ideals in their pure form and free from the bias that one confronts in everyday life. The fact that phenomenology bases its knowledge on the personal level only indicates that it is a form of reductionism. Apparently Husserl was also confronted with the unresolved problems of establishing in phenomenology non-reductionist knowledge and social laws and ideals of the world free of personal bias (Bleicher, 1982). It is for this reason that in phenomenology "action" and intentionality of the actor are only considered within a context. Therefore the above argument strongly suggests that since phenomenology is a form of reductionism and cannot identify the laws of societal organizations, institutions and the ideal world free from personal bias, its knowledge gives a limited understanding to human "action" and the human being built-environment relationship.

The reservations concerning phenomenology are not quite apparent to those who introduced it to the field of planning and urban design. However, one must note that very few geographical, planning or urban design analyses have been proposed or made using phenomenology. One can therefore safely assume that it is rarely used to acquire knowledge of the "sense of place". The reason may be due to the complexity and difficulty in understanding the philosophical arguments made by Heidegger, Husserl and Shutz. Cullen (1984), who is very critical of current planning and research practice, due to the popular use of reductionism and positivism, still has his reservations about the practicality of phenomenology. Apparently he sees it as being far too complex to be professionally and practically applicable.

Another important philosophical trend that currently advocates the importance of the subjective meaning of the actor and criticizes the limitation of positivism, is hermeneutics (Gadamer, 1976; Bleicher, 1982; Bauman, 1978) and the critical theory drawn by Habermas (1978). Both apparently share the same problem: difficulty in applying its complex methodology to planning and urban design. However, the fact that it has very recently entered into the field of planning and urban design (Gregory, 1978), and aesthetic evaluation (Gadamer, 1976), and the notion that the "sense of place" is an aesthetic quality (Relph, 1976), makes it essential to briefly outline some of its basic ideas.

Hermeneutics is considered a philosophy that questions the nature and objectives of historical knowledge. In other words, it seeks to establish a basis for the discrepancy and relationship between human conduct and historical events. Hermeneutics stresses "understanding" to be a unification of the creator of an object and its interpreter. As Gadamer (1976) puts it, hermeneutics is ontological and seeks to explain the basic phenomenon of understanding events that occurred at times and places where the interpreter was not present. Therefore, it is the comprehension of the meanings through an interpretive effort. That meaning must be recovered through the reconstruction of the historical situation or context in which it has originated or been created. Therefore, it seems essential that the interpreter participates in the history of the event or object. In other words, the interpreter, with all his preconceived ideas and tradition, has to relate to the historical event that he/she is interpreting. Gadamer then concludes that it is the subjective pre-judgement of the interpreter - constituting the actor's notion of personal existence and the dialogue between the object and the actor (i.e., the interpretation) - that makes the subject comprehend the object. The actor's subjective comprehension of the characteristics of the space, contributes to the space becoming a "place".

It is apparent that in this hermeneutic process, due to the existence of a pre-judgement (i.e., a priori), Gadamer faces the problem of identifying the appropriate meaning and the honesty of the interpretation of the

historical situation. The meaning of an event can be defined in relation to the intention of the creator or to the interpretation that recovers the intention of the creator. But the interpreter may give the created or object a different meaning from the one given by the creator. This, as Gadamer remarks, establishes differently both the meaning (given by the creator) and the understanding of the interpreter. It may therefore make the development of "tradition" that conveys the object from the past and influences the present reception, unintelligible. However, instead of having one interpretive meaning in the object, it is more appropriate for it (i.e., the object) to include in itself varying interpretations, in accordance with the observer or the interpreter. The possibility of having a variety of interpretations will overcome the historical self-isolation of the object. The meaning in an object will continuously stand open to new interpretation by the actors. One therefore may conclude that no object (whether an historical event, a work of art or an urban spatial organization) can be regarded as dependent upon its creator or its present interpreter, but upon a dialogue that continuously synthesizes the interpreter and creator and unifies the subjectivity of both meanings and understandings.

Recently, hermeneutic philosophy has reached the field of human geography (Gregory, 1978) and explored the built-environmental design (Bogna, 1985) to elaborate further the notion of the "sense of place". Gregory (1978) in his historical analysis of modern geography, indicates the lack

of humanistic factors in the theories of geography. The reason for this, he argues, is found in the positivistic tradition of geographical analysis, which sought to optimize public policies and outline models based on the visible world. In other words, he argues that geography disregarded the hermeneutic preconception and subjective meaning of space. Instead, geography uses neo-classical economic and functional sociology, both of which are based on positivistic epistemology. Gregory goes further to say that geography must overcome its data base and consider sources, such as dances, literature, landscaping, music and painting for gaining its knowledge.

> What hermeneutic invites in is an interrogation of the totality of meaning which relevance and presupposes a continual examination of our mode of appropriation of the world.
>
> (Gregory, 1978:63)

The "critical theory", developed by Habermas (1978) is rooted in Greek, Kantian and Hegelian philosophy. Basically, it is another criticism of positivism as a means of acquiring knowledge in social science. Habermas makes a historical argument to indicate that positivism has abandoned the proper relation between theory and social reality. By indicating the value that exists in scientific, technical rationality, Habermas attempts to disclaim that positivism is value free. After pointing out the relationship between knowledge and interest, or knowledge and intentionality, he sees the necessity for exploring knowledge in a broader manner. It is here, then, that Habermas raises the importance of subjectivity, the existential or self-reflective experience and the hermen-

eutic element in acquiring the appropriate knowledge. Note that in his thesis Habermas does not exclude the causal analysis used in natural science. In fact as Hekman (1983) indicates, he stresses the necessity of having both the subjective and objective knowledge. He therefore emphasizes that reality is apprehended through technical analysis, practical interest that produces the knowledge characterized by its history and hermeneutic science and theoretical enquiry.

Habermas, who is considered by Overend (1983) to be the most impressive philosopher and sociologist in current years, takes from Kant the epistemological distinction between a priori and a posteriori knowledge and the concept of self-reflection. He develops the latter by using both Freudian psychoanalytic terms and the notion of cognitive process (Habermas, 1978). Overend (1983:25) sums up Habermas' critique of knowledge as:

* Epistemology can only be developed as social theory.
* That this theory will be an investigation into the history of the species in terms of the promulgation of the interest of self-preservation and reproduction.
* That the process of self reflection reveals the inclusion of knowledge within these interests.
* These knowledge-constitutive interests determine the conditions of objectivity, the validity of propositions and the meaning of knowledge.

It is quite explicit that phenomenology, hermeneutics and critical theory underrate the importance of societal organization and "structure" in relation to human "action". For elaborating the human being built-environment relationship, the above theories mainly argue the personal

Table IV-1: Habermas' Theory as explained by Overend

a priori			a posteriori				
a		R	b	r	c	R	b
S-R		M.					
I.S. T.F.	K-C.I.	P.K.	O.E.	S.I.			
	T.E.	E-A.S.					
T.C.	M.U.	H-H.S.		WK.			
	E.	C.S.S.		L.			
				P.			

Where:

1. S-R = self-reflection (process)
2. I.S. = interest structure (structure)
3. T.F. = transcendental framework (structure)
4. T.C. = theoretical certainty
5. K-C.I. = knowledge-constitutive interests
6. T.E. = technical exploitability (Wissen)
7. M.U. = mutual understanding (a species of Kennen)
8. E. = emancipation
9. P.K. = possible knowledge
10. M. = meaning
11. E-A.S. = empirical-analytic sciences
12. H-H.S. = historical-hermeneutic sciences
13. C.S.S. = critical social sciences
14. O.E. = object of enquiry
15. S.I. = symbolic interaction
16. WK. = work
17. L. = language
18. P. = power
19. = necessary and sufficient condition
20. = equivalence
21. a,c = qualitative facts within the individual
22. R = relational facts
23. r = relational facts between individuals
24. b = field of enquiry

In developing the realist conception of a relational fact of the form aRb to an infinite series of the form (aRb) r (cRb) r (dRb) r...n, Habermas' conception of epistemology, with its underlying ontological assumptions, and particularly his notion of epistemology as social theory, can be conceptualized as follows. Although the efficacy and a priori status of self-reflection (S-R) within the enquiring subject (a,c,d,...,n) generates the three knowledge-constitutive interests (K-C.I.) (namely T.E., M.U. and E.) which, in turn, are the determinants of knowledge (P.K.) and its meaning (M.) within the three sciences (E-A.S., H-H.S. and C.S.S.), these later a posteriori conditions operate within a social context (r) of symbolic interaction (S.I.) between individuals. The social milieux of work (WK.), language (L.) and power (P.), then, being the relational facts between individuals (r), distinguish the sociological character of Habermas' epistemology.

By resting in this way both on a sociological theory of symbolic interaction and a psychological theory of interests, Habermas' critique of knowledge stands, inter alia, as an attempt to "socialize" philosophy. And it is from this psycho-sociological epistemology that the radical distinction between the empirical-analytic, historical-hermeneutic and critical social sciences follows as a corollary with far reaching implications for the problem of objectivity. In particular, and in terms of the social sciences, it is used by Habermas to attack empiricist assumptions adopted by social theorists, to advocate a different methodology for social enquiry and to legitimize a growing social idealism found within certain "radical" schools of sociology.

Source: Overend, T. Social Idealism and the Problem of Objectivity. University of Queensland Press, p.26, 1983.

association of the actor and the built-environment. Phenomenology, hermeneutics and critical theory explore the notion of the "sense of place" without considering those institutional components that are a constraint and a generative mechanism for any creative process.

Therefore to establish at the personal level human "action" and the "sense of place", phenomenology, hermeneutics and critical theory strongly suggest the following:

1. The "sense of place" is both metaphysical and physical. Both are related to the self-realization and personalization, in space and time, of the spatial manifestation of the existence of "being". "Being" is a necessary component of the intentionality of human "action".

2. The understanding of the "sense of place" is both epistemological and ontological. Through a dialogue between the actor and the space the "sense of place" is created. Dialogue establishes the understanding of the meaning of the spatial characteristics to accommodate human "action".

3. The knowledge for understanding the meaning is based on a priori conscious, self understanding of personal intentionality. Hence an enquiry into the knowledge and meaning of the "sense of place" is based on the assumption that the subject (i.e., the human being) shares the world with the object (i.e., the built-environment) and has a pre-understanding of the purposes which guide the method of achieving the "sense of place". Hence both the means and the outcome (i.e., the

sense of place), are subjective, relativistic and contextual.

4. A priori knowledge that will identify the subjectivity and contextuality of the "sense of place" and the planning and design process is based on the historical situation and the continuity of the process for development. This a priori knowledge establishes a continuity from the past into the present and to the "future". Bleicher (1982:83) puts it, "The knowledge or historicality of understanding refers to the socio-spatial historic mediation of pre-understanding; its constitution of possible objects and the value dimensions formed by social praxis".

5. Based on the hermeneutic process, the meaning with which the spatial characteristics connote the "sense of place" is the meaning given by the interpreter or actor who wants to self-realize and personalize in space and time the existence of his "being". Hence "sense of place" is an attribute given by the user not by the designer or planner. It is a communicative enterprise between the space and the person who wants to accommodate his/her "action" in that space and has as a priori knowledge of his/her "action".

It is interesting to note here that Norberg-Schulz (1981) bases his study of meaning of European architecture in terms of Heidegger's philosophy. By defining architecture as a "concretization of existential space" (1981:5), he created a basic foundation of referring architecture to

the human being. Moreover, noting the human identification with reference to "give him existential foothold", he introduced the term "existential space". It is defined as "the quality which is the object of man's identification and which may give him a sense of existential foothold" (1981:5). He then divides "existential space" into two complementary terms: space, corresponding to orientation and character, corresponding to identification. Orientation and identification were noted to be the criteria for a "place" in European architecture.

Norberg-Schulz defines "place" as a qualitative total phenomenon that is universally valid. It cannot be an abstract thing but a reality related to spatial characteristics. Furthermore, he says that being qualitative, it cannot be classified by means of an analytic scientific concept. Yet Norberg-Schulz contradicts himself and uses analysis to identify certain components of "place". He first uses a reductionist approach to identify certain elements of "place", and then aggregates these elements to establish their universal validity in "place"-making. His method of acquiring the knowledge - reductionism and aggregation - seems to indicate that he fell into the same pit into which all phenomenologists have fallen. Besides, assuming the criteria that create "place" as universal and free of bias, he has attempted to achieve what the phenomenologists failed - that is from a prejudiced a priori knowledge related to personal intentionality, create a universal phenomenon or, from a subjective meaning, establish a universal one.

6. For personalizing a space and creating a "place", the individual undertakes a dialogue with the built-environment. With all the bias and pre-self-expression, the human being internalizes the space by attempting to understand its meaning and consciously creating it as part of his personal existential "being". Dialogue and personalization of space establish the continuous involvement in personal conceptualization, physical manifestation and expansion of the built-environmental knowledge and consciousness. As Bleicher (1982:76) puts it, dialogue is a means for interpretation and understanding existence "itself in terms of a language that addresses us from inside it". Therefore, one may conclude that the spatial characteristics of a space are the means through which the dialogue takes place between a spatial setting and a human being. Through this dialogue the human being revises his/her pre-notion of the space and continuously imposes on it an alternative to accommodate his/her existential "being" and intentionality. This seems to indicate that to achieve the "sense of place" direct human involvement in self-materialization of the spatial characteristics of a space, is essential.

7. In an urban milieu, it is assumed that the human being confronts a space with other human beings. People are involved in a mutual relationship with others to have "our-own-world". "Nature confronts us as an alien force, social processes we experience with the fullness of our being and become aware of as something that touches the

nerves of our existence, evoking reactions that span the spectrum from love to hate, as we get to know the conditions and forces underlying them" (Bleicher, 1982:61). A person therefore enters into a social relationship as an individual and as part of a social body whose components are known by the individual and are shared by everybody in that social body. Hence to speak of "being" and intentionality outside the spectrum of a social body seems to be quite simplistic. This will be the next theoretical analysis to be carried out in this chapter.

8. Besides the conscious knowledge for self-realization and personalization of space, one has to stress the importance of "cognition" - presented in chapter one - in achieving at the personal level, the "sense of place". "Cognition" and imageability, even though their limitations have been argued in this thesis, are important sources of knowledge for understanding the built-environment. "Cognition" therefore contributes as the psychological phenomena (i.e., territoriality, identity, aesthetic quality and mental map) which associate a person with the environment by contributing to familiarity and perception of the spaces.

B. THE ROLE OF SOCIETY (i.e., THE SUPRA PERSON) AS AN ACTOR

Associating spatial meaning and "action" of the human being with the societal organization and community seems to be another level that one has to consider in conceptual-

izing the "sense of place". The society and the community are made up of an internal world of shared values and feelings created through the social interaction of persons in a pattern to conceptualize the external corporate identity (Suttles, 1972). These corporates share internally, with other corporates, certain knowledge for understanding meaning and collective "action" to form a certain hierarchic order. The consciousness of the collective "action" to interact at each societal level is related, according to its common or corporate intentionality, with the built-environment (Castells, 1983) to materialize as a collective existence of "being" and create the "being-in-our-own-world."

As was noted before, joining this personal level with the societal level to identify the overall characteristics and knowledge for understanding of meaning, seems to be very complex. The identity at the total societal level apparently is not the total sum or aggregate of the personal level. The societal intentionality cannot be identified and pre-supposed unless people enter communion with others and become, instead of individuals, part of a totality whose collective consciousness is different from and irreducible to individual consciousness. It is for this reason that in social science there is a very loose link between sociology (i.e., work at the communal level) and psychology (i.e., work at the individual level). Even as Hekman (1983) and Thorns (1976) have indicated, the attack on positivism is divided on similar lines: the subjective humanist meaning of social actors and the structural

element of social life where the social institution is discussed.

The brief outline of phenomenology, critical theory and hermeneutics explicitly indicated the subjectivity of "the sense of place". Assuming that a similarity of the paradigm is necessary (Kuhn, 1974), it is apparent that a similar subjective (i.e., anti-positivism) analysis of the structure is appropriate. Therefore here the appropriateness and impact of social institutions, mainly the theories of Marx and Levi-Strauss, will be discussed. Later, by referring to Giddens and Layder in the next section of this chapter, an attempt will be made to synthesize the personal human "action" with the following structural analysis of social formation to establish a theory of the "sense of place" that incorporates the spatial meaning, intentionality, personalization of the human being and societal organization.

In the anti-positivism study of social organization, social scientists concern themselves with the social context, in which social actors' concepts are conceived and meaningful "actions" are involved with application of rules. These rules, which define meaningful "action", are similar to language. Hence the study of social "action" is similar to the study of language. The task is to understand and assess the elements of social forms, "structure" and institutions of social organizations, rather than the individual human being, to identify the phenomenon of meaning, "action" and the "sense of place".

Within this framework the structuralists seek their knowledge in a different approach to positivism. Instead of looking at the visible manifestation for analysing the social "structure", they search for the abstract principles which determine the organization of social relation. In this approach the individuals unconsciously support the structure of the social relationship.

One can note here briefly the theory of structure and the methodology outlined by Levi-Strauss (Jenkins, 1979). For Levi-Strauss the social organization is a basis where ideas and meanings are manifested through symbolic actions. These symbolic actions are cultural systems that represent a totality of collective representations, elaborated within the human society at a "supra-individual" level. Levi-Strauss conceives spatial configuration as a system of ideas and meanings according to a logical relationship within a culture. Spatial relationships are then a "metaphorical representation" of the symbolic nature of "cultural configuration". In a society a "cultural configuration" is composed of a basic mechanism or structure by which it manifests a phenomenon that signifies itself in space. Hence, Levi-Strauss defines the structure as an internal cultural pattern of social relationship and a product of the unconscious mind and its mode of social action.

Levi-Strauss uses phonology and the science of language as the basis for his conception. Note that there is a difference between language and speech (Giddens,

1977). The former is a symbolic system where the meaning has a precise specification. While the latter, speech, has its meaning in the subjective human "action" and in accordance with the human intentionality that takes place within the context of a linguistic system and social organization. Hence the meaning of speech can be understood hermeneutically (Habermas, 1978; Gadamer, 1976). Levi-Strauss has ignored speech and concentrated on the symbolic system of language.

As Jenkins (1979) suggested, Levi-Strauss has pointed out two basic factors for associating language and cultural configuration with the system of societal representation:

1. The first factor is the unconscious, the high level of generality and a priori that creates the expression of the action and the mental mechanism (i.e., language and other cultural norms have the same mental mechanism). This level is considered to be the locus, the origin of all "forms" of the system of the structure, empty of any "content". The "contents" are modalities of the structure and the cultural manifestations. Any study to be made, is to search the unconscious to identify the "form", the "contents" and their interdependence. Note that for Levi-Strauss the unconscious, where the structure resides, does not have any individuality. Therefore, language and any other cultural manifestations are connected by the same original "essence". It is where all the symbols reside.

2. Each specific cultural manifestation (and this includes the built-environment) is assumed to have an internal structure, a reality and a signification analogous to that of language. In a manifestation, the culture of a society is assumed to be made up of hidden phenomena, each of which has a basis (i.e., structure) which acts as the mechanism to signify and self-create the human function. Furthermore, due to the unconscious level, the structures of various cultural systems are expected to be similar. In other words, language and other cultural orders have the same structure. In his definition of structure, therefore, Levi-Strauss excludes material resources, but includes the order and pattern of relationships (i.e., the rules) of the elements which are culturally defined and context. Any manifestation - this includes the built-environment - is a variation of the ideal, outlined and conceptualized in the unconscious (i.e., the mechanism), and is a constraint on the material world. In other words, one observes unity in the structure and diversity due to the material world. Thus the structure is a deterministic constraint operating in all cultures.

To identify the structure and cultural pattern Levi-Strauss proposes a methodology similar to that used in linguistics. This includes the choice and the identification of relationships between two opposite binary elements. He therefore proposes an empirical and reductionist technique where he treats the elements of culture as linguistic phonemes whose meaning could be understood in

their mutual relationship. In other words the meaning is understood from the relationship of the elements in a system. In this system any change of an element and its relationship will create a change in other elements and in the whole system.

However, the empirical analysis of Levi-Strauss is not to look at the visible appearance, but to reveal the structure which is beneath it. According to him this can be achieved by creating models that make the structure intelligible facts. Knowledge therefore becomes the fabrication of models that establishes a mechanistic and deterministic structure of a set of empirical social relations. Within the constraints of these models of structure, rules are created to determine human action.

In the past decade or so Levi-Strauss' theory of structure has become a significant base in the field of architectural theory and methodological analysis (e.g., Preziosi, 1979; Alexander, 1979; Broadbent et al., 1980). It identified a means to integrate at the societal level the human dimension into architecture and thus define the societal components of the "sense of place". These architectural theoreticians found their notion of the human dimension to be:

1. similar to Levi-Strauss, based on an analogy to the science of language;
2. associated with the level of the unconscious as a priori;
3. with reference to the structure and the relationship of the elements, similar to Levi-Strauss;

4. studied by using a dialectic relation between two binary oppositional choices (e.g., Preziosi's variant-invariant; Alexander's pattern language);
5. analysed by considering a basic unit or element analogous to the phonemes whose meaning can be understood by their interrelationship;
6. with the assumption that the material resources are outside the realm of structure;
7. a deterministic model;
8. analysed by referring to the knowledge of the structure of the object and its intelligibility.

However, Gregory (1978), by criticizing the applicability of Levi-Strauss to human geography, explicitly indicates the limitation of the theory and the methodology for identifying the societal components of the "sense of place". Part of his criticism stems from the notion that Levi-Strauss has displaced altogether the meaning, given by the society as a subject to the structure (i.e., pattern). In other words Levi-Strauss gives minor importance to the intentionality of the supra-human being. Since the structure never changes Levi-Strauss, Gregory comments, implies that by repeating the basic structure through history, the human being has repeated the same ideas and action. Action, associated here with the unconscious, is identified by an apprehended model that has its origin in the same repertoire: the "unchangeable supra-personal mind". It is reflected in this world repeatedly to solve the same problems by manipulating the same elements. What seems important therefore is to study not the uniqueness of the spatial patterns, but its similarity. This is what

Preziosi (1979) has done to establish the fact that the spatial structure is a product of a universal world view. Preziosi's notion also implies that all the systems that mankind uses to change relationships with the built-environment are but one universal system of socio-cultural signification, where an individual is bound and his action is limited by its universal structure.

There seems to be lots of ground for criticizing Levi-Strauss. However the system of signification in the science of language, Alexander's (1979) pattern language and Preziosi's (1979) studies, make it impossible to deny completely the existence of a priori societal rules and inner logic to spatial patterns. What the structuralists have explicitly indicated is that any spatial element cannot be taken nor its meaning interpreted, in isolation. It has to be in relation to other elements and within a certain socio-spatial system through which it can operate and acquire a certain phenomenal understanding. Spatial patterns need certain rules culturally identified and set upon a pattern of socio-spatial relationship to create the appropriate built-environment. These rules and pattern may create a constraint mechanism, or they may also be creative (Giddens, 1977) for human "action".

In Isfahan, what one observes is that there are a priori rules to create a traditional setting. The inter-relationship of the spatial elements (i.e., surface, shape, form, space, etc.) and their hierarchic position in a system, are culturally patterned. They are paramount in

identifying in all the physical manifestations the "sense of place". Thus, in Isfahan what seems apparent is that the socio-spatial and cultural rules and system are all part of the generative and creative mechanism for human "action".

Another anti-positivism approach to human "action" at the structural and societal level is based on Marxist social analysis. In this case structure was very much associated with the organization of resources. Perhaps the most explicit of its indication in the built-environment is Castells' (1977) Marxist analytical study. The implication of the organization of resources, as a structure, is due to its direct association with the concept of "power" and the capacity to use that power to make certain values count more than others. Note that the thesis uses for its argument Giddens' (1979) definition of power, where he indicates that resources are a vehicle for power.

The Marxist analysis, used by Castells (1979), associates "action" with the power of domination over ownership, allocation and consumption of urban resources for production and services in a capitalist social organization. His methodology, developed in his book the Urban Question (1979) was based on certain empirical data and the Marxist epistemology developed by Althusser (1969). For establishing the link between culture and spatial manifestation, he associates the creation of the characteristics of space with the historical development of social relationship in a society where its organization of resources is based on a capitalist mode of production.

Castells' Marxist analysis attempts to show that in a metropolis, the urban built-environment and its "disorder" are a representation of spatial patterns created by the free market, the domination (i.e., power) of the capitalist class and the ideology whose base is the technological rationality and the maximization of profit. The spatial patterns noted by Castells to be the outcome of a capitalist mode of production are the spatial divisions in accordance with social division of labour and consumption of urban services, and the hierarchic order between the urban areas. Thus human "action" and its physical manifestation are related to the structure of the capitalist society, its ideology and the power of owning the means of production, distribution and consumption (i.e., the resources).

As was previously stated the Marxist structure and epistemology which Castells adopted as a basis for his analytical work, are outlined by Althusser's interpretation of the early work of Marx (Althusser, 1969, 1976). Marx's structure lies in his epistemology, and "historical materialism" that founded "dialectical materialism"; Marx's basis for production of knowledge (Poulantzas, 1973). According to Althusser Marx's epistemology lies in his inversion of the Hegelian dialectic into dialectic materialism (Thorns, 1976). He shows that part of Marx's epistemology is to indicate that the theoretical framework determines the kind of problems which are acceptable and are able to be resolved within that particular framework. In other words, the theory gives the meaning and

significance within a certain framework. His thesis is that outside that framework things are meaningless. Hence the knowledge obtained in a survey would vary according to the adopted theoretical framework (Thorns, 1976). Knowledge is relative to the concepts used by the theory or the paradigm with which the societal community expresses itself. To Althusser, this is a question and a criticism of the positivism mode of knowledge.

Althusser argues that Marxist scientific knowledge is the result of the process of production in the domain of thought. It is analogous to the process in the material world: a "dialectic materialism". It is a movement from the abstract to the concrete or real. Furthermore, Althusser states that Marx saw a certain relationship between science and ideology. They are both linked in terms of the real world and the mode of production. Science, like any other human activity, exists through ideology. Ideology legalizes both an explicit form of knowledge about history, the world and a particular form of existence in the world.

> Ideology is not an abstraction or a contingent excrescence of history: it is a structural essential to the historical life of society. Further, only the existence and the recognition of its necessity enable us to act on ideology and transform ideology into an instrument of deliberate action on history ...
>
> Ideology belongs to the region of unconscious. Ideology is indeed a system of representation. They are images and concepts and above all as structure that they impose on the vast majority of men ...
>
> (Althusser, 1969:232)

> Ideology is a matter of the lived relation between men and their world. ... In ideology men do indeed express, not the relation between them and their condition of existence, but the way they live the

> relation between them and their condition of existence ... Ideology is the expression of the relation between men and their world.
>
> (Althusser, 1969:233)

Therefore, for Althusser, ideology is a functional necessity of existence, in space and time, of all social classes in every type of society. Ideology is for shaping the human being and his spatial existence, and changes with the process of social development. But for Marx social development is in terms of mode of production. Hence existence and the expression of the relationship between human being and the world (i.e., the built-environment) is in terms of the mode of production. Its images and concepts, through scientific knowledge and historical materialism, give meaning and understanding to the spatial characteristics, especially to those that create and are to achieve the "sense of place".

However according to Marx the human being is above all a communal being. A being, as Althusser puts it, which is only recognized theoretically (i.e., science) and practically (politics) in the universal human relation - that is, in the structure which is understood as a pattern of social relationships. One then can conclude that what is important is not the individual, but the structure which the individual supports. Besides, science is to construct and reconstruct sets of theoretical relation, which through ideology, transform the structure of the social world and its spatial dimension. However, according to Marx "historical materialism", social relations and ideology are all based on the modes of production and social formation. Then

it follows that the structure and ideology are both related to the mode of production. In other words, structure and ideology are related to the control, distribution and production of resources, its class relation and social organization. From this point of view it may be said that the "sense of place" is related to the communal being, recognized by the structure and ideology - that is, the societal control, distribution and production of resources, its class relation and social organization.

This brief analysis of Althusserian Marxism is an attempt to establish the organization of resources, the contextual structure, ideology and mode of production as means for creating the "sense of place". Therefore for creating the "sense of place", a study has to be made with an emphasis on the concept of class relations. As Gregory (1978) puts it, spatial configuration is not only where class conflict expresses itself, but also it is the milieu within which and through which class relations are constituted and recognized. "The relation between society and space is a function of the specific organization of modes of production that coexist historically in a concrete social formation and of the internal structure of each of these modes of production" (Castells, 1977:64). It follows that in a capitalist society the "sense of place" takes a conception different from that of a society with different structure. This is due to the Althusserian notion that every society, in accordance with its interest of domination over the mode of production, attempts to rationalize its meaning of the space in accordance with its ideology

which expresses the relationship between society and its condition of existence - that is, its world. Moreover, any spatial configuration is both an expression of the ideology through which that ideology is formed and recognized. In a capitalist society the urban spatial characteristics are not only its expression but also its formation and recognition.

One can also conclude that, for their survival, the new elite in Isfahan and the villages of Iran had to change the traditional "sense of place" to their expression. Moreover, the introduction of the new spatial conception was a means to destroy the surviving tools of the traditional social structure and its mode of production. This suggests that due to the communicated meaning, the "sense of place" is paramount for the survival of the social organization.

It is quite explicit that the function of the Marxist notion of structure makes human "action", within a context of social organization and institution, deterministic. Since there is no room for personal intentionality, it implies a certain uniformity of the built-environment within a class structure. However, in his later writing Castells (1983) seems to have noticed the limitations of the Marxist analysis that ignores personal intentions. Yet he still stresses that meaning is determined by patterns of social organization and institutions. Without institutionalization and class struggle such meaning cannot become internalized in the social behaviour of a social group.

Castells shows that such notions are formed from self-social mobilization on certain built-environmental issues. In other words, institutionalization, mobilization of social issues and identification of meaning are self-initiated by people in accordance with their collective action and the desire to establish certain territoriality. "The emphasis upon the social and cultural determination of space must be combined with the recognition of the fundamental role played by territoriality in the configuration of the social process" (1983:70). In other words, Castells points out that personal intentionality is achieved through self-mobilization and the struggle for societal spatial manifestation. But, as argued in this thesis, spatial manifestations at the societal level and the individual level are different. It is for this reason Castells observes that once the societal action is achieved, its whole institution and organization, even though it is self-organized, is dismantled, so that every individual can spatially pursue his own personalization.

Another interesting and important social theory relevant to the built-environment at the societal level seems to be Parsons' (1971) notion of function and its relation to human action. As stated before, he indicates that any system of action constitutes four sub-systems: social, cultural, personal and behavioural. Each of these sub-systems is defined by an explicit primary function: integration, pattern maintenance, goal attainment and adaptation. To the system of action, the built-environment

is its environmental system. For the analysis of the interrelation among the sub-systems of action and between them, and the environment of action, Parsons introduces the notion of "interpretation" and "institutionalization". The former is an internalization of objects and cultural norms into the personality of the individual, while the latter is the "normative component of the cultural system" (1971:6). He then adds that interpretation and institutionalization are analysed (i.e., the structure of the social system) in terms of four types of independent variable components:

1. Value - It involves the function and indicates the desirable conception and type of social system. It is related to the symbolic structure that composes the core of the cultural sub-system.
2. Norms - They establish the social systems into a particular social function and situation. They include the values of the social system and the specific social modes and conditions for acting certain collective roles.
3. Collectivities - They are the component of the structures that have certain "goal attainment". Parsons talks of "collectivity" only when two criteria are observed: a defined social membership to classify people into certain groups, and/or among the members there is a certain functional differentiation to classify the members into certain groups. Hence the general function of any community is to establish a system of norms to create unity and cohesiveness within a collective organization.
4. Roles - They are the components of the structure that relate to the adaptive function.

For Parsons "role" is the central component of his societal structure. It is the concept to explain all patterns of relationship between the sub-system and the environment. As Giddens (1979) notes, Parsons' role seems to relate the function to a property which not only separates the general social characteristics from its individual members but, by conceptualizing and institutionalizing certain functional criteria of society, he also uses it as a dominating component over the voluntary conduct of its individual members. In other words Parsons reduces voluntarism in the individual action and connects it only to the characteristic of the social system. It seems therefore that the conduct of an individual actor towards his built-environment is the outcome of social norms and psychological behaviour (see Barker and Michelson in chapter one). Therefore, the voluntarism that Parsons introduces is not the one given by humanistic sociology and philosophy but by behaviourism which is constrained by social norms. Role has become the most important component of the structure, while the understanding of meaning is in a context of a system theory in which, as Bleicher (1982) indicates, the patterns - the variable values - are linked to the functions of the system of action - that is, conform to a given norm.

C. AN ALTERNATIVE ANTI-POSITIVISM APPROACH TO SYNTHESIZE THE PERSONAL AND SOCIETAL LEVEL: THE SOCIAL THEORY OF GIDDENS

As was noted in chapter one, by taking Parsons' social theory, Barker and Michelson integrated the societal and personal built-environment relationship. Briefly, the integration was by assuming a certain societal context, as a constraint within which human behaviour can be studied. This conception, however, was looked at to be a deterministic operation at both levels of the human being built-environment relationship. There was no room for the voluntarism associated with action. Moreover, the societal level was assumed to be only a constraint, loosely linked to the individual level. Thus certain complexity was noticed in defining and conceptualizing the "sense of place".

Similarly, Giddens (1976) establishes the difficulty of associating the personal level with the societal level by showing that most of the studies made of the personal level are based on voluntarism, while those made of the societal level are based on determinism. He notes that the personal level deals with the personalization of the built-environment on the individual level, while the societal deals with the institution and structural aspect of social organization and its environmental determinism. He also goes on to state that the nature of the problem also stems from the notion that the structuralists interpret the social structure as a constraint on human "action", while the humanists look at structure as a human

creation - that is, the producer of meaning. Giddens compromises between these two notions of structure and introduces what he calls "the duality of structure". Through this new conception, "structure" becomes associated with human action both as a medium of production and as an outcome of social form in the process of production. In other words, "structure" becomes, in this process of production and reproduction, a constraint on human "action" and at the same time enables human "action" to take place.

It is for this reason that Giddens (1979, 1984) defines "structure" not as a pattern of social organization or a system, but as the generative rules and resources continuously used in social production and reproduction. Social organizations that are institutionalized have their structural properties stabilized across time and space and their "structure" institutionalized in the rules, the co-ordination of activities of the actors and the allocation of resources. Therefore the rules and resources are the properties of the social system for creating a certain observed social manifestation. "They are continuously used by the social actor as knowledge in the production of society in which he/she are members" (1979:5). The continuous production of the actors forced Giddens to introduce the idea of "structuration". For him to study "structuration" is to study the condition governing the continuous transformation of the "structure" in the process of reproduction. Reproduction is thus to specify the connection between "structuration" and "structure" (1979:120).

The social theory of Giddens considers it essential that any social activity is established with reference to three interconnected dimensions: space, time and the paradigmatic dimension. The first two dimensions (i.e., space and time) are the definers of the modes in which objects and social events occur. Giddens has taken this conception of space-time from Heidegger and the humanistic philosophy. In fact, Heidegger says that what makes a thing and its future possibilities is what precedes that thing in space and time. While the third dimension (i.e., the paradigmatic dimension) is very much related to the "duality of structure". It involves at a certain historical situation the existing "structure". Since it is related to history it does not refer to the apparent representation at a certain moment in time.

Thus for Giddens, "action" and "structure" are directly and dialectically related. "Action" continuously interacts with the "structure" to establish a space-time reality. That reality becomes part of the paradigmatic dimension for further interaction, production and reproduction.

Giddens in figure (IV-2) schematically represents the "duality of structure" in the process of production and reproduction. Communication, power and morality are considered the criteria of interaction, while signification, domination and legitimation characterize the "structure". Note that these properties are horizontally and vertically interconnected, and through interaction are connected to human "action".

[HUMAN ACTION]

INTERACTION	Communication	Power	Morality
(MODALITY)	Interpretive scheme	Facility	Norm
STRUCTURE	Signification	Domination	Legitimation

Drawing IV-2: Duality of structure is social interaction.

Source: Giddens, A. New Rules of Sociological Methodology. Hutchinson, London, p.122, 1976.

1. Communication-signification: It is the communication of meaning through interpretive schemes by which the actors can make sense of each other and convey their intentionality and the manifestation of their "being". Such schemes are drawn from orders that are shared and used by the community as interpretive knowledge. They are attained through a dialogue between those members who are involved. The "structure" of signification can be considered as a system of semantic or, in the case of built-environment, semiotic rules and coding. Through "structuration", signs are continuously produced and reproduced in the same way as "structure". Giddens says (1979:98), "Signification as concerning generative properties of structure, is linked recursively to the communication of meaning in interaction. Signification refers to structural features of social systems drawn upon and produced by actors in the form of interpretive schemes". This strongly suggests that the built-environment and the spatial characteristics - as a signification system - are structural features of the social system. Moreover, any communicative act and meaning between actors has as its basis a priori signification system.

Therefore, in terms of the built-environment the signification system is seen as a priori that the culture puts on the spatial characteristics, as is the case in Isfahan, to achieve the "sense of place".

2. Power-domination: Even though the actor's association and interaction with signification seems to be critical for the "sense of place", one should not ignore the importance of power and domination in the process of production and reproduction. Power is involved when the participants are able to generate their own outcome to accommodate their "action". It is drawn from the order of domination and used both in the application and the production of the order of domination in the built-environment. It also represents the capability of an agent (or the actor) to mobilize the skills and resources and intervene in the events that serve his "action". In short, it is the capability to secure an outcome in the built-environment.

   Domination refers to the authorities over other persons for allocation of resources (i.e., organization of resources). Due to the "duality of structure", it is drawn upon, produced and reproduced by the interactive power of the actor. In terms of the built-environment power-domination is not only related to the ownership of resources, but also the distribution of resources and control over the planning and design process. Therefore, the process may be considered a mechanism that either constrains or creates the "sense of place".

3. Morality-legitimation: The moral constitution of interaction involves application of certain norms drawn from a certain legitimate order. Similar to the others, due to the duality of structure, the legitimate order is produced by the moral consideration of the actors.

It is essential here to argue the concept of right. In Giddens' legitimation, there exists the notion of collective consciousness for the appropriate course for the utilization of the limited resources. Actors by virtue of being members of a particular group (i.e., community, class, family) have certain interests. Hence one has to consider production and reproduction in terms of justice, moral order and power. An elaboration of this is to indicate the right of the individual, the collective right and the decision as to which one is more paramount. Rawls (1971) states in his book A Theory of Justice that a social organization needs a set of principles or norms for choosing among the alternatives. They provide and assign rights, duties and define the appropriate distribution of benefits and burdens of social co-operation, bearing in mind the inequality created by socio-economic and political factors and the different expectations, notion and understanding of each actor. He then suggests the importance of standards as a basis for the principles of justice (i.e., "social contract"). Standards are to be based upon certain social ideals and conceptions on which the aim of the social co-operation is to be understood. Rawls then calls for two necessary principles:

i) Each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others.

ii) Social and economic inequality are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage; (b) attached to positions and offices open to all.

(1971:60)

It is not surprising that Rawls for his middle ground is attacked from both sides of the political spectrum. This criticism of Rawls shows that any group or actor has a different interest (i.e., ideology) and intentionality and may have a different notion of justice.

It is relevant to state here the notion of justice and its relation to urban design. Urban design being associated with collective meaning and social reproduction, may be considered a public utility to be enjoyed by everybody. However, based on Rawls' theory of justice and hermeneutics, each person has the right to choose the meaning and thus his personal spatial characteristics. This public personal dichotomy complement each other at the external facade of buildings and spaces that, even though they are private, visually are part of the collective communal meaning. It is at this point of coincidence that a dialogue between two hierarchic levels of social organization occurs. In fact, Habermas advocates here a dialectic model of perfect mutual comprehension.

In conclusion, Giddens' formulation establishes that the same structural (i.e., built-environmental) characteristics, through the duality of "structure", participate with the actor to create personalization and with the

society to create socio-spatial characteristics. Hence "structure" is both a generator and a constraint. But in neither case is it absolute, because there is a continuous flow of "action" from the past, which supplies the means of its initiation through present and future possibilities.

Based on the above, any built-environment is determined by both the actor's concept and the concept set by the institution. The planner and designer, based on Giddens' theory of "structure", may propose an alternative created by a dialogue between the actor and the institution. This process will be shaped and organized continuously as an internal part of the dialogue, and in accordance with the history (paradigm) of the situation. The proposed spatial characteristics will then have the personal existential meaning of "being" and the cultural norms and symbol systems. Therefore both levels are synthesized to define the "sense of place". Through the concept of "duality of structure", the "sense of place" will become the outcome and the means for further spatial manifestation. This is achieved by both the actor and the institutional power which sets the control and the norms for the rules and resources and steers the process to establish certain spatial strategies and conceptualization that characterize the "sense of place" (e.g., design guidelines). Hence the continuity of both the human action and the institution transform the "sense of place" from one time-paradigm dimension to another.

Layder (1981) takes Giddens' notion of "structure" and interaction one step further. He classifies them by arguing

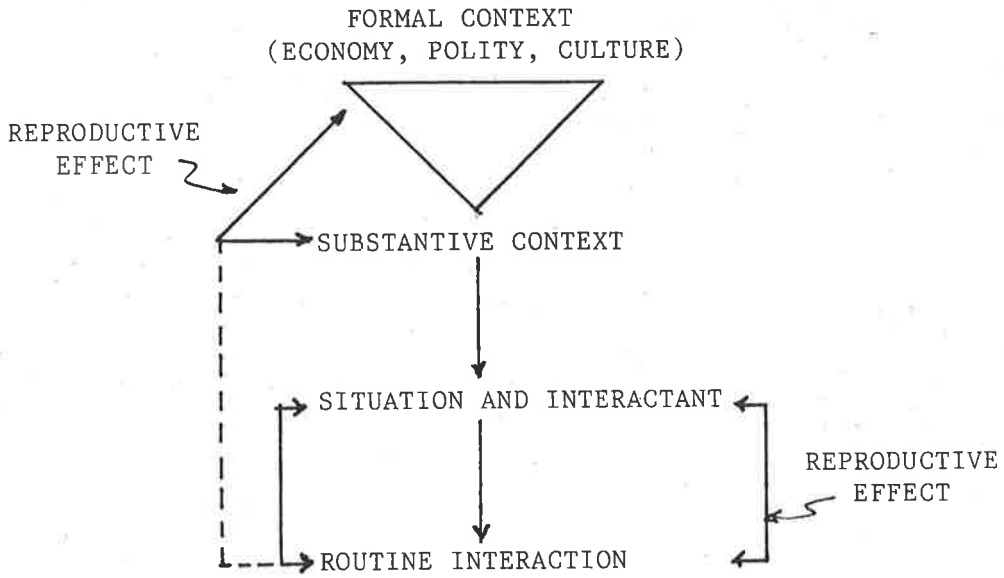
that "structure" is not only a preconstituted contextual framework, but it is also the relative autonomous accomplishment of the social actor. He therefore attempts to distinguish between the contextual "structure" which is made up of the rules and resources that are institutional and constrain the "action" of individuals, and the phenomenological "structure", or what he calls "interactive structure". The latter being phenomenological, is related to the meaning given by the social actor. In other words, there are two hierarchic levels of "structure": the external or contextual one which sets the parameter and defines the possible alternatives of interaction; and the interactive one which is within the situation of the former and gives the actor, in accordance with the skill of the actor, certain creative autonomy.

Layder lists the properties of the contextual structure as being:

> 1. the objectivists notion of a structure as a priori and constraining. They may be material, relationship of production and consumption, ideals, laws and cultural knowledge.
> 2. Context refers to the specific structural environment of action.
>
> (1981:95)

This point seems to indicate that the contextual structure establishes certain characteristics for sustaining itself. Thus the Marxist theory is apparent.

For Layder the "contextual structure" is not a routine feature of interaction, as is the case in Giddens' notion of "duality of structure". Layder's argument says that interaction which reproduces contextual structure is



Drawing IV-3: Layder's Model of Interaction.

nothing but a form of reductionism. He therefore sees that change in contextual structure is only through a revolution. However, Layder accepts that some of the "interactive structure" contributes to the reproduction of the "contextual structure". This does not mean that, as Giddens stresses, routine interaction are continuously responsible for reproduction of the "contextual structure". Routine interaction is only responsible for producing and reproducing itself, its own "situationally emergent condition" which has a limited spatial and temporal existence and would not necessarily have any connection with wider objectives.

Therefore, at the societal level of the human being built-environment relationship Layder has reformulated Giddens' notion. It can be summed up into:

1. The hierarchy in space and time identifies the properties above and below that of a particular situation. For example, it states at a certain situation the interactive and the contextual mechanisms that create and constrain the spatial characteristics.
2. It localises internally each interactive process to its own situation.
3. Instead of Giddens' dialectic balance between human "action" and "structure", Layder stresses more the individuality and personalization of the actor or a collective group of actors.
4. Layder accepts that whenever there is societal production and reproduction, there always is a priori and a constant framework - i.e., a paradigm.
5. The hierarchy of the "structure" and the built-environment implies the internalization and continuous change at a particular level. As one goes from down-up through the stages of hierarchy, the space-time change of the "structure" and the built-environment is much slower.

In conclusion the anti-positivism theory of "structure", formulated by Giddens and Layder to synthesize the actor and the social institution, can be outlined as follows:

1. Both, as their point of departure, criticize the limitation of positivism and empiricism methodology of knowledge in social science. They look at social theory and its analysis as a continuous process of social interaction and a recursive production and reproduction of the rules and resources - that is, the "structure".
2. Both stress the subjectivity of the actor. They integrate in their theory the phenomenology and hermeneutic notion of existential "Being", intentionality and purposive "action". According to them interaction and structure are internalized with reference to the continuous "action" of the actor.

3. Both theories question Marxist social theory of structural and social determinism and the theories of behaviour psychology. Giddens states:

> We have to avoid any account of socialization which presumes either that the subject is determined by the social object; or by contrast which takes subjectivity for granted, as an inherent characteristic of human beings, not in need of explication. Both approaches lack a 'theory of the subject', since the first reduces subjectivity to the determined outcome of social forces, while the second assumes that the subjective is not open to any kind of social analysis.
>
> (1979:120)

4. Their contradiction to Marxism is apparent in their hierarchy of "structure". As was noted before, one of the essential criticisms that Castells (1977) makes of capitalist built-environment is the hierarchy of spaces.

5. They base their theory of social-interaction on a dialogue between the actor (creator or interpreter) the continuous outcome and means of his/her "action" and the rules and resources that form the "structure". The actor may be a person or a group of people who share common understanding of their societal "being", intentionality and purposive "action".

6. Their theories stress space, time and the historical situation of the "structure" (i.e., paradigmatic) as the dimensions for social interaction. While in his theory Layder establishes the contextual structure as the paradigmatic dimension, Giddens takes a broader view and considers that dimension, the historical situation of the "structure" and its ideology - that is, power and justice.

7. They both assume a continuously self-reproducing system.

8. The interaction being continuous and three-dimensional, at each hierarchic institutional level and social organization an explicit and unique interaction and structure

for that situation is apparent. This indicates that social production and reproduction is relativistic.

9. Finally the built-environment is assumed to be the space dimension of the social organization. It is produced and reproduced to acquire the properties of "structure" in the social interactive process.

IV. AN ALTERNATIVE NOTION OF THE BUILT-ENVIRONMENT

Chapter one reviewed the work of those who see the built-environment as part of an ecological system that surrounds and interacts with the human being.

It is most important to note here that in formulating the aim and objectives of this thesis, the necessity for an explicit identification of the human being built-environment relationship was highlighted. The purpose was to identify the way people form and transform their built-environment, the extent to which it affects people, the mechanism of the relationship and how to identify and achieve the "sense of place".

Giddens' and Layder's theories implicate a different notion of the built-environment and its relationship to the human being. The built-environment is looked at as a dimension of the social organization producing and reproducing itself in accordance with the continuous personal "action", the "structure" and the social interactive process. Since their theories are associated with the subjective notion, the built-environment, in general, and the "sense of place", in particular, are assumed as a

"structure", to be the means and outcome of a conscious process of thought. This implies that the built-environment is an essential component of the social system. In other words Giddens and Layder see the rationale of the human being built-environmental studies and theories only when the built-environment is internalized and identified in terms of an explicit social organization.

The social organization is not only the external and contextual identity (i.e., paradigm) to be taken or assumed as an independent variable of the built-environment, but also as its generative mechanism. The social organization continuously creates and re-creates internally to itself and at different "structural" and human "action" levels, the built-environment. The meaning and signification of space to create the "sense of place" (as a spatial manifestation of the existence of "being") is through a spatial design that accommodates the synthesis between human "action" and "structure". Since any built-environment is a continuous and integrated part of the social system, it seems more appropriate to say that the study is of the human being built-environment integration.

This alternative notion sets a conceptual difference between the natural and built-environment. The former, which refers to the natural world has its meaning produced by people in the course of their practical life. It is the outcome of their endeavour to understand or explain its meaning for themselves. In other words, people are interpreters not creators of the natural environment. Based

on Layder's argument, the natural environment is a "contextual structure", hence a set of deterministic rules to be understood and then used in the production of the built-environment. Lack of comprehension and/or non-abidance by the laws of nature results in inappropriate human production and reproduction (e.g., pollution, environmental depletion and, as is the case in many suburbs, disorientation). This is explicitly indicated when a traditional society, such as the villages in Iran, attempts to relate its settlement to the natural phenomena that surround them. Therefore, the aim is to achieve a certain harmonic order between the natural environment and the society itself (refer chapter two). A similar process may take place when one is confronted with a visited built-environment, especially when there is a cultural difference between the "home" and the visited place.

On the other hand, the built-environment, which is integrated into the social system and part of a personal and societal endeavour, is produced by the social system itself and in accordance with the synthesis of human "action" and "structure". The "sense of place" in this notion of the built-environment reflects the frames of meaning that are organized in accordance with a priori knowledge and the personal and societal symbol systems.

The human being by creating the symbol systems to understand the natural environment and the alien environment attempts, as Gadamer (1976) explores, to do that by establishing certain communicative meaning. The human being

is trying to ontologically interpret the situations (i.e., the natural phenomena) in his/her own terms for future reference. The dialogue between the interpreter and the confronted environment integrates the environment into the social system so that the human being may comprehend its inner sense and thus understand the "spirit of the place". However, as indicated before that interpretation is subjective and a "self presenting reality". In other words, the interpreter employs his/her personal meaning to understand the environment and to express himself/herself in it. As was previously argued, if the meaning of the creator of the environment is the criterion under study, then one has to "subjectify" the meaning, not the understanding of the environment. Thus the historical development of a particular spatial design (the paradigmatic dimension), made by the meaning of the creator, will be unintelligible unless the creator explicitly states that meaning. Moreover, that meaning will be historically located with reference to the creator and it will not be relevant to the interpreter who has to use its understanding of it for the personal future "action". In other words, there will never be a continuity in the interactive process. Furthermore, any urban design scheme that aims to achieve the "sense of place" has to be formulated in accordance with the understanding of those who are going to use its spaces in perpetuity. This strongly suggests continuous involvement of the interpreter and flexibility of the space to accommodate different meaning.

With the above in mind one now can explore the architectural expression, the "spirit of a place" and its desirability, as an entity by itself, to generate the "sense of place". The expression, as was noted before, was defined by Norberg-Schulz (1980) as the "genius loci". It referred to the uniqueness of the characters given by an architect to a space so that it might later be transformed into "place". In other words, it is with respect to the architect (i.e., the creator) who has to design meaningful places for the interpreter, without the interpreter's contributions. This implies that the interpreter has to understand the meaning made by the architect. Hence both meaning (the architect) and understanding (the interpreter) give different subjectivity to the built-environment. As noted before, Gadamer (1976) argues against that because it may create unintelligibility of the space created, unless the architect explicitly tells the user the meaning. Furthermore, the meaning may become historically located and thus inappropriate for continuous human "action". One therefore can conclude that the "spirit of a place" is not a necessary condition or even related to the "sense of place". In fact in any environment (natural or built, architecturally designed or vernacular) once its meaning is understood by the interpreter, it can be used as part of the "structure" in a social interaction and be transformed into the "sense of place". The only apparent prerequisite is the necessary and sufficient flexibility and diversity of the initial environment to acquire understanding.

One then can conclude:

1. The built-environment should not be studied in isolation, but only as an integrated part of the social organization and the theory of social production and reproduction. Through the latter (i.e., social production and reproduction) people transform their built-environment.

2. The study of the built-environment consists of not only the observed technical and practical (i.e., functional) data, but also the understanding of the subjective meaning of the actor and interpreter.

3. The spatial characteristics, as a signification system, has space, time and the historical situation (the paradigmatic) as its dimension. Through a dialogue between the actors, the built-environment (the means and outcome of human "action") and societal institution and "structure", the milieu is transformed from the past through the present to the future.

4. The built-environment is a space dimension of the social organization and the "structure". It therefore acquires all the properties of the "structure", argued by Giddens and Layder. This includes the "duality of structure" (built-environment becomes a medium and outcome of social production) and hierarchy of "structure". Both indicate the built-environment as a contextual constraint and a source of creative "action".

5. Therefore in the study of the human being built-environment integration, the synthesis of the subjectivity of

the two components: the personal human "action" and societal organization, is important. Each is assumed to be an inseparable part of a more general theory of social system, whose continuous change implicates the study of the built-environment from at least three aspects:

a. The built-environment is seen as integrated and utilized by the social actor. Here is where the actor personalizes his built-environment to accommodate spatially his/her existence and "action", and thus achieve the "sense of place". The human being therefore:

   i) needs the skills and the practical knowledge to deal with the production and reproduction of the personal built-environment. The human being draws upon the historical tradition, experience cognition and rationalizes the personal skills to deal systematically in the course of production and reproduction.

   ii) puts upon the built-environment certain meanings. It is a continuous creative process where, through the signification systems new meanings are created to complement the existing and thus make the spatial settings accommodate more appropriately the personal existence and the "sense of place". With a priori knowledge and prejudice, the human being enters into a dialogue with the built-environment to revise the environment and the personal preconceived world view.

iii) needs the power and capability to act and achieve his will. That power, usually conducted through the actor's domination over the rules and organisation of the resources, is signified and legitimatized within certain moral norms.

iv) uses the personal perception and cognition, which are within the unconscious (i.e., the psychological behaviour) as knowledge. The limitations attributed to behaviour psychology do not necessarily imply its purpose of investigation - that is, how do people function psychologically? - is irrelevant and has to be ignored. It is apparent that human behaviour is associated with the built-environment through its cognition. In fact, cognition is a type of knowledge that one accumulates from past perception of the built-environment.

b. The built-environment, when utilized in the process of social production and reproduction, becomes a medium of communication. Therefore its meaning has to make sense and be shared by those who are involved in it. Hence:

i) the spatial concepts used have to be of a mutual collective understanding. This occurs through a dialogue that establishes a "contextual interdependence" and creates a totality whose collective characteristics and meaning are different and irreducible to the form of individual characteristics and meaning. In other words, meaningfulness of the built-environmental characteristics is

continuously negotiated between those who consider it part of their social component, and accordingly its socio-spatial creation is revised. Hence a communication system is created as a context and a background knowledge, continuously formed, modified and re-utilized.

ii) Once this totality of collective characteristics and meaning of the built-environment is objectively stated into codes and norms, they become a priori and a hierarchic context under which detailed spatial patterns are internalized and used by human "action". Similarly, the hierarchic order establishes for each group of people internal and external collective characteristics and meaning of the built-environment. They are synthesized to produce an internal built-environment for the group and an external built-environment to the group. Therefore, the spatial characteristics of any social organization is created internally by its constitution and by the order above and below that social organization.

c. Finally, in the production and reproduction of the social organization, the built-environment takes the property of the "structure" by becoming part of the characteristics of the community. That implies that the "sense of place" of any group becomes a vital feature and a survival component of that group (see the previously discussed Marxist spatial analysis). Hence the spatial characteristics can be conceived as:

i) an abstract set of rules of spatial signification which is employed by the group to express their own spatial domination and legitimation in the process of production and reproduction.

ii) a manifestation of a culture from which the actors draw their rules, as a context, for future socio-spatial characteristics.

Note that the concepts of the spatial characteristics of Isfahan are part of a "structure" employed by the traditional Muslim to express domination, legitimation and are used as a context, for future spatial design. Similarly, in the study of the rural settlements of Iran, the geographic location, building material and utilization of the economic resources have created those spatial characteristics to identify each communal culture, and to express its domination and the means for its future survival.

The above analysis indicates a different conception of the "sense of place" from the ones made by those who have pursued their study by considering positivism and Parsons' social theory as the bases for their methodology. The emphasis on synthesizing the subjective meaning and the communal institutional order through Giddens' duality of "structure" and Layder's hierarchic order and classification of "structure" into "contextual" and "interactive structure", strongly suggest that the built-environment and the "sense of place" have to be argued as an essential part of human "action", a medium of communication and a necess-

ary part of the whole social organization, its production and reproduction. The above analysis differs from Barker's and Michelson's who considered societal level only as a constraint on human behaviour. Therefore, understanding this synthesis as a whole implies the necessity for understanding the social system and its spatial manifestation.

V. AN ALTERNATIVE NOTION OF THE HUMAN BEING BUILT-ENVIRONMENT SYSTEM

Parsons (1971), in his social analysis, stresses the continuous engagement, through interaction, between the social and surrounding built-environmental system, to achieve a high level of self-sufficiency for the latter.

> Any society depends for its continuation as a system on the input it receives through interchanges with its environment systems. Self-sufficiency in relation to the environments means stability of interchanging relationships and the capacity to control interchange in the interest of social functioning. ... The physical environment has an adaptive significance for a society in that it is the direct source of the physical resources which the society can exploit through its technological and economic mechanisms of production. ... Hence there are two contexts of societal self-sufficiency that concern, respectively economic and political functioning in relation to the physical environment, through technology and through the organized use of force in the military and police functioning.
>
> A third context of societal self-sufficiency concerns the personalities of individual members in a special mode of interpenetration with the organism involved. The organism links directly to the territorial complex through the importance of the physical location of action. But its main link with the social system involves the personality; the primary zone of interpenetration concerns the status of membership. A society can be self-sufficient only in so far as it is generally able to "count on" its members performances to contribute adequately to societal functioning.
>
> (1971:8-9)

Parsons' social system is associated with a fixed pattern function. It is a part related to the physical environment as a whole. For any causal change that occurs, a sequence of events will occur to restore the original state defined by the cultural norms. This, as Catton (in Thorns, 1976) rightfully argues, makes Parsons' system organic; similar to the ecological one where balance and stability are pursued (as an effect) between the organ and the built-environment. The properties of Parsons' system ignore the continuous social production and reproduction, Giddens' "duality of structure" and the dialectic change.

In chapter one it was mentioned that Parsons' notion of functionalism, social and action system and their environmental relation have many followers (Catton, 1976). These include people such as Michelson who comes up with the concept of human being built-environmental congruency, in a context of certain social norms, and Barker (1963, 1972) who uses Parsons' notion of structure, action and pattern to systematize his behaviour units, creates a continuum in time - known as "behaviour streams" - and sets them all in a hierarchic ordered pattern.

Bowler (1981) defines a system in terms of togetherness and "regulative relationships between elements. In his terms of reference "regulative relationships means the opposite of randomness and chaos. It may be simply between two or an unspecified number of components (Angyal, 1978) that contribute certain characteristics to the components and to the whole. Hence, the whole is neither the total sum

of the components, nor can it be reduced to the properties of the individual components. A group manifests certain characteristics by virtue of being a specific group and it may maintain these characteristics even if some of the elements are replaced. For this reason, systems are looked upon to be very complex entities (Laszlo, 1972; Emery, 1978).

According to the system theory, there are two types of general systems: the closed mechanical and the open organic or ecological system. The former, since it operates without any continuous material or energy input, is known to be isolated from its environment. While the latter, which is known to be more complex, continuously interrelates with its environment for its survival. The ecological system is a living system that adjusts itself to both, its internal pattern - a necessary condition for its survival, and external - to obtain for itself a steady state with the environment. Hence the ecological system is usually noted to be part of a larger system, and composed of smaller sub-systems in an organized hierarchic manner.

For acquiring the steady state - sometimes known as equilibrium - any organic system moves toward a more stable condition, which is done by having a cyclic relationship with its environment. The organic system takes an input energy - in terms of information, and converts it into output so that it will again become an environmental input. It is an active and dynamic understanding and manipulation of the information coming into the system in order to make

itself fit within a larger system (Bowler, 1981). Through this process the system undergoes a slow but inevitable internal exchange of all its sub-systems (i.e., its parts). However, this is not done mechanically, and the final state of equilibrium can be reached by different conditions and a variety of paths (Katz-Kahn, 1978). This implies that the synchronic characteristic (i.e., characteristics or internal pattern of elements at each instant) is independent of its diachronic process. In other words the present situation is independent of its historical situation and process as a priori.

Bowler (1981), Laszlo (1972) and Emery (1978) indicate that the social system is an open organic system. It seems that Parsons, Michelson and others who study the human being built-environmental relationship (see chapter one) also make the same assumption for the conception of their social system. Consequently, the "sense of place" seems to identify that state of equilibrium, or as a system which is fitted within a higher ordered system. Even Piaget, with his significant influence over environmental psychology (Ittelson et al., 1974) views the development of the human mind as a process of equilibrium between the organism and the environment (Bowler, 1981). For Piaget, Bowler comments, the central role of equilibrium is with reference to two invariant functions: "organization", due to maturation, experience and social interaction; and "adaptation; comprising two complementary processes: "assimilation" and "accommodation". Similarly, Barker's (1978) ecological

psychology and his notion of "stream of behaviour" (1963) are based on the organic system theory. Therefore, one can safely assume that there is a dominant belief that the social system and the human being built-environmental system are somewhat organic in their characteristics.

It is important to note that in the late 1960s and early 1970s, system theory was introduced into planning to establish the city and its configuration as an open-ended organic system (McLoughlin, 1969; Chadwick, 1977). In fact McLoughlin states explicitly in his hypothesis the relevance of the eco-system to urban planning, bearing in mind the system's competitive (i.e., Darwin's theory of competition for survival) and self-regulative behaviour for survival and acquiring a state of equilibrium.

Apparently Giddens' and Layder's social theory outlines the social system differently from the open-ended organic one. Giddens' and Layder's notion is based on the argument that the built-environment and the social system are integrated to form one continuous self-reproducing social system. Self-reproducing means the importance of its historical situation and process of development in defining the present situation. In other words, the human being cannot be defined except by noting the characteristics of his/her built-environment, through which the personal existence is spatially manifested. This idea of a new social system, with a distinctive character of its own, is supported by the "critical theory" of Habermas and the hermeneutics of Gadamer, whose philosophy also indicated

the integration of the built-environment into the social system through the historical situation and meaning which the human being continuously gives to his personal space. Moreover, Castells (1983) in his later works, stresses further the new social system when he says that space is one of society's fundamental dimensions, and to study it independently from social relationship is to separate the built-environmental symbols and its development from culture. Hence for achieving the "sense of place", as defined in this thesis, it is apparent that one fundamental basic principle has to be observed: that the built-environment is integrated into the human being to form an independent and distinctive social system.

The social system exists in time and space and is constituted by human social practices (Giddens, 1979). It is continuously and internally produced and reproduced by the rules and resources (i.e., "structure") that are its generative mechanism. The outcome of that - that is, the manifested built-environment, is in itself a part of the "structure" that in turn interacts as means with human "action" to create further change. In Giddens' and Layder's notion of the social system, the actors (i.e., the subjects), through their "action" are the ones that regulate the system, not the input from the surrounding environment, as it is suggested in the open-ended ecological system. Hence the system does not depend only on feedback information (i.e., syntax), but on the human knowledge consciously and continuously generated by

people's intentionality, personalization and desire to establish their spatial existence through the "sense of place". The visible patterns, such as those noted by the followers of Levi-Strauss, the Marxists and the empirical study of the environmental psychologists are important indications that note the social system as a pattern of socio-spatial organization in space and time.

VI. SOME PROPOSED PROPERTIES OF THE PLANNING AND DESIGN PROCESS THAT ACHIEVE THE "SENSE OF PLACE"

The social system proposed above, when considered in the process and the desirability for achieving the "sense of place", gives a different spatial concept to space, "place" and urban design. The proposed social system assumes that the built-environment is subordinate to the individual and group. This strongly suggests that the built-environment is the sub-system whose meaning and existence can only be identified by the higher order: the social system. Apparently it is quite different from the ecological, where the social system is subordinate to the higher built-environmental system. Assuming that the human being always desires to achieve the "sense of place" - that is, to give spatial existence to his/her "being", he/she attempts to give, organize and configurate (i.e., design) the built-environmental characteristics in accordance with personal symbol systems identified externally by the culture and internally by human "action". Note that the symbol systems are the generative mechanism: the

"structure" that forms, due to the "duality of structure", both the signification and the means for communication.

All this implies that the "sense of place" is not a visible criterion, objectively recorded and identified by the characteristics of the spatial patterns in space and then standardized and prescribed as a system within which the human being as a sub-system can habituate itself. The "sense of place" is a spatial characteristic manifested by symbols in space and time to create a sub-system that subordinates and is a necessary component of the social system.

Meanings, subjectivity and social interaction, being central to the urban design and planning process that attempts to achieve the "sense of place", implies the identification of the paradigm (i.e., the historical situation and process of the existing social organization) in each operation. But as noted before, paradigm identification or the paradigmatic dimension of the operation relates to the "structure" as a means that seems to question the appropriateness of a universal and systematic model for the urban design process. This means that it is necessary to identify the context of the process which is shaped and organized internally by the situation and is an integral part of what one aims to achieve (i.e., the "sense of place"). In other words, for achieving in each situation the "sense of place", an operation formulated by that situation has to be identified. It is drawn by the intentionality and conduct of the actors, the "duality of

structure", the hierarchic situation and the process of production and reproduction. This type of planning and design methodology seems to - using Giddens' term - "bracket" the institutional analysis and planning. The methodology allows the "structural" elements and the whole process to enter and become integrated into the characteristics of the human "action". Thus the urban design and planning process is internalized and defined by the direct involvement of the actors.

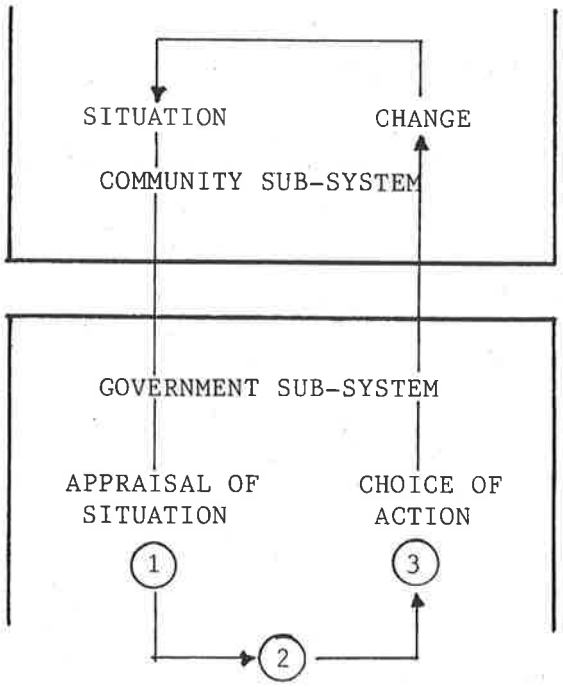
Institutional analysis, orchestrated by the administrative bodies (bureaucrats) in the political system (Page, 1985) - especially in the modern system of government - assumes the standardization of human meaning and behaviour into deterministic criteria. The expertise and officials tend to rationalize human "action" in accordance with certain bureaucratic rules and norms. Their nature, based on their knowledge and position in the social system, gives them common values that seem to transform the public policies and their formulation into more private and closed activity (Page, 1985). Standardization, based on modern decision-making science and the preference for quantitative analysis, is seen as the appropriate method for problem identification, solution and formulation of guidelines for achieving what is best for public interest by the best possible means (Dror, 1986). In other words, the institutional analysis and bureaucrats bracket human intentionality and "action" into standard quantifiable modalities (e.g., census) to be used in deterministic models that are

geared to optimize and normalize the spatial characteristics into bureaucratic planning and design guidelines.

Dror gives here seven main types or sources for standardization and institutional analysis: past quality, quality of other systems, desired quality, professional standard of quality, survival quality, planned quality and optimal quality. He also argues that the subjective nature of desired quality may lead to confusion.

Some of the methodologies of institutional analysis that have found profound application in planning and urban management are operational research, system analysis and corporate management. Basically they are used in most planning operations to formularize universal models for decision-making (Freind and Jessop, 1971). Contrary to the argument in this thesis, their theory divides the social system into a community and a government sub-system, and considers the planning process as an operation, through the input-output of information that interacts between them (drawing IV-4).

In this typical planning process, the institution (i.e., the government) is seen as a regulator of human behaviour and a provider of certain developments for the community. The restrictive circular dialogue between the two sub-systems is limited only to the initial stages, where the problems of the community situations are perceived and at the end where the institution proposes, according to its bureaucratic standards, identifiable alternatives to the community representatives (i.e., the



1 PERCEPTION OF DECISION OF FIELD

2 FORMULATION AND COMPARISON OF POSSIBLE ACTION

3 CHOICE OF ACTION

Drawing IV-4: Model of the planning system.

Source: Freind, J. and Jessop, W. Local Government and Strategic Choice. Tavistock, London, 1971.

elected politicians). It is apparent here that this mechanistic planning operation is mostly external to the human being (i.e., the community) and geared to establish certain equilibrium or steady state between the two sub-systems.

An important part of the institutional analysis and corporate management of local government is carried out by urban planners and designers. As urban policy-formulators and managers, they are noted to be part of the bureaucratic institutions whose aim is to allocate resources, set criteria and standards and propose alternative developments, analysed and justified by a commonly known scientific methodology for example, operational research. Apparently their power, knowledge, expertise and influence to transform human production and reproduction of the

built-environment, make the whole planning process a private and closed bureaucratic activity that excludes the public from urban policy-formulation (Page, 1985). However, due to the complexity of the planning operation and the urban environment, since the early 1970s, many (i.e., academics, politicians and professionals) started to question the planners' competence and capability to carry out their task without proper consultation and information (Eversley, 1973). Furthermore, with the increase of unemployment and tighter monetary policies to control public expenditure (a conservative ideology), community participation was looked at as a means to keep the cost down, decrease the resources and increase efficiency (Cockburn, 1977). Besides, corporate management and mathematical models, that have become a common technique in planning, need a considerable amount of feedback from the community to justify their scientific objectivity. Therefore, through the concept of cybernetics the community became the necessary feedback information for the control and the efficiency of the system. In other words, public participation institutionalized and "bracketed" human action.

Cockburn (1977) rightly argues that Skeffington's report on public participation in Britain, the legislation which followed and other similar acts are mainly an attempt to formulate a means for controlling public information and institutionalizing it into the planning and political system, under the bureaucratic organization. Alternative plans are offered to the public not only to increase the

community role in policy-making but, rather, as Swell and Coppock (1977) put it, as a means to collect and make available to the planner more information and promote a certain political organization (Thornley, 1977). It may be for this reason that, in public participation, the comprehensibility of the means of communication to maximize the data, and the cost effectiveness of the public display are usually sought. Any transformation of power for formulating planning policies, from the bureaucratic organization to the community, is restricted to comments on the proposed policies.

Therefore, it is apparent that public participation is mainly a channel of feedback communication, carried out at an appropriate time so that the planner can obtain the necessary information efficiently. Any increase in participation is looked upon as a cause that may jeopardize the political decision-making process, an indication that the institution is not doing its job properly (Perry, 1975), and lose the control of planning and hence lower the standard of the built-environment. In other words, public participation is restricted and justified only as a means to obtain the necessary feedback information into the system so that the assumed models of the social system may achieve internal stability and external equilibrium with the built-environment. Once the reality and feasibility of the system of these planning and design models are questioned, public participation will lose one of its fundamental arguments (i.e., as an information feedback).

Besides, as Pateman (1970) indicates, in modern democratic theories extensive public participation and people's involvement in the political system is not desirable. More participation is looked upon by some (i.e., Schumpeter, Dahl and Sartori) to be viable for the democratic state and its stability. Patemans shows that for these, modern democracy is the political decision in which the individual has the power to choose a politician in a competitive market. Hence, the competition for leadership is seen as the distinctive feature for democracy, and by this method everyone is free to compete for leadership in a free election. Thus competition for leadership and free market economic competition - the bases for a modern democratic society - have the same foundation in which community participation is apparently restricted.

The above analysis strongly suggests that the foundation of the usually practised planning and design process is different in conception from the one argued in this thesis for the "sense of place". The current practice of planning confines the human "action" to certain models and standards within which personalization and intentionality are objectified, categorized and simplified to the choice of proposed alternatives. The restrictive dialogue between the participants, in the form of public participation in current planning practice, is to collect the necessary feedback information so as to achieve equilibrium. While the "sense of place" proposed in this thesis sets the dialogue between the human being and the involved societal

levels as the foundation for its achievement. Achieving the "sense of place" requires the formulation of a planning and design process based on the historical situation, the historical process that establishes that situation in time and space and all the parties involved. Therefore the methodology of the planning and design process for achieving the "sense of place" is formulated and internalized to the situation. Since in public participation, the human being is known only as a set of information that rarely pre-defines the desired meaning for understanding the spaces and the planning and design operation, its methodology can hardly be considered internalized to the situation. Rather, in the current public participation, the planning institution, through corporate management, operation, research and feedback processes acknowledges the importance of efficiency. In public participation the human being is an internal component of the planning and design process. In other words, in each development scheme, the current public participation and the planning and design process are bureaucratic procedures for decision-making, instead of being reformulated in accordance with the historical situation and human "action". Furthermore, the hermeneutic consideration, another central concept of the "sense of place" that associates human self-understanding with the spatial characteristics in a particular situation, is absolutely ignored.

All this strongly suggests that the current planning and design system may be inappropriate to achieve the

"sense of place", even though public participation is a vital part of its operation. From the argument in this thesis, one may conclude that any planning and design process that aims to achieve the "sense of place" has to consider:

A. Human involvement as the main criterion upon which the planning and urban design process is to be formulated. It is not only a means of acquiring the necessary information for achieving a state of equilibrium between two interactive systems - as is the case with public participation, but it is the methodology necessary to achieve the "sense of place".

B. The social system which, as argued in this thesis, internally and continuously produces and reproduces itself and that the built-environment is integrated into it as a necessary dimension of social interaction.

C. The human involvement as the process itself implies that there is no universal model. By understanding the situation and the factors involved (i.e., human "action", the historicality of the place and the "structure"), a paradigm and a meaningful process will be outlined to achieve the desired spatial characteristics for human "action". The understanding of this paradigm will make meaningful, for the individual and group, the personalized space within a general meaningful context. That generalized meaningful context is then a priori, utilized in each situation by the human being for social interaction and creation of the "sense of place".

D. The dialogue, upon which the whole planning and design process is based, cannot be logically and methodologically connected to formulate a universal model and operation. The dialogue which involves all the parties is a framework for communication and explication of the spatial meaning to be developed within the situation itself, to relate the intended spatial meaning to the objective meaning of the space and its characteristics.

E. Given that the planner and designer have to understand the meaning given to the spatial characteristics, they have to be involved fully in the process itself and understand the social reality they share with others involved in that situation. Therefore the planner and designer, by using their skills, will be subjectively involved in the process and thus their roles as professionals (i.e., bureaucrats and objective people) will change and will be based upon the intellectual and practical skill of understanding and transforming meaning into spatial manifestation.

F. The proposed planning and urban design will be the internal part of the interactive process and the means for spatial production and reproduction of human "action". They will be the creative modality, utilized by human "action" and "structure" to establish the "sense of place". Planning and urban design, through the process of development controls, will change from bureaucratic constraints into creative documents outlining the necessary and sufficient spatial meaning, the

means for human education and the creative process for the generation of an appropriate spatial manifestation (i.e., What can you design?). Design guidelines and planning documents will no more be looked at only as a context and standard and a restricting mechanism, but more as a generative and creative document for proposing in each situation the means and the spatial characteristics for establishing the "sense of place".

VII. CONCLUSION

It is quite apparent that for formulating the theory and achieving the "sense of place", this chapter strongly suggested the subjectivity of the actors and society. Furthermore, Giddens' social theory that stressed the importance of the purposive human "action", hence a societal attitude, conception and social system different from those established by Parsons, the behaviour psychologists and their disciples were considered in this chapter to be vital for the notion of the "sense of place". By transferring the planning and urban design, from a bureaucratic and institutional activity that aims at the adjustment of the imbalance that usually exists in a free market society, to the human "action", this chapter attempted to reveal an alternative concept of planning policies formulation. In the proposed new concept the human being as the controller of personal "action" is no more considered an inert and ineffective actor. Nor are the societal rules, organization of resources and the built-

environment determined spatially, economically and politically by a free market mechanism. In this chapter, the suggested theory and approach to a methodology for achieving the "sense of place" noted the human being as an active actor and the main participant who goes into a dialogue with the others to share and shape the built-environment and its spatial characteristics in accordance with his/her own intentionality and purposive "action".

The proposed theory and definition of the "sense of place" bases its central argument on the synthesis of the personal and the societal meaning in each spatial situation. This meaning is given by the people to the spatial characteristics of each situation so that they may understand that situation and spaces, and perform their "action". At the personal level, the meaning is given so that the actor may understand the "place", personalize the environment and establish his/her spatial existence as a human being.

Similarly, at the societal level, the shared meaning (i.e., the cultural symbol systems) is given to a space, so that the society can establish in a "place" its societal existence. Therefore to create the "sense of place" in a space, the meaning of its spatial characteristics has to be the outcome of the synthesis of the societal and personal meaning and understanding. In each built-environmental design operation, the existing spatial characteristics are the historical situation (i.e., paradigm) and <u>a priori</u> meaning, to be understood by the human being and used in a

synthesis, for future creation of the spatial characteristics of the built-environment to accommodate future "action" and future spatial existence of "being". Through this continuous synthetic process, the "sense of place" is transformed from the past, through the present into the future.

The outline and approach to the theory and methodology proposed in this chapter, questions the appropriateness of the current planning practice and management to achieve the "sense of place". It explicitly indicates that bureaucratic incremental planning, corporate management and institutional power tend to establish the built-environment methodologically, according to certain deterministic models based on market forces where the individual is only a quantifiable behaviour and a statistic. This chapter pointed out that current planning and its models therefore underrate the subjectivity of the actor and society, which is the foundation of the "sense of place".

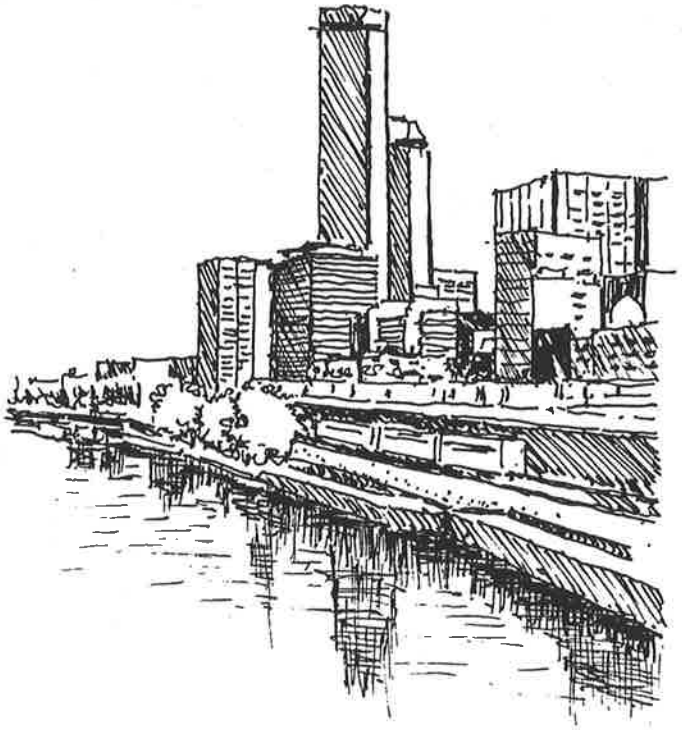
Achieving the "sense of place" gives back spatial creativity and responsibility to the individual to produce his/her own framework for the desired space to accommodate, through its characteristics, what he/she sees appropriate. In the proposed guidelines for an alternative process people, as individuals or groups, attempt to understand the meaning of the desired spatial settings and accordingly manifest their spatial characteristics. It is therefore a concept and a process that, through personalization, allows people to regain control over their own lives through

regaining control over their spaces in time, and thus understand themselves and their culture. Thus, in the proposed planning and design process, the market forces and bureaucratic terms of reference lose their primacy and become second to human "action".

In such a process, the designers and planners take both a central and peripheral position with respect to the spatial manifestation and realization of "place". Their understanding of the meaning of the space is synthesized with that of the community in that situation (i.e., what Giddens calls double hermeneutics). The planners therefore, share with the community the process of creation. However their responsibilities are not reduced, but the course changed and made more complex to include the built-environment in relation to the subject and social interaction. In this new responsibility, the architect and planner must acquire the tools of communication and skills for understanding the human "action" and create comprehensive images (i.e., sketches) so that the participants can make appropriate decisions.

It is quite important to note here the limitation set by the scope of this thesis upon the subject. Therefore, the theory outlined in this chapter has to be considered as a brief upon which further empirical and theoretical research and elaboration have to be undertaken. By critically analysing community involvement in the planning and design process implemented in the Collingwood Housing Estate redevelopment, Melbourne, the next chapter will be

an attempt to verify within a situation a limited part of the proposed theory and design process that achieves the "sense of place". The study and evaluation will be based on the views and attitudes of the professionals, bureaucrats and the community who are all involved in designing and planning a residential built-environment. Special attention will be given to the community who look at their newly created space as a "place" to perform their personal "action" and reflect spatially their personal and societal existence as human beings. The next chapter therefore attempts to elaborate further on this theoretical approach and test the practicality of community involvement as a planning and design process that achieves the "sense of place".



CHAPTER FIVE

V. A STUDY OF COMMUNITY INVOLVEMENT IN THE REDEVELOPMENT OF THE COLLINGWOOD PUBLIC HOUSING ESTATE - MELBOURNE

I. INTRODUCTION

In the previous chapter, the "sense of place" was defined as the spatial self-expression of the existence of the human being in space. The "sense of place" was noted as the meaning in the built-environment, used and produced through the synthesis of human "action" and "structure", in a historical situation. The previous chapter argued also that the synthesis was a dialogue between those involved in the social interaction and the built-environment. Therefore, the dialogue is used as the means for continuously creating the spatial characteristics that give to a space the meaning known as the "sense of place". Also, the dialogue encourages each person, as an individual and a corporate being, to be directly involved in understanding the situation so as the spatial characteristics of that situation accommodate in space the individual and corporate existence of the human being.

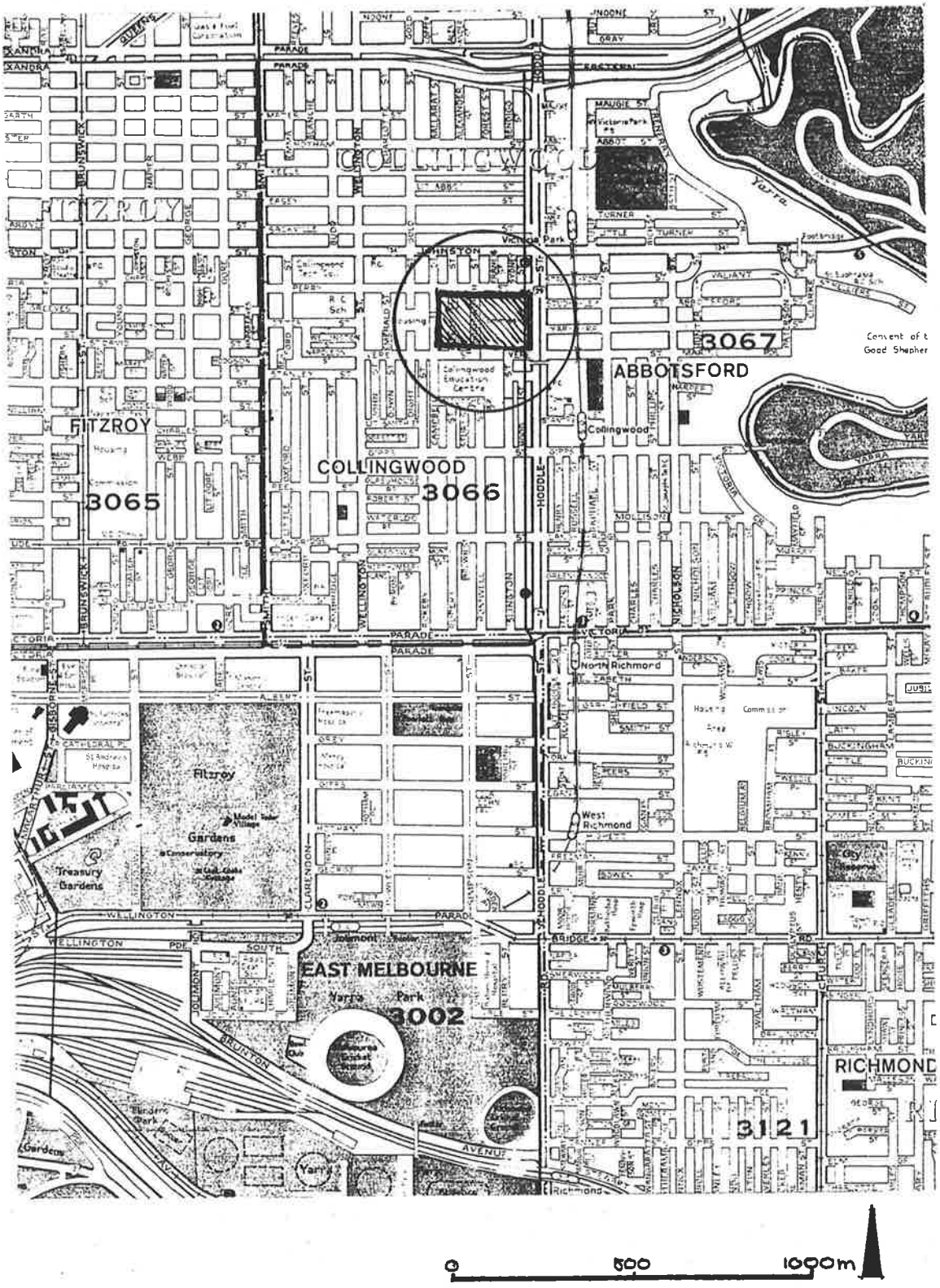
It was strongly suggested that an important component for achieving the "sense of place" is to encourage the people, as a community, with a corporate "action" and as individuals, with personal purposive "action" to be directly involved in the planning and design process. Throughout the operation of the process, they participate in a dialogue so as to learn and point out their

built-environmental problems, outline solutions and make decisions.

This chapter therefore critically analyses three adjacent case studies of planning and design, where the objective was to involve the community in the planning and design process. These studies explore and test in three historical situations of public housing the importance of the paradigmatic dimension and community involvement in the planning and design process to achieve the "sense of place", as outlined in the theoretical formulation in chapter four. Therefore an attempt will be made here to identify some of the important components and inter-relationships that may create the spatial configuration and characteristics that give the meaning of the "sense of place" in these case studies carried out at a public housing estate in Collingwood, an inner urban area of Melbourne (drawing V-1). They are:

1. Upgrading and management of two high-rise residential flats in Hoddle Street.
2. Design and construction of five terraced houses in Francis Street.
3. Design and redevelopment of the site of the walk-up flats. The redevelopment is known as the Dight Street Project

In these schemes and in accordance with the recent policies of the Ministry of Housing (MOH) of Victoria, the tenants were encouraged to become involved in the planning



Drawing V-1: Location of the Collingwood Housing Estate in Collingwood.

and design process. The data were collected by visiting the estate several times between 1983 and 1986, examining letters and documents and having long discussions with the following people:

* officers, architects and planners in the Ministry of Housing, Victoria
* housing officers on the district and local levels
* consultant architects
* local council officers
* tenants' representatives
* tenants
* independent academic researchers.

One has to note that these case studies are not very adequate for testing and identifying explicitly all the components and the process that create the "sense of place". It would have been more appropriate to have and observe a self-organized group of people whose "structure" and collective and personal, purposive action can be explicitly identified. Furthermore, because of the inadequacy of their present spatial configuration, they are looking for an alternative environment that can accommodate their "action". Also, they are willing to be involved directly in the planning and design process and have an architect who accepts their terms of reference. Therefore, further research into the subject is necessary.

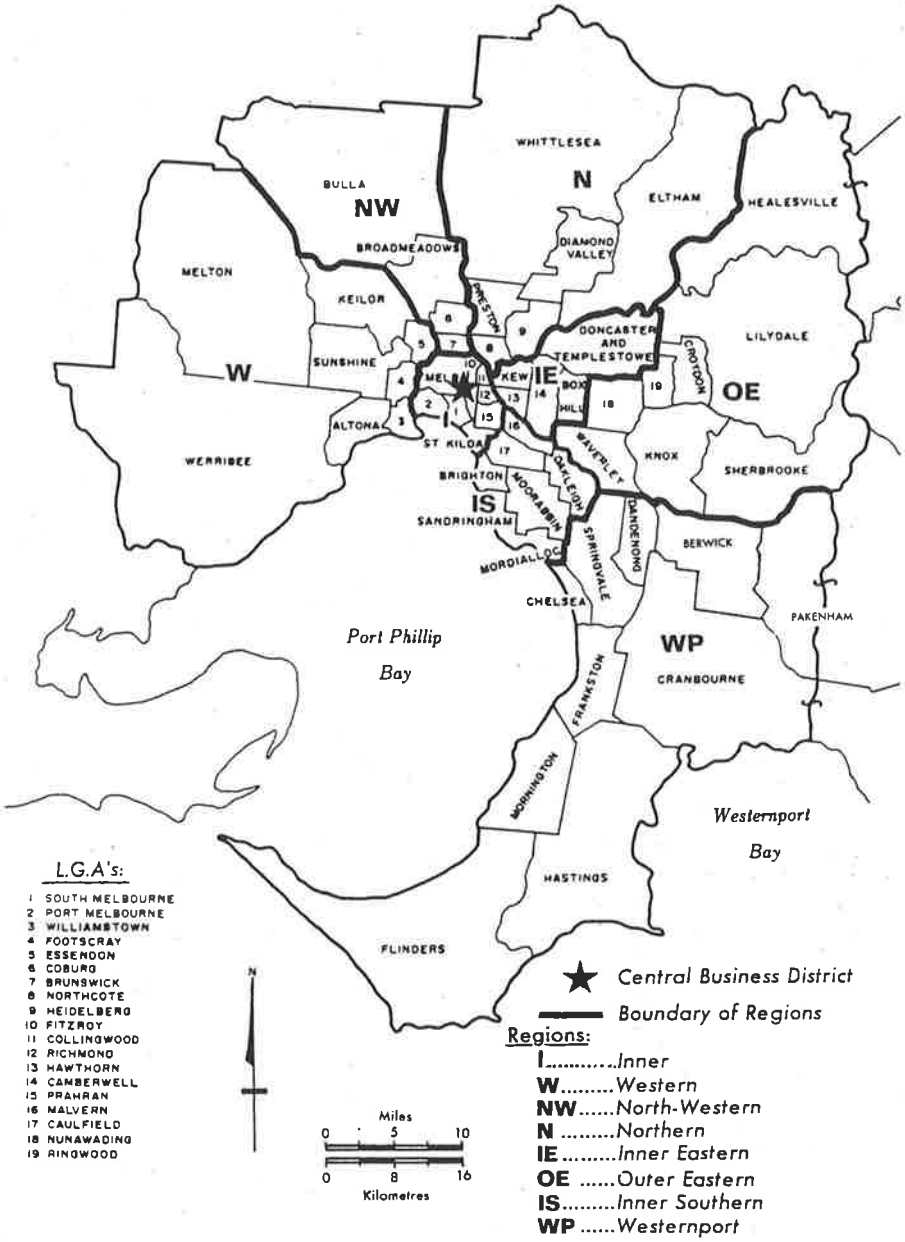
As indicated in appendix "C", an appropriate test was intended. A group of elderly was chosen and a dialectic format of a workshop was outlined. However, due to bureau-

cratic factors, the workshop never materialized. In fact only the first section - the questionnaire - was in a restrictive manner carried out. Even though formal invitations were sent, the administrators of the elderly did not show any enthusiasm and were not willing to explain and encourage the elderly to co-operate and participate in the workshop.

II. AN HISTORICAL BACKGROUND (THE HISTORICAL SITUATION)

Before World War II, most people in Melbourne lived in what are now regarded as the inner suburbs (drawing V-2). The choice of going and living in the outer suburbs was limited to those people who had a high income, while the low income group stayed mainly in the inner suburbs. Due to the intense competition for land - from other urban activities (i.e., industries) - the lower income householders were not able to compete for appropriate space to accommodate a high degree of spatial satisfaction (Beed, 1981). Their choice, therefore, was confined to densely packed small cottages or terraced houses located in a built-environment of rather poor quality. Thus, the built-environment of inner urban Melbourne was characterized by its traffic, high density, noise and unsanitary conditions (Melbourne and Metropolitan Board of Works, 1954).

At the same time (before WW II), due to the location of industries in the inner suburbs, employment opportunities were available for the skilled and unskilled labour force (Maher, 1978).



Drawing V-2: Inner Melbourne.

Source: Logan, The Gentrification of Inner Melbourne, 1985.

After the war the inner urban population grew due to European migration and the post-war baby boom (Maher, 1982). Those whose income had risen began looking for an alternative environment which satisfied their "action" at a reasonable price. Their choice was to move to the affordable outer suburbs. There, they had the opportunity to live in a newer, more spacious detached home, within which personal and household privacy, more bedrooms, bathrooms and outdoor space could be obtained. All this was looked at as a means of achieving a better way of life. Therefore the suburbs became, as Stretton (1974) indicated, the place where most of the households could achieve their dreams.

Beed (1981) took a different point of view. Contrary to Stretton (1974), his interpretation of the suburban trend was argued on the basis of limitation of available choice in the financial and built-environmental alternatives that were offered and encouraged by the government. He claimed that the limitation was the reason for 90 per cent of the population to become suburban. He pointed out that, had there been a better built-environmental condition in the inner urban area, people would have stayed where they were. His argument could be supported by the government's encouragement of suburbanization, indicated in the 1954 Metropolitan Planning Scheme and the 1971 Metropolitan Strategies.

Beed then continued to state that, due to the higher cost of land in the inner urban areas, limitation was set upon the manufacturing industries to expand and adopt new

technology. As an alternative, they looked to the outer suburbs for any new expansion. Their locational choice was encouraged by the new, more efficient and more economic transport system. They therefore tended to follow the population trend and become suburbanized. The 1971 metropolitan policies seemed to support that migratory trend. This created employment for skilled blue-collar workers in the outer suburbs, while reducing employment in the inner suburbs. And so the location of industries and planning policies became the catalysts to accelerate the migration of those who could cope with the new industries and technology, leaving the inner suburbs with the unskilled labour.

With the new mode of transport, based on both the private car and the newly constructed roads, and the supporting policies of the government (Beed, 1981), suburbanization became more and more attractive. Masses of the population due to the ownership of a motor car, were freed from locational restriction. More accessibility was given to land which was cheaper than that of the inner suburbs. Later in the 1970s, however, the studies made on housewives' isolation, long distances of communication and higher energy prices, showed that suburbanization was becoming more expensive and beyond the reach of those who could not afford private transport.

Beed argued that only those who could afford the new life style (i.e., skilled blue-collar workers and those with private transport) migrated to the suburbs, while the

poor and unskilled stayed in the inner suburbs. The latter could not afford a car and suburbanization, unless they sought isolation. Further, their skills were inappropriate for the new manufacturing industries located in the suburbs. Therefore, their inner urban built-environment had to be appropriately designed and secured. But the rent of land in the inner urban areas, due to the demand, was high. Hence they had to occupy less appropriate space and increase the density to reduce housing cost. Less indoor and smaller private outdoor spaces indicated that the built-environment was appropriate only for small households or families with no children. However, for any increase in density, more public outdoor spaces, urban amenities and services had to be provided. This seems to be one main reason for accommodating more public services in the inner urban areas than in the suburbs where life style is centred on the self-maintenance of the traditional "quarter acre block" of land.

The necessity to accommodate public places for outdoor activities, due to high density and lack of private outdoor spaces in the inner suburbs, generated a new type of employment: services and maintenance. The planners took this argument one step further to formulate, for the inner urban areas of Melbourne, a deterministic phenomenon between the high density housing and the increase in service employment for the unskilled labour (Melbourne Metropolitan Strategies, 1971:70-71). The planners expected that part of this new service industry would be generated

by the corporate world and financial institutions of the Central Business District (CBD). Wyatt (1982) however, argued against this deterministic planning conception. He indicated that, as was envisaged, service industries had not altered people's suburban preference. He then criticized the planners for applying a fashionable American solution to a city located in a different space-time and cultural pattern dimension (i.e., historical situation). Wyatt apparently supported the inner urban consolidation not because it increased employment, but because it was an alternative life style.

While manufacturing industries in the inner urban areas of Melbourne decreased, managerial, financial, banking, consultancy and many other service industries increased. Therefore there was an increase in white-collar employment and a decrease in demand for blue-collar. It was a dramatic structural change in employment. From 1961 to 1971 the percentage of residents who were professional and managerial workers increased by 2.7 per cent (Beed, 1981), to generate demand for high quality flats. Thus after 1961 a boom was created in upmarket flat construction which exerted more pressure on housing for the lower income group. Sandercock (1975) adopted a Marxist approach in her analysis and argued that the increase in managerial flat construction was encouraged by the Melbourne City Council (MCC), and Melbourne Metropolitan Board of Works (MMBW) and the retail industries. High quality flats then became a means to increase the price of land. The result was a further reduction in residential space for the lower income people.



Drawing V-3: Typical terraced houses and facade treatment in inner urban area of Melbourne.



Since the 1960s, many young professionals and affluent people, who worked in the city, came to live in the inner urban areas. Their preference was either to buy or to rent the terraced houses and cottages that once belonged to the low income people (Logan, 1982, 1985) (drawing V-3). The influx of the affluent was a process of gentrification. This was another factor that contributed to the displacement of the lower income population in the inner urban areas of Melbourne. One of the first groups which directed attention to this phenomenon, was the Brotherhood of St Laurence, a social welfare and research organization in Fitzroy (Logan, 1985). It is interesting to note that Logan did not accept that gentrification contributed to lower income people's displacement and speculation. In fact, Logan attributed the displacement of the low income people in Melbourne, to government policies of "slum clearance". Even though there seemed to be evidence to support her argument (Jones, 1972; Sandercock, 1975; Beed, 1981), the local papers (e.g., The Melbourne Times, 1/2/84; The Clarion, 1/2/84) explicitly indicated that gentrification was related to the displacement of lower income groups. As for Logan's insistence that gentrification was not for speculation, but the result of a desire for an alternative life style, generated by the demographic and social features of certain affluent people, Mahr (1982) argued to the contrary. Mahr explicitly indicated the speculative nature of gentrification and the large impact it had on the property market in the inner urban areas of Melbourne.

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V-4: The Melbourne Times and The Clarion explicitly indicating speculation and displacement of lower income people.

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V-5: Typical advertisement for cottages and terraced hours in inner urban areas of Melbourne.

Due to their household structure (young couple), minimal parenting responsibilities and life style, it was expected that the new gentry would further create employment in service industries that would balance those lost in manufacturing. For the planners and policy-makers it was another reason for securing high density low income rental accommodation in the inner urban areas (Beed, 1981).

The above studies seemed to conclude that economic and political factors (i.e., increasing land value and service industries) were the reasons for attracting people from all classes of society to the inner urban areas. However, most research on Melbourne indicated that suburbanization was still the trend. For reversing that trend and consolidating the inner urban areas, the planners saw it necessary to maintain the inner urban activities, increase the desirability for high income people to live in the inner urban areas and create high density housing for the lower income households. These policies were explicitly reflected in the 1954 Scheme and 1971, 74 Strategies.

The generation of service industries, the necessity to secure tenancy for lower income groups, the decrease in the amount of housing for these poeple due to gentrification, construction of high-rise flats for affluent people, and the incoming migrants from Europe were all seen to require policies aimed at maintaining residential activities in the inner urban areas. Studies that indicated human isolation in the suburbs, the increase in cost of transport due to the energy crisis and the cost the government had to

undertake to provide suburban services and infrastructure further encouraged the necessity for policies aimed at inner urban consolidation. Policies which sought merely to accelerate the inflow of white-collar residents were therefore to incorporate with policies that encouraged the lower income people to stay. For the latter, public housing in the form of lower rental accommodation, rental compensation and/or owner-occupied dwellings, were envisaged appropriate.

III. VICTORIAN HOUSING COMMISSION AND SLUM CLEARANCE

Up until the late 1960s the Victorian Housing Commission (VHC) saw slum elimination as part of its activities. This idea was formed in 1936 by the Housing Investigation and Slum Abolition Board (Hargreaves, 1975). In 1937, a statutory slum reclamation and housing authority was set up. Under this statute the VHC claimed that poor houses were a social problem that generated crime and many other social adversities. However, as Jones (1972) had indicated, slums were due to the dwellers' low incomes and demands for services which the landlord did supply.

Jones (1972), Hargreaves (1975), Sandercock (1975), Logan, T. (1981) and Logan, W. (1985) all elaborated on the involvement of the VHC in slum clearance.

In the Melbourne Metropolitan Planning Scheme (1954), the shortage of appropriate dwellings in the inner urban areas was stated explicitly to be due to substandard

housing supply and an increase in population. The Scheme therefore suggested that the VHC needed comprehensively to clear all slums (99,000 dwellings by 1980) and build 10,000 units annually for a certain number of years. At first the Scheme argued against the idea that high-rise buildings would replace the dwellings demolished in the slum clearance programme. The Metropolitan Planning Scheme (Survey and Analysis, 1954:63) stated in its conclusion:

1. The great majority of families prefer single home ownership.
2. There is at present a greater shortage of flats than any other form of housing and there is every reason to believe that an increased proportion of future households will want to live in flats of all types.
3. The principle housing problem is rehousing the low income families who at present are living in substandard areas in the inner industrial suburbs, many of which are in need of development.
4. The most economical form of row housing for redeveloping such areas for their present inhabitants would appear to be some form of row housing supplemented by low level flats.
5. The substandard inner areas could be redeveloped for their present population in accordance with the modern standards, by a mixture of row houses and flats, so as to maintain the average existing densities in those areas.
6. The more attractive inner suburbs, favoured by those people in the medium to high income groups requiring flats, would seem to offer scope for high level elevator service.

Note that this conclusion advocated walk-up flats for lower income people. Their appropriateness was the result of simplicity of services (i.e., no elevators) structure and cost effectiveness.

The Scheme (1954) also stated that with the increase in density, the total cost for high-rise flats would

decrease, if certain technology was used to reduce the cost of the structure. Note that on page 34 of the Scheme, the high-rise was accepted aesthetically and socially.

While in another place, the Scheme described and classified the houses in Collingwood and Fitzroy as sub-standard tenements, small terraced and row houses. They were set in allotments much below the density of 80 persons per acre. Thus for Collingwood, the Scheme proposed clearance of substandard houses, amalgamation of allotments and re-subdivision.

The Melbourne Metropolitan Planning Scheme (1954), after analysing the unacceptable built-environment of the inner urban areas of Melbourne, proposed that:

1. With the appointment of the VHC, the state department accepted responsibility for bringing about better conditions;
2. Private enterprise was to be promoted;
3. The density was to be kept and if possible increased;
4. Since the proposed density was above what was needed for a single dwelling, row houses walk-up flats and high-rise flats were proposed;
5. Due to the high value of land, row houses were proposed for those who required single family dwellings, walk-up flats for those in the lower income group and elevator-serviced high-rise flats for high income groups. In certain areas, totalling 750 acres (the Scheme, 1954: 38), emphasis was on the high-rise flats, while the rest of the inner urban areas row houses and walk-up flats were proposed.

Parallel to the above, the Scheme advocated high-rise for lower income groups. Reference was made to other Western countries to support this view. Architects and planners saw the decaying inner suburbs as aesthetically offensive. Multi-storey housing, which in many parts of the world was highly desirable, was promoted and adopted even though the Scheme indicated people's preference for low-rise buildings. (Note that on p.66 of the survey a picture of a high-rise project in Los Angeles was presented to promote and indicate the aesthetic value and advantages of a high-rise.) Moreover, the building industries were very much in favour of high-rise. They applauded the increase in building construction that accompanied all the proposed development.

The Scheme saw the necessity for a survey to determine public reaction toward the new forms in the cityscape. However, it is doubtful whether people, in the 1955 public display of the Scheme, questioned the wisdom behind the high-rise buildings.

Another reason that apparently made the VHC promote high-rise for lower income groups was their pre-cast concrete factory. This new technology was looked upon as the means to reduce cost, make high-rise economical and keep 798 people employed at the pre-cast concrete factory (Jones, 1972).

It was not until the Shaw and Davey Report, in 1960, that slum clearance became a main issue in Melbourne. Based

on a superficial survey, conducted by the VHC, the report indicated that 35 per cent of the dwellings in the inner urban areas were to be demolished as slum clearance or block demolition (Hargreaves, 1975). These operations were never properly planned, even from the point of view of physical co-ordination of the basic services, such as, roads, schools, community centres, welfare services and shops (Sandercock, 1975).

From the cleared sites, a considerable amount of land went to private enterprise (Jones, 1972). In appropriate areas, houses for higher wage earners, who wished to reside in the inner urban areas, were constructed. By incorporating high income earners into the newly developed housing estates, the VHC thought it would demolish low income ghettos which would aid the declining CBD and lessen suburban sprawl. Jones (1972) however, doubted the VHC's motivations. Incorporating private enterprise into the redevelopment process was seen as a means of reducing the cost of slum clearance to an acceptable level. On the other hand, Sandercock (1975) related slum clearance and redevelopment to an exercise, done by those who controlled the VHC, MMBW and MCC, to increase the land and commercial value of the city centre and thus bring in more revenue. This line of argument was supported by Beed (1981) and had been advanced by Jones (1972). They saw the entire process as an opportunity to increase the population of the inner urban areas and revive the declining CBD. Slum clearance also seemed an exercise in increasing the capital of those

who had interests, land and other property in the inner urban areas. The high-rise, high density housing was not aimed at providing appropriate housing for the lower income poor. Apparently the VHC deprived the lower income earners of housing and the built-environment they did not want to leave.

The above brief was a description of the generative mechanism (i.e., "structure") and historical process that created the walk-up and the high-rise public housing in the inner urban areas of Melbourne. The "structure" was the result of the corporate "action" of the higher income people who controlled the CBD. The "structure" did not interact with the "action" of the lower income people, but with others who had a different intentionality and purpose for their "action". The power (economic and political) and the bureaucrats' symbol systems utilized, were inappropriate and restrictive and thus put a constraint on the creation of the built-environment for lower income people. The Scheme operated without considering the historical situation and the process that created the slums in the inner urban areas of Melbourne. Those who established the policies had a different view of the high-rise. They saw the high-rise as a component in a system that may develop the inner urban areas of Melbourne in accordance with their own ideology (i.e., capitalist) and cultural pattern. Therefore, it was other people's "action" and "structure" and in the context of a different paradigmatic dimension that created for the lower income people the high-rise and walk-up flats.

IV. GENTRIFICATION AND THE HIGH-RISE HOUSING POLICIES OF THE VICTORIAN HOUSING COMMISSION

As was noted before, gentrification in Melbourne contributed to the displacement of the lower income group and increased rent and housing speculation.

Gentrification in Melbourne came directly into conflict with VHC policies. Slum clearance and high-rise buildings were regarded as having a negative impact and reduced the market price of the property newly purchased by the affluent (Sandercock, 1975; Jones, 1972). By 1968 resident groups of different inner suburbs organized themselves to exert the necessary political pressure on local and state governments to change VHC policies. Building unions joined in to place bans on land cleared for private enterprise (Sandercock, 1975). The councils, which became dominated by the newly affluent, refused to co-operate with the VHC. They were joined by some of the occupants of the high-rise buildings. It was the first time a community safeguarded their own interests and built-environment from the vision of the planners in the VHC, MMBW, MCC and the politicians (Logan, 1985). Finally, in May 1971 the VHC buckled under the pressure and announced it was phasing out high-rise development. It seemed quite a coincidence that parallel to this confrontation, the 1974 Planning Strategies introduced public participation, socio-economic and cultural components (Strategies, 1974:14) and conservation (Strategies, 1974:31).

It is interesting to note that those who protested mainly against the high-rise and slum clearance were not the displaced lower income groups, but the affluent, who saw their expression of an appropriate built-environment endangered (Logan, 1985). The latter, who were the middle class, knew the political process, the political power of being organised and controlling the council. They were familiar with the means (i.e., newsletters, demonstrations and political rallies) of political pressure to achieve their own objectives. Logan indicated how those of the middle class, who owned their residences were the ones usually involved, while those who rented were the least involved. Because of their relationship to their built-environment, the former (i.e., the owners) were the ones who set out to put pressure on the bureaucrats and politicians to change and propose new planning criteria.

Sandercock (1975) was apparently cynical about the achievements of the new gentry in phasing out the high-rise flats and their interest in housing the lower income people in the inner urban areas of Melbourne. She implied that the conservation policies achieved by the residents' action groups, were not possible if they did not coincide with the policies of those who controlled the CBD of Melbourne (i.e., the central and powerful commercial and financial institutions who saw the new policies to their advantage). Furthermore, once the VHC announced that it would phase out high-rise buildings and site clearance, most of those gentry associations were dissolved, leaving the lower

income housing problems unsolved. It seemed that once the young affluent achieved their own objectives, they saw no reason to accommodate the spatial settings for the "action" of the lower income groups, even though they contributed to their displacement.

V. THE ROLE OF THE VICTORIAN HOUSING COMMISSION (i.e., THE MINISTRY OF HOUSING - MOH)

It was apparent that the VHC was quite controversial in the inner urban areas of Melbourne. The responsibility for slum clearance made the VHC directly involved in broad planning issues, while it played a minor part in housing the poor. In fact, Sandercock (1975) accused the VHC of actually depriving the poor of proper housing and built-environment.

Logan (1985) went one step further, and explicitly stated that the VHC supported the City Chamber of Commerce and its policies outlined by the MCC. In the 1960s the VHC accepted money from the MCC for persisting with the policy of slum clearance and high-rise development. Furthermore, the VHC tended to ignore the normal development process of seeking planning permission. Being a commission it was not, as is the case with a ministry, accountable to the parliament.

Jones (1972) indicated that the participation, prescribed for the VHC in the 1970 Urban Renewal Act, was taken very lightly by the bureaucrats. They assumed the Act to be just a public relations exercise. The bureaucrats

apparently saw participation as an operation to convey and make sure that the public understood the Commission's policies for housing. Therefore, the bureaucrats saw participation as a means to impose their values on the lower income group (Jones, 1972). The lower income groups did not have the political power and knowledge to confront and show the VHC, their dissatisfaction. Beed (1981) stated that studies made in the mid-1970s showed that there were many reasons for dissatisfaction with high-rise and there were more preferences for single dwelling units. In fact, during the 1970s, there were serious vacancy problems in the highly bureaucratized and institutionalized high-rise buildings (Jones, 1979). Occupants could not display personal expression and create settings whose symbols were legible and could accommodate appropriately their "action". There were no outdoor areas for the children of the high-rise. Most important of all the high-rise gave the public an image (i.e., a stigma) of tenants comprising people who abuse the welfare system, live on government hand-outs and thus were an undesirable socio-economic group.

In 1973 the VHC was involved in several scandals over land deals on the rural urban fringe and the Princess Street block in Carlton (Hargreaves, 1975). It was then that many saw the necessity for change. It was an opportunity for the Premier of Victoria to reorganize and give state housing a new image. After considerable debate in 1978-79 the VHC's urban renewal policies became secondary

and senior bureaucrats who did not bother to explain their decisions were removed (Logan, 1985). The VHC was re-structured and transformed into the Ministry of Housing (MOH), accountable to parliament and the state political process.

Since 1979 a number of changes and approaches to planning have taken place in the MOH. Following the events of public participation and the VHC's urban renewal a review of housing policies commenced. This led to the publication of the Green Paper in 1980. After a series of debates, the first volume was prepared. It was to be followed by a more detailed second volume and a White Paper. However, neither the second volume nor the White Paper materialized. Rimmer in his report on the Consultative Arrangement of the Ministry of Housing (1983), stated that a White Paper was prepared but never circulated.

A. THE GREEN PAPER

In 1980 the Minister of Housing in Victoria, Mr J. Dixon, brought out general housing strategies called the Green Paper, which was produced over 13 months of community co-operation and consultation. However, because of a dispute between the Victorian Government and community housing groups over tenancy legislation, the consultation process was not satisfactory (Rimmer, 1983).

Mr J. Dixon forwarded that document by stating:

> The purpose of the Green Paper ... is to assist Victorians to understand the social and economic changes affecting our housing and its use, and to develop new responses to the new challenges ... It is intended to catalyse community discussion of these alternatives and their implications; in the light of that discussion and debate, the government will then formally review its policies and priorities affecting housing, and the chosen policies will be published in the form of a White Paper on Housing in Victoria.
>
> (Green Paper, Vol.1 1980)

In this document the new Ministry of Housing explicitly stated its aim and to whom it was catering: "to people who do not possess the resources to adequately cater for their needs" (Green Paper, p.8). The Green Paper listed a broad base liaison team to review and consult the Ministry on its housing policy. The members of this team were assumed to be the watchdogs of the community. A steering committee, comprising the Minister, the Housing Commission, the Housing Advisory Council and the Technical Liaison Team was also listed. The purpose of the Steering Committee was to see that the strategies of the Green Paper were being implemented and their effectiveness was catalysing the necessary community discussion and debates. The Green Paper, therefore, indicated explicitly the MOH's new consultative and community participation approach to planning, as observed in the 1979 Melbourne Metropolitan Planning Strategies. Hence the Green Paper stressed:

1. the importance of sponsoring the self-help housing co-operatives among low-income groups;
2. the client groups to nominate representatives that can be involved in formulating dwelling design objectives and guidelines to architectural briefs. [This seemed to be in conflict with the standards the MOH applied.];
3. the establishment of a design review panel, to assess and report on the Ministry's Development

Plans and Building Designs. This panel included representatives nominated by consumer groups, the building construction industry, R.A.I.A. and R.A.P.I.;

4. the extent of the consultative procedure with clients, with the objectives of involving the client in all aspects of policy formulation;
5. the encouragement of residential management for maintenance, planning or rehabilitation programme, and the planning of community services in association with local government.

It was hoped that these proposed strategies would establish a communication channel in which community "action" and awareness of the built-environmental spatial quality could be integrated into the planning and design process. It seemed that the MOH set for itself the task of creating the spatial settings and characteristics to accommodate the tenants' "action". Therefore, to achieve the appropriate built-environment, bureaucrats, architects, planners and engineers had to consult the community during all stages of the planning and design process. Past errors were admitted and new concepts more in line with community intentionality, needs and preferences were established. It was envisaged that sociologists and psychologists were to become part of the Ministry's design and planning force. Opportunities were given to organizations (e.g., the Victorian Council of Social Services) to comment on the new consultative process. Funds were allocated to support and encourage community housing groups and tenants' organizations. Management skills were offered at the level of local tenants' organizations. Part of the Estate Improvement Programme was to assign local officers to establish communication with the tenants and identify their needs.

Sometimes tenants' organizations were developed in the recognition of their common "action" and the necessity of political pressure to achieve their objectives. There was no doubt that the change the MOH had undergone in management, philosophy and image was quite dramatic.

However, the new approach to the planning and design process was not well received by all. During the interviews with the technocrats and the bureaucrats of the MOH (while collecting the necessary information for this thesis), many of them, on both local and ministerial levels, were suspicious of the community participation process. Probably the bureaucrats and technocrats saw this as a trespass that would eventually endanger their professional validity and bureaucratic organization. Their suspicions might also have been due to the fact that the Green Paper did not comply with and consider local building regulations and development controls, which were usually formulated by the local councils. This argument was mentioned implicitly in the Green Paper, where it was stated that the local governments were not well oriented to the new housing strategies and philosophy; based on community involvement (Green Paper, p.43). In fact the local councils had their own housing policies.

The Green Paper hinted that community involvement strategies created a new conflict between state and local governments. The exact source of conflict and its implication was rather ambiguous. It might have been based on the vague definition of the role of local government involve-

ment in the new planning and design process. The conflict might also have stemmed from the power struggle between two bureaucratic institutions: local and state governments, and/or some ideological conflict. Whatever the reason, it was observed in the unco-operative attitude and reaction of local government to some of the invitations and procedures of the community meetings and to the comments local government officers made regarding the participation process.

B. COLLINGWOOD HOUSING ESTATE

The outline given above is an attempt to establish part of the historical situation behind the case studies. The brief description asserted some of the important socio-economic and political forces that interacted in a continuous historical process to shape the existing residential built-environment of Collingwood, in general, and the Collingwood Public Housing Estate, in particular. Because of the post-war political and economic "structure", Collingwood had undergone the historical processes of slum clearance, urban migration, urban consolidation (gentrification) and community involvement policies. The results were: diversity of land use (residential and industrial); high density high-rise and walk-up flats for lower income groups; abundance of derelict and empty sites and demand for low income housing.

The Melbourne Metropolitan Strategy (July 1980) indicated that due to unemployment there was an increase in

Table V-1: Public Housing Stock by Dwelling Type, Collingwood and Region, as at 30.6.85

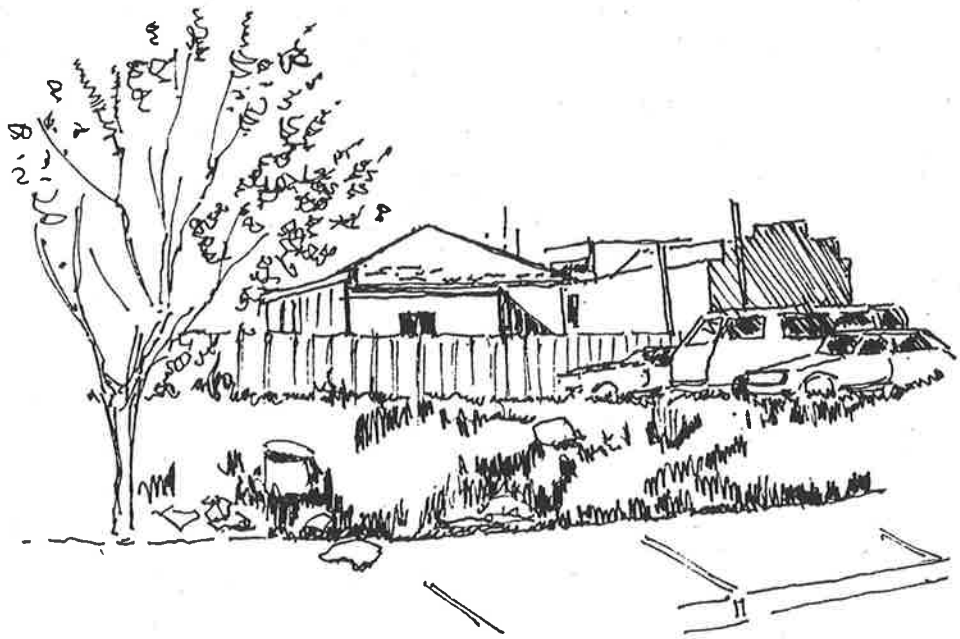
	Separate House	Attached House	Medium Density	Low-rise Flat	High-rise Flat	Rooming House Rooms	Total
COLLINGWOOD	84	0	43	413	560	0	1,100
FITZROY	118	9	104	286	800	19	1,336
RICHMOND	31	45	0	356	1,020	9	1,461
TOTAL INNER URBAN REGION	443	160	576	3,352	7,099	79	11,709
TOTAL METROPOLITAN	8,444	1,819	1,316	9,626	7,989	152	30,642

SOURCE: MINISTRY OF HOUSING, ANNUAL REPORT, 1984-85.

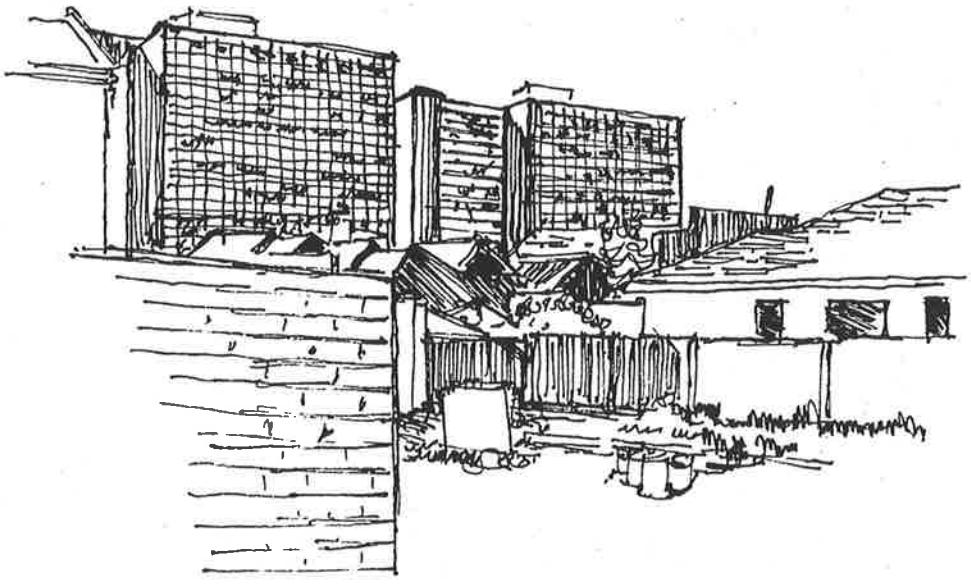
demand for low cost public housing. High inflation and interest rates had increased the real cost of housing and had deterred buyers, especially in the lower income groups. When interviewing the manager of the Fitzroy and Collingwood Housing Association, she remarked that also due to speculation and gentrification, the low cost housing stock was continuously decreasing and the list of those who were in need of shelter was increasing.

Since World War II the population of Collingwood, due to the factors described above, had fallen by 50 per cent. The decline peaked between 1971-76. But since 1976, it became somewhat more stabilized. During that period, due to gentrification, the household had been replaced gradually by more affluent, smaller and more diversified ones. Besides, unemployment had increased. Therefore the draft for the Collingwood Housing Policies (1986) stressed preferences for rental accommodation, flats and affordable family dwellings accessible to private open space. The draft also showed a continuous increase in demand for public housing.

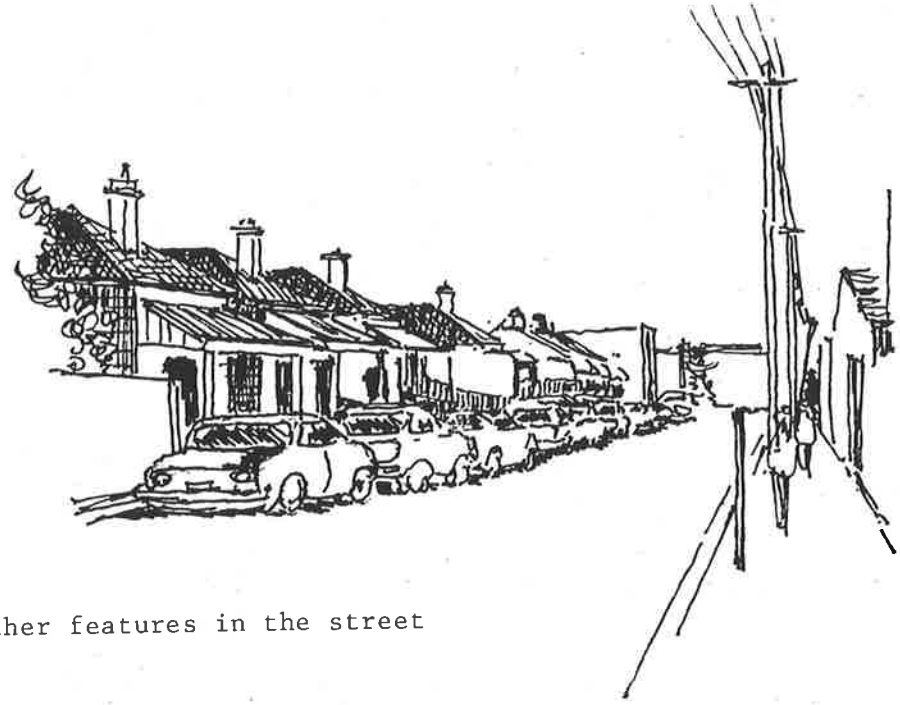
Similar to other inner urban areas, Collingwood had mainly medium- and high-density housing stock. The 1986 draft of the Collingwood housing policies showed that in 1981 Collingwood had 49.8 per cent of its stock in flats. A significant part of this was public housing, run by the MOH, 88 per cent of which was located in the Collingwood Housing Estate on Hoddle Street: the site of this case study. In other words, the majority of the public housing



Drawing V-6: A typical derelict gap site in Collingwood.

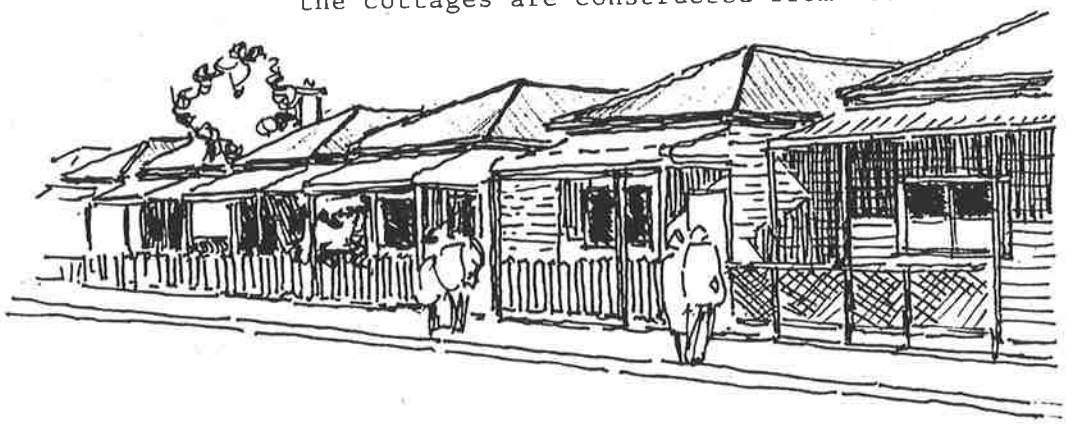


Drawing V-7: Overdomination of the multi-storey block in the cityscape of Collingwood.



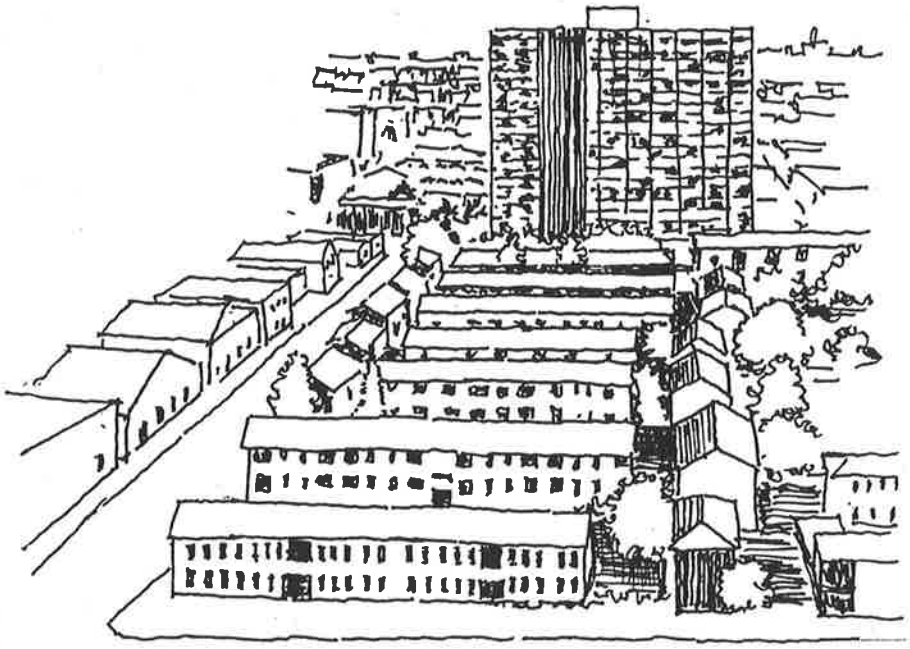
no trees or any other features in the street

the cottages are constructed from wood



Drawing V-8: Low income detached houses (cottages) in inner urban area of Melbourne (i.e., Collingwood).

high-rise flats

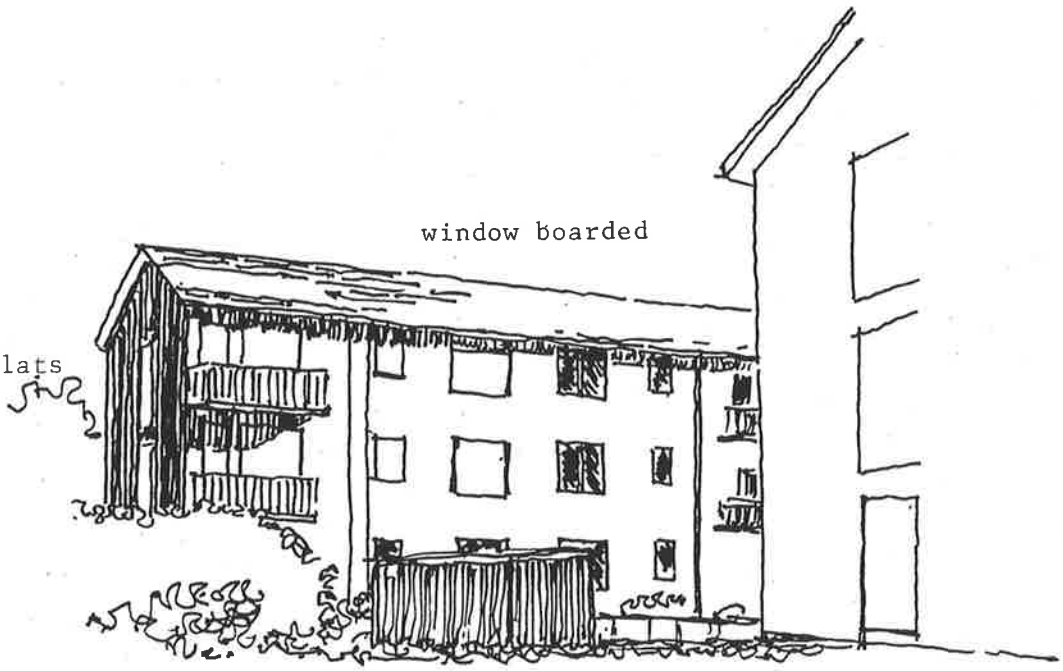


dormitory-type
public housing

overview of Collingwood Housing Estate

window boarded

walk-up flats



Drawing V-9: Collingwood Housing Estate.

flats were located on the Collingwood Housing Estate. They were in three, twenty-storeys, high-rise towers, each containing 180 flats and 400 in three-storeys walk-up flats (drawing V-1). Adjacent, on Francis Street, the site for five terraced houses was located. Each of these had certain built-environmental problems. For the solution of each the MOH chose the tenants' involvement policies outlined in the Green Paper.

VI. THE HIGH-RISE BUILDINGS

Of the three high-rise buildings on the Collingwood Housing Estate, this thesis will study two: 229 and 253 Hoddle Street. The reason for this choice is that these two buildings were built as a result of socio-economic and political forces, and VHC urban and housing policies of the 1960s. Furthermore, under the Estate Improvement Programme, these two blocks were chosen for upgrading, using tenants' participation as outlined in the Green Paper. In 1982, $1.2 million dollars was allocated to upgrade these two blocks and study the process as a pilot scheme to establish the feasibility of improving tenants' involvement in the MOH high-rise flats in Melbourne.

A. A BRIEF DESCRIPTION OF THE HIGH-RISE

Both blocks are at a distance and parallel to Hoddle Street, their main access road. The space between the street and the buildings was envisaged as the space to be landscaped for the main entrance. The community spaces for



Drawing V-10: The high-rise blocks on Hoddle Street.

both blocks were to be located on the ground floor. The Scheme showed the location of a kindergarten in one building and an infant officer's office in the other. In the development programme, the ground floors of both blocks had a foyer, accessible to Hoddle Street and the back yard spaces, two elevators, a service and maintenance area and toilets. Above the foyer and services, the typical residential floors comprised one, two or three-bedroom flats, served by an open, public corridor, a laundry and drying area.

At the start of the improvement programme, the inhabitants comprised a high degree of single parent families, a considerable amount of ethnic groups (i.e., Turkish, Yugoslav and Vietnamese) and a high proportion of children as compared with adults.

A tenants' profile in January 1982 showed:

* Households headed by women	- 54%
* Australian	- 56%
* Turkish origin	- 20%
* Other ethnic groups	- 24%
* Those who had been there for ten years or more	- 21%
* Those who had been for average 5 years	- 30%
* Those who had been for average 3 years	- 21%
* Households who had one or two children	- 66%
* Households who had three or four children	- 17%

(Source: Ministry of Housing - High-rise Resident Attitude Survey, July 1982, pp.14, 15).

Note: The data source does not define the range of average 5 and average 3 years.

B. THE PROBLEMS OF THE HIGH-RISE FLATS

From the papers circulated in 1980 (e.g., Smyth, 1980; Kneebone 1981; Kneebone and Smyth, 1981) it seemed that the MOH was very much influenced by the research carried out in other countries on multi-storey public housing. The failure in places like St Louis (Pruit-Igoe high-rise estates) made the Ministry realize that in the VHC housing programme little foresight had been given to the potential social and physical impact of high density and high-rise buildings on their tenants. The Ministry saw their high-rise estate deteriorating physically due to poor construction, irregular maintenance and vandalism. The increased number of families with children, housed in the high-rise estate, led to social problems, public stigmatization and environmental deprivation. The open corridors were encouraging non-tenants to come, jump and commit suicide. The services such as the elevator and common laundry on each floor were breaking down. In short, these problems were recognized and became an important basis for the policies in the Green Paper (pp.60-61).

C. "THE ESTATE IMPROVEMENT PROGRAMME"

Although the high-rise buildings were strongly suggested to be unsuitable for public housing in general and certain tenants in particular (families with children), they still presented a considerable stock of public housing and an investment for many years to come. Demolition was

therefore not seen as an appropriate solution. Minor built-environmental change and better selection of tenants were seen as more suitable alternatives. Thus, in February 1980, a high-rise improvement programme was established to upgrade the high-rise buildings. Blocks 229 and 253 were therefore considered first. Rimmer (1983) stated that the choice was political. The Green Paper stated:

> A pilot highrise redevelopment program has commenced at both the Collingwood (Hoddle Street) and North Richmond (Canning Street) estates. The program involves improvement to the physical environment as well as to the social and managerial environment. Some of the approaches being pursued by the Ministry in this program are set out in the options that follow:
>
> Option 91 Redefining site areas to delineate open spaces shared with the broader community, spaces common to the estate, space common to a specific block, and private open spaces. Improve landscaping to assist this definition.
>
> Option 92 In conjunction with residents' management committees, rationalize parking areas and underground parking. Improve security for parked cars.
>
> Option 93 Redesign all entrance lobbies, lifts, corridors. Install a reception desk/kiosk at the entrance to each highrise block, which would serve as a control desk overnight. Provide carpets, indoor plants, community notice boards, piped music, etc. ...
>
> Option 94 Provide a community flat in each highrise block; alternatively, redesign the lift lobby and convert adjoining two-bedroom or three-bedroom flat to a one bedroom, using the extra space for a community room and/or a child care centre.

In implementing these policies, the Green Paper had stressed strongly self-management and residents' participation (Green Paper, 1980:58)

The Green Paper indicated that the Estate Improvement Programme was an interdivisional working party, including

tenants' representatives, representatives of local agencies, the council and the Ministry. It was set up to examine the problems and propose alternative solutions for the high-rise buildings. For each of the above-stated physical improvement policies, in general, several possible solutions were proposed. The Estate Improvement Programme defined their aim:

1. To discuss housing options that reflected tenants choices, improve social and physical conditions and retain low cost rental accommodation for a variety of tenants.
2. To encourage the social and physical upgrading of the existing highrise estate, increase residential satisfaction, reduce vandalism and cost and improve the identity and general image of public housing.

To achieve the aim and policies of the Estate Improvement Programme, several methodological criteria were identified:

1. The necessity for alternative physical proposals and management changes to achieve the policies of the programme. While the necessity for alternative physical proposals was clear, the management was not. A number of major issues were therefore noted to be important for management. They were:
   a. a more comprehensive role for the building manager in order to improve management accessibility.
   b. A policy of social mix and selective tenancy allocation.
   c. Policies allowing greater individual identity to improve the self image of residents.
   d. Tenants self management schemes.

e. A new eviction procedure.

(MOH: Estate Improvement Program, High Rise Residents Attitude Survey, July 1982:4).

2. Public meetings were to be conducted so that tenants could participate in the choice of the alternatives proposed.

3. An evaluation study was to be undertaken to measure the success of the programme and the methodology. For this criterion, in July 1982 a study was undertaken to identify the attitude of the tenants towards the physical and managerial changes. The pre-improvement survey and study was carried out and documented in a report titled: High Rise Residents Attitude Survey - July 1982.

D. TENANTS' INVOLVEMENT IN THE IMPROVEMENT AND MANAGEMENT OF THE HIGH-RISE FLATS

To study the tenants' involvement in the planning and design process, one has to critically analyse the methodological criteria formulated by the Estate Improvement Programme. This is important because of the assumption taken in this thesis that community involvement is a recommended alternative process to achieve the "sense of place", both as a means for the interactive process and as a spatial outcome. In this case however, due to the existing built-environment, several contextual "structural" constraints have to be noted:

1. Rigidity of the existing spaces as a result of the design of high-rise buildings.

2. Since the high-rise is for tenancy occupancy, one has to consider certain flexibility to accommodate future occupants who may have different "actions". However, by tenancy selection policy, certain resolution to the problem of occupancy is expected.
3. The setting of the high-rise buildings on Hoddle Street: a major Melbourne metropolitan vehicular access.

In the following study of the interactive process, the above "structural" properties have to be integrated with other "structural" components (i.e., economic and political, power and resources available).

The report Review of the Consultative Arrangement of the Ministry of Housing by John Rimmer stated that, at the early stages, the Housing Commission Tenants Association attempted to establish a tenants' consultation group. However, it failed due to a lack of commitment from the interested parties. Later in February 1980 the Collingwood Council formed the High-rise Working Party, comprising the tenants' representatives, local agencies and the Ministry of Housing. They met quite a number of times to discuss issues relating to the Collingwood Estate (i.e., upgrading the built-environment). Kneebone and Smyth (1981) claimed that the Working Party came together 30 times with different groups of tenants and ethnic minorities. In May 1981, after the Ministry formulated their own aim and objectives for upgrading one of the high-rise buildings (based on consultations with some of the tenants), the MOH

lost interest in the Working Party and withdrew. This brought to an end the high-rise Working Party.

Both the Green Paper and Rimmer show that the choice and issues that were raised and included in the upgrading were very limited both in substance and in tenants' involvement. They were outlined by the MOH without considering any tenant's voluntary demand and "action".

One may conclude therefore that, at the initial stages of upgrading the built-environment, only the Ministry of Housing was involved in formulating the aim and objectives. The aim and objectives were based theoretically on the government's new housing strategies outlined in the Green Paper. Except for a few - the members of the High-rise Working Party - the tenants in general did not participate directly or their participation was limited in the aim and objectives formulation. The limited community involvement as a new planning and design process was dictated to the tenants by the MOH. Furthermore, community involvement was carried out without even an explanatory programme which clarified the new housing policies for the tenants. Objections from the tenants and local agencies made this approach inappropriate. Participation on a limited scale was apparently a privilege given to the tenants. It was never considered the right of the tenants and an appropriate means of creating the "sense of place".

The above report also stated that the Estate Improvement Programme for the high-rise started in Collingwood due

to political reasons. Apparently Collingwood environmental problems were not as critical as some others. This, however, did not create a cynical feeling in the Collingwood Estate. Tenants in the third block who initially were excluded from the Working Party and formulation of the general aim and objectives, raised their voices in disapproval to the Ministry. However the change in government (i.e., Labor coming to power) made the Collingwood environment no longer a political issue. Human and financial resources became available to carry out the environmental upgrading in the third block.

The 229 Hoddle Street tower was considered first. The tenants were limited in the choice of colour for the doors of their flats (eight colours) and window screens (three colours). All other decisions were made by the architect. The superficiality of the tenants' involvement in the early stages of the process was apparent. It seems to be the major reason for the tenants' outcry and demand for proper involvement.

However, more direct tenants' participation was considered in the environmental upgrading of the neighbouring block; 253 Hoddle Street. There the tenants had more freedom to choose colours, flooring, tiles and even ceiling finishes in the common lobbies. Through the floor co-operatives this programme was carried out floor by floor. Therefore, to upgrade their common and private built-environment and to discuss, recommend and choose their alternatives, tenants participated as an organized

body (i.e., floor co-operatives, block committee and estate committee) and as individuals.

Therefore, one can conclude that for upgrading the high-rise buildings, gradual consultation and tenants' involvement - not at the initial stage - took place only on certain limited issues and carried out at the later stages. Moreover, the MOH controlled their environment through financial factors, political power, the process itself and the aim and objectives formulation.

In February 1982, a community officer was appointed to liaise with the tenants. He was to be there during the formulation of the aim and objectives and achievement of the environmental upgrading. At the beginning, little response came from the tenants because of their mistrust of the unfamiliarity with the prescribed planning and design process. The mistrust and unfamiliarity were due to the lack of a two-way communication system between the tenants, the community officer and later the architect. In other words, there was no common ground in semantics or symbol systems upon which the MOH could understand, and convey to the tenants its policies. Hence there was no co-operation or enthusiasm among the tenants. Finally, a subjective door to door survey resolved that particular problem. At the beginning this approach formulated the environmental dissatisfaction of each household. Later, when the co-operatives and other tenants' organizations were formed, the general and specific dissatisfaction of the community was determined. The dissatisfaction was due mainly to

vandalism, security in the foyer and elevators, run down facilities - such as laundries and entrances - missile-throwing and suicide from the open corridors. There were also noise problems and a lack of privacy created by the pre-cast concrete construction. As well, the parks and landscaping were unsuitable for tenants' outdoor activities. Once all the tenants' dissatisfaction was known, the aim and objectives were reformulated.

Right at the initial stages it was found necessary to establish, between the tenants and the Ministry, two-way communication systems, so as to interchange ideas and attitudes at all stages of the planning and design process. The communication systems were regarded as the bases for an appropriate reorganization of future estate management.

The channels of communication were at three levels, connected and placed in a hierarchic manner:

1. The Floor Co-operatives: These were the lowest levels of management organization and communication channel were established with tenants on each floor. Their main aim was to recognize the problems and organize the maintenance of their particular floor and report to the block committee through their representatives. The floor co-operatives also had the power to choose the appropriate solution for their floor among the limited proposed alternative schemes. In the regular meetings of the co-operatives, unless it was necessary, the Ministry was not represented.

The floor co-operatives were, to a limited extent, set as basic units or channels for direct involvement of the community in organizing their built-environment. Therefore, these units were seen as the basic sources for the interchanging of ideas and reactions of the tenants to any upgrading and management proposals. Moreover, they were the basic societal "structure" that had a corporate purposive "action".

Due to the predetermined spatial configuration of the floor and limitations imposed upon them by the MOH (i.e., no flexibility in spaces to suit particular tenants' aspirations), the co-operatives' decisions were restricted as to choice of colour and material, necessary for upgrading the public spaces on their own floor (i.e., corridors, laundry rooms, drying rooms etc.). Therefore a higher "structural" order imposed constraints on the co-operatives.

The floor co-operatives seemed to have resolved some of the social problems. On each floor more cultural interaction was observed. Ethnic groups who were somewhat discriminated against and, due to their social rituals were looked upon as inferior, were now appreciated and respected (the community officer noted the acceptance of an Australian housewife of a new recipe for cooking rice from a previously discriminated against Vietnamese). Added to that, specific spaces in the common rooms were assigned for different cultures and social rituals. This therefore achieved the desired social mix and identified

on each floor the corporate tenants' intentionality and "action".

2. Block Committee: This was the intermediate level in the management organization and communication channel. Each month, the floor co-operative representatives in each high-rise met as a body called the block committee. Here, too, the representatives of the Ministry were observers, with no voting power, unless it was necessary (i.e., an issue that directly involved the Ministry).

   For two months the block committees worked on an outline for their constitution and management framework. The aim was to establish a legal co-operative body and a "structure" where elite and power groups could not take over. The constitution, however, was held by the MOH, because they saw it as too elaborate and also a means by which the management could become independent. In other words, the MOH looked at the constitution and did not accept it because it was a means whereby the power of decision-making would be transferred from the MOH to the tenants.

   The block committee was responsible for the general management of the block. Decisions regarding proposed alternative schemes for the whole block in general and its public spaces in particular were made here (i.e., entrance foyer, elevators, public rooms etc.).

Diagram V-1a: Proposed structure of Collingwood Estate Management Council - option 'A'

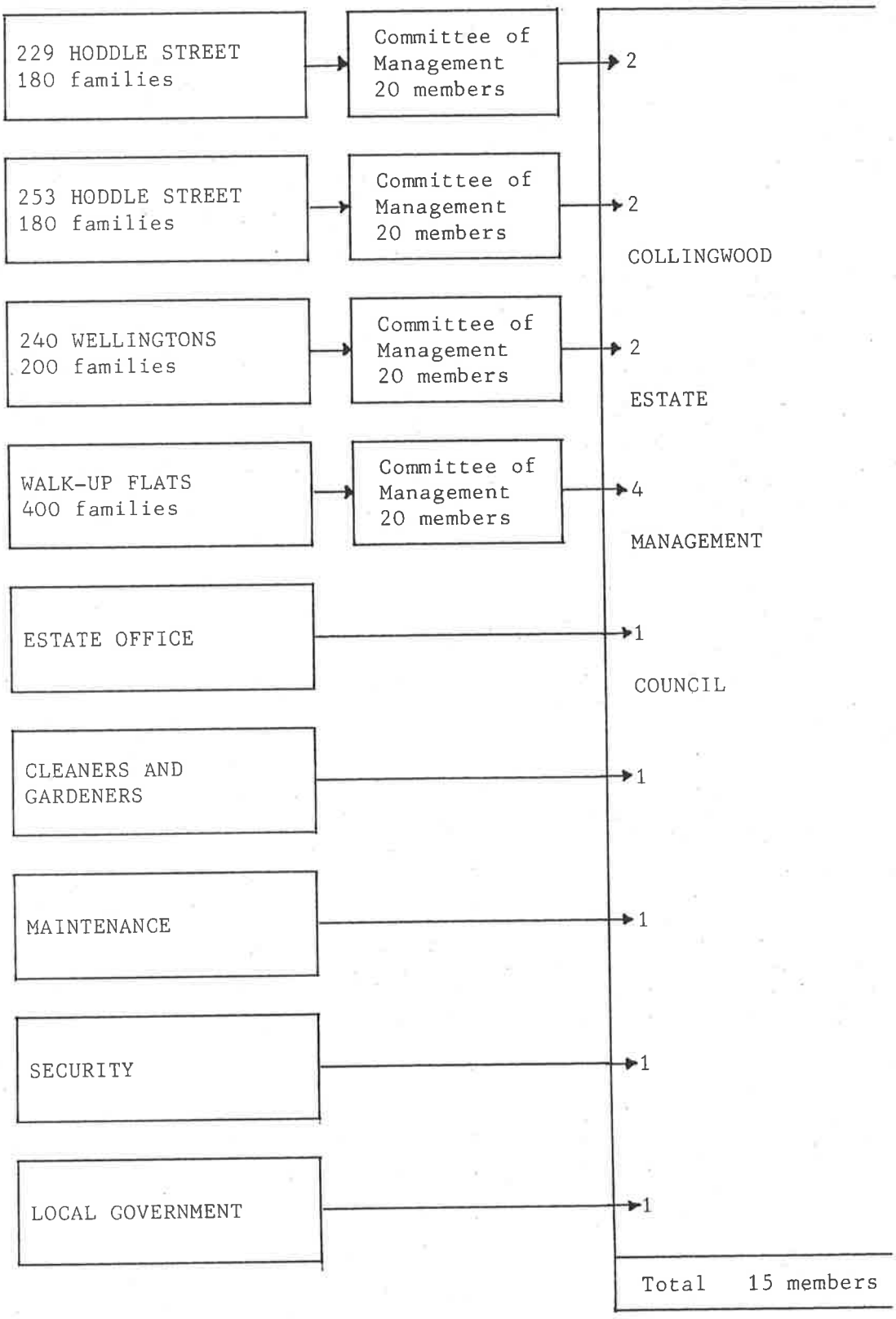


Diagram V-1b: Proposed structure of Collingwood Estate Management Council - option 'B'

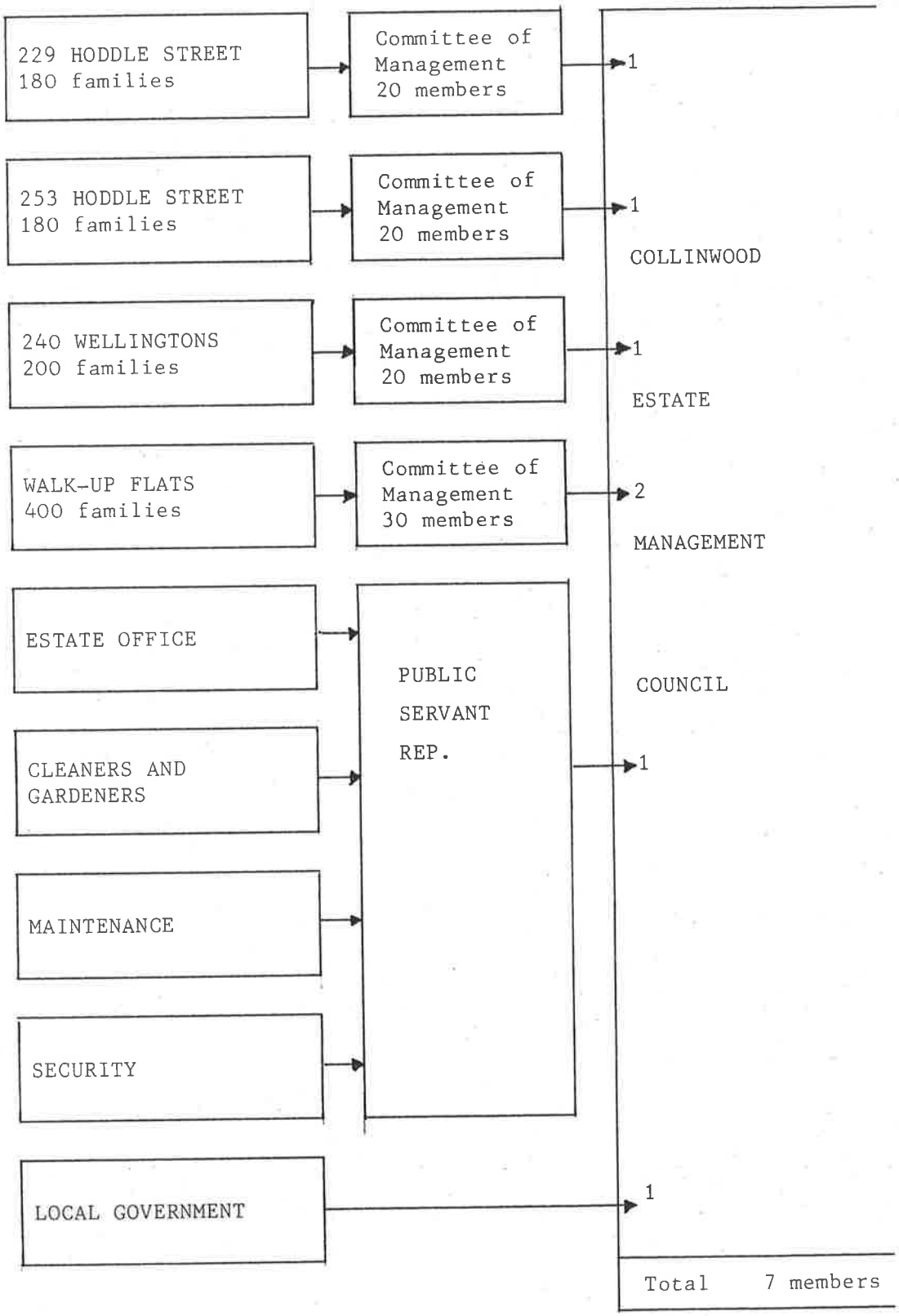
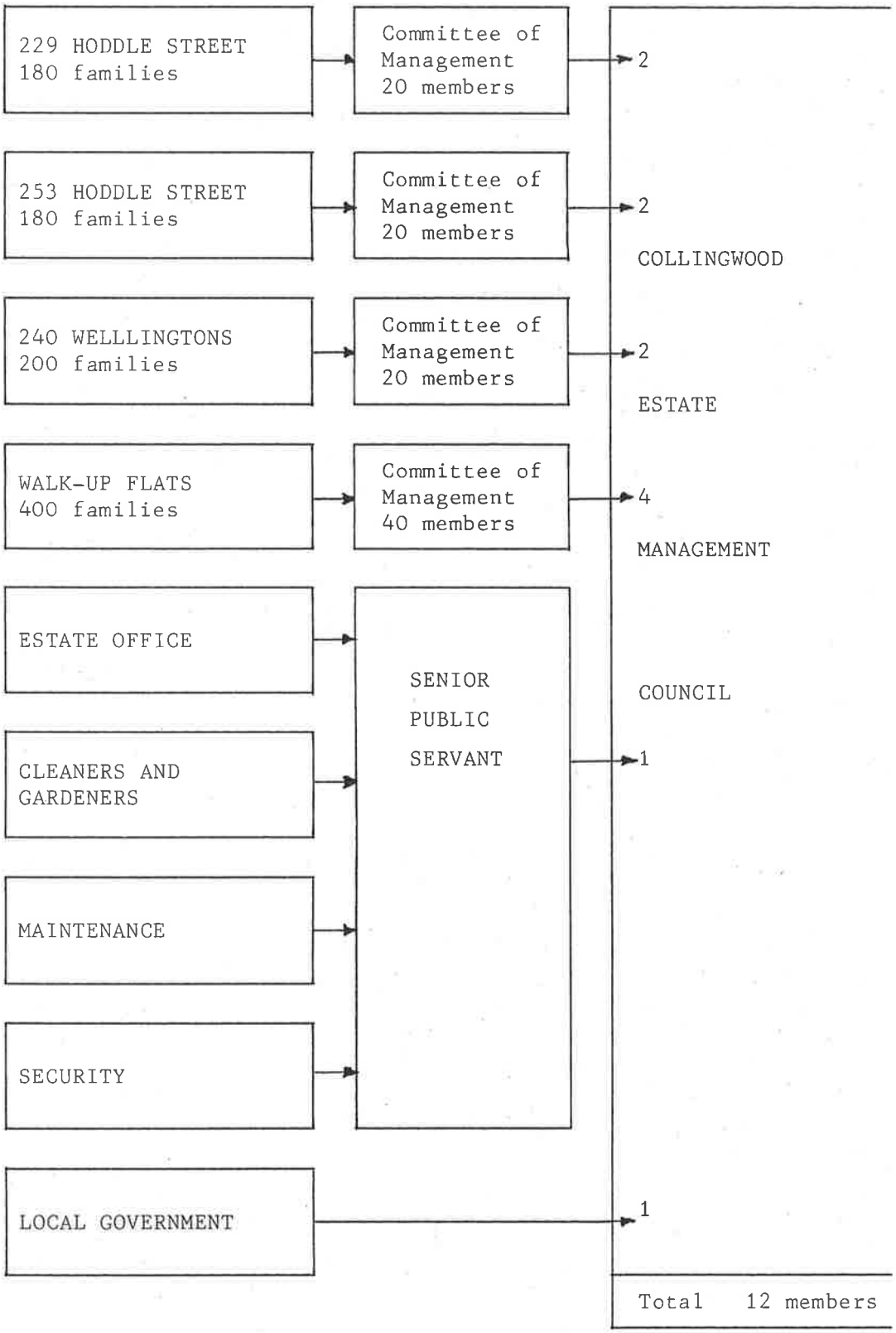


Diagram V-1c: Proposed structure of Collingwood Estate Management Council - option 'C'



3. Estate Committee: This was the highest level in the management organization and communication order of hierarchy. At this level the representative of the Ministry was an active, powerful member, influencing all decision-making through its political and economic resources.

As noted before, initially the Collingwood Council's representative was part of a similar committee (i.e., the High-rise Working Party). But, once it was dissolved and the new management established, the Collingwood City Council was disregarded. Part of the reorganization seemed to be a political manoeuvre by the MOH to get rid of the City Council. The fact that the Council had its own housing policy and, due to its local representation, was supposed to take care of the housing interests of the local people, was ignored by the MOH. The reason given was that they did not have anything to do with upgrading. But one suspects that the reason the MOH ignored the City Council was more to do with power and power-sharing.

Decisions for all the housing estate were made here: parking, landscaping, community facilities (i.e., kindergarten and common rooms) and general security.

During upgrading the high-rise blocks, the organization and representation at the estate level of management were discussed in the Estate Committee and alternatives drawn (diagram V-1), but no final decision was made. In February 1987, when the high-rise buildings were visited for the last time to test after a period of time, the

self-management system and tenants' satisfaction (i.e., the final methodological criteria outlined by the Estate Improvement Programme), it was discovered that the tenants' involvement in management never materialized. In fact, during this final interview it was found that the tenants were not participating at all in the management of the high-rise buildings.

In an interview during the upgrading of the high-rise buildings, the community officer indicated certain tenants' satisfaction with the above-stated hierarchic management and channels of communication. Even though the MOH had dictated certain limitations on the responsibilities of the management of committees, there seemed to be certain tenants' involvement in the process. However, among the tenants, a certain amount of dissatisfaction was still observed. Apparently this was due mainly to the tenants' lack of economic and political power on each of the management levels which prevented them from implementing any of their own decisions. Since the representative of the Ministry was not part of the management - except at the estate level - at the floor and block level, no final and explicit decisions could be made without reference to the Estate Committee. The community officer stated that if the tenants had more economic power and knew how to budget the construction according to their priorities, then they could make better decisions on the appropriate material and preference. The Improvement Programme would have been much cheaper and the tenants would have been more associated in the planning and design process. In other words the "sense

of place" in the high-rise blocks would have been better achieved as a self-expression of the tenants.

One may have a better understanding of the relationships between the MOH and the tenants' management committees by looking at Layder's conception and differentiation of structure into "contextual" (i.e., the MOH) and "generative" (i.e., the tenants' committees) (see chapter four). The former structure was not a representation of the tenants' corporate "action", but of the bureaucracy in the MOH. This seems to be the reason for observing that the MOH according to their feedback information outlined certain constraints on what the tenants could create in the built-environment, while the latter (i.e., the "generative structure" or the tenants' committee) was the corporate "action" of the tenants and therefore could be used internally for creating the spatial characteristics that give the meaning of the "sense of place". However since the tenants' structure lacked power and skills, interaction of the "generative structure" and "action" and the production of the appropriate built-environment was limited.

A more appropriate system may have been one with less vertical decision-making channels. At each hierarchic level of management there was to be a ministerial officer with the necessary political, economic and technical power to enter into a dialogue with the tenants, to learn, share and to materialize the tenants' decisions. However many of the bureaucrats who were interviewed, indicated their dissent

with regard to a dialogue with the tenants. As indicated before, the bureaucrats felt that tenants' involvement and dialogue may result in a dramatic fall in their bureaucratic power for decision-making and control over the Scheme. Besides, having the tenants making their own decisions, may also be undesirable to the politicians who liked to see their party ideology implemented in public housing policies.

E. THE SURVEY TO IDENTIFY THE TENANTS' ATTITUDE TOWARDS THE HIGH-RISE

As stated before, part of the methodology outlined by the Estate Improvement Programme was to carry out a survey entitled: "High-Rise Residents Attitude Survey - July 1982", to identify the increase in satisfaction due to upgrading the built-environment. The result was seen as a means to establish the feasibility of community involvement in the planning and design process. The survey was also a means to objectify and thus complement the decisions made in the management committees.

Therefore, prior to any development, in July 1982 a sample residence satisfaction survey was carried out by a psychologist, who was a consultant to the Development and Property Division of the MOH. He set out to assess the reaction and attitude of the tenants to their built-environment, to identify their problems and priorities and to measure the success of the high-rise Improvement Programme. The objectives of the survey were indicated as follows:

* Gather information to determine residence preference as regard to the proposed improvement;
* Determine residents' reaction to certain consequences of the improvement programme; especially the rent increase;
* Scale the success of the community participation in the improvement programme;
* Collect data that explain particular residents' opinion;
* Study the feasibility of the community participation policy and its adaptability to other housing estates.

To determine the success of the tenants' involvement programme further elaboration of the above objectives was seen to be necessary. The study noted that the options offered by the MOH for improvement had to reflect the tenants' choice. If that was the case, any decisions ought to reflect a certain increase in satisfaction. However in the high-rise programme the options and the decisions did not reflect the tenants' choice. The tenants' involvement programme had overlooked the tenants' "action" and self-expression in the spatial settings. Moreover, the objective of the attitude survey, which was to indicate the success of the tenants' involvement, had to avoid becoming a test for indicating whether the improvement programme had solved the problems. In other words, the test should not become an outline of the tenants' existing spatial attitude before, and after the upgrading. To test the tenants' involvement programme the survey should be continuous throughout the process of the Improvement Programme.

The variables considered by the survey to measure satisfaction of the tenants' involvement process were:

* Reduction in vandalism
* Rate of friendship and co-ordination
* Perception of privacy
* Improvement of residential identity
* Intention to move away
* Tolerance of increases in rent.

Apparently the methodology proposed by this survey, to identify any increase in satisfaction, was never considered. In February 1987, when the high-rise was re-visited, the estate officer did not display any knowledge of this study nor was she aware of whether satisfaction had increased. One is tempted therefore to question the MOH's intention in proposing the policy of community involvement in the planning and design process.

The section of the survey indicating the success of the tenants' participation in the improvement process, was quite interesting to note. The survey strongly related the communication system and management organization to the ethnicity of the tenants. The Australian and U.K. citizens were somewhat involved in the participatory programme and utilized the system. They comprised about 50 per cent of the residents who participated in the process, while only 30 per cent of the Turks and Greeks participated. The result of the survey seemed to relate tenants' involvement to the language barrier and the <u>a priori</u> knowledge that each group had of the participatory process. Both factors were very much related to the cultural diversity within

which the tenants-landlords relationship had to be identified. One can speculate intelligently and note that participation for an Australian is a democratic system to be used to its fullest extent for achieving certain objectives, while for a Turk it may seem a channel used by the landlord (MOH) to identify discontent and thus create an excuse for eviction. This may be a reason why the survey noted a cultural barrier between the Turks and the Greeks and the management. The housing officer had to understand the conception of participation in each culture and then try to assure that tenants' involvement is a constructive and feasible process for environmental upgrading. The Australian and U.K. citizens understood the objectives of the involvement process, while the others did not. Of those who participated in the floor co-operatives only 52 per cent thought it was useful. Thus, the result of the survey indicated that for communicating with each culture, different communication and tenants' involvement processes have to be considered.

F. THE ROLE OF THE COMMUNITY OFFICER

It was noted previously that in February 1982, an Estate community officer was appointed by the MOH to liaise with the tenants, convey the Ministry's intentions, - hence their agent - organize the tenants' management and monitor their attitudes and needs. Therefore, throughout the commencing stages, the role of the Estate community officer was to establish an appropriate channel of communication

and implement the policies of the MOH. For the former, it seemed necessary to establish a legible semantic system between all the parties involved - that is, different ethnic groups among the tenants, community officers, technocrats and architects. The tenants' "action" and the relevant symbols of the spatial settings had to be understood by all who were participating in the system. Thus the community officer had to:

1. attempt to make the tenants' symbols and "action" legible to all parties;
2. through his experience be able to establish the channels of communication. It seemed that many of the tenants could not relate to or comprehend architectural drawings, models and technical terms;
3. gain the confidence of all parties. In the early stages of upgrading the high-rise buildings, the community officer had to work very closely with the tenants. As stated before, this was necessary to establish and discover an appropriate channel of communication. Even though the community officer was employed and was the agent of the MOH, his relationship with the tenants made him the tenants' advocate.
4. economically and politically be independent of the MOH. A better suggestion may be for the officer to be employed by the tenants

Apparently the double role of the community officer and definition of tenants' involvement was resented by many

of the bureaucrats in the MOH. The bureaucrats saw the officer only as their agent and a conveyor of their decisions and proposed alternatives, not as a party to organize and convey the tenants' "action".

Therefore, one may conclude that a bifunctional housing officer to carry the job of two conflicting interests (i.e., MOH vs the tenants) was inappropriate. Being both the agent of the MOH and the tenants' advocate, made the officer disloyal to both. As a result, the dialectic synthesis between the two parties - a necessity for an appropriate tenants' involvement - never materialized.

G. THE ROLE OF THE CONSULTANT ARCHITECT

In proposing the alternatives and the approval for the environmental upgrading, the consultant architect - employed by the MOH - was given the opportunity to enter into a dialogue with the tenants and thus become more involved with the tenants than the Ministry. Note that the architect was an independent consultant and not related organizationally to the Ministry, except through his consultancy contract and fee. He considered and treated the tenants as clients and the Ministry was merely his financier. It seemed that the architect used to listen more to the tenants' attitude than the Ministry. In other words, he also became somewhat of a tenants' advocate. The bureaucrats, however, since they saw the Ministry as the financier, wanted more control, objected to the developed

architect-tenants relationship, and saw the Ministry as the legal client and the tenants as only temporary occupiers.

Most of the above misconceptions of interrelationships seemed to be the result of a lack of any explicit definition of the involved parties, clarification of terms of reference and the intra-parties' relationships (i.e., the different ethnic groups of tenants, the MOH, the architect and the community officer). Each party related to the other in accordance with their own interests, intentionality and "action". The bureaucrats in their definition of participation, saw their control of the process as paramount. Right from the initial stages they saw tenant involvement only as a choice between an approved set of alternatives. The bureaucrats did not consider the tenants sharing in the decision-making operation and formulation of spatial conception as part of the involvement process.

H. THE ROLE OF THE CITY COUNCIL

Co-ordination and co-operation with local government and agencies was stressed all through the initial policy formulation of the Estate Improvement Programme. However, this did not occur in the planning and design process carried out in the Collingwood high-rise buildings. Except for the High-rise Working Party, the local agencies' and local council's contribution was insignificant. None of the local social and government institutions was consulted for outlining the programme, choosing the community officer or

selecting the architect, which resulted in an antagonistic relationship between the local council and the MOH.

Besides, as the redevelopment consisted mostly of upgrading the existing built-environment, planning permission was not required. The Collingwood City Council having less power, therefore, was not involved fully in the planning and design process and their attribute, as a party with an input in the process was minimal. However, being the local planning authority and supplier of municipal services, one expects from them a more participatory role. Their claim of being the advocate of the tenants and being interested in local public policies, as indicated in their 1987 draft of the housing policy, was not very indicative in the high-rise upgrading programme. Since they represented the community on the local level, their involvement in estate management would have been appreciated.

I. CONCLUSION OF THE HIGH-RISE STUDY

It is quite explicit that the involvement process carried out for upgrading the high-rise buildings did not abide by the methodological criteria outlined in the Estate Improvement Programme. The proposed management change to accommodate the tenants' decision-making process, even though it was outlined and debated, was never fully implemented. Nor was the process put under scrutiny to evaluate it properly, as intended. The whole operation therefore did not achieve the aim and objectives outlined in the Green Paper and the Estate Improvement Programme.

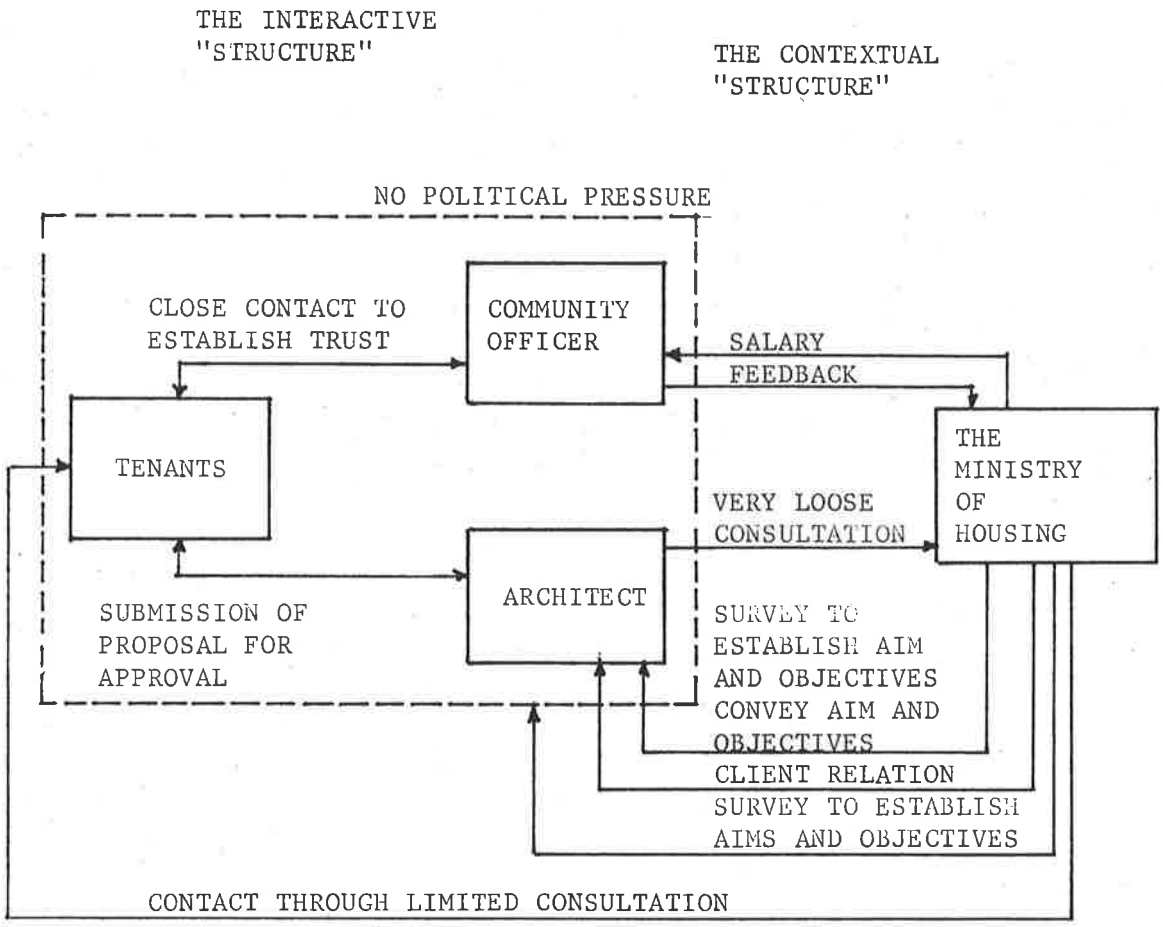


Diagram V-2: System of communication and relationship of parties involved in upgrading Hoddle Street high-rise buildings. Note that the Ministry of Housing controls from the outside the whole system.

Note that in this diagram there is no provision for the local city council.

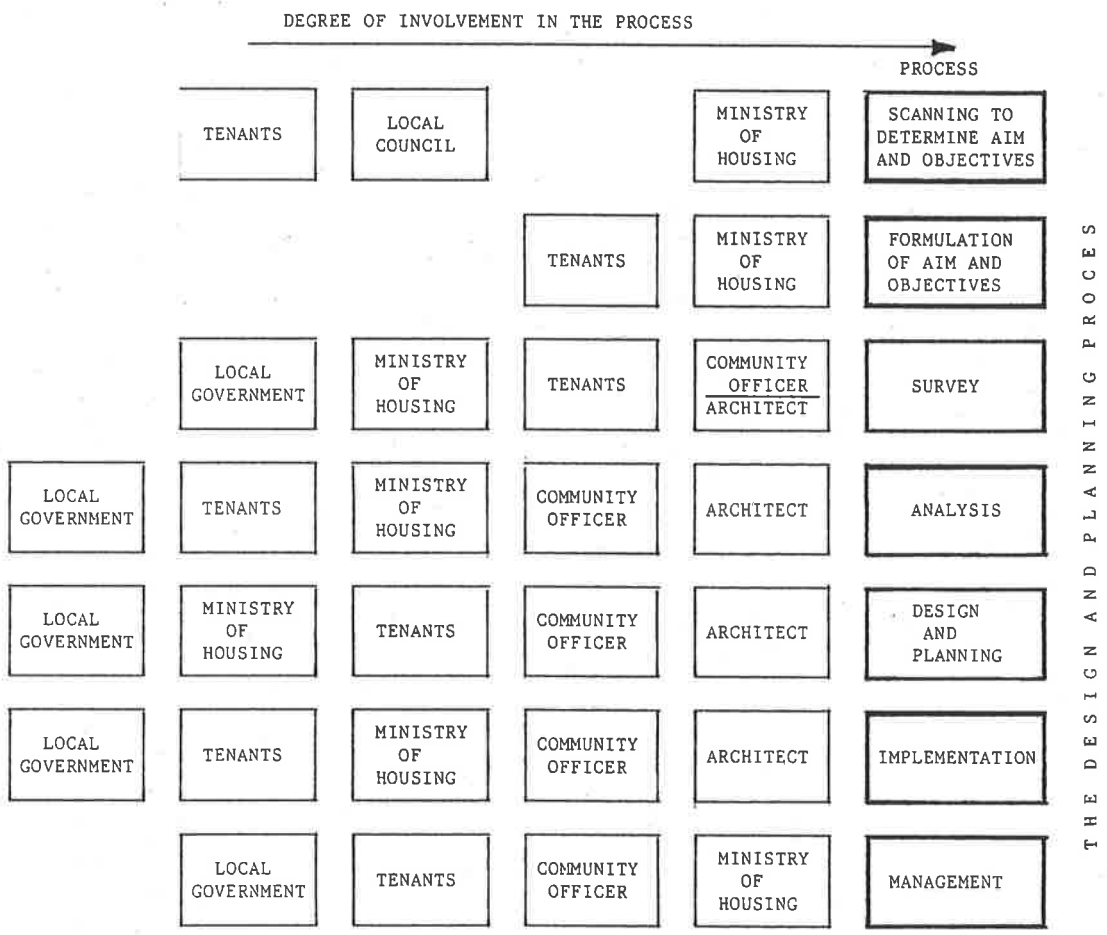


Diagram V-3: The parties and their degree of involvement in the planning and design process.

The reason for the limitation on the involvement process seemed to be disclosed in the comments made by the bureaucrats in the MOH. Their notion of what and how should the tenants participate was incongruent to the other parties who were involved in the planning and design process for upgrading the high-rise blocks.

The generative mechanism that had to interact and be a catalyst to materialize the appropriate interaction between the built-environment and the tenants' "action", was neither preconceived nor fully expressed by the bureaucratic structure of the MOH. Yet one cannot deny that the tenants, with all their limitations, were not involved and the parties were not interrelated (diagram V-3). In fact the restriction placed on the tenants' involvement process had identified certain important ideas and characteristics of the "structure" and the interactive process. The role of each participant and their relationship to the planning and design process (diagram V-2) was apparently made much clearer later in the process than it was initially and the contextual mechanism that controlled their operation was better understood.

The contextual mechanism of control strongly suggested the notion of a phenomenon external to the tenants' "action", yet an important component of the interactive process. The contextual mechanism was the externalities that, even though they seemed to be beyond the control of the tenants, contributed to the planning and design process and the achievement of the "sense of place". The external-

ities were defined, in this context, as the uncontrollable and/or unforeseen factors that might facilitate or constrain the tenants' involvement in the proposed planning and design process. The externalities may be classified into social (e.g., internal conflict, degree of homogeneity of the tenants and the degree the symbol systems and ideology were in common and acceptable to the community); economical (e.g., household income, the budget for up-grading and capability of tenants to accept and adjust to increases in rent); political (e.g., internal or external conflict in or among the involved parties); organizational (e.g., the existing system of management and bureaucracy) and spatial (e.g., the characteristics of the existing built-environment).

The major apparent externalities seemed to be due to the underdeveloped state of the communication system and the process itself. The main aim and objectives of the planning and design process, as formulated by the MOH, was to make the Ministry understand and gain knowledge as to what the process involved. Tenants' involvement was to be monitored and revised, as a future reference, whenever community involvement was required. Unknown factors were to be discovered and formulated to establish a more objective analysis. Furthermore, the lack of an appropriate model and methodology for community involvement created for the bureaucrats many unpredictable factors that contributed to their incomprehension. The bureaucrats thought that a general model could be drawn once the final analysis of the

process was carried out and an evaluation made to determine its feasibility. But even though the MOH may have obtained a clearer view of the participatory process - thus formulating better manipulative tools, it seemed debatable that such a general and prototype model that considered space-time and the paradigmatic dimension was possible. In fact in each high-rise that had to be upgraded the paradigmatic dimension had to be specifically identified. Hence, the whole idea of testing and outlining from one operation a general process of tenant involvement and self-management was debatable. Thus to reduce these externalities due to the process one had to propose a certain flexibility in the process itself.

As stated before, up until February 1987, the MOH had not carried out an explicit evaluation of the planning and design process, nor had it identified the tenants' attitude towards the tenants' involvement, the aim and objectives outlined in the Green Paper and the Estate Improvement Programme. From the attitude and the lack of knowledge of the officer, it was doubtful whether such an operation would ever take place. One can only cynically conclude that the whole exercise was a public relations one or, the MOH found that, to achieve an appropriate and successful operation, power had to be shared among all participants, even though an appropriate system of communication was explicitly identified. Any evaluation of a system of community involvement in the planning and design process without considering power and its distribution was rather obscure.

It is important to note that in February 1987 when the high-rises were re-visited, some of the objectives of the Green Paper were still unresolved. The non-existence of self-management and the outdoor spaces (i.e., public gardens and parking) were still impersonal and vandalized. In fact parts of the upgraded spaces were also vandalized. The underground parking was shut and apparently never developed. All along the facade of the ground floor, graffitti was the only self-expression that one noticed. All these were indications to suggest that tenants' involvement did not achieve, to any significant extent, the objectives outlined in the Green Paper.

VII. FRANCIS STREET TERRACED HOUSES

Since the initial stages of its conception, Francis Street terraced houses have been extensively debated. Local newspapers (V-11), academic researchers (Sanders, 1984) and architectural reviews (Davey, 1985) have commented and analysed its achievement. However, the study undertaken here explores this development with reference to the theory outlined in chapter four. Therefore, this analysis of the Francis Street terraced houses is to identify some of the components that are necessary for a dialogue, establish the importance of the paradigmatic dimension and the appropriateness of community involvement in the planning and design process for achieving the meaning of the "sense of place" in space.

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V-11: A press release indicating the effort of the Ministry of Housing towards public relations. The Age, September 17, 1983.



Drawing V-12: The terraced houses on Francis Street. Note that spatial unity and harmony is achieved by considering the symbol system and ideology of the tenants. While the "action" of each tenant has given each dwelling a personal identity and self-expression.

The sources of information for this case study were:

1. interviews with officers of the MOH and local planning authorities, consultant architects, academic researchers and tenants;
2. meetings held between the consultant architects and the MOH;
3. local newspapers and architecture magazines;
4. MOH internal papers and files dealing with initial conceptions and economic and architectural feasibility studies;
5. pre- and post-occupancy evaluation questionnaire and answers (analysed by the author);
6. progress reports; and
7. notes made by Saunders (1984) of the meetings between the architects and tenants.

In late 1982, the MOH proposed a small pilot project where the tenants were to be directly involved in the planning and design process. Similar to the high-rise upgrading, the aim was to study the process and its feasibility for achieving an appropriate built-environment with a high degree of satisfaction for the user. A small infill site was therefore chosen in Francis Street (i.e., adjacent to the Collingwood Housing Estate), suitable for five terraced houses. The methodology proposed a continuous and direct involvement of the tenants with the architects in all the stages of the design process. It was decided that the tenants would contribute directly:

1. their preferred location on site;
2. through a census agreement the exact location on site of each household;
3. in the layout of the internal rooms in accordance with the Ministry's housing standards;
4. in the choice of the finishes among several proposed alternatives;
5. in the choice of utilities; and
6. landscaping.

Even though the general aim and objectives of the process were established by the MOH (based on the strategies of the Green Paper), the specific objectives and the alternative proposals to achieve them were expected to be formulated by the tenants. In fact, according to their "action" and symbol systems, each household was expected to prescribe its own spatial characteristics.

In their design guidance the MOH recommended basic pre-formulated rules. Without considering the scale of the scheme, the technology and the industrial necessities, the guidance proposed the creation of a modular component, similar to Habraken SAR (Hatch, 1984), which the tenants could manipulate, under the guidance of a professional member of the group, to create their built-environment. That idea, however, did not materialize beyond its conceptual stage.

For the scheme the MOH proposed the involvement of seven to ten professional persons. The list included managers, technical officers, architects, surveyors, land-

scape architects and engineers. For each, the number of hours involved was estimated.

For designing and implementing the design process the MOH chose a firm of two external consultant architects. The choice was based on whether the architects were experienced in the proposed type of operation. It is important to note that the tenants were not consulted in the selection. Therefore, there was no initial client-architect relationship between the architects and the tenants.

A. THE CHOICE OF TENANTS

The choice of tenants to participate in the project was made by the appointed architects and the community officer of the high-rise buildings, under the guidance outlined by the Ministry. There were to be five different families living in the adjacent high-rise buildings. After a thorough research of the tenants in the high-rise buildings, it was decided to choose a single parent, two parents, an extended Vietnamese family, and a household with two out of five disabled members. The choice was based on the assumption that the scheme, being under scrutiny and evaluation, needed a diversity of occupants and uniqueness in internal household characteristics to succeed. It was also based on the unsuitability of the flats and the tenants' indication of any interest in the process. However, the architects remarked in their interview that some of those who were chosen did not know what they were involved in.

Once the final choice was decided, the Ministry was asked formally to approach the selected tenants. Some tenants and bureaucrats in the MOH objected to the selection criteria. They expected the selection to be based upon the Ministry's housing waiting list, giving top priority to those who did not have shelter. This however, might have formed a uniformity among the tenants and hence created a different spectrum, inappropriate to the purpose of the Ministry's exercise (i.e., establishing an appropriate environment based on individual household characteristics). Besides, if the tenants' choice was based on the housing list, their choice of an appropriate environment would have been in accordance with their priority need: the acquisition of a shelter, not participation in a process. While those selected, being the tenants of the adjacent high-rise buildings, were somewhat liberated from a priori notion of a built-environment (to accommodate one of the basic human needs), and could look forward to a dwelling whose spatial characteristics accommodated more their intentionality and self-expression. In other words, the choice was made so that the tenants, besides having a shelter, might have the opportunity to express their existence in space.

According to the architects, the choice of tenants was very critical. They recommended that it might have been better to choose tenants from the top of the list and explicitly indicate to them the time and effort they were expected to donate to the planning and design process to

encourage enthusiasm all through the operation. The architects argued that usually the tenants who are chosen from the housing list are improving the quality of their built-environment, and therefore they see their benefit in moving into the public housing. While the tenants chosen from the high-rise buildings, evaluated their cost (i.e., the cost of moving to a new place and the expected increase in rent) and the built-environmental benefit they would gain by moving from the flats into the terraced houses. In fact the tenants were very much conscious of the expenses they had to bear due to relocation and increase in rent. As a result the MOH had to financially aid the tenants and eventually increased the cost of the whole scheme.

All through the operation, keeping the tenants' enthusiasm in participating in the process was quite important. At a later stage, the architects had observed that, due to the delay of the operation, financial restraint and misconception of the process, the tenants became indifferent. In fact some demanded shelter that did not strain their financial resources. The tenants insisted on knowing the necessary and sufficient information regarding the process and their relocation so that they could decide between their alternatives:

1. living in a flat constructed as a market commodity shelter with a modest running cost that did not consume their limited resources; or
2. living in a terraced house with spaces designed in accordance with their own "action" and symbol systems, but with a higher running cost.

According to the consultant architects, the change in the tenants' commitment and, later in the process, their indifference, seemed to be due to the lack of a proper channel of communication. This argument indicated communication to be a deterministic factor in the tenants' involvement. That deduction however is arguable. Even though an appropriate channel of communication was necessary, in time other major factors, such as duration of the planning and design process, financial and political restraints, may arise to govern the decision-making operation. It is apparent that at the initial stages a proper tenants' involvement scenario was necessary to outline some of the major factors that might have been confronted during the implementation of the scheme.

B. THE PROCESS OF PARTICIPATION OF THE TENANTS

The participation comprised six group meetings and twenty individual household meetings. Usually, in these meetings the tenants, architects and the MOH community officer were present. In general the bureaucrats saw these meetings as very time-consuming and complicated. However, the architects saw them to be appropriate for determining the characteristic of each household and for resolving any conflicting ideas among the participants. According to the architects, simplification of the whole operation would occur once sufficient time was given to the tenants to establish their intentionality and know their desired spatial characteristics. The possibility of simplification

was envisaged once the architects gained the necessary experience and knowledge to carry out the process and its communication channel. Besides, the community officer had to know explicitly his/her framework as the conveyor of necessary and sufficient information between the architects and the tenants. All through the process the architects, without the aid of the community officer, had to communicate directly with the tenants. What the community officer did was to impose the constraints made by the Ministry's standards (i.e., what can and cannot be done) on the entire operation.

At the first general meeting the architects attempted to gain the confidence of the tenants. The architects stressed the fact that they were wives, mothers and housewives and were aware of the problems in establishing an appropriate home. Even though mutual trust was necessary, this initial line of communication might have become a means for creating the architects' imposition on the tenants. The architects, by assuming that they knew what the tenants' appropriate homes had to be because they were mothers, wives and housewives, were attempting to design the spatial settings in accordance with their own self-expression and "action". However, the architects being from a different socio-economic class and culture, may have had a different a priori knowledge of the space that accommodates the "action" of the tenants as housewives, mothers and wives. Most probably the architects' symbol systems and self-expression of space were different from those of the

tenants. Because of the historical situation, meaning and cultural symbol systems, not all those who are wives, mothers and housewives have the same self-expression and "action".

During the early stages of the operation the architects used architectural drawings and 1:50 scale models for communication. The tenants, however, could not comprehend these techniques. Then later in the process, a direct spatial experience was introduced which included bus tours to terraced houses similar to those to be built for them. Besides showing the tenants a built-environment similar to the one they were going to have, these visits gave the architects an opportunity to observe the tenants' attitude to that type of housing scheme. This approach apparently established the necessary initial communication channel and the appropriate semantic to transmit, both ways, the meaning for the appropriate built-environment. However, it seemed it had its limitation and danger. Showing existing spatial settings as appropriate to accommodate the tenants' "action", may have ended in a spatial imposition of the architects' intentionality and self-expression. In other words, during the planning and design process, the architects were attempting to impose the spatial characteristics they saw as appropriate for the tenants. All this implied that bus tours were far from being sufficient. The architects therefore had, through other means, attempted to identify the tenants' "action" and the characteristics of the spatial settings that might

accommodate the tenants' self-expression and intentionality and thus with its symbol systems achieve the "sense of place".

In the past decade or so several tools, based on dialogue between a group of people, have been developed to identify human "action" and its spatial settings. Their basic theoretical and philosophical differences have eventuated into different methodologies. Lawrence (1985), for example, developed and used a modular system of basic blocks to create a real scale, flexible model to identify people's attitudes. Due to the magnitude of the model his technique is limited to internal dwelling spaces. While Sanoff (1978, 1979, 1981) formulated certain gaming simulation techniques, used in group dynamics, to generate people's critical observation and creation and become involved in discussions that might be formulated into environmental policies. Still others such as Alexander's (1977) "pattern language" have come up with techniques which are different from the notions of Lawrence and Sanoff (Grabow, 1983). However, all of these techniques are founded on a continuous dialogue between the people who are involved in the planning and design process.

At the initial meetings the architects inquired from the tenants about the existing layout of their furniture and the way it was utilized. The architects also asked about the tenants' private outdoor activities. Both architects then visited the tenants' flats in the high-rise buildings so that they could understand what the tenants

liked and disliked and identify family living patterns such as, cooking, dining and socializing.

In the individual meetings, the architects attempted to understand further the individual tenants' "action" and preference of spatial characteristics. The architects stated that the meetings were essential to determine the character and personality of each individual tenant.

During these meetings, due to the tenants' frustration and incomprehension of drawings, the architects imposed their own environmental meaning and conception on the tenants. As well, the architects imposed on the tenants the aesthetic qualities of the whole scheme. This also occurred when the tenants could not decide or were indifferent towards the architects' proposed spatial configuration. However in many places, mainly the interior and back yard spaces, the tenants knew in general what they wanted and could convey their needs. In fact for the courtyards the tenants wanted a private barbeque and a playing place for children: symbols of a detached suburban house.

Even though the community officer of the MOH was the catalyst, both the architects and the tenants found his attitude and the way he insisted on the Ministry's standards, restraining and objectionable. The standards, as the architects indicated to the Ministry, were based mainly on economic rationale. They did not allow many opportunities to accommodate individual variations. One of the tenants, for example, complained that her bedroom could not

be furnished by her old furniture and her only choice was to sell those items that were dear to her and buy new ones. The tenant further remarked, that this was going to cost her lots of money. Hence the standards were not flexible enough to accommodate this sort of personalization and individuality.

Apparently the bureaucrats very much stressed the economics of the project and the necessity for control. As one of them said, "This thing has gone too far. Is it not enough that we provide shelter for them?"

Commenting on this bureaucratic remark, a social worker, who was involved in the scheme, indicated in her research (Sanders, 1984), that the MOH just wanted to be seen as an "innovative organizer" whose priority was to publish brochures and make a public display (even in many conferences) of their progressive attitude towards the human being built-environment relationship. These projects also supported the validity of the Research and Development Division in the Ministry and their attempt to follow the policy outlined in the Green Paper. According to Sanders the process of tenant involvement in planning and design and its outcome was secondary to the bureaucrats in the Ministry.

C. THE ROLE OF THE PARTIES INVOLVED IN THE PROCESS

In this housing programme four independent bodies, each with its own objectives, were involved in the planning

and design process: the tenants; the architects; Collingwood City Council and the Ministry of Housing.

Even though the architects were not chosen by the tenants, and their obligation was to satisfy the contract and desires of the Ministry, right from the beginning the architects saw themselves as the advocates of the tenants, and thus treated them as the clients. Note that the Ministry, by choosing the architects, gave no alternative choice to the tenants. If by any chance the channel of communication between the architects and the tenants was obscure, the tenants had only one choice and that was to complain and ask the Ministry to change the architects. If the Ministry was satisfied with the architects, certain conflicts of interest were apparent. These conflicts were overruled because of the power the Ministry had over both architects and tenants. In this interrelationship the tenants, with no power to exercise, had no alternative choice. The architects on the other hand had to satisfy two clients: the tenants and the Ministry.

While the Ministry used its political, legal and economic power to control the whole process, during the tenants' involvement meetings, it nevertheless took a secondary role. The community officer - the representative of the MOH - never took an active role to liaise between the tenants and the architects, and through his involvement bridge the gap between them. The attitude of the officer created an information barrier between the MOH and the tenants. Since the architects were not educated in commun-

ication science (Sanders, 1984), they recognized the necessity of a third party (i.e., the community officer) to establish the channels of communication. Alternatively, the architects needed to educate themselves in communication so that they could interrelate with the tenants and convey to them the constraints imposed by the MOH.

The other government body involved was the Collingwood City Council. Besides granting planning and building permission, they saw themselves - through their social worker and their housing policies - as guardians of the community. The Council insisted that their standard not the Ministry's be applied and, as a result, delayed their planning and building approval. This resulted in the reduction of the tenants' enthusiasm and increased their complaints. Therefore, a powerful decision-making body, because it was denied involvement, restrained the planning and design process.

Except for the 1½ per cent increase in the consultant fee, the bureaucrats in the MOH did not explicitly object to the planning and design process. In general, through regular meetings, the Ministry had the necessary control over the whole development. The control was also imposed through the formulation of public housing standards and the general aim and objectives of the development. The community officer was also considered to be a mechanism for control. As was stated before, the consultant architects objected to the inappropriateness and the control imposed by the public housing standards. The architects proposed a

revision and adaptation of that document to fit the needs and aspirations of the tenants and the Council (i.e., the historical situation). However, if this proposition were adopted the MOH would lose one of its main mechanisms for control over the development.

Due to the implementation of the scheme, and lack of proper communication, the tenants became frustrated and lost their initial enthusiasm. Apparently they also needed time to establish the conception of their "action" and built-environmental desires. This implied more delay and a higher monetary cost of operation. It was assumed that once the tenants moved into the terraced houses they would experience and appreciate the quality of the spaces created by the architects. Frustration further developed because of the Ministry's refusal to change its standards and attitude to favour the tenants' "action" (e.g., adaptability of the tenants' furniture). For example, it was observed by the architects that when the tenants moved from the high-rise flats where living, dining and family areas were conceived as one space, to the terraced houses, where living, dining and family areas were separated, they became disorientated. The tenants did not know which room to use for family and which one for living. As a result they did not know how to furnish the rooms in the new terraced houses. All these factors that contributed to incomprehension and disorientation strongly suggest the importance of the historical situation within which people acquire their spatial meaning and knowledge.

It seems quite important to note here that through involvement in the layout of the interior spaces, the tenants had great influence on the external form of the terraced houses. In fact, it created a certain personalization of each individual house and established the scheme with reference to its occupants. At the same time the tenants demanded from the architects to have their built-environment in harmony with its surrounding. In other words, personalization and environmental harmony were formulated as the aim and objectives of the scheme and accordingly implemented. They were achieved by involving the tenants continuously in the planning and design process (drawing V-12).

D. EVALUATION OF THE SCHEME

The evaluation of the project was to include:

1. The efficiency of the scheme: This comprised the capital cost and a comparative analysis with other developments which provided a similar quality of life and housing. Note that the quality of housing was never defined. However, since the buildings were tailored to fit the tenants it was assumed that capital expenditure was maximized. As a result higher satisfaction, fewer requests for transfer, less maintenance cost, less vandalism and a more stable community were envisaged and were to be considered in the evaluation. (Note that the tenants' involvement cost $A4338. Money allocated for the project was $A283,000 and total cost $A323,000.) (MOH - cost analysis of Francis Street, Smyth 1983.)

2. Evaluation of the process throughout the project: This included the evaluation of the tenants' participation in the design, administration and methodology.

3. Post-occupancy evaluation: This took into consideration the final product, the attitude of the tenants and the design effectiveness of the process. For appropriate evaluation, questionnaires were given on two occasions to the tenants: once when the scheme was terminated and the other after a certain time had elapsed.

   The architects also were given a questionnaire to express their views and evaluation of the process.

However, up until February 1987 the analyses of these evaluations, to identify the success of the process, had not been done. But from a general overall look at the answers to the questionnaires the following were deduced:

1. Overall there seemed to be great satisfaction.
2. A pre-project guidance was seen necessary.
3. Right at the initial stages of tenants' involvement, the tenants had to be informed of what they were being committed to.
4. The architects did not know explicitly who their client was (i.e., the tenants or MOH).
5. Throughout the process a change in command of an involved dominant power (i.e., the MOH), disrupted the whole process. It seemed that certain administrative problems in the Ministry had taken their toll of the scheme.

6. The objective of the community officer as a liaison officer had to be more explicit.

7. An appropriate channel of communication was seen as a prerequisite to the process.

8. The tenants could not relate to scale and models. However, they could relate to large sketches and bus tours of similar dwellings.

9. Apparently there was general dissatisfaction with the housing standards.

10. There seemed to be an urge and a necessity to personalize each house with reference to its tenants.

11. Harmony with the Collingwood built-environment and community common bonds were observed to be important.

12. The tenants when asked whether they would design their house differently, answered "yes". This indicated that further involvement was necessary to achieve a setting whose characteristics were appropriate to their "action".

13. Many of the answers explicitly indicated that the tenants' ideal was still owning a suburban home.

What was apparent in early 1987 was that community involvement strategies were no longer an important issue in the MOH. The Francis Street project, which at the beginning was a pilot, a learning operation and thus given certain priority, was buried in the bureaucratic files. Obtaining a real evaluation of the process seemed in early 1987 to be secondary to the MOH.

E. CONCLUSION TO FRANCIS STREET

In this analysis one can observe that the externalities which were previously defined (see the high-rise flats), exist here in the planning and design process. The externalities in this case study are also attributed mainly to the infancy of the process (i.e., the operation lacked a defined model and methodology) and the contextual restriction imposed by the MOH. One also observes that during the planning and design process, since the tenants did not know what they were letting themselves in for, they had their reservations about participating. Even though the initial tenants' enthusiasm was substantial, the cost of running the terraced houses, relocation of dwelling and the delay were considered as factors that would place restraints on the tenants' scarce resources and thus create further externalities in the process itself. The tenants, prior to choosing an alternative built-environment, made a rudimentary cost benefit analysis and thus evaluate their "action". Therefore the process of tenants' involvement in creating the "sense of place", has to assure a net benefit that exceeds the cost of moving and paying a higher rent. For this evaluation, the tenants have to acquire the necessary knowledge of the operation so as to eliminate, as much as possible, the externalities. Acquiring this knowledge is through the dialogue (i.e., as a learning process) between all the parties involved in the planning and design process.

At the initial stage of the planning and design process the above externalities seem to be unavoidable. This should not, however, discredit community involvement in the planning and design process. The operation of any model of community involvement requires a methodology and an identified communication channel and system to increase and modify the tenants' knowledge of the historical situation and thus reduce the number and effectiveness of the externalities. Again here, a proper learning process and a scenario that envisage some of the elements that create the externalities and also establishes the necessary channel of communication may be appropriate.

A comparison with the high-rise study strongly suggests that for achieving the "sense of place", the planning and design process and the means with which the tenants are to be involved, must be formulated with reference to the historical situation (i.e., space-time and paradigmatic dimension). Besides, it has to have certain flexibility to accommodate during the process both external and internal change.

Therefore, efficiency and evaluation of community involvement in the planning and design process seems to be related to the magnitude of the development, the experience, attitude and continuity of those involved, the historical situation and the communication system. However, Ms B. Smyth of the MOH, in her discussion paper (June 1983), outlined some of the options and stages of the design process where the community can be directly involved

in public housing. Based on the restraints that she envisaged in any development (i.e., time, budgetary, administration, circumstantial factors and size), the following general stages were proposed for the process for obtaining maximum benefit from community involvement:

* site plan
* design of unit
* choice of alternative
* selecting of finishes, fixtures and fittings
* management of the buildings.

Further on in her paper Ms Smyth outlined alternatives for community involvement. The alternatives were formed by the amount of involvement and the inclusiveness of the above stages in the process. Thus, a general methodology for community involvement in the Francis Street terraced houses and Dight Street (the next case study in this thesis) redevelopment was proposed. It therefore became the policy of the MOH in Victoria.

The Ministry seems to relate the degree and model of involvement to the magnitude of the project, not to what it aimed to achieve: the "sense of place" for the involved people. Nor does the Ministry consider or relate the involvement process to the human "action" and the historical or paradigmatic dimension, that this thesis has argued. The Ministry made the bureaucratic decision to bear the responsibility for the aim and objectives formulation, as well as the choice of architect, while the tenants whose self-expression in space, intentionality and "action" were to be accommodated, played a minor role in these decisions.

Thus the above classification of the MOH seems to be somewhat deterministic. The options given neither argue the externalities, nor the local societal conditions (i.e., "structure"). Furthermore, no specific indication is given to the restraint created by the process itself (i.e., the model of communication and dialogue). Therefore, a critical review and a thorough research into each particular case and what it is to achieve might be a prerequisite for process determination. Once the type of involvement and the particulars are determined, the model can then be explicitly formulated and implemented. It can be given to the participants so as to identify spatially their self-expression, intentionality and "action".

Therefore up until now, for an appropriate community involvement and dialogue, the following seem to be some of the main factors:

1. An explicit identification of the situation of the development.
2. All the participants have to know explicitly the framework of the process and what is going to be achieved.
3. Degree and model of involvement has to be in accordance with the objectives of the scheme, the historical situation, the attitude of the people and the societal organization, not the magnitude and scale of the project.

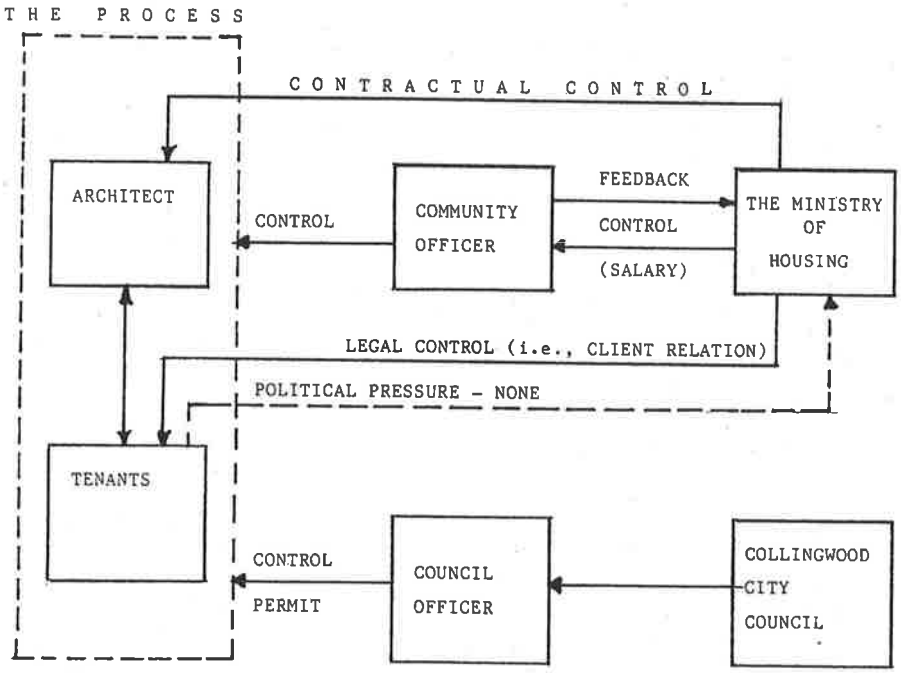
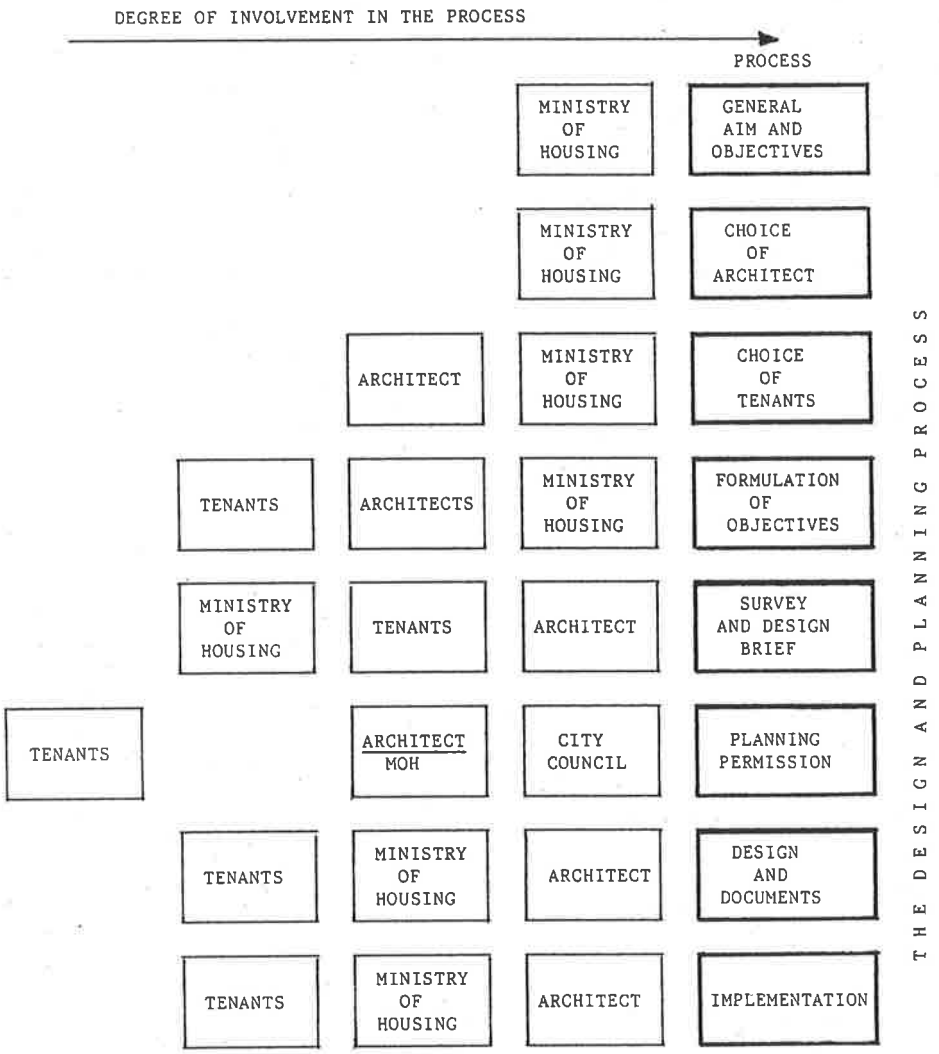


Diagram V-4: The system of communication and the role of each party in the planning and design process in Francis Street.



V-5: The parties and the degree of tenants' involvement in the Francis Street development.

4. The community has to know the limitations imposed by the "contextual structure" on the generative mechanism (i.e., "the structure").
5. Special emphasis has to be given to the communication system.
6. The involvement of the community has to occur in all the stages of the process.
7. The community involvement process is both continuous and educational.
8. The commitment of the participants has to be kept high all through the process.
9. Explicit identification of the relevant bureaucratic attitude is necessary.
10. Both the positive and negative attitudes of the participants seem to be necessary.

VIII DIGHT STREET WALK-UP FLATS REDEVELOPMENT

Part of the Collingwood Housing Estate is made up of 376 walk-up flats, known as the Dight Street flats, constructed in the 1950s. They were built as an outcome of the slum clearance and housing policies proposed by the VHC for the inner urban areas of Melbourne, as previously mentioned in this thesis.

Contrary to the previous two case studies the liaison community officer, presiding over the Tenants' Council, was employed in early 1982 by the Collingwood Community Health Centre. She was accountable to a steering committee

comprised of representatives from the Health Centre, Collingwood City Council and Collingwood Education Centre. The responsibility of the community officer was to co-ordinate all social and political programmes and facilitate in developing any necessary tenants' organization. Therefore in this case study, the MOH did not have any power over the community officer's activities and inclination.

A. THE PROBLEMS OF THE ESTATE

In 1981, a local group called the Collingwood Housing Experiment drew attention to the environmental problems in the walk-up flats. Besides vandalism, security and deterioration of the Estate, structural faults were becoming apparent in the bridges that connected the flats. An independent consultant engineer was then employed by the Tenants' Council to identify explicitly the magnitude of the structural faults. The result was critical and many of the flats had to be vacated and boarded-up, and their tenants sent to other estates.

A copy of the consultant engineer's report was sent to the MOH for further action. The Ministry then carried out another investigation by its own engineers. Thus in December 1982 the MOH sent a team to look at the structural stability of the walk-up flats and then made a choice between two options: upgrading the flats or redeveloping the entire Estate.

B. THE TENANTS' ORGANIZATION

From July 1982 the tenants had been meeting to discuss the structural condition of their flats. In November 1982, with the assistance of the Collingwood Health Centre, they met and decided to set up a tenants' council to liaise with the Ministry and organize the tenants. More specifically, the Council had to:

1. convene with the Director of Housing about the structural condition of the flats; and
2. take up tenants' concern over general maintenance, security, rubbish collection, laundry, flyscreens and playground for the children of the Estate.

At the first meeting it was decided to elect a co-ordinating group of twenty members. They were to meet every two weeks, be responsible for liaising with the MOH and publish a monthly newsletter to inform the tenants of the local social organizations, and of the meetings held with the Ministry, as well as the activities of the Joint Planning Committee.

The Joint Planning Committee comprised three members from the MOH, three members from the Dight Street Tenants' Council and three members from the Collingwood City Council. The Committee had its first meeting on 28th April, 1983 and subsequently met on a monthly basis to discuss in general the public housing issues in Collingwood; in particular the programme for redeveloping the Dight Street walk-up flats.

MONTHLY TENANT MEETINGS (ALL TENANTS IN WALK-UPS)

ELECTED CO-ORDINATING GROUP (WORKING GROUP)

- PRODUCTION OF NEWSLETTER, REPRESENTATIVES TO MEETINGS (e.g., MYER HOUSE etc.)
- LIAISON WITH MINISTRY OF HOUSING, DOOR KNOCKING, ORGANIZATION OF MONTHLY TENANT MEETINGS

INFORMATION TO ALL TENANTS ON ISSUES OF CONCERN

ISSUE MEETINGS

- DEMOLITION OF CROSS-OVERS
- SECURITY
- STRUCTURE CONDITIONS OF FLATS - PROPOSED COLLINGWOOD ESTATE MANAGEMENT COUNCIL

SPECIFIC TARGET GROUP MEETINGS

- AGED (SENIOR CITIZENS) TENANTS (ONCE A MONTH)
- VIETNAMESE TENANT (ONCE A MONTH)

Diagram V-6: Dight Street Estate Tenants Council Structure.

C. THE REDEVELOPMENT PROGRAMME

In December 1982, after identifying the structural problems, the MOH decided to redevelop the entire Estate. The development was to be implemented over a period of ten to fifteen years. The initial programme was only to replace the most structurally critical buildings. However, the tenants saw this programme as a patchwork job and thus refused it.

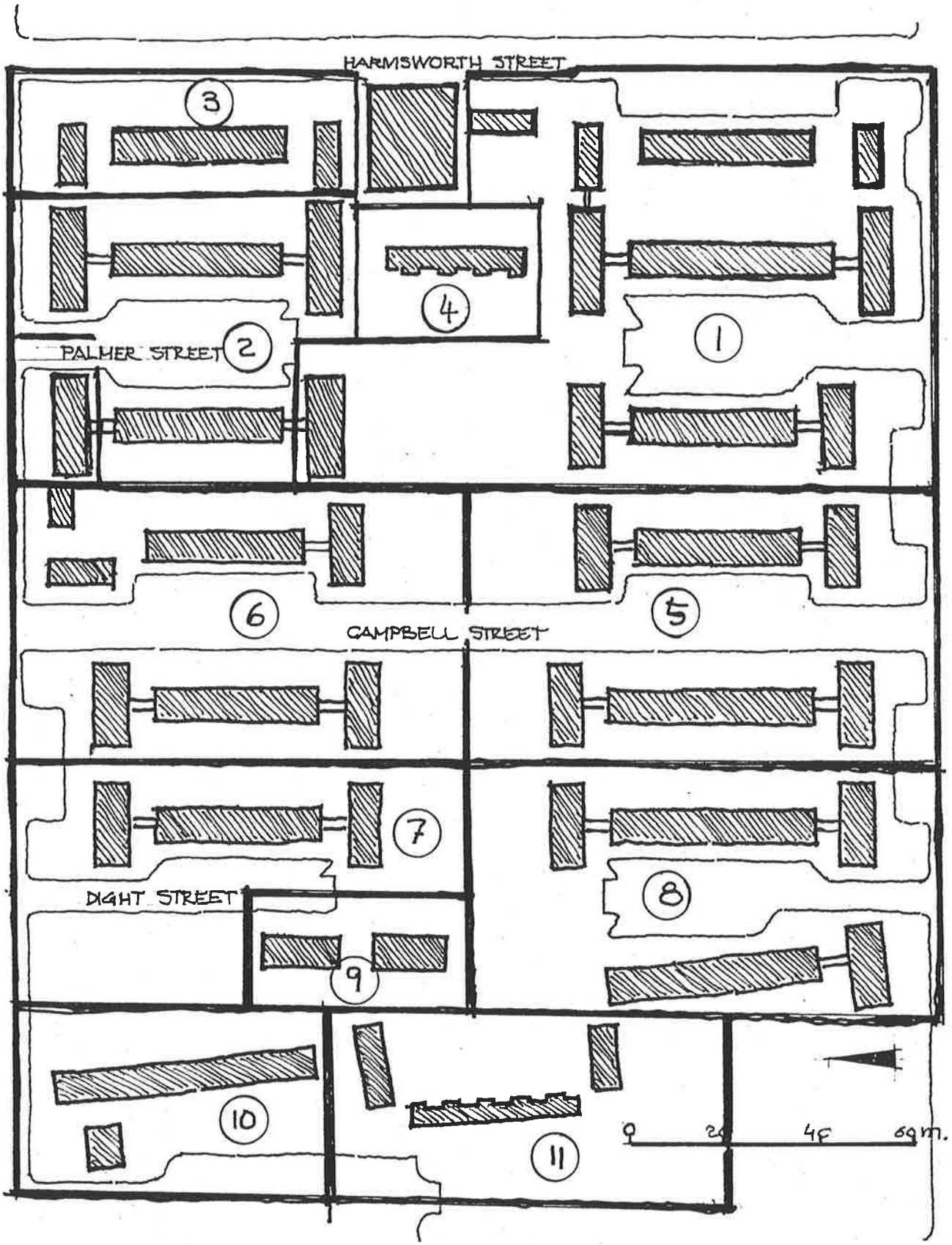
In early 1983, because of the dry season, the structural problems became worse. Twenty-four families had to be displaced. The condition of the Estate deteriorated and created instant problems which needed an entirely new set of policies. The tenants took the opportunity to demand from the MOH a permanent and comprehensive solution to their housing problem. As a result the MOH decided to redevelop in five years the entire Estate. An external consultant architect was chosen, briefed and then instructed to propose a master plan as soon as possible.

On April 19, 1983 at a meeting between the tenants and the Ministry, several issues relating to the Estate were discussed. Motions were then passed to:

1. Demolish all the walk-up flats and replace them with townhouses.
2. Each tenant, whose house was demolished, would have top priority and an option for a new dwelling.
3. The MOH was to pay removal expenses.

Drawing V-13: Demolition programme for Dight Street walk-up flats.

Source: The Ministry of Housing, Victoria.

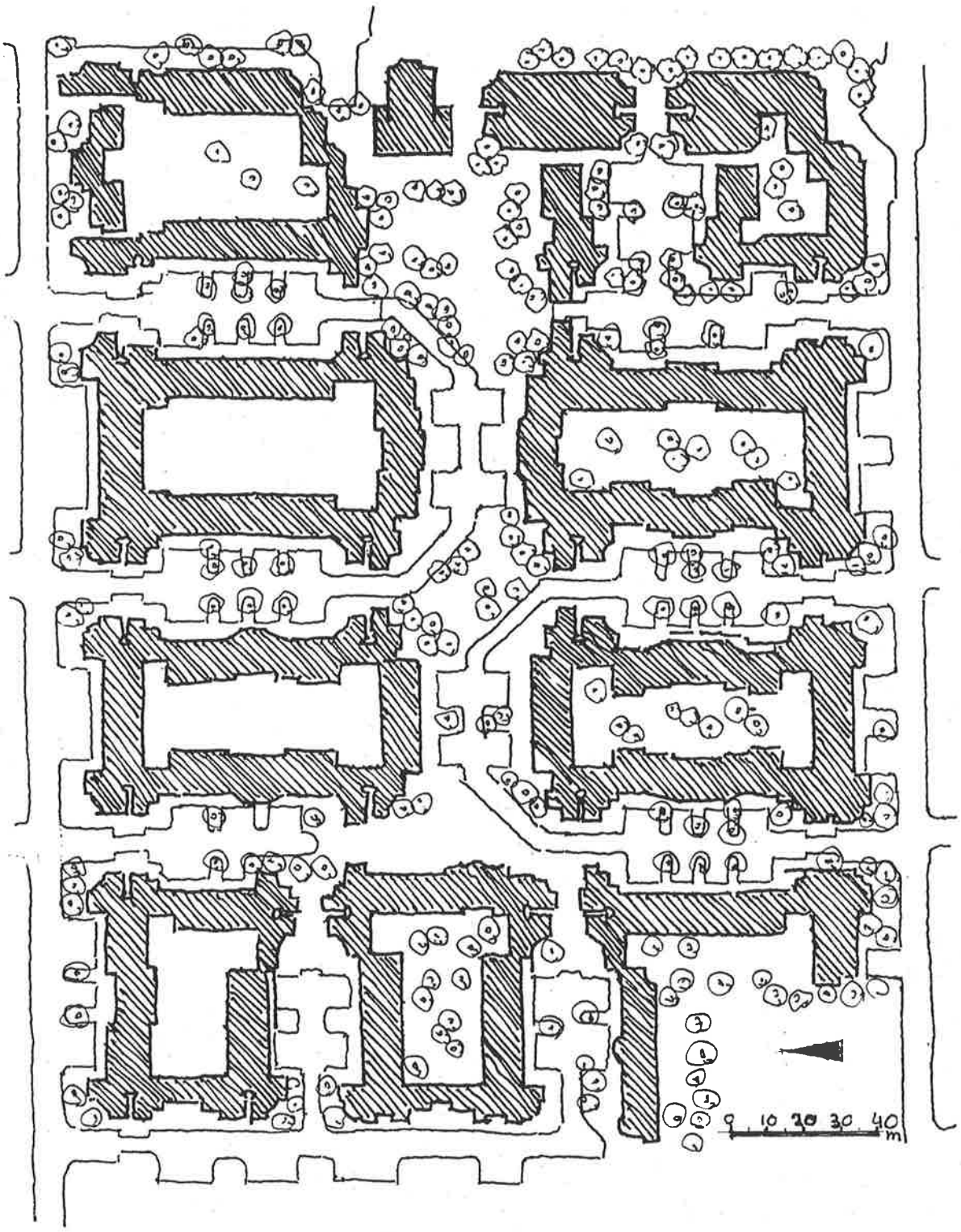


4. Meanwhile, the Ministry was to upgrade the existing laundry.
5. The tenants ought to have the option of buying.
6. During redevelopment the Ministry would consider the security of the tenants.

Due to their past experience and attitude, the tenants mistrusted the Ministry. Therefore, on April 22, 1983 the Tenants' Council wrote a letter to the MOH for a written reconfirmation of the above resolutions. On May 8, 1983 the Ministry confirmed in a letter all the points except the option of buying.

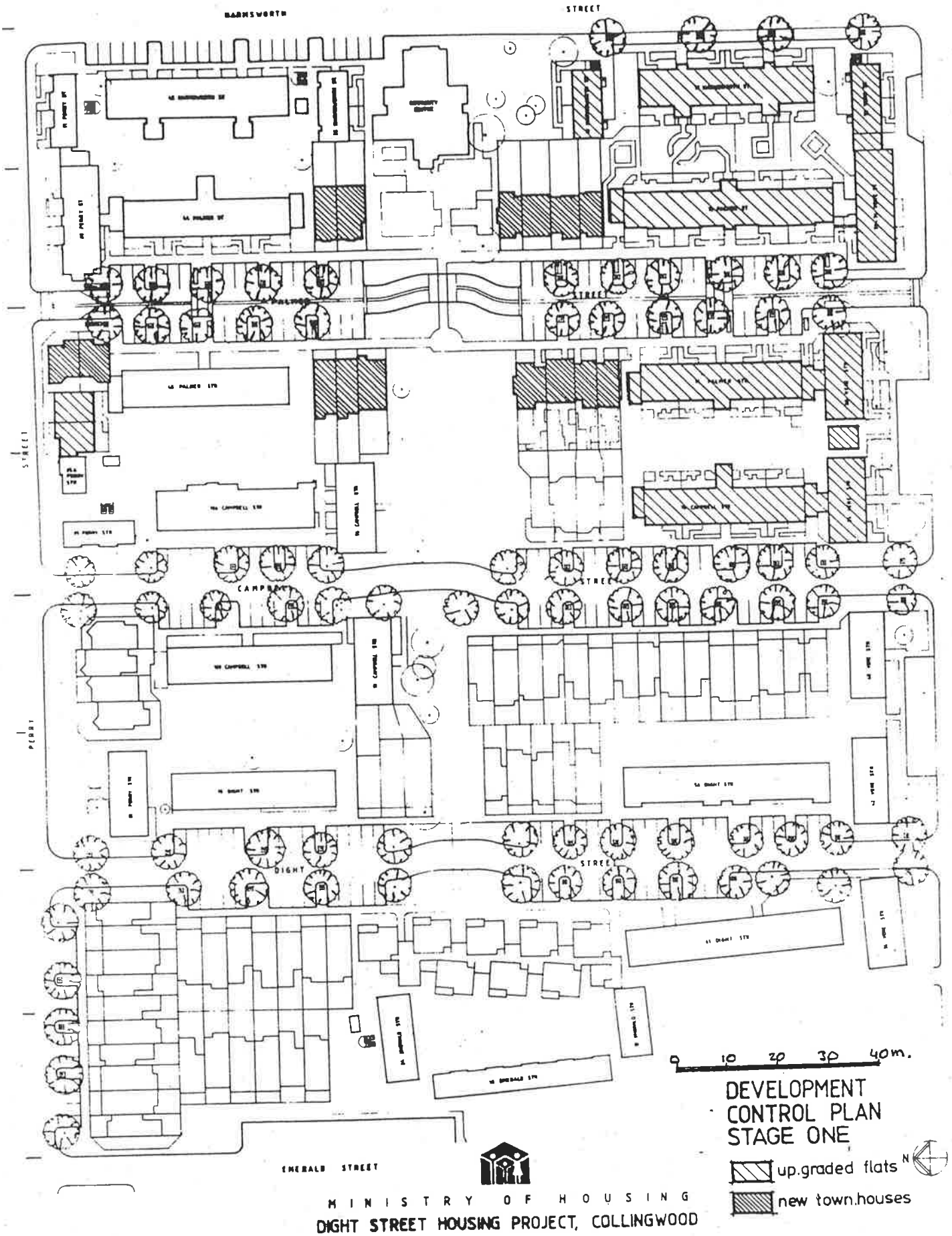
Apparently the tenants in Dight Street initiated community involvement. The aim and objectives of the redevelopment were formulated with reference to their own intentionality and "action". The success of their initiation seemed to be due to the tenants' self-organization, explicitness of their conception and realization of the means of obtaining the necessary resolutions from the Ministry to redevelop their built-environment.

It was interesting to note the fact that since the community officer was outside the bureaucratic structure of the Ministry, it made him a fully independent tenants' advocate. The Ministry could not pressure and demand loyalty from him. The community officer's objective was to pursue and attain from the MOH the appropriate built-environmental settings to accommodate the tenants' "action". Therefore the community officer's position in the

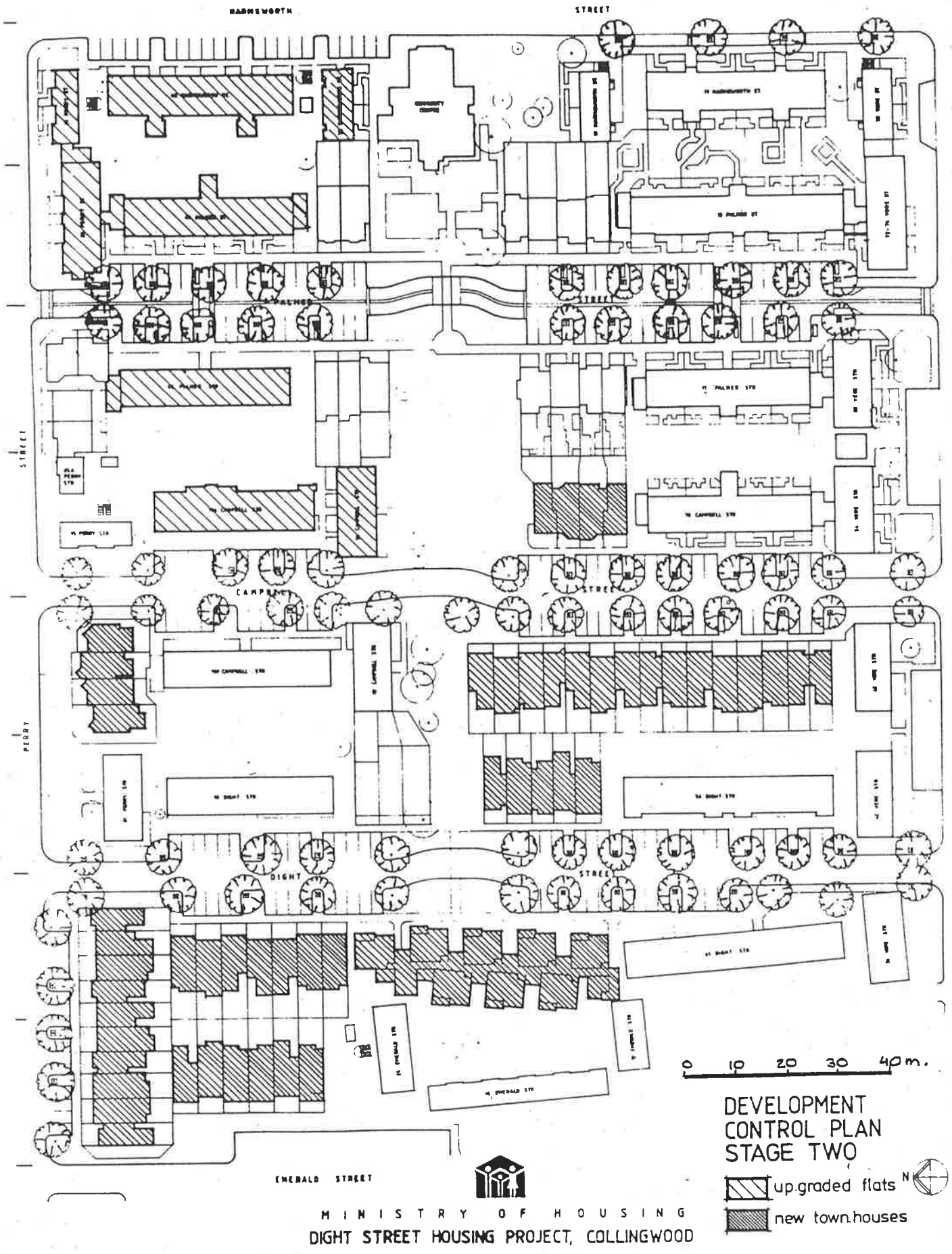


Drawing V-14: The initial master plan for the Dight Street development.

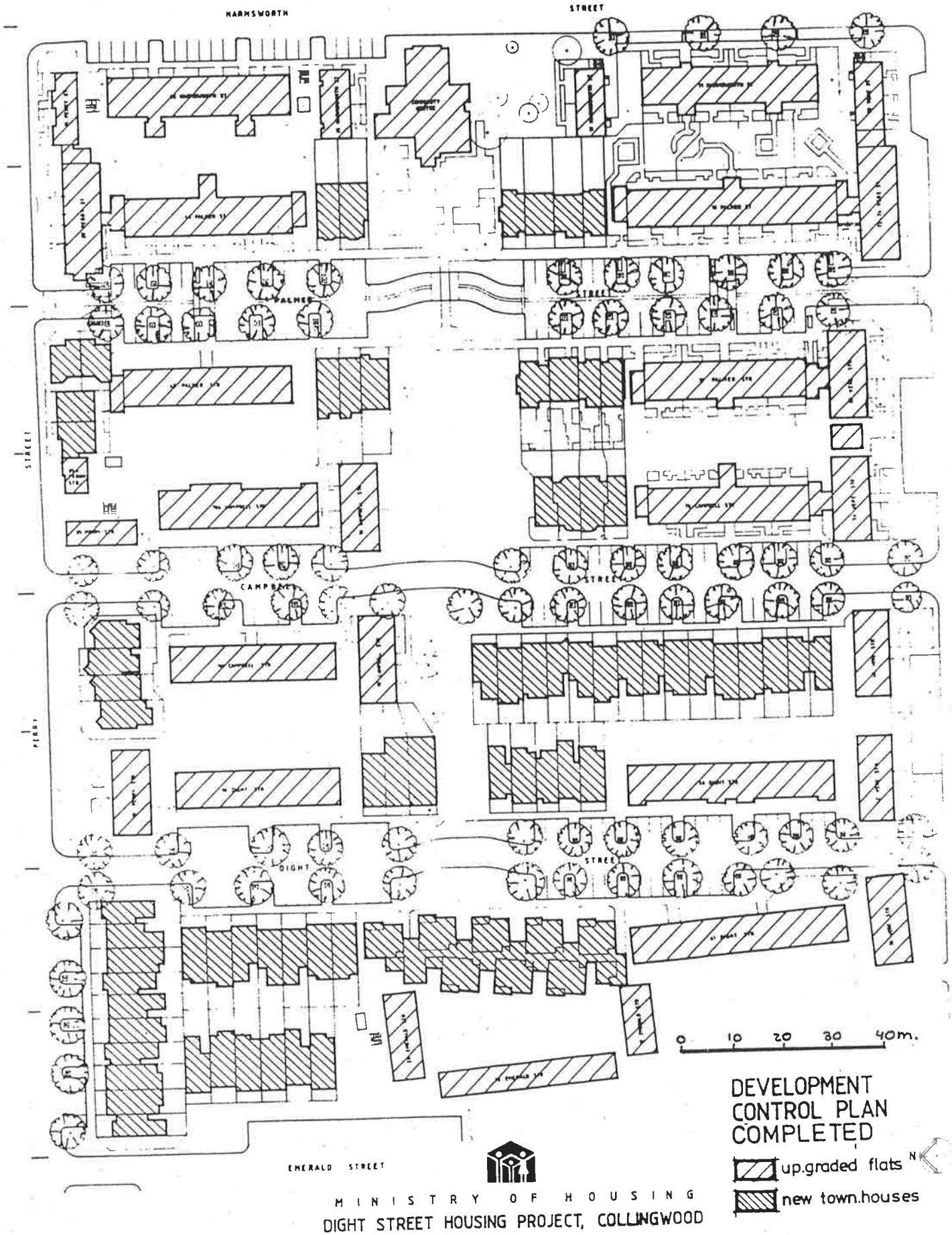
Source: Daryl Jackson Pty Ltd, Architects.



Drawing V-15: First stage development.



Drawing V-16: Stage two development.



Drawing 17: The revised master plan for the Dight Street development.

process was different from that in the high-rise and Francis Street developments.

D. COMMUNITY INVOLVEMENT IN THE PLANNING AND DESIGN PROCESS

As was noted before, the consultant architect was an outsider, chosen by the Ministry to propose a master plan. His position in the process was therefore similar to his colleague in the high-rise and Francis Street development. The tenants did not have any legal or political power to demand alternative schemes from him, unless they went through the bureaucratic structure of the MOH. In other words, the Ministry outlined to the architect the magnitude and type of community involvement in the planning and design process, because the Ministry had all the legal power of a client.

Similar to the Francis Street development, the tenants' degree of involvement was in reference to the magnitude of the scheme. Since it was quite substantial (compared with Francis Street) the Ministry saw involvement limited only to a choice between proposed alternatives.

However, initially the architect did consult the tenants. After several meetings with the Planning Committee, in May 1983 the consultant architect came with a final master plan for approval and a programme for demolition and redevelopment. The master plan also proposed the involvement of several architects in the design so that the usual monotonousness and stigmatization of public housing would

be replaced by a variety in character. Note that the variety in Francis Street was the result of tenants' involvement and accommodating different settings for different tenants' "action", and harmony through the tenants' common desire for a built-environment complementing Collingwood.

During the preparation of the proposed scheme, the architects presented drawings to the Planning Committee on a monthly basis for their comment. The architects also consulted, upon approval of the Ministry, the Tenants' Council, the elderly who were committed to the area and the Vietnamese who were the dominant ethnic group. In all of these meetings both the Ministry and the Tenants' Council were present.

These meetings identified the following important phenomena relevant to the tenants' involvement in the planning and design process:

1. The politics of the process: Since the tenants were properly pre-organized around specific issues, they knew how to put political pressure on the Ministry to gain certain vital demands. One such political issue was explicit when in April 1983 a tenant inquired from Mr Hurford, the federal Minister for Housing, during a visit to the Estate, about the abolition of market rent from public housing.

2. The channel of communication in the process: The tenants, similar to Francis Street, could not communicate with the architects through drawings and sketches. A

better channel of communication was achieved once actual physical presentation was made (i.e., tours to other public housing estates).

3. Conflict of power in the process: In many of these meetings there was a political confrontation between the Ministry and the Collingwood City Council. This phenomenon was not explicit in the other two case studies. According to the Ministry, the Council wanted to comment on the proposed scheme before it was presented to the tenants. The reason was, that the Council saw itself as the representative and advocate of the tenants. The Ministry on the other hand, wanted to involve only the tenants. As will be indicated later, the relationship between the Ministry and the Council was far more complex than tenants' representation.

E. CONFRONTATION OF THE COLLINGWOOD CITY COUNCIL AND THE MINISTRY OF HOUSING

At the beginning of August 1983 the Collingwood City Council refused to give Dight Street planning permission, unless the order of demolition was changed. Apparently the Ministry, with the approval of the tenants, wanted to demolish all the walk-up flats and comprehensively redevelop the whole site. Hence all the tenants were to be temporarily relocated on other estates. The Council objected to a comprehensive development, because they saw the programme would relocate the elderly twice, and thus cause inconvenience. The Council wanted to see a gradual demolition, the final stage of which would be the demolit-

ion of the brick buildings: the home of the elderly. Apparently, since no structural fault was detected in them, their redevelopment was a centre of controversy. Also the Council did not like the idea of having a vacant estate and displaced tenants. The argument was that, if the tenants were moved, it would create a negative impact on the municipal services (i.e., school, child-care centre and community health centre).

The Council also objected because some of the walk-up flats that were to be demolished, were structurally sound. Their redevelopment would have reduced the housing stock and the supply in Collingwood for low income public housing. It was contrary to the depopulation prevention policy of the Council. Moreover the proposed townhouses were very unpopular among some of the Council members. As one explicitly said at a Council meeting, "They are very flashy for low income housing" (The Clarion, July 27, 1983). In fact the Council tried very hard to indicate that the Ministry was selling a dream without even being sure where the money was coming from.

The tenants however refused the Council's argument. They became, as the social worker stated in her interview in early 1987, very suspicious of the Council's intentions. As a result they sided with and generally approved of the Ministry's programme. A wedge was therefore being put between the Council who tried to show it was the tenants' advocate and the tenants who saw their interest was to go along with the Ministry's proposition.

F. A REVISION OF THE REDEVELOPMENT PROGRAMME

In December 1983, a dramatic change occurred. The Minister, who wanted to allocate his budget more efficiently asked for a review of the project in Dight Street. In January 1984, the Minister advised the tenants that the project would not be implemented as planned. It would be replaced by a gradual scheme programmed to finish the redevelopment in fifteen to twenty years, and only those buildings with a structural fault would be demolished. The Ministry's argument was based on the lack of financial resources to develop the entire Estate, while at the same time build in other places new public housing.

The new proposal was a development going through stages, the first of which would be to build 45 townhouses, nine flats and one shop on the south-eastern corner of the Estate. Even though the immediacy of redevelopment was promised, the revised programme, after 18 months of delay, began in 1985.

One can argue here that the Ministry chose the new alternative scheme similar to the one initially proposed by the Collingwood City Council. In fact the social worker, in her interview, stated that behind the scene, both she and the Council's planning officer attempted very much to convince the Ministry to abandon the comprehensive plan and take a more gradual scheme into consideration. Whether the Council officer's argument for revising the redevelopment plan in Dight Street was a factor in persuading the Ministry to change its mind seemed to be very unlikely.

when compared with Drawing V-9, one notices a dramatic change in the design concept

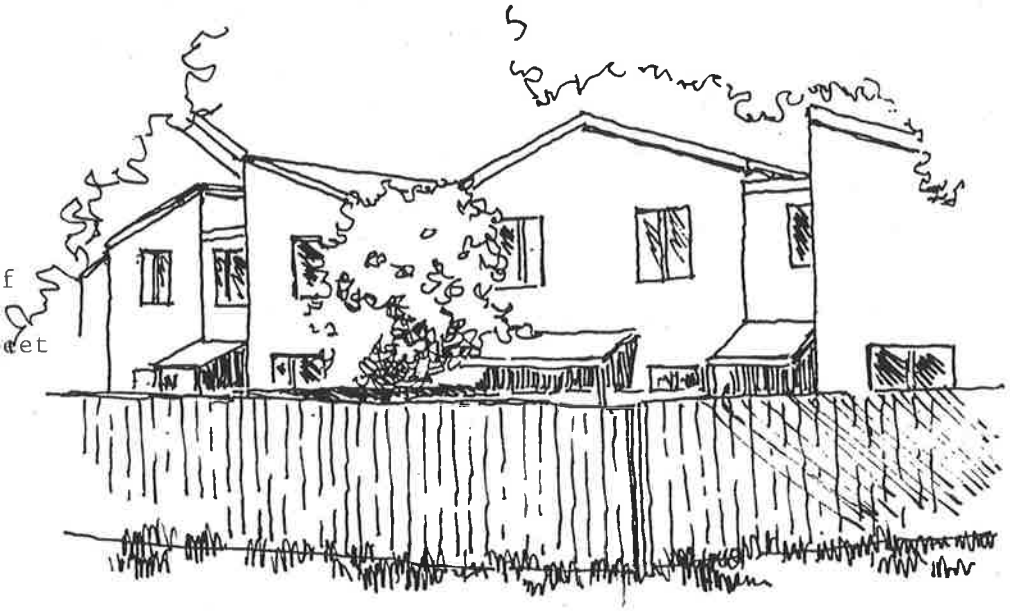


front facade on Palmer Street

Drawing V-18: The terraced houses built in stage one of the Dight Street development. Note that the two types of architectural style is due to the appointment of different architects. The tenants' contribution to the external characteristics is minimal.



Vere Street



backyard of
houses on
Palmer Street

Drawing V-19: Some other views of the Dight Street housing development.

The tenants were quite angry with the new decision. They saw it as an unkept promise and their dream to be shattered by the state political decision-makers. The Tenants' Council was afraid that a gradual demolition would increase insecurity and the noise would be unbearable for those residing there during construction. Besides, many of the displaced tenants thought it would be quite a while before they could go back to their new home.

A week after the announcement, the Tenants' Council met and passed a motion to lobby against the Minister's failure to keep his initial promise. They contacted other community groups, local papers and local politicians. The pressure was such that the Collingwood Council, who disapproved of the initial comprehensive scheme, joined in condemning the MOH. It was apparently a political opportunity taken by the Council to gain the tenants' favour and respect.

G. TENANTS' INVOLVEMENT IN THE PLANNING AND DESIGN PROCESS OF STAGE ONE OF THE REVISED MASTER PLAN

Once the new master plan had been approved, the design of the first stage commenced. During the design and construction of the townhouses, the following arrangements were made to involve the tenants in the process:

1. The Tenants' Council: Up until February 1987 (my last visit to the Estate) the Tenants' Council was carrying out its objectives outlined in November 1982. Every two weeks they had a meeting with the architect and the

Ministry to discuss and organize the redevelopment. Whenever it was necessary (e.g., choosing finishing material) they called upon the individual tenants to meet the architect and participate directly in the decision-making process.

2. The Newsletter: In September 1986 a newsletter prepared jointly by the Ministry of Housing and the consultants was created. Its purpose was to keep all tenants up to date with what was occurring on the Estate with regard to the work in progress. It was to inform the residents of the decisions made in the joint meetings of the Ministry of Housing and consultants. (Note that the Tenants' Council had no input in this newsletter.)

It seemed that in the Dight Street development, the planning and design process was different from those previously used (i.e., Francis Street and the high-rise buildings). Here the tenants were more dynamic in their approach to the entire operation used in creating the townhouses. Based on their own "action", the community formulated the general aim and objectives of the scheme. To determine their built-environmental problems they hired their own consultant engineer, independent of the Ministry, to inform them of the structural problems. In fact in the first stage of the process, the MOH acted in accordance with the tenants' "action".

The tenants through their well organized committees could exert the necessary political pressure, demanding a comprehensive redevelopment plan for the whole Estate.

Furthermore, the Co-ordinating Community Officer, being appointed by a body independent of the Ministry, became in all aspects, the tenants' advocate. It was what seemed to be lacking in the two previous cases (Francis Street and the high-rise). To push their cause and need for environmental improvement, the tenants acted on their own and in accordance with their own aspirations and intentionality. Their organizations were formed through their own initiation and with the administrational skill of the Co-ordinating Community Officer. While for organizing the tenants in the high-rise flats, the Ministry, through its own appointed officer, made the necessary initiation. The self-organization in the Dight Street development set up the tenants' committees independent of any outside contextual institution. This approach seemed to have generated some antagonism between the bureaucrats in the Ministry, the Local Council and the tenants.

All through their struggle to achieve their aim and objectives the tenants, through their own solidarity and political maturity, could manipulate the MOH and the Collingwood City Council. The tenants did not trust either of them. They changed alliance in accordance with their own "action" and desirability.

As was indicated before, during the redevelopment of the master plan and the first stage of the townhouses, the Ministry appointed the consultant architect. In his preparation and implementation of the development, the architect was to consult the tenants. However by appointing

him, the Ministry officially became the client, and the tenants only the occupiers. This act again established the Ministry as the main and full controller of the decision-making process, and regained some of the power that was in the hands of the tenants. Had it been otherwise, the tenants would have been more in control of the process.

Similar to the two previous cases in this chapter, there seemed to be a semantics (i.e., symbol systems) problem in the communication system in the Dight Street development. The tenants could not comprehend the ideas and concepts presented by the architects. Graphic presentations (e.g., architectural drawings) and technical terms were not appropriate means of communication. As an alternative, direct experience of the built-environment was chosen, and the tenants were taken on a bus trip to view similar schemes. It seemed that this type of elaboration was seen to be appropriate whenever the architects needed to communicate with the tenants. However, similar to Francis Street, this approach did not include tenants' evaluation and their desire for a future built-environment. Another alternative mechanism was needed to establish the tenants' preference, attitude and ideals. Therefore, one may conclude that this approach (i.e., direct physical contact with an environment similar to the proposed) was not sufficient for an appropriate communication channel.

It is quite important to note here some of the properties of the relationship between the architects, the tenants and the MOH.

1. Similar to Francis Street, the 18-months' delay in the scheme reduced the enthusiasm of some of the tenants. Those who were relocated temporarily did not want to return to Collingwood. The Tenants' Council therefore had to assume and suggest to the architect certain spatial notions that were seen to be acceptable to any new tenants. By establishing the spatial characteristics, the Tenants' Council expressed in space the symbol systems and the ideology that would be understood by an unidentified person.

2. One group of architects who participated in the scheme were those who designed Francis Street. Their experience in communicating with the tenants and their positive attitude towards tenants' participation in the planning and design process created, with reference to the tenants' "action", a highly satisfactory built-environment for the tenants. (Note that this view was expressed by the tenants.)

3. Since the Ministry had the power of control, their officer's attitude towards the process and management skill, accordingly increased or decreased the number of tenants involved and the magnitude of their involvement.

The tenants were involved in the following stages of the redevelopment:

1. The aim and objectives formulation was initiated by the tenants with reference to their own "action".

2. In the preparation of the master plan, the tenants had to choose between the alternatives the architect had prepared.

3. In planning approval, the tenants had sufficient political power, motivation and knowledge to confront the Ministry and the local city Council.

4. In designing the specific settings, tenants' involvement varied in accordance with the attitude of the architect towards the process. Greater satisfaction of the tenants was noted when the architect had the knowledge for creating the appropriate channels of communication.

5. Tenants were the least involved at the construction stage. They only chose between several given alternatives.

6. Since in February 1987 (the date of the last visit to the Estate), stage one of the redevelopment had not yet been finished, it was premature to elaborate the system of management.

H. CONCLUSION TO DIGHT STREET DEVELOPMENT

As might be expected, and due to the scale of the project, the Dight Street redevelopment seemed to identify aspects different from those observed in Francis Street and the high-rise. This study strongly suggests the importance of the political phenomenon involved and the role of the community officer. Furthermore, it identified other important externalities which had to be realized in community involvement in the planning and design process.

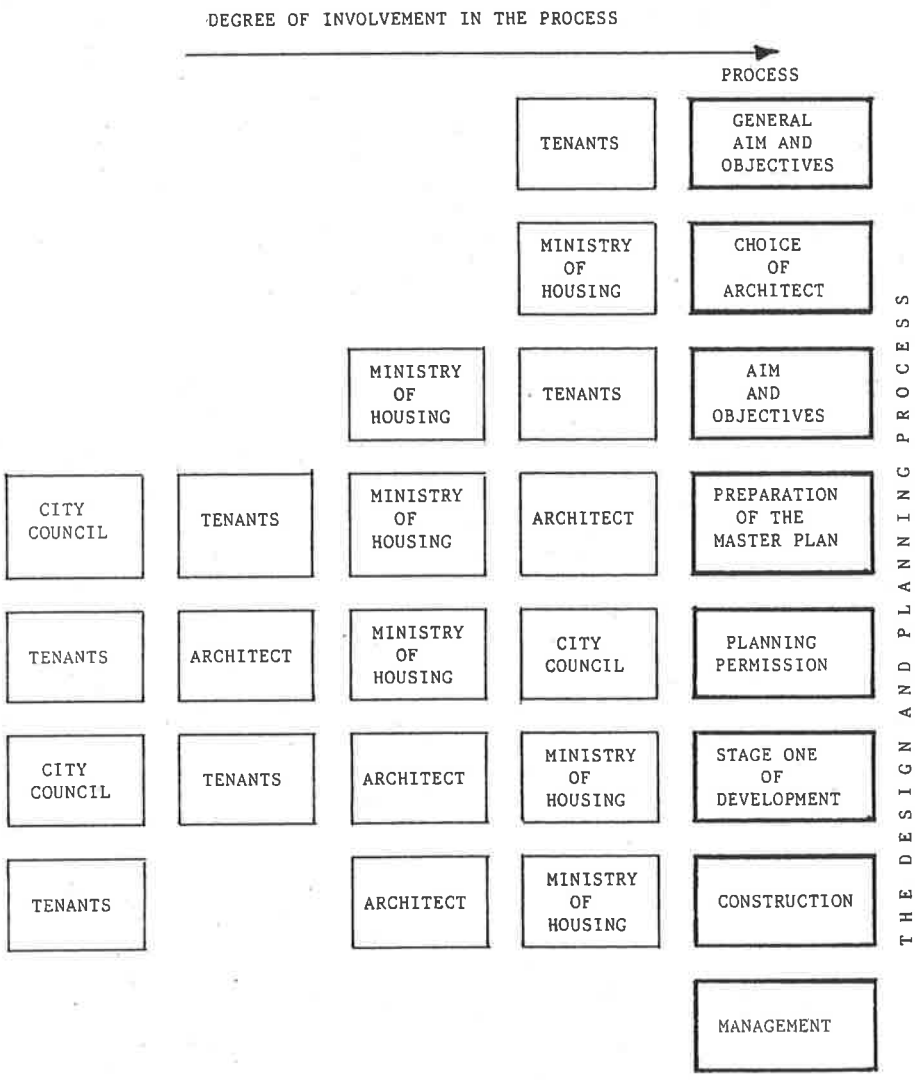


Diagram V-7: Tenants' involvement in the Dight Street development.

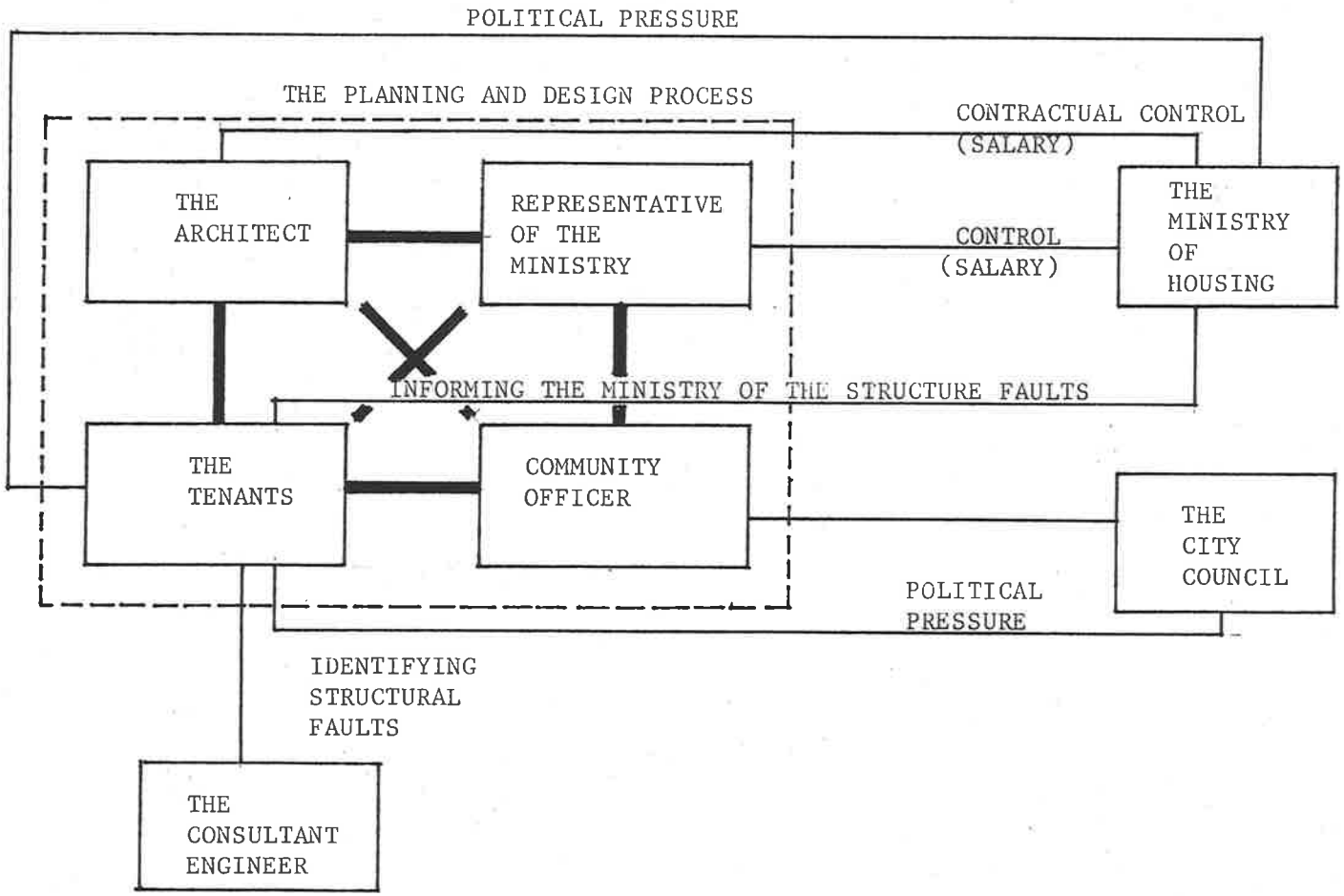


Diagram V-8: The system of communication and the role of each party in the planning and design process in Dight Street.

The political phenomenon was expressed in the conflicts, relationships and struggle for supremacy in power of the institutions involved - the MOH and the Collingwood City Council. Their conflicting interests had placed certain limitations on the process. The power struggle was best indicated in the Council's attitude towards the fact that it was not consulted prior to the tenants' involvement in choosing the appropriate proposal. Thus the Council debated and took its time for approving the planning and building permission. To override this limitation it was necessary for the Council and the MOH to collaborate and enter into a dialogue, rather than confronting each other.

The political phenomenon, however, was not only a limitation but also a generative factor that the tenants used in accommodating their "action". Through their self-organizations (e.g., the Tenants' Council) and understanding of the political system, the tenants could manipulate both the MOH and the Council to achieve their objectives more satisfactorily.

The tenants' understanding of the importance of solidarity and the power of the press, as a means for exerting pressure on politicians, was clearly observed in their newsletters, meetings and the press coverage they sought.

Dight Street also suggested the importance of the role of the community officer in the planning and design

process. Contrary to Francis Street, the community officer's independence of any bureaucratic institutions (e.g., the MOH or City Council), organizational skills and realization of the situation (i.e., the legal and political aspects) were paramount in advocating the tenants' desires and establishing an appropriate communication system. The necessity for his prerequisite skills and knowledge implied a role similar to "advocacy planning" and/or "planning aid". The community officer's objective was to make sure that the tenants' "action" was understood and explicitly conveyed to the architects, the Ministry or any other related body. The importance of his independence permitted him to attempt to obtain, without prejudice, the appropriate built-environment for the tenants. Therefore, the community officer was more than a liaison officer, and his position was contrary to his counterpart in the high-rise and Francis Street - that is, to convey to the tenants the Ministry's intentions.

Because of the magnitude of the development and complexity of the process the externalities may differ, in scale and type, from those found in Francis Street and the high-rise. However the present condition of the development makes it quite difficult to define them explicitly. When the site was visited in February 1987, none of the townhouses, built in stage one, was ready and occupied. Nor was there a plan to carry out a post-occupancy evaluation of the process and the development of the Estate. Besides, to make a prediction now concerning the governing factors and externalities in a future ten to fifteen years'

piecemeal programme is rather dangerous. Many of the socio-economic and political factors may change. Future political ideologies and symbol systems may alter dramatically the current housing policies and spatial characteristics. The tenants' "action" may also be in accordance with the future situation. Therefore it is premature to evaluate and identify the externalities and human satisfaction of the Dight Street redevelopment.

However, two externalities that had impact on the entire scheme were identified and are worth noting. The first was the inter-departmental conflict and the bureaucratic reorganization in the MOH. The responsibility for the whole scheme was shifted from the Estate Improvement Department to the Redevelopment and Infill Group. The second was the change in the programme for redevelopment due to economic constraints. Both resulted in unnecessary delay, wastage of resources and reduction in the tenants' enthusiasm.

IX. CONCLUSION

The previous chapter argued that the subjectivity of human "action" has to be spatially translated and accommodated so that the "sense of place" may be created. This implied the transfer of the planning and urban design operation from a bureaucratic and institutional activity into a dialogue and a means with which the actor may self-express his/her existence in space. It was noted that the actor is no more on the fringe of the process: inert

and ineffective. The actor was redefined to become the dominant factor. The continuous intentionality to create a self-expressed space that may continuously accommodate his/her "action", made the actor the generator and the main participant in the process that shapes and transforms the built-environment.

The analysis in this chapter indicates the complexity of community involvement in built-environmental design. The study identifies the importance of the distribution of power for allocating the scarce resources in a historical situation. In the Collingwood Public Housing Estate the political framework for development was apparent. The planning and design process and the community involvement were related to the political power, conflicts and sharing of ideology between different socio-political organizations and bureaucratic institutions in society.

In the Collingwood Public Housing Estate community involvement was defined by the attitude of the bureaucrats in the MOH, the Collingwood City Council and the policies outlined in the Green Paper. Many bureaucrats saw community involvement as a privilege given to the tenants, under a certain prescribed framework. The bureaucrats' argument and definition for community involvement was based on certain economic factors and their approval of the degree to share their power with the tenants for formulating policies and making decisions. Thus choosing between given alternatives and collecting the right data from the tenants were therefore seen as the necessary and sufficient level of

tenants' involvement. Furthermore the allowance of community involvement was established by the magnitude of the development scheme, not by certain tenants' desired objectives (i.e., the "sense of place"). In other words, community involvement was defined in terms of the bureaucrats' ideology and symbol systems in the Ministry or City Council. Community involvement was then transplanted in the Collingwood Public Housing Estate without looking at the historical situation in each of the developments.

In the high-rise, Francis and Dight Streets developments, even though they indicated a certain degree of satisfaction, the tenants' involvement was restricted and limited to certain stages of the process and to the tenants making some minor decisions. (This is explicit in the high-rise upgrading.) The users could not physically and fully manifest their "action". More specifically, the study seems to relate satisfaction with the spatial setting and the power of decision-making to:

1. The attitude of bureaucratic institutions (central and local) and their relationship and degree and intention of power-sharing with the tenants.
2. The terms of reference and definition of tenants' involvement - that is, the tenants' "action", intentionality and self-expression in space.
3. The methodology of involvement in the process can be identified more explicitly once the "action" of the tenants is known. In other words, the degree and means of involvement apparently should not be related to the

magnitude of the scheme, as was indicated by the policy-makers in the MOH, but to the tenants as human beings.

4. The attitude of the involved parties towards community involvement (is it a privilege given to the tenants by a political or bureaucratic institution or the basic "right" of the tenants?).
5. The relationship of the parties involved and their contribution to the dialogic process.
6. The communication system (i.e., dialogic process) that has to convey to all parties involved, the necessary and sufficient information for understanding the situation, outlining alternative proposals and sharing in decision-making and thus reinforcing the interrelationships between the participants.
7. The attempt to identify the contextual mechanism (i.e., externalities) which seems paramount in achieving the objectives of the process. In other words, the process has to have certain flexibility to accommodate any unforeseen factors.
8. The historical situation of the development and the participants' knowledge of this historical situation.

Apparently what was defined in Collingwood as community involvement was outlined in a bureaucratic framework. It seems to be similar to the commonly-known connotation of broad "public participation in planning" as analysed in chapter four of this thesis and defined in the 1971 and

1974 Melbourne Metropolitan Planning Policies. In the latter, "participation" was limited to a control and reaction to an explicitly defined issue, beyond which many people were looked on as being incompetent to pass judgement. One may be bold enough to assume that this conception of involvement is also reflected in many planning schemes, somehow approved and passed by the legislative body of the state. However, upon implementation many of them were criticized for their limitations (Howard, 1974; Gowan, 1981). Note that chapter four of this thesis indicated the inappropriateness of public participation in achieving the "sense of place".

The above argument associates the political situation with the "sense of place". To accommodate their "action" and self-expression in space (i.e., hence the "sense of place"), the tenants in Dight Street had to become involved in a dialogue between themselves and integrate their corporate intentionality and "action" with the political and social process of the Collingwood Housing Estate. Because of the historical situation, looking at another estate for a spatial setting, that may accommodate their "action", seems to be debatable. As indicated in chapter four, transplanting a setting to another space-time and cultural dimension is erroneous. Therefore any community involvement in the planning and design process has to look at the particular historical situation of the development to identify the appropriate dialogue to create the meaning of "place".

It is important to note that the given case studies stress the importance of communication. It was critical in the relationship between the tenants, the architects and the officers of the MOH. It was mostly observed that the tenants could not comprehend technical symbols, nor could they convey their needs and aspirations. In other words an appropriate means to identify the tenants' symbol systems was paramount. However as noted in chapter four, the symbol systems are part of the culture and an expression of knowledge. Therefore to identify the communication system the MOH and the architects had to look at the tenants' culture, knowledge and the means by which they express their "action".

Based on the above argument, it is explicit that visiting similar estates was not the appropriate way to establish the communication system. Furthermore, visiting similar estates only conveyed the architects' conception of the end product not the dialogic process of communication. As argued in chapter four, a survey and analysis that might have indicated the tenants' attitude towards the visited estate would also have had its limitations, because attitude surveys that use positivism and behaviour psychology do not identify the tenants' "action" and symbol systems. Any communication system had to relate to the tenants and their knowledge of their own built-environmental meaning.

In the Collingwood Public Housing Estate, lack of appropriate communication was also due to the fact that the

exact definition of the parties was vague. Their relationships and functions in developing the Estate were not clear. Each party saw the other differently. The MOH, by defining itself as the client, expected the architect to be its consultant and treat the tenants only as occupiers. Whenever the architect considered the tenants as the client, a conflict was generated between the Ministry and the architect. Improper or lack of definition also seemed the cause of conflict between the Ministry and the local Council. Community officers were confused by their contradictory roles (e.g., the tenants' advocates or the Ministry's employees). Each body seemed to have had a different priority. Tenants were concerned with short terms and local issues, while the Ministry was more concerned with long-term housing policies. To establish an appropriate communication in the planning and design process, the determination of the political and economic power and responsibility of each of the participants seemed important. Once can conclude that an explicit definition and relationship of all parties is critical to the community involvement in the planning and design process.

During the analysis in this chapter, there was a strong suggestion for having an equal opportunity among all the participants to share their resources in all the stages of the planning and design process. The participants' input into the process would then be a personal and corporate contribution. Hence all parties would have to comprehend the political, economical and institutional realities

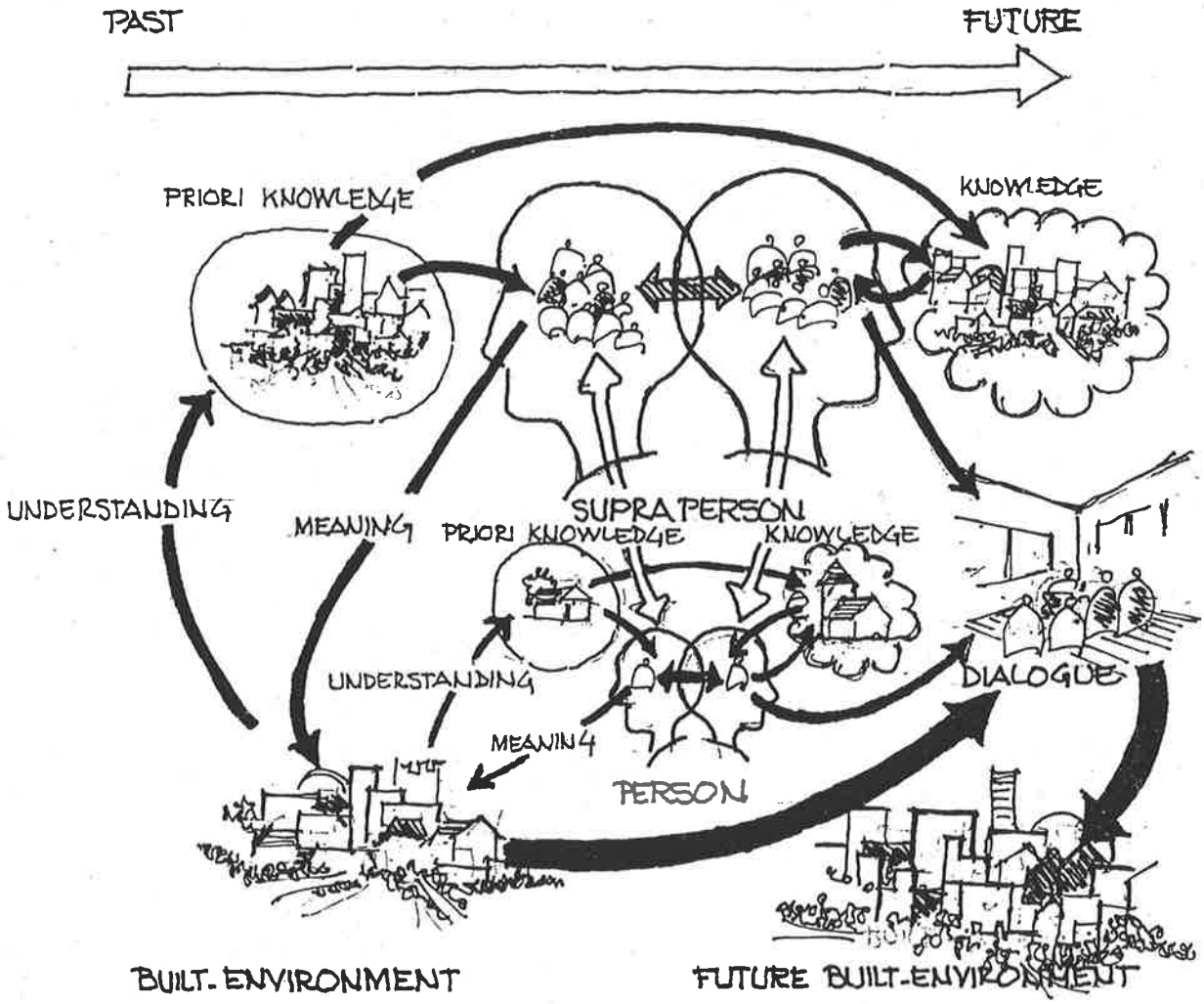
involved in the situation of the Estate. Moreover, the tenants had to acquire certain power to balance the Ministry's power in allocating resources. As well as, the above suggestion implies decentralization and a new social organization, based on corporate management. Each public housing estate would then be self-autonomous and self-managing, with a "structure" related to the historical situation and the shared meaning of the tenants (i.e., "structure"). Hence development and upgrading would take place through a dialogue within the situation, constraint by a higher social organization (i.e., MOH). Furthermore, the spatial characteristics would be created as an expression of the tenants, not the MOH and/or the City Council to establish, in space, the "sense of place".

In this chapter, the evaluation of the planning and design process strongly suggests one main factor that contributes to the "sense of place" is to have continuous community dialogue and involvement. However, for pointing out this contribution one may require a redefinition as to what planning and built-environmental design should be and how the planning and design process could operate in the technical and professional sense. Most probably, a dramatic re-adjustment of the societal technocratic and bureaucratic institutions (similar to the MOH) that control today's built-environment has to be considered. The planning and design evaluation has to be continuous and based on the personal values of the tenants and their shared norms, expression and characteristics at each historical

situation. The communication and the information for any planning and design operation have to be based on the flow and continous change in the human spatial meaning and understanding, not on a certain technocratic standard and language. For achieving the "sense of place", the information from the centre of decision-making to the public, under the control of "experts" has to be questioned and accordingly adjusted by the community to express individual human purposive "action". Hence planning and built-environmental design will give the opportunity for the people to enter into a dialogue and participate in shaping their built-environment. Thus planning and built-environmental design will depend more and more on the creativity of the human being, and freedom for individuals and groups to act independently of the control of technocratic and bureaucratic institutions.

Finally, it is quite apparent that a critical analysis of the Collingwood Public Housing Estate has only elaborated on some issues that contribute to the creation of the "sense of place". This denotes the complexity of the subject, the limitation of the case study and the necessity for further research in the human being built-environment relationship. Further research may be carried out to define the role of each player on the personal and societal levels, the process with which one can identify in each situation his symbol system (i.e., the a priori knowledge) and the planning and design process that continuously transforms the past to the present into the future.

Besides, further studies have to be made and theories tested to establish the means and model with which these factors - some of them suggested in this case study - that contribute to the "sense of place" are synthesized.


PAST
FUTURE
PRIORI KNOWLEDGE
KNOWLEDGE
UNDERSTANDING
MEANING
SUPRA PERSON
PRIORI KNOWLEDGE
KNOWLEDGE
UNDERSTANDING
DIALOGUE
MEANING
PERSON
BUILT-ENVIRONMENT
FUTURE BUILT-ENVIRONMENT

CONCLUSION

CONCLUSION

Throughout this thesis an attempt has been made to conceptualize the subjective human dimension of space and hence propose a socio-spatial theory that elaborates the notion of the "sense of place". The thesis assumes the concept of the "sense of place" in planning and urban design as a means by which people may attain a better quality of life. However, one has to bear in mind that even among the professionals, the scope of planning and urban design is unclear. The diversity of human activities, the dynamic change that has become an important feature of today's urban environment and pluralism in modern society, have all made it quite difficult for the planner and urban designer to outline clearly their terms of reference. In the urban built-environment human "action" and societal generative mechanism (i.e., "structure") display quite a number of facets and conflicting organizations. Conflicting organization implies confrontation and the need for identifying means for resolving it. This may take very complex operations where each organization may either use its power for domination and/or enter into a dialogue with others so as to identify their shared objectives and resolve their disagreement. Thus creating in today's urban areas the spatial characteristics that give explicit meaning to the "sense of place" may be quite complex, frustrating and a cause for human confrontation. Any resolution will require the understanding of human needs

and the means and criteria (i.e., how and with what) with which a society and an individual express human existence in space and thus transform the space into an essential part of their personality and their "sense of place".

This thesis has argued that for the planner and designer to create those meanings that manifest the "sense of place", they need the ethnological knowledge of the people whose built-environment is to be formed. Ethnological knowledge includes the understanding of the human being and his/her "action" as an outcome of a synthesis of biological, metaphysical and social phenomena. To obtain in each planning and design situation the ethnological knowledge, the planner and designer may have to look beyond the objective rationality of human attitude, cognition and behaviour and understand subjectively (i.e., the way it is interpreted by the subject or actor), human intentionality, purpose, motivation, rationality and expression in space. Furthermore the planner and designer may have to explore in each development the societal metaphysical expression (e.g., the artistic conceptualization) by comprehending the corporate meaning of the symbol systems and ideology in space. The thesis argued that the synthesis of all this knowledge is essential if the meaning of the "sense of place" is to be expressed in each development. Furthermore, the planner and designer have to be specialists in their profession and generalists in their understanding of the human being. Moreover, in each development, the planner and designer may have to to outline certain means for inter-

preting and manifesting in space the ethnological knowledge so as to create the "sense of place". Planners may therefore have to observe, interact and establish a dialogue with the community over a period of time so as to understand their intentionality for creating the spaces to accommodate their future "action". All this may also be complicated and may use a great deal of scarce resources that can be allocated for other necessary alternative operations. However, if understanding the subjectivity and interrelationship of communities and individuals for creating in the built-environment a "sense of place" is vital, a certain practical, cost-effective and reputable means for obtaining or allowing the communities and individuals to express their ethnological knowledge seems to be desirable.

With the above in mind, chapter one outlines the aim and objectives of this thesis by first indicating some of the criticisms made in the past three decades or so identifying the necessity for the human dimension of space in planning and design. Remarks and research work carried out by people such as Gans, Habraken, Smith and others are reviewed. They saw the plight of the inner urban areas and public housing in the 1950s and 1960s to be due to the development policies that underrated human conduct and attitudes and also misunderstood the importance of culture in conceptualizing space. Chapter one as well gives a brief analysis of some of the research that has been carried out since the early 1960s by social scientists to establish the

relationship, at the personal and societal level, between the human being and the built-environment. The impact of their research was such that many academic and professional people saw the necessity for redefining new approaches and outlooks in planning and urban design and outlining processes that utilize the newly acquired knowledge of the human being built-environment relationship. Since then several methodologies and models, such as gaming simulation, public participation, "Stiching Architecten Research" (SAR) and self-help have been proposed to integrate the human dimension and establish spatial characteristics.

Chapter One goes on to argue that for the past two decades the sociologists, behavioural psychologists, human geographers, phenomenologists and theoreticians in architecture, in their research, have come up with a human and socio-spatial conception, known as the "sense of place". The psychologists have referred this notion of the built-environmental quality and meaning to human cognition and imageability: established by the perception and behaviour of the human being in certain existing environmental configuration. The sociologists and anthropologists have defined the "sense of place" in terms of societal constraints on the built-environment and human behaviour. Apparently due to their methodology of research, both have looked at the properties of the configuration of space and related existing human attitudes and behaviour as the foundation for defining the "sense of place". Moreover,

they have defined their terms of reference assuming the relationship of the human being and the environmental ecology (i.e., ecological system). Both the psychologists and sociologists have underrated the importance of the conscious, purposive and voluntary nature of human "action" and the spatial self-expression of existence in space that identify the knowledge for creating the desired future spatial characteristics of the built-environment and the spatial meaning of the "sense of place". Therefore the psychologists and sociologists have established deterministic models showing that human behaviour and the "sense of place" are an outcome of the cognitive knowledge of the existing built-environment and/or the constraints made by the independent features (i.e., factors) of social organization. For example, many studies are made to identify and analyse the behaviour or attitude of a certain age group or an ethnic group (as a fixed constraint variable) in a residential environment [e.g., Pastalan on elderly people (1978)].

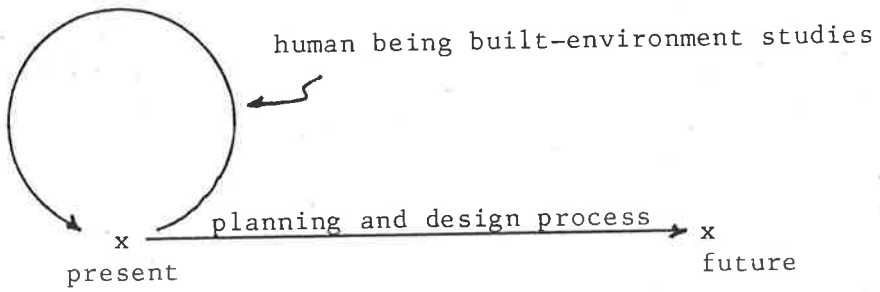
The result of the above analysis and the current direction in sociological thoughts that indicates the limitation of positivism and reductionism in social scientific knowledge, have generated fundamental arguments to point out the inappropriateness of many of the studies conducted by psychologists and sociologists on human being built-environment relationship in general and the notion of the "sense of place" in particular. Moreover, these arguments have shown some of the reasons for the lack of

conformity between the studies of the human being built-environment relationship and the planning and urban design operation. While the nature of the former tends to be:

1. analytical;
2. divided into independent specialized fields of knowledge;
3. an indication of human behaviour as a cause of the built-environment;
4. non-predictive in nature. The psychologists and sociologists do not have the tools to predict the future. In fact they can only show the impact of the existing built-environment on human attitudes and behaviour;
5. based on deterministic models that underrate the purposive and the voluntary nature of the human "action",

the nature of planning and urban design tends to be:

1. a synthesis of human knowledge (ethnological knowledge);
2. holistic in nature;
3. an operation and a process opposite in direction to the human being built-environment studies. In other words, the planners and the designers start by knowing human "action" and attitude and then move, through the process of planning and design, to create the built-environment, while the social scientists start with an existing environment and through their analytical models identify human behaviour and attitude in the same environment;



4. dealing with the future, not with the present situation;
5. needing the voluntary and purposive nature of human "action" for explicitly formulating design and planning objectives and evaluating their decisions.

The fundamental differences between the process of environmental design and human being built-environment studies have created certain confusion in identifying the "sense of place". All these differences limit and make it difficult for planners and urban designers to utilize the knowledge documented by psychologists and sociologists. To attempt to resolve these complex problems and identify more explicitly the notion of the "sense of place", this thesis saw it necessary to identify:

1. the way people at the personal and societal's (i.e., supra-personal) level create and re-create their own built-environment and its spatial characteristics;
2. the magnitude of the impact of the built-environment on people at the personal and the societal levels;
3. certain mechanisms, if possible, that may test the appropriateness of the relationship between people and the built-environment;
4. the spatial characteristics of the situation where the "sense of place" is achieved;
5. the necessity for integrating and establishing the "sense of place";
6. a planning and design process that achieves the "sense of place".

All these were the bases upon which the aim of this thesis was formulated.

The points of departure for the argument in this thesis were, chapter two: the critical analysis of the impact of the rural policies on the villages in Iran and chapter three: the spatial characteristics of the traditional residential areas of Isfahan. Both identified some of the main spatial phenomena that are related to the societal and personal levels of the subjectivity of the human dimension of space. The phenomena are used later in chapter four as foundations for suggesting the necessity for an explicit definition, and outlining a brief theory for the "sense of place". However, again one has to emphasize that chapters two and three do not elaborate all the factors that are involved in creating the "sense of place". It is very clear that many more case studies and in a different historical and cultural context are necessary. The case studies stated above established only the significance of the societal organization, the institution, the cultural rules (i.e., the symbol systems) and the organization of scarce resources in shaping the spatial characteristics of the built-environment. The analysis showed that the characteristics of the built-environment play an essential role in the survival of societal traditions. Once the traditional spatial characteristics were changed to Western societal norms, it encouraged and accelerated rural urban migration, the disintegration of society and the dereliction of the built-environment. Therefore, one of the main reasons for the failure of the rural policies and the master plan of Isfahan may be associated with the planners'

disregard for the spatial meaning, given by the Islamic tradition, to sustain its Islamic existence in space.

In chapter three, the study of the self-expression of the Muslim family in its existence in the dwelling and urban cluster identified the relationship, at the personal level, between the human being and the built-environment. It was argued that, in Isfahan, the design of the spatial elements and the relationships in the dwelling and the cluster, as a microcosmic world, gave the meanings that were essential for establishing in space the family's existence, as Muslims, and as an independent human unit with a character of its own. The traditional Muslim family's personal existence in space was noted as an expression of its personalization, intentionality and purposive "action" and the reflection of the societal norms and regional identity in the internal courtyards, the hierarchy of spaces and the spatial elements and relationships.

Thus the study of rural settlements in Iran and the traditional residential areas of Isfahan strongly suggested the necessity for understanding the meaning given to the spatial characteristics for defining the "sense of place". By exploring the notion of the spatial meaning and human understanding, the importance of the human being as a subject that interprets and organizes the spatial elements in the built-environment so as to establish spatially his/her existence was realized. Moreover, the importance of the subject implied the necessity for a new approach that

includes hermeneutics and phenomenology - hence different from positivism and reductionism - to be explored for outlining a theory of the "sense of place".

The outcome of the analysis of the residential areas of Isfahan noted the importance of the historical situation to identify a priori knowledge of the symbol systems, the socio-economic process that led to the pre-development situation and the societal organization under which that situation materialized. It was argued that this knowledge is necessary for understanding the meaning of the spatial characteristics and identifying the appropriate planning and design process for creating the "sense of place". This suggestion was founded on the notion that the planning and design process has to outline and achieve its objectives in accordance with communal and individual needs, aspirations, intentionality and self-expression in space (i.e., "action"). Therefore, in each situation the planning and design process has to be understood, conform and be part of communal knowledge. It goes to suggest that each individual in that community will be able to use the planning and design process to accommodate his future "action". Moreover, in each built-environmental development, the human dimension of space could be transformed from the past through the present into the future in accordance with the individual and society's "action". Transplanting notions of the built-environment other than what the historical situation reveals, may result in the planning and design process falling short of its aim and objectives.

Subjectivity, as was argued in chapter four of this thesis, has recently become an important issue in social science. Social scientists and philosophers, by establishing the relevance of the personal attitude and societal historical situation to any knowledge in social science, have created a sound foundation for criticizing and indicating the limitations of positivism and empiricism in scientific investigation. As a result, other methodologies, such as phenomenology, critical theory, hermeneutics and structuralism are now explored and looked at as alternatives that integrate the subject into the research operation and thus replace positivism in social scientific investigation.

The idea of subjectivity indicates the limitation of knowledge of the human being built-environment relationship that has expanded in behavioural psychology and the sociological classification of societal constraints. By considering recent sociological thought and the societal theories of subjectivity of "action", chapter four of this thesis has alternatively implied and re-identified the spatial characteristics as the property of the subject and thus proposed a human being who has regained the central position for defining the "sense of place". Therefore, the theory of the "sense of place", outlined in chapter four, explored and indicated the importance of the subjective meaning and human understanding of space at the personal level, the societal level, and their synthesis.

At the personal level, the meaning and understanding of the spatial characteristics, founded on human intentionality, purposive "action" and the desire for establishing "place" for personal existence, were conceptualized by exploring the ideas of Heidegger in phenomenology, Habermas' critical theory and Gadamer's hermeneutics. Special attention was given to the influence of their notions on recent spatial theories in architecture, planning and geography (i.e., Norberg-Schulz, Gregory and Relph). The definition of the "sense of place" at the personal level was therefore interpreted as an outcome of the human being to establish a personal existence in space by creating and/or understanding the meaning of the spatial characteristics so that the spatial setting might accommodate his/her purposive "action". Since the metaphysical existence of the human being (i.e., "being-in-the-world") is argued to be a component of purposive "action", it goes to suggest that the meaning of the "sense of place" may take a metaphysical notion to identify and personalize in space the "being" of the actor at the personal level. Thus the "sense of place" is associated with a subjective meaning bestowed upon space by the human being so as he/she may carry out his/her purposive action and identify his/her personal existence in the built-environment. As Heidegger suggested, through a dialogue between a person and the built-environment, and by using a priori knowledge of the situation and the notion of his/her existential "being" in space, the actor creates the spatial characteristics to

give the meaning of the "sense of place" and accommodate his/her "action" in space.

The emphasis given in this dialogue on meaning and understanding, raises the importance of the interpreter and his/her skills and ability to understand the spatial characteristics and the power to achieve spatial manifestations. Based on Giddens' argument the thesis notes that a priori knowledge at the personal level comprises cognitive knowledge (i.e., imageability), the practical knowledge needed for everyday life and the knowledge with which an actor can conceptualize and express spatially his existence (e.g., his dream house). These three types of knowledge are looked upon to be necessary for human "action" and establishing the meaning in space that identifies the "sense of place".

In chapter four, it was assumed that the human being shares the world with others to form communities and societies. It raised the notion that each community or society is made out of shared values, meaning and an historical process created by social interaction in a manner to form an external corporate identity, intentionality, purposive "action" and a body of knowledge to understand and give meaning to space so as to establish its corporate existence. This implies that each society or community has certain symbol systems and rules, subjectively identified by the corporate values and norms of the society or community, and used in space-time situations for social interaction. Its result was that the thesis

forwarded the idea that for creating the "sense of place", one also has to consider the corporate meaning and knowledge of the society or community.

For exploring the subjective meaning of a society and its relation to the personal meaning of the human being, the theoretical analysis in chapter four explored Giddens' social theory. Giddens introduced the term "structure" to identify societal organization and corporate values. "Structure" was defined not as the order or pattern of the relationship between societal elements, but as the societal rules and the organization of scarce resources, used as a generative mechanism in any social interaction to produce in space-time situations identifying social manifestations.

For indicating the subjectivity of the societal rules and their significance in the formation of the spatial characteristics, Levi-Strauss' structuralism and its apparent adoption by Preziosi and Alexander was explored. Even though structuralism was criticized for being reductionistic, deterministic and mechanistic, its theory explicitly indicates that in each society there exists shared symbol systems that reflect the cultural rules and values of that society in space. Thus the symbol systems were noted to be important to establish the societal expression and existence in space and thus manifest the meaning of a "place".

To identify the organization of scarce resources as a subjective property of the "structure" and a vital component of the "sense of place", this thesis explored Althusser's critique of Marx's definition and influence of ideology on scientific investigation, and Castells' analysis of the urban environment in a capitalist society. Althusser argues that societal ideology, which is based on the domination of the means of production, consumption and distribution of resources, identifies the course for any scientific investigation, historical knowledge and the meaning in space. He goes on to say that ideology which is an expression of the relationship between people and their environment and a conscious system of representation of images, is also the functional existence and development in space-time of all social classes. Through ideology, Althusser says, the power of societal control over the means of production, consumption and distribution is expressed by the meaning of the spatial characteristics. From his argument one may conclude that the meaning of "place" is also associated with class self-expression so as to dominate in space the mode of production, consumption and distribution of wealth.

The above implies, for the subjectivity of the human dimension of space at the societal level, one may have to explore the knowledge of societal rules, organization of scarce resources and their expression in space. They are all used in the design of spatial elements so that a meaning is given to a space that identifies the "sense of

place" of a particular society or community in an historical situation. However, as was pointed out in the thesis, when only the rules and resources (i.e., structure) are used for identifying the spatial meaning, the design of the spatial elements and creation of the spatial characteristics tend to be mechanistic and deterministic. Furthermore, the "structure" and the created setting in the built-environment would be constraints over human action and social interaction. In other words by considering only the "structure, the human being as an individual does not have an essential role to play in establishing the meaning that identifies the "sense of place". Therefore, the relationship of the rules and the organization of scarce resources with the personal expression of human existence in space, intentionality and purposive "action" have to be raised if the appropriate meaning of the "sense of place" in a particular situation is to be sought.

For exploring the means for associating the personal and the societal level of the human subjective dimension in space, Giddens' recent social theory was considered. Giddens argued that the societal level is not only a constraint on the human "action", but also has a generative property used through a dialogue in the process of social interaction and social production. He then introduced the term "duality of structure", to identify the dual properties of the subjectivity of the societal level and through a dialogue to synthesize the societal properties with human "action". In the "duality of structure", the societal rules

and organization of resources (i.e., the "structure"), become the medium and the outcome of any social production in space, time and historical situation (i.e., the paradigmatic dimension). In this case the "structure" is both a constraint and at the same time enables the human being to utilize it for creating the spatial characteristics that give meaning and understanding of the "sense of place". Based on Giddens' social theory, for any future spatial production (i.e., future "sense of place"), the spatial characteristics of the existing historical situation (with all the signified symbol systems and ideological expressions in space) takes the property of the spatial rules and scarce resources (i.e., "structure") to continuously be used and interact with human "action" and establish future human self-expression of existence in space. This implies that because the existing spatial setting is a "structure", reflecting in space and time society's symbol system and ideology, it has to be continuously studied, understood and then integrated into the design and planning process. Hence the existing "place" will be used as a component for identifying future setting for human interaction. One therefore can conclude that the existing spatial characteristics will be continuously used in a space-time continuum to transform the "sense of place" from the past through the present into the future.

For the process of continuous social interaction and an appropriate dialogue to manifest certain spatial reality, communication, power and morality were considered

paramount. Through communication schemes, the actor(s) can understand the symbol systems and participate in a dialogue to convey to the architects and planners their intentionality and meaning of "place". While the actor(s) will use their power in order to control their spatial production and allocation of resources. Finally, morality involves certain societal norms that identify personal and communal rights for an appropriate course of "action".

Therefore, for any social interaction in an historical situation, the meaning of the "sense of place" as understood by the actor(s), can be noted as a priori knowledge and a "structure" that may be continuously modified and re-created through a dialogue between the human being as an actor(s), the societal corporate properties and values and the spatial characteristics of the built-environment. The dialogue that creates the "sense of place" is a communication system and a learning process. Therefore, it is a tool for conveying knowledge and the means to understand and modify in the course of continuous social interaction, the spatial meaning and symbol systems in time, space and historical situation. Thus through dialogue the space becomes:

1. an essential part of human personal existence;
2. a "place" where human intentionality and purposive "action" are carried out;
3. a "place" that reflects and is an expression of the cultural pattern;
4. a "place" that reflects and is an expression of the societal ideology.

In the latter part of chapter four, the planning and design operation was defined with reference to the allocation of resources in space, in accordance with certain societal norms reflected in the cultural patterns, the ideology and the human "action". It was noted to be a modality created by the social organization so as to enable the human "action" to interact with the "structure" and produce in the course of spatial production and reproduction the spatial characteristics whose meaning identifies the "sense of place". But as was stressed in this thesis, the understanding of meaning and social interaction that creates the "sense of place", considers a priori historical situation and a dialogue between the "structure" and human intentionality and purposive "action". Moreover, according to Giddens, human "action" interacts with the "structure", through a dialogic process, and the result, one may assume, is that the planning and design process is part of the dialogue. Therefore in achieving the "sense of place", the planning and design process may be considered as part of societal "structure", in the context of the historical situation and an internal part of the dialogue between all the parties involved in the development scheme.

In its theoretical formulation this thesis has also strongly argued that the built-environment is integrated as a sub-system and as a spatial dimension of the social system. Because of the continuity of the social interaction, reproduction and change in space and time

dimension, the social system is not an ecological system that tends to establish certain equilibrium between society as a sub-system and the external environment as a system. This re-conceptualizes the built-environment as part of the societal internal organization and self-expression. It is therefore more appropriate to assume that in the planning and design process the human dimension of space is the integration of the built-environment as a component of the human being. Moreover, the planning and design process takes into its operation the properties of the social system. Furthermore, operation research, systems analysis and corporate city management, which are all instrumental actions based on the notion given by the ecological system for the human being built-environment relationship (i.e., equilibrium) and used for gathering information for bureaucratic organization, are inappropriate for operating the planning and design process that aims to integrate into its operation the human dimension of space so as to achieve the "sense of place".

Initially, part of the research, to be undertaken in this thesis, was to identify and test some of the main concluding statements made in chapter four and thus create a better understanding, foundation and argument for further research. At the start, the thesis was looking mainly for a case study to evaluate:

- the importance of the historical situation;
- the notion of internalizing the planning and design process into the human and socio-spatial production; and

- the necessity for a dialogue between the parties involved in the planning and design process so as to create the "sense of place".

After a preliminary investigation, it was decided to form a workshop in which some elderly people would actually participate in a dialogue for creating an environment for themselves. However, later and due to the unco-operative attitude of the organizations involved with the elderly, the whole project fell apart (appendix C). It is hoped that sometime in the future the workshop will be carried out and the result noted.

It seems quite important and indeed appropriate to outline briefly the concept of the workshop and the format of the dialogue. The structure and the choice of the case study was to achieve the above stated objectives. A three-stage research methodology was assumed to be appropriate (appendix C).

Basically, the first stage was to identify the historical situation and culturally understand the elderly people in Adelaide. It was envisaged that this initial stage would identify their a priori knowledge, and thus a format for the design and planning process, the structure of the workshop and the language of the dialogue could be drawn. Besides reading the relevant literature, a questionnaire was outlined to be distributed to an appropriate number of elderly people who live in villages in the Adelaide metropolitan area. During the selection process, an attempt was made to have the elderly from different

socio-economic backgrounds. This decision was taken so as to determine the relationship between class structure and the attitude, intentionality and spatial expression of the elderly.

The format of the questionnaire was to evaluate their demands, the spatial characteristics they desired, and seemed paramount for their daily activities and expression, their current environmental satisfaction and how much the present notion of self-expression is part of their previous "action" and environment (i.e., the historical situation). It was envisaged that the result of this stage would identify the direction of the workshop and the spatial notions that have to be discussed.

The purpose of the second stage - the workshop - was to let the elderly people participate in a dialogue and come out with certain proposals as to how their built-environment should be (outlining objectives and formulating strategies). The elderly people were supposed to participate in a gaming simulation (appendix C) for identifying their communal self-expression in space and the appropriateness of the dialogic process. In this manner, they were involved in a negotiatory process rather than a confrontational one.

The reason for choosing a gaming simulation was due not only to the notion that it simplifies a life situation, but more importantly because it is an educational exercise in human relationships and identification of <u>a priori</u>

knowledge. During the gaming simulation the participants were to discuss, negotiate, evaluate, settle differences and emphasize agreements (consensus) on those issues that are important for their future "action" and their notion of how their environment should be. Even though a lot has been said to support the use of gaming in design and planning (Taylor, 1971; Sanoff, 1979, 1981, 1987; Seminar, 1973), this research was to go a step further and ask the participants to evaluate the methodology and the dialogic process. It was envisaged that this final operation would result in some positive ideas for any revisions and/or research into an alternative dialogic process (e.g., Lawrence, 1982, 1985).

However, due to bureaucratic and institutional reasons, the whole exercise was abandoned and other alternative case studies were considered. Hence with all its limitation, the Collingwood Public Housing Estate was chosen and critically analysed for achieving the objectives in the thesis. It is important to stress that the choice of the Collingwood Public Housing Estate has limited the scope of these that the workshop was to achieve. However, the author hopes that this unavoidable change of direction has not prejudiced the subject of the thesis. In any case, further research is needed to elaborate on the arguments undertaken in this thesis.

Therefore the concept of internalizing the planning and design process into the human and socio-spatial production, the necessity for a dialogue between the parties

involved in the planning and design process so as to create the "sense of place", and the importance of the historical situation were within those limitations set by the thesis evaluated and further explored and tested by analysing in chapter five community involvement in the Collingwood Housing Estate redevelopment, Melbourne. Each part of the development showed that communication, community knowledge, political and economic power distribution and the attitude of the participants are all important components of the dialogic process.

Throughout this thesis an attempt was made to indicate that the dialogic approach for achieving the "sense of place", is a concept of using people's knowledge as a source for designing, communicating and deciding on the spatial characteristics while the planning and design process is in progress. It is envisaged that during this type of process people's knowledge is modified and added to by learning while being aware and involved in the dialogue with the built-environment and with others (i.e., people in the same community - architects, planners and engineers). Therefore dialogue is looked at as a learning process that grows out of personal involvement and experience. Dialogue requires a continuous reflection and thinking for the development and testing of alternative approaches for solving the spatial problems. Therefore, it is not only a means and an instrument to be used by designers and planners to gather information, as was considered by the bureaucrats involved in the Collingwood Housing Estate

development. It is assumed that the dialogue and the knowledge, once evaluated and integrated into the planning and design operation, create an internal flexibility to accommodate continuously an environment appropriate for human "action". One then can conclude that an environment created by a dialogic process has an evaluative system built into its planning and design process, as a continuous everyday event, to test and modify its spatial characteristics. Planning and designing then may lose its primary elitist value and reliability and becomes a common everyday human activity in shaping personal and societal lives and environment. The "sense of place", because of its creation through a continuous dialogue, becomes common human knowledge continuously expressed as a foundation for ecological conservation and built-environmental creation. Because of the knowledge assumed to be gained from the dialogue between the parties involved in the planning and design process, it will not only be a factor for creating the meaning of the "sense of place", but it may also donate to a common spatial understanding and interpretation of the properties to allocate efficiently society's scarce resources. To leave on a positive note, dialogue may then become an important means for evaluating the appropriateness of the existing symbol systems, values and understanding. As a result - one may speculate - the bureaucratic language and technical skills for planning and designing may eventually become part of everyday life and *a priori* for future and more appropriate spatial manifestation in the built-environment.

The analysis of the Collingwood Housing Estate development indicated some of the main components that contribute to the fluency and success of the dialogic process. For example, the relative achievement of the dialogue and the high rate of tenants' satisfaction in the Francis Street terraced houses was due to the means and tools used for the communication system, the attitude and skills of the architects, the a priori knowledge of tenants and the flexibility of the planning and design process. Other factors that were also noted to be important to the fluency of the dialogue were observed to be the possession and exercise of political power for allocating the scarce resources and expressing the meaning in the spatial characteristics. The fact that throughout the development process the Ministry of Housing had the power to allocate the resources and express the meaning in space made the bureaucrats in the Ministry impose their own attitude and ideology over the others who were involved in the operation. Other components that were observed to contribute to the success of the dialogue were the scale and time used for the development. The scale of development influenced the intensity and management of the involvement, while the duration of time to terminate the whole project had an impact on the enthusiasm and morale of those who participated in the planning and design process.

Throughout the analysis of the Collingwood Housing Estate, reference was made to the attitudes of the architects and planners who were involved. On several occasions

chapter five explicitly stated that the architects and planners, apart from their usual professional skills, require experience in communication and new knowledge for operating a planning and design process based on human involvement and dialogue. Part of the knowledge for creating the meaning of the "sense of place", is the ability of planners and architects to take responsibility for generating comprehendingly images (e.g., sketches and plans) of the knowledge of the participants, synthesized and derived from different points of view. This means that the architects and planners may need to develop skills to comprehend, integrate the views of all who are involved, express and communicate to those involved in the dialogue the personal and corporate problems and the alternative solutions. Note that during the dialogical operation, passing judgement on the architects' and planners' solutions may lead to a redefinition of the problems and other possible variant solutions. In short, this type of architectural and planning practice may ultimately call upon the architects and planners to acquire certain skills that are necessary to design and solve problems as part of the dialogic process. These skills as Boekholt (1985) indicates, far exceed the formulation of community involvement models for gathering the necessary information for achieving or consolidating a state of equilibrium. Boekholt in his paper proposes an architectural and planning education that will give the architects and planners the tools:

1. to communicate, analyse, and formulate design problems together with other participants who do not have the architectural and planning professional skills;

2. to synthesize and generate with other participants who do not have the architectural and planning professional skills, intermediate and final drawings as the alternative proposed solutions;

3. to evaluate these solutions together with other participants who do not have the architectural and planning professional skills.

In the study of the Collingwood Housing Estate, the author of this thesis noticed that one of the most important factors that influenced the dialogic process of community involvement in planning and designing the developments, was the degree the participants were allowed to make their own decisions regarding the spatial characteristics and the aesthetic qualities of the spaces. During the process the actors (i.e., the tenants) expressed in space the aesthetic qualities for their environment different from those noted by the architects. Note that since the "sense of place" is assumed to deal with the meaning of the actors, its aesthetic quality has to be congruent with the self-expression of the people who are utilizing the space as their personal "place". However the analysis of the Collingwood Housing Estate indicated that this type of desirability may generate certain conflicts between the tenants and the architects who see themselves as the only professionals qualified in dealing with aesthetic matters. To elaborate on the argument on aesthetic quality one has to look at the following issue.

The architects and planners may have to realize that part of the learning involved in the dialogue deals with the aesthetic quality of the built-environment. Throughout the history of mankind the lack of professional training never restrained people from building beautiful spaces. In many places and time the criteria and mechanism which allowed people of great human civilizations to create beautiful built-environments are those mainly founded on their personal and societal meaning and the traditional skills manifested in their vernacular architecture (e.g., the villages in Iran). In many places today, the vernacular architecture has become the self-expression, in time and space, of each nation. One may argue that one main reason for conserving vernacular architecture is to maintain an inspirational source for the architects and the planners who are researchers and look at the built-environment to formulate theoretical theses in spatial concepts (e.g., Alexander's Pattern Language and Cullen's Townscape). Therefore the architects and planners may have to realize the notion that the aesthetic quality of space is not only an elitist realization and expression. As indicated in vernacular architecture and urban design and argued in chapters three and four, the aesthetic quality of space is an outcome of a synthesis and a dialogue between the human being, societal rules and organization of available resources and the environment. It is an important means with which the human being as an individual person and a supra-person express his/her existence in space and time. Therefore it is not a necessary condition for the "sense of

place" to have initially an architectual expression noted to be beautiful because it complies with certain elite's terms of reference for aesthetic quality. In vernacular architecture and urban design the aesthetic quality of space is integrated into the historical situation as a priori and as the paradigmatic dimension of production and reproduction of future architectural expression and of personal built-environmental value for human "action". The architects and planners by materializing this notion of aesthetic in space may be able to further identify factors to express more clearly the meanings that manifest the "sense of place" and establish the appropriate built-environment to accommodate human "action".

The above goes to suggest that the argument for aesthetic decision-making and judgement may be resolved by redefining planning and architectural education. The system of education, such as the one proposed by Boekholt (1985), explicitly indicates a departure from the idea that the architects and the planners are an elite and the only qualified people to deal with the aesthetic of the built-environment. The notion that the dialogue is a system of education for all those who participate in the planning and design process, indicates that the planners and architects are continuously expanding their knowledge of aesthetic value by considering and sharing other people's views. Thus the aesthetic value of space may also become a shared meaning, materialized by the corporate self-expression of the human being and imaged by architectural and planning drawings.

Therefore, the design criteria that comes out of the dialogic process is based on the practical aspect and corporate aesthetic knowledge of the participants. Through the continuity of the dialogue, as a learning process, the aesthetic knowledge is modified and the design criteria revised. While applying only the aesthetic judgement of the architects and planners, the built-environmental qualities may only be in accordance with the meaning of a certain elite in the society. Note that the elite's (i.e., bureaucrats) judgements are not always objective, as some tend to think, but many times are an expression of a particular ideology and symbol system as was indicated in modern Isfahan. Therefore, one can conclude that urban design should not be the sole physical expression of the architects and the planners at a static point in time and space. Urban design should associate itself with the spatial expression that results from a continuous dialogic synthesis operating within the social system. Thus the design criteria mainly become the outcome of continuous processes modified in a space-time continuum to accommodate the human self-expression of existence, intentionality and purposive "action".

If today one analyses the dialogic models introduced into the planning and design process, one observes that the central issue is learning, identifying the participants' aesthetic judgement and establishing a communication system legible to all those who are involved in the dialogue (Sanoff, 1978, 1979; Lawrence, 1982). In these models the

continuity of the dialogue throughout the planning and design process (i.e., data collection, problem identification, aim and objectives formulation, plan and design, decision-making, implementation and management) is noticed. Some of these games are used only for the production of proposed plans and designs, while for the latter stages (i.e., implementation and management), community self-help and corporate management seem to be considered appropriate approaches. As was noted before, using gaming for proposing plans and designs is to transfer the real world into a lesser time and space dimension and create a more economic and practical dialogic process (Appendix C).

Depending on the polity of the situation, community involvement and dialogue may take a wide variety of expressions. The reason is that many times the philosophies of community involvement and dialogue are at odds with the attitude of the authorities who see themselves responsible for creating the spatial characteristics of the built-environment. Apparently the conflict is based on the idea that community involvement shifts the power of decision-making from government institutions and elected politicians to the people. In other words, in dialogue people may regain more power and control over their own lives. This dramatic shift in power questions the basic criteria of modern democratic theory (Pateman, 1970). Pateman argues that contrary to Rousseau's dialogic democratic conception as ideology, today's modern theories, look upon democracy as a political and economic mechanism based on the free

market where few politicians are competing for the people's roles. As he indicated, those who defined modern democracy - contrary to the classical democracy of Rousseau - criticized and looked at maximum people's involvement in decision-making and dialogue as undesirable, because it advocates totalitarianism. Furthermore, the theoreticians of modern democracy (e.g., Schumpeter, Berelson and Dahl) argue that since those of lower economic status generally lack interest in politics and lack the knowledge for understanding their built-environmental quality, their participation in a dialogue could not contribute to the decision-making process and the conception of an appropriate space (Pateman, 1970).

However, a closer look at self-help, which may be assumed as a form of dialogue, shows that maximum community involvement in the decision-making process does not undermine the "contextual structure" and national political system. Self-help in planning, which has shown an encouraging result in urban renewal and housing for the poor, explicitly indicates that the lower income people can learn and acquire the knowledge to create the spatial characteristics of their built-environment.

Therefore, as argued in this thesis, dialogue is an important means for achieving the "sense of place" and a polity that redefines modern democracy so as to become an ideology. But as was argued in this thesis, the ideology of a society is a "structural" component and a societal self-expression that interacts with human "action" and

contributes to the meaning of the spatial characteristics so as to accommodate the existence of the democratic dialogic society. Thus, one can conclude that once dialogue is part of the democratic polity of a society, it becomes the ideology, hence a "structural" component to contribute to the self-expression of the existence of that society in space and a planning and design mechanism that contributes to the creation of the "sense of place". Therefore, one may note that by using continuously a dialogue for creating, re-creating and transforming the "sense of place", both its notion and continuous formation become closely associated with societal ideology.

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APPENDIXES

APPENDIX A

APPENDIX A

THE PHYSICAL PLAN OF ISFAHAN AND THE DEVELOPMENT CONTROL

The sources are:

1. 1961 Master Plan -

   Kocks, F.H. and K.G. Consulting Engineers, Master Plan of Isfahan, 1961.

2. 1968 Master Plan -

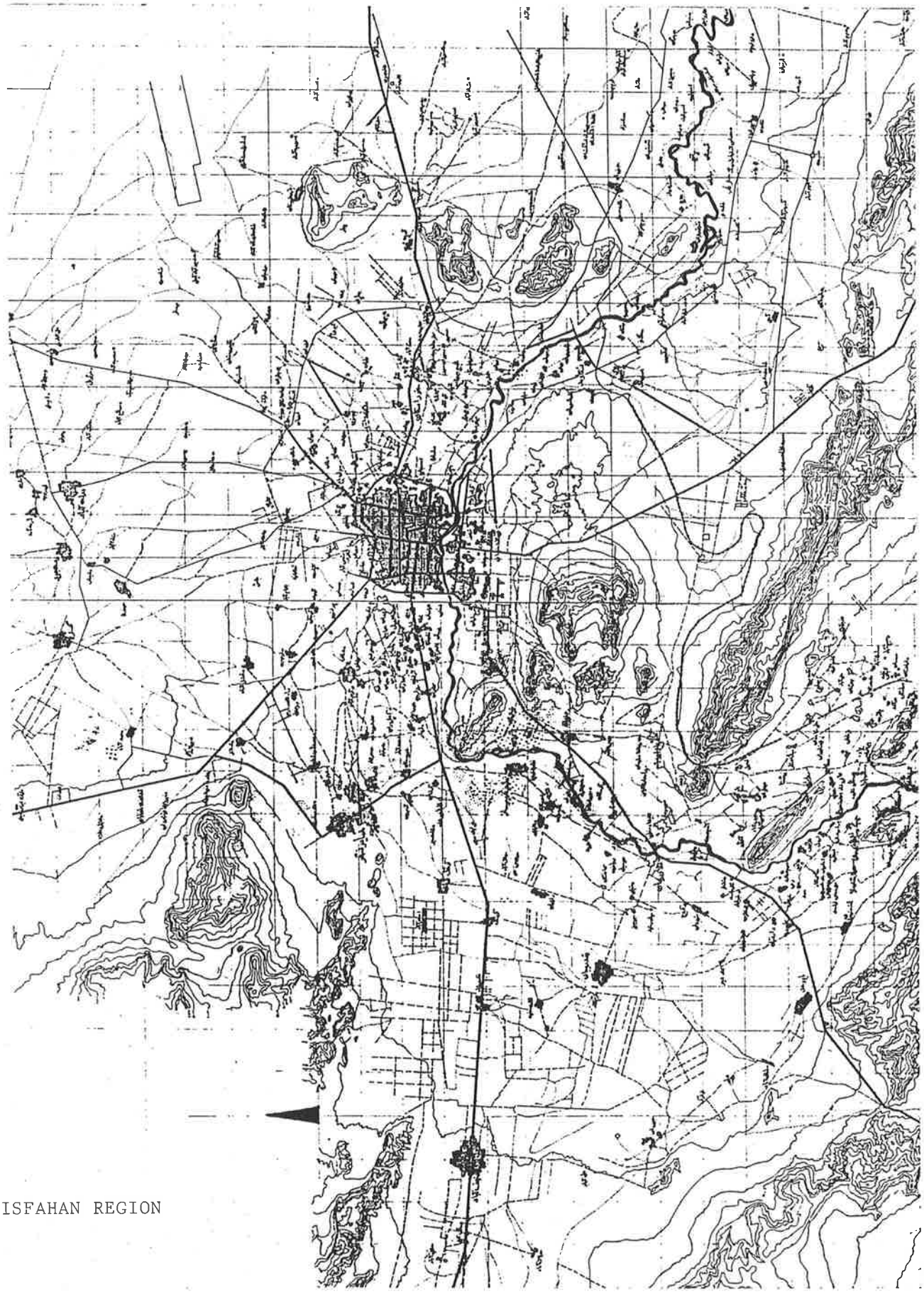
   Organic Consultant Planners, Master Plan of Isfahan (Persian text), 1968.

3. Isfahan Regional Plan -

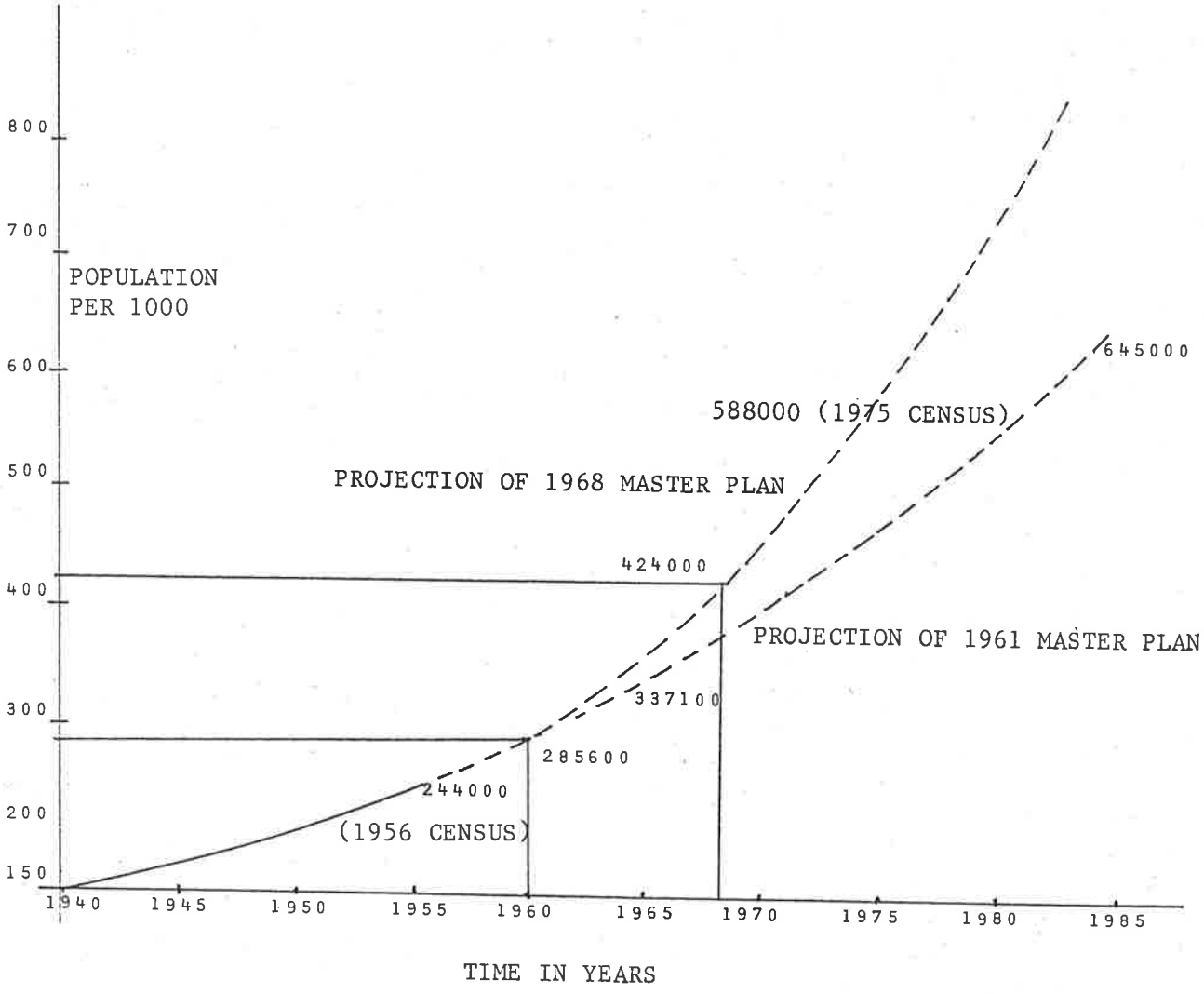
   Minai, A.T., "Regional Analysis for Iran: Isfahan a Case Study", Tehran University Press (Persian text), 1974.

4. Development Control -

   Isfahan Municipality Development Control (Persian text), 1980.



ISFAHAN REGION

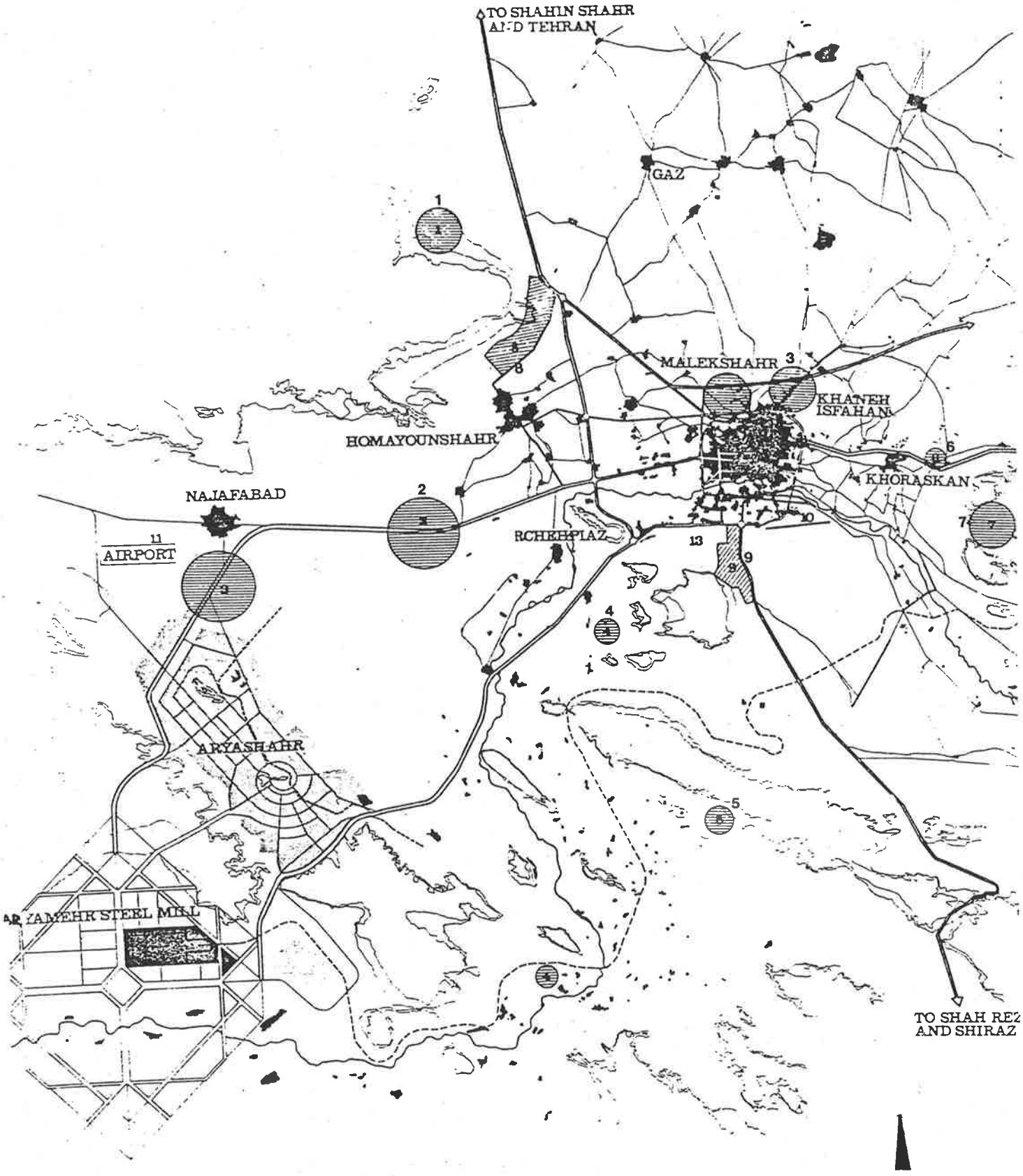


Population projection from both 1961 and 1968 master plans.

In the 1968 master plan it has been projected that by the year 1990 the population will be 1,250,000.

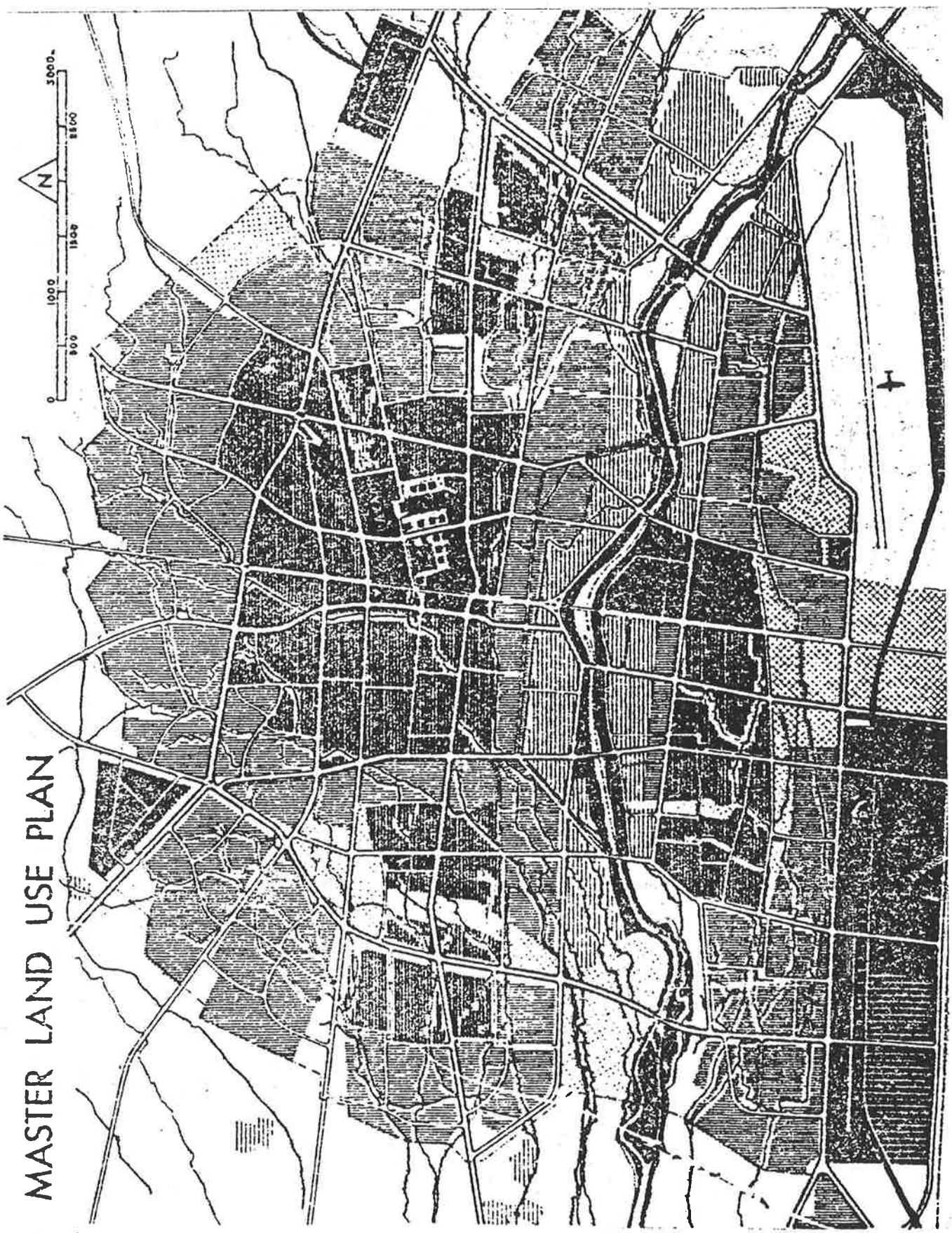
Source: F.H. Kocks, K.G. Consulting Engineers - Master Pan of Isfahan, 1961.

Organic Consulting Planners, Master Plan of Isfahan, 1968.

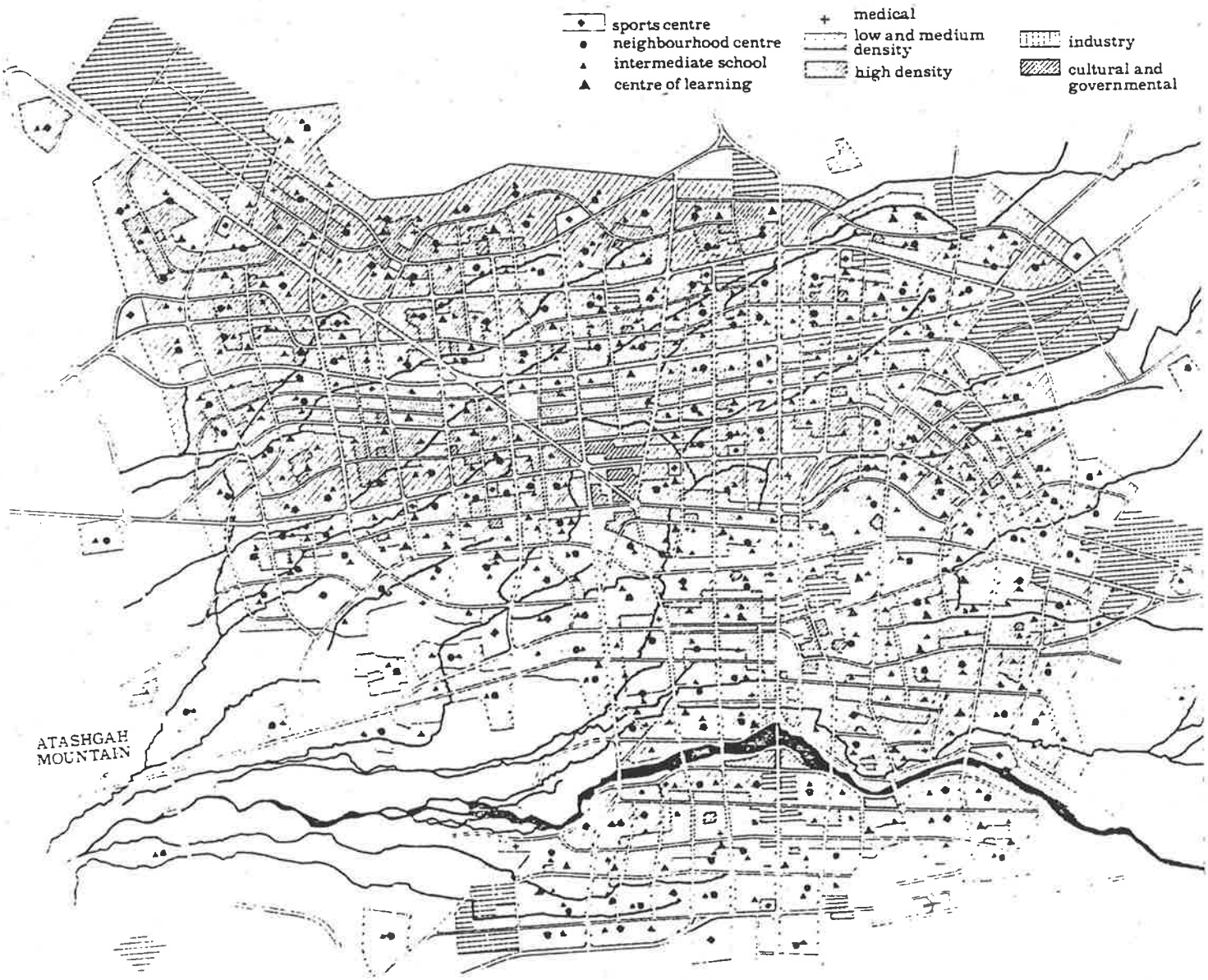


Isfahan Region - Plan

1. Oil refinery
2. New Town Villashahr
3. New town
4. Cement factory
5. Dupont factory
6. Sugar refinery
7. Proposed atomic energy centre
8. Aryamehr University
9. Isfahan University
10. Existing airport
11. Proposed airport
12. Proposed airforce housing
13. Army installation



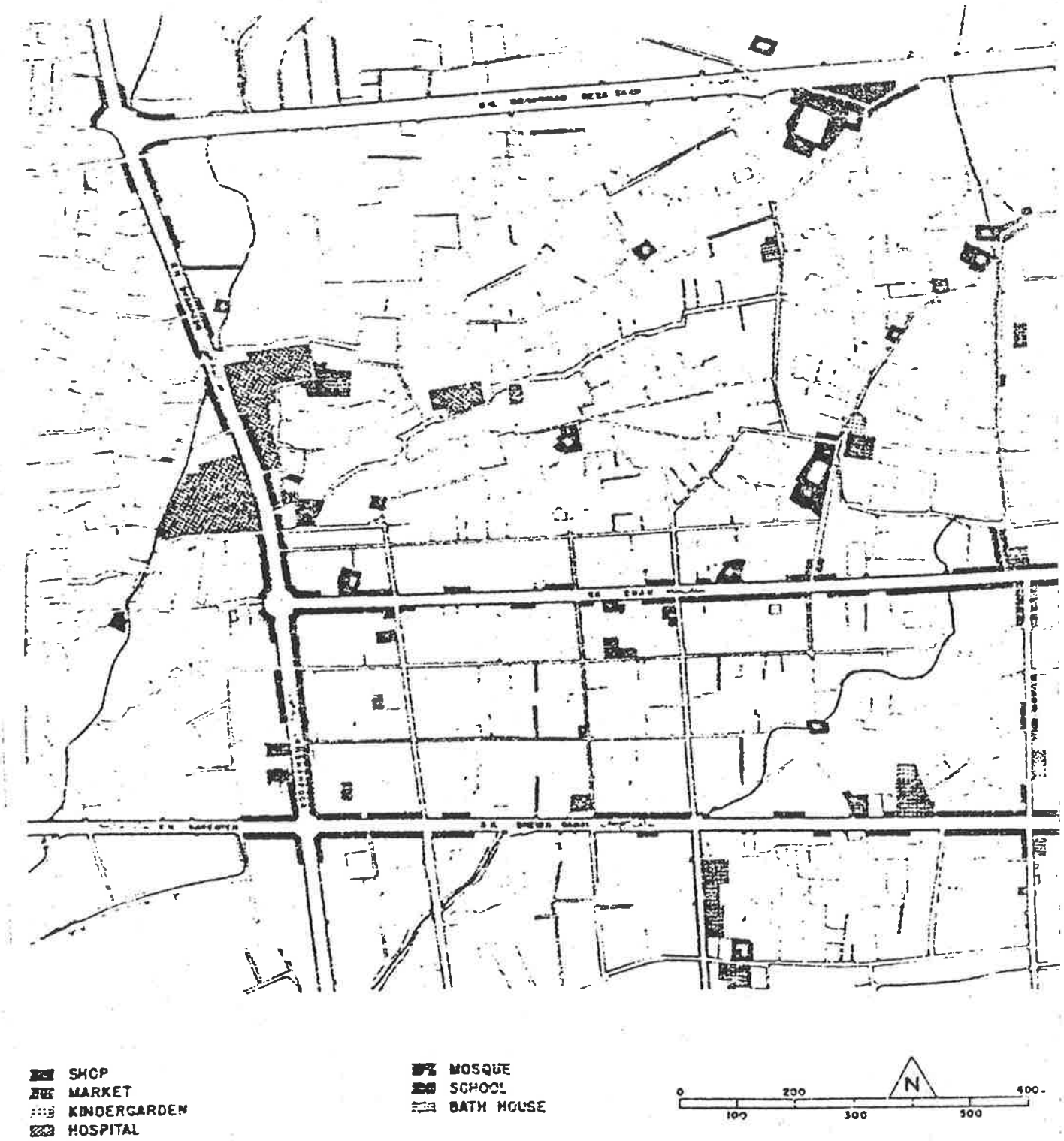
1961 master plan, prepared by F.H. Kocks Consulting Engineers.



1968 master plan, prepared by E.E. Beaudouin and Organic Consulting Planners.

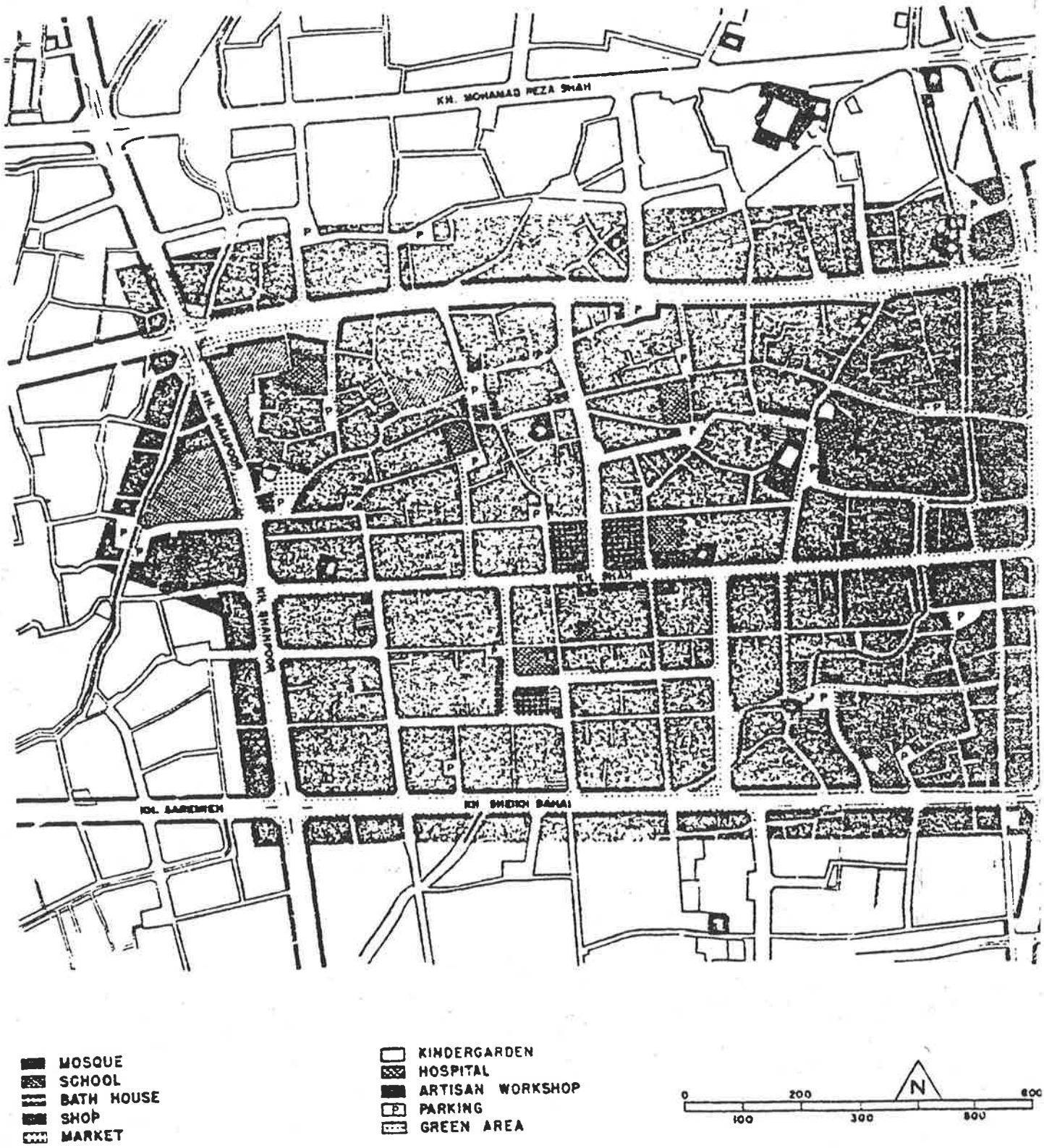
Grid system imposed on the traditional pattern.

PRESENT NEIGHBORHOODS



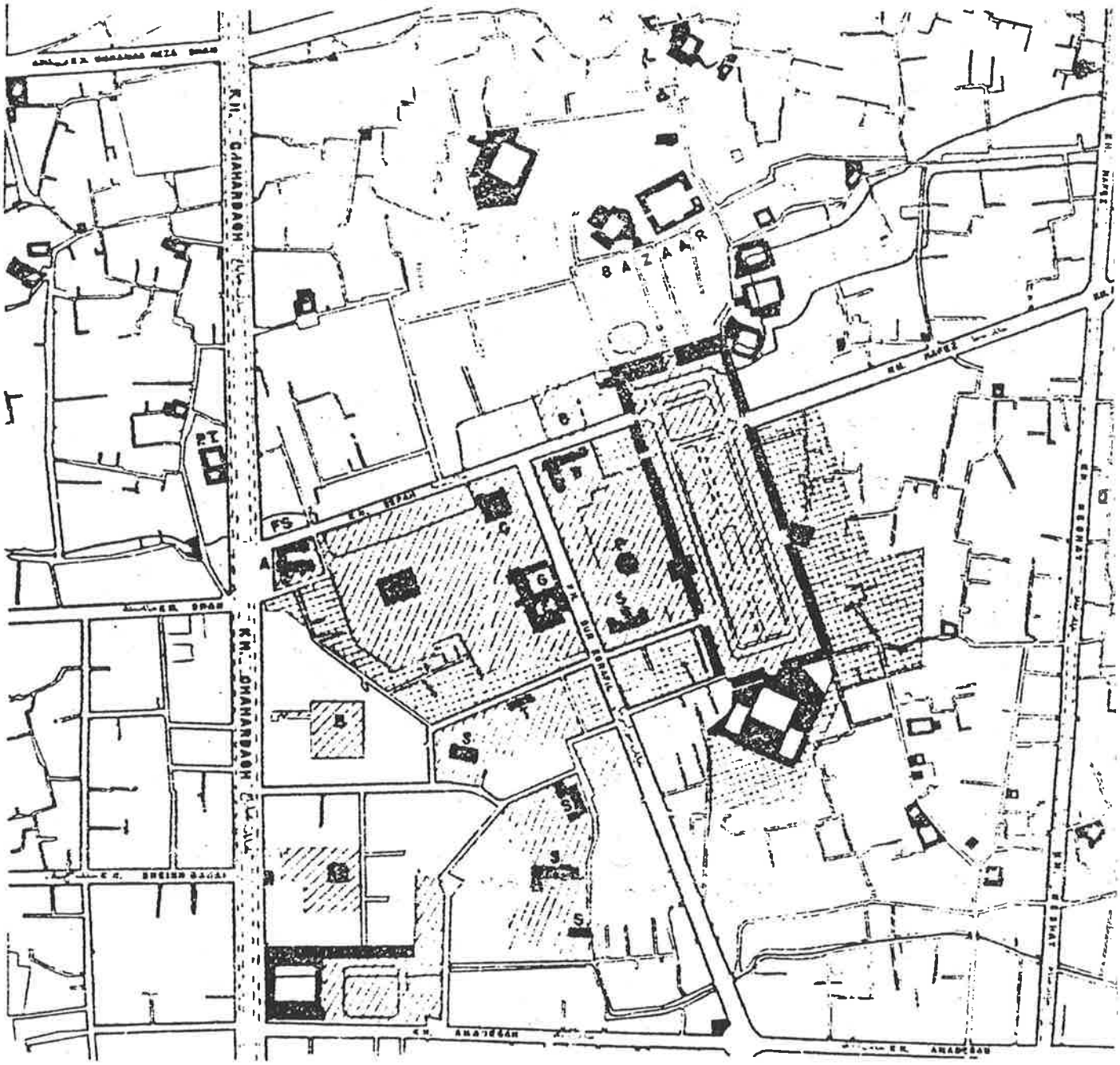
Example of the existing traditional neighbourhood – 1961 master plan.

PLANNED NEIGHBORHOODS



Proposed neighbourhood – notice the grid system imposed on the traditional pattern – 1961 master plan.

PRESENT CITY CENTER

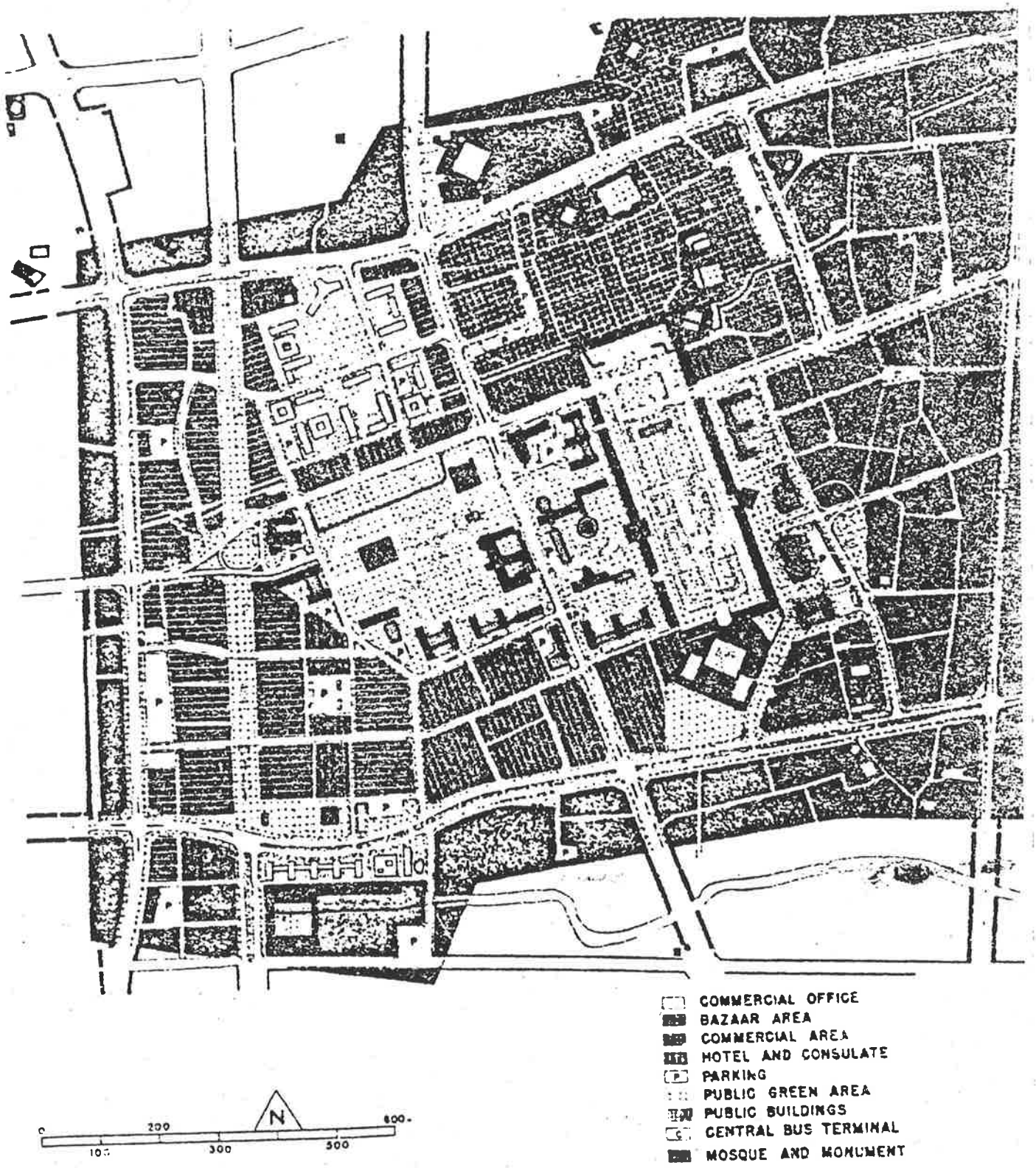


GOVERNMENT LANDS
MOSQUES AND MONUMENTS
A MUNICIPALITY
B BANKS
C MILITARY CLUB
E EDUCATION DEPARTMENT
FS FILLING STATION
G GOVERNOR GENERAL
P PRISON
P.T. POST AND TELEGRAPH
S SCHOOLS
T TELEPHONE EXCHANGE
LAND TO BE ACQUIRED FOR PUBLIC

0 200 N 600
100 300 500

Existing traditional city centre of Isfahan – 1961 master plan.

PLANNED CITY CENTER



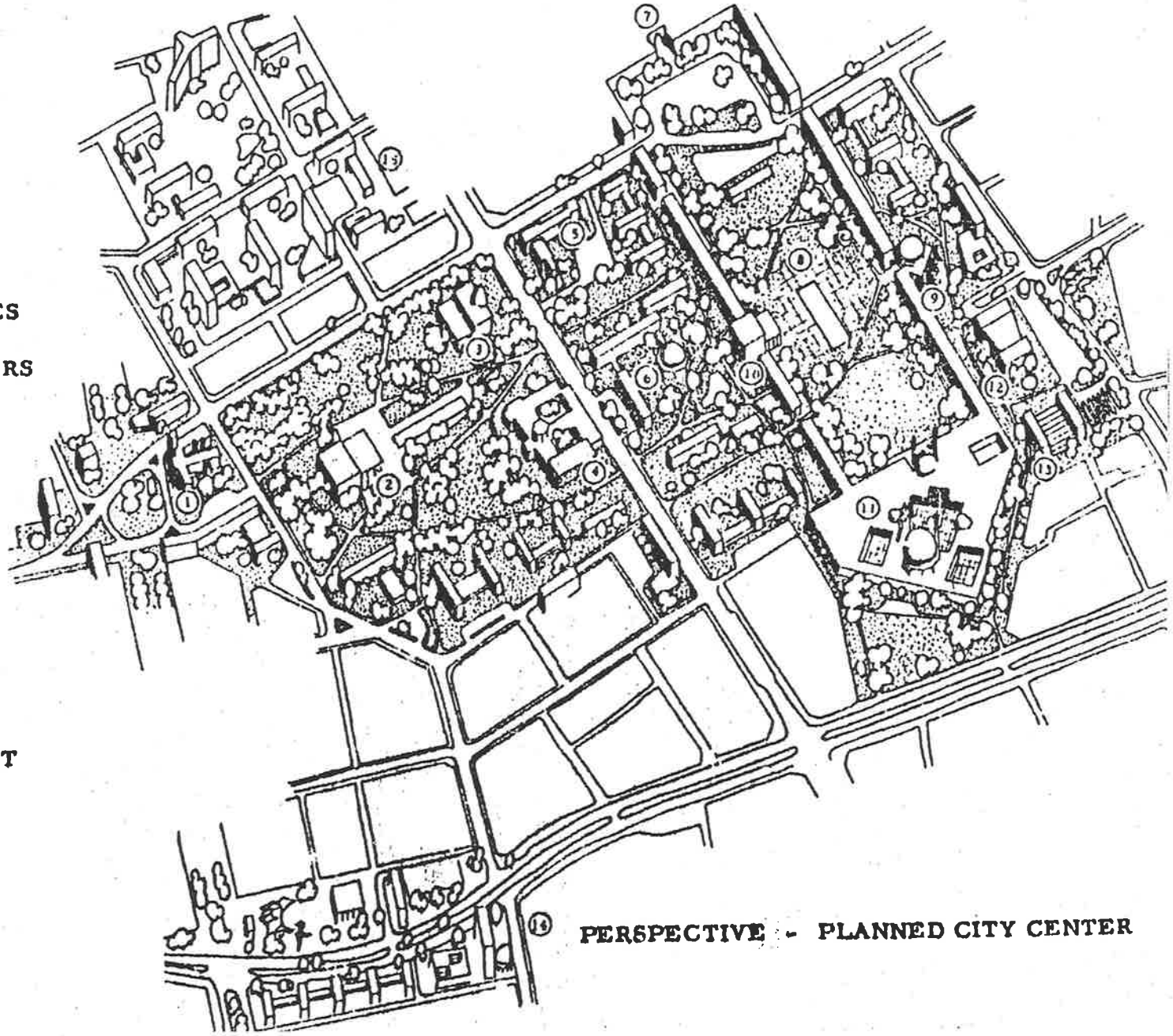
Proposed design for the centre of Isfahan – 1961 master plan.

EXISTING

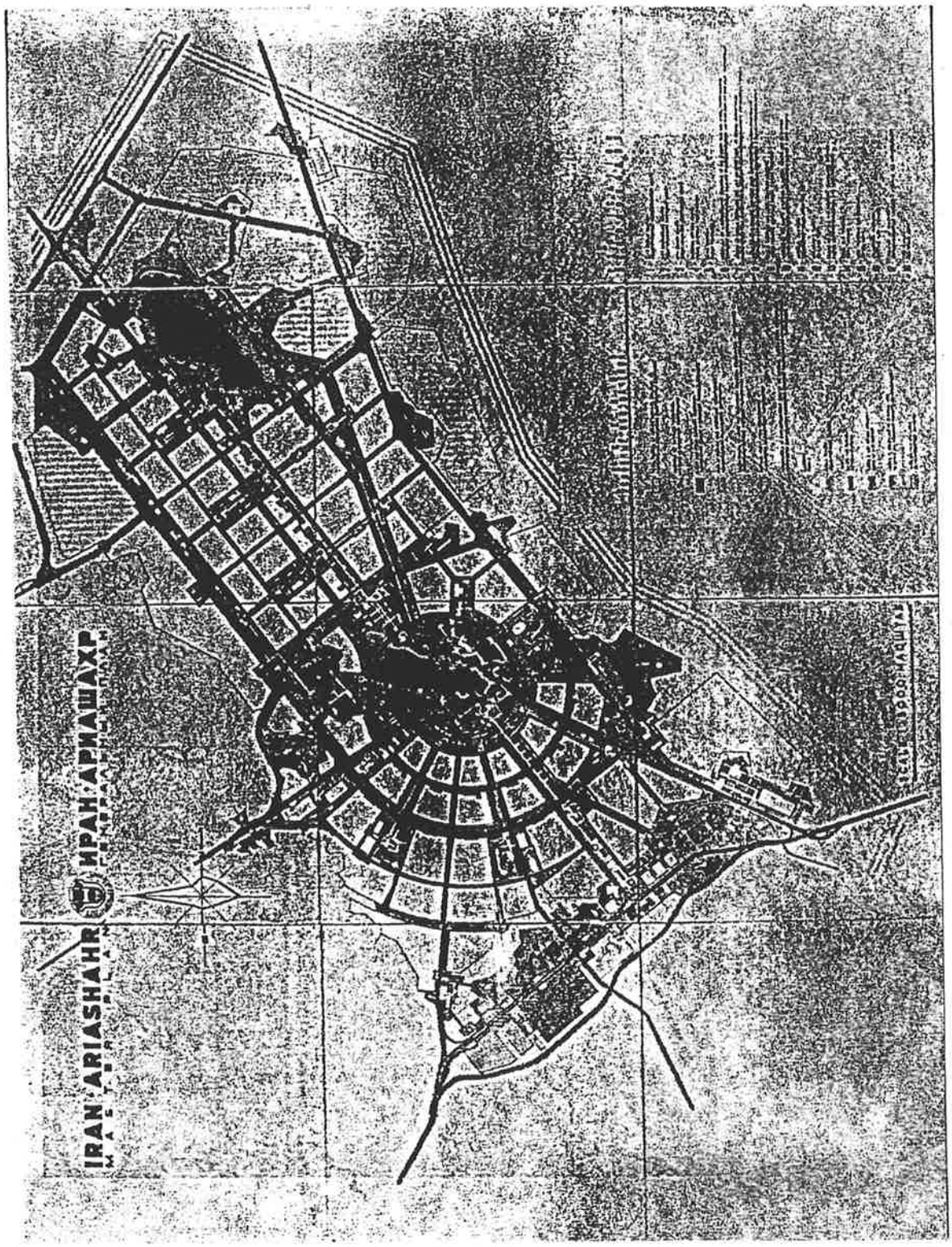
1 CITY HALL
2 CHEHEL SOTUN
3 OFFICERS CLUB
4 GOVERNMENT OFFICES
5 BANK MELLI
6 POLICE HEADQUARTERS
7 BAZAAR
8 MAIDAN SHAH
9 LOTFULLAH MOSQUE
10 ALI GHAPOU
11 SHAH MOSQUE

PROPOSED

12 THEATRE
13 BUS TERMINAL
14 COMMERCIAL DISTRICT
15 OFFICE BUILDINGS

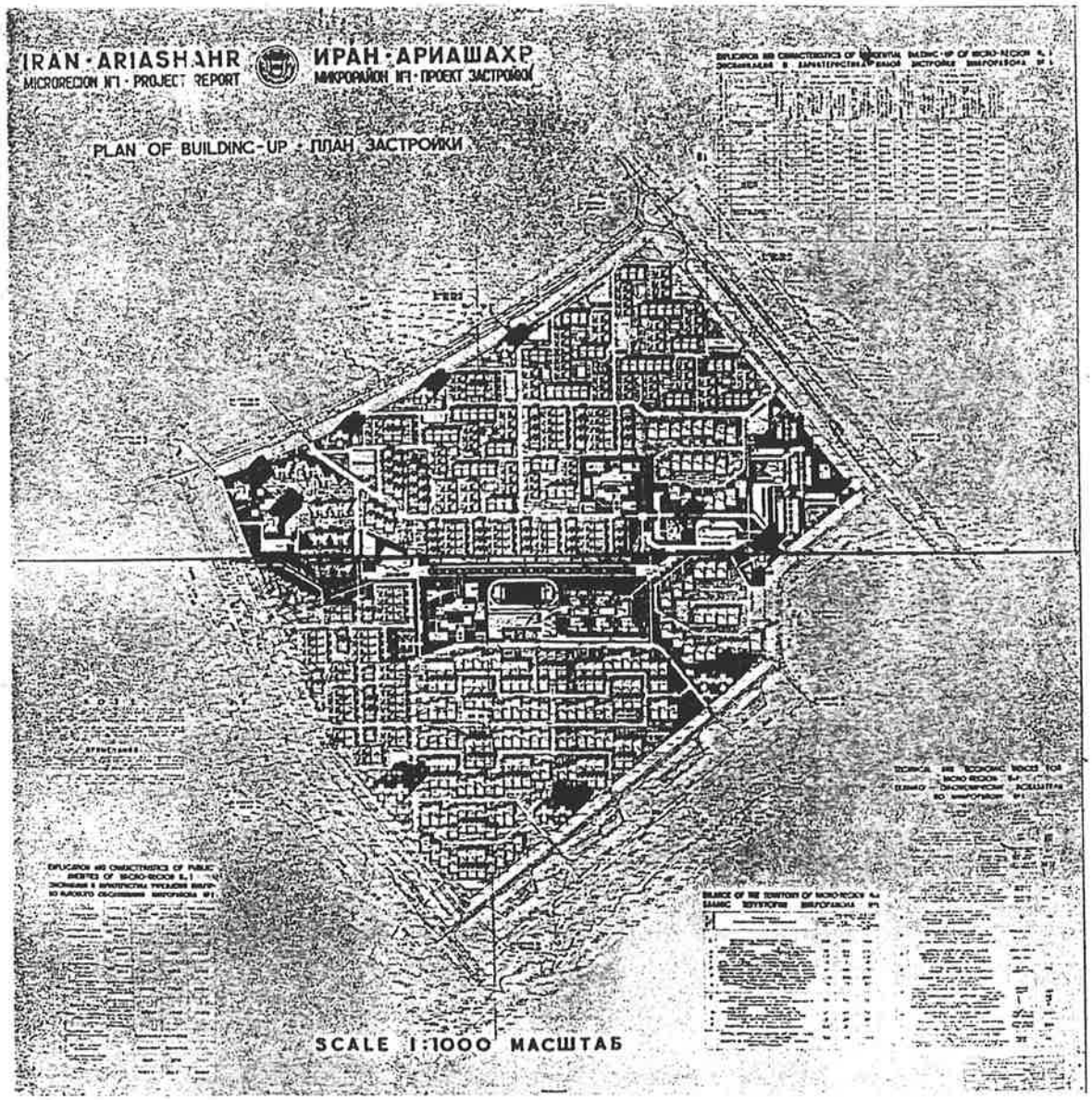


PERSPECTIVE - PLANNED CITY CENTER



Ariashah - a new town planned for the iron and steel industries.


IRAN ARIASHAHR ИРАН АРИАШАХР
PROJECT OF DETAILED PLANNING OF THE CITY CENTRAL PART
ПРОЕКТ ДЕТАЛЬНОЙ ПЛАНИРОВКИ ЦЕНТРАЛЬНОЙ ЧАСТИ ГОРОДА
SKETCH OF THE BUILDING-UP ЭСКИЗ ЗАСТРОЙКИ

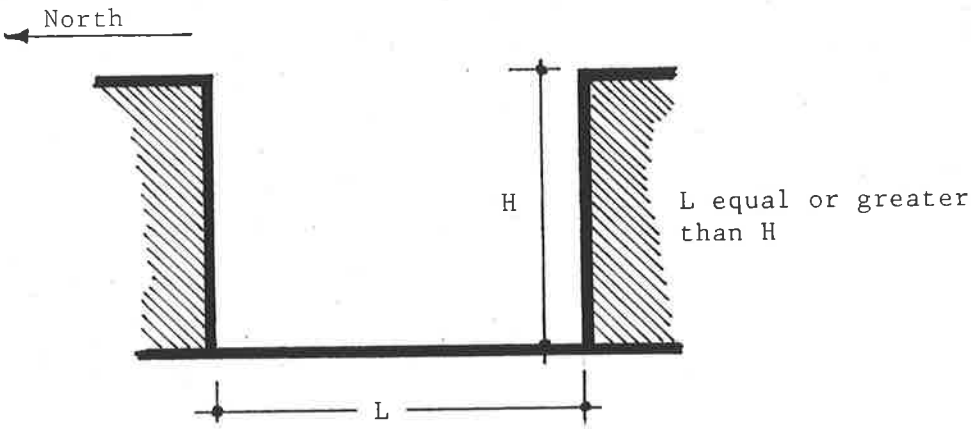

IRAN · ARIASHAHR
MICRODECION №1 · PROJECT REPORT
ИРАН · АРИАШАХР
МИКРОРАЙОН №1 · ПРОЕКТ ЗАСТРОЙКИ
PLAN OF BUILDING-UP · ПЛАН ЗАСТРОЙКИ
SCALE 1:1000 МАСШТАБ

EXISTING DEVELOPMENT CONTROL IN ISFAHAN

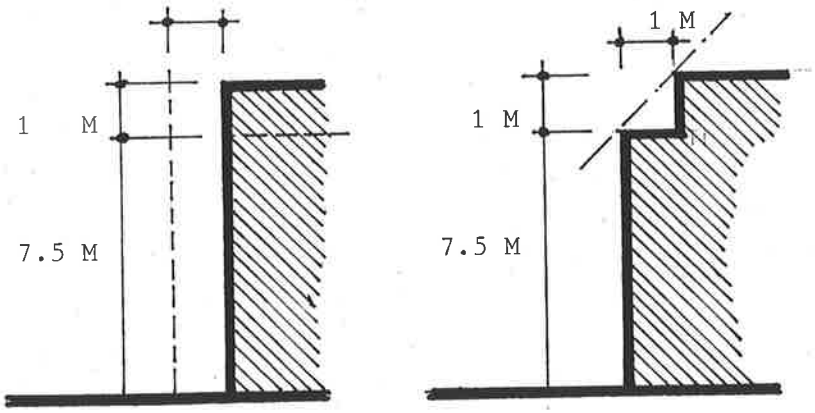
The following are some of the major existing development controls in Isfahan. Since they are a translation from Persian, discrepancy may be found with the original Persian text.

General Controls

1. The height of a new building 'H' should not be greater than the distance between the new building and the next building to its north.



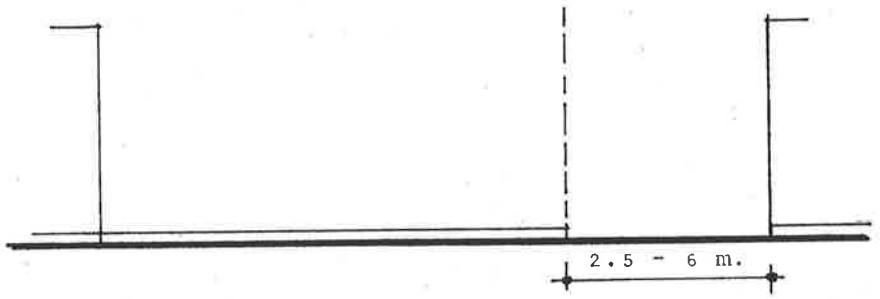
2. Inside the ring road, facades that are facing streets less than 6 metres wide should not have a height greater than 7.5 metres. For each extra one metre in height a set back of one metre is required. (Sky exposure).



3. Inside the ring road and on pedestrian circulation channels, set backs from the boundary line are not required.

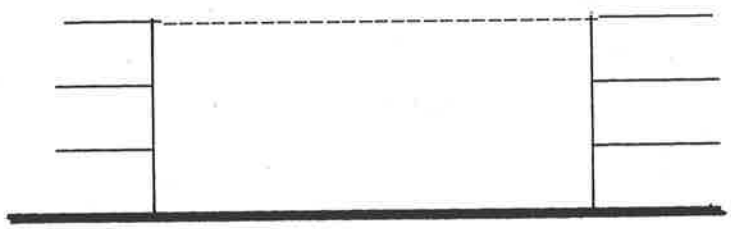
4. No window or other opening is allowed to overlook an adjacent property unless there is a minimum distance of two metres.

5. Only one fifth of the side of the land facing the street is allowed to be directly accessible to vehicles (minimum 2.5 metres and maximum 6 metres). If the side facing the street is more than 60 metres wide, the maximum accessibility is then 10 per cent of the length.



Accessible to vehicles

6. The height of a building is allowed to be equal to the height of the adjacent buildings, even though it exceeds its permitted building rights as stated in the zoning regulation. This applies only if the adjacent buildings are built in accordance with zoning regulations.



7. Buildings are permitted an overhang above streets that are more than 8 metres wide. The overhang can be one-tenth of the width of the street, but should not exceed 1.5 metres. This can be repeated in all floors above the ground. Near the historical areas permission is required from the Ministry of Culture.

8. Near the river or waterway (maadi) a walkway should be provided.

9. Streets for newly developing areas:

   a. All pedestrian circulation channels should be more than two metres wide.

   b. A through traffic street should not be less than twelve metres or more than 20 metres wide.

   c. The culs-de-sac are to be:

      - up to 50 metres in length - a minimum of 6 metres in width
      - up to 100 metres in length - a minimum of 8 metres in width
      - up to 250 metres in length - a minimum of 10 metres in width

      Culs-de-sac are not allowed to exceed 250 metres in length.

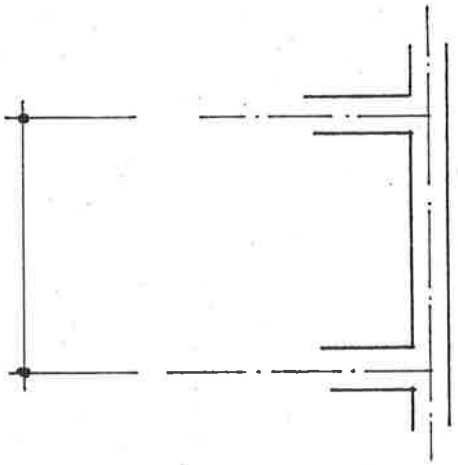
      - At the end of the cul-de-sac there should be a manoeuvring space for vehicles.

   d. To keep the hierarchy in the circulation channels no street can be connected to another if the width of the first exceeds that of the second by more than 1.5 times: unless otherwise specified.

   e. Road layout has to conform to the following:

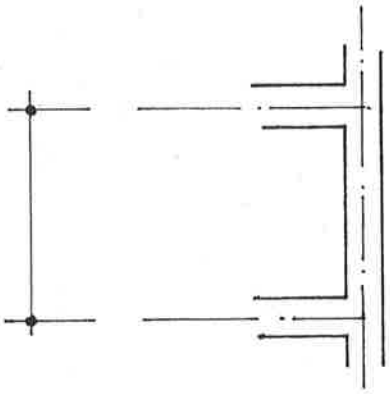
Secondary roads
(less than 20 metres wide)

Minimum distance
40 metres



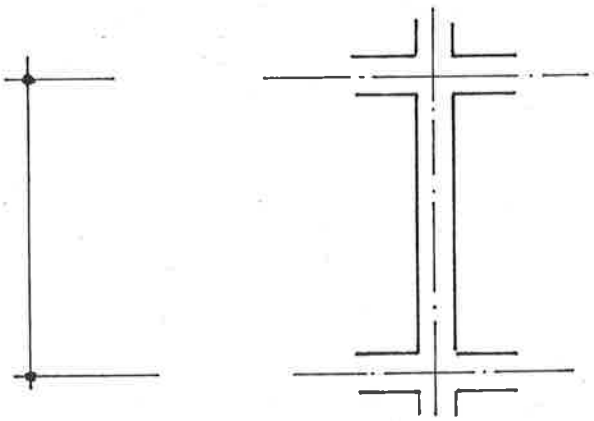
Primary roads
(more than 20 metres wide)

Minimum
100 metres



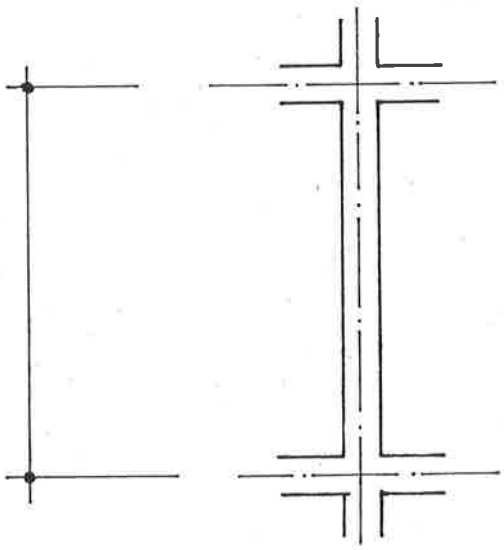
Secondary roads
(less than 20 metres wide)

Minimum distance
120 metres



Primary roads
(more than 20 metres wide)

Minimum
200 metres



10. Parking space per car should be 20.0 square metres.

11. A group of dwelling units with no private parking is entitled to a collective parking area, provided they have the approval of the Municipality. Note that the distance from the collective parking lot to the dwellings should not exceed 150 metres.

12. All commercial signs on buildings should be specified on architectural drawings, otherwise they will not be allowed.

13. All circulation channels in the historical areas of Isfahan are under the supervision of the Ministry of Culture.

14. In the new buildings, the minimum permitted areas of units are:

    a. residential flat 65 square metres
    b. office 50 square metres
    c. shop 20 square metres

15. If a building does not exceed 3 metres in height, a set back from the boundary line is not obligatory. Furthermore, the owner can build wherever he desires on the land. But if the building is more than 3 metres high, a set back equivalent to 40 per cent of the length of land from the southern boundary is mandatory.

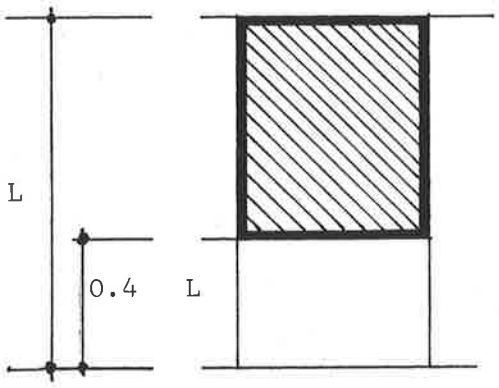


Table 1: Residential zones

CODE OF ZONE	HEIGHT OF BUILDING IN METRES	MINIMUM LAND AREA M^2	BUILT UP AREA	FLOOR AREA RATIO	BUILDING USE	SET BACK
M_1	7.5	750	50%	50%	Only one detached residential unit	2/3H from north and south 1/2H from east and west
M_2	10.5	500	60%	100%	Semi-detached house more than one unit	Not necessary at ground floor but first floor minimum 40% L. from south. Up to maximum 15 metres
M_3	8.5	200	60%	100%	Parking area and private business in services only (occupier) + M_2	Ditto M_2 but maximum 8 metres
M_4	8.5	250	60%	120%	Guest house + M_3	Ditto M_3 but maximum 12 metres
M_5	10.5	300	60%	150%	Ditto M_4	Ditto M_4 but maximum 15 metres
M_6	12.5	400	60%	180%	Ditto M_5	Ditto M_4 but maximum 12 metres
M_7	16	500	70%	200%	Ditto M_6 + private club + art gallery	No set back on ground floor 30% from south up to maximum 15 metres
M_8	20	600	70%	250%	Ditto M_7	Ditto M_7
M_9	24	1000	40%	300%	Ditto M_6	1/3H of building minimum set back from all sides after ground floor

Table 2: Commercial zones

CODE OF ZONE	HEIGHT OF BUILDING IN METRES	MINIMUM LAND AREA M	BUILT UP AREA	FLOOR AREA RATIO	SET BACK	LOCATION OF BUILDING ON SITE
T_1	12.5	400	80%	180%	No set back for ground floor. Above ground floor set back from all sides	Anywhere on site
T_2 [1]	12.5	400	80%	180%	No set back for ground floor	Ditto T_1
T_3 [2]	16	600	80%	250%	No set back for ground floor and first floor	Ditto T_2
T_4 [2]	16	1000	80%	250%		Ditto T_3

Remarks: 1. The difference from T is in the type of activities allowed.

2. If the land area is greater than 5000 square metres there is no limit to height.

Zoning Regulations

1. For residential areas see Table 1.

2. Mixed commercial and residential areas:

   a. Mixed Zone A - the maximum permitted area for commercial activity is 20 per cent of the ground floor area or 50 square metres.

   b. Mixed Zone B - the maximum permitted area for commercial activity is 25 per cent of the ground floor or 70 square metres.

   c. Mixed Zone C - the maximum permitted area for commercial activities is 50 per cent of the ground floor or 150 square metres.

3. The parking space for residential or mixed commercial and residential areas are:

   a. All residential buildings less than 150 square metres in area do not have to have a parking space.

   b. One parking space for dwellings that are from 150-300 square metres in area.

   c. Two parking areas for dwellings above 300 square metres in area.

   d. If the building is also used for commercial:

      - mixed Zone A does not need extra parking
      - in mixed Zones B and C for each 50 square metres of area of commercial building, one parking space should be added to the above (b) and (c) regulations.

4. Commercial zones - see Table 2.

Special Physical Control

Due to physical, social and economic factors in some areas, special types of control are designated. These controls are classified into:

1. Special control for circulation channels. They are the ones outlined by the consultant engineer who designs a specific road.

2. Special control for historical areas and monuments. These are outlined by the Ministry of Culture and they are classified into two types:

   a. Areas near monuments and archaeological sites.

   b. The historical areas.

      In these areas after planning application submission the Ministry of Culture has one month to respond to planning and building applications. If it fails to do so, the Municipality undertakes that responsibility.

3. Areas with special economic and social factors. These areas are designated in the master plan.

4. Gardens. Special controls for gardens are:

   a. Division of land of less than 1000 square metres is not allowed.

   b. The building should be allocated and constructed in such a manner that 80 per cent of the trees are preserved.

   c. To encourage the owner to preserve these gardens, the master plan has permitted the following privileges:

      - The owner can build 30 per cent more than is designated in the zoning regulation.

      - The height of the building can be 6 metres in excess of that stated in the zoning regulation.

APPENDIX B

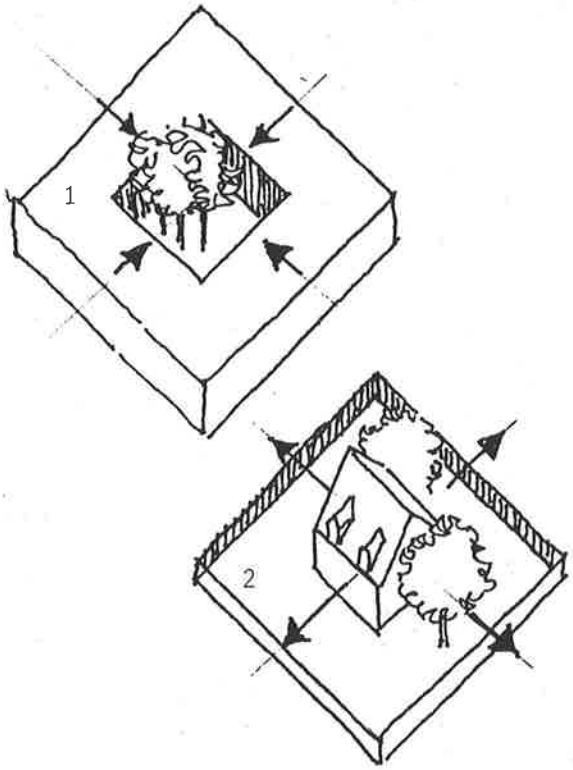
APPENDIX B

A SAMPLE OF THE DESIGN GUIDELINE SUBMITTED BY THE GOVERNMENT OF IRAN TO HABITAT CONFERENCE, VANCOUVER, JUNE 1976

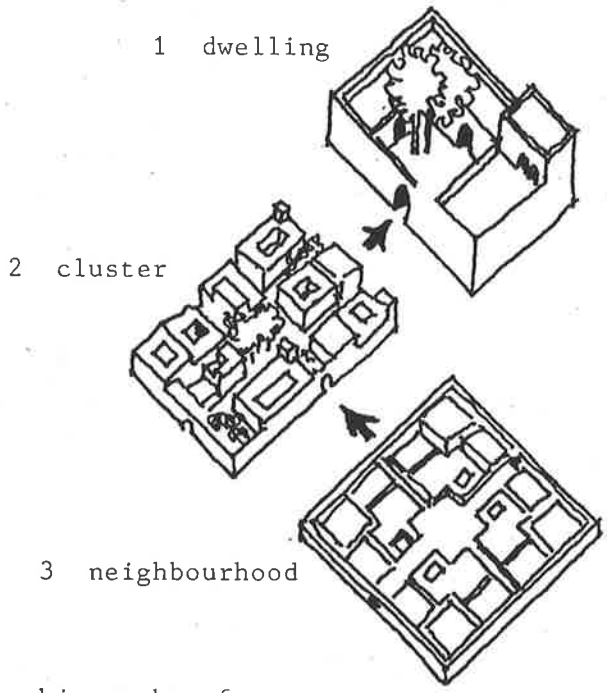
Appendix 'B' is a brief of a document submitted by the Government of Iran to the U.N. Habitat Conference in Vancouver, June 1976. The brief is a design guideline based on the Iran Islamic spatial characteristics and urban pattern as are indicated in Isfahan.

The following are extracts from an article:

Government of Iran, "Illustrated Habitat Code for Iran", Ekistics, Vol.43, No.258, May 1977.



1. The traditional Iranian "sense of place" is inward-looking.
2. Western "sense of place" is outward-looking.

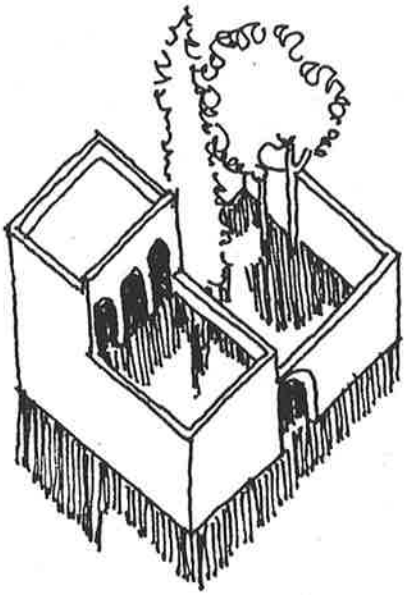


The hierarchy of space:

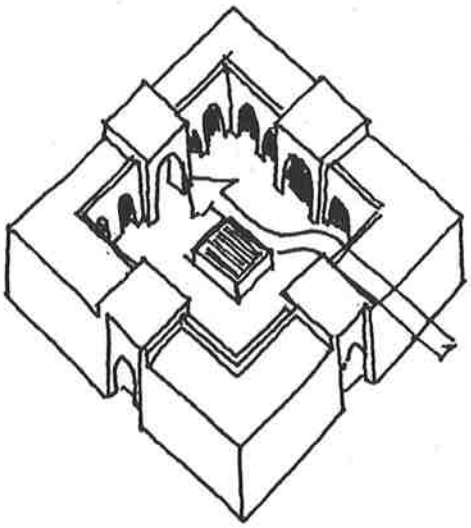
1. dwelling
2. cluster
3. neighbourhood

THE "SENSE OF PLACE": The Iranian "sense of place" identifies the existence of the human being (i.e., the contained) with reference to his/her surrounding personal space (the container). The concept of place should therefore be reflected in all urban development.

the importance of shadow to moderate the microclimate in the internal spaces

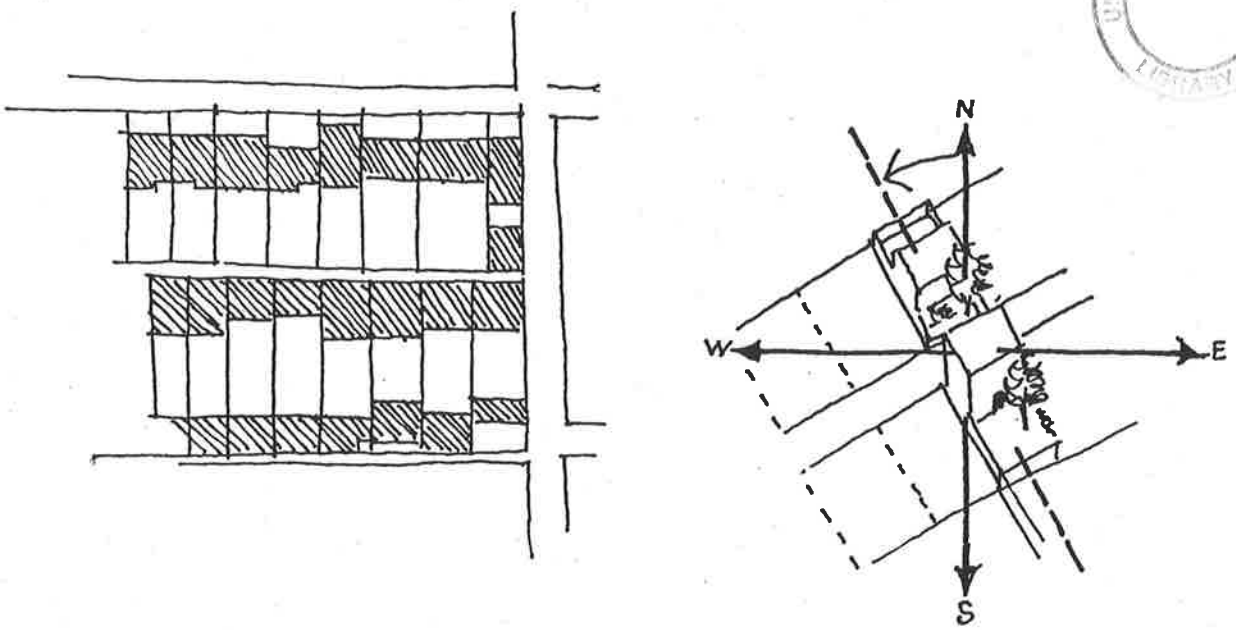


the importance of water and private internal garden to create a space in contrast to the external arid conditions



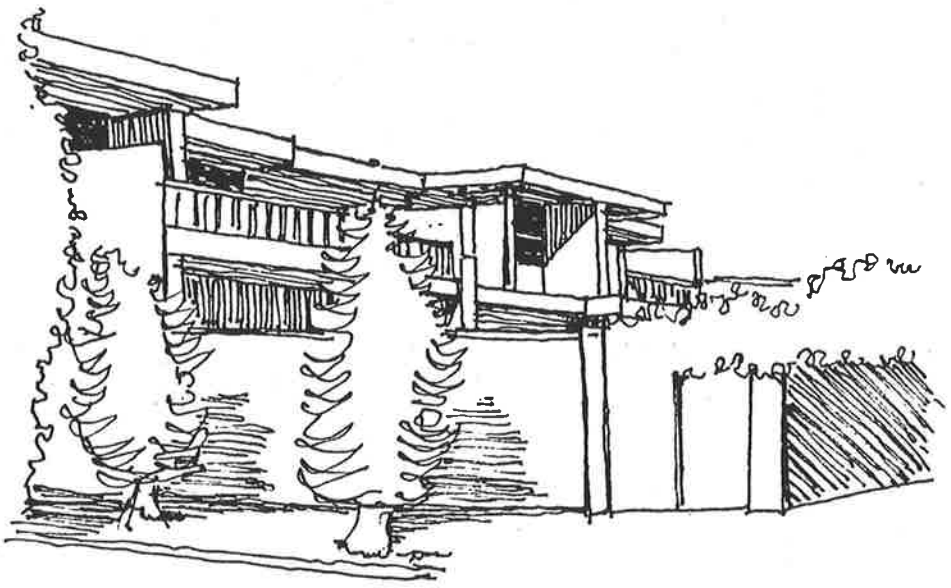
CLIMATE: In the arid regions of Iran, water and channelling of cool breezes are quite important for creating a comfortable microclimatic condition. Effort therefore should be made to minimize the exterior wall surface and maximize the internal sheltered and moderate space of a dwelling. The design of dwelling, cluster and neighbourhood should be governed by achieving shadows. Correct orientation and creative use of water and green spaces.

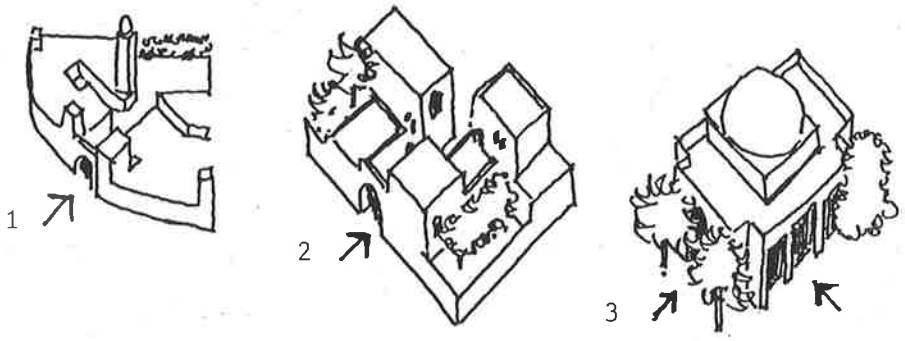
UNIVERSITY OF ADELAIDE LIBRARY



ORIENTATION: To minimize the effect of the sun and maximize the effect of the cool breeze, houses should have a compact cubic form, common side walls with adjacent buildings (i.e., terraced), and an orientation principally south-easterly, north-easterly in direction.

The patio and courts of the dwellings should have similar orientation as the dwelling. The long side of the court should face the east and west, while the narrow side north and south.

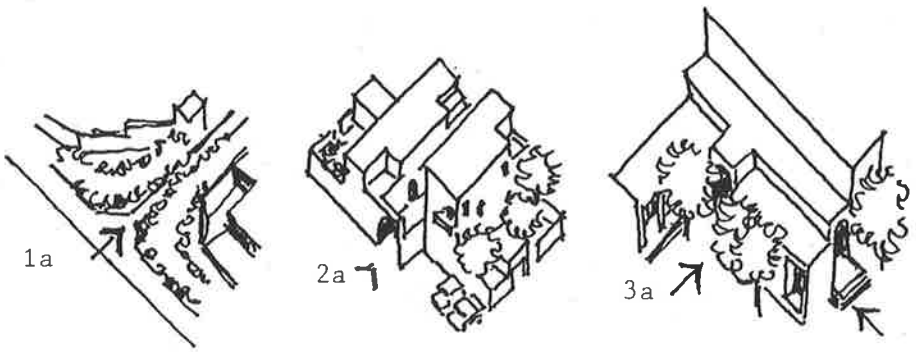




Traditional

1 Gateway to a neighbourhood
2 Gateway to a cluster
3 Gateway to a dwelling

GATEWAY: The gateway is an essential element in Iranian urban design. The gateway should be used to give a sense of arrival to a place and a sense of territoriality that divides the personal private from the communal public spaces.



For the non-traditional

1a Vehicular acces to a modern neighbourhood
2a Pedestrian gateway for a modern cluster. The parking is a collective area for the entire cluster

3a A gateway to a contemporary building



bazaar

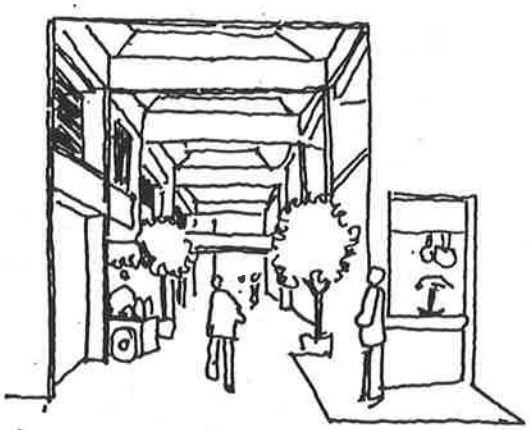


neighbourhood path

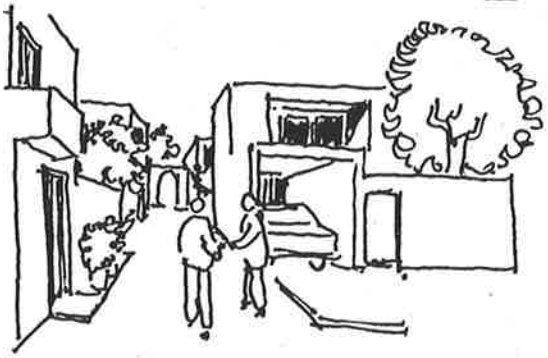
Traditional paths

PATH: The traditional path is expressed in the linear movement of the bazaar and the neighbourhood circulation system.

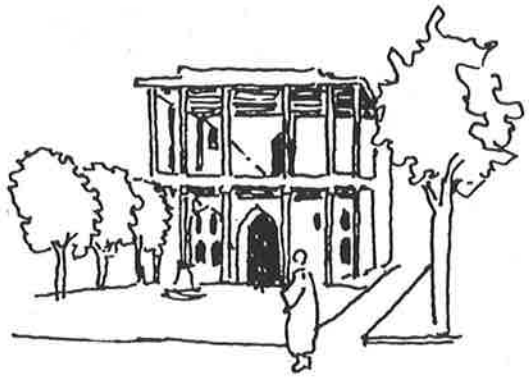
Paths should be designed so that they are in shadow most of the day. Similar to the Teamcheh in the bazaar, at certain intervals nodal points should be created at major intersections of paths.



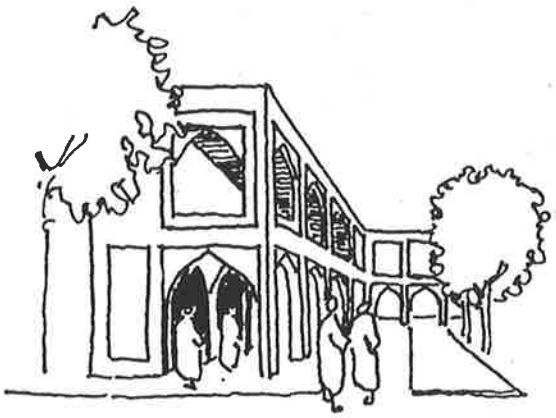
contemporary bazaar



contemporary neighbourhood path

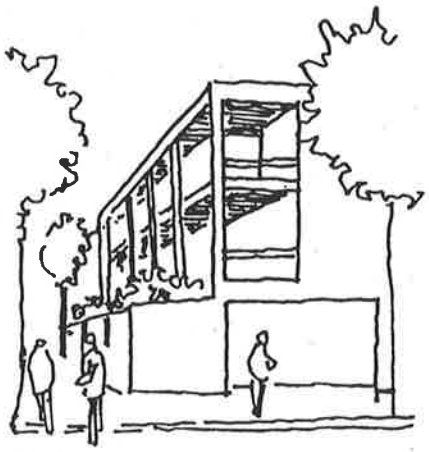


traditional porch giving shadow while providing exterior exposure to building

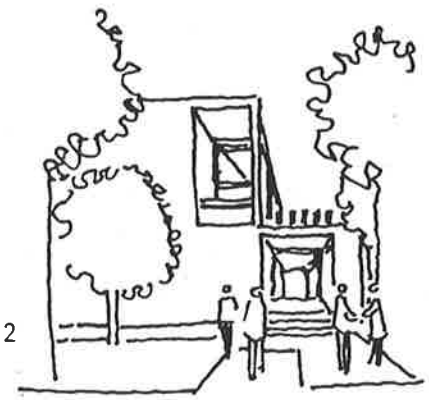


traditional arcaded building

PORCH: The porch, a three-dimensional method of modulating the penetration of light into a building, should be used to intensify the useability of semi-outdoor spaces



1



2

1 Contemporary application of porch form through the addition of exterior screening elements to the actual porch itself.

2 Use of the arcade to form the edge of a garden or town square to provide shaded pedestrian way.

APPENDIX C

APPENDIX C

Appendix C is a programme for an intended workshop in which the elderly were to participate and enter into a dialogue so as to determine some of the major factors that are important for designing a retirement village for the elderly.

The workshop is also intended to be a study of the appropriateness of gaming simulation and dialogue as a means of integrating community involvement into the planning and design process.

However, after the initial contact and the approval of the societies and organizations associated with the retirement villages, the whole research fell apart. The reason was that these societies and organizations showed little enthusiasm to co-operate and commit themselves and make available the means to carry out adequately the workshop. Moreover, it was practically impossible to gather a sufficient number of retired people ready to participate in the workshop unless these societies and organizations were willing to introduce the aim of the research and encourage a number of elderly people to participate. As a result, after outlining an initial questionnaire and programming the workshop, the whole project was abandoned.

Oct. 20 & 22, 1986

THE UNIVERSITY OF ADELAIDE

G.P.O. Box 498, ADELAIDE, SOUTH AUSTRALIA 5001
Telegraphic Address: UNIVAD Telex UNIVAD AA 89141

DEPT. ARCHITECTURE
Tel. (08) 228 5836

December 5, 1985.

Mr. Frank J. Schaper- Executive Director,
South Australian Council on the Ageing,
23 Coglin Street,
Adelaide S.A. 5000.

Dear Mr. Schaper,

Following my submitted brief dated December 3, 1985, I like you to introduce me as soon as possible to one or two retirement villages, where I may carry out a post-occupancy evaluation. As you may know, this part of my research is a pre-requisit to the workshop: its proceedings tobe submitted and carried out as stated in the brief. In fact the gaming simulation and my final analysis will be based on the post-occupancy evaluation.

I telephoned Mr. Bruce Verrier for that assistance without realizing he is a member of the Council's Board. He refered me to the Council and encouraged me to look at the retirement village in West Lakes. He also told me that about a year ago the Council had undertaken a survey on that village. I will appreciate it very much if you will let me look at that survey.

To carry out on time my post-occupancy evaluation, I will be very greatful if I can have as soon as possible your letter of approval and introduction to the requested one or two villages.

I enclose a draft of the post-occupancy evaluation.

Yours Faithfully,

Parviz F. Afnan.

THE UNIVERSITY OF ADELAIDE

G.P.O. Box 498, ADELAIDE, SOUTH AUSTRALIA 5001
Telegraphic Address: UNIVAD Telex UNIVAD AA 89141

DEPT. ARCHITECTURE
Tel. (08) 228 5836

December 3, 1985

Mr. Frank J. Schaper- Executive Director,
South Australian Council on the Ageing,
23 Coglin Street,
Adelaide S.A. 5000.

Dear Mr. Schaper,

With reference to my presentation and discussion in the meeting held on November 26, 1985, with the Resources and Development committee, I enclose a copy of the workshop brief to be submitted to the Board.

As was agreed in the above meeting, I will send you in February, 1986 a detailed description and instructions of the games and proceedings of the workshop.

I thank you for your cooperation and hope to hear from you soon.

Yours faithfully,

Parviz F. Afnan.

THE UNIVERSITY OF ADELAIDE

G.P.O. Box 498, ADELAIDE, SOUTH AUSTRALIA 5001
Telegraphic Address: UNIVAD Telex UNIVAD AA 89141

DEPT. ARCHITECTURE
Tel. (08) 228 5836

January 21, 1986.

Mr. Tim Horsnell - Director,
Aldersgate Village,
160 O.G. Road,
Felixstow,
S.A. 5070.

Dear Mr. Horsnell,

I am a research student in The Department of Architecture at Adelaide University. My current research involves a study to identify the needs and aspirations of the elderly people as regard to their environment.

I therefore like to interview some of the residents at Aldersgate Village. It will mainly be answering few questions that may identify their environmental needs and aspirations.

Your and the residents co-operation will be very much appreciated.

Yours Faithfully,

Parviz F. Afnan.

SACOTA
THE AGE OF CARING

15th November, 1985.

Mr. Parviz F. Afnan,
Department of Architecture,
University of Adelaide,
North Terrace,
ADELAIDE. 5000

Dear Parviz,

Your letter dated August 14th 1985, has only recently been dealt with by the Board of Management, and I am sorry there was such a long delay.

The Resources/Development Committee of the Council is keen for the project to be supported and would welcome the opportunity for them to discuss your proposal in greater detail.

I have been asked to invite you to meet with them on Tuesday November 26th, 1985 at 4.30 p.m. to discuss the project with you and to permit them to make some suggestions concerning the actual process.

Could you please let me know at your earliest convenience if you are able to attend.

Yours faithfully,

Frank J. Schaper
EXECUTIVE DIRECTOR

SOUTH AUSTRALIAN COUNCIL ON THE AGEING INCORPORATED
23 COGLIN STREET, ADELAIDE 5000
TELEPHONE: 212 2057 212 2252

THE UNIVERSITY OF ADELAIDE

G.P.O. Box 498, ADELAIDE, SOUTH AUSTRALIA 5001
Telegraphic Address: UNIVAD Telex UNIVAD AA 89141

DEPT. ARCHITECTURE
Tel. (08) 228 5836

January 6, 1987.

Mrs. M. Ruth Stock,
Chief Executive Officer and Administrator,
Elkanah Administration,
Elkanah Inc.
P.O.Box 611,
Norwood,
S.A. 5067.

Dear Mrs. Stock,

With reference to your letter dated November 3, 1986, and my letter dated October 21, 1986, regarding the interviews I may carry in Elkanah, I would appreciate it very much if you could convey to me the residents' response to my letter of "Willingness to Participate...".

Thank you for your assistance.

Yours faithfully,

Parviz F. Afnan.

S.A. Baptist Homes for Aged Inc.

P.O. BOX 611, NORWOOD, S.A. 5067

"ILLOURA"
157 Beulah Road,
NORWOOD, 5067
Tel: 332 4066

GERICKE UNITS
10 Nicholas Drive,
TEA TREE GULLY, 5091

CHIEF EXECUTIVE OFFICER
& ADMINISTRATION
MRS. M. RUTH STOCK
Tel: 332 4577

ELKANAH INC.
States Road,
MORPHETT VALE, 5162

3rd November, 1986

Mr. Parvie F. Afnan,
Dept. of Architecture,
University of Adelaide,
G.P.O. Box 498
ADELAIDE S.A. 5001

Dear Mr. Afnan,

Your letter and "Willingness to Participate" form has now been sent to all residents of Elkanah Village.

I will contact you when responses have been received.

Yours sincerely,

Ruth Stock
Chief Executive Officer.

THE UNIVERSITY OF ADELAIDE

G.P.O. Box 498, ADELAIDE, SOUTH AUSTRALIA 5001
Telegraphic Address: UNIVAD Telex UNIVAD AA 89141

DEPT. ARCHITECTURE
Tel. (08) 228 5836

October 21, 1986.

Mrs. R. Stock - Chief Executive Officer,
Elkanah administration,
Elkanah Incorporated,
P.O.Box 611,
Norwood, 5067.

Dear Mrs. Stock,

Thank you for your assistance in my research studies.

With reference to our conversation on October 15, 1986, I enclose the letter you recommended to me to write.

Once your administration approves of my research in Elkanah, is it possible for you to arrange the distribution of the enclosed letter and FORM among the inhabitants of Elkanah? Moreover, is the return address in the "Willingness to participate...." FORM acceptable? If not, could you recommend another where the inhabitants can send back the FORM.

Should you find any part of the enclosed letter and FORM objectionable, please do inform me.

Faithfully yours,

Parviz F. Afnan.

A WORKSHOP FOR THE ELDERLY

SUBJECT: THE PARTICIPATION OF THE "ELDERLY" IN CREATING THEIR OWN ENVIRONMENT.

DATE : OCTOBER 20 AND 22, 1986.

PLACE : SOUTH AUSTRALIAN COUNCIL FOR THE AGEING,
23 COGLIN STREET,
ADELAIDE 5000.

You are invited to attend and participate in the workshop, held on October 20 and 22, 1986 at the above place. The workshop will give you an opportunity to get involved and negotiate with others to identify certain criteria that you think are important for creating a "village for the elderly".

Your participation will give us the pleasure of learning from your valuable point of views and experiences. It will be a further step in setting a better environment for the "elderly".

WHETHER YOU INTEND TO COME OR NOT, PLEASE INFORM US AS SOON AS POSSIBLE (BEFORE SEPTEMBER 25, 1986.

The age structure today in the industrial society, indicates a proportional increase of retired people due to ageing. Governments realizing its economical and political implications, are planning to allocate more of their resources to create an environment suitable for the "elderly". Similarly, private investors and developers, realizing a new market and its economic potentials, have recently shown a great interest. Being however bound by cost effective and maximum profit factors, both governments and developers tend to standardize and produce prototype housing and services (i.e. village) for the "elderly".

The ageing people, however, due to their experience, different lifestyle and physical capabilities, show a great variability in their interest, competence and environmental needs. Their retirement age is rarely an indication of disability. Based on their social involvement, occupation and lifestyle, retirement is usually only a shift in activities from economic to social and cultural ones. In fact the environment for the

"elderly" has to be more diversified and culturally oriented to accomodate their new needs and aspirations. Therefore it seems inconsistent to design an environment for the "elderly" without involving them directly. By being involved, the "elderly" can shape and choose the environment that is appropriate to their lifestyle.

This workshop will give you the opportunity to express and argue with others who may share the same ideas, desires and problems. You will participate in exercises that directly involve you in the design process. You will be asked to set certain guidelines that you think are necessary for creating an appropriate "village for the elderly". In accordance to your role, desires and experience, you will be asked, as a person and a group, to identify your preferences, likes and dislikes for:

* the natural setting you think is most appropriate for a "village for the elderly",
* the best location of the "village" in the urban area,
* the residential layout and density that you think is appropriate for the "elderly",
* the streetscape,
* and the residential characteristics.

Eventhough due to time, we may not get all the necessary information for creating a "village for the elderly", it is envisaged that with your involvement, the workshop will be able to outline certain design criteria, important for the architects and developers.

It is for this reason that your participation is needed. We all hope to see you on Monday October 20th. and Wednesday October 22nd, 1986.

THE WORKSHOP TIME SCHEDULE:

Monday Oct. 20 1986:

9:00 am. - 9:30am. INTRODUCTION

9:30 am. - 10:00am. coffee/tea.

10:00 am. - 12:00n. GAME I- OUTLINIG OBJECTIVES.

12:00 n. - 1:30pm. lunch.

Monday Oct. 20, 1986 cont...

1:30 pm. - 3:00 pm. GAME IIA. LANDSCAPE AND TOPOGRAPHIC PREFERENCE.

3:00 pm. - 3:30 pm. coffee.

3:30 pm. - 5:00 pm. GAME IIB. LOCATIONAL PREFERENCE.

Wednesday Oct. 22, 1986.

9:00 am. - 10:30 am. GAME IIC. RESIDENTIAL LAYOUT AND DENSITY PREFERENCE.

10:30 am. - 11:00 am. coffee/tea

11:00 am. - 12:30 pm. GAME IICa. RESIDENTIAL LAYOUT AND DENSITY PREFERENCE.

12:00 pm. - 1:30 pm. lunch.

1:30 pm. - 3:00 pm. GAME IID. STREETSCAPE PREFERENCE.

3:00 pm. - 3:30 pm. coffee/tea.

3:30 pm. - 5:00 pm. GAME IIE. RESIDENTIAL CHARACTERISTICS PREFERENCE.

5:00 pm. - 5:30 pm. CONCLUSION.

FORM- WILLINGNESS TO PARTICIPATE IN THE RESEARCH INTO THE BUILT-ENVIRONMENT FOR THE "ELDERLY".

Name:

Address: Tel.

Willingness to participate in:

	Yes	No
- PART I of the research (interview)		
- PART II of the research (workshop)		

Please send this FORM to:

c/o Mrs. R. Stock
ELKANAH administration.

THE UNIVERSITY OF ADELAIDE
DEPARTMENT OF ARCHITECTURE AND PLANNING

DATE: NOVEMBER, 1985

TITLE: A WORKSHOP FOR ELDERLY INVOLVEMENT IN THE PLANNING AND DESIGN PROCESS

Demographic projection in the industrial society indicates a proportional increase of retired people due to ageing. Governments realising the economic and political implications of this demographic trend, are therefore planning to allocate more of their scarce resources to create an environment suitable for accommodating elderly people. Similarly, private investors and speculators have recently shown an interest in building villages for retired people.

Ageing people however, due to their experience, culture and change in mental and physical capability show great variability in their interest, competence and environmental demand. As a result of their rapid ageing process and increased frequency of death, their built-environment has acquired a short occupancy. Therefore, it is inconsistent to create the built-environment for the elderly, based on a fixed set of objectives, and thus achieve a static end product (i.e., defined usage and user). Furthermore, a continuous planning and design process is inevitable.

To accommodate the diversity of the elderly in the built-environment, the following research attempts to determine: a) the appropriateness of the dialogue and the elderly involvement in the planning and design process, and b) some of the major variables that are paramount for planning and designing the built-environment of ageing people.

In the following research, the term "elderly" specifies those pople who, due only to their age, have retired from monetary gaining activities. However, without any external help, they can still carry on their personal and social activities, in accordance with their desired life style. Therefore, the above definition excludes those elderly people who due to age, physical or mental disability are incapable, voluntarily, of performing their activities.

The research will be executed in three stages:

1. Post-occupancy evaluation of typical built-environments, planned and designed specifically for elderly people in the Adelaide metropolitan area:

   This is to determine the degree of satisfaction with the existing and identify alternative criteria, necessary for creating an appropriate built-environment for the elderly. It is envisaged that this stage of the research will clarify major criteria to be integrated into the gaming simulation workshop for formulating objectives and strategies for an appropriate built-environment for the elderly.

Data is collected through:

a. A survey of typical, existing elderly built-environment. This is to identify the spatial element and the relationship between the built-environment for the elderly, the neighbourhood and Adelaide city.

b. Photography and personal observation of the elderly built-environment to identify its visual characteristics.

c. Questionnaires addressed to the managers and occupants of the environment.

2. Gaming simulation workshop:

In this workshop an attempt will be made to establish certain objectives for an appropriate alternative elderly built-environment, and formulate strategies to achieve these formulated objectives. The elderly people will participate in a series of gaming simulations, systematically, to identify their spatial needs and aspirations. Furthermore, observations will be made to critically analyse the dialogic process in the workshop as an alternative process of planning and design.

3. Future environmental evaluation of workshop participants:

This is a second post-occupancy evaluation of those who participated in the workshop and moved to a built-environment designed for elderly people. It will be performed six to eight months after the gaming simulation workshop. The results will be analytically compared with parts one and two of the survey.

THE ALLOCATION OF ENVIRONMENT FOR ELDERLY PEOPLE

In this survey the choice of the environment will be based on the definition of "elderly" people and their type and place of habitation. Emphasis is made on the choice of place where each one (single or couple) has a private individual dwelling. The internal configurations of the dwelling (i.e., internal design), are assumed to be private and personal and excluded from the survey. While the external spatial characteristics of the built-environment, are the variables to be surveyed and analysed. The totality of that built-environment, (i.e., "village"), will be a cluster of different types of building designed and allocated in accordance with the collective needs and aspirations of the inhabitants.

POST-OCCUPANCY EVALUATION OF EXISTING "VILLAGE" ENVIRONMENT

I. GENERAL ENVIRONMENTAL VARIABLES, METHOD OF COLLECTION AND PRESENTATION OF DATA

a. Plan of Adelaide metropolitan area indicating:

   1. the location of the "villages" under study
   2. the general public communication system

b. The neighbourhood plan of each "village" under study, showing:

   1. land use, zoning, density, and planning regulations
   2. topography of the area
   3. local public communication system and its distance from the specified village. This will include the nearest bus, taxi and tramway station
   4. local activities and amenities and their accessibility to the specified village

* health centre
* church
* post office
* bank
* recreation (theatre, cinema, clubs, parks etc.)
* laundry
* chemist
* restaurants, snack bars, hotels, coffee shops
* public library
* hairdresser

5. a graphical and descriptive indication of vehicular traffic
6. a graphical and descriptive indication of pedestrian traffic.

c. By means of photography show the neighbourhood's visual characteristics.

d. From the latest census determine:

1. ethnicity of the neighbourhood where the "villages" are located.
2. the socio-economic status of the neighbourhood, where the "villages" are located.

II. "VILLAGE" ENVIRONMENTAL VARIABLES, METHOD OF COLLECTION AND PRESENTATION OF DATA

a. Indication on map of the general characteristics of the village

1. topography
2. type of activities and amenities
3. general layout of activities
4. layout of communication
   * pedestrian
   * vehicular
   * parking

5. vehicular and pedestrian accessibility
6. massing of building
7. landscaping

b. Visual characteristics of village (photography and map)

1. harmony with the neighbourhood environment
2. building characteristics
3. building density
4. landscape characteristics
5. communication characteristics
   * pavement - pedestrian, vehicular
   * pedestrian crossing
   * treatment of boundary lines
6. special outstanding features of the environment
7. boundary (edge) characteristics
8. views of special significance from the village
9. characteristics of outdoor activities (spaces)

III. MANAGERS' QUESTIONNAIRE

The manager (whether one of the community or a government institution), being directly involved in the environment, his view is valuable for an overall view and a general environmental performance evaluation. Any general knowledge of the complaints and the demographic characteristics of the village, may further clarify the needs of the environment. Even though the manager may not reside in the village, his/her personal opinion of the "village" environment is valuable information to identify the appropriate criteria for a retirement village. Thus the manager is a main participant in the planning and designing of the environment.

The questions put forward to the managers are both open-ended and explicit.

IV. THE GAMING SIMULATION WORKSHOP: AN ALTERNATIVE DESIGN AND PLANNING PROCESS

I. INTRODUCTION

The purpose of the following research is to test the theory of a "sense of place" and community involvement in the planning and design process. Elderly people, chosen by the "South Australian Council for the Ageing", will be involved systematically in a gaming simulation operation. The study of the gaming will be to identify both the appropriateness of the operation, and the needs, aspirations and alternative proposals necessary for building an environment for the participants.

II. THE NECESSITY OF THE EXERCISE

The previous research exercise sustained the idea that elderly people value their physical, psychological and cultural security. Familiarity with the structure of the built-environment, accessibility to their daily activities, socio-economic homogeneity and urbanity of the milieu, seem to be some of the main components that ageing people attribute to security. Even though there is an economic restraining factor, it is observed that the elderly choose the location of the retirement "village" in their previous suburb, or in places where they can relate its spatial characteristics to their lifelong built-environment.

The outcome of the previous exercise also indicates that ageing people show a substantial degree of variabil-

ity in their interest, competence in self-management, sociability and demand for mobility. This may be due to the wide range of age groups, previous occupation and current physical and mental condition. Moreover, the ageing process, seems to create continuously different needs and aspirations. The result strongly indicates that for planning and designing a village for the elderly, the objectives and strategies have to be diversified and continuously modified.

In planning and designing an environment for the elderly, it is inconsistent to attempt to outline inflexible objectives and strategies. Due to the multitude, complexity and diversity of their environmental demands, architects' assumptions and initial reliance on their expertise are shown to be insufficient for designing a "village" that will accommodate the needs and aspirations of the elderly. Flexibility and readjustment in the planning and design operation are highly desirable. Therefore at the initial stages and, later in management, continuous and well conceived community involvement and a dialogue between the members of the cummunity are recommended.

The research exercise carried out here on existing "villages" for the elderly, has indicated certain adaptability and flexibility. The front garden display, pot plants displayed in the entrance porch, room layout and modification have identified implicitly the personalization of the built-environment. Territoriality and individuality have been created even in standardized dwelling units. That personalization may be considered by

some to be sufficient for creating for the elderly the "sense of place". It may also stand as an argument for dwelling providers' impartiality and resistance to the concept that the planning and designing process is continuous, and residents' direct involvement is necessary. It may also be used to encourage the rationalization of the environment for the elderly through standardization.

Dwelling as a packaged finished product and standardized environment for the elderly may create uneconomic and additional expenses for both the public and the consumer (i.e., the elderly). This possibility is generated by the increase in demand and the speculative nature of the built-environment for the elderly. With the increase in demand there is the possibility of changing the standardized housing into mass housing. The outcome would be an increase in the monotony and disorientation of the current built-environment, and may end up to be hideous, dull, undesirable and quite costly to the community.

To the consumer, standardization may create unadaptability, disorientation and environmental dissatisfaction. A supplied rigid commodity has a shorter life span for a very flexible market demand. Therefore, for a built-environment for the elderly it is advisable to have a diversity that complies with their different demands and satisfaction.

III. CHOICE OF TECHNIQUE

It has been observed that the technique used for community involvement depends very much on the scope and scale of the planning and design exercise. However, a simple community involvement technique may be advisable for an initial outline of objectives and general course of strategies. It may be a questionnaire, a visual evaluation of photographic scenery, or a combination of the two.

In this research study, a gaming simulation technique is proposed. It will be tested for its apropriateness as a tool that can identify the environmental needs and aspirations of ageing people. In other words, the exercise will attempt to evaluate both the feasibility and outcome of the operation. The criteria upon which gaming simulation will be tested, are:

- Comprehensibility and Practicality: the evaluation will be done by the participants. It will be an "evaluation game" that will identify the educational achievement of the whole simulation.
- Economic Feasibility (i.e., cost-benefit): bearing in mind the importance of the scope and scale of the exercise, this criterion will be tested by looking at the simplicity, time consumption and appropriateness of the entire operation. A questionnaire, distributed to the participants, will further evaluate this criterion.
- A Tool to Create the "Sense of Place": the appropriateness of the operation to create the "sense of place" will be tested by the previous criteria and the outcome of the simulation (i.e., the outlined objectives and strategies).

It is also expected that the above testing measures will identify the success of the operation for the proposed community involvement in the planning and design process.

Theoretically, a gaming simulation is based on the fact that the participants involve themselves in a simulation that reflects a real life situation. However, to make it more operational, it is compressed in time and resources.

In these games, the roles are based on the assumption that this group of elderly people (i.e., the participants) is seeking a plot of land in the Adelaide metropolitan area, to establish a retirement residential community for themselves, where each household will have a private, individual dwelling. The totality of the environment defined in this research, a "village", will be a cluster of different types of human dwellings, created to accommodate a diversity of needs, aspirations and activities. The need for this type of environment varies among the participants. Some may see the need for a change in their built-environment because of the difficulty in managing their lifelong environment, while for others it may be a security factor or a desire for independence.

Whatever the reasons for changing their built-environment, these ageing people have agreed to participate in the workshop so that they can identify more explicitly their needs and aspirations. It is expected that this will facilitate the formulation of objectives and strategies

necessary for planning and designing an appropriate environment. It is envisaged that a guideline for proposed alternative solutions, allocation of resources and choice of an appropriate environment will be established. In other words, the games are assumed to be a self-educating exercise in the comprehension of the built-environment.

Therefore in the workshop, the participants will be engaged in an exercise to provide basic and fundamental information in human relationships. It is expected that this will be best achieved when the participants enter into a dialogue and are required to negotiate, settle differences and outline agreements on issues that inter-relate them to their built-environment. It is believed that the workshop will also be an appropriate setting for an interaction between the ageing people who share certain common behaviour and are connected by the same common problems.

V. CHOICE OF PARTICIPANTS

The participation of fifteen to twenty people in the workshop seems to be appropriate. It is recommended that the choice will be from those who share a common identified socio-economic background and similar life style. However, their ages may vary from sixty to eighty years. A mixture of both sexes and marital status is desired, bearing in mind the previous research exercise.

	WIDOW	WIDOWER	COUPLE
Site 1	18	2	2
Site 2	12	-	-
Site 3	47	2	126
Site 4	109	44	35

In three sites there seems to be a predominance of widows and married couples over widowers.

The above proposed choice is expected to create between the participants a desired socio-economic homogeneity (as seen in the existing studied "villages"), and the necessary diversity that reflects a real life situation. It is expected that this method of choice will clarify the internal communication system and minimize any alienation among the participants. Furthermore it is envisaged that it will adequately simplify the operation of the games, reduce the variables and rationalize the final synthesis. In other words, this will be an attempt to have the participants share in more of the group objectives and strategies.

VI. THE AIM AND OBJECTIVES OF THE SIMULATION

The above analysis sets the following aim and objectives.

AIM: THE AIM OF THIS GAMING SIMULATION WORKSHOP IS TO PROPOSE DESIGN CRITERIA (i.e., OUTLINE OBJECTIVES AND FORMULATE STRATEGIES) TO CREATE A BUILT-ENVIRONMENT APPROPRIATE FOR THE NEEDS, INTENTIONALITY AND ASPIRATIONS OF IDENTIFIED ELDERLY PEOPLE, TEST THE APPROPRIATENESS OF GAMING SIMULATION AS AN ALTERNATIVE TECHNIQUE FOR COMMUNITY INVOLVEMENT IN THE PLANNING AND DESIGN PROCESS AND FURTHER SUPPORT THE NECESSITY FOR ESTABLISHING THE "SENSE OF PLACE".

THE OBJECTIVES

- Identify participants' personal and group needs and aspirations for a built-environment.
- Outline the objectives that are expected to create an appropriate built-environment for the participants in the workshop.
- Establish strategies to attempt to achieve the outlined objectives.
- Test the games for their appropriateness as an alternative technique for community involvement in the planning and design process.
- Test and analyse the whole workshop to support the necessity for a "sense of place".

VII. METHODOLOGY OF THE WORKSHOP

Diagram 1 indicates a flow diagram of the whole gaming methodology. The aim of the first game (i.e., Stages 1 to 4) is to identify, outline and classify design criteria to formulate objectives for:

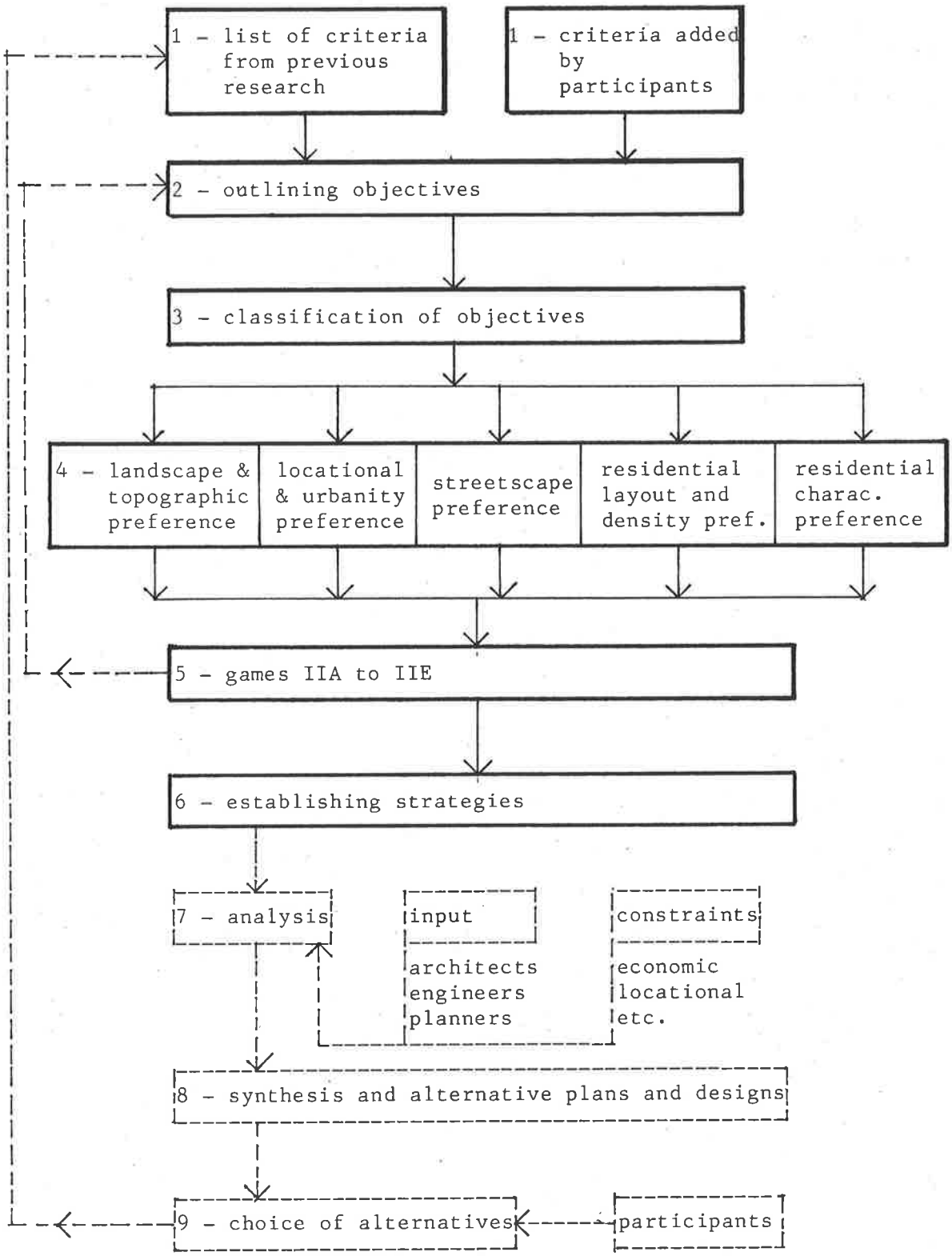
- LANDSCAPE AND TOPOGRAPHIC PREFERENCE
- LOCATIONAL AND URBANITY PREFERENCE
- STREETSCAPE PREFERENCE
- RESIDENTIAL LAYOUT AND DENSITY PREFERENCE
- RESIDENTIAL CHARACTERISTICS PREFERENCE

An attempt will be made to restrict the design criteria to the above classifications. Objectives that are based on internal structure and design of the dwelling are not considered part of the research. The imposed limitation is only to simplify and reduce the time duration of the workshop. Note that regardless of scale and scope, many types of games can be created to identify specific and appropriate environmental design criteria (e.g., Sanoff, 1979).

Stages 5 and 6 involve several strategy games. Since they also have educational purpose, certain unidentified environmental factors may be created and clarified. This may demand a revision of the objectives. As a result, the operation may go to Stage 2. If there is no reason for a revision, the operation will move to Stages 7, 8 and 9.

Stages 7, 8 and 9, and redefinition of new objectives are not included in this workshop.

Diagram 1: Methodology of the Gaming Simulation Workshop



GAME I: IDENTIFICATION OF DESIGN CRITERIA AND OBJECTIVES FOR PLANNING AND DESIGNING AN ENVIRONMENT FOR THE ELDERLY (A RETIREMENT "VILLAGE" FOR THE ELDERLY)

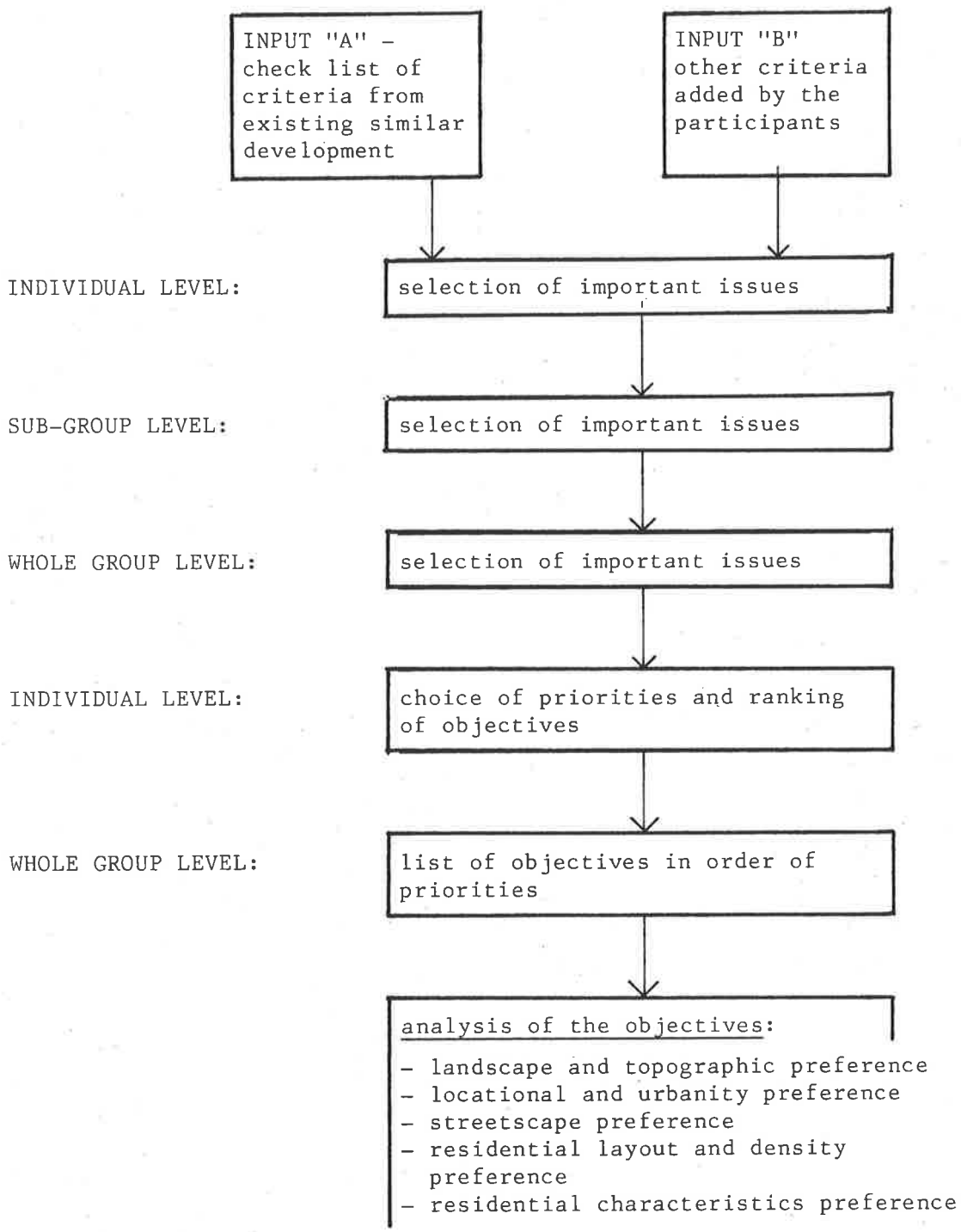
INTRODUCTION

An aim and objectives formulation is known to be the first stage of the planning and design process. It sets up the target to be achieved, the steering direction and the basis for evaluating the alternative proposals.

Systematic and continuous information from the environment identifies the problem. The feedback is mainly the output generated by the human being for any alteration, re-adjustment and re-adaptation of the internal structure (i.e., sub-system) of the environment. Therefore, continuous evaluation and observation of the existing spatial patterns created by the human being (as an individual and/or a group) seem necessary.

The first game is proposed to identify the problems and formulate the aim and objectives for creating a retirement "village" for the elderly.

Diagram 2: Methodology of Game I



INSTRUCTIONS FOR GAME I:

1. Distribute to each participant the "Check List of Important Criteria", defined and derived from the existing environment for the elderly. This will be considered as the basic proposed guideline.
2. Each person is to write down a minimum of FIVE environmental criteria that he/she considers important for planning and designing the "village". They are to be added to the "Check List".
3. Each person is to eliminate from the "Check List" FIVE criteria that in his/her opinion are not important.
4. Break up the participants into sub-groups.
5. Have each sub-group come to consensus on a new list of criteria that they consider important.
6. Have each sub-group discuss and argue in front of all the participants, their list of criteria.
7. Have the whole group come to consensus on the final list of criteria. This list comprises the OBJECTIVES.
8. Classify the OBJECTIVES into the following sections:

   A. LANDSCAPE AND URBANITY PREFERENCE

   B. LOCATIONAL AND URBANITY PREFERENCE

   C. RESIDENTIAL LAYOUT AND DENSITY PREFERENCE

   D. STREETSCAPE PREFERENCE

   E. RESIDENTIAL CHARACTERISTICS PREFERENCE

   (An objective may be located in more than one place.)

9. Instruct each individual to rank the objectives in each classified section from the most important to the least important, assigning a certain rank for each objective in each section (i.e., one for the most important, two for the next, etc.).

10. Add up the rank number each person assigned to the objectives. The one with the lowest score has the highest priority.

11. Re-adjust the objectives in each section in order of priority. Each section has therefore a list of the OBJECTIVES.

OBJECTIVE 'A' - LANDSCAPE AND TOPOGRAPHIC PREFERENCE
OBJECTIVE 'B' - LOCATIONAL AND URBANITY PREFERENCE
OBJECTIVE 'C' - RESIDENTIAL LAYOUT AND DENSITY PREFERENCE
OBJECTIVE 'D' - STREETSCAPE PREFERENCE
OBJECTIVE 'E' - RESIDENTIAL CHARACTERISTICS PREFERENCE

This game is adapted from Sanoff, H. (1979) Design Games. William Kaufmann: Los Altos, California.

CHECK LIST OF IMPORTANT CRITERIA (DEFINED AND DERIVED FROM THE EXISTING ENVIRONMENT FOR THE ELDERLY):

- Attempt to create appropriate physical and material security for the "village" in general and the private dwelling in particular.
- Encourage social contact through accommodating appropriate outdoor and indoor community amenities.
- Attempt to set an appropriate density and layout to achieve privacy, without isolating each household.
- Attempt to provide appropriate areas for pedestrian communication and leisure walk.
- Provide the necessary outdoor seating areas.
- Attempt to achieve adequate accessibility of the retirement "village" to urban, commercial and social activities.
- Provide the necessary accessibility to the retirement "village" from the Adelaide city.
- Locate the "village" in an appropriate quiet place.
- Attempt to achieve appropriate private outdoor space for each household.
- For safety reasons, attempt to restrict vehicular traffic to necessary activities.
- An effort should be made to secure an adequate parking area.
- Through layout and design, an attempt should be made to encourage community spirit within the "village".

- Through planning and design, an effort should be made to discourage alienation and promote social contact and integration with the surrounding neighbourhood.

CRITERIA ADDED BY THE PARTICIPANTS:

GAME II. STRATEGIES FOR CREATING AN APPROPRIATE ENVIRONMENT FOR THE ELDERLY (A RETIREMENT "VILLAGE").

INTRODUCTION

The second stage of the workshop is to formulate certain design and planning strategies for creating an appropriate environment for the elderly. It is expected that the strategies will achieve the OBJECTIVES outlined in Game I.

The game is devised into the following sections:

Game IIa - strategies to achieve OBJECTIVE 'A' (Landscape and topographic preference)

Game IIb - strategies to achieve OBJECTIVE 'B' (Locational and urbanity preference)

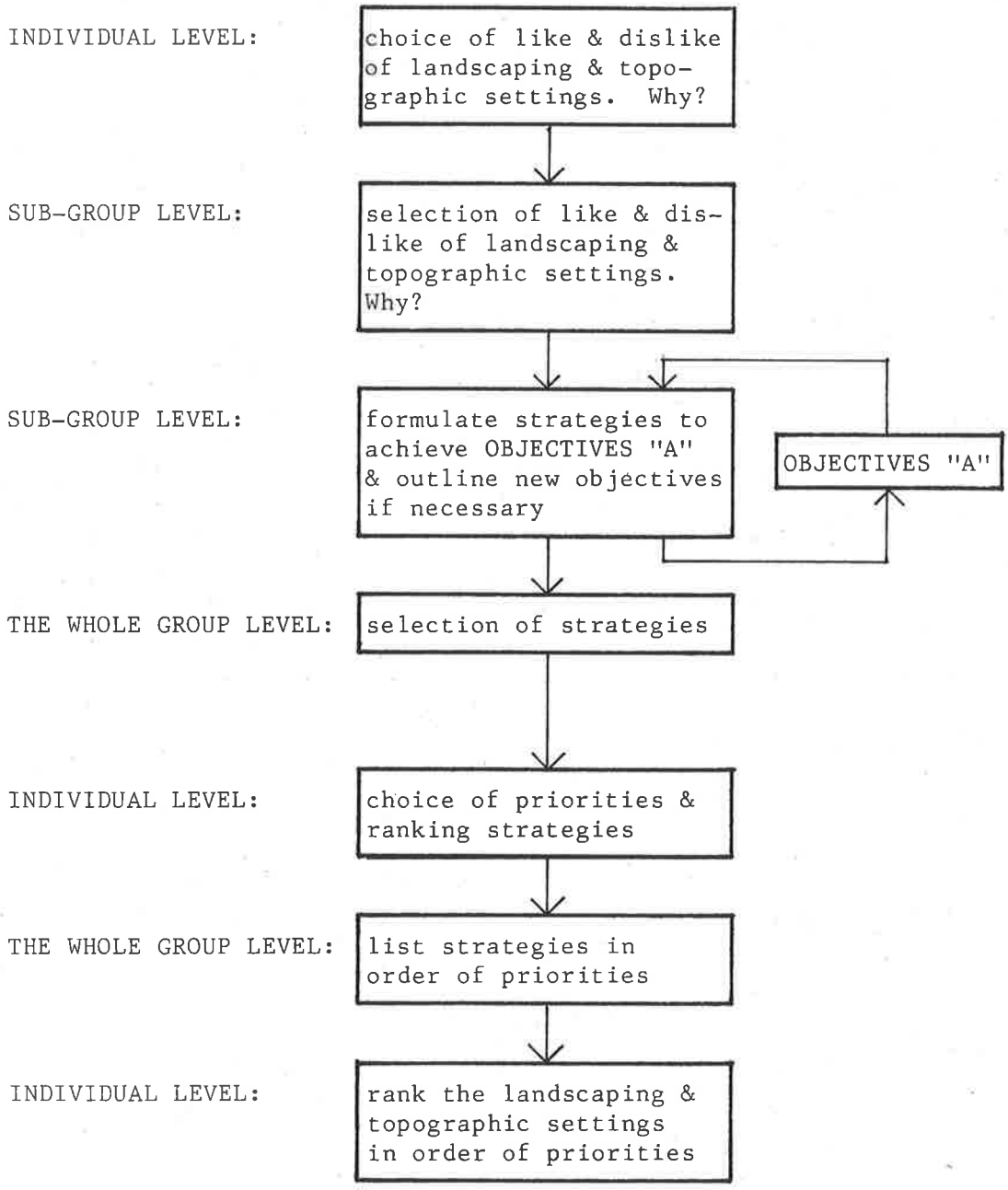
Game IIc - strategies to achieve OBJECTIVE 'C' (Residential layout and density preference).

Game IIca - strategies to achieve OBJECTIVE 'C' (Residential layout and density preference).

Game IId - strategies to achieve OBJECTIVE 'D' (Streetscape preference).

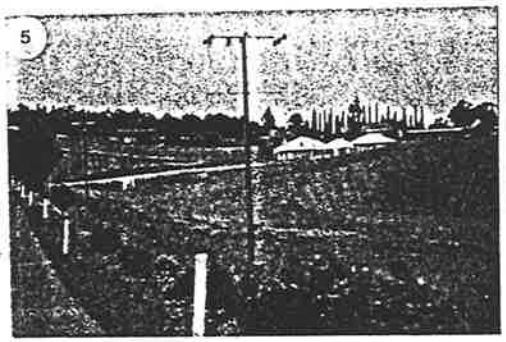
Game IIe - strategies to achieve OBJECTIVE 'E' (Residential characteristics preference).

Diagram 3: Methodology of Game IIA



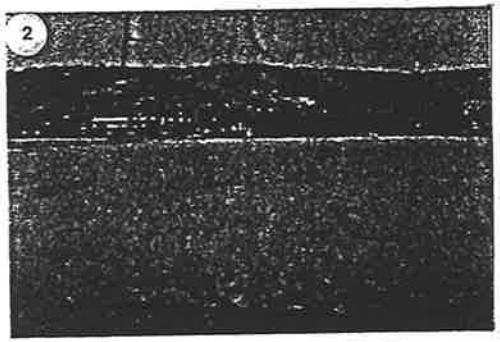














DRAWING -1- landscape and topographic preference

The prefernce is very much related to the nature of the landscaping you were exposed to and experienced through your life.

1 Mark the scenery you like best.

2 What characteristics do you like in the scenery? Why?

3 Mark the scenery you dislike the most.

4 What characteristics do you dislike in the scenery? Why?

5 Discuss your ideas with those who are playing the same game. Find out whether you share the same ideas.

6 Do you think that after this game your landscaping preference is clearer? If so, can you share it with those who are playing the same game? List your common landscaping preference.

INSTRUCTIONS FOR GAME IIa:

1. To each of the participants distribute Drawing 1.
2. Each person is to point out his/her most liked landscaping and topographic setting and state the reason for the choice.
3. Each person is to point out his/her most disliked landscaping and topographic setting and state his/her reason for the choice.
4. Break up the participants into sub-groups.
5. Have each sub-group come to a consensus on the most liked landscaping and topographic setting and state the reason for their choice.
6. Have each sub-group come to a consensus on the most disliked landscaping and topographic setting and state the reason for their choice.
7. Have each sub-group formulate strategies for achieving OBJECTIVE 'A' and outline new objectives if necessary.
8. Have each sub-group discuss and argue in front of all the participants:

   a. Their choice of like and dislike of a setting
   b. Their reason for like and dislike of a setting
   c. Their choice of strategies for achieving OBJECTIVE 'A'.

9. Have the whole group come to a consensus on the final list of strategies.
10. Instruct each person to rank the strategies in order of priorities (i.e., 1 for the most important, 2 for the next most important, etc...).

11. Add up the rank number each person had assigned to the strategies. The one with the least score will be the most important.

12. Rank the strategies in order of priorities.

13. Have each person rank the landscaping and topographic setting in order of like (i.e., 1 for the most liked, 2 for the next, etc...).

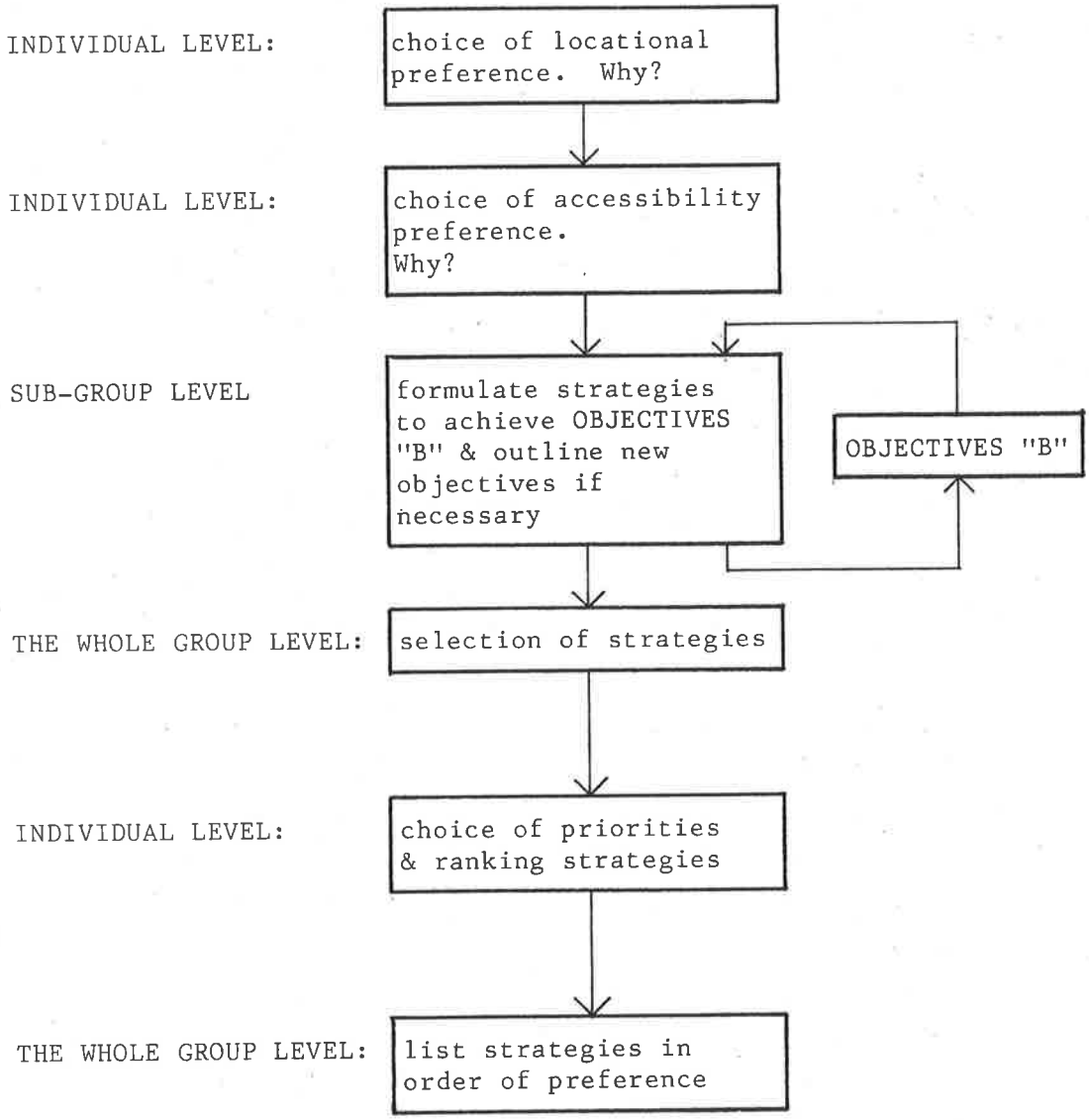
Note: By revising and outlining new objectives, Step 7 of the instructions assures the continuity of the process.

GAME IIb: LOCATIONAL AND URBANITY PREFERENCE

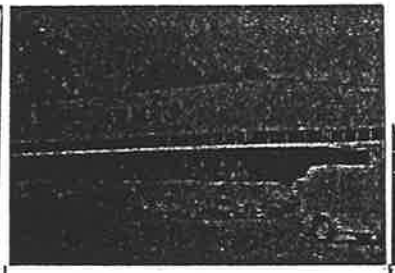
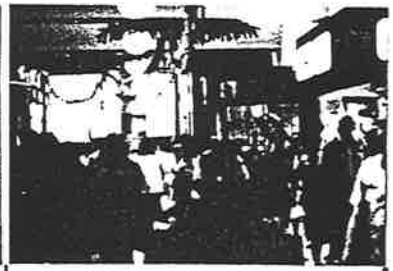
In the previous research exercise it was observed that the elderly who are competent, mentally and physically, desire diversified social and physical activities. Their age does not restrict them from seeking excitement. Accessibility to public facilities, amenities and urban centres, seems to be necessary. This implies the importance of their location in the urban environment. Preference seems to be related to the characteristics of the previous place of residence, their present desire for mobility and their interest in the local social activities.

This game is therefore an attempt to identify the locational preference of the "village" in the urban area.

Diagram 4: Methodology of Game IIB



DRAWING -2- locational and urbanity prefernce

shopping and activity preference / residential locational preference	 THE CITY	 SHOPPING CENTRE	 SHOPPING STREET	 SHOPPING ARCADE
 HIGH DENSTY_CITY	WALK CAR BUS	WALK CAR BUS	WALK CAR BUS	WALK CAR BUS
 LOW DENSITY_INNERSUBURB MED.DENSITY_INNERSUBURB	WALK CAR BUS WALK_SUS	WALK CAR BUS WALK_BUS	WALK CAR BUS WALK_BUS	WALK CAR BUS WALK_BUS
 LOW DENSITY_OUTERSUBURB	CAR BUS WALK_BUS	WALK CAR BUS WALK_BUS	WALK CAR BUS WALK_BUS	WALK CAR BUS WALK
 RURAL AREA	CAR BUS WALK_BUS	CAR BUS WALK_BUS	CAR BUS WALK_BUS	CAR BUS WALK_BUS

INSTRUCTIONS FOR GAME IIb:

1. To each of the participants distribute Drawing 2.
2. Each person is to choose the place that he/she likes to live in:

   a. the city (high density)
   b. inner suburb (medium density)
   c. outer suburb (low density)
   d. rural area

3. Each person is to choose the place where he/she likes to shop and socialize:

   a. the city
   b. regional shopping centre
   c. shopping street (high street)
   d. shopping arcade

4. Each person is to choose his/her mode of transport preference from his/her chosen place of residence to his/her chosen place for shopping and socializing.
5. Break the participants into sub-groups.
6. Have each sub-group come to a consensus on their preferred place of residence, shopping, socializing and mode of transport.
7. Have each sub-group formulate strategies for achieving OBJECTIVE 'B' and outline new objectives if necessary.
8. Have each sub-group discuss and argue in front of the whole group:

   a. their locational choice of residence. Why?
   b. their preferred shopping and socializing place Why?
   c. their preferred mode of transport. Why?
   d. their choice of strategies to achieve OBJECTIVE 'B'.

9. Have the whole group come to a consensus on the final list of strategies.

10. Instruct each person to rank the strategies in order of priorities (i.e., 1 for the most important, 2 for the next most important, etc...).

11. Add the rank number each person has assigned to the strategies. The one with the least score will be the most important.

12. Arrange the strategies in order of priorities.

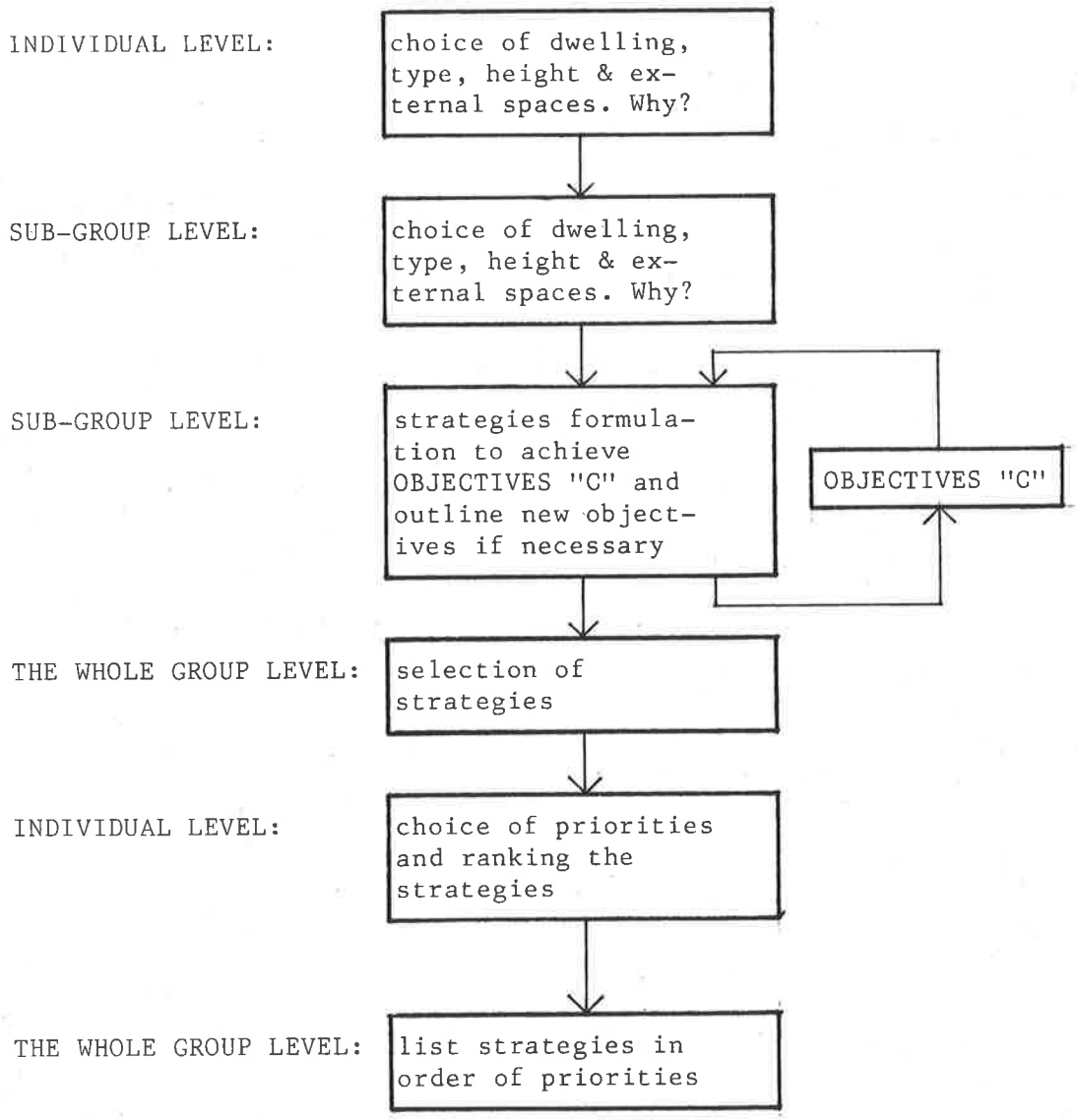
Note: The theory of locational preference is based usually on land rent and distance from the urban centre rationalized in economic terms. Further psycho-cultural forces, such as class consciousness and life style are also quite noticeable. A comprehensive study in locational theory and preference requires a vast range of information.

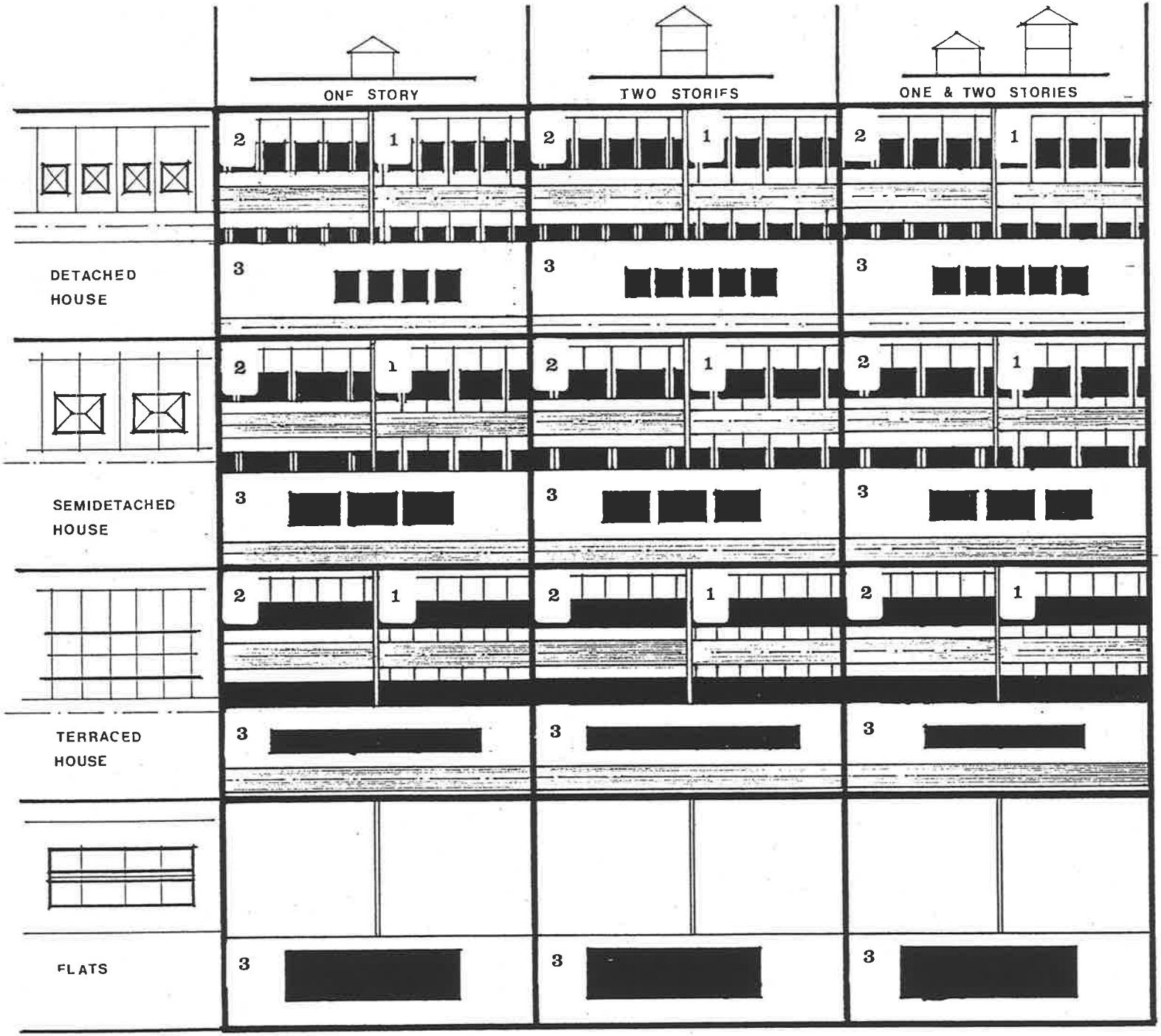
GAME IIc: RESIDENTIAL LAYOUT AND DENSITY PREFERENCE

It seems that site layout and density identify the value of social interaction and degrees of privacy. Psychologists and anthropologists have related these two variables to culture. In these games, it is expected that the range of possibilities for an environmental configuration will enable the participants to choose an appropriate alternative that complies with their economic potential and internal social organization and personal action. An attempt is made here to determine the type of cluster, building height, density, pattern, grain, subdivision, amount of external private and community spaces, communication classification and the relationship of the parking to the dwelling. The proposed games are therefore efforts to further elaborate on an appropriate residential cluster and internal communication network.

There are two games in this section: Game IIc
Game IIca

Diagram 5: Methodology of Game IIC:





DRAWING_3_

height, type and external spaces preference

NOTE:

1 Front and back gardens are private.

2 Communal front gardens and private back gardens.

3 All gardens are communal.

INSTRUCTIONS FOR GAME IIc:

1. Distribute to each of the participants Drawing 3.

2. Each person is to choose the type of dwelling he/she sees appropriate:

   a. detached
   b. semi-detached
   c. terraced
   d. flat

3. Each person is to choose the height he/she thinks is appropriate for his/her dwelling:

   a. one-storey
   b. two-storeys
   c. a combination of 'a' and 'b'

4. Each person is to choose the type of outdoor spaces he/she thinks is appropriate:

   a. except the streets, all outdoor spaces (i.e., front and back garden) are private
   b. front garden is communal, back garden is private
   c. all outdoor spaces are communal

5. Break the participants into sub-groups.

6. Have each sub-group come to a consensus on their preferred:

   a. type of dwelling
   b. height of dwelling
   c. type of outdoor spaces

7. Have each sub-group formulate strategies to achieve:

   a. type of dwelling
   b. height of dwelling
   c. type of outdoor spaces
   d. OBJECTIVE 'C'

8. If necessary, have each sub-group outline new objectives.

9. Have each sub-group discuss and argue in front of the whole group:

   a. their choice of dwelling
   b. their choice of dwelling height
   c. their choice of outdoor spaces
   d. their choice of strategies to achieve OBJECTIVE 'C'

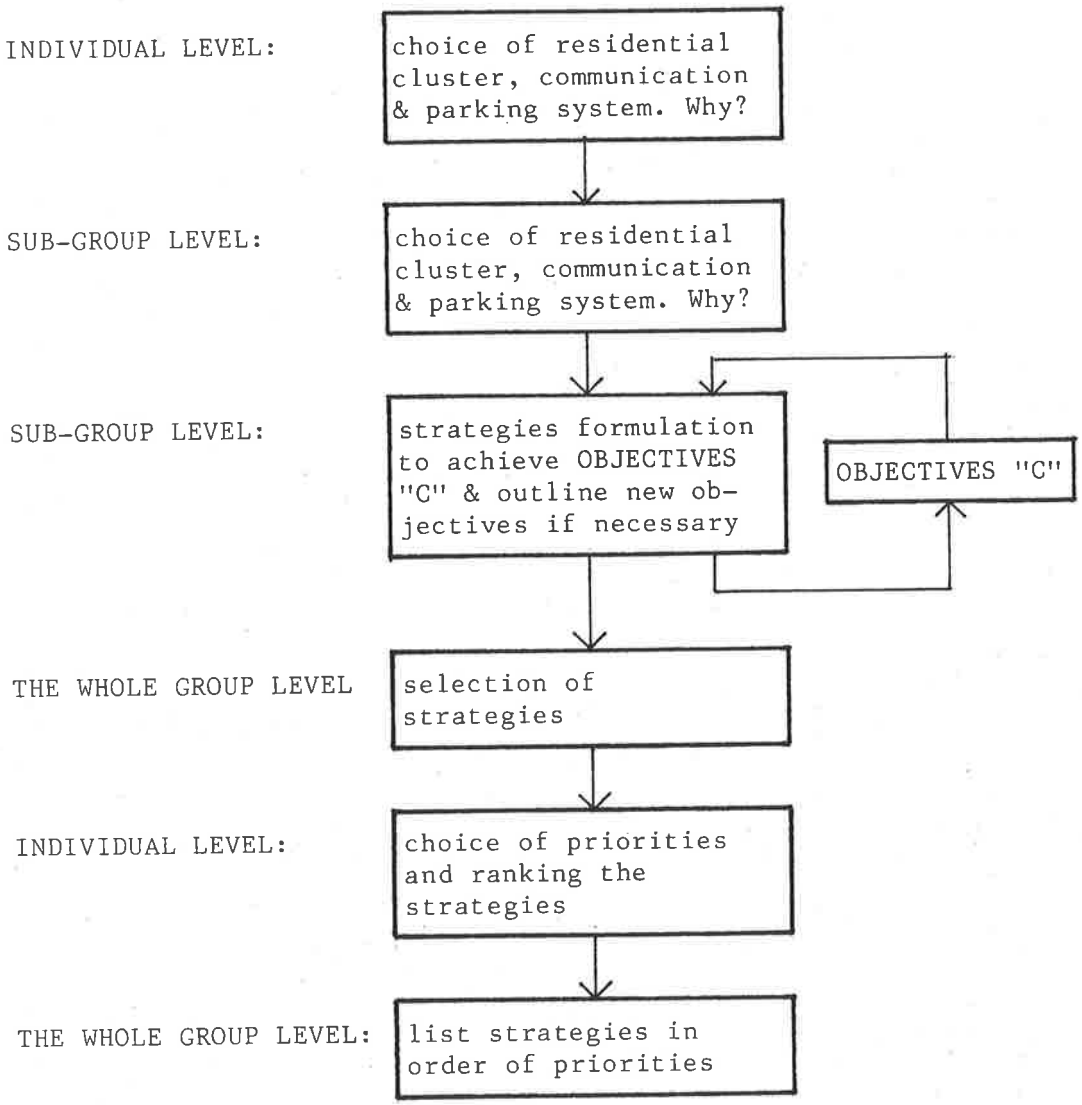
10. Have the whole group come to a consensus on the final list of strategies.

11. Instruct each person to rank the strategies in order of priorities (i.e., 1 for the most important, 2 for the next most important, etc...).

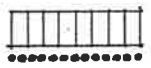
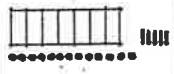
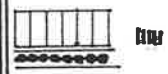
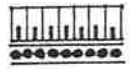
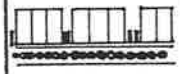
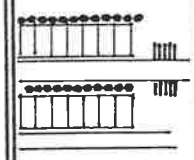
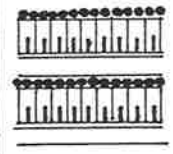
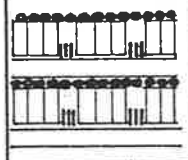
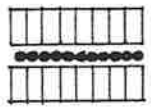
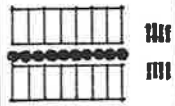
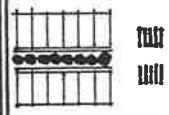
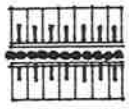
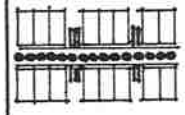
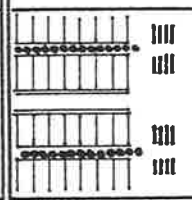
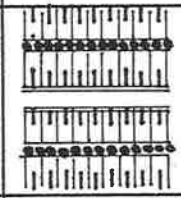
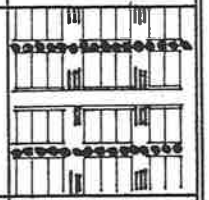
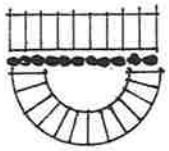
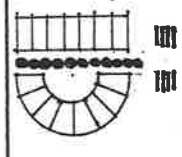
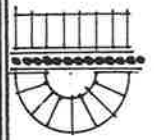
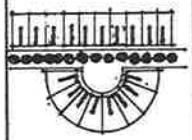
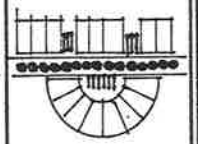
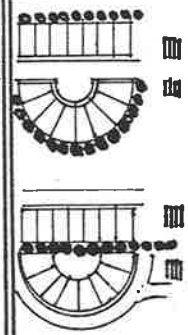
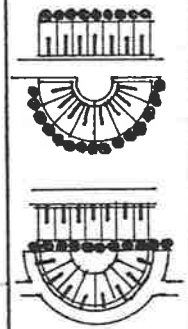
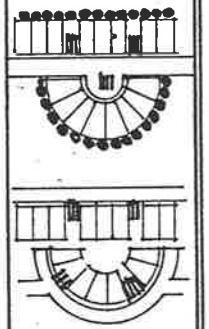
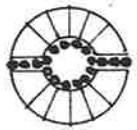
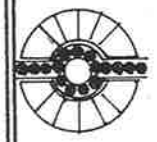
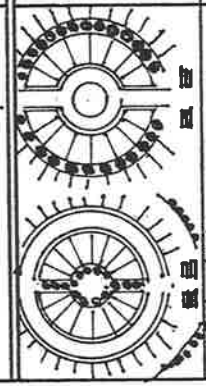
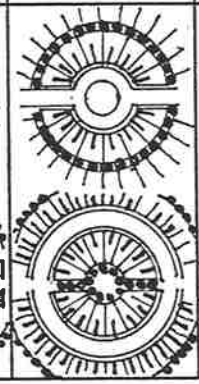
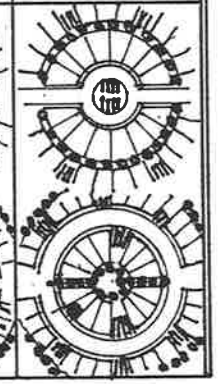
12. Add the rank number each person has assigned to the strategies. The one with the least score will be the most important.

13. Arrange the strategies in order of priorities.

Diagram 6: Methodology of Game IICa.



DRAWING_4_ communication networks and cluster preference

	pedestrians movement only		mix of pedestrians and vehicles			separation of pedestrians and vehicles		
	without vehicle stor.	with vehicle stor.	separate vehicle stor.	storage in house	cluster storage	separate vehicle stor.	storage in house	cluster storage
linear housing on one side of the street								
linear housing on both sides of the street								
linear housing on one side, group spacing on the other side of the street								
group spacing on both sides of the street								

LEGEND:

vehicle
house
pedestrian movement
vehicle movement

SOURCE_URBAN FRINGE STUDY_ MEXICO 75_WASHINGTON UNIVERSITY_ SUMMER STUDIO_ SAN MIGUEL DE ALLENDE.

INSTRUCTIONS FOR GAME IIca:

1. Distribute to each participant Drawing 4.

2. Each person is to choose from the given residential clusters, the type he/she thinks appropriate and state the reason for the choice. The given residential clusters are:

   a. linear housing on one side of the communication network
   b. linear housing on both sides of the communication network
   c. linear housing on one side and housing surrounding a communal space on the other side of the communication network
   d. housing surrounding a communal space on both sides of the communication network

3. Each person is to choose from the given communication network the type he/she thinks appropriate and state the reason for the choice. The given networks are:

   a. only pedestrian access to the dwellings
   b. an access of mixed pedestrian and vehicular
   c. a separate pedestrian and vehicular access to the dwellings

4. Each person is to choose from the given parking the type he/she thinks appropriate and state the reason for the choice. The types are:

   a. separate vehicular parking
   b. individual parking for each dwelling
   c. cluster of sheltered parking between the dwellings

5. Break the participants into sub-groups.

6. Have each sub-group come to a consensus on their preferred:

a. cluster of housing
b. type of communication network
c. type of parking

7. Have each sub-group formulate strategies to achieve the desired:

   a. cluster of housing
   b. communication network
   c. parking
   d. OBJECTIVE 'C'

8. Have each sub-group discuss and argue in front of the whole group:

   a. their choice of the cluster of housing
   b. their choice of the communication network
   c. their choice of parking layout
   d. their choice of the strategies

9. Have the whole group come to a consensus on the final list of strategies.

10. Instruct each person to rank the strategies in order of priorities (i.e., 1 for the most important, 2 for the next, etc...).

11. Add the rank number each person has assigned to the strategies. The one with the least score will be the most important.

12. Arrange the strategies in order of priorities.

GAME IId: STREETSCAPE PREFERENCE

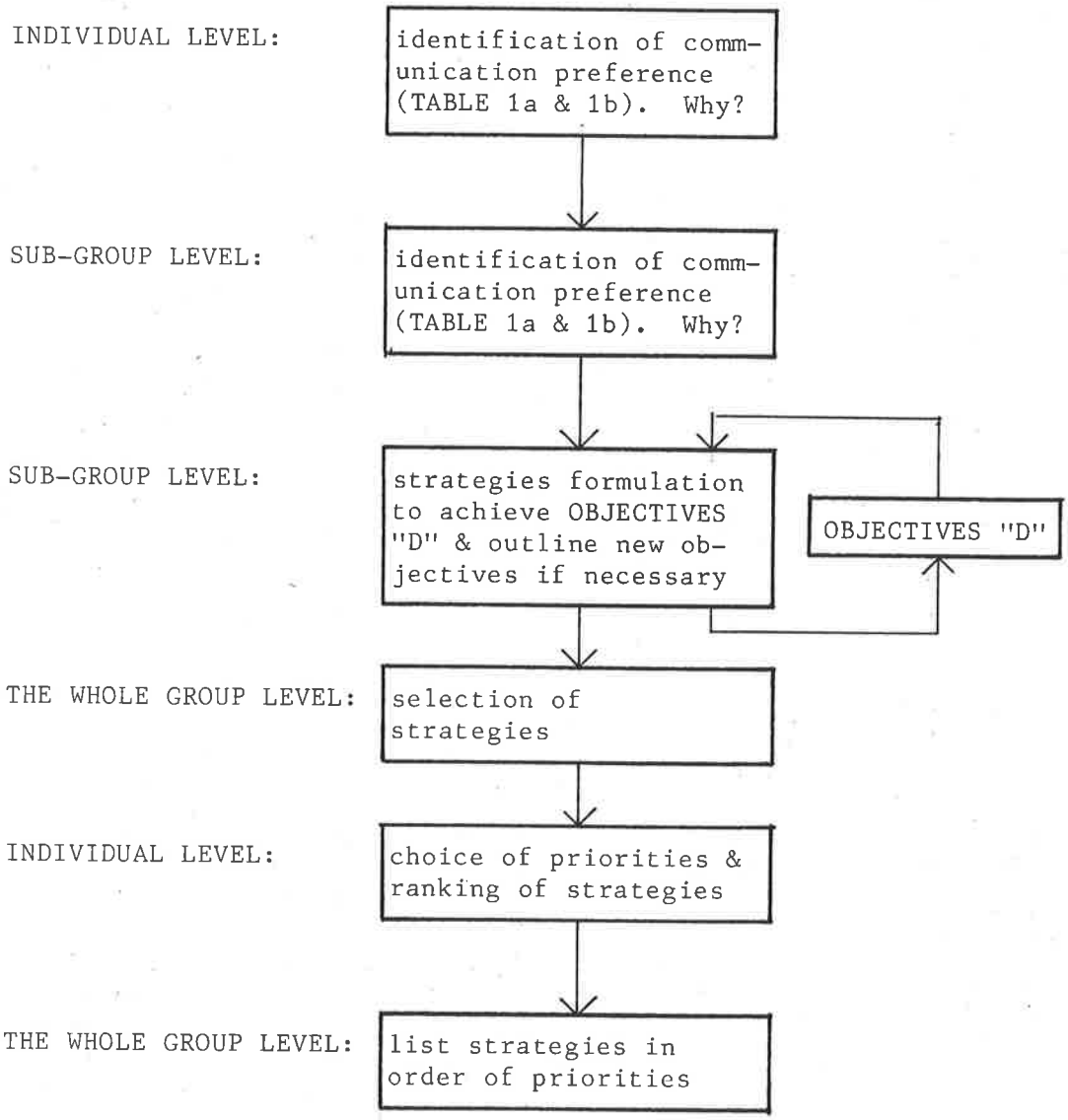
Streets, according to Gordon Cullen, are spaces that encourage human movement from "here" to "there". They are known to be directly related and identified by enclosure, mode and purpose of going from one "place" to the other. This indicates the classification of streets by means of their characteristics and human-environment relationship ("action"). An experience of a street while having a leisurely walk, differs from the one while sitting in a car. The enclosure, spatial treatment of surfaces, and street pattern (i.e., layout, diversity of width and hierarchical order), are seen differently by people who use different transport systems. Furthermore, an appropriate space (i.e., street), is based on the perceived cues that are expected to inform the speed, purpose, activity and mode of communication.

This game is to explore:

a. walking intentions and street environmental preference at different speeds and purpose of movements
b. the spatial characteristics of the paths that the participants consider congruent with identified activities

It is expected that this game will propose strategies to achieve OBJECTIVE 'D'.

Diagram 7: Methodology of Game IID:



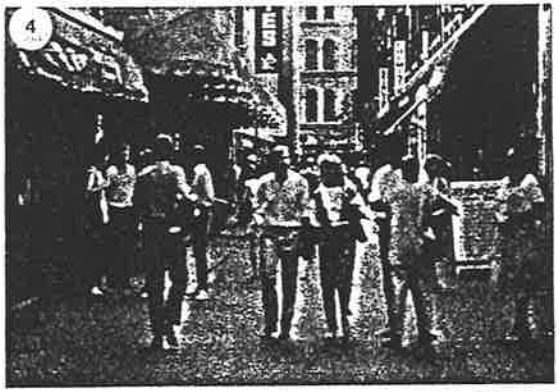
DRAWING_5_streetscape preference

Streets are the outdoor movement spaces of the urban environment. Their spatial characteristics are indications for human transport behaviour. Land pattern, surface treatment, landscaping, building facade, skyline, depth of view and degree of enclosure are some of the main factors that contribute to the street characteristics.

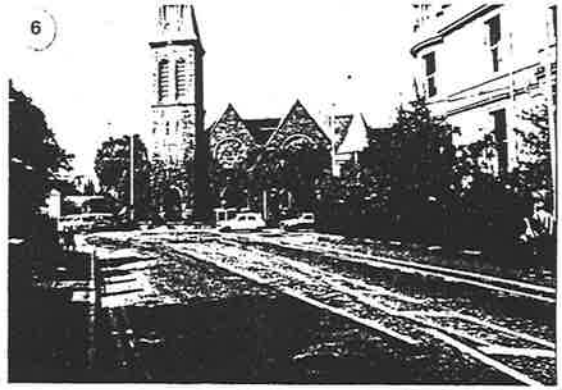


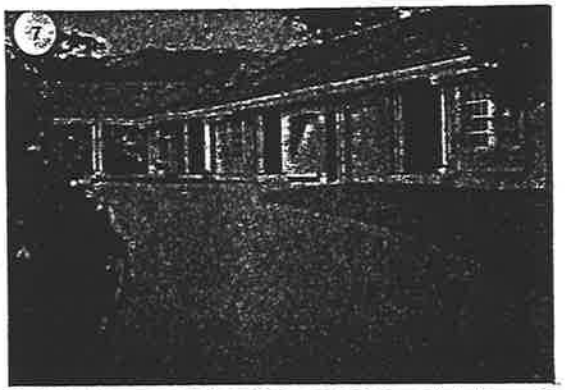


















INSTRUCTIONS FOR GAME IId:

1. Distribute to each participant Drawing 5 and Table 1.
2. Each person is to fill in Tables 1a and 1b as instructed.
3. Break the participants into sub-groups.
4. Each sub-group is to share ideas and come to a consensus on the appropriate fill in Tables 1a and 1b.
5. Have each sub-group come to a consensus on a list of strategies that attempt to achieve OBJECTIVE 'D'.
6. Have each sub-group discuss and argue in front of the whole group:

   a. Tables 1a and 1b
   b. their choice of the strategies

7. Have the whole group come to a consensus on the final list of strategies.
8. Instruct each person to rank the strategies in order of priority (i.e., 1 for the most important, 2 for the next, etc...).
9. Add the rank number each person has assigned to the strategies. The one with the least score will be the most important.
10. Arrange the strategies in order of priorities.

TABLE 1: STREET PREFERENCE

(Adapted from American Institute of Architects, "Built Environment Guidebook: How to Conduct Environmental Education Workshop for Teachers and Architects", Washington, D.C., 1977.)

TABLE 1a - SPACES THAT CONNECT

Outdoor walking takes one through a variety of passages. The appropriateness of that particular route depends very much on the transmitted visual information and intentionality. Whether one is in a hurry or walking leisurely, he/she tends to look for features, such as ground cover, amount of enclosure, path width, traffic and visual variety that enables the choice of alternatives.

The route taken is very often influenced by the purpose of the trip, how interesting it appears and the speed of travelling.

There are however three common situatins that we encounter while walking. They are destination oriented but fast, destination oriented but leisurely, and exploratoty. For each situation there might be an appropriate route. From the set of pictures in DRAWING 5, select your route.

SITUATION		GROUP	SPACE QUALITY THAT INFLUENCED YOUR DECISION
1	DESTINATION ORIENTED RUSHED. "I've got only five minutes to get there".		
2	DESTINATION ORIENTED BUT LEISURELY. "I've got to get there by nine and its only seven-thirty.		
3	EXPLORATORY, & LEISURELY "I've got some extra time, why not look at some interesting places along this route".		

TABLE 1b: DESIGN YOUR OWN ROUTE

From places listed below, sort through the pictures in DRAWING 5 to find the route spaces you prefer to connect each pair. For each route select at least three and state the reason fot it. Set your choice in order of preference.

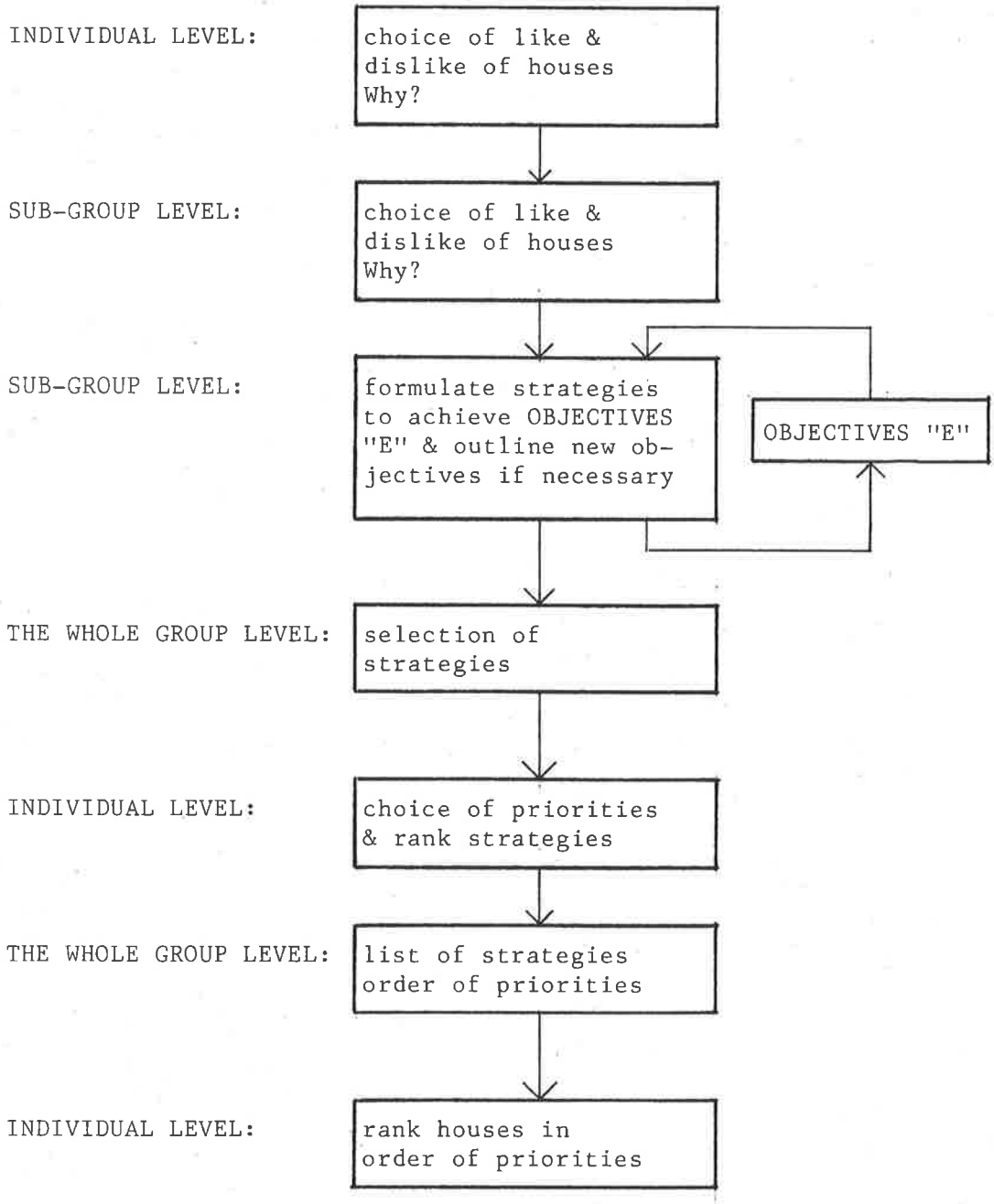
ORIGIN	ROUTE	DESTINATION	TRANSPORT USED	REASON
home		shop		
home		best friend house		
home		community centre		
home		bus stop		
parking lot		shopping centre		

GAME IIe: RESIDENTIAL CHARACTERISTICS PREFERENCE

A dwelling is not only a shelter, but also a spatial manifestation of human existence in space. Its spaces are an expression of the activities, personalization and intentionality of the inhabitants. Besides, the personal emotion triggered by the building image is apparently a result of present feelings and past experiences. It is therefore safe to assume that it presents a very personal form of expression.

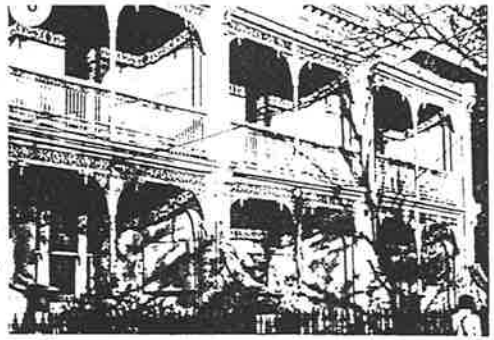
This game is based on photographs representing a broad range of houses with different images. Some are vernacular, while others are architect-design. It is assumed that a player's response to a particular house and setting is based on what he/she has been familiar with previously and the characteristics he/she associate with his/her image and ideals of an appropriate environment. Therefore the player's choice will indicate the visual quality he/she desires in his/her dwelling.

Diagram 8: Methodology of Game IIE













DRAWING_6_ residential characteristics preference

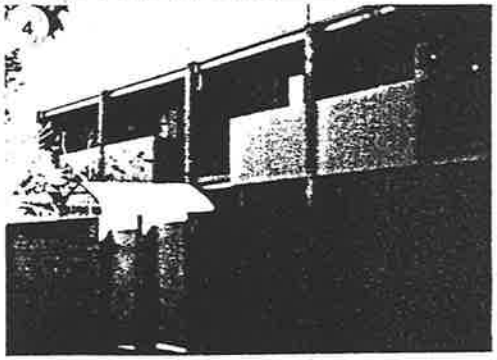
1 Mark the houses you like best.

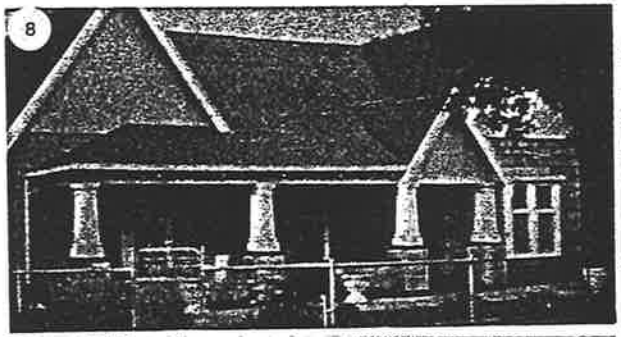
2 What characteristics do you like? Why?

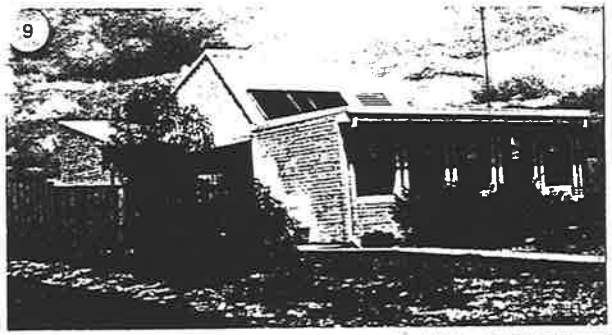
3 Mark the houses you dislike.

4 What characteristics do you dislike? Why?













INSTRUCTIONS FOR GAME IIe:

1. To each of the participants distribute Drawing 6.
2. Each person is to point out his/her most liked houses and state the reason for his/her choices.
3. Each person is to point out his/her most disliked houses and state the reason for his/her choices.
4. Break up the participants into sub-groups.
5. Have each sub-group discuss and come to a consensus on the most liked and disliked houses and state the reason for their choices.
6. Have each sub-group formulate strategies for achieving OBJECTIVE 'E' and outline new objectives if necessary.
7. Have each sub-group discuss and argue in front of all participants:

   a. their choice of like and dislike of houses
   b. their choice of strategies to achieve OBJECTIVE 'E'.

8. Have the whole group come to a consensus on the final list of strategies.
9. Instruct each person to rank the stratgegies in order of priorities (i.e., 1 for the most important, 2 for the next, etc...).
10. Add up the rank number each person had assigned to the strategies. The one with the least score will be the most important.
11. List the strategies in order of priorities.

GAME III. EVALUATION FOR THE GAMING SIMULATION WORKSHOP

INTRODUCTION

Previously, it was stated that through a gaming simulation the participants are to evaluate the comprehensibility and practicality of the workshop. Ideas that may be revised and clarified from the reaction of the players with their own experience, is assumed to be an appropriate approach. In fact, it is expected that this stage will identify certain factors that may revise many stages and continously modify the gaming process. This implies an internal operation for the evaluation of the planning and design process. It is therefore strongly proposed for measuring the achievement of the aim and objectives.

The result and assessment of the gaming simulation are paramount to the game designers and players. It can be achieved by a discussion among the participants that converts personal experience into valuable knowledge. For more objectivity the evaluation may also be assessed through an explicit questionnaire. Such action is also proposed to evaluate the learning aspect of the workshop.

QUESTIONNAIRE

1. Would you describe your feeling about the workshop ...

   A - excellent B - interesting C - all right
   D - mediocre E - uninteresting F - waste of time

2. What are the strongest points about the workshop?

3. What are the weakest points about the workshop?

4. Did you find any design aspects that are useful to you? What are they?

5. Would you consider the workshop important for identifying your environmental needs and aspirations? Why?

6. Do you think this type of exercise is important before actually planning and designing your environment? Why?

7. Would you consider the method used for group participation in planning and design effective? Why?

8. Taking into consideration your investment and desire for an environment that can accommodate you appropriately, would you consider this exercise to be economical? Why?

9. Do you feel that you will be able to implement ideas gained through this experience?

10. Whenever you are building your home, do you think that this type of workshop ...

A strongly recommended B recommended C neutral
D not recommended E strongly not recommended

11. Do you think after participating in this workshop, your house will be ...

    A very much better designed
    B much better designed
    C same
    D much worse designed
    E very much worse designed

12. Do you think the games are good for...

    - gaining skills and improving ability to perform
    - learning to negotiate and communicate? YES, NO.
    - gaining experience in applying and testing knowledge learned from reading and real life experience? YES, NO.
    - acquiring critical thinking, analytic and decision-making skills? YES, NO.
    - learning the importance of establishing policies and making long term plans? YES, NO.
    - discovering criteria rarely thought of? YES, NO.
    - learning how to communicate better with others who have different perspectives? YES, NO.

MANAGERS' QUESTIONNAIRE

QUESTION NUMBER: DATE

VILLAGE NUMBER:

VILLAGE DATE:

VILLAGE ADDRESS;

NAME OF MANAGER:

ADDRESS TEL.

TYPE OF DEVELOPMENT:

Housing Trust	charity organization	private developer

1 - WHAT IS THE DWELLING SYSTEM OF OWNERSHIP?

Housing Trust
private ownership
private company
community corporation
other

2 - PLEASE ELABORATE THE SYSTEM OF OWNERSHIP

3 - TYPE/HOW MANY/VALUE/RENT OF DWELLING

no. of rooms	detached			semi-detached			terraced			flat		
	B.S.	1BR	2BR	B.S.	1BR	2BR	B.S	1BR	2BR	B.S	1BR	2BR
a - how many												
b - area/m^2												
c - rent/week												
d - price/unit												

B.S: bedsitter; 1BR: 1 bedroom; 2BR: 2 bedroom

Please explain the conditions of rent/sale

4 - WHAT IS THE LENGTH OF OCCUPANCY?

5 - HOW IS THE VILLAGE MANAGED?

Housing Trust
community co-operation
private company
other

PLEASE EXPLAIN THE SYSTEM OF MANAGEMENT

6 - DO THE OCCUPANTS PARTICIPATE IN MANAGEMENT?

7 - FOR RAISING ENVIRONMENTAL ISSUES, IS THERE A COMMUNITY ACTION GROUP?

8 - DEMOGRAPHIC FEATURES: HOW MANY ARE THERE?

couple	single male	single female	total

9 - SOCIO-ECONOMIC BACKGROUND: HOW MANY ARE THERE?

managers	professional	white-collar labour	blue-collar labour

10 - HOW MANY HAVE CARS?

11 - HOW OFTEN ARE THE FOLLOWING COMMUNITY ACTIVITIES USED?

	twice/week	once/week	twice/month	once/month	never
a - dinner party					
b - bingo					
c - playing room					
d - library					
e - ex. trips					
f - church					
g - films/lectures					
hobby room					

12 - WHAT ARE THE COMMUNITY FACILITES?

13 - IN THE PAST SIX MONTHS, HAVE YOU HAD ANY COMPLAINTS FROM:

	outside the village	commuters in village	neighbours
a - lack of privacy			
b - noise			
c - security			

14 - IN THE PAST ONE YEAR, HAVE YOU HAD ANY COMPLAINTS ABOUT THE VILLAGE LAYOUT?

15 - IN THE PAST ONE YEAR, HAVE YOU HAD ANY COMPLAINTS ABOUT THE LANDSCAPING?

16 - WHO MAINTAINS THE:

	private residents	private company	Housing Trust	community corporation	others
a - private gardens of dwelling					
b - common village gardens					
c - residential buildings					
d - common buildings					

17 - ARE THE RESIDENTS ALLOWED TO DO THEIR OWN GARDENING IN:

a - private gardens of their dwelling?

b - public gardens of the village?

18 - HOW DO YOU RANK THE FOLLOWING FEATURES OF THE VILLAGE?

	extremely good	very good	slightly good	neutral	slightly bad	very bad	extremely bad
a - building layout							
b - building characteristics							
c - circulation layout							
d - parking layout							
e - access to external amenities							
f - landscaping							
g - village amenities layout							
h - social activities							

19 - WHAT FEATURES DO YOU LIKE IN THE VILLAGE?

20 - WHAT FEATURES DO YOU DISLIKE IN THE VILLAGE?

21 - WHAT ADDITIONAL FEATURES, IF ANY, WOULD YOU LIKE TO SEE IN THE VILLAGE?

RESIDENTS' QUESTIONNAIRE

RESIDENTS' QUESTIONNAIRE (REVISED)

VILLAGE NAME DATE:

VILLAGE NUMBER: 1.4 ☐

VILLAGE ADDRESS:

QUESTIONNAIRE NUMBER: 1.1-1.2 ☐☐

INTERVIEWER'S ADDRESS: 1.3 ☐

RECORD

TYPE OF RESIDENCE: 1.5 ☐

1 - detached
2 - semi-detached
3 - terraced
4 - flat

DEVELOPER: 1.6 ☐

1 - Housing Trust
2 - private company
3 - corporation
4 - religious institution

PART A - DEMOGRAPHIC CHARACTERISTICS

1 - AGE 1.7-1.8 ☐☐

2 - SEX 1.9 ☐

1 - female
2 - male
3 - couple

3 - MARITAL STATUS: present single - 1 1.10 ☐
past married - 2 1.11 ☐

4 - NUMBER OF CHILDREN:

5 - ARE THE CHILDREN RESIDENTS OF SOUTH AUSTRALIA?

6 - PREVIOUS OCCUPATION: 1.12 ☐

1 - manager
2 - professional
3 - white-collar labour
4 - blue-collar labour
5 - housewife

7 - PRESENT OCCUPATION: 1.13 ☐

1 - manager
2 - professional
3 - white-collar labour
4 - blue-collar labour
5 - completely retired

PART B - CHARACTERISTICS OF THE PREVIOUS ENVIRONMENT:

8 - WHAT WAS YOUR PREVIOUS ADDRESS? 1.14 ☐

1 - in the suburbs near the village

2 - in other areas

9 - HOW LONG DID YOU LIVE IN THE PREVIOUS NEIGHBOURHOOD 1.15-1.16 ☐☐

10 - WOULD YOU DESCRIBE YOUR PREVIOUS NEIGHBOURHOOD AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
attractive						unattractive 1.17	
modern						traditional 1.18	
scenic						unscenic 1.19	
lively						dull 1.20	
clean						dirty 1.21	
quiet						noisy 1.22	
safe						dangerous 1.23	
pleasing						unpleasing 1.24	

11 - WHAT DID YOU LIKE ABOUT YOUR PREVIOUS NEIGHBOURHOOD?

12 - WHAT DID YOU DISLIKE ABOUT YOUR PREVIOUS NEIGHBOURHOOD?

PART C - CHARACTERISTICS OF THE PREVIOUS STREETS:

13 - WOULD YOU DESCRIBE THE STREETS IN YOUR PREVIOUS NEIGHBOURHOOD AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
attractive						unattractive 1.25	
scenic						unscenic 1.26	
pleasant						unpleasant 1.27	
inviting						uninviting 1.28	
personal						impersonal 1.29	
safe						dangerous 1.30	
clean						dirty 1.31	
quiet						noisy 1.32	

14 - WHAT DID YOU LIKE ABOUT THE STREETS IN YOUR PREVIOUS NEIGHBOURHOOD?

15 - WHAT DID YOU DISLIKE ABOUT THE STREETS IN YOUR PREVIOUS NEIGHBOURHOOD?

PART D - CHARACTERISTICS OF THE PREVIOUS RESIDENCE:

16 - WAS YOUR PREVIOUS RESIDENCE ... 1.33 ☐

1 - detached?
2 - semi-detached?
3 - terraced?
4 - flat?

17 - HOW MANY BEDROOMS DID YOU HAVE IN THE PREVIOUS RESIDENCE? 1.34 ☐

1 - bedroom
2 - two bedrooms
3 - three bedrooms
4 - more than three bedrooms

18 - DID YOU OWN/RENT YOUR PREVIOUS RESIDENCE 1.35 ☐

1 - own
2 - rent

19 - WHAT DID YOU PLANT ...

	shrubs	trees	lawn	flowers	vegetables	none
front garden						
back garden						

1.36 ☐
1.37 ☐

1 - 1 item, 2 - 2 items, 3 - more than 2, 4 - none

20 - WHAT ACTIVITIES DID YOU HAVE IN YOUR ...

	entertain guests	outdoor family	children playing	others	none
front garden					
back garden					

1.38 ☐
1.39 ☐

1 - 1 item, 2 - 2 items, 3 - more than 2, 4 - none

21 - DID YOU CONSIDER THE FRONT GARDEN PART OF YOUR DOMAIN? 1.40 ☐

1 - yes, 2 - no,

22 - WAS THERE A PHYSICAL BARRIER BETWEEN YOUR GARDEN AND THE STREET?

1 - yes, 2 - no, 1.41 ☐

23 - DID YOU DO ANYTHING SPECIAL TO PERSONALIZE YOUR FRONT GARDEN?

1 - yes, 2 no, 1.42 ☐

24 - WOULD YOU DESCRIBE YOUR PREVIOUS RESIDENCE AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
comfortable						uncomfortable	1.43 ☐
cosy						monumental	1.44 ☐
modern						traditional	1.45 ☐
functional						non-functional	1.46 ☐
inviting						repelling	1.47 ☐
roomy						cramped	1.48 ☐
scenic						unscenic	1.49 ☐
secure						unsecure	1.50 ☐
attractive						unattractive	1.51 ☐
personal						impersonal	1.52 ☐

25 - WHAT DID YOU LIKE ABOUT YOUR PREVIOUS RESIDENCE?

26 - WHAT DID YOU DISLIKE ABOUT YOUR PREVIOUS RESIDENCE?

PART E - CHOICE OF THE NEW ENVIRONMENT

27 - DO YOUR OWN/RENT THIS RESIDENCE? 1.53

1 - own, 2 - rent,

28 - HOW LONG HAVE YOU BEEN HERE? 1.54-1.55

29 - DID YOU KNOW ANYBODY HERE BEFORE YOU MOVED IN? 1.56

1 - yes, 2 - no,

30 - DID YOU HAVE A CHOICE BETWEEN THIS VILLAGE AND ANOTHER VILLAGE?

1 yes, 2 no, 1.57

31 - WHY DID YOU CHOOSE THIS VILLAGE 1.58

1 - it was recommended
2 - I could afford the price
3 - I knew the neighbourhood
4 - the environment is adequate
5 - previous place unmanageable
6 - health reason
7 - security
8 - I did not want to depend on my children
9 - other reasons

PART F - PREFERENCE, DEGREE OF PARTICIPATION AND UTILIZATION OF URBAN ACTIVITIES AND AMENITIES:

32 - DO YOU HAVE A PRIVATE CAR? 1.59 ☐

1 - yes, 2 - no,

33 - HOW OFTEN DO YOU USE THE FOLLOWING ACTIVITIES?

	twice/week 1	once/week 2	twice/month 3	once/month 4	once/3m 5	more 6	
shopping							1.60 ☐
post office							1.61 ☐
bank							1.62 ☐
church							1.63 ☐
hotel							1.64 ☐
hairdresser							1.65 ☐
laundry							1.66 ☐
chemist							1.67 ☐
restaurant							1.68 ☐
library							1.69 ☐
medical care							1.70 ☐
social club							1.71 ☐
park							1.72 ☐

7 - never

34 - WHERE DO YOU CARRY OUT THE FOLLOWING ACTIVITIES?

	the city 1	this neighbourhood 2	previous neighbourhood 3	other places 4	
shopping					2.5
post office					2.6
bank					2.7
church					2.8
hotel					2.9
hairdresser					2.10
laundry					2.11
chemist					2.12
restaurant					2.13
library					2.14
medical care					2.15
social club					2.16
park					2.17

5 - never

35 - WOULD YOU DESCRIBE THIS NEIGHBOURHOOD AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
attractive						unattractive	2.18
modern						traditional	2.19
scenic						unscenic	2.20
lively						dull	2.21
clean						dirty	2.22
quiet						noisy	2.23
safe						dangerous	2.24
pleasing						unpleasing	2.25

36 - WHAT DO YOU LIKE ABOUT THIS VILLAGE?

37 - WHAT DO YOU DISLIKE ABOUT THIS VILLAGE?

38 - WHAT MODE OF TRANSPORT DO YOU USE TO CARRY OUT YOUR ACTIVITIES?

	in the city	in this neighbourhood
1 - public transport		
2 - taxi		
3 - private car		
4 - walking		

2.26 ☐
2.27 ☐

PART G - CHARACTERISTICS OF PRESENT VILLAGE/NEIGHBOURHOOD STREETS:

39 - WOULD YOU DESCRIBE THE STREETS IN THIS NEIGHBOURHOOD/VILLAGE TO BE ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
attractive						unattractive	2.28
scenic						unscenic	2.29
pleasant						unpleasant	2.30
inviting						uninviting	2.31
personal						impersonal	2.32
safe						dangerous	2.33
clean						dirty	2.34
quiet						noisy	2.35

40 - WHAT DO YOU LIKE ABOUT THE STREETS IN THIS NEIGHBOURHOOD/VILLAGE?

41 - WHAT DO YOU DISLIKE ABOUT THE STREETS IN THIS NEIGHBOURHOOD/ VILLAGE?

PART H - EVALUATION OF THE CITY OF ADELAIDE:?

42 - HOW OFTEN DO YOU GO TO THE CITY? 2.36

1 - twice/week, 2 - once/week 3 - twice/month,
4 - once/month, 5 - once/3m., 6 - once/6m., 7 - never

43 - WOULD YOU DESCRIBE THE CITY OF ADELAIDE AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
exciting						unexciting	2.37
expensive						cheap	2.38
fashionable						unfashionable	2.39
friendly						unfriendly	2.40
lively						dull	2.41
colourful						drab	2.42
safe						dangerous	2.43
attractive						unattractive	2.44
clear						confusing	2.45

44 - WHAT DO YOU LIKE ABOUT THE CITY OF ADELAIDE ?

45 - WHAT DO YOU DISLIKE ABOUT THE CITY OF ADELAIDE ?

46 - WHY DO YOU GO TO THE CITY ? 2.46

- meeting friends
- shopping
- entertainment
- business
- other reasons

1 - item
2 - 2 items
3 - more than 2
4 - none

PART I - SOCIAL INTERACTION OF VILLAGE COMMUNITY:

47 - HOW OFTEN DO YOU USE THE VILLAGE FACILITIES ?

	twice/week 1	once/week 2	twice/month 3	once/m. 4	once/3m. 5	never 6	
shopping							2.47
post office							2.48
bank							2.49
church							2.50
hotel							2.51
hairdresser							2.52
laundry							2.53
chemist							2.54
restaurant							2.55
library							2.56
medical care							2.57
social club							2.58
park							2.59

48 - WHICH AND HOW OFTEN OF THE COMMUNITY ACTIVITIES DO YOU PARTICIPATE ?

	always 1	very often 2	often 3	rarely 4	never 5	
dinner party						2.60
bingo						2.61
indoor games						2.62
outdoor games						2.63
ex. trips						2.64
film/lectures						2.65
hobby room						2.66
church						2.67
others						2.68

49 - HOW MANY PARTICIPATE IN THE COMMUNITY ACTIVITIES ? 2.69 ☐

all 1	many 2	about 50% 3	some 4	very few 5	nobody 6

50 - IN YOUR OPINION, IS THERE A REASON WHY SOME DO NOT PARTICIPATE ?

51 - HOW MANY PEOPLE IN THE VILLAGE DO YOU KNOW BY NAME ? 2.70 ☐

all 1	many 2	about 50% 3	some 4	very few 5	nobody 6

52 - HAVE YOU MADE ANY FRIENDS/ACQUAINTANCES IN THE VILLAGE ?

1 - friends, 2 - acquaintances 2.71 ☐

53 - WHERE AND HOW OFTEN DO YOU MEET YOUR FRIENDS FROM THE VILLAGE ?

	daily 1	twice/week 2	once/week 3	twice/month 4	once/m. 5	never 6	
social club							2.72 ☐
at home							2.73 ☐
village garden							2.74 ☐
church							2.75 ☐
outside village							2.76 ☐

54 - HOW OFTEN DO YOUR OLD FRIENDS AND RELATIVES COME AND VISIT YOU ?

daily 1	twice/week 2	once/week 3	twice/month 4	once/m. 5	once/3m. 6	never 7

2.77 ☐

55 - DO YOU LIKE YOUNG PEOPLE TO BE INTEGRATED INTO THE VILLAGE COMMUNITY ?

1 - yes, 2 - no, 2.78 ☐

56 - WHY DO YOU LIKE YOUNG PEOPLE TO BE INTEGRATED INTO YOUR COMMUNITY ?

57 - DO THE RESIDENTS PARTICIPATE IN MANAGING THE VILLAGE ?

1 - yes, 2 - no, 2.79 ☐

58 - IN THE PAST ONE YEAR, HAVE YOU MET WITH OTHER RESIDENTS TO DISCUSS CERTAIN COMMUNITY ISSUES ?

1 - yes, 2 - no, 2.80 ☐

59 - WHAT WHERE THE MAIN ISSUES ?

60 - ARE YOU AN ACTIVE MEMBER OF A POLITICAL PARTY ?

1 yes, 2 - no, 3.5 ☐

61 - ARE YOU ACTIVE IN THE LOCAL COUNCIL ACTIVITIES ?

1 - yes, 2 - no, 3.6 ☐

62 - DO YOU HAVE A FRONT GARDEN ?

1 - yes, 2 - no, 3.7 ☐

63 - IS YOUR FRONT GARDEN,

1 - managed by you?
2 - semi-managed by you?
3 - not managed by you?

3.8 [ ]

64 - IF NO, DO YOU LIKE TO HAVE A FRONT GARDEN?

1 - yes, 2 - no,

3.9 [ ]

65 - WHY DO YOU LIKE TO HAVE A FRONT GARDEN ?

66 - WHY DO YOU DISLIKE TO HAVE A FRONT GARDEN ?

67 - DO YOU HAVE A PRIVATE BACK GARDEN ?

3.10 [ ]

1 - yes, 2 - no,

68 - IF NO, DO YOU LIKE TO HAVE A PRIVATE BACK GARDEN?

3.11 [ ]

1 - yes, 2 - no,

69 - WHY DO YOU LIKE TO HAVE A BACK GARDEN ?

70 - WHY DO YOU DISLIKE TO HAVE A BACK GARDEN ?

71 - IF YOU HAVE, WHAT DO YOU LIKE ABOUT YOUR BACK GARDEN ?

72 - WHAT DO YOU DISLIKE ABOUT YOUR BACK GARDEN ?

73 - WHAT DO YOU PLANT IN YOUR ...

	shrubs	trees	lawn	flowers	vegetables	none
front garden						
back garden						

3.12 [ ]
3.13 [ ]

1 - 1 item, 2 - 2 items, 3 - more than two, 4 - none

74 - WHAT ACTIVITIES DO YOU HAVE IN YOUR ...

	entertain guests	outdoor family	children playing	others	none	
front garden						3.14
back garden						3.15

1 - 1 item, 2 - 2 items, 3 - more than 2, 4 - none

75 - DO YOU CONSIDER THE FRONT GARDEN PART OF YOUR DOMAIN ?

1 - yes, 2 - no, 3.16

76 - IN GOOD WEATHER, HOW OFTEN DO YOUR USE THE COMMUNAL GARDENS FOR ...

	always 1	very often 2	often 3	rarely 4	never 5	
leisure walk						3.17
sitting						3.18

77 - WOULD YOU DESCRIBE THE LANDSCAPING AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
beautiful						ugly	3.19
calming						upsetting	3.20
colourful						drab	3.21
personal						impersonal	3.22
natural						artificial	3.23
neat						messy	3.24
private						public	3.25
scenic						unscenic	3.26

78 - WHAT DO YOU LIKE ABOUT THE VILLAGE LANDSCAPING ?

79 - WHAT DO YOU DISLIKE ABOUT THE VILLAGE LANDSCAPING ?

80 - WHAT DO YOU LIKE ABOUT THE PARKING ARRANGEMENT ?

81 - WHAT DO YOU DISLIKE ABOUT THE PARKING ARRANGEMENT ?

PART J - EVALUATION OF THE NEW RESIDENCES:

82 - HOW MANY BEDROOMS DO YOU HAVE ? 3.27 ☐

1 - one bedroom
2 - two bedrooms
3 - bed-sitter

83 - WOULD YOU DESCRIBE YOUR NEW RESIDENCE AS BEING ...

	very 1	slightly 2	neutral 3	slightly 4	very 5		
comfortable						uncomfortable	3.28 ☐
cosy						monumental	3.29 ☐
modern						traditional	3.30 ☐
functional						non-functional	3.31 ☐
inviting						repelling	3.32 ☐
roomy						cramped	3.33 ☐
scenic						unscenic	3.34 ☐
secure						unsecure	3.35 ☐
attractive						unattractive	3.36 ☐
personal						impersonal	3.37 ☐

84 - WHAT DO YOU LIKE ABOUT YOUR NEW RESIDENCE ?

85 - WHAT DO YOU DISLIKE ABOUT YOUR NEW RESIDENCE ?