

Interpretation of the Built Environment: Users Approach
with Reference to Nablus as a Case Study

Thesis submitted for the degree of
Doctor of Philosophy in
Architecture

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DECLARATION

This thesis is my original work and has been composed solely by myself

Eman Assi

TO MY PARENTS

TO MY PARENTS

ACKNOWLEDGEMENT

During the period over which the study has been conducted, many people have helped me. It is difficult to mention each by name.

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Interpretation of The Built Environment: Users Approach

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Abstract

The current process of growth of the city of Nablus has created many problems, both at subjective and objective levels. Subjective problems are associated with changes in people's attitudes caused by dramatic changes in the character and identity of the city, its cultural continuity and the social structure. Objective problems are associated with deterioration in the physical qualities of the built environment and the crisis of fragmentation in the structure of the city caused by an arbitrary pattern of development. As a result, one may relate these problems to a planning and decision making process which is not compatible with the specificity of the place and its indigenous culture. This thesis is concerned with tracing the origin of these problems and examines people's perception and preferences in order to form a framework, needed to guide the future development of the city and which responds to its people's needs and expectations.

At the core of the study is an attempt to explore from people themselves a way of responding to these problems through understanding how they perceive and interpret the environment of their city. Another aim is to identify the area and the type of different interpretations and attitudes towards the environment held by both professionals and the ordinary people. This would provide a broader perspective from which we could gain more insight and information needed for future planning processes.

The study has adopted a particular methodology needed for collecting and interpreting primary information. The city of Nablus was chosen as a case study and three techniques were used to gather and interpret data and responses. These techniques were an open-ended questionnaire, the Repertory Grid of George Kelley's Personal Construct Theory and finally Semantic Differential analysis. In addition to this the thesis comprises a literature review and interviews and also benefited from self - experience and observations of the city.

Certain areas and notions of concern have been defined and observed through the main findings of the research. The notions of communication, participation, and conservation, for example, are the components engaged in the system of the city transformation, which is specific to its structure. On the other hand, cultural awareness was found to be the catalyst which enables these components to interact within this system and as a result allow people to be virtually and actively involved in their cultural processes.

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CHAPTER ONE INTRODUCTION

CHAPTER ONE

1.0

INTRODUCTION

How do we live in a modern world? What does the city mean to its residents? In what way does the city mean to its citizens? Are they satisfied with its modern modes, or do they like the old-fashioned?

These and other questions were the main concern of all studies when the student thesis. As an outcome, the author has observed that people are in search of a modern relation with a smart city. As the time goes they show dissatisfaction with their contemporary environment as it lacks spatial quality. The above mentioned issue is related to the situation of man over his environment. This phenomenon has occurred in many of the world countries where Western models have been adopted by the planning and design profession without any evaluation of their consequences.

The objective of this research is to discuss the research problem which has been dealt through the detailed reading of the case literature. The research is based on the study of the current situation of the city of ... and to explore the various aspects of the built environment, which could be used to enhance the quality of life of the people of the city of ...

1.1. The city of ...

In this study, the author has observed that the way our modern cities have evolved. The city of ... has been developed in a way that has been suggested, if not stated, by the ... and ... of the city of ... The city of ... are not aware of the fact that it is through their

CHAPTER ONE: INTRODUCTION

1.0 Introduction:

How do people see the world around them? What does the city mean to its residents? In what way do people react to its structure? Are they satisfied with its modern spaces, or do they like the old ones?

These and other questions were the main concern of the author when she started the thesis. As an architect, the author has observed that people are in favour of a modern solution for their future city. At the same time they show dissatisfaction with their contemporary environment as it lacks spiritual qualities. The above mentioned issue is related to the alienation of man from his environment. This phenomenon has occurred in many third world countries where Western models have been adopted by the planners and decision-makers without any evaluation of their consequences.

The objective of this research is to discuss the research problem which has been dealt through the theoretical studies of the man- environment relationship. The reasoning behind this is to give a widening perspective to the various aspects of the built environment, so we could enrich our interpretation of the way people of the city of Nablus evaluate their city.

1.1 The Problem:

In Palestine, many factors have influenced the way our modern settings have evolved. Politically speaking, the cities where our culture has been suppressed, if not erased, by thirty years of occupation have witnessed a noticeable destruction of our heritage. The mass of Palestinian people are not aware of the fact that it is through their

cultural and physical historical heritage that they can identify themselves, that architecture is the massive and tangible link between man and his national identity.

In addition, one of the outcomes of the social and economic changes in the built environment of the West Bank appears in the spatial organisation and forms of new modern areas in the cities, which are in contrast to the traditional areas. These modern areas are collections of mismatched and unrelated styles which do not reflect the culture of the inhabitants, nor is there harmony between its elements.

This contradiction between old and new, traditional and contemporary is one of the issues which threaten the loss of cultural identity within Palestinian cities. This mixture of style creates confusion about the identity of the place and its inhabitants. Moreover, the existing traditional architecture, which is regarded as a valuable national heritage, is decaying. It is noticeable that many buildings in the traditional quarters have collapsed or are about to collapse at any time.

All these issues can be best understood within the framework of man-environment relationship. To understand the way man relates to the environment and acts and interacts with it will help us to identify many aspects that are related to the meaning of the environment. There is a mutual relationship between man and his environment. Each shapes and is shaped by the other. For a long time man has depended for his survival on the quality and quantity of the elements which make up his environment.

To understand this environment we have to look at the definitions of the term itself. There are many definitions for the "environment" varying according to the subject dealt with. At its broadest the environment can be defined as any condition or influence outside the organism, group, or whatever system is being studied, while recent ecological thinking stresses the need to consider the organism within the environment rather than organism and environment.

Rapoport, (1977) defines it as a series of relationships between elements and people, each relationship having a pattern. The environment reflects and helps relations and

transactions between people and physical elements of the world. These relationships in the physical environment are spatially basic, primarily objects, and people are related through separation in and by space (Rapoport, 1977).

Ittelson (1973) describes the environment as an ecological system with seven components

- 1) Perceptual; the ways in which individuals experience the world, which is a principal mechanism linking people and environment.
- 2) Expressive; which concerns the effect on people of shape, colours, textures, smells, sounds, and symbolic meanings.
- 3) The domain of aesthetic values of culture and, I would add, the whole area of values.
- 4) Adaptive; the extent to which the environment helps or hinders activities.
- 5) Integrative; the kinds of social groupings which are facilitated or inhibited by the surroundings.
- 6) Instrumental; which refers to the tools and facilities provided by the environment.
- 7) The general ecological interrelationship of all these components.

In a different formulation, Lawson (1980), describes the environment as an ecological system having four components:

- 1) The individual
- 2) The physical environment, including all natural features of geography, climate, and man-made features which limit and facilitate behaviour, and the 'resources' of the environment.
- 3) Personal environment, including individuals who are important sources of behaviour control- family, friends, authority figures, etc.
- 4) The social environment, consisting of social norms and institutions.

These, and other models proposed, have two things in common. Firstly, they suggest a multiplicity of environments- social, cultural, and physical. Secondly, they imply a link between changes in the physical environment (which the designer manipulates)

and which provides a setting for people and changes in other areas- psychological, social, and the like.

Detwyler and Marcus (1972) give another definition of the environment. They consider it as an aggregate of external conditions that influence the life of the individual or population, especially the life of man. This is an ecological definition that includes both physical and cultural components.

It is very important to bear in mind the way people and their culture affect the environment, and how physical environment affects cultures and people. Altman and Chemers (1980) argue that people, culture and the physical environment are a trio that cannot be understood separately.

The relations between man, culture and environment are very variable, and there have been several views on them. Ujam (1987) suggests that the problem has been about the nature of the relationship between man and his ecological environment. The old answer was that the physical environment determines human action, or in a broader sense, influences them in what they do.

One simple and broad definition of culture states that culture is the man made part of the human environment. However, there are several components of culture, which we can say refer to beliefs, perceptions, values, and norms, customs and behaviour of the group of society.

The question is what might the effects be of culturally inappropriate environments? How serious might these be and, consequently, how important is the consideration of cultural variable in design?

These questions are best approached by considering briefly the effects which environments have on people, i.e., the effects of particular organisation of space, time, meaning, and communication in human behaviour, well-being, or mood. If there are no effects, or if these effects are minor, then the importance of studying man-

environment relations is correspondingly diminished. It is also a difficult question to answer since the evidence is often difficult to compare, is contradictory and there is no consensus or generally accepted theoretical model. However, three positions can be distinguished regarding this, one of the three basic questions of man-environment research (Rapoport, 1977). The first is environmental determinism, the view that the physical environment determines human behaviour. This has been the traditional view in planning and design, the belief that changes in the forms of the urban environment can lead to major changes in behaviour, increased happiness, increased social interaction, and so on. As a reaction, a second view was put forward that the physical environment has no major effects on people but that it is the social, economic, and similar environments which are of major importance. At most, to use a geographical analogy, one could accept the possibilist view, that physical environments provide possibilities and constraints within which choices are made based on other, mainly cultural criteria. The third position, in geography, is probabilism – the view that physical environments do, in fact, provide possibilities for choice but that they also constrain choice to the extent that some choices become much more probable than others in given physical settings.

People, then, act according to their reading of the environmental cues, and the code or ‘language’ must be understood. The design of the environment can be seen partly as a process of encoding information so those users can easily decode it. If the code is not shared, not understood, or inappropriate, the environment does not communicate: its ‘language’ may be foreign for users. An important aspect of culture specific environments, those culturally supportive, is thus in the organisation of meaning.

Rapoport, in his book “Human Aspect of Urban Form”, 1977 says;

Given the argument about the importance of socio cultural variables and hence the need for culture supportive environments, designing for culture seems desirable. It also seems to be exceedingly difficult although it should be the long-range goal. Activities, however, particularly if they include latent symbolic aspects, can provide a very useful starting point and lead fairly easily to life-style, as defined above, i.e., as the outcome of a series of choices about how to allocate temporal, material, and symbolic resources on the basis of culturally defined priorities. Design is also the result of a similar choice process, so those particular environments have qualities seen as desirable or

undesirable, supportive or inhibiting. They are supportive to the extent that the systems of settings, their cues of meanings, and the rules about who is included or excluded are congruent with the activity systems, all these judgements being subjective and culturally variable. Different organisations of space, time, meaning, and communication are needed to support rather than inhibit given life-style.

Thus the individual and the environment form a system and their mutual interaction is partly determined by the physical environment and other people, or more correctly, the individual perception and interpretation of them and their significance.

1.2 Main Objectives:

Environmental perception thus involves the present stimulus information, present context information as well as stored stimulus information; also acting are the perceiver's current and stable ambitions, fears, values, and various other real and imagined elements.

The main objective of the thesis is to explore people's perception of the built environment as a tool to understand the man environment relationship. The study of meaning enables the researcher to identify and examine many parameters involved in people's evaluation. Thus the notion of meaning is seen as a vehicle to deal with the issues related to the city of Nablus, and how people attribute meaning to its urban environment.

The study will examine what and where the differences occurred in people's and professional's perception. This will help the professionals to minimise the gap between them and the people, because in the end, it is the people who are using and living in these places.

Meaning in the environment is inescapable, even for those who would deny or deplore it. Everything that can be seen or thought about takes on a meaning (Jencks, 1980). Mankind creates objects as an attempt to maintain his significant existence,

one that could express his beliefs, attitudes and values. Therefore, all objects have specific meanings for people.

Osgood (1975) described meaning as the product of signs, which reflect the idiosyncrasies of individual experiences. Benswessi (1987) argues that meaning like emotion, is a relational or process concept; accordingly, the message of the sign as a cultural product, resides in the use of the common features of the situations in which it is used and the activities it produces. This significance applies to the interpretation of particular individuals, particular concepts and particular factors. Therefore, what is meaningful to one person or group of people may not be meaningful to another.

Within the built environment, some authors consider meaning as an idea or thought that mediates between people and significant objects (Rapoport, 1982; Csiszentmihalyi and Rochberg- Halton, 1981). In this sense, these objects are considered as communicative elements within certain societies.

It appears that people react to environments in terms of the meanings the environment has for them .One might say that “ environmental evaluation then, is more a matter of overall affective response than of a detailed analysis of specific aspects, it is more a matter of latent than of manifest function, and it is largely affected by images and ideals” (Rapoport,1977).

The whole concept of environmental quality is clearly an aspect of this- people like certain urban areas, or housing forms because of what they mean. In Britain, places considered to be industrial, and hence smoky, unhealthy, dark, and dirty are disliked; places with a rural character, and hence quiet, healthy, and gentle, are liked (Burgess, 1978). Thus trees are highly valued not least because they indicate high - quality areas and evoke rural associations.

Through the study of meaning one can identify people’s attitudes towards their own city Nablus, which has been chosen as a case study. One of the most difficult tasks in

architectural design is to identify the various needs of people or clients as many of them are very subjective and mostly expressed unconsciously through “unstated” preferences and desires. Clients are not always capable of expressing themselves. On the other hand, people’s real needs are suppressed due to the complex influences and information bombarding them in their everyday life. Designers may be unaware of their shortcomings in dealing with complex issues. As a result many of them seek refuge in adopting the variety of options offered to them by the architectural styles in the form of fashions and schools of design which are largely verified by rhetorical conceptualisation.

This thesis is about tracing the origin of these problems in Nablus and is concerned with examining people’s perception and expectations in order to form a framework with which to guide future development of the city which responds to its peoples needs and expectations. This could be achieved though applying different techniques that will help the researcher to understand the problem. The techniques which are used by the author are, the open ended questionnaire, Personal Construct Psychology, and the Semantic Differential.

At the core of the study is an attempt to explore from people themselves a way of responding to these problems through understanding how they perceive and interpret the environment of their city. Another aim is to identify the area and the type of different interpretations and attitudes towards the environment held by both professionals and the ordinary people. This would provide a broader perspective from which we can gain more insight and information needed for future planning processes.

1.3 Formulation of the Study:

The origin of this research goes back to the eighties, when I was practising in one of the architectural firms in the city of Nablus. As a young architect who values the traditional indigenous architecture which exists in the historic city, the author was trying to adopt solutions that were inspired by traditional settings in the design projects. The author was surprised by people’s conservative attitudes towards those

solutions. Most clients showed a great interest in modern solutions. When the author was walking in the streets of the old city, admiring its rich and diverse façades and spaces, she noticed that people held a rather negative attitude towards the old city. The author was trying at that time to understand its structure, and to analyse the way the ancient great master builders constructed this marvellous city. At that time the author was faced with people constantly questioning her when she was taking pictures of the old city. They were asking “Why are you taking photos of the old city? Do you find it really beautiful?” For them the old city is no more than a forgotten past. This past holds good memories, but it is still past.

These questions have spurred the author to go back and ask the following questions; how do people see the built environment? And in particular how do they evaluate their traditional and modern settings? What do they like from both settings? Do different people look at the built environment differently? And if so, in what way do they differ?

1.4 Research Methodology:

The orientation of this research is exploratory and relies as far as the methodology is concerned on quantitative data. For in-depth investigation, a case study is employed: The city of Nablus was chosen for the survey, which is divided into three parts using different techniques. The strategy for investigation is to proceed from Macro level to the Micro level. For data collection multiple techniques are applied because the issue under investigation is complex and variant. These techniques were an open-ended questionnaire, the Repertory Grid of George Kelley's Personal Construct Theory and finally Semantic Differential analysis. In addition to this, the thesis carried out a literature review and interviews and also benefited from self - experience and observations of the city.

1.5 Structure of Thesis:

The following is a brief summary of the various chapters and the organisation of the thesis.

In chapter one an introduction is given by the author to the main subject of this research. An overall review of the problem and the main objectives, as well as the research methodology adopted in this research, are also introduced. Also, this chapter describes the general summary of the contents of the thesis.

Chapter Two discusses the theoretical perspective of the meaning of the built environment. It reviews the different approaches that have been used in this discipline. The purpose of this chapter is to familiarise the author and the reader with the key issues about the principle theories and context of the man environment interaction studies. This will be reflected in and help with the interpretation of the findings from people's perception. Without this the interpretation will be limited and constrained by the author's ignorance.

Chapter Three reviews the research methodology adopted during the field work for investigation of the meaning of the built environment. It explains the approach to the study, the strategy for investigation, the technique adopted for collecting information and the analysis.

Chapter Four introduces the city of Nablus as a context, where this investigation is carried out. It gives an idea about its historical background. In this chapter there is a review of images from the past followed by a description of the current structure of the city. This will help to give the reader an idea of the context.

Chapters Five and Six explore people's interpretation of the built environment using an open-ended questionnaire, taking into consideration the contextual dimension. This attempts to try to understand people's preference system that is associated with their own culture, values, ideas, and history. This is conducted either through descriptive analysis of findings or interpretation of some of the observed aspects, dimensions, and activities in the settings which will help the author to form a holistic view of the built environment.

Chapter Seven introduces Personal Construct Psychology as a technique applied to investigate people's construct system for the interpretation of the built environment. This is conducted through the analysis of correlation, associations, and preference system. This will help us to understand the concepts people hold for different settings- the traditional one and the new one-. This chapter will also try to see if there is a difference in dimensions used for interpretation between the professionals and lay people.

In chapter Eight the semantic differential was introduced as a technique to carry out analysis of three different urban spaces in the city of Nablus. The purpose of this chapter is to check the results of findings in the previous chapter through various analyses, as our main concern in this research is to try to identify the differences of interpretation of the built environment between the professionals and the lay people. This chapter will try to identify these differences with reference to one type of the built environment, the street. This part will allow us to cross check on some of the findings of the previous part. By doing so, it will enhance the validity of the research and add more sensitivity to it.

Chapter Nine starts with introducing certain areas and notions of concern that have been defined and observed through the main findings of the research. The notions of communication, participation, and communication, for example, are the components engaged in the system of the city's transformation, which is specific to its structure. Moreover, it summarises the results of the investigation through the research, and finally presents recommendations regarding the future of the built environment derived from the different key players in the process.

CHAPTER TWO

MEANING IN THE BUILT ENVIRONMENT

CHAPTER TWO: MEANING IN THE BUILT ENVIRONMENT.

“Meaning in the built environment is inescapable, even those who would deny or deplore it. Everything that can be seen or thought about takes on a meaning”.

Jencks, 1980

2.0 Introduction:

The notion of the meaning of a place is an essential aspect of self awareness. Throughout history, the meaning of the environment has been of extreme significance in man's response to satisfying his needs. Mankind creates objects as an attempt to stress his significant existence through which he could express his beliefs, attitudes and values. Therefore all objects have specific meaning for people.

In order to establish a better understanding of the notion of meaning, it is necessary to investigate and grasp its essential aspects. This investigation will serve as a source towards the construction of theoretical guidelines that will help to develop a coherent view of the meaning of the built environment. The aim of this theoretical perspective is to formulate more clearly the outlines that emphasise the concept of meaning within the built environment.

Although the notion of meaning has been addressed from a broader perspective, this part of the research dealing with the literature review will help to give one an idea about the notion of meaning. The meaning could be understood through schematic, cognitive, social, behaviour, and symbolic approaches. For example, we cannot explore meaning without understanding schemata, because schemata and cognitive structure carry meaning, and social interaction and social values all lead to the notion of meaning. So, the meaning of the built environment is the umbrella which will help in understanding the people's responses in this research.

2.1 Perception:

How do people acquire and process information about their environment? Obviously this happens through the various sensory modalities- vision, hearing, smell, touch, taste and kinaesthetics. According to Rapaport (1977), before cues can be understood, they must be noticed; before the social significance of elements can be assessed, they must be perceived; before messages- whether signs, buildings, areas or locations- can be evaluated, they must be discriminated from noise. Perception is then the most fundamental mechanism linking people to the environment. It is the most direct and immediate sensory experience of the environment.

All our senses (vision, auditory, olfactory, tactile and tasting) are means to obtain information. They receive first hand information about the properties of the environment from the environment. There is some justification for concentrating on visual perception, because vision is arguably the most acute. People can discriminate more between the signals through vision than through other senses. The amount of information carried by this channel is believed to be correspondingly high.

Every organism lives out its days in relation to and as part of, a larger environmental context through sense organs and processes it, together with information from other sources, in the nervous system (Ittleson, 1973). The perception and processing of information from the environment constitute the area of study designated as perception.

Perception is commonly used in the sense of "seen" because the function of seeing is argued to play the essential role in gathering information. Most theories on perception have been constructed with a sense of vision in mind. According to Kitoni (1988), the stimulus is first received by the sensory organs. Secondly it is transformed into neural impulses and then carried through the nerves to an area of the brain called the cortex. This cites Smith's (1974) explanation that a person's "body is equipped with a number of highly sensitive receptors which convert energy emitted by the environment into energy of a different nature which conforms to the structural code of the brain".

Arnheim (1969) argues:

Without information on what is going on in time on time and space the brain cannot work. However, if the purely sensory reflections of the things and events of the outer world occupied the mind in their raw state the information would be of little help. The endless spectacle of ever-new particulars might stimulate but would not instruct us. Nothing we can learn about an individual thing is of use unless we find generality in the particular.

Evidently then the mind, in order to cope with the world, must fulfil two functions. It must gather information and it must process it. The two functions are neatly separate in theory, but in practice they are not.

Traditional thinkers, according to Arnheim (1969), viewed perception and cognition as opponents, in need of each other but different from each other in principle. Thinking consists of intellectual operations performed on perceptual materials. The material becomes non-perceptual from the moment when thinking has transformed the raw prospect into concept. Arnheim (1969) criticised the last point by arguing that the “operation called thinking is not the privilege of the mental process above and beyond perception but an essential ingredient of perception itself”. For Arnheim there is no difference between what happens when a person looks at the world directly and when he/she sits with his/her eyes closed and “thinks” It is difficult to separate the cognitive and perceptual process in his work.

Looking at it from a different point of view, Rapoport (1977) states some differences between perception and cognition. The proposed differences correspond to that between direct (perception) and indirect perception (cognition).

Yet another view can be found in Neisser’s work (1976), where he suggests that perception and cognition are both parts of one unique cycle. He assumed that cognition and the perceptual process are successive and affect each other, whereas the function of an expected stimulus is to initiate the cycle of perception.

The different views on perception and cognition are complementary, in fact, as Neisser had concluded. Those who treat perception and cognition as two functions in

need of each other are right; those who find them embedded are also right along with those who suggest that cognition and perception interact. "Each of these views has focused on a single aspect of what is normally a continuous and cyclic activity" (Neisser, 1976).

Cognition is a broader term, which includes perception. It is associated with the psychological process by which human beings obtain, store, use and operate upon information. It consists of sensing, perceiving, remembering, deciding and other types of psychological processes and is intimately related to experience. Perception, by comparison, is a more specific term. It is the psychological function that enables the individual to collect sensory stimulation into organised and coherent experiences.

Others define perception as "the process of interpreting stimuli in the environment. This involves classification of novel stimuli or novel combinations of stimuli, and the recognition of familiar stimuli, or sets of stimuli, where the interpretation of the input is now clearly with the process of recall." It is obvious from this definition that any new stimuli cannot be perceived or recognised unless they are compared with what is stored in one's memory and some kind of correlation is being made. In other words, "no perception, and as a result no intelligent behaviour, can occur in any automation which is not able to store information from the past" (Minai 1989). Minai argues:

If similar things are done by an organism, as well as artificial intelligence, then the difference would be in the innate input in part of the organic system. As Gestalt psychologists point out, the organism's innate input in a perceptual process is important. But George adds to this that "whilst the structural consideration is a relevant factor, the more significant factor is the method of perceiving which must lie in a comparison between the present and the past.

Levine and Shefner (1981) suggested that "perception refers to the way in which we interpret information gathered (and processed) by the senses". In a word, we sense the presence of a stimulus, but we perceive what it is. This process of interpreting sensory information is complex and involves a considerable variety of processing mechanisms (Eysenck, 1984). At the very least, perception depends upon a basic physical system associated with each sensory modality, together with central brain processes that integrate and interpret the output from these physiological systems. Hence it is

suggested that perception itself depends on the skill and experience of the perceiver, on what he knows in advance (Neisser, 1976).

2.2 Cognition:

According to Arnheim (1970), a typical image of cognition was related to intelligence activity. He states that:

The business of creating concepts, accumulating knowledge, connecting, separating and inferring was referred to the higher cognition function of the mind.

To cope with the world, the mind must gather information and must process it. Gathering information is related to perception, whereas processing is related to cognition. However, cognition is not limited to processing, it also consists of intelligence and problem solving which include understanding, reasoning, judging, etc. As Neisser (1976) explains “cognition is the activity of knowing: the acquisition, organisation and the use of knowledge”.

Flavell (1985) suggests that although it is important to communicate ideas about the nature of cognition, it is neither possible nor desirable to define it and limit its meaning in any precise or inflexible fashion. He stated that the traditional image of cognition tends to restrict it to the “intelligent” process and products of the human mind. This image, he added, includes such higher-mental-process types of psychological entities as knowledge, consciousness, intelligence, thinking, imagining, creating, generating plans and strategies, reasoning, inferring, problem solving, conceptualising, classifying and relating, symbolising, and perhaps fantasising and dreaming.

What one knows and thinks (cognitive) obviously interacts in a very substantial and significant way with how one feels (emotion). If there is no arbitrary place to stop once we go beyond a narrow, purely higher-mental-process image of cognition, why go beyond it at all? Flavell asked this question and his answer was that the processes which go into “thinking”, “perceiving”, “remembering” and the rest are in fact

complexly interwoven with one another. Each process is believed to play a vital role in the operation and development of every other process, affecting it and being affected by it. What you know, for example, affects and is affected by how you perceive; how you conceptualise or classify things influences the way you reason about them, and vice versa.

Piaget, (1977) on the other hand, views human cognition as a specific form of biological adaptation of complex organism to complex environment. The cognitive system he envisaged is an extremely active one. That is, it actively selects and interprets environmental information in the construction of its own knowledge rather than passively copying the information just as it is presented to the senses. While paying attention to the structure of the environment during knowledge seeking, the mind always reconstructs and reinterprets the environment to make it fit in with its own existing mental framework. The mind builds its knowledge structures by taking external data and interpreting it, transferring it, and recognising it. However, Piaget made much of the idea that the mind meets the environment in an extremely active, self-directed way (Ujam, 1987).

The Piaget model describes how this cognitive system interacts with its environment, and, by means of many such interactions, undergoes developmental change. According to this model, the cognitive system plays a very active role in its cognitive interchanges with numerous experiences in its milieu, rather than simply making a mental copy of what is experienced. Each cognitive encounter with the world always has two aspects, assimilation and accommodation. Assimilation essentially means interpreting or constructing external data in terms of the individual's existing cognitive system. What is encountered is cognitively transformed to fit what the system knows and how it thinks.

The key elements of cognition are cognitive maps and perceptual schemata, which essentially constitute both the framework for and the content of our memory, operating on cognitional and perceptual levels, though on a large scale, accepting information and guiding exploration. Culture has an important role in terms of building the cognitive structure. Culture, including social actions, informs us about

ourselves as well as about the world with which we are engaged. It too, creates cognitive structures that have many other uses (Neisser, 1976). In other words, fundamental cultural knowledge by which people interpret and evaluate the world, is embedded in the individual cognitive structure of people.

2.3 Cognition, Schemata, and Culture:

People's understanding and remembrance of events is shaped by their expectations, which are obtained through a series of experiments. The most commonly used construct to account for complex knowledge organisation is the schema. So a "schema" is a structured cluster of concepts; usually, it involves generic knowledge and may be used to represent events, sequences of events, precepts, situations, relations, and even objects (Eysenck 1984).

Jencks (1969) thinks that the way people can perceive the world depends on the concepts that they already have (schemata). These schemata are not based on intrinsic information, but are the result of a gradual process of gathering information, gaining experience, and through cultural symbols. The schemata determine perception. People are not passive receptors of outside stimuli, they perceive things according to a former expectation mostly found over time, but the initial necessity before an individual gets involved with the built environment is first to understand it. Schematic knowledge about the environment is the main resource for everyone. Schematic knowledge itself is the consequence of long term experimental interrelation between the individual and the environment and includes information about expectations, values, norms, and so on. As Grynberg (1991) argues:

Reference is linked to the subject's knowledge systems, semantic networks, systems of categorisation, habit, and so forth, all of which vary between individuals and between cultures.

The concept of "schemata" is related to one of the most significant theories about the human mind identifying the people-environment interconnection. Eysenck, referring to Kant's philosophy, proposed the idea of schemata as innate structures for organising our perception of the world (Eysenck, 1984). Bartlett showed that the

schemata vary with culture and things are remembered not in order of presentation but how they are assembled into schemata. In other words, schemata help to make the world a more predictable place than it would otherwise be.

Schemata form that portion of the entire perceptual cycle which is internal to the perceiver, modifiable by experience, and somehow specific to what is being perceived. Schemata accept information as it becomes available at sensory surfaces and are changed by the information; they direct movements and exploratory activities that make more information available, by which it is further modified (Neisser, 1976). The user constructs cognitive schemata that have a predictive value because schemata are induced or abstracted from many specific experiences.

Rapoport (1977) argues that:

If something has to be transmitted and learnt in human terms it should have cognitive and schematic basis.

There is enough evidence to show that culture is the main resource for human schemata. This explains the relative sameness of actions and reactions among a group of people who are under the umbrella of the same culture and why in a cultural context the entire systems of behaviour that are made up of hundreds of thousands of details are passed from one generation to the next.

The relationship between culture and schemata is tied into the whole cultural structure. So, although the details inside a culture's structure may differ from one person to the other, or be forgotten in one way or another, the overall knowledge is much too strong to be forgotten or ignored. Neisser (1976) argues that the forgetting tends to affect minor details of embedded schemata rather than the overall embedding structure. The total meaning of a sentence or a story survives far longer than the particular words that established and expressed it. The structured knowledge that identifies fundamental interactions between people and their environment, their relationship with nature, ideology, and the society, for instance, cannot be changed as quickly as their ideas about, say, clothes fashions or car technology, because they are the basis of people-environment unity.

Culture therefore is to be found both in people's minds and their surroundings. According to George Kelley's theory about the structure of the mind, as well as the theory of perception, cognition and schemata, individuals actively interpret the external world based on prestructured images and knowledge. Although it can be claimed that some of this knowledge is shared among almost all people all over the world, as stereotype images, each person's perception is for the most part affected by local culture and its verbal symbols, producing differentiation and bonds of similarity between people in various societies and environments.

Equally, it can be said that the external environment in different ways is already "culturised" in that it holds and manifests cultural verbal and non verbal symbols. When children learn, they are learning to perceive and recognise their particular environment through meanings and symbols. They are necessarily dealing with a culturally affected environment: therefore, as children develop, their mental structures, i.e. schemata are strongly influenced by the local culture and its related environment.

2.4 Approaches to the Interpretation of the Built Environment:

"Meaning in the environment is inescapable, even for those who would deny or deplore it. Everything that can be seen or thought about takes on a meaning" (Jencks, 1980).

Mankind creates objects as an attempt to build a significant existence which can express his beliefs, attitudes and values. Therefore, all objects have specific meanings for people.

There is increasing interest in meaning in a number of disciplines. It is also becoming more important in geography with the growth of interest in phenomenology and "place" (see Tuan, 1974,1977, Relph, 1976). It is, for example, proposed that the human world can be studied in terms of signs (which guide behaviour), affective

signs(which elicit feelings), and symbols (which influence thought, Tuan1977). In psychology, also, the study of meaning is reviving and has been approached, to give just one example, through the concept of “affordance” (Gibson, 1979) which deals with all the potential uses of objects and the activities they can afford. However, the notion of meaning in terms of potential uses is rather ambiguous.

Meaning has also been approached through particular methodologies. Most used has also been the semantic differential (Osgood et al., 1957), which has spawned a great number of environmental research efforts. More recently, one finds the related but competing use of the repertory grid, based on Personal Construct Theory (Kelly, 1955).

For a more theoretical perspective, it would appear that environmental meaning can be studied in at least three major ways:

- 1) Using linguistic models mainly based on semiotics. These are currently the most common.
- 2) Relying on the study of symbols, these are the most “ traditional”
- 3) Using models based on non-verbal communication that come from anthropology, psychology, and ethnology. These have been least used in studying environmental meaning.

The third model is the simplest, most directed and immediate, and lends itself to observation and inference as well as to relatively easy interpretation of many other studies.

2.4.1 Non verbal Communication:

These studies have been mainly concerned with the subtle ways in which people indicate or signal feeling, states and moods, or changes in those states or moods. People communicate verbally, vocally, and nonverbally. Verbal behaviour is much more codified and used more “symbolically” than either vocal or non-verbal behaviour. It thus seems incorrect, on the face of it, to argue that “language dominates all sign systems” (Jencks, 1980) particularly since language may be more iconic, and hence related to non-linguistic reality.

Verbal and non-verbal act together, they may “say” the same thing or contradict each other, thus reinforcing or weakening the message.

The concept of non-verbal communication in the environment can be used in at least two different ways. The first is in the sense of analogy or metaphors since environments apparently provide cues for behaviour. The second is more directly related to what is commonly considered non-verbal behaviour.

The symbolic interactionist approach to the definition of the situation can be summarised in three simple propositions (Blumer 1969):

- 1) Human beings act towards things (both objects and people) on the basis of the meanings which these have for them. This central point is shared by other approaches such as cognitive anthropology.
- 2) The meanings of things are derived from, or rise out of, the social interaction process. This is claimed to be specific to symbolic interactionism. Cognitive anthropology suggests that a basic human need is to give the world meaning and that is done by classifying it into various relevant domains and naming those. These domains often correspond to the settings of everyday life (Rose 1968).
- 3) These meanings are handled in, and modified through, an interpretative process used by people in dealing with the things which they encounter. Meaning is thus not intrinsic and interpretation plays a critical role.

Authors speak of physical, social, and abstract objects, but in the built environment these are combined and interact. Most conceptualisations of the built environment stress the point that environments are more than physical (Rapoport, 1977) .

More stress needs to be given to the routinizing of behaviour and the formation of habits, which is one thing culture embodies. It is this process that answers the question(Blumer, 1969) about how acts of interpretation can be given the constancy they need. One answer, to be developed later, is that this is part of the enculturation process in which the environment itself plays a role. It does this through the association of certain environmental cues and elements with certain people and

behavior; this is assimilated into a schema whereby these elements come to stand partly for those people and behaviour. Finally, these cues can be used to identify unknown people prior to any behaviour or even when the people are not there. At this point we begin, in fact, to see the indirect effect of the environment on behaviour, and other important environmental themes- clearly the beginning of a fairly large conceptual schema.

The fixed cues and meanings encoded in the environment of any particular culture help make behaviour more constant, that is, they help avoid the problem of totally idiosyncratic interpretation. This would not only make any social structure or cultural agreement impossible and hence any social interaction extremely difficult, but it is also likely that it would demand so much information processing as to exceed human channel capacity for such processing. One important function of the built environment is to make certain interpretations possible or predictable. Settings elicit appropriate behaviour, if people notice, properly interpret, and are prepared to “obey” the cues. Environments in traditional cultures have done this extremely effectively and with a very high probability of success.

2.4.2 Semiotic Approach:

Semiotic theory at its broadest considers language to be a system of conventional signs. In the late 19th century, the Swiss linguist Saussure introduced semiology as a science of recognised systems of sign. The basic Saussurian definition of sign consists of two concepts: expression (signifier) and content (signified). According to Saussure, the signifier and the signified are formally unified by a social contact. The Danish linguist Hjelmslev follows Saussure by also dividing the sign into two concepts: content and expression (Jencks, 1980). These two concepts are referred to as a cultural unit. Semiotics is thus, according to them, a science that studies all cultural phenomena if they were system of signs.

Others like Rapaport (1982) see the semiotic approach as a “process by which something functions as a sign” and semiotics contains three main components:

- the sign vehicle(what acts as a sign)

- the designation(to what the sign refers)
- the interpretant (the effect on the interpreter by virtue of which a thing is a sign)

Semiotics, as the study of the significance of the elements of a structured system, can also be understood as comprising three major important components; these, in the author's view, help us both in understanding some of the problems with semiotics and take us further.

They are:

- **syntactics** - the relationship of sign to sign within a system of signs, that is, the study of the structure of the system
- **semantics** -the relation of sign to things signified, that is how signs carry meanings, the property of elements.
- **pragmatics** -the relation of sign to the behavioral responses of people, that is , their effects on those who interpret them as part of their total behavior; this , then, deals with reference of the signs and the system to a reality external to the system- in a word, their meaning.

The use of semiotics in the study of environmental meaning can be criticised. For one thing, there has been little apparent advance since its use began. (See Broadbent et al., 1980). Another criticism is that even when interesting empirical work on meaning is done apparently within the semiotic tradition (for example, Krampen, 1979), it does not really need, nor does it relate to, semiotic theory. Moreover, in that case, much of what the theory is meant to signify (such as classification) is better explained by other approaches, such as cognitive anthropology, ethnoscience, cognitive psychology and so on. The study of sign becomes so broad as to become trivial. This is also the problem with symbols. It also weakens the applicability of the structuralist model when one tries to apply it to the built environment. One such problem of semiotic analysis, which is a particular case of the use of linguistic models more generally, is the extremely high level of abstraction and the rather difficult and esoteric vocabulary full of neologism, which makes much of it virtual or unreadable. These aspects of semiotic analysis are extremely difficult to understand and even more difficult to use.

Koeing argues that from a behaviourist approach to semiotics, and states that the meaning of a sign has to be verified on the basis of response-sequences or objects that can be observed (Eco (1980)). But with a semiotic framework, one is not obliged to characterise a sign on the basis of either behaviour that it stimulates, or actual objects that would verify its meaning; it is characterised only on the basis of codified meaning that in a given cultural context is attributed to the sign-vehicle. It is true that even the processes of codification belong to the realm of social behaviour, but the codes do not admit to empirical verification either. Although they are based on constancies inferred from observation of communicative usage, they would always be constructed as structural models, postulated as a theoretical hypothesis.

This perspective distinguishes between sign vehicle (observable and describable, apart from the meaning we attribute to them, at least at some stage of the semiotic investigation) and meanings (variables but determined by the codes in the light of which we read the sign vehicles).

Eco (1981) argues:

Sign vehicles are capable of being described and catalogued, which can denote precise functions. Provided one interprets them in the light of certain codes, and successive meanings with which these sign vehicles are capable of being filled, whose attribution can occur, as we will see, not only by way of denotation, but also by way of connotation, on the basis of further codes.

For example windows, in their forms, their number, and their disposition on the façade may, besides denoting a function, refer to a certain conception of inhabitation and use. They may connote an overall ideology that has informed the architect's operation. Round arches, pointed arches, and ogee arches all function in the load-bearing sense and denote this function, but they connote diverse ways of conceiving the function: they begin to assume a symbolic function.

This applies also in the city of Nablus where the arch window, domes, and vaults in particular, besides denoting a function, referred to a structural concept of these elements in the old days. They connote an identity to the structure which is perceived and identified as traditional and indigenous. See this in chapter 5 through people's responses.

Then all the ingenuity of an architect or designer cannot make a new form functional (and cannot give form to a new function) without the support of the existing process of codification.

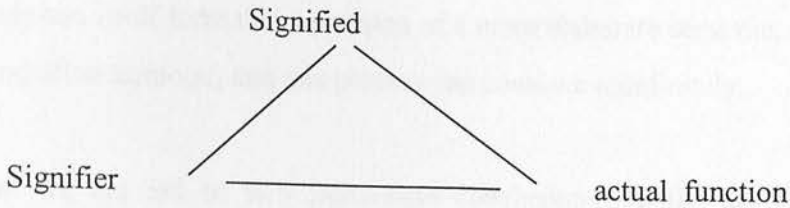
So the title function should be extended to all the uses (in our perspective, to the various communicative, as well as to the denoted, functions) for with respect to life in society the “symbolic” capacities of these objects are no less “useful” than their “functional” capacities. It should be clear that we are not being metaphorical in calling the symbolic connotations functional, because they may not be immediately identified with ‘function’ narrowly defined; they do represent (and indeed communicate) in each case a social utility of the object.

There are two major semiotic models which have been applied to the architectural sign: the Ogden-Richard semiotic triangle and Hjelmslev’s double partition model. Both of these models incorporate aspects of Saussure’s definition of the sign as a two part entity- signifier and signified. According to the Ogden-Richard model, the signifier symbol (work of architectural form) connotes a signified (concept, thought, content) and may or may not denote a thing (referent, object, or ‘actual function’ in architecture).

In comparison with spoken language, the architectural language is more ‘motivated’ and less ‘arbitrary’, which is to say that it has a higher ratio of indexical and iconic signs. Another way of putting this is to say architectural signs stay closer to their functional base than linguistic ones, and, in the case of construction, stay very close.

Umberto Eco has objected to this model because he cannot see the difference between the signifier and the object. For him a triumphal arch connotes triumph and denotes itself. It is not a substitute for the denotation as all signs should be, but the actual thing.

Figure 2.1 The Ogden-Richard semiotic triangle.



In Nablus this happens also to the special kind of window which is called Mashrabeyya, which besides its denotation as being an element to see through, is nowadays perceived as one way of social character that connotes privacy.

This objection rests on a misunderstanding of what the architectural signifier is in this case: an image on the retina, or a mediated precept, mediated by the senses and learned codes. It is not the object itself, or actual function made possible by the object, but rather a set of visual articulations (figure) which are interpreted according to certain conventional codes into a meaning. The virtue of the Ogden-Richard triangle is that, unlike other semiotic models, it incorporates extra-semiotic elements into the universe of architectural meaning. Too many semioticians want to exclude these elements as irrelevant or impure, forgetting that 'reality' or actual 'function' do in fact restrict the codes, or pure semiotic elements, and if the model does not incorporate this level is going to end up too idealistic in nature.

Another model, Hjelmslev's, divides the sign into two planes similar to the signified/signifier; that is content/expression. Furthermore these two planes are subsequently subdivided into form and substance.

The power of this double partition according to Eco (1981) lies in its structure. He argues:

The architecture of any era will only be concerned with $Con f / Exp f$. (The form of content and expression) that is, the particular way culture articulates and conventionalises content and expression. But lying behind these cultural units are all possible units, the actual continuum of the plane of content and expression, in a sense the 'ultimate realities' of these two levels. The substance could be, and is, cut up differently, and in that sense forms an alternative or critique of the way any particular culture or individual uses it.

Then, as Hjemslev has pointed out, a sign(cf /ef) or semiotic coupling of the two planes can itself form the expression of a more elaborate semiotic, a meta semiotic or connotative semiotic, and this process can continue indefinitely.

Thus we are led to two immediate conclusions: firstly the difference between connotation and denotation is a matter of coding, or the other in which meanings are learnt (and does not concern an absolute difference between 'association' and 'function', 'aesthetics' and 'use' or 'vagueness' and 'fact' which is commonly supposed).

Secondly, we can only term denotations, or 'form follows function', that function which is socially codified to the point where signifiers (E) and signified (c) relate as a reflex action. "Functionalism" or entirely functional objects then depend on how well a code is known and not on the object's shape or technical qualities alone.

The hope of modern architects was to build up a complex universal language based on such indexical and iconic words. They believed the 'function' of these diagrammatic objects would be transparent, or obvious to everyone. This has not proved to be the case.

2.4.3 Symbolic Approach:

The symbolic approach, see Rapoport (1982), traditionally has been used in the study of historical high-style architecture and vernacular environments. It has suffered from an excessive degree of abstraction and complexity. It has stressed structure over context, but even in that case it seems more approachable and more immediately useful than semiotic analysis (Basso and Selby, 1976, Leach, 1976; Lanoy, 1971; Greetz, 1974; Rapoport, 1979; Tuan, 1974).

The symbolic approach has proved to be useful in those situations, mainly in traditional cultures, in which fairly strong and clear schemata are expressed through the built environment, whether high style or vernacular. The study of symbolism has not played a major role in the environmental design field. When symbols have been

considered at all, it was only in one of two ways. Firstly, the discussion was restricted to high style design and special buildings within that tradition. Secondly, the discussion formed part of historical studies, the implication being that in the present context symbols were no longer relevant to the designer.

The definition of “symbols” presents difficulties. There have been many such definitions, all with a number of things in common. The question that seems of more interest is why, if they are so important, they have received such minimal attention in design, design theory, and environmental design research. Many answers can be given; one is the difficulty in the conscious use of symbols in design and the manipulation of the less self-conscious symbols involved in the creation of vernacular forms.

One distinction has been proposed by Hayakawa (Royce, 1983) between discursive symbols, which are lexical and socially shared, and non discursive symbols, which are idiosyncratic. The argument follows that in the past there was a much wider area of social agreement about symbols and fewer idiosyncracies. Symbols in a given culture were fixed, known and shared by the public and the designers. A given environmental element would always, or at least in most cases elicit the “right” responses (that is, those intended by the design) or at least responses within a narrow range. The choices were greatly limited by the culture and these limitations were accepted.

Today it is far more difficult, if not impossible, to design in the associational world, since symbols are neither fixed nor shared. As a result designers have tended to eliminate all concerns with the associational world and have restricted themselves to the perceptual world; where they have not, the results have been less than successful (Rapoport, 1982) .

This issue is one of the reasons for the crisis in the identity of modern cities in general, and in particular in the city of Nablus, where the modern areas of the city have failed to meet the cognitive needs of its people. The cognitive needs, if satisfied, would enable the people of the city to communicate with the world around them, and

associate with it. This is mainly achieved through a system of shared symbols.

In the end, the meaning of the city of Nablus is not only what its physical structure resembles, but also the shared symbols. One of the main challenges of designers is to try to study and use these symbols in their future design and planning of the city. See also the section on correlation in chapter 8 of this thesis.

Any attempt to design for associations at levels above the personal are thus difficult. This is one reason for the importance of personalization. The translation of symbols into form has certain common features in all forms of design- high style, vernacular, and popular. What seems to vary is the nature of the criteria used in making choices among alternatives that, used systematically, result in recognisable style.

Given that people's mobility and the need for appropriate behaviour can be communicated, chain operations indicate very clearly, explicitly, and almost automatically what to expect. Seeing the relevant symbols, people know without thinking, what behaviour is expected of them, who is welcome, what level of "dressing up" is acceptable, and what food and services are available at what prices. The cues are as clear, consistent, and comprehensible as in a tribal society and, in this way at least, such design is extremely successful and sophisticated. The question, then, of why such design is so strongly disliked by designers and other groups must be reiterated. The answer, in brief, is that the ideals incorporated in these images and schemata, that is, the values and meanings that are expressed, are found unacceptable. The result of this analysis is, therefore, that the problem is the symbols, images, and meanings held by different groups. These are not shared and, in fact, elicit very different reactions from various groups, mismatches and misunderstandings then follow.

In non-traditional cultures it is difficult to use symbols when they are even less shared and hence ever more idiosyncratic. The problem has to do with the common distinction between sign and symbols. Signs are supposed to be univocal, that is to have a one- to- one correspondence with what they stand for because they are related to those things fairly directly, iconically or in other ways; hence they have only one

proper meaning. Symbols, on the other hand, are supposed to be multivocal, that is, they have a one-to-one-many correspondence and are hence susceptible to many meanings.

In this case correspondence is arbitrary and any part may stand for the whole. This then compounds the specific problem raised above since it compounds the difficulty of using symbols in analysing or designing environments in the pluralistic situations that are now typical. There is also an even more general and basic question about the extent to which “symbolism” is a useful separate category, given that all human communication, and in some views much of human behaviour generally, is symbolic. Some definitions symbol tend, then, to be so general, in effect, since symbol systems define culture, everything becomes as a symbol (as in semiotics everything becomes a sign).

Thus symbols have been defined as any object, event, quality or relation which serves as a vehicle for a conception (Greetz, 1965) and also as any object in experience upon which man has impressed meaning. One can look at environmental cues and analyse their meaning without getting into the whole issue of symbols, which can , and does, become fairly abstract.

In many cases, what used to be and is called symbolism can also be studied by the analysis of schemata and their meanings. The question is not that communication contains many verbal and non-verbal components, the question is how unfamiliar information is decoded, particularly expressive function. The need is to reduce the arbitrariness of symbolic allocation, which requires a stress on the social elements in symbolism and an interest in the processes of human thought and the role of symbols in communication.

The terms image, symbol, and sign are often used interchangeably. An image is an imitation or a reproduction or a similitude of something. A symbol is something that stands for something else. It may do this as a result of an association, a convention, or even an accident (Burchard and Bush- Brown, 1966). A symbol is the result of a cognitive process whereby an object acquires a connotation beyond its instrumental

use. An “object” may be an environment or a person as well as a material artefact. Its meaning is derived from what an observer imputes to it (Kepes, 1966). A sign in contrast, is a conventional figure or device that stands for something else in a lateral rather than an abstract sense.

The built environment conveys symbolic meaning in subtle ways. The correspondence between a building pattern or set of patterns and what is signified has to be learned. Sometimes this is done consciously, but often it is unconscious. Architects, among others, often attempt to establish a new symbol system. To get them accepted, they have to educate others about the set of associations between the new patterns i.e. the symbol. Within any field, elite groups are likely to control some of this process (Barthes, 1976), but other meanings are largely unconsciously developed.

Two other psychological processes explain some of the confusion over the interpretation of the symbolic meaning of specific patterns of built form. These are the processes of stimulus and response generalisation. It is known that the same architectural variables (e.g., façades of a building) may have different meanings for different people. Different forms may also communicate the same meanings. The associations that people have with specific patterns may also change over time in a manner that it is difficult to predict. Chain-link fences, block walls, and asphalt landscaping may be associated with state institutions now, but this may not endure.

The ability to predict how people will interpret the symbolism of an environment is limited by the designer’s lack of a positive theory of architectural symbolism (Hershberger, 1974). This is particularly true in dealing with groups whose values are different from those of the designer. In such situations, the designer cannot rely on his intuitive knowledge because that is drawn from his own experience and not that of others. To understand the importance of symbolism in people’s lives, one has to understand the purpose served by symbols. See chapter 9, which discusses certain aspects that will enhance the communication between people and the professionals, and as a result allow the people to participate in shaping their own environment.

One way in which people communicate with one another is via symbols. Architectural symbolism is one of a set of non-verbal mechanisms that people use to communicate messages about themselves, their backgrounds, social statuses, and world views to others. Some people find it very important to communicate meanings about themselves to others through the material artefacts they own or use. Others do not. A tentative set of explanations for this can be derived from an examination of Maslow's (1954) model of human motivation. Because the model is widely known, a brief overview of it will suffice here .

Maslow suggested that human needs can be arranged in a hierarchical fashion, with strongest level needs taking precedence. His hierarchy, in descending order, is as follows: physiological needs, such as hunger and thirst; safety needs, such as security and protection from physical and psychological harm; belonging and love needs, which concern the relationship of response, or affection; esteem needs, or those needs of an individual to be held in high esteem in his own eyes as well as those of others; self-actualization needs, which represent the desire to fulfil one's total capacities; and cognitive or aesthetic needs, such as the thirst for knowledge and the desire for beauty for their own sake. In using this classification, it must be recognised that an individual's or group perception of their needs cannot be simply correlated with socio-economic status. Even for people of the lowest socio-economic levels, the need for belonging or for esteem is often very important. Some hypotheses can, nevertheless, be suggested about the relative importance of architectural symbols for people with different basic needs.

When people are struggling for survival, the symbolic aesthetics of the environment will not be the focus of attention, nor will the physical character of the environment. The physical character of the environment will still communicate messages about the status of the people concerned; they are likely to be well aware of this, but they have little energy and thus inclination to act to purposively change the symbolism. For people whose prime concern is with safety, architectural variables, particularly those associated with symbolic barriers representing territorial demarcations- become more important, but it is in fulfilling belonging and esteem needs that architectural symbols are particularly important. The symbols that people choose to have around them may

reflect their perception of who they are or what they aspire to be, or may simply reflect a rejection of the past.

One of the fundamental goals of design has always been the aesthetic one - the creation of “delightful” rooms, buildings, townscape, and landscape. In attempting to understand the nature of the aesthetic experience, (e. g., Santyana, 1896) have found it useful to distinguish between sensory, formal, and symbolic interaction between people and their built environment.

Sensory aesthetics is concerned with the pleasurableness of the sensation received from the environment. It involves the arousal of one’s perceptual system, is multidimensional, and results from the colours, odours, sounds, and textures of the environment. **Formal aesthetic** in architecture is concerned primarily with the appreciation of the shapes, rhythms, complexities, and sequences of the visual world, although the concepts can be extended to the sonic, olfactory, and optic worlds. The appreciation of the associational meanings of the environment that gives people pleasure is the subject matter of symbolic aesthetics.

Lang (1978) examines **symbolic** meaning. He suggests five architectural variables that may carry symbolic meaning: building configuration, spatial configuration, materials, illumination, and pigmentation. Kaplan, (1988) expands the evolutionary argument to suggest that aesthetic judgement is the product of two processes related to survival: one capturing the viewer’s attention, and the other enhancing his or her comprehension. According to his framework, complexity, coherence, mystery, and legibility should enhance aesthetic value. He also argues that aesthetic response is a complex interaction between cognition and affect in which the two components of affect- pleasure and interest - are influenced instantaneously by cognition.

On the other hand Nohl (1988) argues that some aesthetic problems arise from the expression of certain primitive symbolic forms. Greenbie (1988) finds certain forms that should be preferred because they have symbolic meanings grounded in evolution and survival. His analysis produced three hypotheses: 1) symbolic forms in the contemporary landscape have separated humans from nature, assertive symbols from

sheltering ones 2) built forms tend to suggest shelter; and 3) the most important aspect of built form is social neutrality.

According to Nohl, symbolic meaning results from three levels of response: perspective cognition (which involves recognition, appraisal, and knowledge of a place), symptomatic cognition(in which objects become symbols for something else). Using this frame, he argues that nature in urban open spaces is overdesigned and is lacking in variety, individuality, and historical context. Hence these spaces fail as aesthetic objects.

One can say that perception and preference are no more variable than any other aspect of human experience and human behaviour. As with everything else, there is regularity and there is variability. By identifying some of these regularities, we may suggest some ways in which they might be understood. Perception and interpretation are inseparable. The perceptual process is itself influenced by all those cultural, experiential, and individual factors that are supposed to underlie interpretation.

2.5 Theory of Place:

The concept of place can be traced back to the ancient philosophical writings of Aristotle. Place or “topos”, in his view, was the “where” dimension in people’s relationship to the physical environment, conjuring up a feeling of “belonging”. The Romans, centuries later, used the term “ Genius loci”, the “spirit of a place”, a “genius spirit” of a physical location. Recent years have seen a revival of the concept of place in many disciplines. The concept of place should encourage architectural theorists and environmental psychologists, to not only consider the semiotic meaning of the external façade of buildings, but also the meaning of the spaces behind the walls. As Venturi (1966) suggests “ architecture occurs at the meeting of interior and exterior forces of uses and space”.

The term “place”, as opposed to space, implies a strong emotional tie, not temporary

but longer lasting, between a person and a particular physical location. Sime (1986) refer to the “place” ascribed to a physical location, which engenders a positive, satisfactory experience. Creating places, according to him refers to “places” which the architect and /or potential users of the “space” actually like.

Abstract arguments concerning the “relationship” of spaces to each other in architectural discourse (e.g. Moretti, 1974) reflect the seductive visual qualities of physical “space”. Sometimes there is an assumption that by switching attention from the architectural exterior or plan to the “space” inside a three-dimensional model, the “meaning” of that space will be accounted for by default. Peterson (1980) writes:

We must make space the generator, not the plan and certainly not the façade. The plan is the generator of order. The façade is the generator of signs. Space is the qualifier of both, the generator of complete meaning and comprehension.

2.5.1 Spirit of Place:

Genius loci, or the spirit of the place, is that quality or characteristic which makes one location of the landscape different from any other, i.e. unique and individual. The concept is somewhat abstract and intangible and tends to be more commonly understood on an emotional and subconscious level. It is however, a most important attribute in a place and may be fragile and vulnerable when changes take place in or around the particular location.

Several people have written about the subject, most recently Norberg-Schulz (1980) in his book “Genius Loci”. Place is very important to us and in our lives. Our sense of identity may be bound up with a particular place and we may refer to ourselves by this, for example, ‘ I am Parisian’. The location itself marks the position of the place, but place itself consists of the totality of the natural and man-made things, assembled in a unique way and may well include the history and associations attached to the place by the people who identify with it. While all places have a character, this in itself is not adequate to induce genius loci. It is the uniqueness which makes it special

and with which we can readily associate.

One of the difficult aspects of genius loci is that we may instantly sense its presence but be unable to identify what has created it. That is why it can be so vulnerable . Often the essence of genius loci can be teased out by an artist or writer who understands it in an emotive, often very personal way.

Drawing on the philosophical writings of Heidegger , Norberg-Schulz has espoused a theory of place which emphasises the quality of a person's existential existence or "being in the world". He argues that the concept of "existential space" is of central importance to architecture (Norberg-Schulz,1971). More recently he has used the concept of "place" to define the characteristics of " existential space" (Norberg Schulz, 1980). He argues that architecture should direct itself to the "meaning" as well as physical properties of the environment. The modern movement, according to Norberg-Schulz, has concentrated on the properties of physical flowing space at the expense of more "enclosed" spaces regarded as an important feature of a place.

In keeping with a " phenomenology of architecture", Norberg-Schulz (1980) regards space as an existential as opposed to a mathematical dimension. Phenomenology is conceived as "a return to things as opposed to abstractions and mental constructions". Adopting the Roman concept of "genius loci", a place is defined by Norberg-Schulz as "space plus character" (how things are). The existential purpose of building is therefore to make a site become a place, that is, to uncover the meaning potentially present in the environment.

The term "dwelling", borrowed from Heidegger (1971), is regarded as the characteristic of a physical location which best expresses what in Eastern philosophy might be described as being at one with the world. The latter, however, emphasises an inner peace in relation to the environment, whereas Norberg-Schulz implies that an important role of architecture is to provide the physical features of a place which allow a person to "dwell". Dwelling is to be at peace in a protected place.

Norberg-Schulz draws on the arguments of Kevin Lynch (1960). Lynch lists a

number of physical features of urban settings which on the basis of people's sketch maps of cities (projected cognitive maps), he regards as a basis for orientation in space: node, landmark, path, edge and district. Norberg-Schulz uses the term paths, places and boundaries. Two psychological functions are considered important in a place: "orientation" and "identification". He said:

To gain an existential foothold, to identify himself with the environment, that is he has to know how he is in a certain place.

While Lynch considers a good environmental image gives its possessor an important sense of emotional security, he does not concern himself with "meaning" of this image for the individual. In this respect the arguments of Norberg-Schulz are an extension of the early work of Lynch into the realm of existential meaning.

2.5.2 Pattern of Place:

Christopher Alexander's development of the pattern language arose from the design disciplines of architecture and planning. It is an attempt to catalogue a comprehensive set of patterns which, when employed in the design process, will ensure the creation of places with "the quality without a name" (Alexander,1979). Each pattern consists of three elements: 1) the definition of particular context; 2) the identification of the system of forces which arises in that context; and 3) a solution which is both described verbally and presented in the form of a diagram " configuration which allows these forces to resolve themselves in the context". The pattern language is intended to be used by non-experts just as much or more as by architects; and as such Sime, (1995) suggests the patterns are " more prescriptive than descriptive". Nevertheless, Sime argues that the pattern language concept serves as " an extremely articulate and evocative expression of the dangers in ignoring the relationship people have to places".

The quality imbued in places which have adhered to " the timeless way" of designing and building is " the quality without a name". Alexander uses the analogy of language to delineate the patterns, both physical and experiential, which lead to creation of

places. The quality without a name is undoubtedly akin to the spirit of place. The timeless way of building outlines the rationale and theory of a pattern language. Each pattern is more prescriptive than descriptive, introducing what is defined as a problem and the field of physical and social relationships which are required to solve the stated problem.

Alexander considers that a creative part of design exists in choosing the combination of patterns to use in a particular design. Each pattern is a predesignated element of a language in which “you yourself are only the medium for the creative spark not its originator”. Sime argues that the links between pattern are not articulated in the form of rules of grammar, as they would be in real language. Specifying these rules might be seen by him as an unnecessary restriction on the creative freedom of the designer. Yet for a language to work, it seems insufficient to restrict the theoretical framework to the individual parts.

Alexander’s approach was criticised by others. Juhasz (1981), for example, suspects that the first three volumes of his treatise on architectural design were not published chronologically (Vol. 1 1979, vol. 2 1977, vol. 3 1975), which suggests that the unearthing of the patterns and formulating the philosophy was, in fact, “more inductive and personal in nature than it being a question of deduction from first principles”. Broadbent (1980,1990) has been particularly critical of the apparently “personal, idiosyncratic, stylistic preferences” shown in some patterns.

Seamon (1985) regards a pattern language as an approach which, although requiring more exploration and experiment, offers considerable scope in providing a direction for environment-behaviour research. Whereas Sime holds that the degree to which the patterns are acceptable as a basis for design and research depends on the criteria for validity that are used. Alexander suggests using the criteria of conjectures, environment-behaviour hypotheses, and design premises.

2.5.3 Sense of Place: (Humanistic Approach)

The area in which the concept of place has seen the greatest revival which has been the most prolific increase in literature on the subject, is humanistic geography (e.g. Tuan, 1977; Buttimer and Seamon, 1980). Criticisms are made by its exponents of the spread of technology, the destruction of natural landscape and the repetitive nature of modern urban design (e. g. Relph, 1976, 1981). The focus of this literature tends to be the landscape and the “loss of a sense of place”. Humanistic geographers emphasise the dangers of geographers preoccupying themselves with the “objectives” physical environment. This concern has been shared in other areas of human geography which concentrate on the cognitive aspects of people’s relationship to the environment through statistical measures. The general starting point in humanistic geography is the phenomenological experience of landscapes. Relph (1973) has coined the term “ placelessness” to refer to physical locales which no longer have an identifiable “ sense of place” or character which make them individually distinctive.

Saarinen *et al.* (1982) describe a “sense of place” as a “unifying concept bringing together a number of separate strands of geographic research in the general environment-behaviour design field”. Essentially, the term “place”, by definition, extends the focus of attention beyond geographic space to the experience people have of being in a particular landscape environment. The value of the term “sense of place” is in highlighting the “Sense of identity” of particular environments. Most of the examples Relph gives of placelessness are North American in flavour. The importance of preserving landscapes, historical sites or public urban settings which contribute to people’s self-identity is, however, an important message to planners in other countries as well. Sime argues ;

A place is a whole phenomenon, consisting of the three interviewed elements of a specific landscape with both built and natural elements, a pattern of social activities that should be adapted to the advantages or virtues of a particular location and set of personal and shared meanings.

One exception is an earlier study by Canter and Wools (1975) which examined architectural elements of a room(roof angle, window and furniture layout) in relation to rating of its friendliness(on a semantic scale). In general, semiotic discussions by

architectural theorists, and empirical studies of meaning in architecture by environmental psychologists, have concentrated on building exteriors. Moreover, as Groat (1982) points out, architectural semiologists have tended to be interested in the physical elements conveying meaning rather than the meaning conveyed (in semiotic terms , the “signifier” rather than “signified” component of a “sign”). In contrast, the early empirical studies of meaning have focused more on dimensions of meaning rather than the physical properties of design to which they are linked (the “signified” rather than “signifier”) .

2.5.4 A Psychology of Place:

Place is a very rich psychological concept, yet one which has been ignored in the psychological literature until recently. Canter (1977) published a book entitled “ The Psychology of Place”. Place, according to Canter, is a combination of actions, conceptions and the physical environment. This is represented by the point of intersection of three overlapping circles, representing actions, conceptions and physical environment.

Although identifying psychological factors are important in understanding the relationship of people to physical environments, there is limited attention paid to people’s actions and almost none at all to the objective physical environment which architects have to manipulate. Canter (1977) criticises the lack of descriptions of actual physical settings in environmental psychology, yet this is not something that he has addressed himself in research. For him the physical environment is firmly locked in the head of the person experiencing it (Sime, 1986).

Canter’s visualisation of placedness forming when actions, conceptions and physical attributes are inter-related gave form to the concept and proved helpful in establishing linkages with planning practice.

Canter’s model also married well with the literature addressing cross-cultural environmental research. Without entering into the perplexing web of definitions of

culture which are apt to ensnare the researcher, the often used Kroeber and Kluckhorn definition was selected as being the most helpful.

Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted symbols, constituting the distinctive achievement of human groups. This includes their embodiments in artifacts. The essential core of culture consists of traditional (i. e. historically derived) and selected ideas and especially their attached values. Culture systems may on one hand, be considered as products of action, or on the other, as conditioning elements of further action.

Canter's discussion of the physical attribute component is given solely in terms of man-made elements. This assumption that meaning is imposed upon the natural landscape through the acts of human designers is such a fundamental part of the practice of planning, architecture and landscape architecture that it is usually not noticed.

Canter's "conceptions", which are similar to Relph's "meaning" were expanded to include the mythical aspects of human experience to bring into the designers' consciousness the need to attune to the "essential core of the culture". This is the most problematic aspect of the rotation of theory in practice. It is recognised today that architects and planners often have cultural backgrounds different from that of their clients. If the designer is working with a client who speaks a different language, the need for translation is questioned. Cultural ' translation ' of conceptions and meanings is also necessary.

Relph (1976), in criticising Canter's book, has suggested that "environment, buildings, even people could equally well be substituted for places. What is "place" about this supposed fusion is not clarified and in fact the term may be used as little more than a synonym for " environment" through out his book".

What is important about the concept of place espoused by Canter is that he always emphasises the necessity of understanding the perspective of the users. His emphasis is on scientifically measuring the relationship between people and the physical

environment approach to “place”. Unfortunately, any “sense of place” which is so important to the humanistic geographers is lost in Canter’s book. Interestingly, the emotional tie to places does not figure as an essential component. Recently, Canter (1983a) has adopted the term “place rules” and “role-rules”. In essence, the suggestion is that there are consistent patterns of action in spaces which are related firstly to the particular roles of people in settings and secondly to particular forms of physical setting.

2.5.5 Politics of Place:

In their paper, Proshansky *et al.* (1983) argue that the role of places and spaces in a person’s development has been neglected in psychology. They introduce the concept of “place –identity” as a physical environmental referent for a more well-known and widely used term: “self-identity”. As they suggest:

Humanistic geographers have argued that through personal attachment to geographically locatable places, a person acquires a sense of belonging and purpose which give meaning to his or her life.

A primary function of “place”, is to gather a sense of belonging and identity. Place attachment is strongest in relation to a person’s own home. Individuals may strive to project their self-concept into the design of an environment. Interestingly, Clare Cooper (1971), who adopted Jung’s notion of the house as a symbol of the self, has found a close correspondence between the “ideal homes” architectural students create in sketches and their previous childhood homes. This shows that there are likely to be physical features of settings, which most people would feel are essential qualities of “place” and some which are idiosyncratic, being related to an individual’s past experience.

Whether or not somewhere is a “place” for someone is not determined solely by the physical environment. In this respect, a place cannot, and perhaps should not, be created in absolute terms on behalf of other people. It is often important for people to be involved in the production, decoration, furnishing and maintenance of their environment. The “placelessness” which Relph identifies probably stems from a sense of alienation in an environment over which he feels he and other people no longer

have control. People are subordinate to the technological innovations of large-scale, mass-produced architectural schemes.

Relph (1985) has suggested that the task of professionals such as architects, planners and social scientists is to develop a sensitivity to the attitudes of places, but the possibilities for place making on behalf of other people solely through the physical features of a design are limited. The professional role which he advocates is one of “environmental midwife” rather than “the machine-driven arrogance of some landscape equivalent of a genetic engineer”.

On a final note, architecture, in concentrating on the physical dimensions of space and form, is in danger of neglecting the pattern of behaviour and experience which imbue buildings with meaning. Psychology has historically divorced itself from the physical environment of buildings, which are so much a part of our everyday behaviour and experiences. It has been argued that it is not possible in absolute terms to create a place for users solely by manipulation of the physical environment on “their” behalf. The building may be imbued with particular qualities or physically modified by the eventual building users. An individual, in creating a place, is involved by definition in the appropriation and personalisation of a physical space through thought and action. This should not deter architects and environmental psychologists from considering firstly the degree to which the structure of a physical layout can be used flexibly by the eventual building user to create a sense of place, and secondly the features of a design which should help to nurture a feeling of a place rather than space.

2.6 Conclusion:

The meaning of the built environment is essential to help one to understand people's interpretation of the place they are living in. The notion of meaning has been addressed in this chapter through a literature review that will convey knowledge and understanding of issues related to man environment interaction in general, and people's interpretation of their own city in particular.

The theoretical background concerning the meaning has been addressed at different levels and directions. This chapter has introduced firstly the mechanism of experiencing the built environment, which occurs through perception and cognition. It also discusses the aspect of perception and cognition as mechanisms of experiencing and interpreting the built environment. Cognition has been defined as the activity of knowing. The human cognitive structure selects and interprets environmental information in the construction of its own knowledge. The knowledge is embedded deeply in our psychological structure. The concept of schemata was introduced with in cognitive psychology to explain some controversies in the field of accepting, restoring, and processing information. To understand the cognitive system will enable one to see how people structure the world conceptually, as people construct systems for handling the world that are based on past experience, knowledge, and expectations.

Secondly, this chapter discussed various theoretical approaches that have been applied in order to understand the notion of meaning. One depends on the linguistic model, which is mainly based on semiotics, another relies on the study of symbols, while a third is based on non-verbal communication. These approaches should be considered in any design and planning for the future if one wants to consider cultural interpretation.

The linguistic approach is a significant source of knowledge about what and how an element is supposed to be and why. If it is meaningful, understandable, and communicable, every development in the built environment should be linked to the existing language embedded in its structure.

Without meanings and symbols there will be no appropriate understanding of the environment. Both indicate what people are , who they are, and what they want to be.

In this chapter also, the concept of place has been reviewed. This concept has been theoretically approached in various ways by different people, each one stressing one aspect of the built environment. An overview of these approaches will help us to understand the differing aspects in people's interpretation of the city of Nablus. These range from seeing a place as a spirit, which has a character " Genius Loci" to seeing the city as a language, where its street, buildings, features are patterns in this language. To understand the city one has to understand and analyse its spaces, streets, and buildings. Others see the city depending on the way people experience and sense its places as a combination of physical elements, social activities, and shared meaning. Still others like Canter see the city as actions, conceptions, and physical attributes that are interrelated, finally Proshansky sees the city as a sense of belonging and identity.

Understanding all these aspects of seeing a place will give us an idea about how to approach the notion of meaning of the built environment in the city of Nablus, depending on a holistic approach for understanding people's responses in the three applied techniques used in this research.

CHAPTER THREE: RESEARCH METHODOLOGY

CHAPTER THREE

3.0 Introduction

RESEARCH METHODOLOGY

Over the last century, the field of psychology has grown to become the most established and widely researched scientific discipline. The development of scientific theories, methods, and theories has provided a solid foundation for the study of human behavior. The field of psychology has grown to become the most established and widely researched scientific discipline. The development of scientific theories, methods, and theories has provided a solid foundation for the study of human behavior. The field of psychology has grown to become the most established and widely researched scientific discipline. The development of scientific theories, methods, and theories has provided a solid foundation for the study of human behavior.

3.1 Research Methods

Environmental psychology is one of the disciplines that study how the environment affects people's perceptions of their own and others' behavior. The field of environmental psychology has advanced these days with different approaches to study human behavior at the individual, social, and cultural levels.

Classical environmental psychology research focused on the relationship between the physical environment and human behavior. The field of environmental psychology has advanced these days with different approaches to study human behavior at the individual, social, and cultural levels. The field of environmental psychology has advanced these days with different approaches to study human behavior at the individual, social, and cultural levels.

3.1 Research Methods

One of the most difficult tasks in psychology is to study the behavior of people in their natural environment. The field of environmental psychology has advanced these days with different approaches to study human behavior at the individual, social, and cultural levels. The field of environmental psychology has advanced these days with different approaches to study human behavior at the individual, social, and cultural levels.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction:

Over the last century, the issue of meaning of the built environment has been considered widely in environmental research. The assignment of meaning does have direct and indirect consequences on human actions. Canter, (1995) argues that the study of man-environment has changed the emphasis of environmental research from focus on the consequences of environmental manipulations to a careful consideration of their implication.

Environmental psychology is one of the disciplines used by researchers to examine people's interpretation of their own built environment. This issue has been widely addressed these days with different approaches ranging from individualistic, micro level to the social cultural, and macro level.

Citizen involvement, through understanding their own system of evaluation of their own environment, is one of the preferable means of dealing with any cultural development or decision-making process, because in the end, future settings are for people to live in and appreciate. Major consideration of people's values and culture is recommended to avoid disintegration and disassociation of the individual to his own environment.

3.1 Research Problem:

One of the most difficult tasks in architectural design is to identify the various needs of people or clients as many of them are very subjective and mostly expressed unconsciously through "unstated" preferences and desires. Clients are not always capable of expressing themselves. On the other hand, people's real needs are suppressed due to the complex influences and information bombarding them in their everyday life. Designers may be unaware of their shortcomings in dealing with this

complex issue. As a result many of them would seek refuge in adopting a variety of options offered to them by the architectural styles in the form of fashion and schools of design which are largely verified by rhetoric and conceptualisation.

How far can we as professionals succeed in understanding people's attitudes towards their environment? And how far can we also adapt suitable solutions for shaping the environments which are in harmony first with people's cultures and consequently with their desires and needs? In order to do so we have to work towards a better method of communication between the professionals who are responsible for shaping the environment and the people who are using that environment.

It is important to recognise that there is a dilemma here, particularly when architectural solutions evoke a sense of anxiety for the loss of identity, which is growing in many societies, especially in third world countries. The result is a more complex picture of the nature of environmental design than that held by many of the designing professions at present.

The problem can be identified when some cities start to fail to satisfy and cope with the needs of their inhabitants not only in terms of the physical needs but also the social and cultural ones. Although authorities, decision makers, city designers and other professionals are trying to satisfy human desires, the problem of the built environment is still increasing and becoming complicated and diversified.

Rapoport states;

In the increase of cities, the difficulty of defining what is a city is related to the use of different schemata and it is easy to show differences in the way cities are structured These differences in location, definition of domains, the meaning given to various elements are all due to varying perceptions, cognition and evaluation of the environmental quality, images, values and many social-cultural variables all which need to be understood before differences in spatial organisation can be understood.

The main object of this research is to explore people's interpretation of the built environment through understanding their attitudes and concepts of their perception to that environment.

The general concern in this research is to try to obtain a better understanding of the built environment. This could be achieved through exploring different people's construct system of the built environment. The need for this initially emerged from a problematic situation related to the author's own experience, where she found that there is a necessity for the professionals who are responsible for reshaping the built environment to be aware of people's desires and need. More specifically the author is concerned with finding out firstly whether people think and hold different ideas about the built environment, and secondly, to identify the area and types of difference in attitudes of interpretation of the environment in both groups.

3.2 Related Research:

Since the late 1960s, environmental psychologists have addressed and re-addressed the question of whether design professionals think differently to the public. Methodological developments have taken researchers from semantic differential studies (e.g. Canter, 1969; Hershberger, 1969), through repertory grids (e.g. Leff & Deutsch, 1974; Stringer, 1977), to less-constrained techniques such as the multiple Sorting Task (e.g. Groat, 1982; Devlin, 1990). Researchers have shown that architects solve both experimental and applied problems differently from nonarchitects (Edwards, 1974; Lawson, 1980). One way or another it is now well established that design professionals in general, and architects in particular, hold a different system of constructs through which they understand and evaluate the environment.

Although the issues are frequently confused in the literature, there are two distinctly different systems of construct under consideration: conceptualisation and evaluation. The first is a system of concept with which to organise and understand architecture that is essentially descriptive, objective, and nonevaluative, while the second guides subjective evaluative judgements. Groat (1982) has shown that architects use different concepts from non-architects. It has been the assumption that these concepts are developed during the period of training, and Wilson and Canter (1990a) have made visible the conceptual transformation that occurs across each year of professional training. Wilson (1996) has examined the changing system of evaluation in

architectural students at two schools of architecture to understand the way in which preference is socialised within professional training.

3.3 Research Method:

The research was conducted through a qualitative method using a case study approach. Such an approach is valuable because it provides information that helps us to understand the complexities of human behaviour.

A case study, which focused on the interpretation of the built environment in the city of Nablus, was used to facilitate understanding of the complexity of the issues related to the research topic. The case study was divided into three parts, each of them using a different technique to explore or study certain aspects of the research problem. Using more than one technique allows the researcher to confirm her findings both through comparison of results of each part of the case study and cross checking between methods. This will enhance the validity of the research and consequently add more sensitivity to it.

The case study used the methods or techniques as follows:

- 1) Open-ended Questionnaire.
- 2) Personal Construct Psychology (PCP).
- 3) Semantic Differential.

The first part was run by using an open-ended questionnaire to establish the following findings:

- 1- Description: by asking people to give an account, in their own words, of the place being studied. This would give a great deal of descriptive information of the place, and through piling analysis of the questions we could identify the dimensions involved in the interpretation system of the person.
- 2- Interpretation of the piling results by using a model adopted from the Ujam Model (see F. Whitworth, 1992) of categories, that allows interpretation of the information through the categorisation of responses into aspects, objects, and activities.

The second part of the study, which is the Personal Construct Psychology approach (PCP), uses a repertory grid technique dependent upon Kelly's theory of analysing the construct system of interpretation. The PCP allows us to :

- 1- Confirm the findings of the open-ended questionnaire for the dimensions involved in the interpretation system.

Examine the construct system for both the examined groups (the professionals and the lay people) through their attitudes, preference system and image of different types of environmental settings, (old settings and modern ones). what is meant by the professionals mostly the architects who are involved in many aspects of the profession that goes under this disciplines like architects, planners, art historian, and interior designers.

The third part of the study is a sub section of the previous one, using semantic differential on one aspect of the environmental setting in order to examine the dimensional structure of environmental meaning. This is achieved by investigating the influence of the type of environment (traditional or modern) on the attitudes used by the defined groups (professionals and lay people) on the interpretation system. Attitudes can be measured by examining people's preference system and image of the defined setting. Table 3.1 below outlines the applied methods.

Table 3.1 The applied method

Study	Technique	Measurement
1) Open ended Questionnaire	Piling	- Descriptive analysis of the interpretation process
	Categories	- Aspects. - Objects. - Activities
2) PCP	Flexi grid	- Dimensions of the built environment - Construct system. - Attitudes. - Preferences
3) Semantic Differential	SPSS	- Structure of dimension. - Preferences. - Attitudes. - Images.

3.3.1 Open-ended Questionnaire:

Qualitative research is a particular tradition in social science that is fundamentally depends on watching people in their own territory. Its methodology is used in many disciplines; for example, the social sciences, and in such fields as education, public health, and nursing administration.

Thirty-five people were interviewed through an open ended questionnaire. The interview was informal and lasted between one and a half and three hours. This is to allow the participant to feel freer to say anything they want, and to talk about his or her feelings, ideas, and expectations. Some of participants were people whom the author knows through work, family and friends. The interviewees numbered thirty-five, twenty males and fifteen females of varying ages, all of whom live in different areas of the city of Nablus. Table 3.2 summarises the respondents' details.

Table 3.2 Distribution of respondent group by age and sex for Open-ended Questionnaire.

Respondents	Female	Male	Total
Over 30	8	11	19
Below Thirty	7	9	15
Total	15	20	35

The survey has been divided into 25 questions, which concentrate on different issues. The purpose of these questions is to elicit the feelings toward an understanding of the immediate social and physical living environment. It is intended that these questions should evoke responses about personal feelings, needs, hopes, social tendencies, and other characteristics that are important in people's lives. These issues are:

- 1) Scale: different levels of scale have been considered in exploring people's interpretation namely: small scale objects, architectural buildings, areas within the city and areas outside the city.
- 2) Preference system: things, which are liked and disliked by the people of Nablus and the reason for liking or disliking. This could be helpful in many ways. First, it could introduce us to the physical objects – irrespective of scale - that are significant in people's cognition system. Also we could establish with what attributes and associations these objects have in people's construct systems.
- 3) Knowledge of cultural values, social structure of the people. We could also identify the past and present events that are important to people.
- 4) Knowledge about everyday life, what kind of activities the citizen of the city participates during everyday life, and how they relate this to the physical urban structure.

To achieve the above mentioned results, various analyses were carried out namely:

- 1) Piling: piling techniques of responses were conducted in three ways, namely piling of responses for each question, piling of responses for a group of questions depending on what the author wants to find, and lastly an accumulative response of all questions.
- 2) Categories: further analyses were carried on the results of the accumulative piling of all responses. This analysis were divided into the following:
 - B- Objects.
 - C- Aspects.
 - D- Activities.

Objects are the physical elements of the environment, not solely the built features. This is a list of the real aspects of an environment, and hence they are the primary stimulants to all emotion and to all activities. These range in scale from a single object to an architectural building to an area. The physical attributes could be linked

to the other components of the place in question, which will facilitate the identification of places.

Aspects consist of the properties perceived in the activities or objects. It is a description, not so much of the real object, but of the observer image or evaluation of the objects. Although the aspects here are all relevant to different items, by being considered independently of their target, the prevalent feelings or emotions of the whole city could be ascertained.

Activities are responses of the observer to the object and aspect reaction. The appearance of a place is only part of its identity. As the physical image develops as a result of the environment, so do the activities.

3) Dimensions: dimensions are motivating forces behind any occurrence in the environment, whether the occurrence is physical or emotional, visible or invisible.

3.3.2. Personal Construct Psychology (PCP)

Personal Construct Theory has characteristics through which it has achieved a unique position in environmental psychology research. At the heart of PCP lies the idea that reality is relative rather than absolute. We use our past construction against future events. A person, therefore, is not passively dependent on the surrounding environment.

Consciously or unconsciously our backgrounds, history and experience give us a set of expectations about the world so that we recognise familiar things and bend less familiar ones until they resemble what we already know (Stewart, 1981) . The Repertory Grid technique allows the interviewer to obtain a mental map of how the interviewee views the world, and to write this map with the minimum of observer bias.

Kelly invented the Repertory Grid technique as a way of getting people to exhibit to him their construct system. This technique was used in this research because:

1. The researcher's influence on the subjects is minimal in this technique, especially when compared with pre-structured questionnaire techniques.
2. There are no pre-structured questions, this gives the subjects greater opportunity to express themselves more easily. The declared statements are, therefore, more expressive of the subjects' real perceptions or views, although the subsequent interpretation might be comparatively difficult.
3. This technique concentrates not only on preferences but also on the very deep reasons, which might underlie them. If a subject expresses a preference to live in modern areas, as opposed to historic old areas, for example, this preference might be expressed as an outcome of a long series of responses the subject has made, in which a large amount of information has been given on a variety of concerns he or she holds. The technique will also help to generate the expression of other subjective concepts that concern the person at a deeper level, as he or she goes on to justify this preference. The technique therefore has a particularly important advantage, and has been found to be one of the most useful techniques for examination of rather complicated and complex networks of subjective concepts and issues, especially those found in research in relation to environmental perception.

The Repertory Grid Technique is basically an interview method in which the interviewee is not given prestructured answers to choose from. The technique allows for classification of the subjects' responses regarding their assessment of various aspects of the environment. This happens without any kind of predesigned format, so that the sequential and open nature of the questionnaire technique itself lets the structure and classification of these responses emerge spontaneously. The subject is simply asked to make a preference leading onto another, the relationships between these sequential responses will indicate an order or structure which represents the significance of these responses, which Kelly calls constructs. The objective here is to examine the result of people's evaluation of current environmental conditions. There

are various available methods for interpretation and analysis of these responses; some of these are manual, others are based on computer programs.

The process of the interviewing began by selecting a series of coloured photographs of 13 different built environment settings, which we are going to call elements. The pictures were chosen to represent the different types of architectural and urban characteristics which exist in the area of Palestine and more particularly the city of Nablus. None of these are taken from a specific area in the city, which is known by the interviewee. These pictures are selected from books on the middle east or cities from the Arab Islamic world, and have similar physical and cultural characteristics to the settings in the city.

Thirty five respondents of different age, sex, and occupation were interviewed to complete the process. The group includes both professional and non professional people, selected from different areas in Nablus, whom the author used to know as friends and their relatives.

Two groups of people were selected, the first is the non professional group or the lay people comprising 15 persons, 7 male and 8 female . The professional group is made up of 10 persons, 6 male and 4 female.

The interviews were conducted separately for each respondent, and they lasted between forty and sixty minutes. The coloured pictures were 20 cm by 13 cm showing different spatial environments.

The random set of elements (pictures) are taken three at a time, and the person is invited to think of similarities and differences between them. The standard question is “ In what way are two of these alike or different ? ”. We continue this process by replacing two new elements and repeating the same question till the person has finished commenting on the elements. We end up with bipolar constructs in pairs, one at one end and the other at the other end.

The last stage in the Repertory Grid is to score the construct. The interviewee, then, ranks each. In this research a maximum seven point bipolar rating scale has been used to complete Repertory Grid evaluations of the built environment in general terms. This gives us an element by construct matrix within which constructs are rows and elements are columns. This matrix is then analysed for its underlying structure in terms of the relationships between constructs.

3.3.3 Semantic Differential:

The semantic differential, a general measuring technique developed by Osgood (1975) to measure connotative meaning, was selected to obtain judgements of meaning from the various respondent groups on the architectural material. The semantic differential utilises a number of scales consisting of polar adjectives, such as good-bad, strong-weak, active-passive, to differentiate the meaning of the concept (in this case, aspects of buildings). The scales are divided into seven steps, as follows:

The purpose of this part of the study is to investigate the following:

Strong -----: -----: -----: -----: -----: -----: ----- Weak

Each subject is asked to consider the concept (building aspect) and place a check in the blank in which he or she feels the meaning of the concept (building aspect) lies. From left to right on the example, a check in the blank would indicate: extremely strong, quite strong, slightly strong, neither strong nor weak (or not applicable), slightly weak, quite weak, extremely weak. Each concept is judged on several such scales, the scale being varied to suit the subject materials.

Participants were asked to evaluate these places on a semantic differential scale through 32 variables. Variables have been chosen to include all dimensions elicited by a previous part of the research. These dimensions are; the physical dimension, concerned with structural properties of the place such as harmony, symmetry, colour; the evaluative dimension which deals with affective dimension such as deserted, friendly, lively, and satisfactory dimension such as healthy, polluted. Variables that deal with aesthetics such as beautiful, attractive, pleasant, and age of the setting such as old, worth keeping, historic, were also added. Table 3.3 below shows all the variables chosen to be studied in this part.

Table 3.3 Variables used in the Semantic Differential experiment.

Old	-----,-----,-----,-----,-----,-----,-----	Not old
Historic	-----,-----,-----,-----,-----,-----,-----	Not historic
Worth keeping	-----,-----,-----,-----,-----,-----,-----	Not worth keeping
Think about history	-----,-----,-----,-----,-----,-----,-----	Don't make think about history
Valuable	-----,-----,-----,-----,-----,-----,-----	Not valuable
Distinguished	-----,-----,-----,-----,-----,-----,-----	Not distinguished
Harmony	-----,-----,-----,-----,-----,-----,-----	No harmony
Symmetry	-----,-----,-----,-----,-----,-----,-----	No symmetry
Human scale	-----,-----,-----,-----,-----,-----,-----	No human scale
Colourful	-----,-----,-----,-----,-----,-----,-----	not colourful
Complex	-----,-----,-----,-----,-----,-----,-----	Not complex
Safety	-----,-----,-----,-----,-----,-----,-----	No safety
Lively	-----,-----,-----,-----,-----,-----,-----	Not lively
Human	-----,-----,-----,-----,-----,-----,-----	Not human
Pollution	-----,-----,-----,-----,-----,-----,-----	No pollution
Mysterious	-----,-----,-----,-----,-----,-----,-----	Not mysterious
Healthy	-----,-----,-----,-----,-----,-----,-----	Not healthy
Economic	-----,-----,-----,-----,-----,-----,-----	Not economic
Good	-----,-----,-----,-----,-----,-----,-----	Not good
Artistic	-----,-----,-----,-----,-----,-----,-----	Not artistic
Beautiful	-----,-----,-----,-----,-----,-----,-----	Not Beautiful
Pleasant	-----,-----,-----,-----,-----,-----,-----	Not pleasant
Attractive	-----,-----,-----,-----,-----,-----,-----	Not attractive
Charming	-----,-----,-----,-----,-----,-----,-----	Not Charming

The purpose of this part of the study is to try to investigate the following:

1- Dimensionality of the interpretation: this means the way in which people understand and structure the built environment. This could be done through applying factor analysis on the proposed variables for both groups, the professionals, and the lay people on the three different streets. This allows us to see how people structure certain settings.

2- The image both groups hold towards the three different aspects of spaces. Understanding the images may be very important way towards understanding of man-environment interaction. They are an efficient and effective way of embodying values and beliefs, and help simplify the complexity of the world. This could be studied in this part of this research through looking at:

1- Preference system: an evaluation system is useful to see how people will rate different settings; this is conducted through a descriptive analysis of the variables to median and standard deviation for both groups.

2- Association and attitudes: through correlation analysis, we could study people's association system. And what different associations they are holding towards the built environment. This could be studied through studying correlation of the proposed variables for both groups.

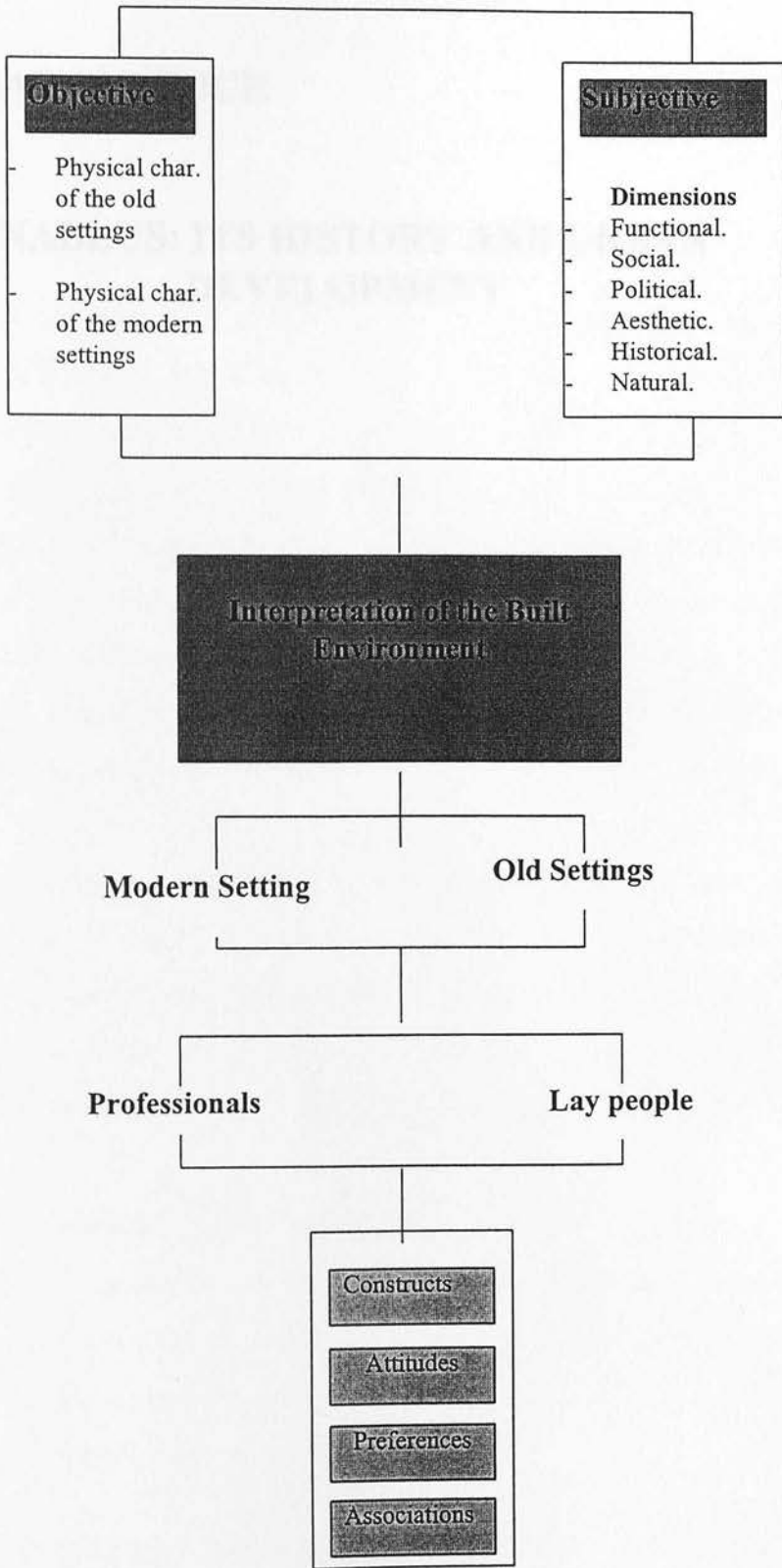
To investigate the required aspects, participants were asked to evaluate different settings on a semantic differential scale rating from one to seven. All the subjects were people who are living in Nablus and are familiar with its places, areas, and streets. Sixty are lay people and 31 are professional. The lay people were 31 female and 29 male. Among lay participants, 26 persons were under the age of thirty and 34 above the age thirty. The professionals were 14 female and 17 male where 24 persons are below age thirty and 7 above thirty. See table 3.4 below for a summary of the respondents details.

Table 3.4 Distribution of respondents by age and sex of Semantic Differential experiment.

	Sex		Age		Total
	Male	Female	+ 30	- 30	
Professionals	17	14	7	24	31
Lay people	29	31	34	26	60

The three different streets, Old Suq, King Faisal Street and Rafidya Street, have been chosen to be evaluated by the participants are mentioned as the most important streets in the previous part of the research (i.e. the open ended questionnaire). The Old Suq is the main commercial spine of the old city. King Faisal street is the major commercial spine that crosses the city from East to West, and is very wide and always congested with cars and traffic. Rafidya street is a new commercial mixed-use street which is undergoing major construction work.

Table 3.5 Proposed variables to be studied.



CHAPTER FOUR

NABLUS: ITS HISTORY AND URBAN DEVELOPMENT

Nablus has been considered one of the major cultural and religious centers of medieval Islam. It was 700 years old before the birth of the Muslim Era. Nablus has been endowed with a very rich and varied cultural heritage (Fares, 1987). A study of the city of Nablus shows that this city indeed had a strategic position in the world from the religious, historical, cultural and economic points of view. The people of this ancient land and its laws are the epitome of power and strength and it has for long been the target of invaders and waves of immigrants. The people have never ceased to exhibit their striking capability as a very hardy and resilient.

This chapter aims to give the reader an idea about the historical and physical development of the city of Nablus, which had been chosen as a case study. A review of what has been written about the city and its history will be referred to visualize the past image of the city. A summary of the physical conditions in the old city of Nablus as well as the new area is also included in this chapter.

4.1 Historical Background:

The name of the city was derived from the Old Latin name "Neapolis" or new city, built in A.D. 70 by the Roman Emperor Vespasian. It remained a Christian city until A.D. 638 when it was captured by the Arabs of Islam. Nablus has a distinctive and rich religious heritage, as depicted in Figure 4.1(a).

Being the very humble abode of a house, at the very beginning and despite antiquities of architectural, religious as well as many compelling local, religious, secular, church, structural, historical, archeology, building materials and local traditions.

CHAPTER FOUR: NABLUS, ITS HISTORY AND URBAN DEVELOPMENT

4.0 Introduction:

Palestine has been, through its long history, one of the major cultural and religious centers of mankind. Spanning well over 7,000 years and located in the heart of the Middle East, Palestine has been endowed with a very rich and varied cultural heritage (Fathi, 1997). A look at the map of the Middle East shows that Palestine indeed had a strategic position in the world, from the religious traditional cultural and economic points of view. The magic of this ancient land and its location at the crossroads of power and civilizations has meant that it has for long been the target of invaders and waves of immigrants, but our people have never ceased to defend her, seeking stability and security for their homeland.

This chapter goes on to give the reader an idea about the historical and physical development of the city of Nablus, which has been chosen as a case study. A review of what has been written about the city in ancient times will be helpful to visualize the past images of the city. A summary of the physical conditions in the old city of Nablus as well as the new area is also included in this chapter.

4.1 Historical Background:

The name of the city was derived from the Old Latin name “Neapolis” or new city, built in A.D 72 by the Roman Emperor Vespasian. It remained a Christian city until A.D 636 when it was captured by the Arabs of Islam. Nablus has a distinctive and rich indigenous architecture, as Shiber (1965) says:

Be it the very humble architecture of a house, or the very sophisticated and ornate architecture of some mosques, architecture is from many compelling local, indigenous factors: climate, structural limitations, sociology, building materials and local traditions.

It possesses a definite anatomy and has a clear-cut urban form; it has a distinct overall plan in relation to the regional landscape that it occupies. It has definition and boundary due to the natural formation of the valley, which provides it with a distinct social, cultural and religious pattern. It is the second largest city in the West Bank and its population was 139,400 in 1990 (Qamheyyeh, 1993). It lies at the center of the West Bank and at the middle of the north south axis that passes through Nablus, with Jerusalem lying to the east, Amman, the capital of Jordan, to the west, and north to Haifa, Jenin, and Tulkarm.

Nablus lies about 110 Km east of Amman, and 42 Km east of the Mediterranean sea. Its latitude is 32° 12 north and longitude 35° 16 east. Nablus valley runs from east to

Fig 4.1 Map of Palestine



west. It extends for several miles from the eastern entrance of the valley. The City of Nablus is the place where two mountains are located nearest to one another. Here the breadth of the valley is about a quarter of a mile, or a little more. Here also is the highest ground; it forms the watershed between the valley of Jordan on the one hand and the Mediterranean Sea on the other. To the east of the two mountains and the valley is a large plain, stretching for several miles from north to south. Proceeding towards the city, the mountains again recede, and the valley widens to about half a mile or more. There is hardly any flat land, with a gradual slope of the two mountains until they dovetail into each other.

Nablus was one of the oldest cities in the world and goes back to more than 5,000 BC. It was called Shakim, which means "The High Place". Nablus was mentioned in Tel Al-Alamarna as a Caananite city (Khatib, 1985), this was confirmed by an Egyptian Pharaoh, Tahutmus (Dabagh, 1965). The Araminians designated her "Maborkhats" or the Holy City. The Romans took possession of Palestine in 63BC; four years later, the Samaritans of Shakim revolted against the Roman Empire and gathered at Mount Gerizim. As a result of this the Roman emperor sent a great military expedition, besieged them and killed about eleven thousand, totally destroying their city, Shakim.

Fig 4.2 Areas around the city of Nablus



"Shakim" remained the apex of the Jewish Kingdom until the Jews were forced to relocate to "Sabastia" in the North. Subsequently "Shakim" or Nablus perished as a result of the Roman invasion of the Holy Land under the leadership of "Ciriaious" (Khatib, 1985).

In AD 72 Vespasian, the Roman Emperor ordered the building of the new city, Flavia Neapolis, for veteran legionaries to settle in (Qamheych 1993). The city was located on the

north-eastern side of Mount Gerizim, and extended to Tel Balata in the east. The city acquired all the civil and religious structures of any Greco-Roman city: hippodrome, agor, colonnaded streets, aqueducts, fountains, temples and later, basilicas, ramparts, and on the slopes of Mount Gerizim, a necropolis (Burgoyne, 1987). Later the Samaritans rebuilt their houses and a Synagogue on the old sites of Shakim, and the new buildings of Neapolis expanded till they joined the Samaritans' buildings (Nimir, 1975).

From the fourth century the city advanced in all aspects of human activity. This was short-lived, because the Samaritan Jews ousted the Christians. This expulsion of the Christians from Nablus did not occur smoothly. "Zen" the Roman emperor, issued an order expelling the Jews who had been burning and demolishing Christian houses in their eagerness to expel the latter group. Additionally, the Emperor mandated the construction of the Church of Mary in an effort to prevent the Christians from fleeing. Furthermore, he reinforced the wall of the city to prevent intrusion by outsiders and to control the exodus of Christians to other locations.

Moslems captured Palestine under the leadership of Omar Ibn Elaas during the Caliphate of Abu Baker in the seventh century. Since then, Islam has become the primary religion and Moslems have exceeded every other religious group in the area. The ethnic composition has changed slightly however, and Arabs continue to be the predominant ethnic group there.

Nablus' position among Palestinian cities declined at the inception of the Islamic era, since Ramla, a port on the sea, became the new seat of government. The influence of Nablus and its region shifted to the southern region. During this period Nablus was known as the "Second Damascus" because of the abundance of water springs, the fertility of its soil and the traditional industry. Two centuries later it enjoyed prosperity and regained its locational preeminence (Khatib 1985).

The Muslims built a new mosque on the site known later as Khan Al-Tujjar, around which the Islamic houses were gathered and extended to the east and along the valley. The Samaritan and the Christian quarters occupied the southern side of the city, with the Islamic quarter on the northern side (Nimir 1975).

In about 1075 AD Nablus was captured by the Suljuk Turks. The Suljuks and the Fatimids remained locked in combat until 1099 AD when the crusaders came to conquer Palestine, the Holy Land (Beshawi 1984). The “Crusades” took over Palestine for a short period between 1100-1178 AD and the economy suffered many setbacks during these years as did the construction process. By 1178 AD the Moslems had driven back the crusaders and once again the city came under Islamic rule, which continued until the Turkish seizure of the area. And Nablus was part of the Ottoman Empire till 1919.

During this period in history, under the rule of the Turkish Empire, the residents of Nablus were grouped in particular neighborhoods and clustered within those neighborhoods according to their occupation, work site, the market place, and their religious affiliation. Hence the existence of different clusters “Ahia” and neighborhoods “Harat” in Nablus was common. Haret El Masasbin was the neighbourhood of the soap factory workers and Haret El Sagha the jewelry neighbourhood. Some of these Harat took their names from a land mark or a physical feature, e.g. Haret Naba El Asal, a geographical location, El Jabal Eshemali, or a historical site, e.g. Balata. Seven of these Harat and Ahia still exist in the central area.

The Turkish rule brought the conversion of Nablus to a governmental seat giving her notoriety and economical progress. The city’s economy slowed down during the Egyptian’s mandate 1832-1841. This was coupled with a severe earthquake in 1836 that destroyed most of its structures.

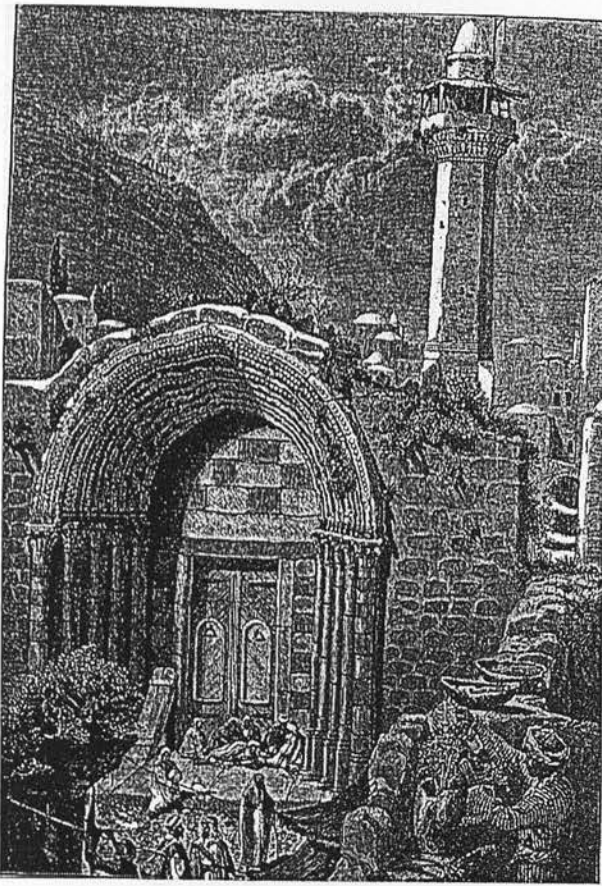


Fig 4.3 The gate of the Great Mosque.

source: Qamheyyeh, 1992

During the Turkish Rule, in the year 1869, Nablus had its first Municipal Council. This Council was composed of seven members. They were elected for a two year period. This was the first time in the city's history that the Nabulsians had elected their own representatives to plan and implement plans for the prosperity of their city.

Rifts in Nablus were based on family lines, which the Turks enforced by appointing Aal Abd Elhadi; the members of the family of Abd Elhadi, to governmental positions. Other prominent families did not like being deprived of their share of the local government, so they engaged in local disobedience and disturbances. The Turkish Emperor intensified Turkish control, bringing stability and economic prosperity. This relative stability was short-lived, because the Ottoman Empire collapsed and the British took over Palestine in 1918; trade routes shifted and its sole export industry, soap was heavily struck. A severe earthquake in 1927 added to the city's misfortune. A six month general strike in 1936 and the effects of the Second World War slowed the growth of the city.

By 1948 the British mandate ended, creating a complex situation. As a result, Palestine was divided into three completely separated entities;

- 1) The coastline, northern mountains, Galilee and the Palestinian desert became Israel.
- 2) The western mountains including, the eastern valley “Nablus”, were now called the West Bank, and were confederated with Jordan.
- 3) The Gaza Strip was linked to Egypt.

Nablus, besides losing its hinterland, experienced a great influx of Palestinians who were forced to leave the Israeli part. Nablus had to house them, feed them, and help them integrate into the city’s life. Those refugees occupy three large camps, two in the east and the third in the west, blocking the only open sides for any future expansion of the city. These camps not only impeded the expansion of the city in the east-west direction, but also created new sub-markets competing with the existing ones and tightening employment opportunities. In 1955 the Jordanian government passed the Municipal law, and increased the city council to ten elected members, giving the government the right to appoint two members.

By June 1967, Israel occupied the West Bank and Gaza Strip, depriving the city of its employment and trade markets in the Arab countries. Nablus has since been under martial law. The city lost many industries and thousands of young people fled the country for either political or economical reasons. Israel linked the West Bank to its economy that suffers from three digit inflation, and unpredictable devaluation of the monetary system. The city’s industry suffered a big blow because it is privately owned and since then individuals have been unwilling to take risks.

The political uncertainty, the Israeli settlement policy and the difficulty in obtaining building and industrial licenses forced possible investors to look elsewhere for potential business ventures.

Soon after the occupation in 1967, Israel seized absolute control over the West Bank and Gaza’s land and natural resources. Since that time, Israel has either confiscated or

declared as a closed area over 55% of the West Bank and 22% of the Gaza Strip, thereby placing it out of Palestinian reach. Israel has continued to expand its civilian colonies and their infrastructure on illegally confiscated Palestinian land (mainly agricultural) further degrading the Palestinian environment. Furthermore, a devastated Palestinian economy is still controlled largely by Israel, as is access to medical facilities and educational institutions.

To revert this unjust situation, the Palestinian people, by and large, accepted the discourse of peaceful negotiations based on the grounds outlined in the Madrid Conference of 1991; the guiding principles of these negotiations were ‘ land for peace ’ and the United Nations Resolutions 242 and 338. Likewise, the Oslo II Interim Agreement was accepted by the Palestinian Authority as an interim step towards the establishment of a Palestinian state. According to the Oslo II Interim Agreement, the West Bank has been divided into three main areas. This jagged distribution of areas A,B, and C has partitioned the West Bank into isolated cantons of areas A and B which are physically separated from the complete control of the Palestinian Authority.

The major political challenges in Palestine at this stage are not the direct result of the content of the agreement. Rather, they are a result of Israeli non-compliance with and partial implementation of the agreement itself. A renewed commitment by Israel to the full and immediate implementation of the agreement is absolutely necessary to restore Palestine’s geographical integrity.

4.2 Images of the Past:

Much has been written about Nablus throughout its history from people who visited Palestine and had the chance to stay in Nablus or passed through it on their journey to Jerusalem. Each of them has written about Nablus describing one aspect of life or the place with its natural setting or topographical character, while some of them have talked about the community and the social structure.

Almaqdisi, the famous geographer in the tenth century, wrote in 985:

Nablus is on the mountain, abounded of olives, called “little Damascus”, and it is in a valley squeezed between two mountains. Its market is extended from the gate to the gate , and another to the heart of the city. The Mosque is in its center, it is finely paved, clean, and through it there is a stream of running water. Their buildings are built of stone.

Nablus has also been described by the travelers who passed through it and praised the city and its surroundings. Daniel the Russian reported:

The land of Nablus is very rich in various fruits trees, figs, nuts and olives. The plantations resemble dense forests surrounding the town. The territory also was fertile of wheat. The entire region is notable for its beauty and its rich produce includes oil, wine, grain and fruit. The city of Jerusalem obtains its food stuff from Nablus.

Others talked about the people and the community, Alsamaani, a famous historian who visited Nablus in the beginning of the twelfth century and died in 1167, described it thus:

Nablus is one of the cities in Palestine where I have spent two nights , this was on my way to Beit Almaqdes, (Jerusalem). The Crusaders have invaded Nablus, there are a lot of Muslemans in it, also there is Al-jame, and another one. It is one of the most beautiful cities in Palestine.

The German Priest, Berchard, who also visited Nablus in the twelfth century described the natural setting of Nablus saying:

Nablus is between two mountains. It is very rich, and because it is not very defensive, the people of Nablus have to escape from one gate to another when they are attacked.

Ibn Batuta, the famous Arab traveler who died in 1355 visited Nablus in the fourteenth century and said:

Nablus is a great city, full of trees and water, it has a lot of olive trees, the olive oil is sent to Egypt and Damascus. In Nablus there is the sweet yellow melon. It has a mosque with high quality of architectural details, and inside the mosque there is a fountain.



Fig. 4.4 Old photo of Nablus taken from the east entrance.

Elia Jelbi, a Turkish tourist who visited Nablus in 1671, described the city structure and buildings as follows:

Nablus is the centre of a large area in Palestine that contains two hundred villages and goes under the rule of Damascus. The Crusaders ruled the city, but Salah Edin retained it back, and because he faced a lot of difficulties to gain it back under his control he has to destroy its castle, the ruins of which still exist at mount Ebal. Nablus is a beautiful city in the valley of two mountains that extends east west. It consists of eighteen neighbourhoods and sixty-four thousand residential buildings, it also contains a government house. There are irrigated gardens, some of its buildings are very defensive like castles. Also there is a big mosque and An-nasir mosque, besides many that spread in the city. There are seven schools for teaching the Quran (The holy book for Muslims). Its suq (shopping street) has gates that close every night, the gates reach a height of 120 feet. It has 370 shops that contain a variety of goods. In the middle of this suq there is a mosque that has a lead dome.



Figure 4.5 The city of Nablus looking at Gerzim Mountain.
Source: Ebers & Guthe.

4.3 Urban Structures:

Today, Nablus like any other city in the Middle East, is undergoing economical, social and political change which makes it very difficult for the city to maintain a coherent urban fabric. The urban fabric of the modern expansion of the city of Nablus lacks any identity or any relation to the historical character of the old city.

The topography is one of the determining factors in planning the city to include both the old city and the new areas. This appears in the linearity of the planning of the city that comes in a shape known as the “bone structure” where the main axis that runs east-west is widened at both ends. Along these axes lie all the commercial activities, and in the middle of this axis is located the center of the modern city. Here there are many of entrances to the old city, as both centers are of equal importance for the inhabitants of Nablus.

At the beginning of the 20th century, most of the old town was situated on the southern slopes of Mount Gerzim, in Nablus valley. It was shaped as a north-west to south-east rectangle, with a length of about 800 meters by about 500 meters wide. The layout is similar to other Eastern Mediterranean cities such as the old sections of Hebron, Jaffa, Acre, Damascus and Jerusalem (Shinar, 1970).

4.3.1 Historic City:

The historic quarters of the old town consist of a most introverted and crowded construction. The city has no walls, but the walls of the houses round the boundary are built one next to the other, thus the houses themselves become a kind of a city wall, with gates, opening in various directions allowing entry to the city at either end of the rectangle. (Conder & Kitchener, 1982).

The Old Town streets are very narrow, and a few are just wide alleys. The narrowness of the streets stemmed from the limited room available to build in, and thus the intensive use of land available to the old town. The street pattern is characterized by a hierarchy that is expressed through the activities located along them and their physical dimensions. They are divided into three main groups; public use, semi-public, or private use. The private streets are cul-de-sacs serving a particular group of houses. The semi-public or semi-private streets, usually run across the line of the valley connecting the other streets that make for easy access to all parts. Parts of the streets are roofed by bridging houses (Quarter), and the central area of the main bazaar is roofed with cross vaults to ease activity throughout the year.



Fig 4.6 The high density of built up area in the old Town

Old Nablus has a fortified defensive image due to its narrow dark paths that lead to the residential quarters, the solidity of the exterior walls of buildings, and the rarity of

openings in the ground floors with only a few in the upper floors. The unique opening called “Mashrabeyeh” enables women to observe what is happening outside without being watched. The urban tissue is very dense and the buildings are very close to each other. Because of this closeness and density, the buildings are of four or five storeys. The main character of the city comes mainly from the building material, i.e. stone. The roofing systems are domes, with flat roofs in some parts, and in some places there has been some Turkish influence, with the use of red tiles as a roofing system.

The main market places, bazaars, are located along the two main streets which cross the town from east to west. Within the bazaars, a functional specialization exists; textiles in Khan Al-tujar or Al-Khan el-Qadeem and food along An-Nasir Street and along the semi-public streets that connect the parallel bazaars. The historic quarters are undoubtedly still the most charming parts of the city in spite of the rather depressing lack of maintenance. One could imagine they could be made attractive to visitors as they have visual and sensory impact on the pedestrian. In general, these quarters look like sculptures consisting of mosques, arcades, domes, and minarets, as well as the covered bazaars, shops and small workshops all interwoven with each other and houses where people live.



Fig 4.7 Photo of the old city shows An-nasir mosque and its dominant blue dome.

Source: The author, 1994.

The Grand Mosque is the largest and the most important mosque in the old city. It was built in the sixth century by Justinian in the Roman period, and was rebuilt again in the twelve century (1167 AD) by the Crusaders. Salah El din, the Muslim leader converted it into a mosque.

The Minaret Square is still the focal point of the old town. It is important because of its surroundings of religious, administrative and commercial buildings. The Old Town is divided into six main quarters or *harat*, each quarter containing several neighborhoods having several families or one big family.

The main industry of Nablus was the manufacturing of soap, which is renowned for its quality throughout the Middle East. This soap made from pure olives and favored by Muslims, comes mostly from local groves and is processed with alkali in vats.

Untill early 20th century the old town comprised the whole city, with all the public facilities; religious, administrative, educational, commercial, industrial health, and recreational institutions. However, when the exodus from the town started in 1918, little by little it began to lose its importance in favor of the new city.

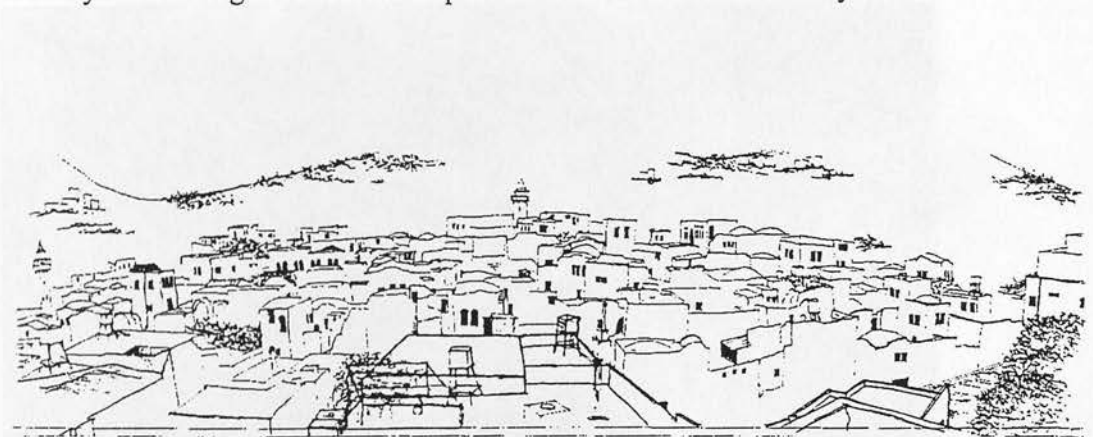


Fig. 4.8 Sketch of the old city of Nablus showing the its sky line.

Source: Sketch by student from An-Najah University, 1996.

The residential parts consist of six quarters such as “Haret ElHabali”, “Haret EL qaryoun”,” Haret El Qesareieh”, “Haret El Aqabeh”, and “Haret El Yasminah,” The traditional courtyard house was the most popular in the past up to the beginning of the

twentieth century. Most of these buildings consisted of more than one storey. The upper floors have their open courtyard, which forms a terrace overlooking the main court located on the ground or the first floor. Each floor consists of one or more housing units, then screen walls were built on the edges of upper courts to prevent them from overlooking onto the lower ones.

The traditional buildings are characterized by their inward looking courtyards, i.e. looking towards the house; e.g. Wasat Al-Dar. Some parts of the court are covered. This courtyard is usually located in a central position near the entrance of the building. It provides the houses with a comfortable internal environment, providing calm and air during the long, hot dry weather. Within the courtyard, women were able to move freely without any fear of being seen by the neighbors.

Stone dome roofs using “cross vaults” are a very characteristic expression of the houses of old Nablus. The shape and size of the domes vary- some are semi-spherical, and some look more like a flat bubble. The use of flat and pitched roofs began only at the end of the 19th century.

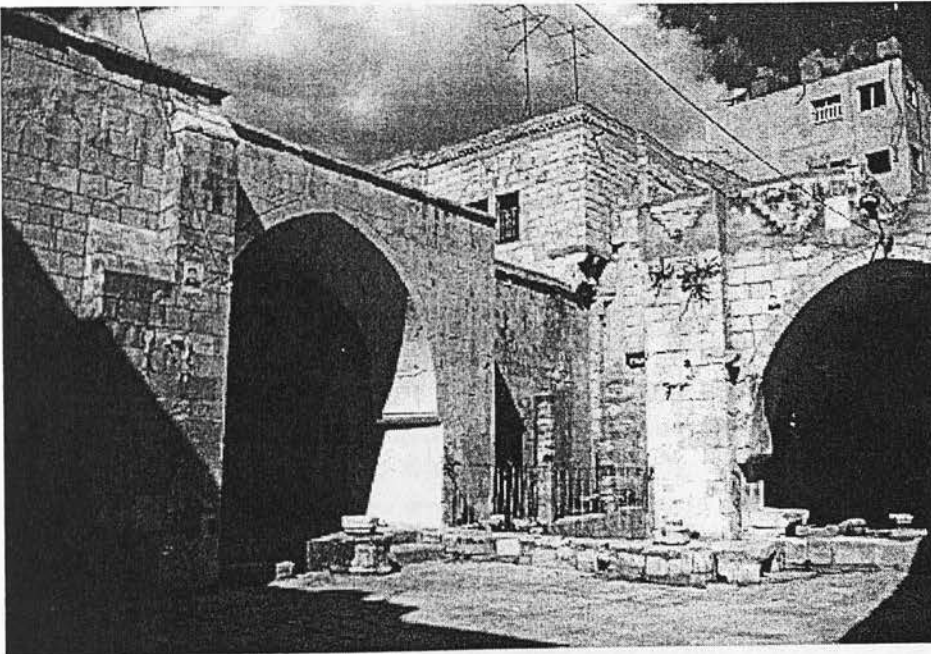


Fig. 4.9 photo of the inside court in An-nimir Palace.

Source: The Author, 1988.

Around this court many rooms of different uses are gathered; a guestroom, bedrooms, and a utility room, which includes a kitchen, and storage space. Every room has a single door opening into the courtyards. Usually the availability of these specialized rooms depends on the economic situation of the house owner, but they are normally in large houses and buildings. The rooms are of a sufficiently large size to accommodate nuclear families within each of them. In this vaulted construction larger rooms have a higher ceiling than small ones.

There is a division into a sector reserved for the men and their guests, known as *Alsalamlik* and another into a rather private sector reserved for women and the family, known as *AL Haramlek*. These areas provide total freedom and privacy for both men and women, each within their own domain. The larger the house, the clearer this division will be. As the walls are massive structures, large or small niches are found in the inner walls. These are used as cupboards. Various types of cupboards are distributed quite irregularly in the walls.

Many of the middle class houses and, generally, all the rich houses and palaces have private gardens. Mary Rogers, in the early 1860s, visited one of these gardens and described it. She wrote:

As we left the,....., and went into a spacious enclosure, where lemon, citron, orange, and quince-tree made a pleasant shade, and apple and almond-tree were full of blossoms. The ground was completely carpeted with the clattering heart, shaped leaves of the violet, and sprinkled with its blue blossoms. I have seen them in our own wild, wood walks, crowding lovingly together in groups, or springing up round the Trunks of ancient trees, but I never saw such a profusion of these sweet flowers as I did then in that Nablus garden. We could not move a step without crushing the tender leaves beneath our feet. We were led into the center of the garden, where a very large squared pool or reservoir had been made, with a stone parapet around it. On the south side there was a pleasant vaulted stone chamber, with a wide spreading archway opening close on the edge of the pool. Here carpets and cushion were spread, and coffee and pipes, sherbets, and fruit and flowers were brought for us. This is the beau-ideal of Oriental afternoon enjoyment - a building narghile in an arched recess, near to a pool or a stream of sparkling water in the midst of a fruit garden, carpeted with violets, in the spring, and with white ever lasting flowers in the summer and autumn. These delights are the chief subjects of many of the modern Arab songs and poems.

Most of the old buildings are in the old City. At the beginning of the twentieth century, administrative and military institutions came under Turkish and European influence. The old city still retains to some degree the narrow, often arched streets that are typical of old Muslim towns. The old city is strongly commercial, but also has primarily residential areas called “Harat”. However some new buildings which have been erected recently in the Old city disturb the unique character of the built environment; different materials, sizes of the masses, and ignorance of the guidelines of the urban structure, all shows that the Old City has been physically neglected.

Nowadays, the physical and ecological environment of the historic quarter of the old town is in a state of crisis and confusion. Neglect and shortsighted incremental planning and building are the result of a long history of foreign occupation over the last four hundred years. Due to the present political situation and its future implications, the old town of Nablus as a piece of urban creation is a sad 20th century example of missed architectural opportunities.

4.3.2 New Urban Development in Nablus:

Nablus today consists of the old city and the modern parts. While enough of the old settlement remains to convey a strong sense of its traditional flavor, the form of the city as a whole has probably changed more radically in the past 50 to 60 years than at any other time since the fourteenth century.



Fig 4.10 Photo shows the historic and the modern areas of the city.

Source: The Author, 1994.

Construction of new buildings mostly took place in the direction east west and climbing the slopes of the two mountains. New areas have been constructed with different housing densities, mostly in stone, generally three to five storeys in height, although some parts there are buildings of ten storeys.

The city of Nablus has special problems. Three refugee camps are at both ends of the city, two in the East and the third one in the West, blocking the only open sides for any future expansion of the city. Living conditions are below an acceptable level, there is no infrastructure, and most families live in one or two spaces. Most houses were built of brick and have a very light metal roofing. There is no planning for the urban setting, and masses of houses are closely attached to each other leaving no open spaces. Although Nablus was known in the past for its green areas, most of these areas have been substituted by commercial and residential buildings leaving only two parks at both ends of the city.

The main commercial city center lies in the middle where most of the administrative, institutional and large office buildings are located. The center is always busy and has many traffic problems. This is natural because most of the transportation lines have to pass through the city center. Recently the municipality decided to move one of the public transportation stations to a location away from the city center. The center has no architectural character, such as buildings of different heights, use, materials, and style. There are some important buildings such as the municipality, the post office, the health centers, the cinema, and the important banks and big office buildings. You can also see fruit and vegetable vendors in the streets.

This city center now has expanded east-west generating other commercial areas in the shape of a longitudinal strip. One is called Rafidya in the West, and another is called King Faisal Street.

Rafidya used to be a residential quarter till 1980 with a few shops scattered here and there. However in the last ten years this area has been exposed to a dramatic change especially after the municipality decided to convert Rafidya street, the main street in

this area, into commercial use. This area is very active, especially at night; today you can see a lot of new shops and office buildings have been constructed along the strip, which disturbs the calmness of the residential quarter. The University campus of An-Najah and the Insurance Building are the two important buildings in that area. Both of them are new but different in character.



Fig 4.11 Photo of the modern City Center.

Source: The author, 1997.

The University is one of the few institutions in the city of Nablus that encourages traditional architectural building. Masses have been organized to create open courts of different levels and sizes. The façade contains arched windows three to four storeys in height. Lively shaded areas formed by the courts, planted with trees, create a very warm social atmosphere.

In contrast is the Insurance Building, one of the many examples of modern international style in Nablus that has nothing to do with respecting the cultural and the traditional aspects of designing. But what makes it different in a way from other modern buildings in Nablus is that it is the first example of mixed use; it contains a hotel, offices, shops, restaurants and parking space. The buildings consist of ten storeys, and stone and concrete were used in the façade.

The other extension of the commercial strip going east is an area called King Faisal Street. This is the main commercial road in Nablus. The street is very wide, and very difficult to cross from one side to the other. Being the main road crossing the city from west to east makes it constantly full of traffic, with traffic congestion in the rush hour.

Various commercial uses are found in the street; most of these are on the ground floors of the buildings while the other floors are kept for residential use. The commercial strip varies from small grocery shops, mini markets, and shops that repair cars to metal craft shops which bring pollution to the area. This area is called "Suq El haddadin".

On the other side of Rafidya, at Mount Ebal, is another area called Al-Jabal Eshamali, comprising stone houses of three to four storeys climbing the slope of the hill, disturbed by few apartment buildings of six to eight storeys height. Because it faces the sun, this area is very healthy and has a very nice view overlooking the old city. You can see the magnificent skyline of the domes and the minarets of the mosques, and the planted courts of the houses in the old city. This area is comparatively calm, preserving its residential atmosphere.

There are two very dense residential areas in Nablus; one is called "Ras El Ein", at the south edge of the old city. Here houses are very close to each other, there is insufficient ventilation, the sun hardly enters the houses, combined with humidity. The number of persons living in the house is high compared with the other areas in Nablus. The area lacks any architectural style. Buildings are mostly of brick or concrete with plaster finishing. In some parts stone has been used.

The other area, which is in a way very similar to the Ras El Ein in its condition and architectural settings, is called "Khallet Al Amood". This area is to the east of Ras El Ein, with residential houses climbing the slope of Mount Gerizim. In the beginning, houses were constructed here as a temporary settlement for people leaving the old city whose houses were destroyed in the 1927 earthquake.

Initially, most of the houses were constructed without following any building regulations because of the urgent situation at the time. Buildings are very close to each other leaving no chance for sufficient ventilation. The area lacks any urban environmental quality and architectural character.

4.4 Economy:

The conspicuous prosperity of Nablus rested on manufacture and trade. Nablus remained Palestine's most important center for local and regional trade and for the manufacture of soap, oil and cotton goods. Up to 1870s, these districts were the most economically active in the country. The economic rise of Nablus then found another expression in building activity and town development.

Nablus is an important commercial center in the West Bank, especially as a regional distribution center for agricultural products gathered from the surrounding villages. These are distributed in Nablus itself as well as the other West Bank cities, like Jenin, Tulkarm and Ramalla. The distribution center used to be near the railway site till recently when the Municipality built a new market at the eastern end of the City.

The commercial activities in Nablus have been concentrated in the city center and along its main streets. These commercial activities include fruitmongers, fishmongers, groceries, cloth dealers, household dealers, and others are distributed within the City without any organization, as they used to be in the nineteenth century.

The industries of the West Bank declined after the 1967 war when the Israeli occupation started, which partially closed the Arab market against Palestinian exportation. The Israeli economic policy was to convert the West Bank into a consumption market for their products, so many of the local industries were badly hit, and many factories were forced to close, such as Al- Masri Flour Mill and the match factory in Nablus.

Nowadays, Nablus is the second most important industrial center of the West Bank, next to Hebron. One of the main characteristics of Nablus' industries is that they depend mainly on the local raw materials, e.g. soap production, tanning, weaving, pastry and dairy products (Nassar, 1991). Other industries that depend on imported raw materials also exist e.g. plastic industries, aluminum finishing, pharmaceuticals, chemicals, and tahini production. All these industries are on a small scale, and their production is mostly for a limited West Bank market. Some, such as the soap, vegetable oil and leather products, are allowed to be exported through Jordan to the Arab countries. The industrial workshops and factories are distributed and mixed up with the commercial shops without any organization or classification except in some parts of the Old Town e.g. the goldsmith market near the main bazaar of the Old Town.

Nablus Municipality is the only public local authority which serves the Arab residents. The Nablus Municipality offers the essential public services (water, electricity, planning control and maintenance, market control, and fire brigade services) to the city and some surrounding towns and villages. Nablus Municipality is one of the oldest municipal authorities in the region. It was established in 1868 (Nimir, 1975). Up to this moment there have been 32 elected mayors and an appointed Israeli one. The last was in office from 25/3/1982 to 19/12/1985 after the political dismissal of Mr. B. Alshakah; the previous mayor. In 1986 the Nablus Chamber of Commerce administrated the Municipality, and Mr. Zafer Al-Masri, the head of the chamber of Commerce, was appointed as the mayor. Later Mr. Masri was killed, and his successor Mr. Hafiz Tuqan was also forced to step down for national reasons. Nowadays, the municipality is administrated by its Nablusian employees under Israeli supervision.

4.5 Summary:

This chapter has traced certain changes in the West Bank, specifically within the city of Nablus. These changes have influenced the way our built environment looks today. Understanding these changes will help us to identify the factors which influence people's interpretation of their own city.

The most significant influence has been the historical and political development in the region since the beginning of this century because since then external powers have controlled development to serve their own purposes. Accordingly, many of the changes in the built environment have been influenced by the consequences of wars and by the policies of successive regimes.

The social environment has undergone several changes of lifestyle and population, while changes in the social structure and occupation have had a gradual effect on the built environment. In addition, economic development has been slow. The restrictions imposed by the Israeli government and the over-dependency upon external sources of income have had a major impact in shaping the built environment.

The historical consequences have not been limited to the physical environment; they also touch the social and cultural aspects of people's life in the West Bank, including their customs and lifestyle.

All the above mentioned factors have resulted in an identity crisis of the built environment. The old city image of greenery and water from the past has disappeared and been substituted by plain concrete blocks and new urban development. The authentic indigenous architecture has been deserted and ignored by the public. In addition, new activities were introduced into society which have changed people's life style in rather a negative way.

CHAPTER FIVE

5.1 INTRODUCTION:

OPEN ENDED QUESTIONNAIRE

When we refer to the meaning of the word questionnaire we refer to a form which records the circumstances, location etc. of a group of people who are asked to fill these forms in life which may be either a questionnaire for a particular purpose, their responses, their attitudes etc.

Environmental psychology is the study of the relationship between the environment and people's interpretations of their own behaviour. The questionnaire method was used as a technique in the study of the relationship between the environment and the behaviour of people.

In this chapter, we shall study the meaning, purpose, types, advantages and disadvantages of the questionnaire method. We shall also study the history and development of the questionnaire method.

The city of Nazareth in the north of Israel is one of the oldest cities in the world. The history of the city goes back to the time of the Israelites. The city was designated as "Nazareth" in the Bible. In the Bible, it is mentioned that Jesus was born in Nazareth and he lived there for most of his life. The city has many historical sites and is a popular tourist destination.

CHAPTER FIVE: OPEN-ENDED QUESTIONNAIRE

PILING ANALYSIS

5.0 INTRODUCTION:

“When we talk about the world we live in, we engage in the activity of giving it a particular character. Inevitably, we assign features and phenomena to it and make it out in a particular way.”

Carolyn Baker, 1982.

When we refer to the meaning of the built environment, we refer to all those things which relate this environment, beyond the “ face value ” of their physical properties, to all those things in life which people attach significance and value including their purposes, their conceptions, their ideas and beliefs.

Environmental psychology is one of the disciplines used by researchers to examine people’s interpretation of their own built environment. The open-ended questionnaire was used as a technique in this part of the research to minimise any influence, which might be imposed upon the respondents.

In this chapter, the author will explore people’s interpretation of their built environment, taking into consideration the contextual dimension. This means to try to understand people’s preference system that is associated with their own culture, values, ideas, and history.

The city of Nablus on the West Bank, is one of the largest and most important cities in Palestine. The history of the city goes back to 5.000 BC when the Armenians designated her “ Maborkhats ” or the holy city (Dabagh, 1965). From that day till now the city has undergone many changes. This has left the city with many layers of history each affecting and moulding the city in its own way.

The city has grown rapidly, especially in the last five years. The character of the city is a mix of a very rich historic core, which forms the heart of the entire city, and the new part. Modern development has occurred very quickly and has changed the character of the city.



Figure 5.1 photograph of the city of Nablus.

In this part of the research there is an attempt to try to explore people's interpretation of the city of Nablus through their cognition system. As Triand (1972) argues, people in different cultures experience differently the environment in terms of their cognitive experience.

5.1 Open-ended Questionnaire:

Qualitative research is a particular tradition in social science that fundamentally depends on watching people in their own territory. Its methodology is used in many disciplines; for example, the social sciences, and in such fields as education, public health, and nursing administration.

In his book which deals with a better understanding of social phenomena through a particular style of analysis termed "grounded theory", Struss says:

Qualitative methodology could be applied in different disciplines such as social science, education, and public health. Qualitative method on qualitative research could take different dimensions (Silverman, 1993). Observation, interviewing, transcripts and data. But all these dimensions deal with how one can do an interpretation of materials and data gathering and do them effectively and efficiently

There is no standard approach among qualitative researchers. For instance, Marshall and Rossman (1989) list six different qualitative research traditions, including ethnography, cognitive anthropology and symbolic interactionism. These all share a commitment to naturally occurring data: “ Each assumes that systematic inquiry must occur in a natural setting rather than an artificially constrained one such as an experiment.”

However, they recognise a wide variation between various approaches: the approaches vary depending on how intrusive the researcher is required to be in the gathering of data, whether these data document, verbal, and non-verbal behaviour or both, whether it is appropriate to question the participant as to how they view their worlds, and how data can be fruitfully analysed.

Burgess (1980) used a model drawn from just one of these approaches, social anthropology. He wrote:

It would appear that field research involves observing and analysing real-life situations, of studying actions and activities as they occur. The field researcher, therefore, relies upon learning firsthand about a people and culture.

More recently, Bryman (1988) has attempted to characterise qualitative research according to six criteria. These criteria are:

- 1) Seeing through the eyes of or taking the subjects' perspective.
- 2) Describing the mundane detail of everyday settings.
- 3) Understanding actions and meanings in their social context.
- 4) Emphasising time and process.
- 5) Favouring open and relatively unstructured research designs

6) Avoiding concepts and theories at an early stage.

No. 1 involves 'a subjective' perspective which derives from anthropology, while numbers 5 and 6 are out of tune with the greater sophistication of contemporary field research design, born out of accumulated knowledge of interaction and greater concern with issues of validity and reliability.

A second version of qualitative research by Hammersley, 1990 suggests the following:

- 1) The use of everyday contexts rather than experimental conditions
- 2) A range of sources of data collection (the main ones are observation and 'informal conversation').
- 3) A preference for 'unstructured' data collection (no hypotheses, no prior definition).
- 4) A concern with the 'micro' features of social life ('a single setting or group')
- 5) A concern with the meaning and function of social action
- 6) The assumption that quantification plays a subordinate role.

A third version of qualitative research, by Hammersley, 1992 states :

- 1) A preference for qualitative data- use of words rather than numbers.
- 2) A preference for naturally- occurring data- observation rather than experiment, unstructured interviews.
- 3) A preference for meanings rather than behaviour- attempting
- 4) A rejection of natural science as a model.
- 5) A preference for inductive, hypothesis- generating research rather than hypotheses-testing.

We can say that there are four major methods used by qualitative researchers: Observation, analysing text document, interview and recording and transcript. These methods are often combined. For instance, many case studies combine observation with interviewing. The table below shows that the methods are techniques, which take on a specific meaning according to the methodology in which they are used.

Struss (1987) suggests the following as techniques of research methods.

Table 5.1 Techniques of research methodology.

<i>Method</i>	<i>Quantitative research</i>	<i>Qualitative research</i>
Observation	Preliminary work ,e.g. prior to framing questionnaire	Fundamental to understanding another culture
Textual analysis	Content analysis, i.e. counting in terms of researchers' categories	Understanding participant' categories
Interviews	'Survey research': mainly fixed-choice questions to random samples	'Open-ended' questions to small samples
Transcripts	Used infrequently to check the accuracy of interview records	Used to understand how participants organize

Simon (1969) argues that the participant-observation strategy is to immerse oneself in all aspects of the situation by using all available sources of information. Informal talks with members of the group one is studying, reading letters, and other documents, passively observing and listening while simply “ hanging around” with the group, and so on. The key difference from other research methods is that the participation-observer participates with and has some sort of role in the group, rather than maintaining a distance between the observer and the observed. Carolyn Baker, 1982 states;

When we talk about the world we live in, we engage in the activity of giving it a particular character. Inevitably, we assign features and phenomena to it and make it out in a particular way. When we talk with someone else about the world, we take into account the person could be presumed to know, ‘ where that other is in relation to ourselves in the world.

Here Baker is questioning the attempt to treat interview question and answer as a passive filter towards some truths about people. Instead, she is telling us interviewer and interview actively construct some version of the world appropriate to what we take to be self-evident about the person to whom we are speaking and the context of the question.

According to “interactivism”, interviewees are viewed as experiencing subjects who actively construct their social world; the primary issue is to generate data which give

an authentic insight into people's experience; the main ways to achieve this are open-ended interviews usually based upon prior, in depth participant observation. Silvermans (1993) says;

Authenticity rather than reliability is after the issue in qualitative research. The aim is usually to gather an "authentic" understanding of people's experience, and it is believed that " open-ended" questions are the most effective route towards this end.

Proshansky, 1983 conceived of place identity as " a substructure of self-identity which consists of Cognition about the physical world in which the individual lives." He added;

These cognitions are memories, ideas, feelings, attitudes, values, preferences, meanings, and conceptions of behaviour and experience, which relate to the variety and complexity of physical settings that define the day –to-day existence of every human being. At the core of such physical environment-related cognition is the environmental past of the person; a past consisting of places, spaces, and their satisfaction of the person's biological, psychological, social, and cultural needs.

5.2 The Experiment:

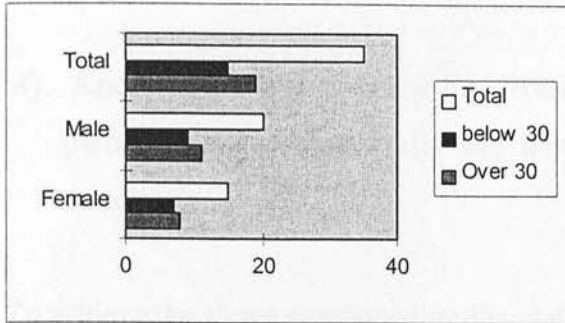
Thirty five people were interviewed through an open ended questionnaire. The interview was informal and lasted between one and a half and three hours. This is to allow the participant to feel freer to say anything he wants, and to talk about his feelings, ideas and expectations. Some of the participants were people whom the author knows through work, family and friends. The interviewees numbered thirty-five, twenty males and fifteen females of varying ages who live in different areas of the city of Nablus. Table 5.2 summarises the respondents' details.

Table 5.2 Distribution of respondent group by age and sex.

Respondents	Female	Male	Total
Over 30	8	11	19
Below Thirty	7	9	15
Total	15	20	35

The questionnaire was divided into three parts all of which are concerned with exploring different aspects and dimensions involved in experiencing the city: the physical space, the mental space and the socio - cultural space.

Figure 5.2 Graphic distribution of the sample by age and sex.



The survey has been divided into 25 questions which concentrate on different issues. The purpose of these questions is to elicit the feelings toward people's interpretation of the built environment. It is intended that these questions should evoke responses about personal feelings, needs, hopes, social tendencies, and other characteristics that are important in people's image of their own environment. These issues are:

- 1) Scale: different levels of scale have been considered in exploring people's interpretation these are; small scale objects, architectural buildings, areas within the city and areas outside the city.

The main objective is to find all aspects for interpretation of the physical setting of the city of Nablus with reference to its areas, buildings, streets and features. This part will consider specific elements or aspects that give the city of Nablus its character. In other words aspects that identify the city as one unique coherent structure taking into consideration its two different parts, the old one, and the modern extension of the city, and then relating the city to the surrounding villages and territories.

- 2) Preference system: things, which are liked and disliked by the people of Nablus and the reasons for liking or disliking. This could be helpful in many ways. First, it could introduce us to the physical objects irrespective of scale that are significant in people's

cognition system. Also we could establish what attributes and associations these objects have in people's construct system.

3) Knowledge about the cultural values and social structure of the people who are living in the city of Nablus. We could find the past and present events that are important to people. This could be explored through peoples' future vision of their own city.

4) Knowledge about everyday life. What kind of activities the citizens of the city participate in everyday life, and how they relate this to the physical urban structure.

To achieve the above mentioned results, various analyses were carried out namely:

1) Piling: piling techniques of responses were conducted in three ways, namely piling of responses for each question, and the second one piling of responses for a group of questions depending on what the author wants to find, and lastly an accumulative responses of all questions.

2) Categories: further analyses were carried on the results of the accumulative piling of all responses. This analysis was divided into the following:

B- Objects.

C- Aspects.

D- Activities.

Objects are the physical elements of the environment, not solely the built features. This is a list of the real aspects of an environment, and hence they are the primary stimulants to all emotions and to all activities. These range in scale from a single object to an architectural building and to an area.

Aspects consist of the properties perceived in the activities or objects. It is a description, not so much of the real object, but of the observer's image or evaluation of the objects. Although the aspects here are all relevant to different items, by being

considered independently of their target, the prevalent feelings or emotions of the whole city could be ascertained.

Activities are responses of the observer to the objects and aspects reaction. The appearance of a place is only part of its identity. As the physical image develops as a result of the environment, so do the activities.

- 3) Dimensions: Dimensions are the motivating forces or influences behind any occurrence in the environment, whether the occurrence is physical or emotional, visible or invisible.

Table 3.3 The most important areas in the city of Navio.

Area	Frequency
Old City	28
Old Town	7
Ball's	6
University Area	4
Al-Madinet	3
Industrial Area	2
King Fahd International Airport	1
Al-Madinet	1
University	1
Al-Madinet	1
Industrial Area	1
Ball's	1

Table 3.3 on the left, lists all the most important areas in order. The old city, the city center and Ball's are the most important areas.

There are 100 other areas mentioned in Table 3.3 on the University, and Al-Madinet have a number of thousands importance according to the respondents. Significant other areas were mentioned 5 times for the industrial area, King Fahd International Airport, and Al-Madinet.

The respondents listed the reasons why Navio is an important target and why different areas are more important depending on their aspects such as the old city, and the importance of the area.

Table 3.4 shows pulling results influences for the older, important. The most important reasons mentioned by the respondents are: historical importance, historical significance, well-preserved and maintained, old and respectively. Factors such as archaeological importance, natural beauty and identity are also mentioned.

5.3 Piling Analysis: (Part One)

Piling was carried out in this part of the analysis in two ways, firstly piling analysis for each question, and secondly piling analysis for all responses.

Question 1:

What are the three most important areas in the city of Nablus? Give three reasons why each area is important.

Question No. 1 shows that the most important areas in the city of Nablus according to the respondents are three major areas, which have different location and character.

Table 5.3 The most important areas in the city of Nablus.

Area	Frequencies
Old City	29
City Center	25
Rafidya	20
University Area	12
Al-Makhfeyeh	9
Industrial area	5
King Faisal street area	5
Al-Jabal Shemali	4
Mountains	4
Al-Rawdah School Area	2
Ras El-ein	2
Parks area	1
Balata	1

Table 5.3 on the left, lists all the most important areas in order. The old city, the city centre and Rafidya are the most important areas.

There are also other areas mentioned. Areas like the University and Al-Makhfeyeh were of moderate importance according to the respondents' responses.

Other areas were mentioned a few times like the industrial area, King Faisal Street area,-----, etc.

The respondents found that reasons why an area is considered important were different from one area to another depending on many aspects such as the character, use and importance of the area.

Table 5.4 shows piling results of reasons for the areas' importance. The most important reasons mentioned by the respondents are: functional importance, historical significance, activity, variety and architectural character respectively. Reasons such as archaeological importance, natural beauty and density are also mentioned.

Table 5.4 Overall reasons why areas are held to be important.

Reasons	Frequencies
Functional importance	58
Historical	24
Activity and variety	22
Architecture character	21
Archaeological importance	17
Beautiful natural setting	19
New development	14
Density	12
Include important landmarks	12
Healthy	10
Accessibility	10
Modernity	7
Quiet	7
Have good services	6
Transportation	5
Religious	4
Location	

Table 5.5 shows the most important areas with reasons for importance. This table gives us a chance to have a general idea about people's measure for the significance of an area. It also gives us a chance to compare two different areas.

Table 5.5 Reasons for the five most important areas in the city of Nablus.

<i>Reasons</i>	<i>Area 1 Rafidya</i>	<i>Area 2 City centre</i>	<i>Area 3 Old city</i>	<i>Area 4 University</i>	<i>Area 5 Jabal El-Shimali</i>
Historical	0	0	24	0	0
Location	1	24	8	0	2
Functional importance	5	15	11	3	0
Architectural character	5	0	12	5	2
Activity and variety	17	4	2	1	0
New development	7	0	0	2	3
Important land mark	4	0	3	8	0
Natural setting	2	2	3	7	0
Healthy	1	0	0	1	8
Accessibility	4	5	0	0	0
Archeological	0	0	5	0	0
Quietness	3	0	0	1	1
Religious	0	0	2	0	0
Dense	1	0	2	0	0
Transportation	1	3	0	0	0
Services	1	0	0	0	1
Security	0	0	2	0	0
TOTAL	52	53	74	28	17

These reasons do not have the same priority of importance. One can see in table 5.5 the different reasons behind the importance of a specific area. For example the old city is important for its historical significance, architectural character and functional importance, while the city centre is important for its location and commercial importance as being the main trade centre. The importance behind Rafidya is being an area which had lots of activity at different times especially at night, see table 5.5

It is also found that the more important the area is, the more reasons people mention. In other words, we could say that the accumulation of mentioned reasons strengthens the importance of the area, for example an area such as the old city which is important for various reasons such as its historical significance, architectural character, location (which is very close to the city centre), activity and variety, among others shown in table 5.5

Figure 5.3 Reasons for the importance of an area.

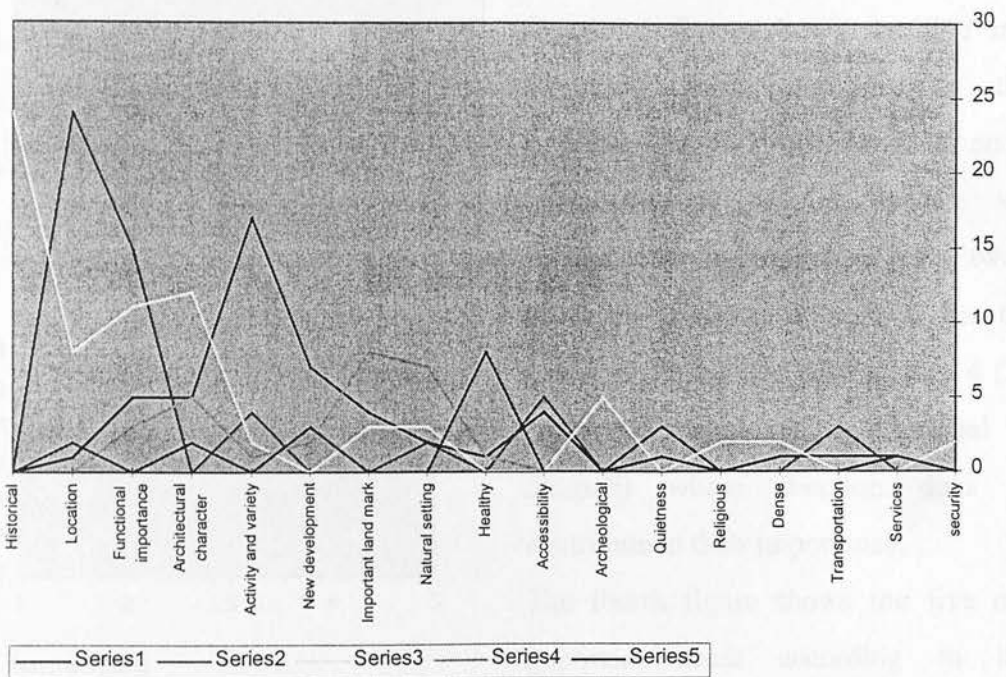
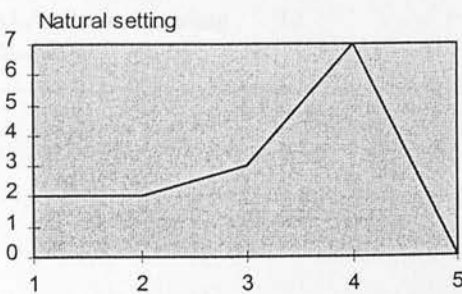
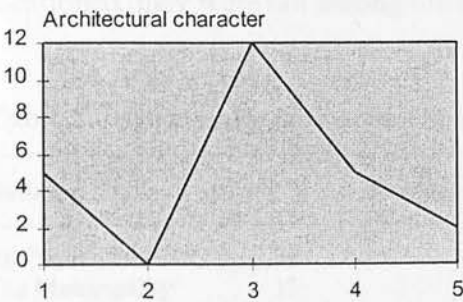
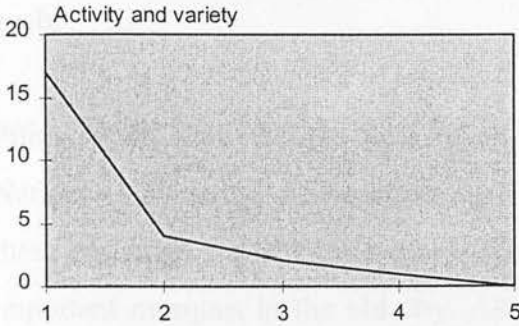
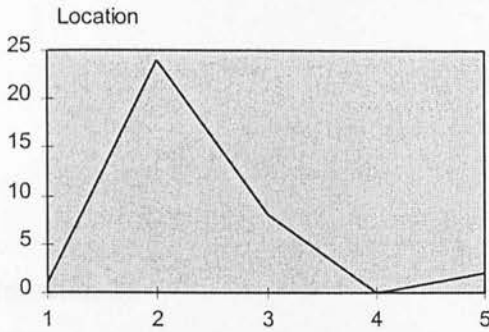


Table 5.6 shows the reasons for the five most important areas in the city of Nablus according to their location, activity, function, natural beauty, architectural character, and accessibility. The graphs illustrate that an area could be deemed important according to one specific reason or to more than one reason.

The first figure shows the five most important areas according to their location. Area 2, which is the city center, is the most important of all because of its location, being in the heart of the city, while location does not really contribute to the importance

Table 5.6 Reasons for the most five important areas in Nablus .



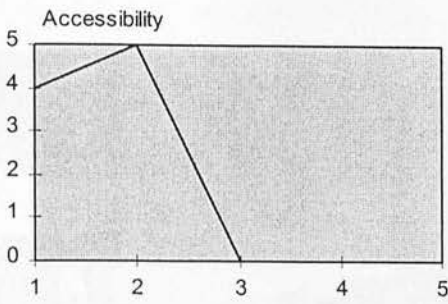
of other areas, for example, area 4 which is the university.

The second graph shows the five most important areas according to their activity and variety. Area 2 (the city centre) is important for its activity as being the main commercial area for the city and the centre for the transportation system. This is not the case in area 5 (Al Jabal El-shimali) which is a residential area.

The third figure shows the five most important areas according to their functional importance. Areas 2 and 3 (city centre and the old city) are very important for their function, being two of the main commercial areas in the city, while this is not the case in area 4 (The university) and area 5 (Al-Jabal El-Shimali) where function does not contribute to their importance.

The fourth figure shows the five most important areas according to their architectural character. Area 3 (the old city) is also important for its architectural character. This is not the case for the city centre (area 2).

The fifth figure shows the five most important areas according to their natural beauty. Area 4(the University) is



important for its natural beauty , while area 5 (Al-jabal El-Shimali) has minimum natural beauty.

The sixth figure shows the five most important areas according to their accessibility. Area 1 and 2 (Rafidya and the city centre) are areas important for their accessibility.

Question 2:

What are the five most important buildings in Nablus? Give two reasons for each.

Piling results show that the most important buildings are: the Municipality, An-Najah National University, Al-Anabtawi building and Al-Nasir Mosque respectively. All these buildings are new ones except for Al-Nasir Mosque which is one of the most important mosques in the old city. Although many old and historic buildings were mentioned, they were not among the most important ones for everyone.

Table 5.7 Summary of the most important buildings.

Building	Frequency
An-Najah University	20
The Municipality	13
Al-Nasir Mosque	12
Al-Anabtawi Building	12
Al-Qasir	11

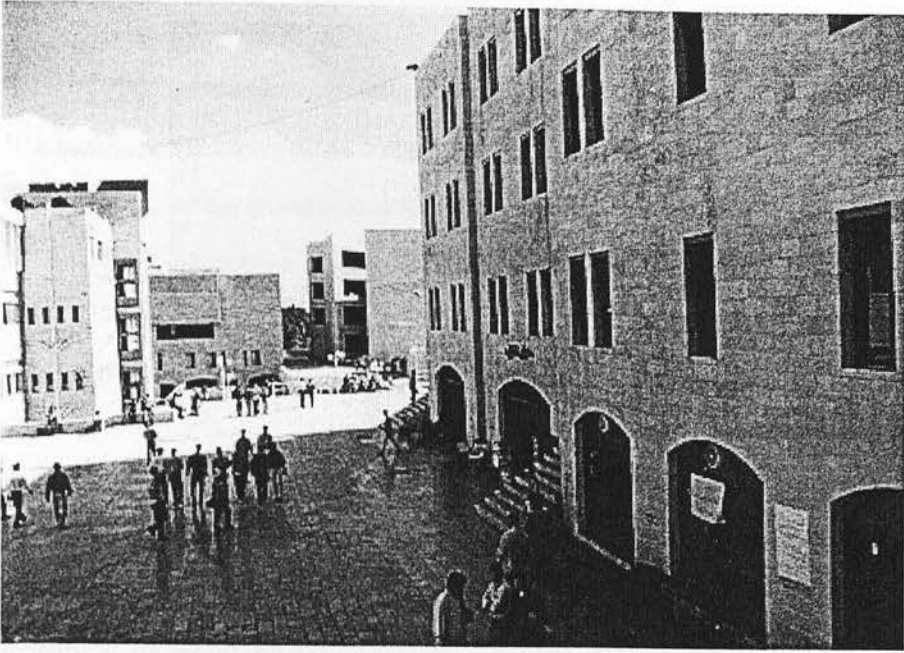
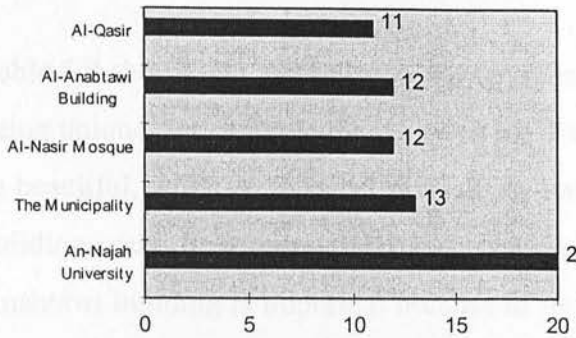


Figure 5.4 An-najah National University.



Figure 5.5 Al-anabtawi Building.

Figure 5.6 Respondents results for the most important areas in Nablus.



When you look at the reasons for the importance of a building, Table 5.8 shows that these are mostly concerned with location, functional importance a building has or the available services it offers to the citizens. The building could be important too for its historical or architectural character. Reasons such as being a landmark, being known, healthy, large, unique, old, modern and pleasant are also mentioned but are not dominant.

Table 5.8 Reasons for the importance of all buildings.

Reason	Frequency
Function	50
Location	49
Architectural character	20
Services it offers	19
Mixed use	18
Historical importance	14
Large	13
Unique	12
Old	10
Being a bad symbol	9
Being a landmark	6
Active	6
Religious importance	5
Aesthetic	4
Known	3
Healthy	3
Modern	2
Accessible	2
Personal attachment	2
Pleasant	2

Table 5.9 shows that a building could be more important for one major reason such as being unique, for example the Al-Qasir building which is new, modern, and perceived as beautiful, while An-Najah University is important for its functional importance. A building could be important for an accumulation of many reasons. For example Al-Anabtawi building is important because of its location (being in the city centre) and its mixed use character, as it includes office buildings, retail shops, banks, and restaurants at the ground level, see Table 5.9

It has been found that architectural character is not a decisive factor attributing to the importance of buildings. People in a way are more practical and pragmatic in their evaluation of any building.

Table 5.9 Reasons for the most important buildings.

<i>Reasons</i>	<i>Building 1</i>	<i>Building 2</i>	<i>Building 3</i>	<i>Building 4</i>	<i>Building 5</i>
	University	Municipality	Al-Nasir M.	Al-Anabtawi	Al-Qasir bld.
Functional imp.	15	5	1	3	1
Architecture ch.	4	1	5	1	1
Aesthetics	1	0	0	0	0
Old	0	0	3	2	1
Unique	2	0	1	1	6
Mixed use	0	0	0	7	3
Good approach	0	1	0	0	0
Large	1	0	1	2	2
Landmark	0	0	0	3	0
Religious	0	0	4	0	0
Historical importance	0	0	4	0	0
Modern	1	0	0	0	2
Accessible	0	1	0	0	0
Location	3	5	8	7	1
Services it offers	0	9	0	0	0
Active	3	0	0	0	0
Known	0	1	0	0	0
Pleasant	0	0	0	0	1
Symbol	4	0	1	0	0
TOTAL	34	23	28	26	18

Figure 6.7 Reasons for the five most important buildings

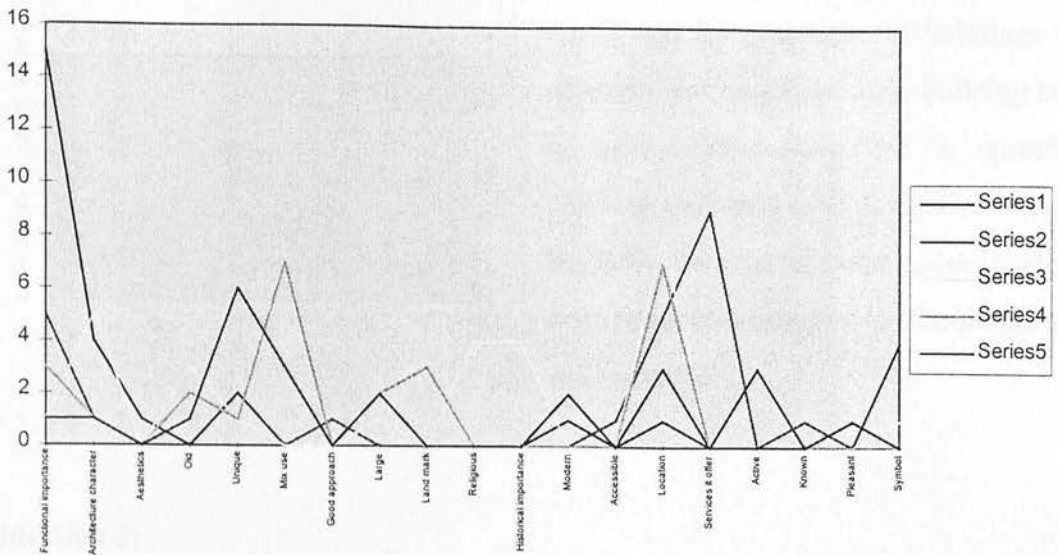
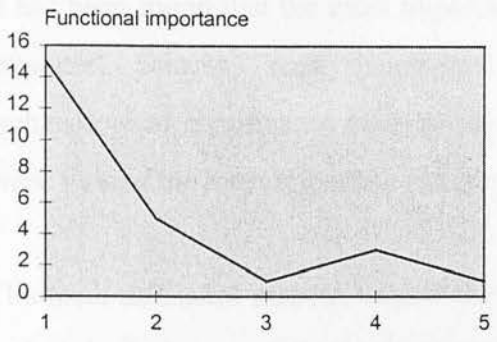
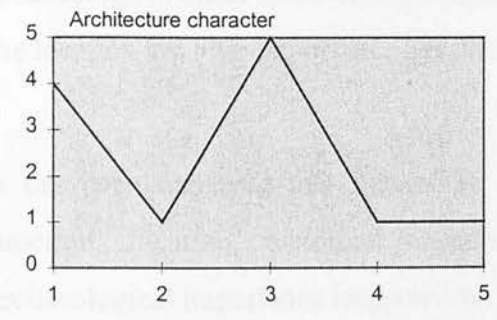


Figure 5.8 Reasons for the five most important areas separately.

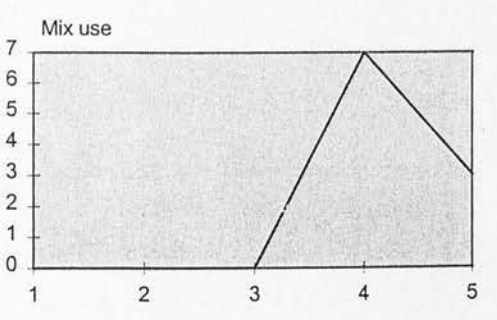
Figure 5.8 Shows respondents results for evaluations of the most important areas taking every reason separately.



The first graph shows that building 1 (An-Najah University) is important for its function as an academic center for the north area of the West Bank, while functional importance is not highly considered in buildings 3 and 5 (Al-Nasir Mosque and Al-Qasir building).

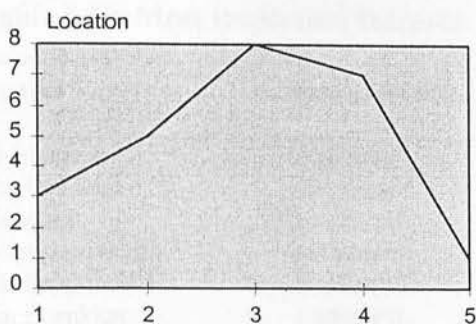


The second figure shows architectural character is important for the evaluation of buildings 1 and 3 (An-Najah University and An-Nasir Mosque).



The third figure shows that location is more important for the evaluation of buildings 3 and 4 (An-Nasir Mosque and Al-Anabtawi Building) and less important for the Municipality.

The fourth figure shows that the aspect of



mixed use for evaluation of buildings is generally not important for a building but is considerable issue for a specific building such as the Al-Anabtawi which has many uses on different scales ranging from small retail shops to office buildings and restaurants.

Question 3:

What are the five most important features that give identity to the city of Nablus? Give two reasons for each.

It has been found that the most important features are those from the old city such as mosques, palaces, suqs, hammams, etc. Other important features have an archaeological significance such as the Roman Theatre, while others still are natural ones. Few of the most important features are modern ones.

The most dominant reasons behind the importance of a feature are the historical and archaeological ones, while the functionality, architectural character, the uniqueness and the location are less important. (See Table 5.10 and 5.11).

It has been observed that factors for judging features, buildings and areas were function, location, historical significance, architectural character, activity and archaeological importance respectively.

Table 5.10 Most important features.

Feature	type of feature	Frequency
Al-Manarah	traditional	18
The Old Suqs	traditional	9
Mosques	traditional	17
Al-yahood Stairs	traditional	1
Old Soap factories	traditional	8
Ein El-sukkar	traditional	4
Hammams	traditional	4
Haret El-yasmineh	traditional	1
The Old Palaces	traditional	8
Total		70
Anabi Yosef Tomb	Archaeological	2
The Roman Theatre	archaeological	5
The Roman Arches	archaeological	2
East Ruins	archaeological	1
Total		10
Jerzeem Mountain	natural	7
Public Parks	natural	1
Wadi Al-badan	natural	1
Eibal Mountain	natural	2
Total		11
City Centre	modern architecture	5
The Municipality	modern architecture	2
AN-Najah University	modern architecture	3
Al-Watani Hospital	modern architecture	4
Total		14

Table 5.11 Reasons for the most important features.

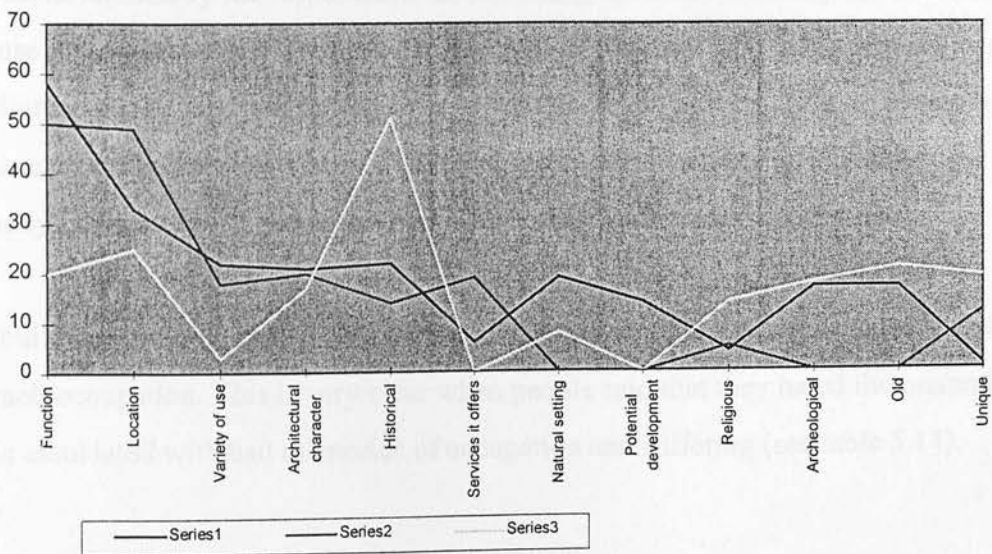
Reason	Frequency
Historical	51
Location	25
Old	21
Functional importance	20
Unique	19
Archaeological	18
Architectural character	17
Important landmark	14
Religious	14
Symbol	12
Large	8
Recreation	7
Natural beauty	7
Dense with people	4
Mixed use	3
Beautiful	3
Accessible	1

These factors differ in importance from one aspect to another. For example, we can see that historical factors are more important when people speak about features and areas more than buildings. On the other hand, location is more important in evaluating a building than in evaluating an area or a feature. Function and location are more important factors in evaluating a building or an area than in evaluating a feature. (See table 5.12).

Table 5.12 Summary of reasons of importance versus the area, building and features.

<i>Reasons</i>	<i>Areas Ser.1</i>	<i>Buildings Ser.2</i>	<i>Features Ser.3</i>
Function	58	50	20
Location	33	49	25
Variety of use	22	18	3
Architectural character	21	20	17
Historical	22	14	51
Services it offers	6	19	0
Natural setting	19	0	8
Potential development	14	0	0
Religious	4	5	14
Archaeological	17	0	18
Old	17	0	21
Unique	1	12	19
Total	233	187	196

Figure 5.9 The reasons for a building or an area to be important.



Question 4:

Mention three areas you would not like to live in the city of Nablus. Give two reasons for each.

The piling results of the respondents responses show that the most disliked areas were the refugee camps, Ras El-Ein and the east area of the city. Other areas have been mentioned several times by the respondents. These areas are; Al-Makhfeye, the Prison area and the Industrial Zone. (See table 5.13).

Table 5.13 Areas in Nablus which are disliked by the people.

Reason	Frequency
Refugee Camps	17
Ras El-Ein	13
East Area	10
City Center	7
Wadi El-tufah	7
Tombs Area	6
The Old City	6
Industrial Zone	5
Al-Mkhfeyeh	5
The Prison Area	4
Al-Sakyeh	2
Haifa Street Area	1
Rafidya	1
King Faisal Street Area	1

Reasons elicited by the respondents for not liking the area are mostly the following: very dense or overcrowded because of the lack of services and adequate infrastructure; polluted, being near the public sewage system or the Industrial Zone; no architectural character or the area has a mix of different styles, which affects its general character, and finally not healthy for reasons of humidity and lack of sun and air circulation.

A building could be ugly because it reminded people of things from the past such as the Israeli occupation. This is very clear when people said that they hated the prison because it is associated with bad memories of occupation and suffering (see table 5.14).

Table 5. 14 Reasons for an area to be disliked.

Reason	Frequency
Very dense	25
Not healthy	21
No architectural character	19
Pollution	16
Bad services	13
Does not suit the site	12
Random	11
Below required standard	10
Bad symbol	9
Traffic problem	9
Noisy	7
Ugly	5
Bad location	5
Negative social impact	4
No identity	2
No security	2
No privacy	2

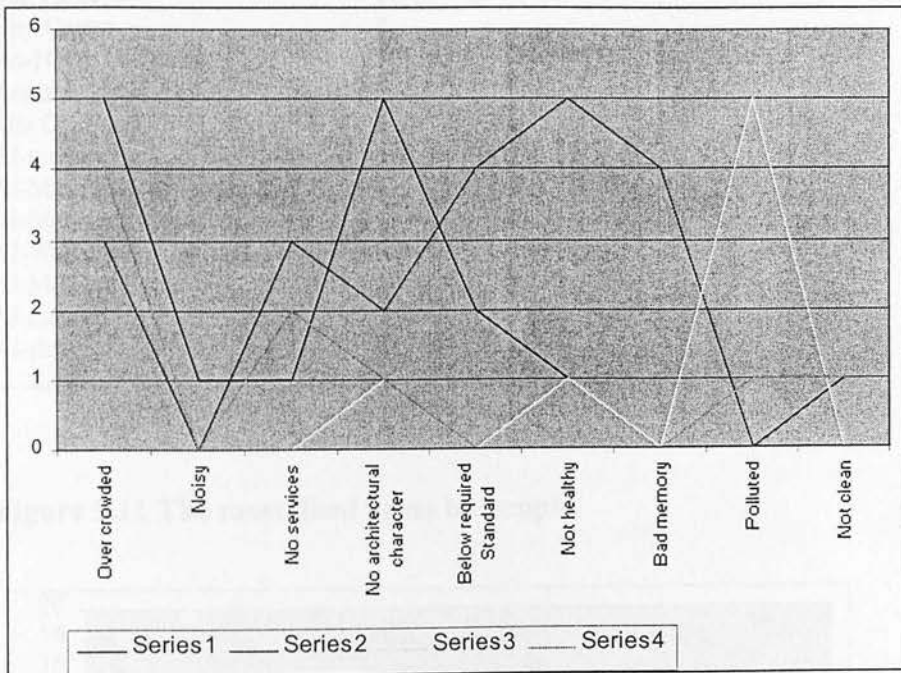
Table 5.15 shows reasons for the most disliked areas chosen by the respondents. Ras El-Ein Area, which is one of the contemporary informal settlements in the city of Nablus, has been mentioned among the non preferred areas. The reasons for this were because it is crowded, noisy, lacks services, and does not have any interesting architectural character .In this context the term crowded is not preferred by people because this affects the living standards of the inhabitants. Also the services offered for the community are not sufficient.

The refugee camps were also among the areas which have not been preferred by people. These areas used to be at the boundaries of the city, and time have been swallowed by new expansion and development to become integral parts of the city of Nablus. The east area of the old city, which is very crowded and polluted with the imposed light industry , has been chosen as one of the most disliked areas.

Table 5.15 Reasons for the most disliked areas.

<i>Reasons</i>	<i>Area 1 Ras El-Ein</i>	<i>Area 2 Refugee camps</i>	<i>Area 3 Wadi El- Tuffah</i>	<i>Area 4 City center</i>
Over crowded	5	3	0	4
Noisy	1	0	0	0
No services	1	3	0	2
No architectural character	5	2	1	1
Below required Standard	2	4	0	0
Not healthy	1	5	1	0
Bad memory	0	4	0	0
Polluted	0	0	5	1
Not clean	0	1	0	1
TOTAL	15	22	7	9

Figure 5.10 Reasons for an area to be disliked.



Question 5:

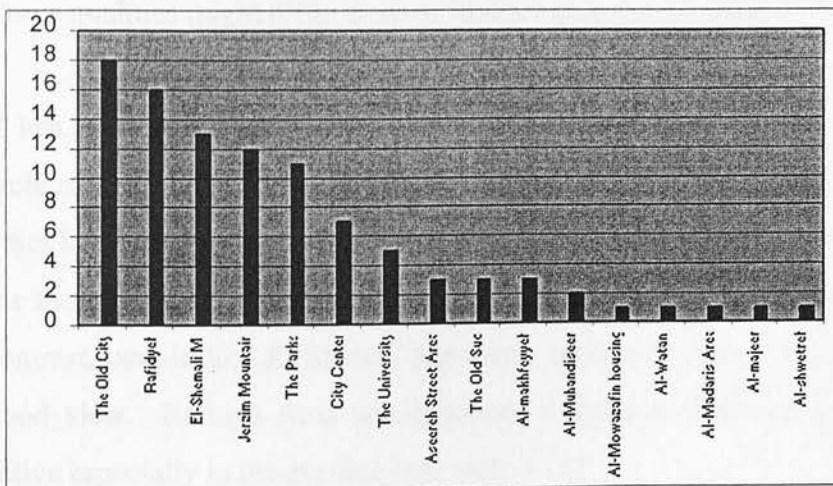
Mention three areas you would like to live in in the city of Nablus. Give two reasons for each.

According to the results of this question, the most preferred areas were the Old City, Rafidyah Area, El-Shimali Mountain, and Jerzim Mountain respectively. For other areas mentioned see table 5.16

Table 5. 16 Areas that are liked by people.

Areas	Frequency
The Old City	18
Rafidyeh	16
El-Shemali Mountain	13
Jerzim Mountain	12
The Parks	11
City Center	7
An-Najah University	5
Aseereh Street Area	3
The Old Suq	3
Al-makhfeyyeh	3
Al-Muhandiseen Housing	2
Al-Mowazafin housing	1
Al-Watani	1
Al-Madaris Area	1
Al-majeen	1
Al-shwetreh	1

Figure 5.11 The most liked areas by people.



It has been found that people liked an area for many reasons; the most dominant one being that it has a good view, such as the area of El-Jabal El-Shimali. An area could be preferred also for its architectural character such as the old city, or the area could be preferred because it has many services to offer such as Rafidya. Reasons such as historic, quiet, green, healthy have been mentioned (See table 5.17).

Table 5. 17 Reasons for an area to be liked.

Reason	Frequency
Have a good view	20
Architectural character	16
Quiet	15
Pleasant	14
Green area	14
Historical significance	13
Active	12
Healthy	11
Function	11
Quiet	11
Location	7
Beautiful	5
Good services	5
New	4
Social life	4
Safe	2

Comparison between the most liked areas and reasons behind an area being liked is illustrated in table 5.17. People like a certain area for the certain specific qualities it has. These qualities might differ from or interact with among other different preferred areas.

It has been found that people like the Old City mostly because of its historical and architectural significance, its personal attachment, its social life and its location. On the other hand, people like Jerzim Mountain for its good views “being on the upper part of the mountain”, its historical importance, its being a holy place and for its greenery. In contrast, people like El-Shimali Mountain mostly because it is healthy, quiet and has good view. Rafidya Area was preferred because it is pleasant, quiet, new and very active especially in the evening (see table 5.18).

Table 5.18 Reasons for the first five liked areas.

Reasons	Area 1 Rafidya	Area 2 Parks	Area 3 Al-Jabal El-Shimali	Area 4 Old city	Area 5 Jabal Jerzim
Active	6	0	0	3	0
Architectural character	3	1	2	5	0
Beautiful	1	1	0	2	1
Pleasant	4	3	0	2	3
Have good view	0	2	7	0	9
Good services	1	1	0	0	0
Quiet	4	1	6	0	1
Healthy	1	0	8	0	1
Safe	0	0	0	2	0
Personal attachment	0	2	1	4	0
Green area (trees)	0	3	1	0	7
Location	1	1	0	2	0
New	3	0	0	0	0
Social life	0	0	0	4	0
Historical significance	0	0	0	7	5
Function	1	0	0	4	0
TOTAL	26	15	25	35	27

Observations made on questions 4 and 5 show that people have different ideas about the same area. For example, the City Centre has been liked for its commercial and cultural functions and for being very active; on the other hand it has been disliked for being very crowded and active, not clean, not organized and its lack of architectural character and identity. The same applies to the Old City, which has been liked for several reasons, i.e. its historical, architectural and commercial importance. It is important because it gives shelter and protection to pedestrians through its shaded areas. Its rich visual experience in the narrow streets and spacious courts is one of the reasons that make the old city important, along with the fact the people of the city feel personally attached to it as it represents their own cultural identity and heritage. At the same time it is disliked because it is unhealthy and humid, the buildings are old and need maintenance to be adequate for living, it is not clean, crowded with people and not accessible by cars. So in a way the analysis reflects that people were confused about the old city, on the one hand

they like it, but on the other, they don't want to live in it, because it is not practical to live under the same conditions as people used to live in the past. See Table 5.19

Table 5.19 Reasons for liking and disliking the same area.

Area	Reasons for an area to be liked	Reason for an area to be disliked
City Centre	<ul style="list-style-type: none"> 1- active and busy 2- main public open space 3- commercial importance 	<ul style="list-style-type: none"> 1- no architectural identity 2- very crowded and busy 3- polluted 4- chaos
Al-Makhfeyeh	<ul style="list-style-type: none"> 1- architectural character 2- modern 3- has good view 4- has good services 	<ul style="list-style-type: none"> 1- crowded with people 2- far from city center
The Old City	<ul style="list-style-type: none"> 1- historical importance 2- commercial activity 3- architectural character 4- safe 5- shaded area 1- personal attachment 	<ul style="list-style-type: none"> 1- not healthy 2- building are deteriorating 3- not clean 4- crowded 5- not accessible by vehicles
Al-Maageen	<ul style="list-style-type: none"> 1- greenery 2- architectural character 	<ul style="list-style-type: none"> 1- crowded 6- far and not reachable

Question 6:

Mention three buildings you like in the city of Nablus. Give two reasons for each.

Question No.6 shows that there are not so many buildings that have been generally approved by most people; this is clear when you see the high scores of the preferred buildings compared with low scores (a lot of buildings have been mentioned once). One can relate this to the individuality of judgment, especially the reason “personal attachment” which was among the dominant reasons for liking any building.

Piling results of respondents' responses elicited that the most preferred buildings were: An-Najah University, Al- Qasir Building, and the old palaces of the old cities.

Other buildings such as the Municipality, the Library and An-Nasir Mosque in the old city have also been mentioned . At the same time many buildings have been mentioned only once (See table 5.20).

Table 5.20 Buildings that are liked by people.

Building	Frequency
An-Najah University	11
Al-Qasir	9
The Old Palaces	8
The Municipality	5
The Librerey	3
Al-Nasir Mosque	3
Al-Salahi Mosque	2
Abu Shosheh Building	2
Badran Buiding	1
Kamil Sad- Edin	1
Fidi Building	1
Al-Shunnar	1
Kalbouneh	1
The Post Office Building	1
Al-Anabtawi Building	1
Hammat	1
Zafir Masri School	1
The Fire Station Building	1
Al-Shunnar Villa	1
The Schools in the east	1
Zafer Masri Building	1
Al-Muhandiseen Housing	1

It has been observed from question 6 that people liked a building mostly because of its location, being close and easy to reach. The functional importance of the building was among the most dominant reasons. Also people preferred a building because of its historical and architectural character. Reasons such as privacy, aesthetics, social attributes, size of the building (being large) age of the building (being modern or old) and many others have also been mentioned (See table 5.21).

Table 5.21 Reasons for liking a building.

Reason	Frequency
Location	25
Architectural character	14
Personal attachment	14
Function	13
Historical significance	11
Private	9
Being a symbol	9
Beautiful facade	7
Used materials	4
Mix use function	4
Social importance	4
Large	4
Modern	4
Have good view	3
Clear circulation	3
Have open space in front	3
Healthy	1
Old	1
Religious	1
Unique	1
Quiet	1

Table 5.22 Reasons for the first four most liked buildings in Nablus.

<i>Reason</i>	<i>Building 1</i>	<i>Building 2</i>	<i>Building 3</i>	<i>Building 4</i>
	<i>An-Najah University</i>	<i>Al-Qasir Building</i>	<i>The Municipality</i>	<i>An-Nimir Palace</i>
Active	1	0	0	0
Location	5	0	1	1
Architectural character	3	3	1	6
Used materials	0	1	0	0
Mixed use function	0	3	0	0
Historical importance	0	0	0	2
Personal attachment	2	0	1	0
Old	0	0	0	1
Religious	0	0	0	1
Social importance	2	0	0	0
Unique	0	2	0	1
Have privacy	0	0	0	1
Quiet	1	0	0	0
Modern	0	4	0	0
Functional importance	6	0	3	0
Have good view	2	1	0	0
Large	0	2	1	0
Symbol	3	0	1	2
TOTAL	25	16	8	15

Question 7:

Mention three buildings you would not like to live in in the city of Nablus. Give two reasons for each.

Piling results of responses shows that reasons for a building being disliked are mostly political because these buildings are associated with a bad memory. Buildings such as the Prison, the Military Administration Building, the Police Station, the Tax and Customs Buildings all reminded people of the hard days of the Israeli military occupation.

Other reasons for any building to be disliked were that they have no architectural character or are ugly; also reasons of complexity, bad location, unhealthiness, and confused facade were mentioned (See table 5.23).

Table 5.23 Reasons for people to dislike a building.

Reason	Frequency
Bad memory	16
No architectural character	15
Ugly	12
Bad location	10
Not healthy	10
Does not suit the context	9
Complicated circulation	9
Confusing facade	7
Expensive	7
Cause traffic problem	4
Not comfortable	3
Boring facade	3
Not attractive	3
No maintenance	2
Not pleasant	2
Negative social effect	2
Crowded	2
Old	2
Deserted	1
Dangerous	1
No services	1
Strange	1
No parking	1
No privacy	1

Table 5. 24 Reasons for the first four disliked buildings in Nablus.

<i>Reason</i>	<i>Building 1</i> <i>Military administration Bld.</i>	<i>Building 2</i> <i>Al-Suq ALAkdar Bld.</i>	<i>Building 3</i> <i>Al-Qamhawi Bld.</i>	<i>Building 4</i> <i>Al-Anabtawi Bld.</i>
Bad memory	7	0	0	0
Not Healthy	1	3	0	1
No arch. Character	0	4	2	0
Bad location	3	0	0	0
Not fit to the context	1	0	2	5
Boring facade	1	0	4	0
Not attractive	3	0	0	1
Ugly	0	0	3	3
Expensive	0	0	3	0
Strange	0	0	1	0
Negative social effect	0	0	3	0
Bad circulation	0	0	0	1
TOTAL	16	7	18	11

Question 8:

Mention three streets you like in the city. Give two reasons for each.

Piling results of question No.8 show that the most preferred streets are Abdi El-Nasir Street, Rafidya Street, King Faisal Street and An-Najah university Street. Other streets were mentioned by people were An-Nasir Street, Al-Rawda Street, Aseereh Street (See table 5.25).

Table 5.25 Streets that are liked by people.

Street	Frequency
Rafidya	17
Abdi El-Nasir street	14
King Faisal Street	11
An-Najah Street	11
Al-Nasir Street	5
Al-Rawda Street	4
Aseereh Street	3
Al-makhfeye Street	3
Amman Street	3

Baker Street	3
Prince Mohammed Street	2
Ibn Rushd Street	2
Omar Khattab Street	1
Street No. 15	1
Al-Qouds Street	1
Sufyan Street	1

These streets were preferred noticeably for many reasons, such as streets that have trees on both sides giving a pleasing effect and offering protection to people who are walking in them. Streets that are quiet are also preferred by people because this could give the street more privacy for its residents. Activity, on the other hand is a quality that is required, as it makes the street more lively and pleasing. See table 5.26

Table 5.26 Reasons for a street to be liked.

Reason	Frequency
Quiet	23
Green area (have trees)	19
Lively	15
Wide	15
Beautiful	11
Architectural character	11
Have good view	11
Protected (safe)	7
Main street	5
Location	5
Active at night	4
Personal attachment	3
Historical importance	3
Healthy	3
Clean	3
Function	2
Visual quality	2
Variety of use	1
Future development	1
Comfortable	1

At the same time, criteria such as the location, the visual quality of the street, the historical importance, and its mixed uses making the street more lively, are criteria which have all been found to be less dominant in people's evaluation of these streets.

Table 5.27 shows reasons behind a street being preferred. Al-Muntazah Street was preferred because it has trees on both sides, it is wide, quiet, healthy, and beautiful. Rafidya street was preferred for its activity especially at night (people like to walk in it), its intimate architectural character, and because it has a mix use function (being a residential street transferring gradually into a commercial strip). It is also preferred for its functional importance.

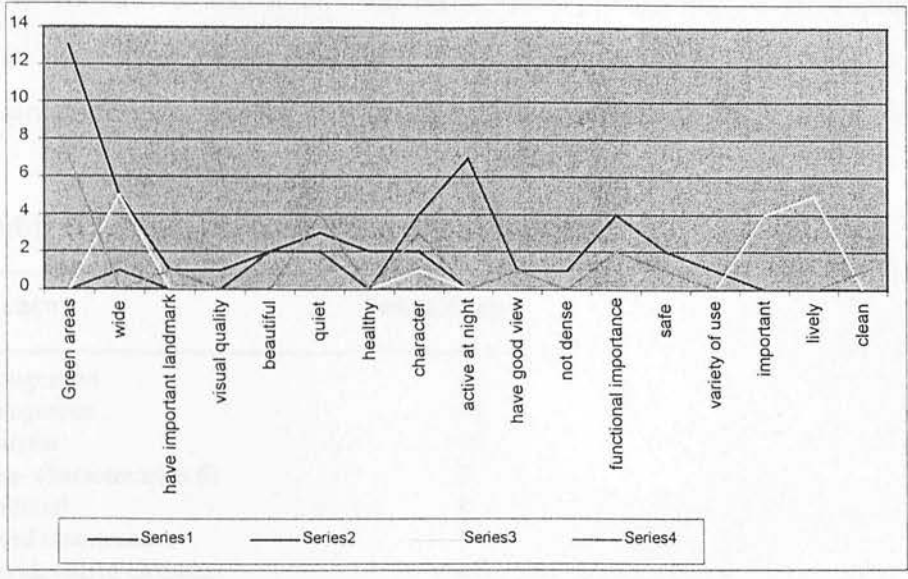
King Faisal Street was preferred for its functional importance, being the main commercial street that crosses the city along its east west expansion. It is also preferred because it is wide and lively.

An-Najah street was preferred because it has trees on both sides, it is quiet and beautiful (See table 5.27).

Table 5.27 Reasons for a street being liked.

<i>Reasons</i>	<i>Street 1</i>	<i>Street 2</i>	<i>Street 3</i>	<i>Street 4</i>
	<i>Al-Muntaza St.</i>	<i>Rafedya St.</i>	<i>King Faisal St.</i>	<i>An-Najah St.</i>
Green areas	13	0	0	7
Wide	5	1	5	0
Have important landmark	1	0	0	1
Visual quality	1	0	0	0
Beautiful	2	2	0	0
Quiet	3	2	0	4
Healthy	2	0	0	0
Character	2	4	1	3
Active at night	0	7	0	0
Have good view	0	1	0	1
Not dense	0	1	0	0
Functional importance	0	4	0	2
Safe	0	2	0	1
Variety of use	0	1	0	0
Important	0	0	4	0
Lively	0	0	5	0
Clean	0	0	0	1
TOTAL	29	25	15	20

Figure 5.12 Graphic distribution of reasons for the four most liked streets.



Question 9:

Mention three streets you don't like in the city. Give two reasons for each.

The streets which are most disliked by people are King Faisal Street, Al-Haddadin Street, Amman Street and Ras El-Ein Street. Other streets such as Al-Makhfeyeh Street, Suq AL-Basal, Haifa Street, and Al-Quds Street were mentioned as being non preferred (See table 5.28).

Table 5.28 Streets that are disliked by people.

Street	Frequency
Al-Haddadin Street	13
King Faisal Street	11
Amman Street	10
Ras El-Ein Street	9
Al-Makhfeyeh Street	4
Suq Al-basal Street	3
Haifa Street	3
Al-Quds Street	3

Reasons behind a street being disliked are mainly concerned with the traffic problem and being congested most of the day, the danger for pedestrians to walk these or cross from one side to the other, and misallocation of the use to its character such as Al-Haddadin Street. Factors such as being noisy, polluted, deserted, not clean, needing maintenance, and having only one use are also mentioned (See table 5.29).

Table 5.29 Reasons for a street to be disliked.

Reason	Frequency
Congestion	18
Dangerous	14
Narrow	10
Use- character miss fit	9
Polluted	8
Need maintenance	7
No identified character	6
Crowded	6
Below required standard	4
Noisy	4
Not clean	3
Boring	3
Empty	1
Have only one use	1
Closed	1
Bad location	2

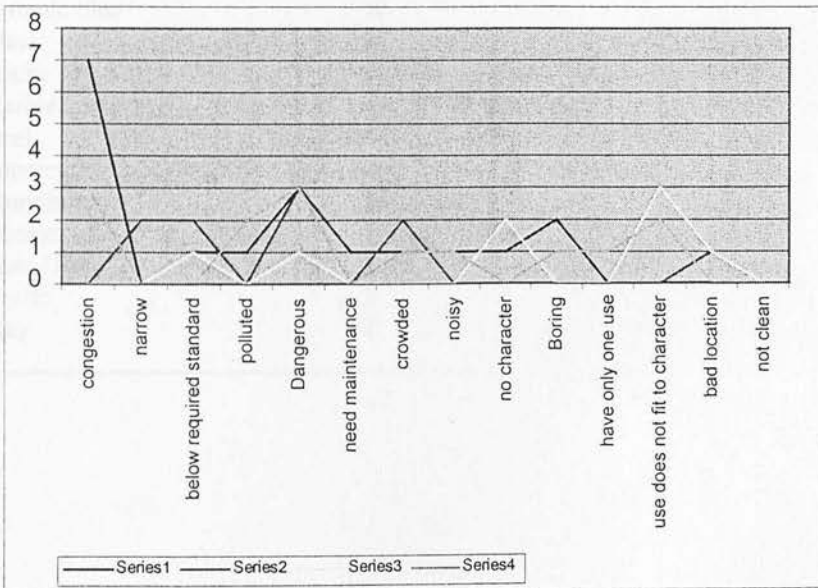
It has been observed from analysis of piling results for this question that King Faisal Street has been disliked and liked at the same time for different reasons. It has been liked for being the main commercial street connecting both ends of the city, whereas it has been disliked because of its traffic problems and being dangerous and congested.

People disliked Ras El-Ein Street because it is dangerous, narrow, crowded and congested most of the time. On the other hand Al-Haddadin Street was disliked for reasons of use and its lack of character (See table 5.30).

Table 5.30 Reasons for the first four streets to be disliked.

Reasons	Street 1		Street 2		Street 3	Street 4
	King Street	Faisal	Ras Street	El-Ein	Al-Haddadin Street	Amman Street
Congestion	7		0		0	3
Narrow	0		2		0	0
Below required standard	1		2		1	0
Polluted	1		0		0	2
Dangerous	3		3		1	3
Need maintenance	1		0		0	0
Crowded	1		2		0	1
Noisy	1		0		0	1
No character	1		0		2	0
Boring	2		0		0	1
have only one use	0		0		0	1
Use-character misfit	0		0		3	2
Bad location	0		1		1	0
Not clean	0		0		0	0
TOTAL	18		10		8	14

Figure 5.13 Graphic distribution of the first four streets to be disliked by the people.



Question 10:

Mention three building materials you like to see being used in the buildings of the city. Give two reasons for each.

Question 11:

Mention three building materials you don't like to see being used in the building of the city. Give two reasons for each.

Piling results of respondents' responses for questions 10 and 11 elicited the following observations:

When asking people about the most preferred materials, it has been observed that people like materials that are locally known to them. Stone was the most preferred building material. Building materials such as Plastic, Fiberglass, Aluminum, and Marble have rarely been mentioned. On the other hand, people disliked certain building materials for aesthetic reasons, such as concrete blocks. Brick was also disliked by people because this material is ugly and not durable in the long run (See tables 5.31 and 5.32).

Table 5.31 The most preferred building material.

Material	Frequency
Stone	14
Ceramic tiles	10
Glass	7
Bricks	5
Marble	4
Steel	4
Concrete	3
Aluminum	3
Mosaic	1
Fiber Glass	1
Plastic	1
Clay	1

Table 5.32 Building materials which are disliked by the people.

Reason	Frequency
Concrete	9
Bricks	9
Steel	6
Wood	4
Aluminum	3
Stone	2
Glass	2
Plastic	1
Mosaic	1
Old tiles	1

Building materials have been positively or negatively evaluated for economical and aesthetical reasons on one hand, and on the familiarity of construction technique on the other hand.

Reasons for any building material to be preferred by people are many. The most dominant ones are the building material is beautiful, easy to build with or strong and durable (See table 5.33).

Table 5.33 Reasons for people to like a building material.

Reason	Frequency
Beautiful	28
Easy to build with	16
Strong and durable	14
Traditional material	10
Available	9
Not expensive	8
Easy to clean	4
Its characteristics	4
Flexible	3
Transparent	2
Good for isolation	2
Not dangerous	1
Modern	1
Luxury building	1

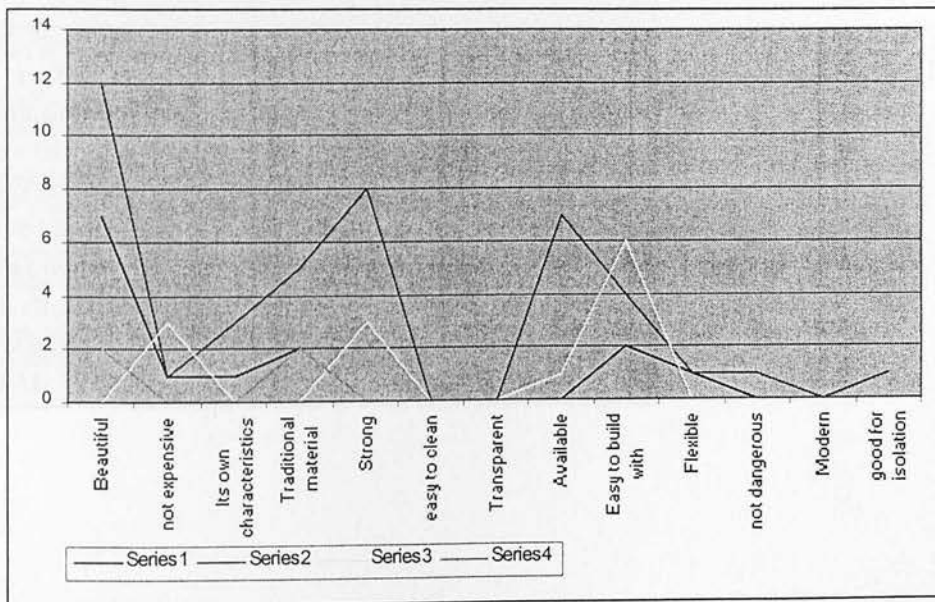
Table 5.34 shows piling results for respondents' responses giving reasons for the four most preferred materials. Stone has been chosen as the most preferred building material

mainly because it is a beautiful and strong building material. Also it is available to many, having been one of the traditional construction materials for so many years. People also preferred ceramic tile mainly because it is beautiful, easy to build with, and it is a modern building material (See table 5.34).

Table 5.34 Reasons for the first four building materials to be liked.

<i>Material</i>	<i>Material 1</i>	<i>Material 2</i>	<i>Material 3</i>	<i>Material 4</i>
	Ceramic tiles	Stone	Concrete	Wood
Beautiful	7	12	0	2
not expensive	1	1	3	0
Its own characteristics	1	3	0	0
Traditional material	2	5	0	2
Strong	0	8	3	0
easy to clean	0	0	0	0
Transparent	0	0	0	0
Available	0	7	1	0
Easy to build with	2	4	6	0
Flexible	1	1	0	0
not dangerous	0	1	0	0
Modern	0	0	0	0
good for isolation	1	1	0	0
TOTAL	15	43	13	4

Figure 5.14 Graphic distribution of reasons for the four most preferred materials.



Reasons for any building materials to be disliked were mainly because it is ugly or not durable or not a local material. Other reasons such as cost, not being practical, needing maintenance and being difficult to clean were also mentioned. See table 5.35

Table 5.35 Reasons for a building material to be disliked.

Reason	Frequency
Ugly	17
Not local material	12
Not durable	11
Expensive	6
Strange	4
Not practical	1
Needs maintenance	1
Limited use	1
Not good for isolation	1
Not healthy	1
Difficult to clean	1

Table 5.36 Reasons for the first three building materials to be disliked.

<i>Reasons</i>	<i>Material 1</i>	<i>Material 2</i>	<i>Material 3</i>
	<i>Concrete</i>	<i>Brick</i>	<i>Wood</i>
Expensive	2	0	1
Ugly	5	3	0
Not practical	1	0	0
Not durable	1	4	3
Needs maintenance	0	1	0
Strange	1	0	0
Limited use	0	0	0
Not local material	2	1	1
Difficult to clean	0	0	0
Not available	0	0	0
TOTAL	12	9	5

5.4 SUMMARY OF FINDINGS (Part one):

This section gives a short summary of the piling results of the first part of the questionnaire. These questions mainly concern the evaluation of the physical character of the city through exploring people preference system of the city's areas, streets, and buildings.

1. Accumulation of reasons for evaluating an area will strengthen the importance of the area.
2. Functional importance and location are the most dominant factors in evaluating an area.
3. Architectural character is not a decisive factor in evaluating a building.
4. Historical and archaeological significance are the most dominant factors in evaluating a feature, while it does not have the same importance in evaluating a building.
5. The most dominant factors in judging the built environment of the city of Nablus are pragmatic, historical and architectural.
6. People like an area mainly because of its architectural character.
7. There was no clear agreement about people's evaluation of buildings.
8. The political factor was very strong when buildings were evaluated.
9. A landmark could enhance the quality of the street.
10. Negative and positive evaluation of the same structure, whether a street or a building, could be given by different people for the same reason or different reasons.
11. People were confused in evaluating the old city for reasons of authenticity and practicality.
12. A need for strategy of using the old buildings in the historic area should be considered to fulfil the changing needs of people.

5.5 Piling analysis: (Part two)

Question 12:

Mention three most important features you like which characterise building in Nablus. Give two reasons for each.

The results of responses reflect signs of confusion on this question. It could be that the question was understood differently by the respondents.

People mentioned different buildings that they found interesting but these buildings do not represent the common or dominating building style in the city of Nablus. This indicates that personal experience could influence peoples interpretation of their built environment.

On the other hand, elements and features of the old city's urban structure were the only ones that have been mentioned. Features such as domes and vaults, arches, old mosques, courts, old suq and baths were often mentioned by people. This reflects that the city of Nablus is highly identified by its historic core represented in a highly sophisticated architectural character. Although some new and modern buildings were mentioned individually, they are not major elements that define the characteristics of buildings in the city, or attributes of the physical identity of the city. For example, An-Najah University and Al-Qasir Building have been mentioned as features which characterised the building in the city for reasons of them both being new buildings, for their functional importance and their architectural character.

Table 5.37 shows piling results for the most important features that characterised the city of Nablus. They were mainly the old mosques, Almanara (an old vertical tower with a clock at the top built in the nineteenth century) and the Old Suq (the main shopping covered Bazaar in the old city).

Other features that represent new modern buildings were also mentioned . These buildings were: An-Najah University and Al-Qasir Building (mixed use building constructed and finished in 1994) (See Table 5.37).

Table 5.37 The most important features which characterise building in Nablus.

Feature	Frequency
Old Mosques	14
Al-manara	8
Old Suq	7
Palaces	6
An-Najah University	6
Bathes	5
Al-Qasir	4
The court	4
Hospitals	3
Domes and vaults	3
Municipality	2
City Centre	2
Springs	1
Jerzim Mountain	1
Fidi Building	1
Ibn Al-Haytham school	1
Zafir Al-Masri School	1
Al-Muhandiseen Housing	1
King Faisal Street	1
Red tiles roof	1
Al-mushrabiyyat	1
Arches	1
Old houses	1
Maqam El-Sheikh Imad	1

It has been observed that the most dominant reasons for any feature being attributed to the city's character were mainly the historical reference of features, the functional importance (being an academic institution or religious building) and also having the qualities of being different, unique and known. The respondents also mentioned other reasons once or twice (See table 5.38).

Table 5.38 Reasons for a feature being attributed to building character in the city of Nablus.

Reason	Frequency
Historical importance	12
Functional importance	7
Unique and different	7
Location	6
Known	6
Large	5
Beautiful	5
Modern	5
Active and lively	5
Unique arch. character	4
Regeneration of culture	4
Religious	4
Have privacy	3
Climate adaptation	3
Social importance	2
Have green areas	2
Symbol	2
Palestinian identity	1
Good character	1
Defensive	1
Colourful	1
Good proportion	1

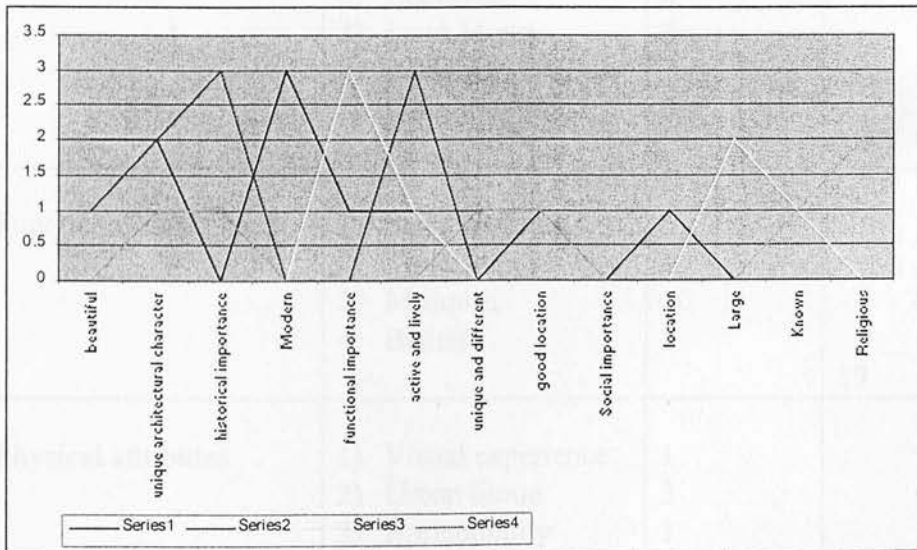
Table 5.39 shows the reasons for the four most important features being attributed to the building character in the city of Nablus. People stated that the Al-Qasir Building is important for its uniqueness, modernity, activity, location and aesthetic qualities.

People thought that the Old Suq is important for its historical significance, and architectural character and also because it is known by every one as being one of the city's landmarks. Activity and liveliness is a character of the Old Suq that makes it important. People considered that An-Najah University as important because it is one of the biggest and most important academic institutions in the West Bank, so its function, size and architectural character are also significant. An-Nasir Mosque was also important for its historical and religious significance. It is also considered as a landmark in the city, which makes it known by everyone who were living in Nablus (See Table 5.39).

Table 5.39 Reasons for the first four important features being attributed to the building character in Nablus.

<i>Reasons</i>	<i>Feature 1</i> <i>Al-Qasir Building</i>	<i>Feature 2</i> <i>The Old Suq</i>	<i>Feature 3</i> <i>An-Najah University</i>	<i>Feature 4</i> <i>An-Nasir Mosque</i>
Beautiful	2	1	0	0
Unique architectural character	2	2	0	1
Historical importance	0	3	0	1
Modern	3	0	0	0
Functional importance	1	0	3	0
Active and lively	1	3	1	0
Unique and different	0	0	0	1
good location	1	0	0	1
Social importance	0	0	0	0
Location	1	0	0	0
Large	0	0	2	0
Known	1	1	1	1
Religious	0	0	0	2
TOTAL	12	10	8	7

Figure 5.15 Graphic distribution for the reasons of the first four features being attributed to the building character in Nablus.



Question 13:

Mention five things which give identity to the Old Town of Nablus. Give three reasons for each.

Question No.13 shows the factors that characterised the City of Nablus. According to the piling results of the respondents' responses, these factors were either architectural buildings or elements that describe the physical qualities of the old historic city such as the rich visual experience of its narrow streets, the coherent urban tissue of the urban structure, and the activities that take place in its streets.

It could also be the specificity of use or function of the building it hosts such as the religious use in its mosques, the social atmosphere in its baths or the light traditional industries which have been known in the City of Nablus for many years, such as soap and sweet production. See table 5.40

Table 5.40 Factors giving identity to the City of Nablus.

Category	Description	Frequency	Total
1) Architectural objects	1) Buildings 2) Elements 3) Land Marks 4) Building materials 5) Interior courts	14 8 6 3 3	34
2) Functional significance	1) Soap factories 2) Sweet shops 3) Mosques 4) Bathes	5 1 10 3	19
3) Physical attributes	1) Visual experience 2) Urban tissue 3) Horizontality 4) Geographical	1 3 1 1	12
4) Natural object	1) Springs	1	1

Reasons for characteristics which give identity to the old city of Nablus according to people's responses were mainly related to the architectural character of the old city . These include urban scale with its narrow dark streets, its lively covered Bazaar and its spacious pleasant open courts.

People also found that the geographical location of the city gives a very strong identity as the city spans between two mountains facing each other .

Table 5.41 Reasons for characteristics which give identity to the old city of Nablus.

Reason	Frequency
Traditional architectural character	30
Social aspect	6
Location	6
Social aspect	6
Location	6
Originality	5
Historicity	5
Age (being very old)	5
Religion	3
Aesthetics	3
Architectural significance	3
Symbolic meaning	3
Functional attribution	2
Privacy	2
Locality	2
Skyline	1
Activity	1
Human scaling	1
Transition	1

Question 14:

Mention three things, which make the city of Nablus different from the other West Bank cities. Give two reasons for each.

Here we notice from the analysis of the results of question 14 that factors which make the city of Nablus different from the other Palestinian cities are mainly geographical location, historical importance and traditional industry. The geographical location of the city: situated between two mountains facing each other, is very influential in people's image of the city. This issue has been mentioned many times by the respondents and all historians who have visited Nablus.

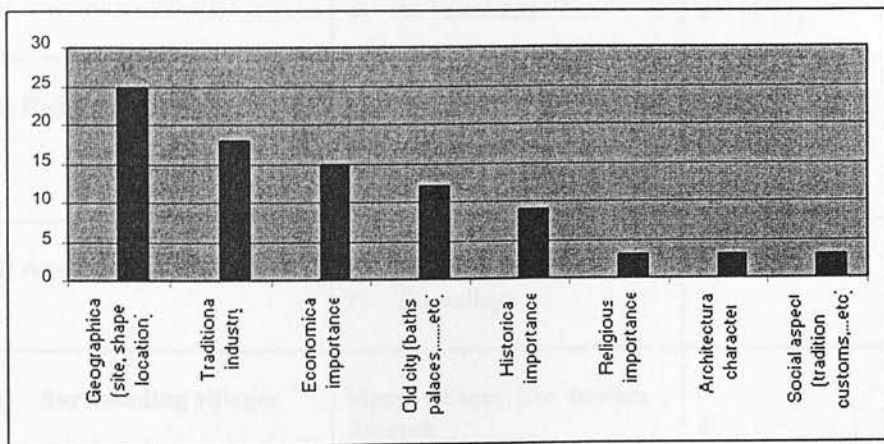
People also mentioned the traditional industry in the city. Nablus has been very famous for its sweet and soap production for many years. 29 soap factories in the historic old city used to produce soaps in a traditional way.

The respondents have also mentioned the religious importance of the city and the social life (the people of the city of Nablus are known by other Palestinians for their own traditions and customs. See table 5.42

Table 5.42 Things that make the city of Nablus different from other Palestinian cities.

Aspect	Frequency
Geographical (site, shape, location)	25
Traditional industry	18
Economical importance	15
Old City (baths, palaces,.....etc)	12
Historical importance	9
Religious importance	3
Architectural character	3
Social aspect (tradition, customs,...etc)	3

Figure 5.16 Graphic distribution of things that make the city of Nablus different from other cities in the West Bank.



Question 15:

Mention five important features outside the city of Nablus. Give two reasons for each.

Piling results of responses to question No.15 show that the most important features outside the city of Nablus were the top of Jerzim Mountain, which is known for its religious importance for the Samaritan community, and Sabastya Town, an old Roman City 15 Km to the west of Nablus.

Wadi Al-Badan the green valley that spreads outside the city with olive and orange trees all over the fields is also mentioned as a pleasing scene.

Table 5.43 The most important features outside the city of Nablus.

Category	Description	Frequency	Total
1) Natural settings	1) Jerzim Mountain 2) Wadi Al--Badan 3) The woods 4) The valey 5) Iraq El-Tayeh 6) Wadi Al-Tuffah	22 19 3 2 2 1	50
2) Archaeological sites	1) Sabasteya Town 2) Skekim 3) Jerzim Mountain 4) Al-Tawaheen	18 1 23 2	44
3) Religious sites	1) Maqam El_Sheikh Tmad 2) Maqam Mujeer El-Din	4 1	5
4) Agricultural sites	1) Jerzim Mountain 2) The valleys	2 1	3
1) Surrounding villages	Many villages like howara , Aseereh,	8	8

Question 16:

Mention three things you would like to see happening in Nablus in the future which would enhance the quality of life in the city. Give two reasons for each.

Piling results of responses to question No.16 show that people are not happy with the current situation in the city. They are not satisfied with the quality of the existing environmental conditions, and because of this, they have shown a great demand for a lot of things to be done in many ways and directions.

They have shown a great tendency for a need to have more new construction of buildings for recreational, cultural, educational and industrial purposes. For example, they want more hospitals and health care centres to be built more, schools and academic institutions to be established and big department stores and commercial shopping malls to be available for them.

People also want to improve the existing situation of the infrastructure of the city, for example, the need to solve the traffic problem, to improve the condition of streets, to ensure security on the road, to have more parking places and also to have more green spaces at the same time.

Finally, people have shown a great need to improve the existing administrative systems, and in terms of planning issues there should be involvement of citizens in planning for the future. People also mentioned the need to encourage traditional industry, to conserve their own cultural heritage, and to work on people's awareness of the importance of their own cultural heritage (See table 5.44).

Table 5.44 Things that people want to see happening in Nablus in the future.

1) to construct new buildings

Recreational buildings	15
Educational buildings	6
Service-buildings	5
Health-care buildings	5
Cultural buildings	4
Commercial buildings	3
Industrial buildings	1

2) Improve the existing situation

Have more green spaces	10
Solve the traffic problem	9
Improve the condition of the streets	8
Have more parking places	3

3) Improve the administrative condition

Planning for the future	6
More care for children	5
Involve citizen participation	4
Conserve the cultural heritage	2
Develop industry	1
Encourage tourism	1

Question 17:

Mention three things you like from the past history of the city. Give two reasons for each.

Piling results of responses to question No.17 show that people in general enjoyed their past and they like many things from their past history. Social and architectural factors were most dominant in the replies to this question.

In terms of architectural aspect, people like the unique and rich architectural character of the old city; its domes, narrow streets, coherent urban structure, its spacious Turkish baths and its lively and colourful Suq.

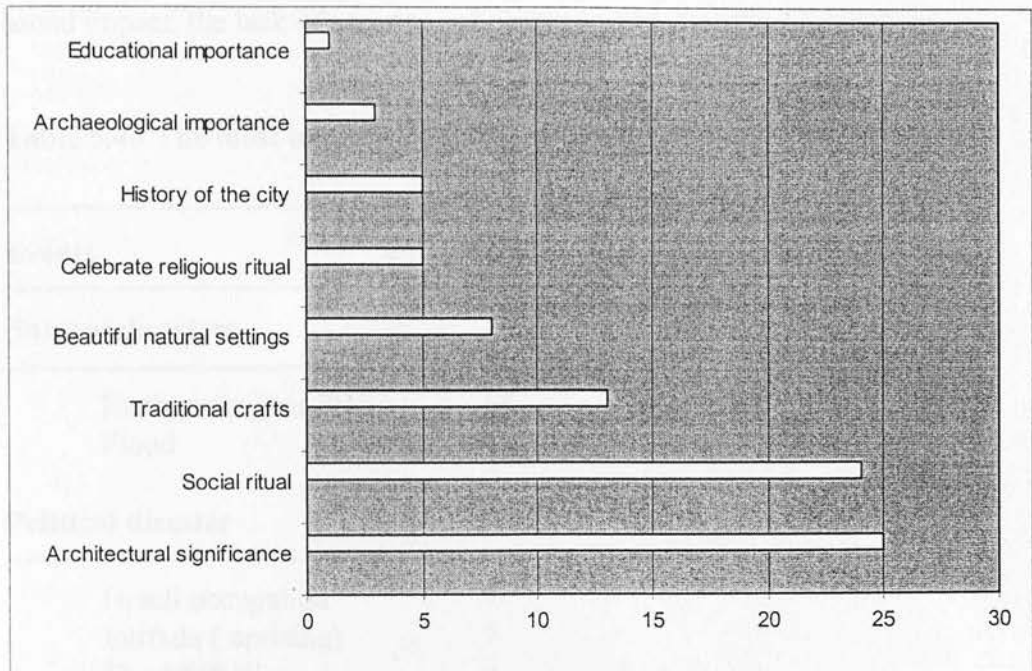
They also like the old social atmosphere and rituals, for example the wedding ritual, family relationships, the old traditions and customs in general (See table 5.45).

Table 5.45 Things people like from the past.

Category	Description	Frequency	Total
1. Architectural significance	1. Old city	2	
	2. Old soap factories	3	
	3. Domes	3	
	4. Narrow streets	2	
	5. Coherent urban structure	1	
	6. Turkish Baths	7	
	7. Old building technique	2	
	8. The Old Suq	2	
	9. Old mosques	2	
	10. Maqamat	1	
			25
1. Social ritual	1. Social relationship	9	
	2. Personality of people	1	
	3. Tradition and customs	13	
			24
1. Religious	Celebrate religious rituals	5	
			5
2. Traditional industry	Soap and sweet production		
			5
3. Beautiful natural settings	Parks, and woods in the mountains		
			8
4. Archaeological importance	Roman archaeological sites		
			3
5. Educational importance	The establishment of the university		
			1
4. Historical	History of the city	5	
			5

Figure 5.17 shows the graphic distribution of piling results for question 17. The main dominant things people liked from the past were the architectural character of the historic old city and the old social rituals. Other things such as traditional crafts and past images of areas of natural beauty (springs and fields of olive and orange trees) were also mentioned. People also listed the archaeological importance of the city, being a Roman and Kanaanite city.

Figure 5.17 Graphic distribution for things people liked from the past of the city.



Question 18:

Mention five historical events which are important in the city. Give two reasons for each.

Piling results of respondents' responses to question No.18 show that the most important historical events are mainly natural disasters and political crises, both of which have a severe negative impact on the formation of the physical environment of the city.

The natural disasters were the earthquake in 1918 and the flood, which caused a lot of damage and destruction to the historic city. The political crises were the 1948 war, 1967

war and the Gulf war. People also mentioned the Israeli Occupation, the Civil Strike in 1936, and the British Invasion.

When asking people about the reasons for the importance of these historical events , it has been identified that these events are very important because they had a very negative impact on the development of the city and serious consequences on its shape and its society as a whole. Consequences were mentioned in very negative way, such as destruction of buildings, immigration, informal planning settlement and constraints on buildings. Other negative reasons mentioned are those of unemployment, the negative social impact, the lack of security and changing life style (See Table 5.46).

Table 5.46 The most important historical events in the city of Nablus.

Events	Frequency	Total
Natural disasters		18
Earthquake year I918	14	
Flood	4	
Political disaster		34
Israeli occupation	7	
Intifada (uprising)	7	
The 1948 War	4	
The 1967 War	4	
Gulf War	2	
The civil strike in 1936	4	
British Occupation	4	
Assassinating B. Shaka	2	
Academic events		4
Establishing An-Najah National University	4	

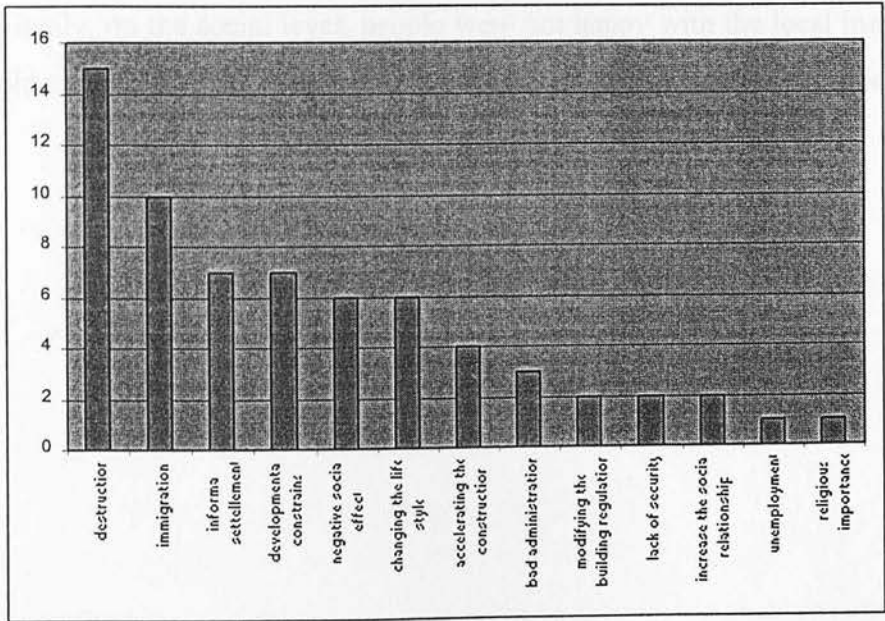
Table 5.47 shows the piling results of responses to reasons that make any historical event important, destruction of buildings and evacuation of the old city were the most dominant reasons.

People also mentioned social change and informal settlement for example the refugee camps and other areas such as Khallet Al-Amood (See table 5.47).

Table 5.47 Reasons for the most important historical events.

Reason	Frequency
Destruction of buildings	15
Immigration	10
Informal planning settlements	7
Constraints on the development of the city	7
Negative social effect	6
Changing life style	6
Accelerating the construction	4
Lack of good administration body	3
Modifying the building regulation	2
Lack of security	2
Increase the social relationship	2
Unemployment	1
Religious importance	1

Figure 5.18 Graphic distribution for cause of historical events people think are important.



Question 19:

Mention three changes in the city you wish had not happened. Give two reasons for each.

Piling results of responses to question No.19 show that many people wish that the most important changes in the city had never happened. These changes were mainly political crises. For example, people wish that the 1948 war and the resulting refugee camps had never happened, along with the 1967 war and the Israeli occupation.

People also mentioned things related to the city administrative system. People were not satisfied with the administrative planning process at the municipal level in terms of zoning, building regulations, and land use issue. For example, people were not satisfied with the modern high apartment and office buildings scattered in the middle of low residential building, replacing agricultural land with new constructions. They were also not happy with the imposed new construction happening in the old city and the different shape of canopies in the shops of the old city for aesthetic reasons. Another dissatisfaction relates to the location of the fruit market in the middle of the city centre without sufficient and adequate facilities for it.

Finally, on the social level, people were not happy with the local immigration from the old city, change in life style and loss of social values and tradition (See table 5.48).

Table 5.48 Historical events which are important in the city.

Aspect	Description	Frequency	Total
1) Political	1) Refugee camps 2) War 1948 3) Resignation of police staff 4) Resignation of the municipality council 5) The Intifada (uprising) 6) The Israeli occupation	4 1 1 4 2 1	13
2)Planning	1) Inappropriate location of fruit market 2) New high building construction 3) New construction in the old city 4) Replacing the green area with apartment building 5) Removal of the rail road transportation system 6) High density of new mixuse building 7) Replacing the agricultural land with housing projects 8) Canopies of shops of the old city 9) Neglect of the old city	1 5 1 4 1 3 1 1 3	20
1) Social	1) Local immigration of the old city 2) Changing of social values 3) Weakness of family ties 4) Women working 5) Change in life style	1 1 1 1 1	5
1) Architectura I	1) Neglect of court solution in new design 2) Replace stone with new materials 3) Closing of old Turkish bath in the old city	1 1 2	4
2) Natural	1) The earthquake in 1918 2) Disappearance of springs	1 2	3

Question 20:

Mention the three most important customs or traditions which characterise the city.

Piling results of responses to question No.20 show that the most important customs and traditions which characterise the city are mainly the religious rituals of the holy month of Ramadan (the way they celebrate the holy month of Islam with specific customs and traditions) .Customs such as wedding celebrations, visiting the dead , women’s visits to each other and many others were also mentioned (See table 5.49).

It has been observed that most of the customs and traditions do not need specific physical objects except for the traditional production of soaps and the social tradition of going to the public hammams (Turkish Baths). For this we have to really think of ways to regenerate these functions because reviving old businesses and industries could be one way of enhancing our cultural heritage and sustaining the historic part of our culture.

Table 5.49 The most important customs or traditions which characterise the city.

Custom	Frequency
Ramadan celebration	10
Feast rituals	8
Wedding celebration	4
Women’s monthly visit	2
Mawled Al-Nabawi	2
Visiting the dead	2
Death ritual	2
Soap production	2
Sweet production	1
Traditional meals	1
Strong family ties	1
Al-sheikh Nazmi	1
Going to the Hammam	1

Question 21:

Mention the three busiest places in Nablus. Give two reasons for each.

Piling results of responses to question No.21 show that this question has taken two dimensions. The term “busy” could reflect the idea of a place being very active and visited by many people; this is applied to the city centre as being busy and active for its commercial importance, or Rafidya area, which has been very active and full of people who come to it for recreation.

On the other hand, “busy” could take the meaning of being overcrowded in terms of high density of population such as Ras El-Ein and Khalit El-Aamood areas, or a large built up area and the very dense physical urban tissue such as the Old City. These two concepts are contradicting on the level of preference of people. While the first term is positive i.e. preferred by people, the second is negative i.e. avoided and disliked (See table 5.50).

Table 5.50 The busiest places in the city of Nablus.

Place	Frequency
The Old City	16
Ras El-ein	14
The city center	6
Khallit El-aamoud	5
Khan El-Tujjar (old suq)	4
Rafidya	3
Refugee camps	3
The east market	2
Al-Jabal El-Shimali	2
The central fruit market	2
The eastern area of the old city	2

Other reasons behind an area being busy were mostly either economical or commercial. Ras El-Ein area was considered by people to be busy because it is not expensive. On the other hand, the city centre is busy because it is the main commercial centre in the city.

Other positive reasons elicited from peoples' responses were that an area could have good services to offer, or be healthy, or beautiful (See table 5.51).

Table 5.51 Reasons for the place to be busy

Reason	Frequency
Not expensive area	16
Commercial importance	9
An extension to the old city	8
Building regulation	7
Has good services	4
Political reason	3
Activity focal point	2
Healthy	2
Social dimension	2
High rate of birth	2
Lack of empty space	1
Lack of commercial spaces	1
Size is very small	1
Mix use (commercial, housing)	1
New and beautiful	1

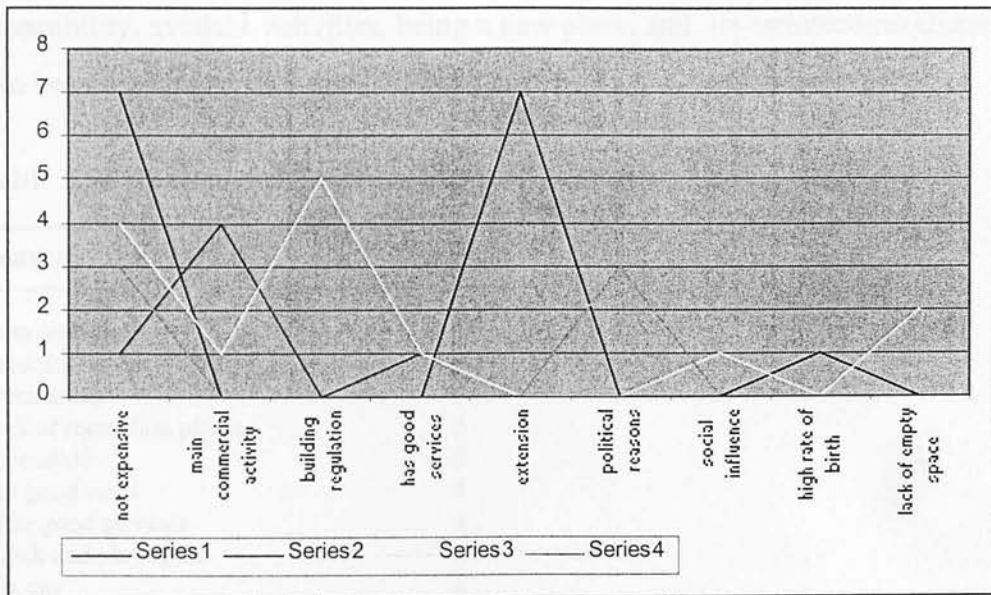
Table 5.52 shows that Ras El-Ein area was considered busy and crowded because it is not expensive, being an expansion of the old city which in itself is a busy crowded area. People also thought that the Old City is a busy area because it is not expensive, has good facilities and it has very strong commercial activity.

The city centre was considered busy for economical reasons and the physical character of its urban tissue. Finally, Khallet Al-Amood was considered busy because it is an informal settlement with no building regulations and it is not expensive. See also figure 5.19

Table 5.52 Reasons for the four busiest places in the city of Nablus.

Reasons	Place 1	Place 2	Place 3	Place 4
	Ras El-Ein	City Centre	Old City	Khallet El-Amood
Not expensive	7	1	4	3
Main commercial activity	0		1	0
Building regulation	0	0	5	0
Has good services	0	1	1	0
Extension	7	0	0	0
Political reasons	0	0	0	3
Social influence	0	0	1	0
High birth rate	1	0	0	0
Lack of empty space	0	0	2	0
Total	15	6	14	6

Figure 5.19 Graphic distribution of the reasons for the four busiest places in the city of Nablus.



Question 22:

Mention three places you like to go for recreation. Give two reasons for each.

Piling results of responses to question 22 show that places which are positively evaluated by the people to be places for recreation are mainly the public parks, Wadi Al-Badan and Rafidya. Other places such as Jerzim Mountain, Al-Qasir Building, the Library, the restaurants have also been mentioned (See table 5.53).

Table 5.53 Places that people go for recreation.

Place	Frequency
Parks	10
Wadi Al-badan	8
Rafidya	7
Jerzim Mountain	5
Al-Qasir	3
Walking in the streets	3
Restaurants	2
Library	2
City center	1
Cafes	1
Cinema	1
Sport playground	1
Streets	1
Countryside	1

Reasons for a place to be chosen as good for recreational purposes are its aesthetic quality, its openness and greenery, or because it is quiet and calm. Other reasons such as accessibility, available activities, being a new place, and its architectural character have also been mentioned (See table 5.54).

Table 5.54 Reasons for the place being recreational.

Reason	Frequency
Calm and quiet	11
Beautiful nature	9
Green areas	8
Lack of recreation places	5
Accessible	5
Has good view	4
Offer good services	4
Watch and play sport	2
Mix use	2
Social atmosphere	2
Modern character	1
Safe for the children	1
Reading	1
Archaeological significance	1
Architectural character	1
New place	1
Active	1
Healthy	1

Table 5.55 shows that people like to go to the Rafidya area because it is a mixed use area with a lot of facilities, making it very active and lively all day especially at night. Architectural character is a considerable issue which enhances the quality of the place.

People like to go for recreational purposes to Wadi El-Badan because it is green and accessible. The lack of recreational places available for the citizen was mentioned many times and mainly with reference to this place.

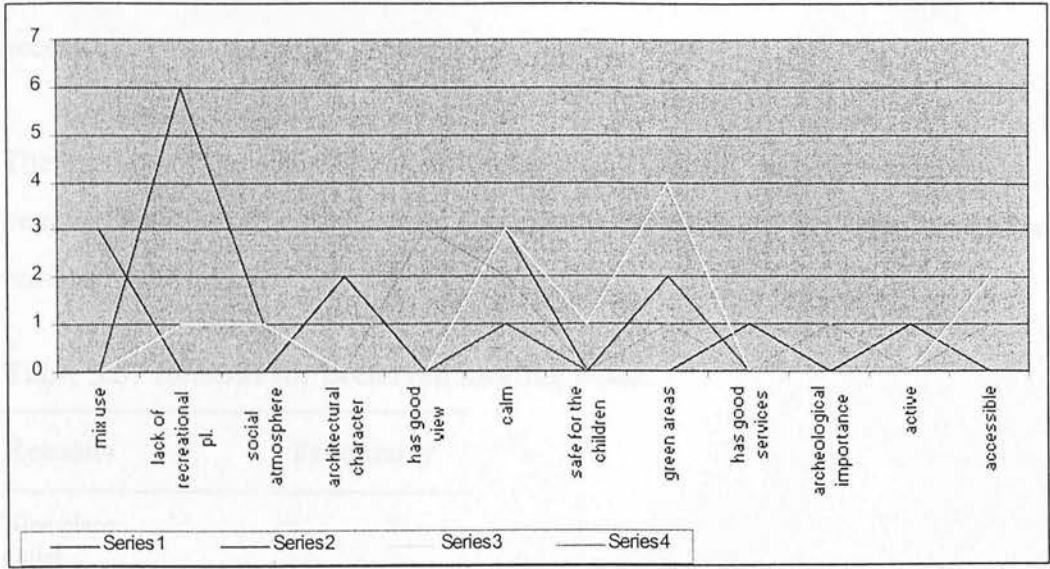
The parks were also one of the peoples options as a place for recreational purposes. These places could offer a social atmosphere, calmness, a green area and safety.

People also mentioned Jerzim Mountain as a place for recreation because of the good view it offers (a whole panoramic view of the city and the areas around it). It also has an archaeological site and a green area (See table 5.55).

Table 5.55 Reasons for the four most important places people like to go for recreation.

<i>Reasons</i>	<i>Place 1</i> Rafedya	<i>Place 2</i> Wadi al-Badan	<i>Place 3</i> The Parks	<i>Place 4</i> Jerziru Mountain
Mix use	3	0	0	0
Lack of recreational pl.	0	6	1	0
Social atmosphere	0	1	1	0
Architectural character	2	0	0	0
Has good view	0	0	0	3
Calm	3	1	3	2
Safe for the children	0	0	1	0
Green areas	0	2	4	1
Has good services	1	0	0	0
Archeological importance	0	0	0	1
Active	1	0	0	0
Accessible	0	2	2	1
Total	10	12	12	8

Figure 5.20 Graphic distribution of reasons for the first four places to be chosen by people for recreation.



Question 23:

Mention three places you prefer to meet your friends in. Give two reasons for each.

Piling results of respondents' answers to question 23 show that there are not in fact many places to meet friends. The library, the parks, and restaurants are the main preferred places, while others mentioned streets, cultural clubs, their own houses and the nearby mosque (See table 5.56).

Table 5.56 Places you prefer to meet friends.

Place	frequency
Parks	9
Library	8
Restaurants and cafes	6
The University	5
Home	4
Working place	2
The city centre	2
Wadi El-Badan	2
Streets	2
Cultural club	1
Mosque	1

Reasons for anywhere to be good place for meeting friends are mainly factors relating to the quality and character of the place. Qualities of quietness, accessibility and aesthetics should be considered.

The location of the place as well as the facilities it offered were also mentioned by people. Qualities of privacy, social atmosphere and good services were among the reasons (See table 5.57).

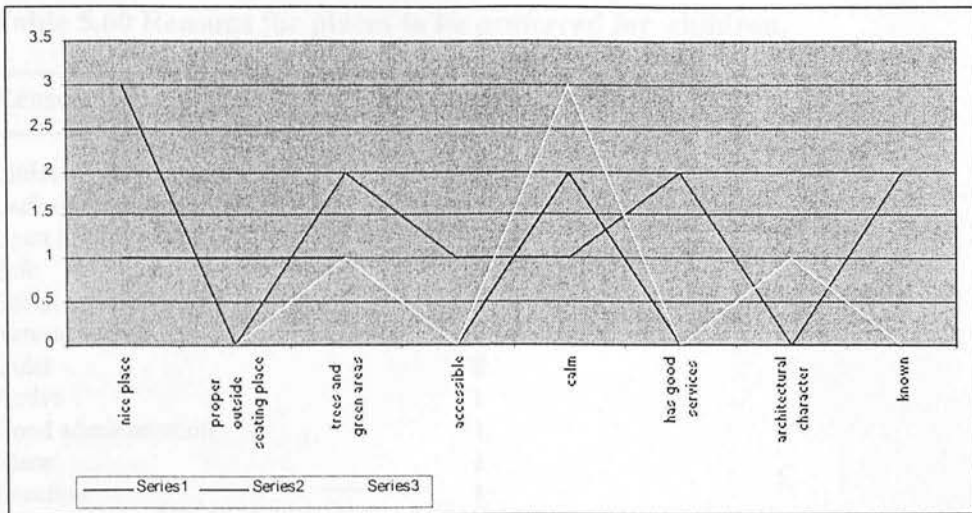
Table 5.57 Reasons for preferred meeting place.

Reasons	Frequency
Nice place	8
Quiet	7
Trees and green areas	6
Accessible	4
Known	3
Location	2
Have good services	2
Architectural character	2
Social customs	1
More private	1
Seating area	1
Has a good view	1

Table 5.58 Reasons for the first three places people liked to take friends to.

<i>Reasons</i>	<i>Place 1</i>	<i>Place 2</i>	<i>place 3</i>
	<i>The library</i>	<i>Rest. & cafés</i>	<i>The Parks</i>
Nice place	1	3	0
Proper outside seating place	1	0	0
Trees and green areas	1	2	1
Accessible	0	1	0
Calm	2	1	3
Has good services	0	2	0
Architectural character	0	0	1
Known	0	2	0
Total	5	10	5

Figure 5.21 Graphic distribution of reasons for the first three places chosen by people as places they take friends to.



Question 24:

Mention three places you like to take your children to play. Give two reasons for each.

Piling results to respondents' replies to question 24 shows that there were not many places in the city suitable for children's recreation, and people do not have many choices in this matter. These places are mainly public parks and gardens or places where there are amusement arcades with game machines. See table 5.59

Table 5.59 Preferred places for children recreation

Place	Frequency
Parks	21
Electrical games places	7
Countryside	2
Library	1
Clubs	1
Playground	1
Wadi El-Badan	1

Reasons for a place to be good for children are its being safe, healthy or having an amusement arcade. See table 5.60

Table 5.60 Reasons for places to be preferred for children.

Reason	Frequency
Children playing games	19
Lack of recreational places	6
Open healthy place	6
Safe	5
Social atmosphere	3
Natural setting	2
Quiet	2
Active	1
Good administration	1
Clean	1
Location	1
Parking places	1

People stressed many times the need to have more places to take children, this point should be considered in the future development of the city.

People also mentioned other reasons such as the location of the place being accessible by public transportation, although provision of parking places will be an advantage.

Question 25:

Mention three places you would like to do your shopping. Give two reasons for each.

Question 25 shows that people like to shop in the following areas: the city centre, the suq in the old city and Rafidya. Other preferred areas are the eastern market, local supermarket, and small grocery shops located near their residence (See table 5.61).

Table 5.61 Places preferred by people to do their shopping

Place	Frequency
City centre	19
The old Suq	17
Rafidya	8
The Eastern market	5
Local supermarkets	1
Small grocery community shop	2

Reasons behind any place being good for shopping were mainly availability of things, economic factors, easy transportation and nearby location. Other reasons were mentioned such as safety, beauty, easy circulation, quality, and open at night (See table 5.62).

Table 5.62 Reasons for a place to be preferred by the people to do shopping.

Reason	Frequency
You can find everything in it	28
Not expensive	10
Easy transportation	9
Near	6
Traditional atmosphere	4
Not dense	3
Comfortable for shopping	3
Good quality	2
Protected	2
Parking places	2
Beautiful	2
Open at night	1
Safe	1
Easy circulation	1

People in general do care about their shopping place, whether it is being close, shaded, beautiful, and comfortable, is more important than the goods on offer whether they are a good quality, or expensive or not. You can tell that the former qualities are existed in the old traditional suq, so maybe we should consider the adaptation of its typology in our design for shopping centres in the future.

5.6 SUMMARY OF FINDINGS: (Part Two)

The previous analysis of piling results underline different findings. This will all come under the evaluation of the old settings versus the modern ones. The findings in general come from people's experience of their own city. Here is a short summary of the findings:

- 1- The city of Nablus is highly identified by its historical core.
- 2- Geographical setting is a very decisive factor in the physical image of the city.
- 3- The image of the city of Nablus depends mainly on historical, archaeological and architectural factors.
- 4- The old city is strongly identified by its architectural elements, the physical qualities of experiencing these elements, the specific use in the old city and the social life embedded in it.
- 5- Past memories of citizens of Nablus are either nostalgic when it comes to the social atmosphere, or negative when it comes to political history. They felt frustration with foreign occupation.
- 6- Citizens involvement could be useful in enhancing the quality of the built environment.
- 7- There is a dilemma between history and practicality of people's evaluation of the built environment.
- 8- The city of Nablus is known for its architectural, historical and archaeological importance.
- 9- The image of the city of Nablus is highly identified by its old historic cultural heritage.
- 10- We should consider people's needs and desires, and try to listen to them in planning for the future. Because people are keen on their cultural heritage, they care about their children's entertainment and the physical shape of the new developments.
- 11- Adaptation, transformation and regeneration of our old urban built environment should be taken into consideration.
- 12- People react to environments globally and effectively before they analyse them and evaluate them in more specific terms.

CHAPTER SIX

INTERPRETATION OF PILING RESULTS Categories and Dimensions

There are approximately 2000 separate dimensions which contribute to an individual's self-concept, including the individual's interpretation of the self. The self-concept is not very meaningful and therefore a method of self-concept organization is needed.

As its simplest the frequency of any particular self-concept dimension is measured. Two major self-concept dimensions are *self-esteem* and *self-worth* (see E. Whitworth, 1997) and it is these two dimensions which are most often looked at here. The self-concept of specific dimensions is divided into two regions into three categories: *high self-esteem*, *low self-esteem*, and *self-worth*. The self-concept of the self-esteem is divided into three categories: *high self-esteem*, *low self-esteem*, and *self-worth*. The self-concept of the self-worth is divided into three categories: *high self-worth*, *low self-worth*, and *self-worth*. The self-concept of the self-worth is divided into three categories: *high self-worth*, *low self-worth*, and *self-worth*.

The aim is to describe the self-concept of the individual and what the researcher feels as a result of the self-concept. The self-concept is divided into three categories: *high self-esteem*, *low self-esteem*, and *self-worth*. The self-concept of the self-esteem is divided into three categories: *high self-esteem*, *low self-esteem*, and *self-worth*. The self-concept of the self-worth is divided into three categories: *high self-worth*, *low self-worth*, and *self-worth*. The self-concept of the self-worth is divided into three categories: *high self-worth*, *low self-worth*, and *self-worth*.

As mentioned before, there were several self-concept dimensions which were operationalized. These dimensions are listed in Table 6.1. The frequency of each dimension was calculated.

**CHAPTER SIX: INTERPRETATION OF PILING RESULTS:
Categories and Dimensions**

6.0 Introduction:

There are approximately 2600 separate responses which provide the information relating to the residences' interpretation of the city. The information in this form is not very manageable and therefore a method of abstraction or classification is required.

At its simplest the frequency of any one response turning up could be a gauge of its importance. Two ways of classification have been utilised based on the Ujam Model (see F. Witworth, 1992) one of which has been called ' dimensions', which will be looked at later. The other set of classification is called 'categories', which divides the responses into three categories: objects, adjectives or aspects, and activities. These divisions relate to the meanings of the words, as seen by the respondents. The three categories simplistically cover the whole environment of stimuli, interpretations and reactions.

The stimulus is the object, i.e. a building, a street or an area. The interpretation is what the observer feels on encountering the object, and this is expressed using an adjective such as calm, ugly, clean, deserted acknowledging the object's beauty or ugliness. Finally the observer will react to his interpretation of the stimulus; this is the activity. He will walk away, stop and stare, sit down or go buy something. In this way all aspects of our environment are included. The inter-relationship between different elements of categories gives an overall deep understanding of people's structure of interpretation of the built environment.

As mentioned before, there were around 2600 separate responses resulting from the open-ended questionnaire. These responses have been classified into three categories, (see Table 6.1) For the sake of facilitating the analysis, all responses which have frequency of two or one were eliminated.

Table 6.1 Piling results classified into categories of objects, aspects, and activities.

Objects	Freq.	Adjectives	Freq.	Activities	Freq.
Old city	77	Beautiful	215	Viewing	52
University	74	Social	136	Religious activities	34
City centre	68	Traditional	107	Study	30
Parks	66	Calm	95	Social interaction	30
Rafedya	63	Old	85	Shopping	26
Old Mosque	59	Healthy	74	Entertain	22
Mountains	51	Crowded	64	Play	11
Old Suq	42	Variety	64	Meet people	10
East Area	29	Accessible	64	Eating	7
King Faisal St.	28	Active	62	Relaxing	6
Al-Makhfeya	24	Distinguished	60	Visit friends	6
Ras El-Ein Area	24	Safe	54	Watching	4
Al-Qasir Bld.	24	Economic	53	Live	3
Municipality	22	Traffic	50		
Old Palaces	21	Good	47		
Al-Jabal El-Shimali	20	Durable	45		
Turkish Baths	19	Modern	45		
Al-Haddadin St.	18	Recreation	44		
Soap Factories	16	Comfortable	44		
Al-Anabtawi Bld.	14	Convenience	40		
Library	12	Pollution	39		
Amman St.	11	Tourist	32		
Wadi Al-Badan	10	Destruction	31		
Refugee camps	9	Misfit	31		
Playground	9	Clean	29		
Al-Manara	8	Human	28		
Roman Ruins	8	Random	25		
Country side	7	Available	23		
Restaurants	6	Centralised	22		
Cafes	6	Privacy	20		
Domes and vaults	6	Legible	18		
Maqamat	5	Original	17		
Sweet shops	4	Known	16		
Court houses	4	Parking places	13		
The Valleys	4	Local	13		
Woods	3	Practical	8		
Hospitals	3	Transition	6		
Springs	3	Functional	4		
Clubs	3	Open	4		
		Pleasing	4		
		Narrow	3		
		Homogeneous	3		
		Close	3		
		Unity	3		
TOTAL	762		1743		241

6.1 Objects:

Objects are the physical elements of the environment, and not solely the built features. This is a list of the real aspects of an environment, and hence they are the primary stimulants to all emotion and to all activities. These range in scale from single object to architectural building to an area. The physical attributes could have the greatest likelihood of linking to the other components of a place in question; those which will facilitate the identification of places. In houses, these attributes are likely to be those which lead to a distinction between rooms, whereas in the cities they help to identify areas such as an important building or a street or a feature.

The following are some of the two most important objects which were confirmed by respondents:

6.1.1 Old Mosques:

In general the definition of a mosque could be a building erected over an invisible axis, an axis which is nonetheless the principal determinant of its design. This axis heads towards the city of Mecca with Kabba in its centre. Mosques are used for daily prayer of the community and for the weekly service on Friday. Normally the mosques in the city of Nablus are places used mostly by men where they go to worship, as part of the culture which does not encourage women to go.

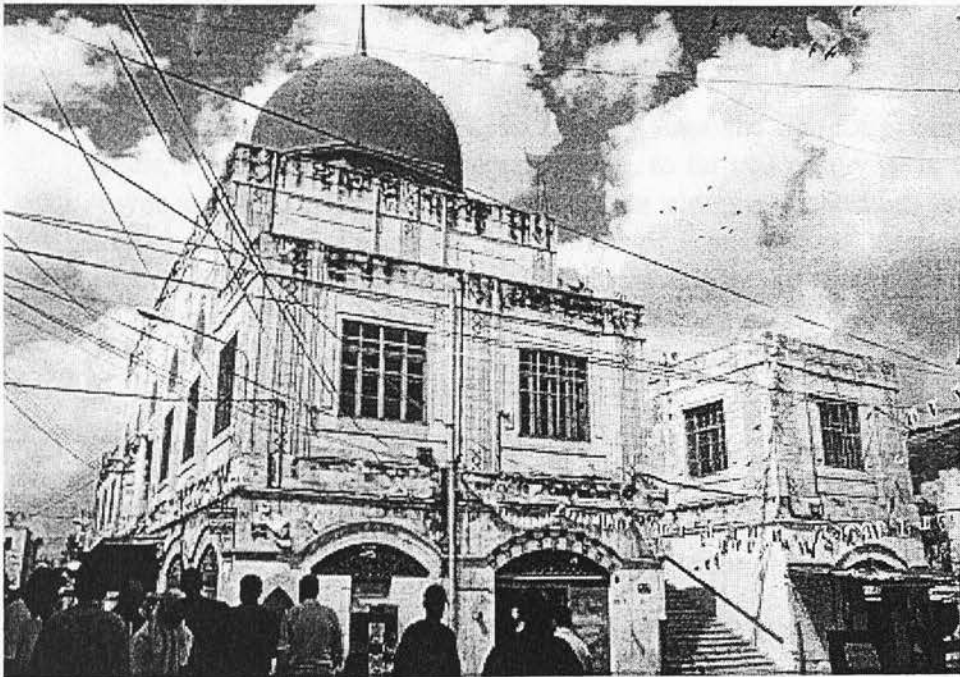
In the old city of Nablus the mosques are not only considered for their religious importance as being a place for praying, but also for other significances. Mosques could serve as a social node, a place where people of the same neighbourhood meet and interact. It could be cultural place where residents of the area meet and exchange ideas and experiences. Mosques, with their physical vertical minarets, could enrich the visual quality of the city through breaking the monotony of the urban skyline. They can also serve as landmarks by which people could identify an area.

The most two important mosques in the old city are Al-Jami Al-Kabir and Jami An-Nasir; both exist in the heart of the old city. The first one lies on the intersection of the two major spines of the old city that run east west. The main entrance of the

mosque is at the corner with its highly elaborated decorated stone facade. You can hardly see the interior of the mosque from the outside but most mosques have open courtyards, which allow entry to more worshippers if there is no space left inside during prayer time.

The other mosque (An-Nasir Mosque) is located at the intersection of the two old Bazaars. The open plaza in front of the mosque (of quite reasonable size) allows an adequate visual sense of approach to the mosque. The mosque is elevated one floor above the ground level allowing for more space to be used for commerce. The big blue dome of this mosque is a very dominant feature, not only in the old city but also for the whole city.

Fig. 6.1 Photo of An-Nasir Mosque.



People of the city of Nablus considered the mosque as one of the important architectural elements in the city for many reasons, but most important is its religious importance. Then come other considerations, such as being one of the elements that gives identity to the city, and its historical significance as reflecting the very rooted

culture. Finally its architectural character plays an important role in enhancing the qualities of the physical character of the city.

6.1.2 Old Suq (Bazaar) :

Bazaars in the Arabic-Islamic world used to play a very important role in urban life. George Mitchell says that “Bazaar and mosque grew together, the twin poles of Islamic urban life, separate but in harmony”. The Bazaar is called the cloth Bazaar, Suq Al-Qumash. It was built by Sultan Qalawoon in about 1290, with four religious schools above it (Nimir, 1975) . Evliya Tshelib, in 1640, described this Bazaar:

The Sultan Bazaar with some built gates at each end (closed daily at nightfall) measures twelve hundred paces between them and consists of three hundred and seventy shops on each side, all well arranged (Celebi, 1938, p.139) .

John Mills, in 1864, also wrote:

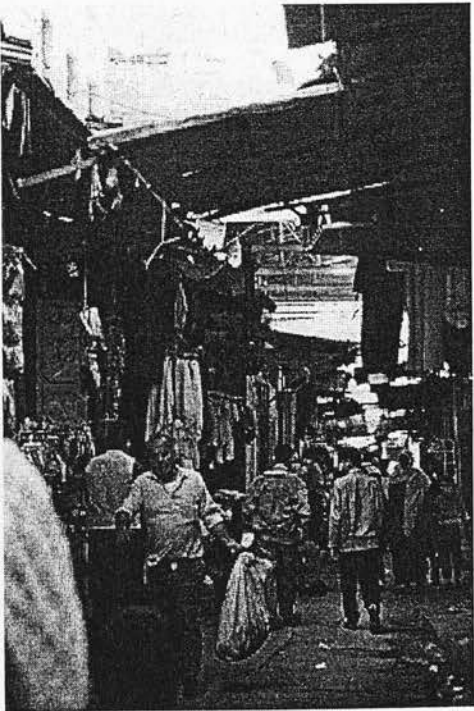
The principal bazaar is arched, and is very large and fine for Nablus. It is the finest, by far, in Palestine, and equals any, so far as I observed, in the largest towns of the Turkish Empire. This is the clothing emporium, and is well furnished with the bright silk productions of Damascus and Alepo- the Abas of Bagdad- calicos and prints from Manchester, in varieties too numerous to be named- as well as the productions of the town itself (Mills, 1864,pp. 88-89).

The Old Suq in the city of Nablus is the main commercial spine in the old city that runs east west for about 500 m. Its location, being in the heart of the old city and very close to the new city centre, makes it one of the important places in Nablus. The suq is not only known for its vitality as being very near and accessible to the residents of the city, but also as a safe place for shopping, as cars are prohibited to enter. The suq is based on a linear organisation with a width of 12m approximately, with small shops on both sides. The bazaar is covered with cross vaults along it decorated with stained glass, giving a natural light ceiling. Shops of nearly the same size are on both sides selling different goods and products. In the old days the Bazaar used to specialise in certain goods, but nowadays you can see different varieties of goods in it.

Although the physical structure of the market is plain and nearly barren, as a place the market is full of colour, supplied by the people who shop there and the produce they bring to sell. Pyramids of red tomatoes, bunches of yellow bananas, sacks of brown potatoes, and trays of fruits of many different shapes and hues transform the stark setting into a stage full of people shouting, pushing, selling, and buying.

The Bazaar was mentioned by the people of Nablus as a place full of activity and liveliness and one of the favourite places for people to do their shopping. Reasons for appreciation of the Old Suq by people emerged many times in their responses in the questionnaire, among them its functional importance as being one of the major shopping places in the city. Many qualities been mentioned of the place such as convenience with reference to its location, availability and variety of products, and economic factors because of the reasonable prices of products. People also considered the safety factor in the old suq, as it is covered and used by pedestrians only.

Fig 6.2 Photos of the Old Suq



6.1.3 Baths (Hammams):

Baths were one of the main aspects of social life in the city of Nablus in the old days. Both men and women used to go to the baths not only to bathe but also to socialise and entertain.

(Qameheyeh, 1992) described the baths:

The public steam baths are of Roman and Byzantine origin. Usually, Al-Hammamat were used during the morning by men and in the afternoon by women. They had to serve different purposes: hygienic, social recreational, and indirectly religious. The bath- house being a hygienic institution, provides thorough cleaning of not only the exterior of the body but the whole organism as well. It is also a centre for recreation, relaxation and where massage is available after taking the bath.

As a social institution, the baths served to strengthen the social interactions, bonds and the relations among the quarter's people. Moreover they were used for special social occasions, such as weddings and educational celebrations, graduation ceremonies for schools, Kuttab, and celebrating the completion of memorising the Qur'an.

There were eight public baths in the city of Nablus distributed in different places each serving the residents of the community. The design of the bath depends on keeping an adequate level of transition between the spaces which allows for maintaining the temperature of the main bathing hall. Lighting was provided to the building through the beautiful coloured glass blended into the design of the domes or vaults that roof the space.

Some of the baths in the city of Nablus have collapsed, others have been deserted and degraded, while the rest have been transformed into another use, but recently two of these baths have been restored again and reopened to the public.

6.1.4 Palaces:

Palaces are large residences in the Old City which used to be owned by persons who were ruling the city at certain times, so palaces were an expression of power and a reflection of social class in the past.

There are four palaces in the old city of Nablus; each is owned by a different family and situated in a different quarter. The design of these palaces comprises multi level courtyards each with its different function. The main entrance of the palace is always known by its elaborate stone arch door that leads to the court on the same level. From this court you can go to other different courtyards situated at various levels of the palaces. Usually most palaces have three to four storeys. Privacy is one of the main issues to be considered in the design by allowing women their own space formed around an open courtyard to be separated from public guest zones which also have their own courtyard. In each court there are trees to provide a shaded area to sit and a fountain to reduce the strong heat of the summer. Walls were of sandstone, openings were arched and the roofing systems were domes and cross vaults.

These days their owners leave the building closed or occupied by different families who divided the palaces into more than one residence. This has affected the status of the building as an historical monument might be qualified for being preserved in its own original condition.

Mills described the palaces in 1864:

The palaces of the noble families of Nablus are fortresses with iron gates. It was said that the largest building, Toqan (Al-Bayk) Palace, could accommodate 1000 soldiers.

In early 1860, the new palace of the governor, planned by Mahmod Abd Al-hadi himself, was described as:

The handsomest house in the city, which is worthy of notice as a good example of modern oriental architecture uninfluenced by European taste. This

house was erected in the year 1855 by Mahmud Bayk Abd Al-Hadi, of Arrabah, who was the governor of Nablus. Its spacious court, surrounded by arched corridors and a lofty reception room, is relieved by arabesque borders of good design in two shades of blue, some being painted in fresco, others simply stencilled.

6.1.5 City Center:

City centers, or down town or central business district (CBD), all mean the same and refer to the high concentration of use, activities and buildings. The city center is the heart of any city; there you can find anything you want from commercial services to institutional services, and cultural recreational facilities. Because the city centre has a good location and transportation, it is always overcrowded with people and polluted from the heavy traffic that passes through it.

The city center of Nablus with all the qualities mentioned above is a place that has a strong role in people's image of the city. The location of the city center, being easy to reach either by walking or by public transport, is one of the major reasons that makes it very active and crowded with the people who are using it for shopping and commercial purposes.

Fig 6.3 Photo of the City Center.



The main commercial city centre lies where there are most of the administrative, institutional and big office buildings. The centre is always busy and has many traffic problems. This is natural because most transportation lines have to pass through it. Recently the municipality has decided to move one of the public transportation stations to a place a little further from the city centre. The centre has no consistent architectural character; buildings of different heights, use, materials, or style can be seen there. There are some important buildings such as the municipality, the post office, the health centres, the cinema, and the important banks and big office buildings. You can also see the vendors of fruits and vegetables in the streets.

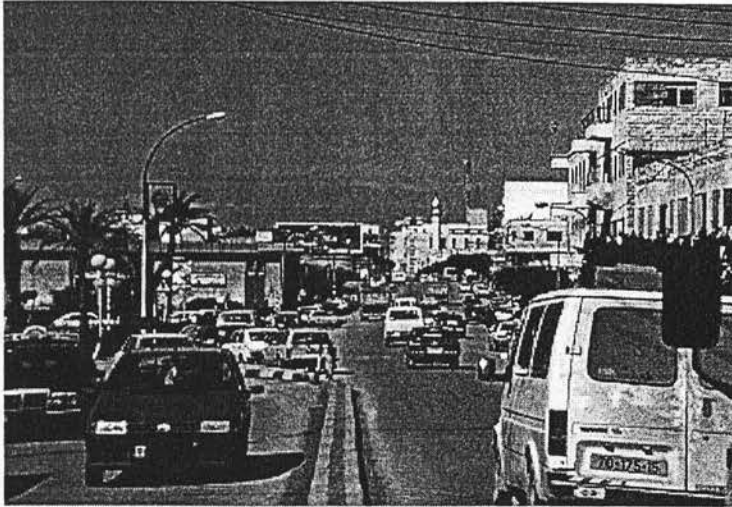
6.1.6 King Faisal Street:

King Faisal Street is the major street that runs along the city with a linear expansion that follows the natural expansion of the city itself. The street itself is the widest street in the city that starts at the eastern end of the city and ends at the city centre. Along it are many important buildings of different significance that are considered as landmarks in the city. At the eastern end of the street are the transport department and the local government. The two mosques located at different places in the street enhance the visual quality of the street with their elegant vertical minarets and beautiful stone front facades. Walking along the street, you can observe the old city climbing slowly to the south following the topography of Jerzim Mountain. At the West End of the street are the municipality, the post office and the tax building. The street used to have trees along the road especially in the western parts when it approaches the city centre. But nowadays with lack of care, these trees have gradually disappeared.

The street is very wide, and very difficult to cross from one side to the other. Being the main road that crosses the city from west to east makes it full of traffic all day and sometimes there is traffic congestion at peak times. Because of the very condensed circulation of cars, the street is known for being unhealthy and polluted.

Different commercial uses are found in the street; most of these are in the ground floors of the buildings while the other floors are kept for residential and office use.

Fig 6.4 King Faisal Street.



The commercial strip varies from small grocery shops, mini markets, and auto repair outlets to metal craft shops which bring pollution to the area. This area is called “Suq El-Haddadin”. People have different feelings about the street itself, some of them have a negative evaluation of the street for health and safety reasons. Others positively evaluated it for its size and functional importance.

6.1.7 Rafidya Street:

Rafidya is the name of an area, which used to be a residential quarter with a few shops scattered here and there along its length. In the last ten years this area has been exposed to a dramatic change especially after the municipality decided to transfer Rafidya Street, the main street in this area, into commercial use.

Rafidya is a very active area especially at night. The street becomes a theatrical place for people who are walking along buying sandwiches or an ice cream and chatting with each other.

Today you can see a lot of new shops and office buildings that have been constructed along the strip, which disturb the calmness of the residential quarter. The University campus of An-Najah, and the Insurance Building are the two important buildings in this area. Both of them are new but different in character.

People of the city of Nablus expressed a very positive evaluation of the street. Aspects of activity and liveliness were the main dominant ones in people's image of the street. It is one of the most convenient alternative solutions for shoppers if they do not want to tackle the problem of finding a parking place in the city centre.

6.1.8 Al-Jabal Elshimali Area:

Mount Ebal is another area in Nablus called Al-Jabal Eshamali. The area is known for its residential character with single separate houses climbing the slope of the mountain facing the other mountain. Houses constructed in this area following the slope of the mountain make it a very unique architectural setting. Because the mountain is facing south, it has been preferred by the people of Nablus because of the sun and the north west wind .

Fig 6.5 Al-Jabal Elshimali.



The main character of this area comes from its stone houses ranging from three to four stories climbing the slope, broken by a few apartment buildings of six to eight stories. The view of the old city is one of the key elements for this area to be preferred by the residents with its magnificent skyline of domes and the minarets of the mosques, and the planted courts of the houses in the old city. This area is comparatively calm preserving its residential atmosphere.

6.2 Aspects:

Aspects are among factors that reflect the qualities through people's ideas about their own environment. Aspects consist of the properties perceived in the activities or objects. It is a description, not so much of the real object, but of the observer's image or evaluation of the objects. Although the aspects here are all relevant to different items, by being considered independently of their target, the prevalent feelings or emotions of the whole city could be realised.

6.2.1 Historical:

The search for identity, for a sense of where we belong in a changing world, appears today to be both a personal and a general quest. It is reflected, at least in the west, in an intense and apparently growing interest in the past, not only of the world at large but also of a particular community in which we happen to live. The reasons may go far beyond any purely intellectual quest to a yearning for stability through a sense of belonging and a knowledge of where we have come from (Biddle, 1978).

The sense of belonging, the need to identify with a particular place, is a fundamental aspect of the quality of life, whether one is the inhabitant of a simple village or a citizen of an urban metropolis. It is indeed the inability to belong, the failure to identify the character of a place and to recognise it as specifically and essentially one's own, that give rise to rootlessness and to host of personal worries and social unrest which this inspires (Biddle, 1987).

History or age was attributed most frequently to the objects within the old City of Nablus. It is obvious when walking in the street of the old city that certain aspects of history are not ignored. In every situation where age or historic qualities were mentioned, it was attributed as a positive value. It is believed by the people that a history provides identity, whether it is for a place or a person. It appears here to be a very major aspect of the city of Nablus in general and the old historic town in particular. Historic values are frequently seen as aesthetic values, but carry many more meanings than those relevant to just pure looks.

The historic aspect of the city is a very strong one. This emerges from the accumulative layering of history in the area. The archaeological site of old Shkeme in Balata at the eastern gate of the city to the Roman site spreads in different areas in the city to the Byzantine building in the old city. All this could not be ignored in people's identification of their city as a dimension of self-identity.

6.2.2 Active:

A city is defined by its outdoor spaces and what happens in them. The place is considered as active according to the variety or diversity of the activity that occurs in the street. Street life could develop from basic activities, such as shopping, but the particular language, noise level, dress, speed, and density define the special character of each neighbourhood. Bacon, (1981) describes the street life in New York saying:

Shopping on Saturday afternoon on New York's elegant Madison Avenue is an exhibition of stylish consumption, a display of people clothed like mankind in the boutique window, strolling leisurely down the street, flowing smoothly in and out of the art galleries and the shopping on Sunday on New York's lower East Side is a noisy and intense body-to-body mixture of Spanish bargain hunters and Jewish merchants.

In the city of Nablus the quality of being active is a very important component in people's evaluation of the place. This is why the Old Suq and Rafidya Street have been judged positively by the people. The noise coming from the shopkeepers

promoting and attracting the people's attention to their own goods, the variety of smells and richness of colours all attribute to the activity of the place.

There is a promenade of some sort in every city of the world. Paris has one of the most famous – the walk along the bookstalls that line the banks of the Seine. On Barcelona's Ramblas, where stalls selling birds, flowers and newspapers line Europe's most vibrant pedestrian street, there is a 24-hour turnover of strollers.

In Nablus the street of Rafidya is the promenade of the city. As the day progresses the street is characterised by the women going to market (it is one of the rare places in the city considered sufficiently conservative where woman can shop). After lunch the street starts to become busier with the university students there going to eat in the restaurants. At night it becomes extremely busy and colourful with people walking in the street and cars driving along.

6.2.3 Legible:

Legibility is a characteristic of an environment that looks as if one could explore extensively without getting lost (Kaplan and Kaplan, 1982.).

Like mystery, legibility entails a promise, a prediction, but in this case not of the opportunity to learn, but to function. It deals with structuring of space, with its differentiation, with its readability.

A highly legible scene is one that is easy to oversee and to form a cognitive map of. Hence legibility is greater when there is a considerable apparent depth and well-defined space that can serve as a landmark.

Historic towns in general are very legible and easy to read; this is because their spatial organisation has come out of the specific needs of society. With their strong schemata one could really identify himself and understand the physical environment that he is subjected to.

Landmarks such as the old mosques and the palaces could really contribute to the legibility of the city. Legibility is not just a quality of an urban space, but also a quality of architectural objects such as buildings. People in the city of Nablus could identify themselves better with the court houses of the old town. This also applies to building types, which are familiar to people like mosques. People sometimes get irritated when they do not know what the components of a building are. The people negatively evaluated many buildings in the city of Nablus especially the new ones because they lack a certain amount of legibility.

6.2.4 Convenience:

Convenience or functional efficiency has been a determining factor in evaluating the places. Places will be valued for the features that contribute to the success of the activity being pursued: the sunny nook, protected from the wind and crowds. Heath, 1988 called it the instrumental objective, (instrumental values of convenience, comfort, and absence of distraction will dominate).

Convenience could be many things; it could be a sufficient amount of wind, sun and ventilation that enter a building for example. It could be a quality of a place that makes it convenient to use such as aspects of accessibility and easy circulation, or it could be a safety factor, making it safe and consequently convenient to use.

People of the city of Nablus were not sure if the historic buildings in the old city were still functioning efficiently with today's standards. Today there is more demand for environmental comfort such as adequate heating. The high ceiling of the old building has an economic impact on the persons who inhabit it. For economical reasons it costs more to heat a room in an old house with a high ceiling around 5 metres than to heat a room in a modern house where the height does not exceed 3 metres.

6.3 Activities:

The final category in which the responses fell labelled as 'activity', is the responses of the observer to the object and his subjective reaction. The appearance of a place is only part of the identity. As the physical image develops as a result of the environment, so do the activities.

Human activities, with their specific demands on the man-made environment make our cities function and provide enjoyment. If they do so, this constitutes, in itself, a highly valued quality.

Such activities include the day to day life of the community: buying food, getting to work, and the non-essential activities such as sport and leisure, etc. Some of these will become ritualistic, such as going to the mosque on Friday.

Gehl (1987) divided outdoor activities in public spaces into three categories, each of which make very different demands on the physical environment: necessary activities, optional activities, and social activities.

Necessary activities include those that are more or less compulsory – going to school or to work, shopping, waiting for a bus or a person, distributing mail- in other words, all activities in which those involved are to a greater or lesser degree required to participate. In general, everyday tasks and pastimes belong to this group. Among other activities this group includes the great majority of those related to walking. These activities will take place throughout the year, under nearly all conditions, and more or less independent of the exterior environment.

Optional activities are those pursuits that are participated in if there is a wish to do so and if time and place make it possible. These categories include such activities as taking a walk to get a breath of fresh air or standing around enjoying life. These activities take place only when exterior conditions are optional, when weather and place invite them.

Social activities are all activities that depend on the presence of others in public spaces. Social activities could also be termed “resultant” activities, because in nearly all instances they evolve from activities linked to other activities because people are in the same space, meet, pass by one another, or are merely within view.

Activities and activity systems are an even more specific aspect of life-style which may offer a most useful entry point into relating culture and environment via human behaviour (Rapoport 1977). Starting with activities, it should be possible to work through the sequence and to identify more easily differences in life-style, values, images, world views and, eventually, culture as they relate to the built environment. Activity systems in space and time have been much used by planners and environmental designers and because they can easily be related to behaviour setting systems (Rapoport 1977) .

Activities however, have been overly generalised, i.e., cultural differences have been neglected and also only their manifest aspects have been considered. Yet activities, even at the level of so-called basic needs, seem extremely variable (Rapoport,1969). This variability increases as one moves away from the manifest aspects to what have been called their latent aspects (Zeisel, 1969). This variability means that one must deal with specifics, so that, for example, while sitting is a universal activity, whether one sits on the floor or on chairs has major implications for behaviour, manners, dress, furniture design, and room furnishings.

Thus, through considering differences among apparently simple molecular activities such as cooking, eating, playing, sleeping, shopping or even sheltering, we can eventually obtain more molar concepts such as life-style, images, values, and eventually, world views and subcultures as they relate to the built environment.

The following schema may be suggested. Any activity can be analysed into four components (Rapoport, 1977):

- 1- The activity proper.
- 2- The specific way of doing it and where it is done.

- 3- Additional, adjacent or associated activities which become part of the activity system.
- 4- Symbolic aspects and meaning of the activity.

Consider cooking, for example. The activity is one of converting raw food- a human activity so basic that it is often used to distinguish between the basic domains of culture and nature(e.g., Lévi Strauss, 1970) . The specific way of cooking may involve frying roasting, baking, or whatever; the use of special kinds of utensils or ovens; the use of special settings; standing, squatting, and so on. Associated activities may include socialising, exchanging information, listening to music, or whatever. The symbolic meaning of cooking may also be a ritual, a way of acquiring status.

Consider shopping. This is basically the exchange of money (or goods) for goods. The specific way of shopping may vary, with major implications for design of the setting- supermarket or bazaar- its relationship to the city and the sensory interaction with both goods and people in the various sense modalities.

Activities associated in the activity system may include talking, eating, socialising, getting messages to people, and finding out what goes on. Finally, the symbolic meaning may be displayed, such as conspicuous consumption, shopping as recreation, or a way for women to get out of the house.

Considering the importance of sociocultural variables and the need for culture supportive environments, designing for culture seems desirable. It also seems to be exceedingly difficult although it should be the long-range goal. Activities, however, particularly if they include latent symbolic aspects, can provide a very useful starting point and lead fairly easily to life-style, as defined above, i.e., as the outcome of a series of choices about how to allocate temporal, material, and symbolic resources on the basis of culturally defined priorities. Design is also the result of a similar choice process, so those particular environments have qualities seen as desirable or undesirable, supportive or inhabiting. They are supportive to the extent that the systems of settings, their cues of meanings, and the rules about who is included or excluded are congruent with the activity systems, all these judgements being

subjective and culturally variable. Different organisations of space, time, meaning, and communication are needed to support rather than inhibit a given life-style.

6.3.1 Viewing:

The most frequently mentioned activity was related to the view. The view as such could be classified as an object, but the act of observing the view is an activity. Situated on a hill or mountain, the view is an intrinsic part of the village; most houses constructed in the mountains always look over part of the city. The act of viewing entails pausing halfway along the street, or leaning out of the window, or finding a park bench which is facing the right direction.

In the city of Nablus, people consider the view as one of the qualities of a place. The topography allows one to view scenes from different locations and positions. Viewing could be performed in different ways. It could be watching people in the street from your own window in the house. It could be viewing the beautiful panoramic scene of the old city from the top of the mountain while you are driving along the road. It could be viewing all the natural landscape spread beyond the city with the valleys curving softly here and there.

Viewing could be related to other activities, such as eating in restaurants that have a good view. Walking or driving are also enriching if this is associated with interesting views.

6.3.2 Religious Activities:

Religious activities have a great impact on shaping the built environment, because these activities need a certain place in which to be practised such as mosques or shrines. Mosques are unique objects among many others that identify the character of Islamic architecture. It is not important for them to possess architectural qualities, but they could also serve as landmarks contributing to the identification of the city.

The main activity related to religion is practising worship. As the majority of people in the city of Nablus are Muslims, going to the mosque is one of the activities that characterises the life style .

Five daily prayers are used to control the working hours in the town. The work starts at dawn, after the first prayer; Al-Fajr, until the afternoon prayer; Al-Asr, for men attending educational circles in the mosques, and until Al-Maghreb prayer at the sunset.

Other religious activities besides praying which are practised on a daily basis also exist in the community. These activities are practised frequently, depending on the time prescribed for them, such as fasting in the holy month of Ramadan. This is followed by celebrating the end of this month (Eid Al-Fitr) . The Muslims also celebrate the pilgrimage (Eid Al- Adha) . These two celebrations are associated with many activities and rituals such as visiting the dead at the cemetery, and visiting close relations such as sisters, aunts, and cousins.

6.3.3 Studying:

In Nablus people consider the University of An-Najah a very important place, for its functional importance, being the largest academic institution in the area. People from other parts of the West Bank come to the university to obtain higher education and exchange experiences with others.

In the past, the traditional places of education used to be centred around rooms, porches, courtyards, spaces adjoining a bazaar and enclosed gardens. The theological schools and mosques certainly elevated the quality of the learning environment.

The traditional places of education in Islam have been the home, the craft guilds, the madrasa, and the mosque. The master discipline system of education, featuring a strong one-to-one relationship between teacher and student, dominated the transfer of experiential knowledge (Ardalan,1980.)

Nowadays educational activity takes place in certain buildings, schools, institutions and universities. Studying is one of the activities that a certain part of the population does in academic institutions. Studying as an activity involves other activities that are related to the experiences of education, such as exchange of experience, social interactions, and other recreational facilities.

6.3.4 Eating and Drinking:

In Palestine eating and drinking as activities most generally occur indoors. The reasons for this is firstly because eating is considered a social activity, and secondly the lack of adequate places to go and eat outside. People very often like to invite relatives and friends, where the housewife has cooked a lot of food for her guests. Generosity, through preparing a large quantity of food is one way to celebrate and welcome the guest.

The lack of adequate places for social recreation makes eating a tradition, and it is the main way for people, especially the woman, to entertain themselves. Eating and drinking are always accompanied by other activities such as talking and discussing politics and community matters.

Other activities are more relevant though not necessarily unique. Eating and drinking are perhaps more a reflection of the national culture. In France you would meet in a pavement cafe, in the United States you would meet in a restaurant, whereas in Britain the tendency is to socialise in pubs.

6.3.5 Shopping:

The purpose of shopping is to exchange materials, as it used to be in the past. Shopping as an activity requires person to move of one from one place to another. Through this moving, one is subjected to an enormous amount of information attracting one to buy things.

Shopping as an activity is performed in the commercial streets where one moves from one shop to another looking at what one wants or it could be in a semi closed space

such as the Bazaar (Old Suq) which is a covered shopping street where a great variety is available in a relatively small place.

Because of the different qualities that are attached to the old suq, people have preferred it for shopping. Factors such as security, variety and activity are among the qualities that the old suq has. Because the suq is only used by pedestrians, this could allow people to move freely from one shop to another without taking into consideration the danger they might be subjected to by vehicles.

On the other hand shopping in the modern streets of the city of Nablus is preferred for other reasons. Convenience is one of the factors that makes people do their shopping there. Convenience comes from providing parking places for the shoppers. Other recreational activities like going to restaurants and cafes, not offered in the old suq makes people prefer to shop in modern streets.

6.4 Dimensions:

In separating the responses into three categories of objects, aspects and activities we are given a view of the city identity. But this information does not help us to interpret this identity for the designs of the future, owing to the continuous development of that identity. To do this, it is necessary to look at the considerations that have resulted in these objects, aspects and activities. Some of these considerations may have ceased to be of consequence, whereas many others will continue to play commanding roles.

Dimensions are motivating influences or forces behind any occurrence in the environment, whether the occurrence is physical or emotional, visible or invisible, permanent or transitory. These motives include such items as weather, building materials, etc. whereas internal constraints include the inherited traits of living, a need to socialise, etc. Every action, every motion, every building will be a result of a number of these underlying requirements. All together these or forces or dimensions make up what we consider to be the culture of a place and as such will affect its spatial or architectural properties (Ujam, F. See F. Whitworth,1992).

If we consider the dimensions to be the motivating forces for any occurrence in the environment, we could argue that these dimensions also affect people’s interpretation of the built environment. This part of the research is going to identify the dimensions used by people to evaluate their built environment, and to try to find out if these dimensions are the same for different people.

A classification process was conducted on all responses to elicit the dimensions. In general, the dimensions could be a subjective or objective interpretation. There were twelve dimensions. Each dimension has many components or aspects. The political dimension, for example, contains aspects of cultural identity, administrative, legislative and bad memory, while the functional efficiency contains all factors that make the place perform with efficiency: smell, accessibility, calmness, economic durability, health, noise, and availability and others. The physical dimension contains all the physical aspects of the place, such as the materials used, and aspects of organisation and structure of the place, for example, dense, narrow, random, dominant, centralised.

Table 6.2 Dimensions of interpretation for the professional and lay people.

Dimension	Frequency	
	Lay people	Professionals
- Physical	177	194
- Amenities	83	79
-Historical	227	181
-Natural	79	92
-Functional efficiency	301	269
-Aesthetics	159	147
- Religious	35	33
-Social	71	92
-Emotional	37	30
-Security	26	35
-Political	46	62
-Spiritual	30	20

The social dimension is composed of aspects of privacy, activity, social interaction and life style. The aesthetic dimension contains all the aesthetic components of the interoperation, aspects of beauty, attractiveness and uniqueness are implied. The natural dimension comprised of the components of natural landscape, mountains, water, green, and geography. Table 6.2 shows the dimensions used by the lay people and professionals elicited from the respondents' responses.

6.4.1 Social:

The analysis and explanation of human behaviour in the environment without reference to social organisation in all its aspects would be a task doomed to failure (Leboyer 1973). In the same way, only a very impoverished picture of social behaviour would be obtained if it were to be forgotten that this involves the use of space. In fact, direct observation allows us to determine how the arrangement of the environment reflects social organisation (cultural values, hierarchical relationships, conflict, the nature, quality, and function of the group). In addition, social behaviour mostly takes place in public spaces where each individual defines and defends his own territory. In the factory, the office, recreation areas, business places, in transit, and in school, the space is public and people have to acquire some of it for themselves. They then defend this temporary territory, and in this way constant interpersonal relations and links between people and their space are created.

The city expresses social values. Closely related but distinct is the expression of the social significance of place. As Ittelson (1978) puts it: "the city, like any environment, has the potential of enhancing value systems." It also has the potential of contradicting them. Social importance is linked to formality of behaviour, which it has been argued, is supported by order, or "good Gestalt," in the physical environment.

The requirement of a relationship between an individual and the society to which he belongs, or the relationship between the individuals is inherited, and hence is an internal force.

Human societies consist of specific traits, which set up the complex pattern of relationships in which people encounter one another, transmit information and simply coexist. These patterns exist within spatial contexts, and some built environments will encourage this behaviour. The development of this spatial network is tied into the social network. Neither one is the cause of the other, but they are an intrinsic part of each other. As a result social traits are frequently visible in spatial elements; one such example is a market square, a space which locates the weekly open market, or perhaps the market arose to fill the square. Both facets are intrinsic part of the other's existence. The visibility of social traits in the physical environment allows cultural identities to be visible

Territoriality is not the sole mechanism for regulating social interactions. Interaction can also be controlled by introducing protocol and ritual. A culture that relies heavily upon rules and customs to regulate social interaction will depend that much less on territorial behaviour (Brower 1980). Whatever the balance, the combined effect of both rules and customs and territorial behaviour is to mitigate the threat(real or imagined) of unregulated interaction. This threat may be directed to personal security (interaction that leads to conflict), to self-esteem (interactions that involve challenge to one's values or life-style). The greater the threat (that is to say, the greater the need to regulate unpredictable or unwanted interactions) , the stronger tendency towards territorial behaviour. As the threat diminishes, territorial behaviour becomes relaxed.

Altman (1975) , suggests a three part typology, with classification of primary, secondary, and public territories. Primary territories are those where one spends most of one's time and interacts with one's primary reference group; secondary territories are those where one spends less time and interacts with one's secondary reference group, and public territories are those where one spends least time and interacts mainly with strangers.

Brower, on the other hand, sees the territoriality on four levels; personal occupancy, community occupancy, occupancy by society, and free occupancy. Individuals and groups whose members have clear and lasting relationships, and whose primary ties

and loyalties are to one another control personal occupancy territories. The most common examples are groups in which members are bound by marriage or a blood relationship. Territories in personal occupancy are accorded the greatest freedom of any occupancy type to restrict admission and to control use.

Community occupancy territories are controlled by groups whose composition may change, but whose members have undergone a common screening process, and, frequently, initiation rites. These serve to establish a clear and consistent distinction between group members and 'outsiders'; claims of community occupancy are generally made by club members and church congregations. Eligibility as a member of community occupancy may depend upon sharing a physical setting (a neighbourhood group), a system of values and beliefs(a church group) , a climate of benefit and risk(a university group) , or a combination of these.

Territories occupied by a society are controlled by the general public, and are open as a right to all. They may include some publicly owned places (a street), but not others (the mayor 's office).Territories occupied by society are accorded less freedom to restrict admission and control use than either personal or community occupancies. They do not, however, have to be equally accessible to all members of the public, so long as the restrictions conform to the prevailing customs of a particular society (as in many eastern countries where women, but not men, have to be veiled in public places).

Free-occupancy territories are characterised by the absence of territorial signs, and for this reason they invite exploration and encourage immigration. Another aspect of the social dimension is the attachment of one to his own environment. Attachment to place involves the feeling of possessiveness that an occupant has towards a particular territory because of its associations with self-image or social identity. Attachment is associated with appropriation in two ways. Firstly, the likelihood of that place being appropriated is greatest where potential occupants have a strong sense of identification with it. Secondly, a strong sense of personal identification is frequently a consequence of an act of appropriation, and it is those territories that reflect a sense

of personal or community worth that will, in the face of a challenge, be most tenaciously defended.

Proshansky (1978) suggests that one's self-identity is composed of a number of sub-identities, one of which is derived from the physical environment that has been a part of one's socialisation experience. This means that people who grow up in similar kinds of physical settings (urban as opposed to rural, say, or single-family houses rather than apartments) will develop common ways of coping with their physical environment. Different settings will produce different demands, create different challenges, and provide different levels of satisfaction. They may well lead to different patterns of attachment (city people, for example, preferring environments that are differentiated, stimulating, choiceful, and changeable).

When people identify strongly with the space, they tend to personalise it, and frequently the same objects used as an indication of personality (real or desired) of the occupants also serve as signs of occupancy. This is especially true of points of real symbolic penetration, such as doors, windows, and approach ways. Social interaction is a constant reciprocal process of objectification and interpretation (Scheff, 1967).

Browers says;

To phrase the matter slightly differently, a person reacts to objects- physical things, people, or abstract principles- on the basis of what those objects mean to the individual. However, the meaning is not located solely within the mind of any individual, but it arises out of the joint process of action and reaction. The process of action and reaction becomes conceptualised, labelled, talked about, and responded to. That bit of action and reaction becomes a segment of human reality; it becomes a situation defined as processing meaning .

Once a situation is defined as being meaningful, people respond to it; however, characteristically, the symbolic interactionist approach insists that the situation must be continually redefined; human reality is symbolic, and therefore fluid. In contrast to the prevailing normative paradigm, which stresses that human behaviour is rule-governed, the interactionist (interpretive) paradigm warns that ' the tentative character of the individual's own role definition is never wholly suspended.

So the need for a thorough understanding of social structures has long been accepted internationally as a desirable prerequisite to the formulation of physical plans,

particularly in the often traumatic circumstances of rapid industrialisation and urban growth. Present social structures and their spatial implications need to be understood.

6.4.2 Aesthetics:

The easiest way to give a reason for liking or disliking any particular element is to give an aesthetical value.

Aesthetic experiences are expressions of objects and emotions, i.e. they relate to stimuli and are expressed by our reactions, but do not in this situation relate to activities. In other environments, activities may well apply. One of the fundamental goals of design has always been the aesthetic one - the creation of “delightful” rooms, buildings, townscapes, and landscapes.

If perception is considered as a necessity to discovering or appreciating aesthetics, then the classification used by Edward Relph (1976) should be considered. The vast majority of these perceptual levels rely on visual images alone. The emotional significance of place is only encountered in the later categories, and generally this is at a sub-conscious level. In the “Aesthetics of Architecture.” Roger Scruton (1979) sets out to pin down aesthetics, when used in an architectural context. The criticisms levelled at other art forms have always been far deeper than any criticism levelled at architecture. This reflects the unique and somewhat schizophrenic properties that architecture has.

Where other representational art forms are generally non-functional, although in music such things as waltzes could be said to have a function, architecture, with very few exceptions, always serves a use. This functionalist nature results in many restrictions and a tendency to judge architectural aesthetics by the building’s ability to cater for its function. Architecture is far more dictatorial to its observers than any other art form, there being no way of avoiding it. Whereas Mozart could cater for a discerning and educated audience, architecture is a truly unavoidable public art form. Furthermore, architecture is constrained by its setting, which can frequently carry a number of buildings of different style.

In attempting to understand the nature of the aesthetic experience, a number of people (e. g., Santyana, 1986) have found it useful to distinguish among sensory, formal, and symbolic interaction between people and their built environment. Sensory aesthetics is concerned with the pleasurableness of the sensation received from the environment. It involves the arousal of one's perceptual system, is multidimensional, and results from the colours, odours, sounds, and textures of the environment. Formal aesthetic in architecture is concerned primarily with the appreciation of the shapes, rhythms, complexities, and sequences of the visual world, although the concepts can be extended to the sonic, olfactory, and optic worlds. The appreciation of the associational meanings of the environment that gives people pleasure is the subject matter of symbolic aesthetics.

On the other hand, Nasar, (1988) states that environmental appraisal of aesthetic quality has two components: formal and symbolic or associational. Formal analysis of aesthetics focuses on the attributes of the object as they contribute to the aesthetic. Such an analysis may consider such properties as size, shape, colour, complexity, and balance. Symbolic analysis of aesthetics focuses on factors that, through experience, produce connotative meanings i.e. the object implies something else.

A review of the aesthetic features or qualities of urban setting based on the contributions of Berlyne (1971), Anreheim (1977), Frances (1977), and others is necessary for understanding aesthetic psychology in general and environmental aesthetics in particular. We can summarise the current state of the art by saying that the importance traditionally assigned to order and complexity as the essential aesthetic features of the environment has repeatedly been confirmed, while very much greater precision has been given to those components. It is, however, necessary to say something about the precise position, in this context, of the collative variables novelty, complexity, conflict, and uncertainty.

Consideration of these variables raises an important theoretical issue. If we are to have a subject, aesthetics, then in general it must be concerned with features or qualities of the materials. It is easy to show that it cannot be concerned with preferences, since preferences arise for all sorts of reasons, many of which are quite

clearly not aesthetic. Aesthetic psychology therefore must study the responses of people as part of the task of distinguishing and classifying the features of the material- in this case, the city- to which they are responding .

Lang (1982) considers architectural symbolic meanings to be carried by both physical and non-physical variables. The physical variables are buildings and space forms, materials, illumination, while the non-physical variables are names of places and events.

As has been stated earlier, people appreciate the aesthetic quality of the built environment for formal or symbolic reasons. These two factors were traced in this research. People of the city of Nablus like certain buildings because of the quality of the materials , such as stone, for example, and marble which are known for their durability. The size of the building or an object affects people's appreciation. It has been observed that people in the city of Nablus like certain building or streets because of their size, like King Faisal Street (the major street that cross the city east west) or An-Najah University and Al-Anabtawi Building. The quality of paving, and street furniture (such as railings, lamps, and fountains) has also affected the aesthetic experience.

The aesthetic features or qualities of urban settings affect people's judgement. The effect of novelty and familiarity, for example, was clear in people's appreciation of the built environment in the city of Nablus. A building like Al-Qasir has been appreciated because it is new and modern. On the other hand, the old mosques, baths, and palaces have been positively evaluated because they are old and historic.

Aesthetic quality may be assumed to contribute to the character or identity of the place, because our mental map of a city is constructed from landmark places (Devlin, 1976). This goes beyond our first getting to know a city; as Ittelson (1978) points out, exploration is a constant feature of urban existence.

In the city of Nablus many buildings have been preferred by people because they are considered as landmarks that people could identify the place by, for example, the University, the Old Suq, and the old Mosques in the old city.

In general, the aesthetic experience is mediated by more general experiences, plans or dispositions, or what we call the instrumental values of the experience, such as convenience, comfort, and the absence of distraction. Places will be valued for the features that contribute to the success of the activity being pursued; for example eating sandwiches protected from the wind and crowd.

6.4.3 Religious:

One of the main functions of many religions is the maintenance of a harmonious relationship between people and their physical environment.

Religion can also influence the way people perceive their physical environment. Nowhere is this more evident than in the perception of environmental hazards such as floods, storms, and droughts. Hinduism and Buddhism, for example, teach followers to accept such hazards without struggle, to regard them as natural and unavoidable. Christians are more likely to view storms, floods, or droughts as unusual and preventable. As a result they will generally take steps to overcome the hazards. Sometimes, however, Christians see natural disasters as divine punishment for their sins, in which case worshippers feel they can prevent future disasters by repenting.

In the city of Nablus, where there are three religions (Islam, Christianity and Judaism) the religious dimension has a considerable role in forming the built environment. Also the values of Islam have been reflected in the typology of the houses where separation of women and men is required for reasons of privacy.

This was clear in buildings, which have been constructed to accommodate religious use. Religion has attributed to the formation of the physical environment. With their unique forms mosques and churches have become landmarks that identify the city of Nablus.

The old Town as an Islamic town has many religious buildings, mosques and shrines. Mosques are the most important, and usually they dominate the townscape with their landmark domes and minarets. Ziadeh, (1935) quoted from Ismael, (1969) the following:

In medieval Islam, religion, law, education and government were so integrated that an orthodox Moslem would hardly try to distinguish them as separate entities. Therefore, the classic Jamea was to function as a religious entity, a court of justice, and intellectual and educational centre. It was also a place of secular activity, such as eating and drinking, as well as providing recreation for many people.

As a result of the town's expansion the need for public services multiplied accordingly, and most of the mosque's functions were distributed among other institutions. Thus, mosques became predominantly sanctuaries for the practice and observance of religious duties (Qamheyyeh, 1992).

Ten mosques exist in the old town. Qamheyyeh (1992) described the religious buildings in the old city:

Many of the historic mosques in the old city had been converted from ancient churches or temples. The main mosques are found in the commercial core of the old town. Others were found in the residential quarters. Besides mosques there are five shrines – Zawaya- , in the old town. The shrine is a place where the Islamic group proceeds with their liturgies. There are two Christian churches in the old town. The Samaritans used to have a synagogue in the old town. At the beginning of this century and when they moved out of the old town to the western side of the city, they sold it to the Muslims (Nimir 1975) , called after them.

Nowadays most of the Samaritans' buildings in the old town are deserted, including the synagogue, but still the Samaritans have religious sites on Jerzim mountain . There they have started to build new residences for themselves.

6.4.4 Political:

The Islamic Palestinian culture has been exposed to pressures of destruction not only by the impersonal forces of economic and cultural domination, but also by the active forces of colonial military occupation. Indeed it may be argued that the Israeli occupying power is actively trying to destroy the Palestinian cultural identity by its policies and actions and that this amounts to cultural genocide against the Palestinians.

For instance, the Israeli authorities demolished three historic houses in the old town of Nablus in 1988. One of these was a very significant building in the old city, Tuqan Palace. As a result of using explosives, many adjacent buildings were affected and six of them were badly damaged, forcing their occupants to leave.

Matters also worsened when the military government added a bureaucratic layer with absolute power above the municipal authority. Municipalities in Palestine are the bodies responsible for any legislative and administrative matters that deal with decision-making policy.

The political dimension in interpreting the built environment was affecting people's perception in many aspects. Firstly as a reaction of the policy of occupying military forces towards destroying the cultural heritage, people became more attached to their cultural heritage as an expression of self-identity. Cultural identity is associated strongly with place.

Rapoport (1975), argues that the essence of place lies in the quality of being somewhere specific, knowing that you are "here" rather than "there". The attachment of place, or the identity with place, is seen as both the cause and the result of the quality of place.

The political dimension also affects the preference system of people. The people disliked buildings that are associated with bad memories of military occupation. The majority, for example, negatively evaluated the prison, although it is an old building

that goes back to the Ottoman period, because it reminds them of suffering and endurance.

6.4.5 Natural Landscape:

For those who can go a long way with a little social activity, natural environments are a means to come to terms not only with the cosmos, but also with other human beings, by putting social relationships in a larger perspective.

Greenbie argues that;

Symbolism is the most important aesthetic aspect of landscape. We desperately need to reintroduce natural elements into our built landscape on a far greater scale, and this requires understanding both humanity and nature without idealising either.

People associate a multitude of qualities with nature, including health, peace, loneliness, freedom, and originality. But one of the interpretations of nature is especially relevant to the creation of a nature aesthetic. As culture develops, people become increasingly divorced from nature. The imposed division of labour brings repression, exploitation, and alienation. As our relationship with nature disintegrates, we are confronted with nature as an object that we have renounced, and we form a sentimental attachment to it. Schiller (1976) remarks in his essay “Naïve and Sentimental Poetry”:

When man enters the cultural state and when art (in the sense of civilisation) has laid its hand on him, then he loses all sensuous harmony and is then only able to express himself as a moral unity, that is to say as something striving for unity. The cost of progress were the loss of these very characteristics of life, and civilisation was achieved only at price of alienation and exploitation (Greenbie, 1988).

Schiller’s words explain why we still desire contact with nature. He points out that we have managed to hang onto our memory of this blissful way of life(one that may never have existed) in the form of our need for natural beauty in a representative society.

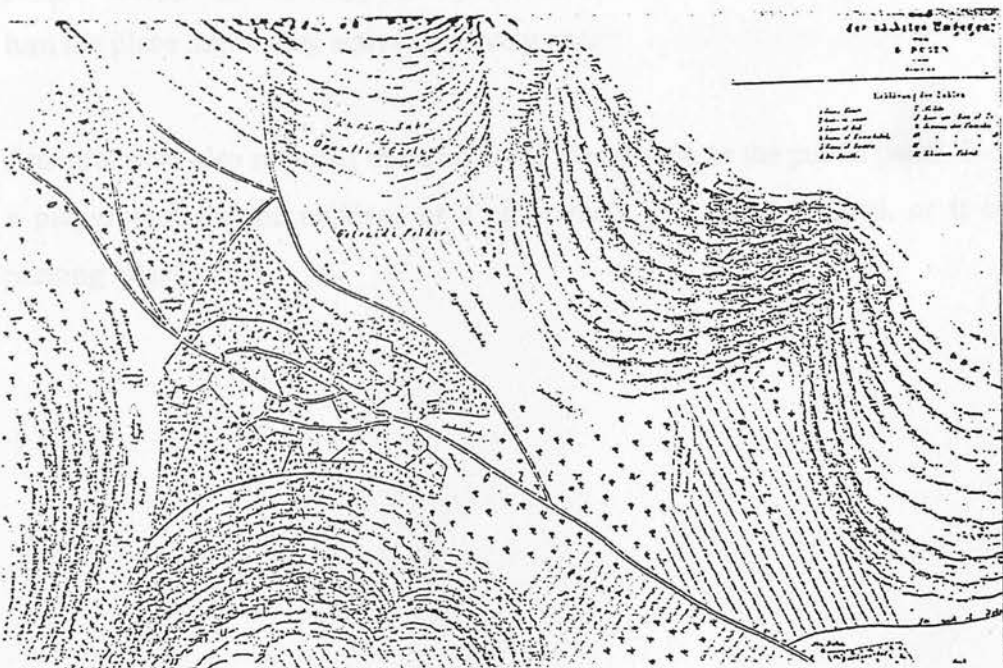
The idea of natural beauty can symbolise a consummate society in which subject and object, man and nature, individual and society are reconciled with each other. Each culture defines its relation to nature through the creation of landscape upon a physical one. This same cultural landscape becomes a series of behavioural settings or stages that provide cues for people to read as they seek to relate to each other in their construction of everyday life.

The topography of the city of Nablus is one of the important factors in defining the character of the city, as it has been located on two mountains facing each other expanding east west. The growth of the city followed naturally the formation of the mountain with the old city in the valley climbing a little towards the south mountain (Jerzim Mountain) .

Many writers in the past who visited the city have described the natural setting of the city. The city has been noted for its two mountains facing each other with the valley in between. Also the image of greenery and water was of the main elements that defines the ancient image of the city.

Fig 6.6 Rosen plan of Nablus in 1860.

Source: Rosen, 1860.



Almaqdisi in 985, the famous geographer in the tenth century, wrote:

Nablus is on the mountain, abounded of olives, called “little Damascus”, and it is in a valley squeezed between two mountains. Its market is extended from the gate to the gate, and another to the heart of the city. The Mosque is in its centre, it is finely paved, clean, and through it there is a stream of running water. Their buildings are built of stone.

Nowadays people think that the topography is also an important characteristic of the city. Elements such as the sloping mountains, the valley and the woods around the city have all been mentioned by people.

6.4.5 Amenities:

Amenities are features or facilities of a place that make life there easy or pleasant; the term is always associated with a city. People who retire to the country often miss the amenities of the town. This could be in the form of shopping centres, restaurants, cafes, or cinemas.

In Nablus shopping is one of the activities that is essential in defining the amenities in the city. Places, having a commercial character, were evaluated very positively by the people. Shopping, with supplementary facilities such as restaurants and cafes, could turn the place into a very active and lively one.

Amenities are also required in recreational places such as the public parks. It could be a playground for the children or a café where you can buy food, or it could be parking places.

6.5 Conclusion:

Given the argument about the importance of sociocultural variables and hence the need for a culturally supportive environment, designing for culture seems desirable. One way of achieving this is through stressing people's needs, values, and aspirations. Listening to the people could elicit the feelings towards an understanding of their environment. This part of the research allows us to explore the aspects that influence people's evaluation of a place.

People's cultural awareness of value of their own heritage and environment reflect that there is a considerable ignorance of their traditional architecture. Although traditional settings are viewed by the people as sources of self-identity, these places are lacking certain standards which makes it difficult to live in them. In other words people like the old houses but they feel that they do not fulfil their present needs of comfort and convenience.

Physical objects are the primary stimulants to all emotions and activities. Evaluation of the physical settings shows that architectural, functional, and historical dimensions are the main factors in people's evaluation of a place.

People's preference system could help to introduce the main physical objects that identify the environment, whether they are new or old. It also enables one to know their associations and attributes.

The experience of a place is developed not only through its physical attributes, but also through the activities it holds. Activities are one of the important components in the cultural core. They are needed to support a given life style.

Dimensions which are the motivating forces for any occurrence in the environment, are subjective and objective. These dimensions could affect people's interpretation of the built environment. Among these dimensions are the political, social, aesthetics, natural ones.

CHAPTER SEVEN

7.1. Introduction

Developmental psychology is one of the fields of psychology that has been addressed thoroughly with different approaches. However, the most common level is the socio-cultural, more than the individual or a higher psychological level. This approach has a different concept of individuality, as the individual is not seen as a whole, but as a collection of different parts that are influenced by the environment.

Carlson's involvement in the world is a result of the interaction between his own environment and the individual's biological makeup. This interaction leads to the development of differentiating processes, which are the result of the individual's ability to live in and adapt to the environment. The individual's ability to adapt is influenced by the environment, but the environment is also influenced by the individual's actions.

The question of individual value is a result of the individual's ability to adapt to the environment. This ability is developed through the individual's interaction with the environment, resulting in a range of differentiating processes. These changes affect differentiating processes, but they are not the same. As Carlsson wrote, the process of change of groups of individuals and people is the very essence of the self.

We all know that the process of change is a result of the individual's ability to adapt to the environment. This ability is developed through the individual's interaction with the environment, resulting in a range of differentiating processes. These changes affect differentiating processes, but they are not the same. As Carlsson wrote, the process of change of groups of individuals and people is the very essence of the self.

The importance of culture, in the sense of the individual's ability to adapt to the environment, is a result of the individual's interaction with the environment. This interaction leads to the development of differentiating processes, which are the result of the individual's ability to live in and adapt to the environment. The individual's ability to adapt is influenced by the environment, but the environment is also influenced by the individual's actions.

CHAPTER SEVEN: PERSONAL CONSTRUCT PSYCHOLOGY

7.0 Introduction:

Environmental psychology is one of the disciplines used by researchers to examine people's perception of their own built environment. This issue has been widely addressed these days with different approaches ranging from an individualistic, micro level to the socio cultural, macro level. The question of whether professionals think differently and hold a different system of constructs to the lay people is also highly considered .

Citizens' involvement through understanding their personal system of evaluation of their own environment is one of the preferable means of dealing with any cultural development or decision-making process. Because in the end, future settings are for people to live in and appreciate. Consideration of people's values and culture is recommended to avoid disintegration and dissociation of the individual from his own environment.

The question of tradition versus modernity is one of the current global issues especially in developing countries where the western model has been blindly adopted, resulting in a rapid change in our physical environment and social economical structure. These changes affect deformed settlements that lack any cultural identity. As Jane Jacobs wrote, this process of exchange, of things, ideas, artifacts, images and people is the very essence of the city.

We all now know that to succeed, cities can no longer depend on the good fortune of being near a good port, near a coal mine or just being part of a successful national economy. They have to build on their own strengths and many of those are cultural ones.

The importance of culture, in the sense of way of life, modes of thought and behavior of different people of the world, is more and more widely recognized and in many cases is taken specifically into account by development officials. Thus, there have

been references to the need to have regard for cultural identity, to have the population participate in their own development projects and to grant them the right of access to culture.

7.1 Personal Construct Psychology (PCP):

Personal Construct Theory has characteristics through which it has achieved a rather unique position in environmental psychology research. At the heart of PCP lies the idea that reality is relative rather than absolute. We use our past construction against future events. A person, therefore, is not passively dependent on the surrounding environment.

Consciously or unconsciously, our backgrounds, history and experience give us a set of expectations about the world so that we recognize familiar things and bend less familiar ones until they resemble what we already know (Stewart, 1981) . The Repertory Grid technique allows the interviewer to obtain a mental map of how the interviewee views the world, and to write this map with the minimum of observer bias.

The system of hypotheses which we begin evolving at birth and which continues to grow until death is not like a filing cabinet. Kelly says it is more like a pair of spectacles, through which you can obtain information, but which also conditions what you see and how you see it. Kelly had a good name for describing the system- he called it a 'construct system' because the word 'construct' carries with it both the sense of having been constructed or developed from experience, and also the sense of being that through which we construe - or see and interpret- the world. Thus if you can understand someone's construct system you can not only understand his history, but you can also make some predictions about how he is likely to behave in a given situation because you can assess what that situation is likely to mean to him.

Kelly invented the Repertory Grid technique as a way of getting people to exhibit to him their construct system. This technique is useful because:

- 1) The degree of agreement between the construct system of two people is a measure of the extent to which they are like each other, and the extent to which they are likely to understand each other without effort.
- 2) The degree to which one person can understand or mimic the construct system of another is a measure of the extent to which he understands that other person - in other words, a measure of the degree to which they can negotiate sensibly, be friends, and predict what the other would do.
- 3) Construct systems change over time to assimilate new information. The construct system is predisposed to interpret new information as familiar information, but there will always be a time when the amount or significance of the new information requires a change in the construct system.

The key points to remember are:

- 1) Perceptions influence expectations, and expectations influence perceptions.
- 2) The medium through which this happens is known as the construct system.
- 3) Construct systems are unique to the individual and develop throughout life.

The P.C.P technique was used in this research because:

1. The researcher's influence on the subjects is minimal in this technique, especially when compared with pre-structured questionnaire techniques.
2. There are no pre-structured questions, which gives the subjects greater opportunity to express themselves more easily. The declared statements are, therefore, more expressive of the subjects' real perceptions or views, although the subsequent interpretation might be comparatively difficult.
3. This technique concentrates not only on preferences but also on the very deep reasons which might underlie them. If a subject expresses a preference to live in modern areas, as opposed to historic old areas, for example, this preference might be expressed as an outcome of a long series of responses the subject has made, in which a large amount of information has been given on a variety of concerns he or

she holds. The technique will also help to generate the expression of other subjective concepts that concern the person at a deeper level, as he or she goes on to justify this preference. The technique therefore has a particularly important advantage, and has been found to be one of the most useful techniques for examination of rather complicated and complex networks of subjective concepts and issues to be found in research in relation to environmental perception.

It was stated previously that Personal Construct Theory has characteristics through which it has achieved a unique position in environmental psychological research. Also at the heart of PCP lies the idea that reality is relative rather than absolute. We use our past constructions to anticipate the future and test these constructions against future events. We are also controlled by behaviorist or stimuli derived criteria coming from needs which should be satisfied. People-environment interrelations are based on a wider and progressively more complicated process (Bannister et. al. 1986).

The Repertory Grid is basically an interview technique in which the interviewee is not given prestructured answers to choose from. The technique allows for classification of the subjects' responses regarding their assessment of various aspects of the environment. This happens without any kind of predesigned format, so the sequential and open nature of the questionnaire technique itself lets the structure and classification of these responses emerge spontaneously. The subject is simply asked to make preferences leading onto another. The relationships between these sequential responses will indicate an order or structure which represents the significance of these responses, which Kelly calls constructs. The objective here is to examine the result of people's evaluation of current environmental conditions. There are various available methods for interpretation and analysis of these responses; some of these are manual, others are based on computer programs.

Because the interviewer plays no part in suggesting the actual nature of the construct, the constructs are a very personal reflection of how the interviewee sees the world, and individual differences in style and personality come quickly to the front.

The construct system is not just a jumble of assorted perceptions; it is a hierarchy, with some constructs closer to the center, to the essence of the person, and others more peripheral. One way of picturing the construct system is as a series of interlocking ladders, getting smaller in number and stronger in influence/strength as one reaches the top.

The importance of constructs then becomes clear; our network of constructs is not simply a residue reflecting past experience, but functions as a set of filters through which incoming information is processed, thereby influencing and conditioning our experience in the here and now (Aspinal 1992).

The built environment responds to the shared construct of society, and is sustainable only by virtue of these basic agreements. Shared meanings and symbols in a cultural context, when expressed in the environment, make communication between individuals possible and help people to cope with events in their environment. The process of establishing shared meanings and symbols in the environment is part of the production of cultural knowledge (Barati, 1997). All this happens in a contextual process by which an individual both shapes and is shaped by the environment. Any interpretation of this process will affect people's perception as well as the environment itself.

Kelly's analysis of constructual of the world allows for the examination of both people's reactions to the objective, physical elements of the world around them and their subjective, personal and cultural values. The study has therefore found Kelly's theories and methodology useful in analyzing the extent to which people's interpretation of the built environment fits the existing situation in Nablus, in other words, how they read the existing built environment.

7.2 The Experiment:

The Repertory Grid is basically a sorting exercise in which a series of items is judged against scales. Therefore, there are three variables in the Repertory Grid :element, construct and scoring procedure (Jackson 1986). The bipolar distinctions are called constructs. They represent the dimensions the interviewee uses when he is thinking

about the elements. Elements define the kind of interview one will have, by selecting the subject matter. In this research the elements are different types of built environment about which the researcher wants to know the interviewee's opinions. The process of obtaining constructs from the elements (by asking the interviewee to put two of them together and separate them from the third) is called construct elicitation. The scoring procedure is when you ask the interviewee to rate the chosen elements on a seven-point scale.

Our constructs are not a random collection of potential discriminations, but set in a hierarchical relationship to each other. The super ordinate constructs have wider implications. To move up or down the hierarchy in the construct is called laddering. The laddering process is used for the clarification of constructs.

The most significant aspect of this method is that it allows subjects to express their own construct with the minimum of investigator interference, so that constructs are normally derived rather than given.

The main objective of this part of the research is to explore if lay people who live in Nablus are using the same Construct system for interpretation of the built environment as professionals, or a different one. How do lay people evaluate certain aspects of the built environment? For example, the old traditional areas, and the new modern ones. Do they hold different associations for certain settings? What kind of correlations and preferences are they attributing when they experience the environment?

As mentioned earlier, the Repertory Grid technique is applied in this part, and analysis of the data was carried out through factor analysis, correlation, analysis of flixgrid and analysis of preference system to try to find answers to the above questions.

The process of interviewing began by selecting a series of colored photographs of 13 different built environment settings, which we are going to call elements. The pictures were chosen to represent the different types of architectural and urban character

existing in the area of Palestine and more particularly in the city of Nablus. None of these are taken from a specific area in the city, which is known by the interviewee. These pictures are selected from books on the Middle East or cities from the Arab Islamic world, cities which have cultural backgrounds similar to Nablus.

These pictures represent four categories of physical character that already exist in the city Of Nablus. The first category is the traditional one, which resembles the architectural character of the old city of Nablus, with its coherent structure and narrow dark paths leading to the residential quarters, and the old suq with its colorful facade and lively atmosphere of people's noise and movements. Buildings in the old city were built from stone with two or three stories. Some pictures were chosen in this category to show the deteriorating conditions of the buildings in the old city, due to lack of maintenance.

The second category is the modern one, that represents certain parts of Nablus with its modern touches, with concrete or stone blocks scattered here and there from the sixties. Office and apartment buildings of seven to ten stories are located in the city center, with no consistent architectural style. There are many new constructions taking place in the residential areas, ranging from apartment buildings to detached houses and residential quarters, provided with adequate services, infrastructure, parking and green areas.

The third category is ' the slums' representing areas created by political changes or developed for economic reasons. Buildings in these areas are not built according to planning law adopted by the Planning Department in the municipality of Nablus. These areas comprise the refugee camps that are very dense and crowded. There are no services or adequate infrastructure, but some low-income housing areas with minimum services and facilities. Houses lack adequate sun and ventilation due to the high density of the built up areas.

The final category is termed ' evolutionary ', which is not very common in the city of Nablus. This represents modern buildings inspired by the local traditional architecture. In these buildings, there are attempts to go back to contextual solutions

that reflect people's values and culture. Such solutions encourage the use of courts, the respect of privacy, and the use of traditional building materials.

Thirty-five respondents of different age, sex, and occupation were interviewed. The group includes professional people and non professionals, and were selected from different areas in Nablus. They are known to the author as friends, relatives, or relatives of the author's friends.

Two groups of people were selected. The first is the non professional group or the lay people comprising 15 persons, 7 males and 8 females. The professional group consists of 10 persons, 6 males and 4 female (See table 7.1 and Figure 7.1)

Figure 7.1 Sample distribution

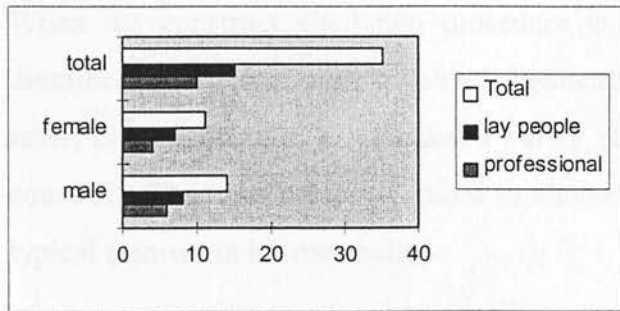


Table 7.1 Sex and occupational distribution of the respondents.

	<i>male</i>	<i>Female</i>	<i>Total</i>
Professional	6	4	10
Lay people	8	7	15
Total	14	11	35

The interviews were made separately for each respondent. Each interview took between forty and sixty minutes. The pictures were colored 20 cm by 13 cm showing different spatial environments.

Random sets of elements are taken three at a time. The person is invited to think of similarities and differences between them; the standard question is “ In what way are two of these alike or different ? ”. We continue this process by replacing with two new elements and repeating the same question till the person has finished commenting on the elements. Thus, we end up with bipolar constructs in pairs.

To move up the hierarchy in order to elicit more constructs, the person is asked “ Which of the constructs do you think is the most important ? ”. This question is followed by another “ Why do you think this construct is the most important ? ”. This elicits new constructs. To move down the hierarchy, the person is asked for more details about how one end of the construct is different from the other end by asking the question “ Can you tell me more about the construct ? ”.

When the construct elicitation procedure is completed, each of the elements is described in terms of each construct. Elements may be rated on, say, a seven point scale, or rank-ordered, or assigned a binary value as they do or do not exemplify a construct. Then the person is asked to choose the best element, the worst, and the typical element in his own belief.

The last stage in the Repertory Grid is to score the constructs. The interviewee, then, ranks each. In this research a maximum seven point bipolar rating scale has been used to complete Repertory Grid evaluations of the built environment in general terms. This gives us an element by construct matrix within which ‘constructs’ are rows, and ‘elements’ are columns. This matrix is then analyzed for its underlying structure in terms of the relationships between constructs.

In this survey, a total number of 700 constructs were elicited during the interviews with thirty respondents. These constructs give a great deal of information about the way in which people of the city of Nablus construct the environment around them.

Analysis of the data in this part was done partly manually and partly by the computer, This depends on the information we want to elicit from the analysis.

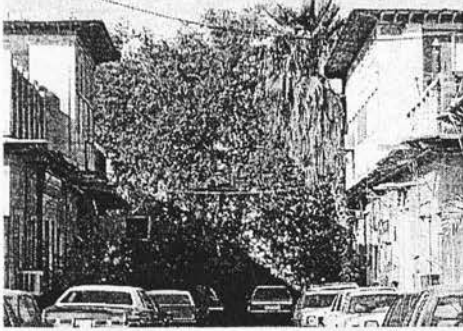
Figure 7.2 The chosen photographs for the analysis of PCP.



Element A



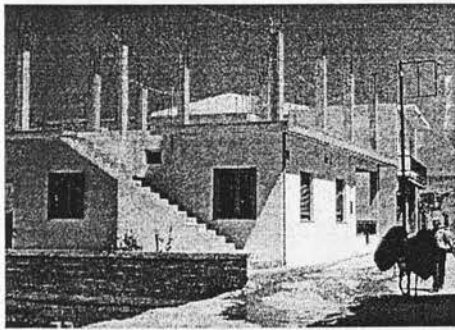
Element B



Element C



Element D



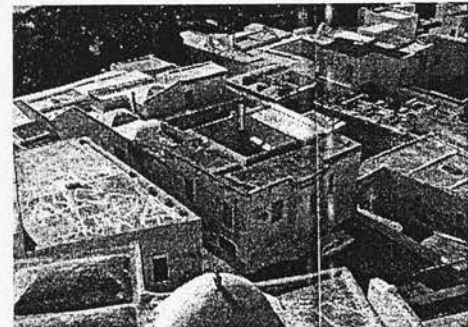
Element E



Element F



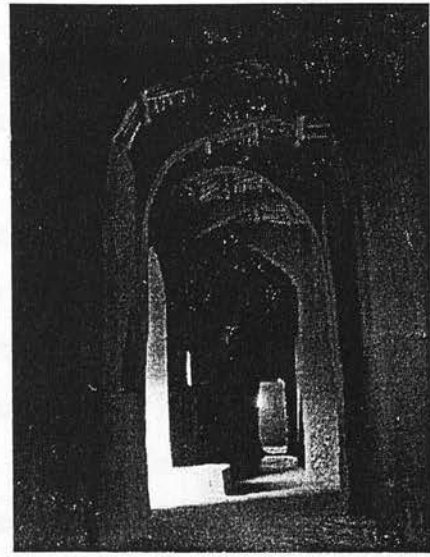
Element G



Element H



Element I



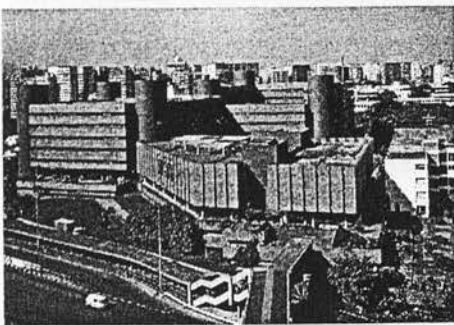
Element J



Element K



Element L



Element M

7.3 Data Analysis:

Analysis of data was carried out in this part of the research using Repertory Grid technique at different steps and levels depending on what information the author was seeking. The main analysis types were:

- 1) Factor analysis: this was used to find out the dimension used by the two groups; the professional and lay people, to judge the built environment.
- 2) Analysis of correlation: this was used to find out the correlation system used by both groups and which variables would correlate.
- 3) Analysis of flexigrid: this was used to discover out the concept each of the two groups holds in order to interpret the built environment. In other words, the relationship between constructs and elements.
- 4) Analysis of preference: This was used to estimate out in what variables are the preferred elements.

7.3.1 Dimensionality of Judgments:

The data were firstly analysed manually to try to define the dimensions the two groups use when they evaluate a certain setting. This is done by taking all the constructs elicited by the two respondent groups and trying to see if they fall into certain classifications. It has been found that the judgments of meaning over all aspects obtained from the two respondent groups lie under two dimensions, namely a physical one 'objective' and an evaluative one or 'subjective'.

The physical dimension deals with talking about the physical qualities of the environment, which could be in one of three ways. Firstly, organizational, that describes the setting in terms of its structure and the way its parts are physically organized, such as symmetry, repetition, continuity, and centrality. Secondly, descriptive, that is, describing the physical qualities such as color, texture, materials used, details, windows, and design facade features, for example rich details, soft colors, old materials, arched windows, and straight lines. The last category tries to classify certain settings according to style or character or under a certain concept. For example, an aspect that deals with style is describing the architectural character as old, new, modern, Islamic, traditional, Arabic, Eastern, or oriental.

On the other hand, the evaluative dimension is a subjective one ‘affective’, which deals with aspects of feelings and can be interpreted in two ways. One interprets the environment according to his own evaluation and the way he sees it. For example as strange, valuable, artificial, complicated, dominant, beautiful, or relaxing, etc. The other sub-dimension deals with the technical satisfaction of human beings for standard of the living, such as, comfortable, clean, healthy, polluted, economic, flexible, etc. In this way, one is evaluating the physical attributes from a satisfaction point (See table 7.2).

Table 7.2 Dimensionality of interpretations used for interpretation:

1) Physical	2) Evaluative
- Organizational.	- Affective.
- Descriptive.	- Satisfaction.
- Style / Character.	

7.3.2 Factor Analysis:

In order to obtain a general understanding of the overall patterns in the total data set, the results of each group were subjected to Principal Component Analysis. This technique examines all the intercorrelations in the data and reduces the complexity of the total construct network to a smaller set of components . This data reduction simplifies the overall picture of the data set and allows more general considerations to be drawn from it. Intercorrelations between constructs are found by examining how constructs fall within a given component or group, and the degree to which they correlate. For the purpose of groupings, constructs correlated at 0.7 or greater with the principal components being taken as a representative of the component.

7.3.2.1 Findings of Factor Analysis:

Factor analysis is a tool that calculates the responses to a large group of variables which can be defined in terms of a smaller number of components. In other words, it is a method for simplifying a complex set of data. In this part of the research, factor analysis for the two groups helps to reduce the information we are getting from all the constructs for the two groups into concepts or aspects. Each aspect consists of several constructs.

Results were obtained from the principal component, with default value set at 1.0 (i.e. each component accounts for the mean variance expected from all the understood constructs). A varimax rotation was carried out to further simplify the data structure. The full varimax rotated components are shown in tables 7.3 and 7.4 for the two respondent groups, with significant numbers highlighted (measuring greater than .7).

The first concern in comparing the two respondent groups was with respect to similarities or differences in the dimensions used to rate the architectural subject material. The basic procedure here was to subject the data obtained from each respondent group to a factor analysis, and then to compare the data.

Tables 7.3 and 7.4 are factor matrices structures by professionals and lay people respectively. Tables 7.5 and 7.6 are the reduction of the results of factor analysis for the professionals and lay people group respectively. Result in 8 factor solution with eigevalues greater than 1. A variable was deemed to be included on a factor if it loads an excess of 0.70.

For the professional group, as shown in table 7.5, factor 1 comprised the constructs, social - not social, Islamic - modern, simple - technology, eastern- western, defined spaces - not defined spaces, straight window - curved window, no green - green and enclosed - exposed. Factor 2 contained these constructs; random- organized and no technology - technology. Factor 3 got mysterious - clear, commercial - residential, industrial - residential and the construct active - isolated. Factor 4 held the constructs;

artificial - natural, social - not social, public - private, comfortable - not comfortable and the constructs urban - landscape. Factor 5 contained the constructs; hierarchy - no hierarchy, and no luxury - luxury. Factor 7 held the construct colorful - dull and rich - poor. Factor 8 comprised only one construct which is one height - mixed height.

For the lay people, as shown in table 7.6 factor 1 contained the constructs; lively - deserted, modern - traditional, crowded - calm and the construct private - public. Factor 2 showed the constructs; simple - technology, not productive - productive, old - new, no ventilation - ventilation and the construct pleasing - frustrating. Factor 3 contained the constructs residential - commercial and sunny - not sunny. Factor 4 got the constructs; readable - not readable, not isolated - isolated and anti social - social. Factor 5 held one construct symmetry - not symmetry. Factor 6 comprised the constructs dull - colorful and no green - green. Factor 7 held the constructs organized - random and arch window - flat window. Factor 8 got one construct future extension - no extension.

Table 7.3 Varimax rotated components for the professional group

OLE	/CONTRAST	BL.	1	2	3	4	5	6	7	8	DIST.
social	/not social	1	0.188	0.654	-0.228	-0.243	0.445	-0.303	0.101	0.243	0.966
artificial	/natural	3	-0.110	0.214	-0.062	0.841	-0.038	0.033	0.165	-0.142	0.905
colorful	/dull	4	0.510	-0.035	0.056	0.101	-0.076	-0.062	0.745	0.075	0.919
Islamic	/modern	6	0.851	0.166	0.252	-0.189	0.115	0.047	0.200	0.179	0.969
social	/not social	7	-0.022	0.111	0.151	0.751	-0.358	-0.081	-0.139	0.292	0.916
complicated	/simple	8	0.023	-0.447	0.203	0.657	-0.255	0.271	-0.285	-0.242	0.976
clean	/dirty	9	0.341	-0.643	-0.032	-0.594	-0.128	-0.072	0.226	-0.005	0.977
technology	/primitive	10	-0.876	-0.279	0.046	0.180	0.090	0.199	-0.132	-0.042	0.973
eastern	/western	11	0.943	-0.068	-0.046	-0.195	0.088	0.107	-0.024	-0.095	0.981
healthy	/not healthy	12	0.361	-0.330	-0.679	-0.316	-0.184	0.209	0.159	0.230	0.978
natural	/artificial	13	0.756	-0.270	0.109	-0.226	-0.099	-0.028	0.303	0.144	0.912
mysterious	/clear	14	0.259	0.160	0.790	-0.284	0.350	-0.043	-0.200	0.155	0.993
live	/dead	15	0.011	0.110	-0.265	0.450	-0.008	0.704	0.245	0.330	0.974
close	/open	16	0.498	0.088	-0.014	-0.450	-0.025	-0.603	-0.138	0.118	0.925
defined spaces	/not defined spaces	17	0.914	-0.074	0.031	-0.294	-0.067	-0.095	0.199	-0.033	0.992
services	/no services	18	-0.581	-0.674	-0.044	0.124	-0.206	-0.020	0.037	-0.305	0.972
housing	/commercial	19	0.118	0.141	-0.858	-0.355	0.248	-0.060	-0.008	0.025	0.980
readable	/not readable	20	-0.016	-0.188	-0.047	-0.247	0.640	0.035	-0.614	0.180	0.959
identified	/not identified	21	0.781	-0.228	-0.209	0.169	0.040	-0.045	0.162	0.287	0.920
public	/private	22	-0.309	-0.066	0.144	0.871	0.244	0.172	0.017	-0.060	0.986
exiting	/relaxing	23	0.119	0.262	-0.153	-0.134	0.238	-0.726	0.068	0.043	0.846
colorful	/not colorful	24	-0.042	-0.090	0.298	-0.465	-0.483	-0.333	0.135	0.476	0.951
dense	/separated	25	-0.048	0.132	0.135	0.769	0.237	0.320	0.218	-0.254	0.948
curved windows	/straight windows	26	-0.829	0.014	0.156	-0.288	-0.257	-0.147	-0.239	0.172	0.985
plain details	/rich details	27	-0.100	0.205	0.154	0.342	0.792	-0.146	-0.182	0.046	0.936
residential	/industrial	28	0.071	0.043	-0.908	-0.238	0.070	-0.054	0.211	0.221	0.994
comfortable	/not comfortable	29	0.312	0.186	-0.148	-0.794	-0.322	-0.180	0.132	-0.009	0.968
valuable	/not valuable	30	0.201	-0.613	0.220	-0.522	-0.154	0.155	-0.030	-0.270	0.927
green	/no green	31	-0.758	0.150	-0.210	0.155	-0.077	0.057	-0.040	-0.100	0.829
one height	/mixed heights	32	0.361	-0.030	-0.223	-0.051	0.303	-0.037	0.078	0.812	0.970
practical	/not practical	33	0.012	-0.345	-0.090	-0.160	-0.609	0.282	0.605	0.044	0.985
hierarchy	/no hierarchy	34	0.536	0.171	-0.006	0.138	0.719	0.269	0.106	0.088	0.972
court	/no court	35	0.258	0.002	-0.511	0.500	-0.134	-0.451	0.161	0.172	0.925
poor	/rich	36	0.511	0.044	0.260	0.140	-0.036	-0.116	-0.764	-0.176	0.990
monotony	/variety	37	0.609	-0.224	-0.022	-0.511	0.198	-0.056	0.355	-0.158	0.936
commercial	/residential	39	-0.056	0.026	0.632	0.387	-0.076	0.443	0.095	0.264	0.913
clear orientation	/no clear orien.	40	0.204	-0.698	0.097	0.379	0.042	-0.197	-0.085	-0.114	0.862
contextual	/not contextual	41	0.396	-0.029	-0.212	-0.507	-0.078	-0.042	0.560	-0.271	0.924
active	/isolated	42	0.201	-0.146	0.863	0.048	-0.013	-0.073	0.081	-0.033	0.907
random	/organized	43	-0.042	0.787	0.334	0.212	0.111	-0.073	-0.215	-0.153	0.930
technology	/no technology	44	-0.335	-0.728	-0.095	-0.033	-0.262	0.068	-0.216	0.068	0.881
exposed	/enclosed	45	-0.881	-0.090	0.332	-0.043	-0.257	-0.090	0.004	-0.161	0.998
old	/modern	46	0.200	0.333	-0.071	-0.254	0.266	0.664	-0.110	-0.315	0.918
natural materials	/artificial mat.	47	0.302	0.104	-0.149	-0.373	-0.077	-0.086	0.557	0.397	0.863
historical	/not historical	48	0.821	-0.134	0.110	-0.223	-0.346	-0.061	0.080	-0.156	0.953
luxury	/not luxury	49	-0.047	-0.253	0.066	-0.058	-0.948	0.037	-0.009	-0.040	0.987
landscape	/urban	50	0.068	0.014	-0.257	-0.889	-0.134	0.106	0.321	-0.017	0.997

Table 7.6 Varimax rotated components for the lay people, a reduction result with significant values > 0.70

POLE	/CONTRAST	VBL.	1	2	3	4	5	6	7	8	DIST.
simple	/technology	1	0.253	-0.817	0.008	-0.300	0.032	0.174	0.156	-0.231	0.965
lively	/deserted	4	-0.874	0.042	-0.295	-0.149	-0.177	-0.053	-0.196	0.166	0.988
residential	/commercial	5	0.049	0.110	0.951	0.056	0.193	0.109	-0.021	0.065	0.988
organized	/random	6	-0.006	0.210	-0.037	0.296	-0.392	0.068	0.710	0.361	0.963
residential	/not residential	10	0.455	-0.173	0.744	-0.345	-0.108	0.077	0.167	0.014	0.978
dull	/colorful	11	0.119	-0.350	0.125	0.098	0.058	0.720	-0.201	0.304	0.904
modern	/original	14	-0.758	0.177	0.128	0.189	0.457	0.052	-0.137	-0.091	0.947
productive	/not productive	16	-0.064	0.732	-0.191	-0.019	-0.485	-0.040	0.115	-0.090	0.914
readable	/not readable	18	-0.329	-0.209	-0.220	0.725	-0.114	0.005	-0.015	0.102	0.866
old	/new	22	0.294	-0.872	-0.010	-0.187	-0.102	0.067	0.073	-0.107	0.956
green areas	/no green areas	23	0.043	-0.011	0.142	0.056	-0.198	-0.940	-0.055	-0.098	0.980
not isolated	/isolated	24	-0.098	-0.332	0.077	-0.768	0.158	0.326	0.070	-0.114	0.930
crowded	/calm	25	-0.921	-0.099	-0.104	0.030	-0.229	-0.115	-0.118	-0.044	0.975
sunny	/not sunny	26	-0.076	0.507	0.737	-0.320	-0.000	-0.058	-0.204	0.040	0.977
ventilation	/no ventilation	28	0.173	0.788	0.302	-0.175	-0.159	-0.011	-0.222	0.090	0.925
no symmetry	/symmetry	29	-0.037	-0.062	0.014	-0.083	0.871	-0.224	0.071	0.200	0.930
pleasing	/frustrating	32	-0.110	-0.845	-0.246	-0.108	0.093	0.246	-0.249	0.087	0.968
private	/public	34	0.912	-0.013	-0.097	-0.206	-0.061	-0.043	0.110	0.073	0.953
future extension	/no future exten.	35	0.051	0.134	0.110	0.208	0.135	0.137	0.210	0.882	0.966
arch window	/flat window	36	0.341	-0.122	0.040	-0.080	0.289	-0.126	0.832	0.064	0.967
social	/anti social	38	0.271	-0.133	0.016	-0.887	-0.136	0.002	-0.006	-0.086	0.951
%VARIANCE			17.269	15.837	12.249	11.792	7.871	9.555	9.571	5.559	89.702

7.3.2.2 Analysis of Factor Analysis:

Analysis of the factor analysis for the lay people results in the following findings:

1) Lay people have shown a tendency of being more subjective than objective in judging the environment.

The dominance of the evaluative dimension over the physical dimension was observed; this means that people were judging the environment using an evaluative aspect. It is the way they felt about it and experienced it, not the way it was in its real physical qualities. This was reflected in factor 1 where the concept of activity was introduced through the evaluative measurement in the constructs lively - deserted and crowded - calm.

Factor 1 was relating the traditional character of the environment with aspects of being deserted and calm while modern was associated settings with the aspect of crowdedness and liveliness. Constructs in factors 2 and 3 mostly deal with the evaluative dimension that holds a judgment of the environment according to the degree of its physical satisfaction. Constructs like productive - technology, no ventilation - ventilation do consider aspects of physical satisfaction which were related in Factor 2 with the construct old - modern. This means that people did hold a certain

preference for modern settings because these settings satisfied the physical need through means of modern technology. On the other hand traditional environments were not healthy, being very humid and lacking good ventilation.

2) Lay people have shown signs of confusion or contradictions in their constructs that deal with interpretation of the traditional setting.

Factor 4 shows that people are confused or contradicting themselves. Social aspects were related to the aspects of being isolated and not readable (identified).

3) Lay people did not hold well established physical constructs when they judged the environment.

Factors 5,6,7 and 8 show that people did not hold well established descriptive variables when they judged certain environments. This means that people were more subjective in their interpretation compared with the professionals. This could be attributed to the influence of professionals' training and education. Factors 5 and 8 hold one physical construct each which is physical, and factors 6 and 7 hold two constructs each.

4) Professionals have shown a tendency to be more objective in their judgment of the environment.

This was clear in factor 1 where many constructs that have physical aspects were introduced. Components such as straight windows, not defined spaces and green described settings which were modern and western. On the other hand components such as curved window and defined spaces described settings which were Islamic and eastern.

5) Professionals have shown a tendency to classify certain settings they are judging.

Professionals tried to categorize any setting before judging it by trying to put it under a certain category, such as urban - landscape, or residential - commercial, or traditional - modern. For example, eastern settings were related with defined spaces, curved window and being enclosed, while urban settings were related with being not

comfortable, public artificial and social. On the other hand landscape settings were judged as being natural, not social, comfortable and private.

General conclusions derived from the factor analysis results showed that differences existed in the dominance of the two factors for both groups. These differences were exhibited in the physical attributes; the architects seem to use a greater range of criteria at the physical level, and more obviously at the organizational level. On the other hand laymen seems to use a greater range of criteria at the evaluative level considering satisfaction. This shows that the layman is interested in the practicality of the architectural structure rather than the concepts of organization and the aspects of massing.

Comparisons at this level are rather important because strong emphasis on different dimensions by architects and laymen could cause disruption in communication fidelity. That is, if the architects place primary importance on the spatial attributes while the laymen place importance on evaluative attributes, then even if both attributes seem to be approximately the same within the two groups, there would be an overall dissimilar impression of the building.

4.1 Lay people group

Results from the correlation analysis are shown in the following table which shows r^2 and r values for the correlation for all variables for the architectural and lay people group respectively. Tables 7.3 and 7.4 show the significant correlations between variables for the professional and lay people group respectively.

The construct simple - technology was correlated significantly with construct all use, $r = 0.76$. The construct lively - detailed correlated significantly with the construct covered - calm, $r = 0.89$ and construct private - subtle, $r = 0.75$. The construct traditional - commercial correlated significantly with the construct traditional - residential, $r = 0.79$ and the construct heavy - not heavy, $r = 0.76$. The construct residential - not residential correlated significantly with the construct low - high, $r = 0.61$. The construct relaxing - being perturbed significantly with the construct lively - depressed, $r = 0.74$. The construct modern - original correlated significantly with the construct rich details - plain details, $r = 0.77$. The construct similar - dissimilar

7.3.3 Correlation Analysis:

Correlation is used when you want to find the association between two variables. That is, you are not assessing whether one variable causes another, but simply whether they vary together.

In this part of research the correlation will help us find the associations of the variables introduced by the two groups and try to see if there is any difference between them.

One way to explore this is by analyzing the correlation tables which show the relationships between all the variables for the two respondent groups the professionals and the lay people. Tables 7.7 and 7.8 are correlation tables showing the relationship between all the variables. Tables 7.9 and 7.10 show reduction of correlation of factors loadings over 0.7 derived from the two correlation tables for the two groups.

7.3.3.1 Findings of Correlation Analysis:

1) Lay people group:

Results from the correlation analysis are shown in the following tables where tables 7.7 and 7.8 show the correlation for all variables for the professional and lay people group respectively. Tables 7.9 and 7.10 show the significant correlation between variables for the professionals and lay people group respectively.

The construct simple - technology was correlated significantly with construct old new, $r = 0.96$. The construct lively - deserted correlated significantly with the construct crowded - calm, $r = 0.89$ and construct private - public, $r = -0.76$. The construct residential - commercial correlated significantly with the construct residential - not residential, $r = 0.70$ and the construct sunny - not sunny, $r = 0.76$. The construct residential - not residential correlated significantly with the construct low - high, $r = 0.81$. The construct relaxing - tiring correlated significantly with the construct lively - depressed, $r = 0.74$. The construct modern - original correlated significantly with the construct rich details - plain details, $r = -0.77$. The construct civilized - not civilized

correlated significantly with the construct artificial material - natural material, $r = 0.92$. The construct readable - not readable correlated significantly with the construct social - not social, $r = -0.78$. The construct low - high correlated significantly with the construct private - public, $r = 0.71$. The construct old - new correlated significantly with the construct pleasing - frustrating, $r = 0.71$. The construct crowded - calm correlated significantly with the construct private - public, $r = -0.79$. The construct sunny - not sunny correlated significantly with the construct ventilation - no ventilation, $r = 0.75$. The construct rich details - plain details correlated significantly with the construct private - public, $r = 0.80$ and the construct social - not social, $r = 0.71$. see table 7.7

2) Professional group:

The construct social - not social correlated significantly with the constructs; Islamic - modern, $r = 0.79$, technology - simple, $r = -0.75$, defined spaces - not defined spaces, $r = 0.84$, identified - not identified, $r = 0.88$, curved window - straight window, $r = 0.75$, monotony - variety, $r = 0.71$ and the construct exposed - enclosed, $r = -0.88$.

The construct ordinary - technology correlated significantly with the constructs; complicated - simple, $r = -0.79$, services - no services, $r = -0.72$ and the construct technology - no technology, $r = -0.73$.

The construct artificial - natural correlated significantly with the construct public - private, $r = 0.70$ and the construct landscape - urban, $r = -0.70$.

The construct Islamic - modern correlated significantly with the constructs, technology - simple, $r = -0.81$, eastern - western, $r = 0.79$, defined spaces - not defined spaces, $r = 0.83$, services - no services, $r = -0.73$, identified spaces - not identified spaces, $r = 0.70$, curved windows - straight windows, $r = 0.76$, green - not green, $r = -0.72$ and the construct exposed - enclosed, $r = -0.75$.

The construct technology - simple correlated significantly with constructs, eastern - western, $r = -0.83$, defined spaces - not defined spaces, $r = -0.88$, curved window - straight window, $r = -0.81$, monotony - variety, $r = 0.73$ and the construct historical - not historical, $r = -0.83$.

The construct eastern - western correlated significantly with the constructs, defined spaces - not defined spaces, $r = 0.90$, identified - not identified, $r = 0.71$, curved window - straight window, $r = 0.80$, monotony - variety, $r = 0.73$ and the construct historical - not historical, $r = 0.82$.

the construct healthy - not healthy correlated significantly with the constructs; residential - not residential, $r = 0.75$, clean - dirty, $r = 0.74$ and the construct random - organized, $r = -0.70$.

The construct defined spaces - not defined spaces correlated significantly with the constructs, green - not green, $r = -0.80$, monotony - variety, $r = 0.80$, exposed - enclosed, $r = -0.75$ and the construct historical - not historical, $r = 0.88$.

The construct housing - commercial correlated significantly with the constructs, residential - commercial, $r = 0.90$, commercial - residential, $r = -0.70$ and the construct historical not historical, $r = 0.88$.

The construct identified - not identified correlated significantly with the construct exposed - enclosed, $r = 0.80$.

The construct public - private correlated significantly with the constructs, dense - separated, $r = 0.87$, comfortable - not comfortable, $r = -0.91$ and the construct landscape - urban, $r = -0.84$.

The construct dense - separated correlated significantly with the construct comfortable - not comfortable, $r = -0.70$. The construct curved window - straight window correlated significantly with historical - not historical, $r = 0.82$.

The construct plain details - rich details correlated significantly with the construct practical - not practical, $r = -0.73$ and the construct luxury - not luxury, $r = -0.86$.

The construct residential - industrial correlated significantly with the construct active - isolated, $r = -0.78$. The construct comfortable - not comfortable correlated significantly with the construct landscape - urban, $r = 0.83$. The construct hierarchy -

no hierarchy correlated significantly with the construct exposed - enclosed, $r = -0.72$.

The construct clean - dirty correlated significantly with the construct random - organized, $r = -0.80$. The construct contextual - not contextual correlated significantly with landscape - urban, $r = 0.75$. See table 7.8

Table 7.9 Correlation table showing the relationship between all variables for the lay people group.

Variables	A	B	C	D	E	F	G	H	I	J	K	L	M
residential – commercial			*										
low – high				*									
old – new	*												
crowded – calm		*											
sunny – not sunny			*										
ventilation - no ventilation												*	
rich details - plain details						*							
lively – depressed					*								
pleasing – frustrating													
artificial materials – natural materials							*			*			
private – public		*							*		*		*
Future extension - no future extension													
social – not social								*					*

A: simple - technology
 D: relaxing - tiring
 G: readable - not readable
 J: crowded - calm

B: lively - deserted
 E: modern - original
 H: low - high
 K: sunny - not sunny

C: residential - commercial
 F: civilized - not civilized
 I: old - new
 L: rich details - plain details

Table 7.10 Correlation table showing the relationship between the variables for the professional group.

Variables	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
islamic – modern	*																		
complicated – simple		*																	
technology – simple	*			*															
eastern – western				*	*														
defined spaces - not defined sp.	*			*	*	*													
services - no services		*		*															
identified - not identified	*			*		*													
public – private			*																
dense – separated										*									
curved window - straight wind.	*			*	*	*													
residential – industrial							*												*
comfortable - not comfortable										*	*								
green – no green				*				*											
practical - not practical													*						
hierarchy - no hierarchy																			
monotony – variety	*				*	*		*											
clean – dirty							*												
commercial – residential																			*
active – isolated														*					
random – organized							*										*		
technology - no technology		*																	
exposed – enclosed	*			*				*	*							*			
historical - not historical					*	*		*				*							*
luxury – not luxury													*						
landscape – urban			*							*					*			*	

A: social - not social

B: common housing - technology

C: artificial - natural

D: Islamic - modern

E: technology - simple

F: eastern - western

G: healthy - not healthy

H: defined spaces - not defined sp.

I: identified - not identified

J: public - private

K: dense - separated

L: curved window - straight

M: plain details - rich det.

N: residential - industrial

O: comfortable - not conf.

P: hierarchy - no heir.

Q: clean - dirty

R: contextual - not contextual

S: housing - commercial

7.3.3.2 Interpretation of Correlation Results:

Analysis of the correlation showed the following:

1) The professionals have shown more tendency to associate more variables than the lay people.

This is clear if you look at the tables. This could be attributed to the professional training and education on the one hand, and on the other hand it could be that people have become confused about their environment and did not hold a clear construct system for interpretation of the built environment. Although people were using a wide range of criteria in their assessment of the environment, there is a perceptual uncertainty about the built environment and its content.

2) Professionals associated traditional modern settings with variables different from those of the lay people.

Traditional settings in the professionals' construct system were associated with concepts of simplicity, monotony and certain architectural characteristics that have a specific shape opening such as a curved window, while lay people associated these settings with the aspect of pleasure.

On the other hand modern settings in the professionals' construct system were associated with aspects of technology, variety and flat openings while lay people associate the modern settings with the aspect of frustration.

3) Professionals associated the concept of privacy with variables different from those of the lay people.

Privacy was associated in the professional construct system with the concepts of density, comfortable and landscape settings, while lay people associated privacy with qualities of being calm, deserted, and being not social.

7.3.4 Flixigrid Analysis:

A grid may be analyzed in a variety of ways, to produce different kinds of information. The number and nature of constructs an individual produces may be of interest. One can examine the constructs' structural relations which underlie their use in the grid.

As mentioned earlier, a grid may be examined in a variety of ways depending upon one's choice of underlying model. A grid is seen as a record of the variation in underlying construct and element interactions. It displays the way constructs are dispersed in a space defined by the elements and the way variation can be reduced to a number of independent components accounting for the varying amounts of the total variation. The components are axes in both the construct and element spaces.

7.3.4.1 Findings of Flixigrid:

Further investigations were made on the constructs elicited from the experiment by analyzing the relationships between the elements and the constructs. The elements, as mentioned earlier, represent types of built environment such as traditional settings, modern new settings, and the one which shows some degree of evolutionary attempt.

Figures 7.3 and 7: 4 were the first and second components, regarded as the most important ones, taken from the varimax rotated components. These diagrams show the relationship between concepts and pictures. The significance of these diagrams is that it is possible to see how the interviewees associated their different ideas with each other, and correlate photographs of various urban spaces and elements with their constructs about the built environment.

1) Lay people group:

Results from the analysis of flixigrid for the lay people group elicited that people hold a positive evaluation for the certain modern settings that have mostly good physical qualities and services. On the other hand, their evaluation of the old traditional setting depends on where, what scale and what use these settings had. For example, they hold a positive evaluation for the old shopping streets (suq), and a negative evaluation for the old deserted residential neighborhoods. See Figure 7.3.

It has been observed that elements L, G and C have appeared in one side of the grid. Element M, which describes a natural setting, was related with variables of privacy, centralization, calm and human. Element G which describes a traditional colorful interior setting, was related with variables, color, symmetry, privacy and function. Element C, which describes a modern setting, was related with the variables; symmetry, future extension, not readable and centralized. See Figure 7.3

Elements M, K, D and B have appeared in one side of the grid. All of these elements described modern new settings. Element M was related with the variables: lasting, colorful, not defined spaces and being green. Element K was related with the variables: not defined spaces, anti social and not satisfied. Element D was related with the variables: not residential, anti social, flat window, natural material and modern. Element B was related with the variables: natural materials, antisocial, plain details, modern and being lively.

Elements J and F appeared in one side of the grid and both describe old deserted traditional settings. Element J was related with the variables: dull, defined , not lasting, not green, low, simple, old, not sunny and depressed. Element F was related with the variables: deserted, rich details, private and being original.

2) Professional group:

Results from the analysis of the flixigrid for the professionals group elicited that professionals hold positive evaluations for the new modern settings which have a

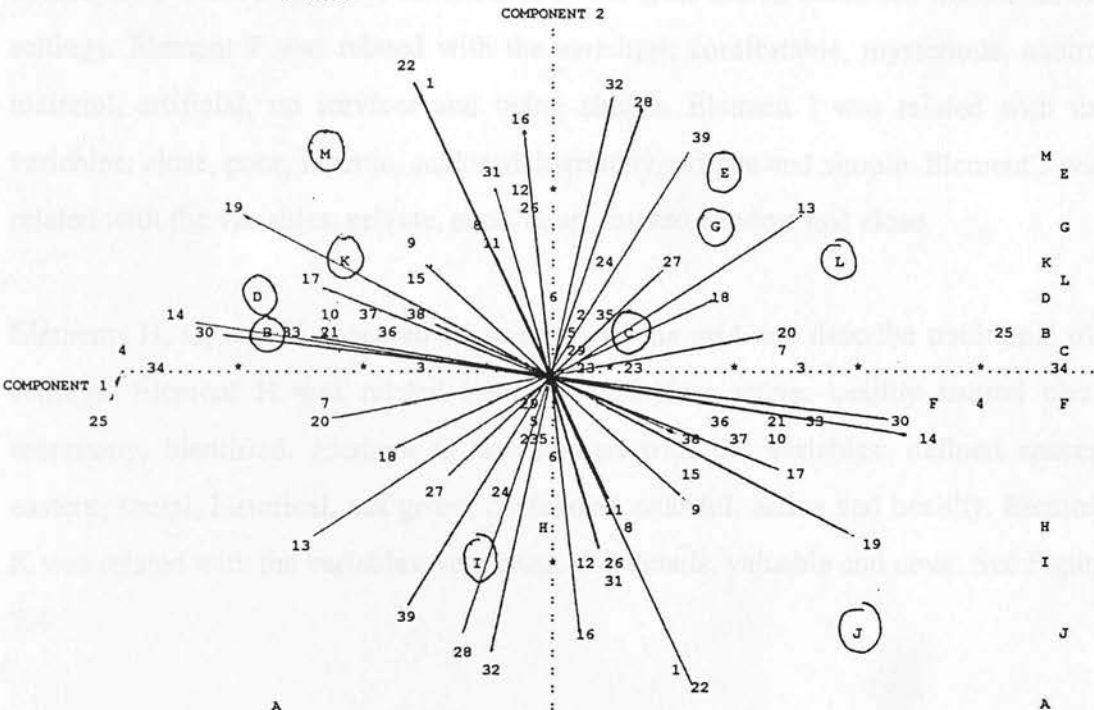
Figure 7.3 Flexigrid, analysis based on rotated results, for the lay people group.

FLEXIGRID v4.0 Feb. 1987. File: non Time: 16:25:51
 GRID TITLE: Lay people
 PLOT *****

ANALYSIS based on rotated results

Axis 1 has been reflected
 Axis 2 has been reflected
 ELEMENT 5 picked as an IDEAL

- | | | | |
|----------------------|---------------------|---------------------|------------|
| 19 high | 22 new | 32 frustrating | 13 private |
| 14 modern | 1 technology | 28 ventilation | 25 calm |
| 33 natural materials | 16 productive | 39 functional | |
| 30 plain details | 31 lively | 24 isolated | |
| 4 lively | 12 relaxing | 27 uni colour | |
| 34 public | 26 sunny | 6 organized | |
| | 8 lasting | 18 not readable | |
| | 9 not defined space | 2 productive | |
| | 11 colorful | 35 future extension | |
| | 17 not civilized | 5 residential | |
| | 15 green | 20 centralized | |
| | 10 not residential | 29 symmetry | |
| | 37 arid climate | 7 human | |
| | 38 anti social | | |
| | 36 flat window | | |
| | 21 artificial | | |
| | 23 no green areas | | |
| | 3 urban | | |



- | | | | |
|------------|------------------------|---------------------|-------------------------|
| 25 crowded | 7 not human | 3 landscape | 34 private |
| 13 public | 29 no symmetry | 23 green areas | 4 deserted |
| | 20 not centralized | 21 not artificial | 30 rich details |
| | 5 commercial | 36 arch window | 33 artificial materials |
| | 35 no future extension | 38 social | 14 original |
| | 2 not productive | 37 moderate climate | 19 low |
| | 18 readable | 10 residential | |
| | 6 random | 15 not green | |
| | 27 multi color | 17 civilized | |
| | 24 not isolated | 11 dull | |
| | 39 not functional | 9 defined space | |
| | 28 no ventilation | 8 not lasting | |
| | 32 pleasing | 26 not sunny | |
| | | 12 tiring | |
| | | 31 depressed | |
| | | 16 not productive | |
| | | 1 primitive | |
| | | 22 old | |

western image. On the other hand professionals hold a negative evaluation for the old traditional setting. They perceived it as being mysterious, poor and not colorful.

It has been observed that elements L, D and M appeared in one side of the grid where element D and M described modern new settings and element L described natural settings. Element L was related with the variables: rich, exposed, modern, open, public. Element D was related with the variables: readable, luxury, dead, practical, complicated and not social. Element M was related with the variables: services, commercial, colorful, relaxing, technology, clear, and luxury. See Figure 7.4

Elements F, I, and J appeared on one side of the grid, and all described traditional old settings. Element F was related with the variables: comfortable, mysterious, natural material, artificial, no services and being simple. Element I was related with the variables: close, poor, Islamic, enclosed, hierarchy, private and simple. Element J was related with the variables: private, poor, court, curved window and close.

Elements H, G, and K appeared on one side of the grid and describe traditional old settings. Element H was related with the variables: active, healthy natural clean monotony, identified. Element G was related with the variables: defined spaces, eastern, social, historical, not green, contextual, colorful, active and healthy. Element K was related with the variables: separated, rich details, valuable and clear. See Figure 7.4

Elements A, B, C, and E appeared in one side of the grid and all describe modern settings which are either not homogeneous do not have any physical character. Element A was related with the variables: random, dirty, artificial, not practical and not clear. Element E was related with the variables: dirty, social, mixed height, not valuable, dense and not healthy. Element C was related with the variables: dull, mixed heights, not contextual and no court. Element B was related with the variables: not healthy, isolated, variety, not defined spaces and green.

Figure 7.4 Flexigrid, analysis based on rotated results, for the professional group.

FLEXIGRID v4.0 Feb. 1987. File: arch Time: 14:33:10
 GRID TITLE: Professional
 PLOT *****

ANALYSIS based on rotated results

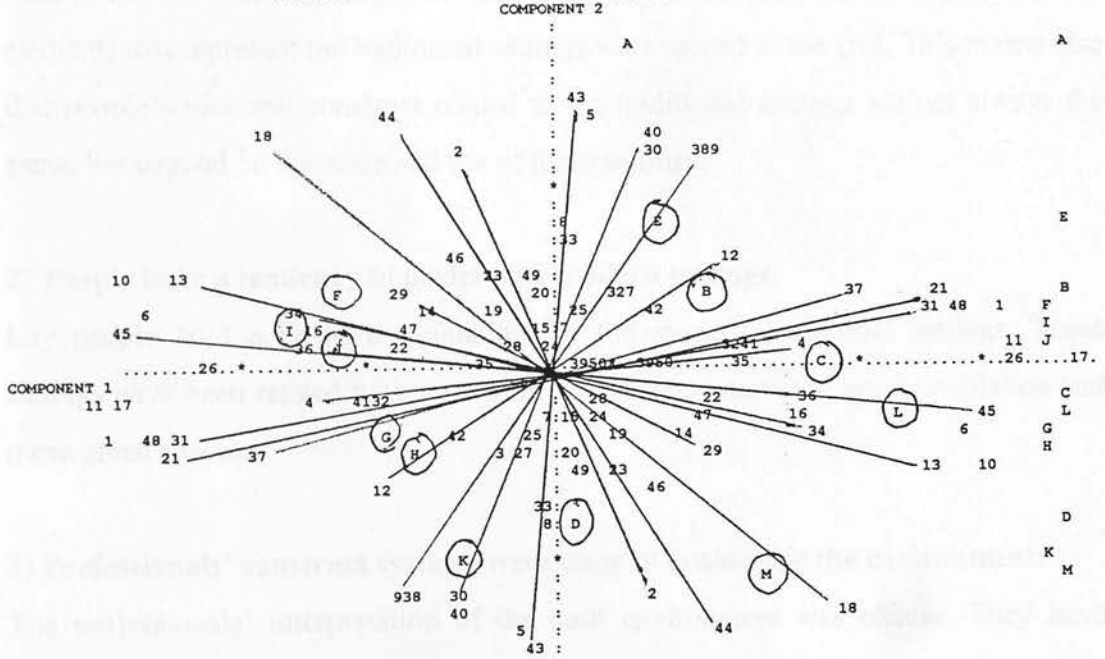
Axis 2 has been reflected
 ELEMENT 2 picked as an IDEAL

- 18 no services
- 10 primitive
- 13 artificial
- 34 hierarchy
- 6 Islamic
- 45 enclosed
- 26 curved windows

- 44 no technology
- 2 common housing
- 46 old
- 23 exiting
- 49 not luxury
- 20 not readable
- 29 comfortable
- 14 mysterious
- 19 housing
- 15 live
- 47 natural materials
- 24 not colorful
- 16 close
- 22 private
- 36 poor
- 28 residential
- 50 landscape
- 35 court

- 43 random
- 5 dirty
- 40 no clear orientation
- 9 dirty
- 38 dirty
- 30 not valuable
- 8 simple
- 33 not practical
- 12 not healthy
- 3 artificial
- 27 plain details
- 42 isolated
- 25 dense
- 7 social
- 4 dull
- 32 mixed heights
- 41 not contextual
- 39 commercial

- 21 not identified
- 37 variety
- 31 green
- 1 not social
- 48 not historical
- 17 not defined spaces
- 11 western



- 11 eastern
- 17 defined spaces
- 48 historical
- 1 social
- 31 no green
- 37 monotony
- 21 identified

- 39 residential
- 41 contextual
- 32 one height
- 4 colorful
- 7 not social
- 25 separated
- 42 active
- 27 rich details
- 3 natural
- 12 healthy
- 33 practical
- 8 complicated
- 30 valuable
- 38 clean
- 9 clean
- 40 clear orientation
- 5 clean
- 43 organized

- 35 no court
- 50 urban
- 28 industrial
- 36 rich
- 22 public
- 16 open
- 24 colorful
- 47 artificial materials
- 15 dead
- 19 commercial
- 14 clear
- 29 not comfortable
- 20 readable
- 49 luxury
- 23 relaxing
- 46 modern
- 2 technology
- 44 technology

- 26 straight windows
- 45 exposed
- 6 modern
- 34 no hierarchy
- 13 natural
- 10 technology
- 18 services

7.3.4.2 Analysis of Flixigrid:

1) Lay people hold different and contradictory ideas about traditional settings:

Judgments of traditional settings on the affective scale for the lay people group were not equivalent or parallel in the satisfactory scale. This shows that the lay people group liked and appreciated the traditional settings, but they found it unsatisfactory to live and use them nowadays. As shown in table 7.3 element I, which represents a traditional setting, is related with public, readable, multi color and pleasing on the one hand, and not isolated, not functional, and no ventilation on the other hand. Also, element F which represents a traditional setting, is related with deserted, and empty on one hand, and calm, centralized, original, rich details and human on the other hand.

This is also clear in the analysis of the flexigrid. One can see that the location of the elements that represent the traditional settings were spread in the grid. This means also that people's idea and construct related to the traditional settings are not always the same, but depend on the scale and use of these settings.

2) People have a tendency to prefer new modern settings:

Lay people hold a positive evaluation for the modern traditional settings. These settings have been related with aspects of having good services, good ventilation and more green spaces.

3) Professionals' construct systems were clear in evaluating the environment:

The professionals' interpretation of the built environment was clearer. They have shown a preference for traditional architecture and also for western contemporary design. Elements J, F, I, are representatives of traditional settings and are related to comfortable, hierarchy, mysterious, close, contextual, and colorful, while element M, which represents the Western contemporary settings, is related with good services and technology. Element L which represents a natural setting is related with rich, natural, transition, exposed, open, technology, modern, and straight windows. Elements E and B which represent an ordinary typical setting are related with random, no clear orientation, simple, plain details, dense, mixed heights, dirty, not valuable, artificial, isolated, social, not contextual and commercial.

7.3.5 Preference System Analysis:

One way to obtain additional analysis is to ask both the respondent groups about their ideal picture. This can give us more information on the analytical base by trying to see the association of the most preferred elements among both the professional group and the lay people group. Analysis shows that both groups differ in their choice of the most preferred photograph.

See Table 7.1.

Figure 7.5 Photographs of preferred elements.

Table 7.1 Preferred elements for both the respondent groups.



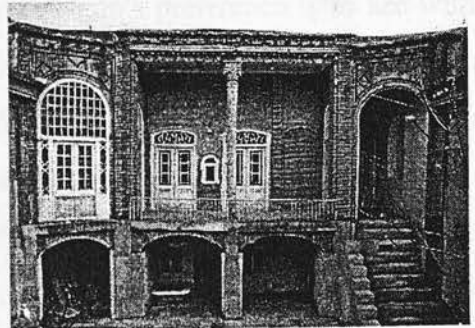
Element I
Traditional setting



Element L
natural modern setting



Element K
Modern traditional setting



Element F
traditional setting

Element No. I, which represents a traditional setting, was selected by the professionals to be the most preferred one, while element No. L was selected to be the most preferred element by the lay people group. This element represents a natural setting. Element No.F representing a traditional setting has been selected once by the professionals. Finally element No. K, which represents an evolutionary attempt was selected three times, once by the lay people group and twice by the architects group. See Table 7.11

Table 7.11 Preferred elements for both the respondent groups.

<i>Element</i>	<i>Professionals Frequencies</i>	<i>Lay people Frequencies</i>	<i>Total Frequencies</i>
Element I Traditional settings	5	2	7
Element L Natural modern setting	3	3	6
Element K Modern traditional setting	2	2	0
Element F Traditional setting	1	1	2

7.3.5.1 Preference Associations:

One way to acquire more information about people’s preference is to see with what aspects the preferred elements were associated. This helps us to explore the structure of the preference system. What are the attributes liked by people? Are these evaluative or physical aspects? What are the priorities in people’s preference systems? Or, to put it another way, why do people like specific settings? What are the negative aspects related to the preferred setting besides all the positive aspects? What is the difference between the professional preference system and the lay people’s system?

Tables 7.12 and 7.14 answer all these questions. We can see that the dimensionality of the preference system takes the direction of the dimensionality of any visual

experience. This means that people preferred the traditional settings according to their spatial attributes, such as descriptive, and organizational, attributes related to character, or attributes related to evaluative aspects such as the affective and the satisfactory ones.

Element I and F, which both represent traditional settings, are associated 21 times with affective constructs, 22 times with satisfactory constructs, 15 times with prescriptive constructs, 13 times with organizational construct, and 15 times with character constructs.

Element K, which represents an evolutionary setting or “new traditional architecture” has been associated 13 times with spatial constructs, 9 times with satisfactory constructs, 10 times with prescriptive constructs, 6 times with organizational constructs, and 9 times with character constructs. Element L which, represents a natural western setting, is associated 12 times with affective constructs, 6 times with satisfactory constructs, 3 times with prescriptive constructs, 5 times with organizational constructs, and 3 times with character constructs.

It has been found that people like or prefer specific settings because they have many qualities. For example, the following constructs have been mentioned repeatedly by the respondents. Evaluative aspects played a part in people’s preference dimension. The constructs exiting, natural, social, organized, comfortable, natural light and accessible have been mentioned three times or more among both groups. Spatial aspects such as, close, rich details, one height, traditional, historical, old and new have also been mentioned more than three times among both groups also.

It has been noticed that element F which has been preferred by the professionals’ group, was associated with negative attributes by the lay people group, such as, messy, deserted, not comfortable, not accessible, and no lighting. This shows that people like the traditional settings even though these settings carry with them some problems.

Table 7.12 Preferred elements and evaluative associations for the professionals and the lay people group.

Variables	Element I Traditional setting		Element F Traditional setting		Element K Modern traditional setting		Element L Natural modern setting	
	Prof.	Lay people	Prof.	Lay People	Prof.	Lay People	Prof.	Lay people
Affective								
Exciting	**				*			
Natural		**	*				***	*
Interesting		*	*				*	*
Human	*	*			*			
Social	**		*					
Mysterious					*			
Protected	*							
Tiring	*							
Belonging			*				*	
Messy			*					
Colorful			*		*			*
Deserted			*					
Organized			*			*		
Dead				*				
Urban					*	**		
Active					*			
Private						*	*	*
Beautiful						*	**	*
Not human				*		**		
Satisfactory								
Dark	**	*						
Functional	*				*			
Comfortable	*		*	*	*			
Natural lighting	*		*		*			*
Economical	*						*	
Privacy	*							
Security	*							
Bad living		*						
No future extension	*							
Accessible		*			*			
Good lighting		*						
Good living		*					*	*
Calm				*			*	
Not comfortable			*					
Sophisticated			*					
Not sunny						*		
Enough spaces						*		
Not accessible				**				
Pollution						*		
Clean					*			*
No lighting				*	*			

Table 7.13 Preferred elements and spatial associations for both the professional and the lay people group.

Variable	Element I		Element F		Element K		Element L	
	Traditional setting		Traditional setting		modern traditional setting		Natural modern setting	
	Prof.	Lay people	Prof.	Lay people	Prof.	Lay people	Prof.	Lay people
Prescriptive								
Open	*						**	*
Close	**			*		*		
Multi color		*						
Small	*		*					
Dark color	*							
Low buildings			*			*		
Rich details			*	*	*			
Arched windows				*				
Curved lines			*					
One color				*				
Not open						*		
Homogeneous					*			*
Mixed heights					*			
Small openings						*		
Flat windows					*			
One height			*		*	*		
Organizational								
Defined spaces	*							
Homogeneous	*							
Inward	*							
Organic	*							
No repetition				*				
Coherent	*							
Dense		*		*				
Approach					*			
Low					*		**	*
Hierarchy					*			
Continuity					*		*	
Complicated					*			
Centralized						*		
Character								
Traditional	*	*	*		*	*		
Historical	**		*		*			
Eastern	**							
Old	**			**		*		
Islamic	*							
New		*			*			
Arabic			*		*			
Residential					**			
Modern						*	**	*

7.3.5.2 Analysis of Preference System:

Results from the analysis of preference data show that there were consistencies among the two groups, the lay people group and the professionals, in the distribution of variables in the dimensions used to interpret the element I which is a traditional setting, represented by an old traditional suq. There was a tendency for both groups to use more variables from the satisfactory dimension than from any other dimension.

On the other hand, the distribution of variables in the dimension used to interpret element F which also represents a traditional setting -an old court traditional deserted house- was not the same for both groups.

Professionals have used more variables from the organizational dimension than lay people, whereas lay people have used more variables from the affective dimension than the professionals.

The distribution of variables in the dimension was the same in the case of element L for both groups, except for the affective dimension, from which professionals used more variables.

The distribution of variables from the dimension used to describe element K representing a modern natural setting was different for both groups. In the case of lay people, variables from the affective dimension were the most used in evaluating this element. On the other hand, variables from the organizational dimension were used least in evaluating the same element.

Figure 7.6 Distribution of dimensions for element I for the two respondent groups.

Element I: Modern traditional setting

Series 1: Professional

Series 2: lay people

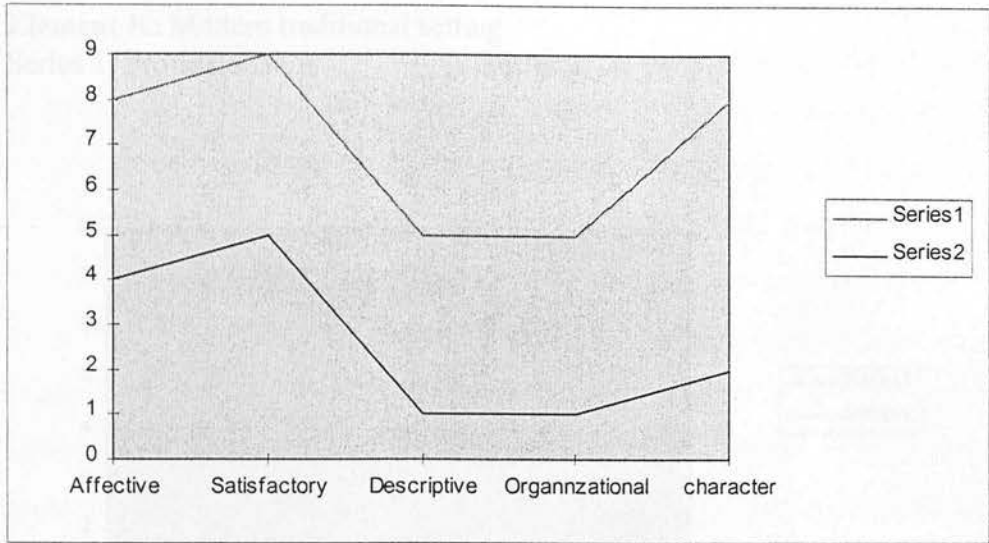


Figure 7.7 Distribution of dimensions for element F for the two respondent groups.

Element F: Modern traditional setting

Series 1: Professional

Series 2: lay people

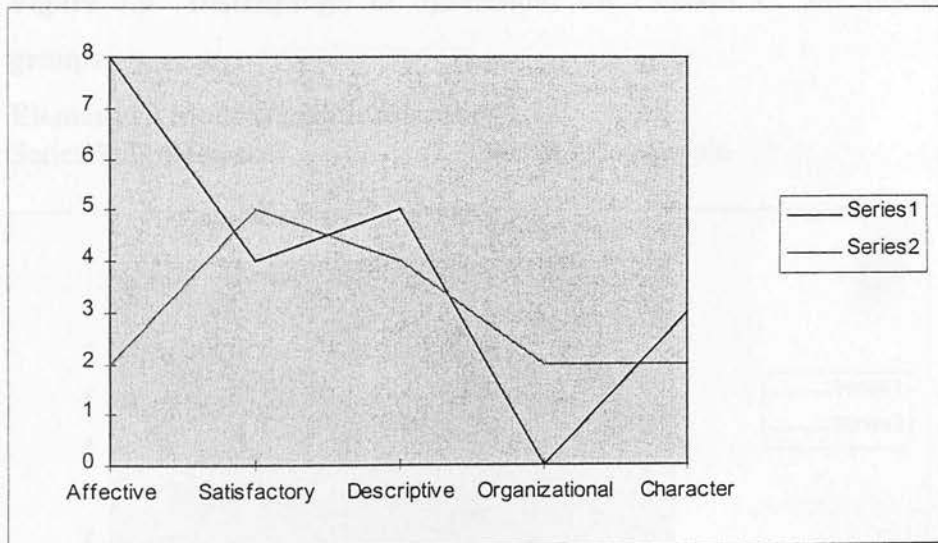


Figure 7.8 Distribution of dimensions for element K for the two respondent groups

Element K: Modern traditional setting

Series 1: Professional

Series 2: lay people

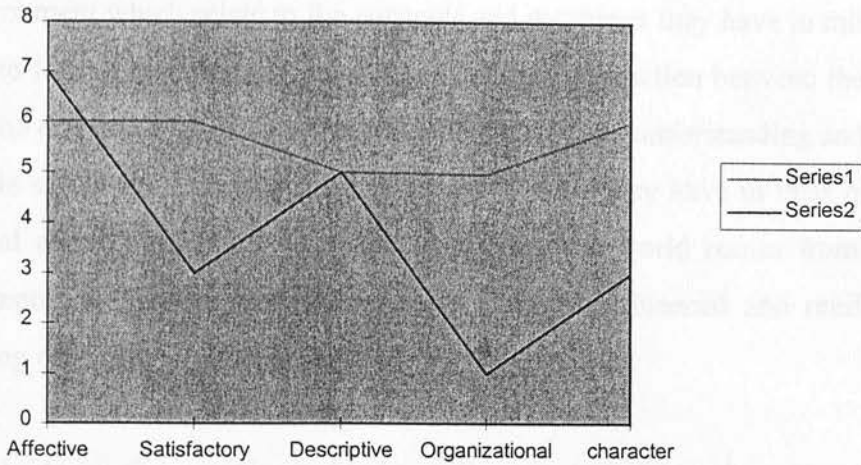
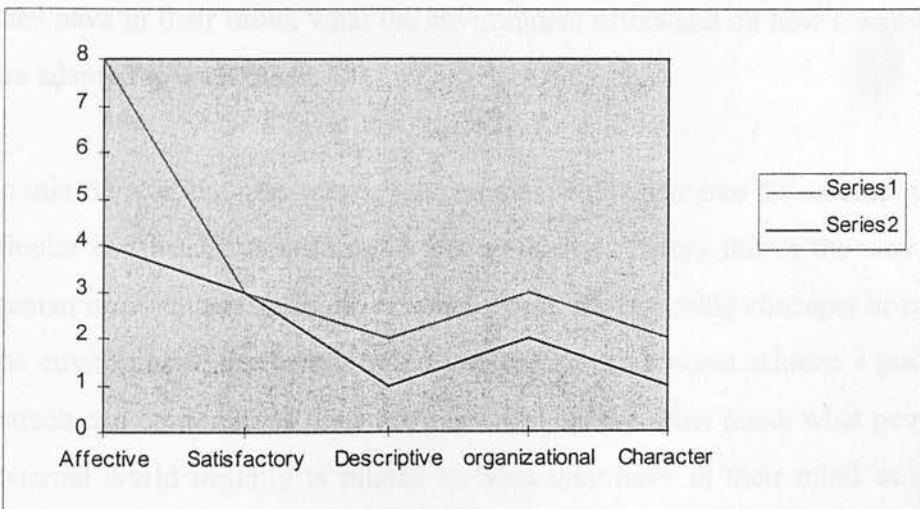


Figure 7.9 Distribution of dimensions for element L for the two respondent groups.

Element L: Modern traditional setting

Series 1: Professional

Series 2: lay people



7.4 Conclusion:

According to Kelly, whatever the external world might be in reality, people link themselves to it by interpreting it or, in other words, adding meaning to it. A mutual interrelationship is established through which the human mind can understand the external world and contribute to it. By imposing concepts and meanings onto the environment which relate to the concepts and meanings they have in mind, people are able to form a certain unity, a state of continued interaction between the human mind and the external world. This is a matter of perception, understanding and action. What people see in the external world is related to what they have in their mind as stored mental assumptions, and what people put into the world comes from that store of assumptions. The stored information is strongly influenced and reinforced by the sharing of values with other people.

In order to survive, people need to know the meaning of the external world; to live in a given society they have to have shared values, both with other people and with the environment. These environmental meanings are not just what an individual invents or suggest. These meanings, which are shared with society, are stored in the local cultural knowledge, and are representations of that culture embodied in the built environment.

What people say about the environment depends on their cultural knowledge, on what they have in their mind, what the environment offers and on how closely these factors are adapted to each other.

In this chapter, the idea was developed that people perceive the external world through bipolar constructs. According to George Kelly's theory this is the way in which the human mind understands the external world. By imposing concepts or meanings onto the environment, the human mind and the external world achieve a point at which a person can comprehend their surroundings. On the other hand, what people see in the external world initially is related to what they have in their mind as stored mental assumption. This stored information has a structure containing a network of bipolar constructs. This structure acts as a filter through which one interprets the world and acts accordingly.

The main objective of this chapter was to use a PCP related technique to examine how people of the city of Nablus interpret the environment. The main target here was to find out the shared constructs and concepts they use for this interpretation. It was also the concern of this chapter to find out the shared concepts which are important for people when evaluating the environment. Not only the concepts, but the way people associate them to each other was significant, i.e. which concept is associated with which.

What generally can be considered as the result of this interview can be classified as follows:

- 1) A significant point is that people do interpret the external world. The constructs and concepts they raised indicate the way they understand the environment. The relationship between those constructs and concepts also indicate the way people associate different aspects in the environment with each other.
- 2) The construct system lay people are using for the interpretation of built environment is different from that of the professionals. In other words lay people conceptualize the world they are living in a different way to the professionals.
- 3) The most obvious point to make about the differences between lay people and professionals in their interpretations of the built environment is simply that the differences do exist. The many complex ways in which the lay people's conceptions differed from those of the professionals exhibited themselves -from our research results- in many directions. Differences between lay people and professionals were observed in the dimensions of interpretation, and in the association structure they use for their judgment. Also, differences were observed through the findings of the correlation system both groups use to correlate variables and aspects of evaluation.
- 4) Lay people have shown a tendency to be more subjective, while the professionals tend to be more objective in their interpretation of the built environment.

Differences existed in the dominance of one dimension into another for both groups. These differences existed in the physical attributes. The professionals seem to use a

greater range of criteria at the physical level, and more obviously at the organizational level. On the other hand, laymen seem to use a greater range of criteria at the evaluative level, considering satisfaction. This shows that the layman is interested in the practicality of the architectural structure rather than the concepts of organization and the aspects of massing.

Comparisons at this level are rather important because strong emphasis on different dimensions by professionals and lay people could cause disruption in communication fidelity. The dominance of the evaluative dimension over the physical dimension was observed: this means that people were judging the environment in an evaluative aspect. It is the way they felt about it and experienced it, rather than its real physical qualities.

5) Lay people have shown signs of confusion or contradictions in their constructs that deal with interpretation of the traditional settings. This could be attributed to the corruption caused by the rapid economical and social changes that occurred when the western model was introduced in the developing countries. It could also be attributed to the enormous flow of information through new ways of communication, especially the T.V, Radio, and computer.

6) Professionals have shown a tendency to classify certain settings they are judging. Professionals tried to classify any setting before judging it by trying to put it under certain category, such as urban - landscape, residential - commercial, or traditional - modern. For example, eastern settings were related with defined spaces, curved windows and being enclosed, while urban settings were related with not being comfortable, public artificial and social, and landscape settings as being natural, not social, comfortable and private.

7) The professionals have shown a greater tendency to associate more variables than the lay people.

This could be attributed to the professional training and education on the one hand, and on the other it could be that people have become confused about their environment, and do not hold a clear construct system for the interpretation of built

environment. Although people were using a wide range of criteria in their assessment of the environment, there is a perceptual uncertainty about the built environment and its content.

8) Professionals associated traditional modern settings with variables different from those of the lay people.

Traditional settings in the professionals' construct system were associated with concepts of simplicity, monotony and certain architectural characteristics that have a specific shape of opening such as curved window, while lay people associated these settings with the aspect of pleasure.

On the other hand, modern settings in the professionals' construct system were associated with aspects of technology, variety and flat openings, while lay people associated the modern settings with the aspect of frustration.

CHAPTER 8

SEMANTIC DIFFERENTIALS

8.0 Introduction:

In the previous two chapters we learned how to create and understand the basic interpretation of the basic structure of the semantic differential scale. We also learned how to create and understand the basic structure of the semantic differential scale. We also learned how to create and understand the basic structure of the semantic differential scale.

8.1 Background:

One main concern in this research is to understand the relationship between the built environment and human behavior. This research will try to identify these relationships and understand the impact of the built environment on human behavior. This part will show a new method for creating and understanding the semantic differential scale. By doing so, we will be able to understand the relationship between the built environment and human behavior.

These streets have been chosen to be the focus of the study because they are located in the heart of the city, near the main business district, and they are very busy. These streets have a long history and they are very important to the city. The old streets have been replaced by modern streets, but the old streets have been preserved. The old streets have been preserved because they are very important to the city. The old streets have been preserved because they are very important to the city.

8.1 Background:

A short background to these streets will be given in order to provide a better understanding of these streets and their history.

CHAPTER EIGHT: SEMANTIC DIFFERENTIAL

8.0 Introduction:

In the previous two surveys an effort was made to try to understand people's interpretation of the built environment. The analysis of the results of the open-ended questionnaire and the PCP confirmed people's construct system or concepts they hold. Results of the analysis reflect that the interpretation of the built environment depends on its type, i.e. whether it is a building, a street, or an area.

Our main concern in this research is try to identify the differences of interpretation of the built environment between the professionals and the lay people. This chapter will try to identify these differences with reference to one type of built environment, the street. This part will allow us to cross check on some of the findings of the previous section. By doing so, we will enhance the validity of the research and increase its sensitivity.

Three streets have been chosen to be the focus of the study: the Old Suq, Rafidya Street, and King Faisal Street. These streets have been mentioned by people in the open-ended questionnaire. The Old Suq (an old traditional street) and Rafidya Street (a modern street) have been evaluated positively by the respondents. While King Faisal Street (a modern street) received a different evaluation from the respondents.

8.1 Background:

A short background to these streets may be a good introduction to providing a better understanding of these spaces within context

The Old Suq:

The Old Suq in the city of Nablus is the main commercial spine in the old city that runs east-west for about 500 m. Its location, being in the heart of the old city and very close to the new city center, makes it one of the most important places in the city. The suq is not only known for its vitality as very near and accessible to the residents of the city but also as a safe place for shopping as cars are prohibited to enter. The Suq is based on a linear organization with a width of 12m approximately with small shops on both sides. The Bazaar is covered with cross vaults along it and has a natural light ceiling with colorful stained glass decorating the cross vaults. Shops of nearly the same size are on both sides selling different goods and products. In the old days, the Bazaar use to specialize in certain goods, but nowadays you can find different varieties of goods in the suq.

Figure 8.1 Map of the old city of Nablus

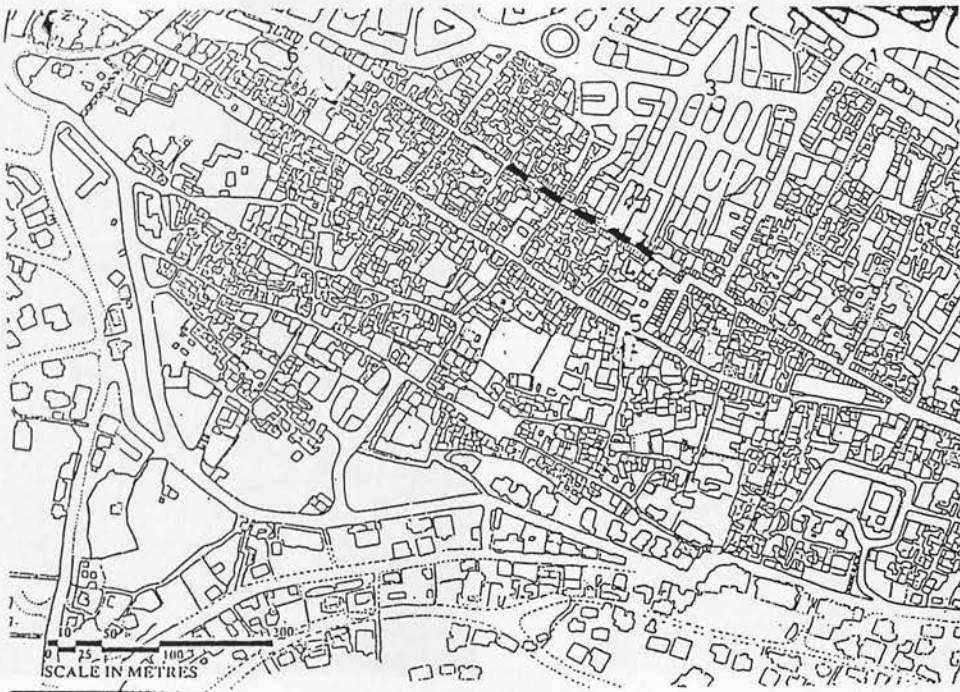


Figure 8.2 The map of the covered Old Suq.

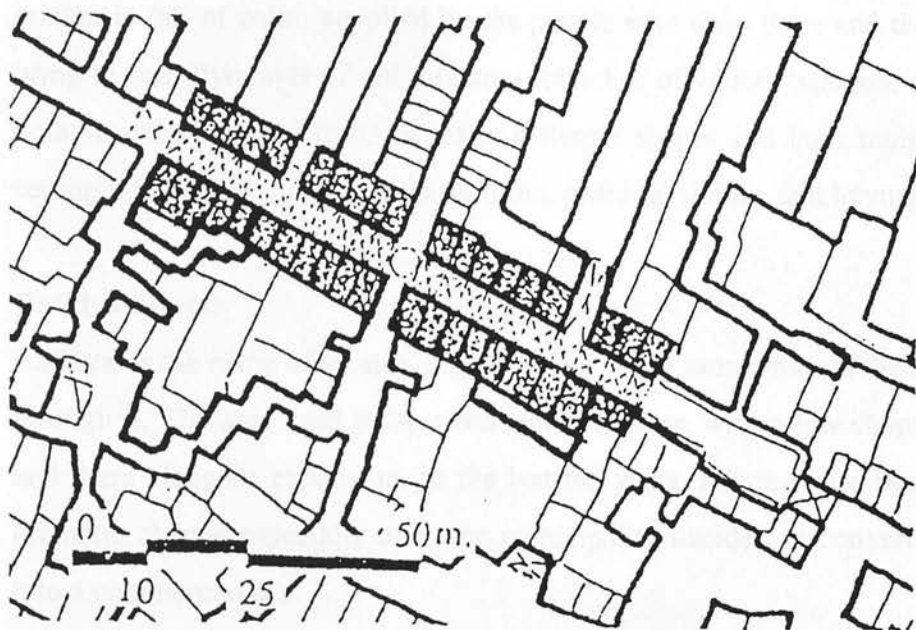
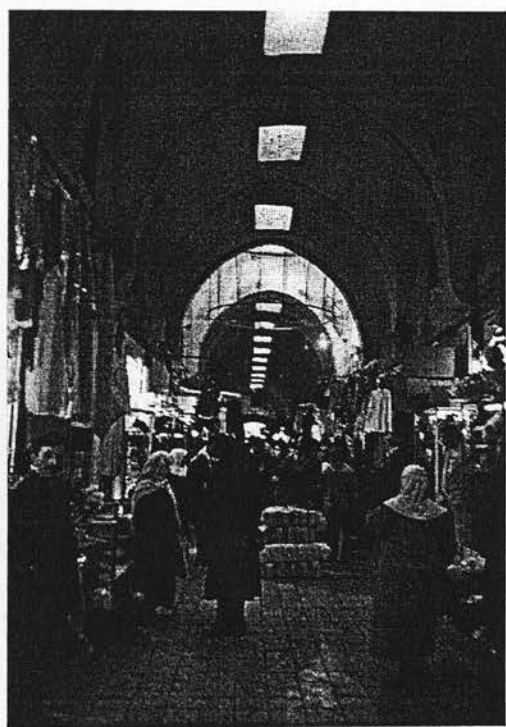
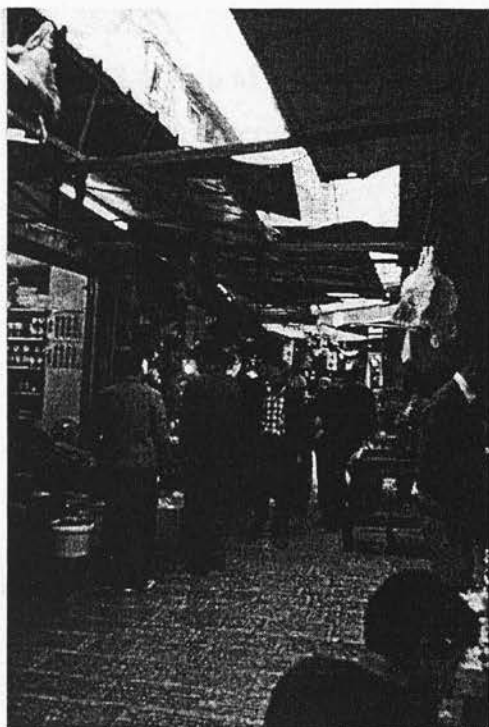


Figure 8.3 Photographs of the Old Suq , the covered one to the right, and the uncovered to the left.



Although the physical structure of the market is plain and nearly barren, as a place the market is full of color, supplied by the people who shop there and the produce they bring to sell. Pyramids of red tomatoes, bunches of yellow bananas, sacks of brown potatoes, and trays of fruits of many different shapes and hues transform the stark setting into a stage full of people shouting, pushing, selling, and buying.

Rafidya Street:

Rafidya is the name of an area, and the street of the same name is the main street pass through it. The area used to be a residential quarter, with a few shops scattered here and there along its expansion. In the last ten years, this area has been exposed to a dramatic change especially after the municipality decided to convert Rafidya Street into a commercial use.

Rafidya is very active area especially in the evening, with people walking along the streets buying sandwiches or an ice cream and chatting with each other.

Figure 8.4 Map of Rafidya Street.

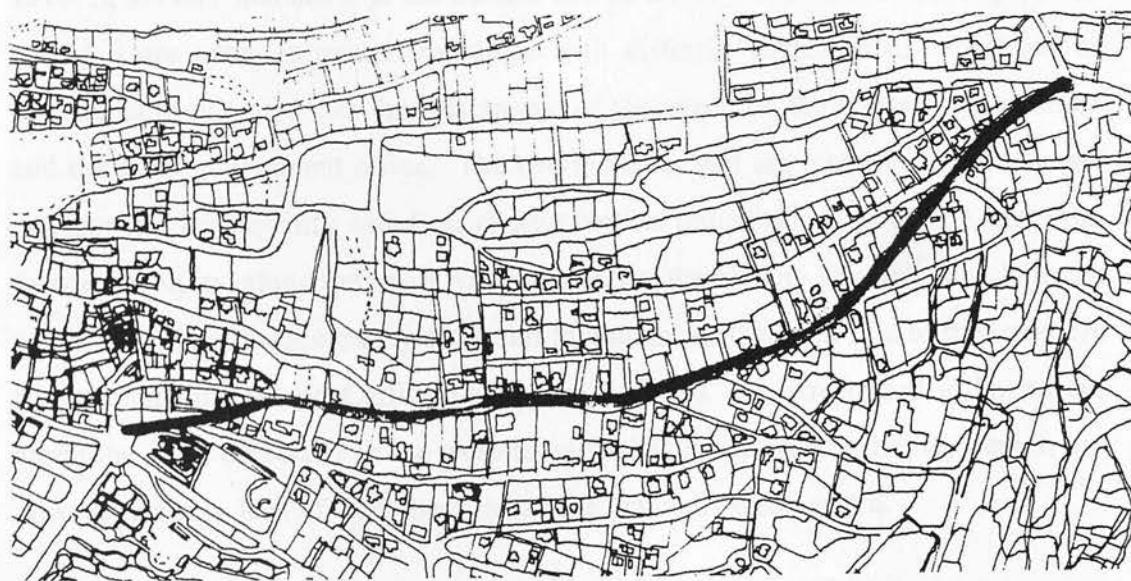


Figure 8.5 Photographs of Rafidya Street.



Today you can see a lot of new shops and office buildings that have been constructed along the strip, which disturbs the calmness of the residential quarter. The campus of An-Najah University and the Insurance Building are the two most important buildings in that area. Both of them are new but different in character.

King Faisal Street:

King Faisal Street is the major street that runs along the city with a linear expansion that follows the natural expansion of the city itself. The street itself is the widest street in the city that starts at the eastern end of the city and ends at the city center. Along it are many important buildings with different significance, considered as landmarks in the city. At the eastern end of the street are the transport department and the local government office. The two mosques that are located along the street enhance its visual quality with their elegant vertical minarets and beautiful stone front facades. Walking along the street, you can observe the old city climbing slowly to the south following the topography of Jerzim Mountain. At the West End of the street are the municipality, the post office and the tax building. The street used to have trees along the road, especially in the western part when it approaches the city center, but nowadays due to lack of care, these trees have gradually disappeared.

The street is very wide, and very difficult to cross from one side to the other. Being the main road that crosses the city from West to East makes the road full of traffic all day and sometimes there is traffic congestion at peak times. Because of the very condensed circulation of cars, the street is known for being unhealthy and polluted.

Figure 8.6 Map of King Faisal Street.

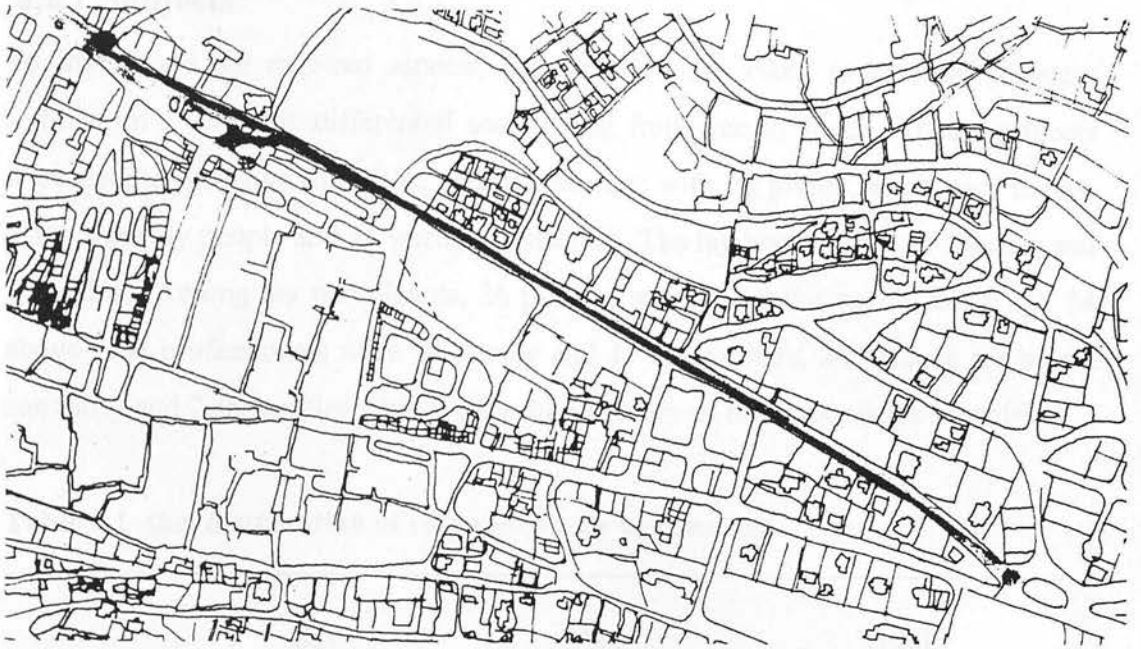
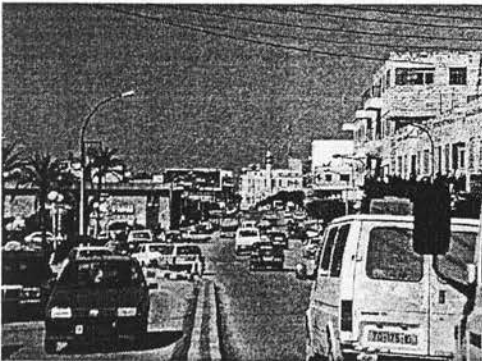


Figure 8.7 Photographs of King Faisal Street.



Different commercial uses are found in the street; most of these are in the ground floors of the buildings while the other floors are kept for residential and office use. The commercial strip varies from small grocery shops, mini markets, and auto repair shops to metal craft shops, which bring pollution to the area, known as “Suq El-Haddadin”.

8.2 Experiment:

8.2.1 Subjects:

To investigate the required aspects, participants were asked to evaluate different settings on a semantic differential scale rating from one to seven. All the subjects were people who live in Nablus and are familiar with its places, areas, and streets. Sixty were lay people and 31 were professionals. The lay people were 31 females and 29 males. Among lay participants, 26 persons were under the age of thirty and 34 above. The professionals were 14 female and 17 male where, 24 persons are below age thirty and 7 above (See table 8.1 for the summary of the respondents' details).

Table 8.1 the distribution of respondents by age and sex

	Sex		Age		Total
	Male	Female	+ 30	- 30	
Professionals	17	14	7	24	31
Lay people	29	31	34	26	60

The three different streets, Old Suq, King Faisal Street and Rafedya Street, which have been chosen to be evaluated by participants, are mentioned as the most important streets in the previous part of the research (the open ended questionnaire). The Old Suq is the main commercial spine in the old city; King Faisal Street is the major commercial spine that crosses the city from east to west, and is very wide and always congested with cars and traffic. Rafidya Street is a new commercial mix use street which has undergone a lot of construction.

8.2.2 Method:

The semantic differential, a general measuring technique developed by Osgood (1975) to measure connotative meaning, was selected to obtain judgments of meaning from the various respondent groups on the architectural material. The semantic

differential utilizes a number of scales consisting of polar adjectives, such as good-bad, strong-weak, active-passive, to differentiate the meaning of the concept (in this case, aspects of buildings). The scales are divided into seven steps, as follows:

Strong -----:-----:-----:-----:-----:-----:----- Weak

Each subject is asked to consider the concept (building aspect) and place a check in the blank in which he or she feels the meaning of the concept (building aspect) lies. From left to right on the example, a check in the blank would indicate: extremely strong, quite strong, slightly strong, neither strong nor weak (or not applicable), slightly weak, quite weak, extremely weak. Each concept is judged on several such scales, the scale being varied to suit the subject materials.

Participants were asked to evaluate these places on a semantic differential scale through 32 variables. Variables have been chosen to include all the dimensions which have been found by the previous part of the research. These dimensions are: the physical dimension concerned with structural properties of the place such as harmony, symmetry, color; the evaluative dimension which deals with affective dimensions such as deserted, friendly , lively, and the satisfactory dimension concerned with healthy, polluted, --- etc. Variables that deal with aesthetic dimension such as beautiful, attractive, pleasant, and historic dimension such as old, worth keeping, historic, were also added.

The purpose of this study is to try to investigate;

- a- Dimensionality of the interpretation: this means the way in which people understand and structure the built environment. This could be done through applying factor analysis on the proposed variables for both groups, the professionals and the lay people, on the three different streets. This allows us to see how people structure certain settings.
- b- The image both groups hold towards the three different aspects of spaces. Understanding the images may be very important for understanding the man- environment interaction. They are an efficient and effective way of embodying values and beliefs, and help simplify the complexity of the world . This could be studied in this part of this research

through: 1) Preference system: an evaluation system is useful to see how people will rate different setting; this is conducted through a descriptive analysis of the variables to median and standard deviation for both groups. 2) Association: through correlation analysis, we could study people's association system. And the different aspects they hold towards the built environment. This could be studied through studying the correlation of the proposed variables for both groups.

8.3 Factor Analysis :

Factor analysis refers to a variety of statistical techniques whose common objective is to represent a set of variables in terms of a smaller number of hypothetical variables. At one extreme, the researcher may not have an idea as to how many underlying dimensions there are for the given data. Therefore, factor analysis may be used as an expedient way of ascertaining the minimum numbers of hypothetical factors that can account for the observed covariation, and as a means of exploring the data for possible data reduction. This form of use is exploratory, which has been applied in the PCP analysis.

But the use of factor analysis need not be confined to exploring the underlying dimensions of the data. Depending upon the knowledge of the researcher, the method can be used as a means of testing specific hypotheses. For instance, the researcher may anticipate that there are certain different underlying dimensions and that certain variables belong to a certain dimension. If factor analysis is used to test this expectation, then it is used as a means of confirming a certain hypothesis, such as in this part of this research where factor analysis is used as confirmatory factor analysis.

8.3.1 Findings of Factor Analysis:

All subjects evaluate the three chosen settings, the Old Suq, King Faisal Street, and Rafidya Street on a different sheet. Data were factor analyzed with varimax rotation to answer the following questions:

- 1) Confirm the underlying dimensions used to evaluate the three settings?
- 2) Do these dimensions differ between professionals and lay people? If so in what way do they differ?
- 3) Do these dimensions differ among different settings? In what way do they differ?

In other words, are different places associated with a certain cluster of semantic, structure and connotative properties.

Table 8.2a is a factor structure matrices by lay people for the old suq. The result in 7 factors solution with eigenvalues greater than 1. A variable is deemed to be included on a factor if it loads an excess of 0.7. These derived accounting for 77.5% of the variance. Factor 1 is the aesthetic dimension with variables good, artistic, beautiful, pleasant, attractive, and charming. Factor 2 is the historic dimension with variables old, history, worth keeping, makes you think about history, valuable, and distinguished. Factor 3 is the affective dimension with variables safety, lively, human, and economic. Factors 4, 6 and 7 are the physical dimension with variables harmony, symmetry, human scale, colorful; and complex respectively. Factor 5 is the satisfactory dimension with variables pollution and healthy.

Table 8.2b is a factor structure matrices by professionals for the Old Suq. The result with 9 factors solution with eigenvalues greater than 1 was derived accounting for 83.1% of the variance. Factor 1 is a combination of physical and affective dimensions with variables harmony, human scale, safety, and lively. Factor 2 is the aesthetic dimension with variables pleasant, beautiful, attractive, and charming. Factor 3 is a combination of three dimensions, the historic dimension with historic, physical with visual and evaluative with deserted. Factor 4 is a historic dimension with variables worth keeping, make you think about history, and valuable. Factors 5, 7 and 8 with variables economy, pollution and mysterious respectively. Factors 6 and 9 are physical dimension with variables symmetry, complex, and size respectively (See table 8.2b).

Table 8.2aFactor analysis by lay people for the old suq

Variables	Factor structure matrices						
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Old		.76247					
History		.81618					
Worth keeping		.85411					
Think about history		.86002					
Valuable		.81187					
Distinguished		.76367					
Harmony				.82839			
Symmetry				.88247			
Human scale						.71089	
Colorful						.81082	
Complex							.69781
Safety			.70293				
Lively			.82350				
Human			.85429				
Pollution					-.90919		
Mysterious						.80295	
Healthy					.65868		
Economy			.85216				
Good	.75145						
Artist	.84135						
Beautiful	.80993						
Pleasant	.85592						
Attractive	.80410						
Charming	.74088						

Table 8.2b Factor analysis by professionals for the old suq

Variables	Factor structure matrices								
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
History			.73147						
Worth keeping				.70344					
Think about history				.71209					
Valuable				.77281					
Harmony	.71681								
Symmetry						.81466			
Human scale	.76687								
Size									.84459
Tidy									
Visual unity			.70433						
Complex							-.77199		
Safety	.83253								
Lively	.76658								
Deserted			-.80537						
Pollution							-.88075		
Mysterious								.84441	
Economy					.88186				
Beautiful		.75948							
Pleasant		.82261							
Attractive		.89133							
Charming		.89034							

8.3a is factor structure matrices by the lay people for King Faisal Street. The result is a 9 factor solution with eigenvalues greater than 1. A variable is deemed to be included on a factor if it loads an excess 0.7. These derived, account for 76.7% of the variance. Factor 1 is the aesthetic dimension with variables beautiful, pleasant, attractive, charming. Factors 2 and 7 are the historic dimension with variables old, history, worth keeping, valuable respectively. Factor 3 is a combination of the physical dimension and evaluative dimension with variables visual unity and privacy. Factors 4, 5 and 9 are the evaluative dimension with variables economic, deserted with negative loading, human respectively. Factor 6 and 8 are the physical dimension with variables harmony, symmetry ornate, and colorful respectively.

Table 8.3a Factor analysis by lay people for King Faisal Street.

Variables	Factor structure matrices								
	1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Old		.79422							
History		.86627							
Worth keeping							.81518		
Valuable							.78689		
Ornate								.72901	
Harmony						.62647			
Symmetry						.77351			
Visual unity			.74573						
Colorful								.83257	
Privacy			.81968						
Human									.75207
Deserted									
Economy						.80168			
Beautiful	.74903								
Pleasant	.84422								
Attractive	.85872								
Charming	.83914								

Table 8.3b is a factor structure matrices by the professionals for King Faisal Street. The result is a 9 factor solution with eigenvalues greater than 1. A variable is deemed to be included on a factor if it loads an excess 0.7. This was derived, accounting for 83.5% of the variance. Factor 1 includes the aesthetic dimension with variables artistic, pleasant, attractive, charming and the evaluative dimension with the variable friendly. Factor 2 is the historic dimension with variables old and historic. Factor 3 is

the evaluative dimension with variables lively and economic. Factor 4 is a combination of the physical dimension and evaluative one with variables Complex, deserted, and mysterious. Factor 5 is a combination of the physical dimension with variable human scale and comfortable from the evaluative dimension. Factors 6 and 9 are a physical dimension with variables ornate, tidy, visual unity and symmetry respectively. Factor 7 is a combination of physical dimension harmony, size and healthy respectively. Factor 8 is the historic dimension with variables worth keeping, and valuable. See table 8.3b.

Table 8.3bFactor analysis by professionals for King Faisal Street.

Variables	Factor structure matrices								
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Old		.83505							
History		.77475							
Worth keeping								.79156	
Think about history									
Ornate						.66084			
Harmony							.61675		
Symmetry									.89094
Human scale					.80273				
Size							.83896		
Tidy						.67126			
Visual unity						.63376			
Complex				.78863					
Friendly	.77507								
Lively			.80074						
Deserted				.80102					
Mysterious				.71681					
Comfortable					.85280				
Healthy							.86036		
Economy			.81679						
Artist	.79220								
Pleasant	.82898								
Attractive	.94670								
Charming	.87562								

Table 8.4a is a factor structure matrices by lay people for Rafidya Street. Result with an 8 factor solution with eigenvalues greater than 1. A variable is deemed to be included on a factor if it loads an excess 0.7. This was derived, accounting for 74.8% of the variance. Factor 1 is the aesthetic dimension with variables beautiful, pleasant, attractive, and charming. Factors 2 and 7 are physical dimension with variables harmony, symmetry and color respectively. Factors 3, 6 and 8 are the evaluative

dimension with variables comfortable, economic, privacy, pollution, deserted, and mysterious respectively. Factors 4 and 5 are the historic dimension with variables worth keeping, valuable, old, history, and makes you think about the history respectively.

Table 8.4a Factor analysis by lay people for Rafidya Street.

Variables	Factor structure matrices							
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Old					.84586			
History					.90525			
Worth keeping				.89003				
Think about history				.74346				
Valuable					.74463			
Harmony		-.87400						
Symmetry		.85694						
Human scale								
Colorful							.84300	
Private						.83330		
Deserted						.79310		
Mysterious								.72671
Comfortable				.72357				
Pollution								
Economy				.66625				
Artist	.66243							
Beautiful	.70294							
Pleasant	.78338							
Attractive	.89050							
Charming	.78788							

Table 8.4b is a factor structure matrices by the professionals for Rafidya Street. The result is an 8 factor solution with eigenvalues greater than 1. A variable is deemed to be included on a factor if it loads an excess 0.7. This was derived accounting for 81.6% of the variance. Factor 1 is a combination of the historic dimension, physical dimension and aesthetic one with variables valuable, harmony, tidy, visual unity, pleasant, attractive, and charming respectively. Factors 2, 4, 6 and 8 are the evaluative dimension with variables comfortable, healthy, economic, deserted and pollution respectively. Factor 3 is the historic dimension with variables old, history, and makes you think about the history. Factor 5 is a combination of the historic dimension and physical one with variables distinguished and ornate respectively. Factor 7 is a combination of the historic dimension and physical dimension with variables worth keeping, and human scale respectively.

Table 8.4b Factor analysis by professionals for Rafidya Street.

Variables	Factor structure matrices							
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Old			.85346					
History			.86295					
Worth keeping							.78218	
Think about history			.80638					
Valuable	.77700							
Distinguished					.71027			
Ornate					.82908			
Harmony	.80294							
Human scale							.73959	
Tidy	.83181							
Visual unity	.76835							
Deserted						.89960		
Comfortable		.89178						
Pollution								.80217
Healthy		.88195						
Economy				.85218				
Pleasant	.85160							
Attractive	.88972							
Charming	.73382							

8.3.2 Interpretation of Factor Analysis:

The previous results of factor analysis of the PCP have elicited that lay people have shown a tendency to be more subjective, while professionals tend to be more objective. However if we look at the findings of the analysis of the factor analysis of this chapter, we can see that this is not always true. The lay people have shown a tendency to be more subjective in the case of the Old Suq and more objective in the case of King Faisal and Rafidya Streets. Factor 3 in the case of the Old Suq for the lay people showed the variables safety, lively, pollution, and economy which are all variables that come under the evaluative dimension, mainly dealing with people's feelings and emotions, while factor 4 showed the variables harmony and symmetry which underlie the physical dimension.

On the other hand, professionals did not show the same degree of objectivity in all cases. Professionals tend to be more subjective towards the Old Suq and preferred modern settings e.g. Rafidya Street. As a conclusion, we could say that the degree of subjectivity or objectivity is influenced by the type of built environment, whether it is new or old, and whether it is preferred or not.

Lay people have shown a greater tendency to group in specific dimensions when they evaluate or judge a certain setting. For example in the case of the Old Suq the physical factor includes subgroups harmony and symmetry in one group and colorful and human scale in another group. In the case of King Faisal the variables were harmony and symmetry in one group, colorful and visual unity in different other group. In the case of Rafidya street the variables harmony and symmetry in one group, colorful and human scale in another group.

In the evaluative dimension, lay people have also shown the same tendency in grouping variables into one dimension. For the Old Suq, safety, economic, lively and human scale are in one group, pollution and healthy are in a second group, and mysterious is in a third group. In the case of King Faisal Street it has been observed that the variables deserted and human are in one group, privacy is in a second group and economic is in a third group. In the case of Rafidya Street it has been observed that variables comfortable and economic are in one group, private pollution are in a second group, mysterious and deserted are in a third group.

On the other hand professionals have shown a greater tendency to combine variables from different factors. This was observed mainly in the evaluative dimension. In the case of King Faisal Street, the variables mysterious and deserted from the evaluative dimension are related to the variable complex from the physical dimension. The variable comfortable is related to the variable human scale, and finally the variable economic is related to the variable size (See table 8.3b).

In the case of Rafidya Street, for the professionals, it has been observed that combining mainly occurs in the physical dimension with other variables. For example, harmony, visual unity and tidy have been related with the variable valuable. The variable ornate has been related with distinguished, and the variable human scale has been related with variable worth keeping in the case of the Old Suq (See table 8.4b)

The clarity of image both groups hold towards a traditional setting (Old Suq) is more than that for a modern one (King Faisal Street and Rafidya Street) . This

could be referred to the importance of schemata for organizing past and present behavior and experience. The aesthetic and historic dimension both groups hold for the old suq is clear and confirmed .

When comparing the most preferred place, according to the greatest average mean of the aesthetic factors among lay people with the number of variables laid by the participants, it has been observed that the more the place is positively evaluated by the participant, the more variables have been used to evaluate it. In other words, the more people like the place, the more they know about its qualities by setting more criteria to interpret certain settings. For example the Old Suq has been evaluated as the most preferred place in terms of historicity and aesthetic. Variables such as harmony, symmetry, human scale, size, tidy, visual unity, and complex were among variables included in the physical dimension. Variables such as safety, lively, deserted, pollution, healthy, mysterious, and economic were among variables included in the evaluative dimension.

8.4 Descriptive Analysis:

A descriptive analysis is one of the investigative techniques used in research to describe the variables. Standard deviation is one kind of descriptive analysis, which describes the distribution or the spread of responses of the respondents for particular variables. In this part of this research SD (Standard Deviation) was used to describe the distribution of ratings taken for both respondent groups (lay people and the professionals) for the dimensions used for interpretation of the built environment.

8.4.1 Findings of Descriptive Analysis:

In general, results show that the SD of rating the three settings by the professionals is smaller than the SD of rating the same settings by the lay people. This is true over all dimensions used for the interpretation. Table 8.5 shows the Medians and Standard Deviation of the physical dimension for both groups.

Table 8.5 Medians and Standard deviations (SD) for variables of historicity taken for three settings; Old suq, King Faisal Street and Rafidya Street.

Variables	Old suq		King Faisal St.		Rafidya St.	
	M	S.D	M	S.D	M	S.D
Lay men						
Old	7	,982	4	2,124	2	1,780
Historic	7	1,258	2	1,990	1	1,605
Worth keeping	7	1,103	4	1,989	4	1,877
Make you think ..	7	1,538	2	2,144	1	1,790
Valuable	7	1,151	4	2,228	5	2,004
Distinguished	7	1,386	2	1,876	3	2,119
Professionals						
Old	7	,919	4	2,211	2	1,710
Historic	6	,922	3	1,918	2	1,251
Worth keeping	7	,529	5	1,791	5	1,548
Make you think	7	1,221	3	1,447	2	,957
Valuable	7	,761	4	1,928	4	1,498
Distinguished	7	1,138	3	1,586	2	1,483

The SD for rating the physical dimensions of the three settings by the professionals is smaller than that for the lay people. The distribution of rating for the variables ornament, color, and complex in the case of the lay people was relatively bigger than in other variables, which means that the aspect of complexity is not highly agreed on by the lay people. This is not the same for professionals who have the least SD for rating the complexity of the Old Suq. This could reflect the fact that the professionals have more agreed perception of the built environment than the lay people do. See Table 8.6

Table 8.7 shows the results of SD by the two respondent groups for the evaluative dimensions. In general, the distribution of rating used by the lay people for the evaluative dimension for King Faisal Street and Rafidya Street is bigger than that for the Old Suq. This means that lay people disagree more for evaluating the functional efficiency of modern streets rather than the old streets. In other words, the clarity of interpretation of functional efficiency is affected by the type of space. Lay people have shown a tendency for greater SD in some variables of the evaluative dimensions. Aspects of pollution, mysterious, and health were among them, whereas this is not the

same for the professionals. Professionals have shown greater distribution in rating the variables of evaluative dimension for the Old Suq. Friendliness of the Old Suq was one of the variables which obtained a high SD (See table 8.7).

A great distribution in rating of aesthetic dimension was observed in King Faisal Street. This means that the level of agreement on the aesthetic aspect of King Faisal Street is relatively low. Also, a great distribution was observed in rating the goodness of the Old Suq by the professionals (See table 8.8).

Table 8.6 Medians and Standard Deviations for the variables of the physical dimension taken for the three settings: Old Suq, King Faisal Street and Rafidya Street.

variables	Old Suq		King Faisal St.		Rafidya St.	
	M	S.D	M	S.D	M	S.D
Lay men						
Ornate	5	2,142	1	1,522	2	1,855
Harmony	6	1,595	3	2,080	3,5	2,090
Symmetry	6	1,294	3	2,158	3,5	1,981
Human scale	6	1,443	5	1,716	4	1,740
Size	5	1,871	4	1,901	4	1,833
Tidy	6	1,810	4	1,956	4,5	1,961
Visual unity	7	1,048	4	2,076	4	2,146
Color	3	2,157	2	1,899	3	2,195
Complex	3	2,034	1	1,418	2	1,455
Professionals						
Ornate	6	1,214	1	1,077	2	1,395
Harmony	6	1,839	2	1,766	3	1,537
Symmetry	6	1,153	2	1,594	2	1,302
Human scale	5	1,863	4	1,673	4	1,652
Size	6	1,275	3	1,781	3	1,456
Tidy	7	1,117	2	1,261	3	1,558
Visual unity	4	1,590	2	1,413	2	1,668
Color	2	1,627	2	1,413	4	1,731
Complex	7	,909	3	1,432	3	1,303

Table 8.7 Medians and Standard deviation (S.D) for the variables of the evaluative dimension taken for the three settings: the Old Suq, King Faisal Street and Rafidya Street.

Variables	Old Suq		King Faisal St.		Rafidya St.	
	M	S.D	M	S.D	M	S.D
Lay men						
Friendly	6	1,164	5	1,761	5	1,813
Private	6	1,776	3	2,111	4	2,098
Safety	6	1,713	4	2,119	5	2,251
Lively	7	1,371	7	1,447	7	1,587
Human	6	1,459	6	1,777	5	1,806
Deserted	1	1,748	1	1,117	1	1,518
Comfortable	6	1,878	4	1,788	5	2,095
pollution	4	2,163	3	2,140	3	2,051
Mysterious	2	2,161	1	1,431	1	1,561
Healthy	5	2,046	5	2,016	5	2,034
Economic	7	1,750	6	1,730	6	1,908
Professionals						
Friendly	5	2,109	4	1,710	4	1,635
Private	7	1,117	2	1,661	3	1,612
Safety	7	,702	2	1,570	3	1,762
Lively	7	1,082	6	1,893	6	1,947
Human	1	1,039	4	1,727	5	1,774
Deserted	6	1,301	1	,798	1	1,503
Comfortable	3	1,602	3	1,716	4	1,691
pollution	2	1,419	5	2,045	3	1,999
Mysterious	5	1,251	2	1,287	2	1,446
Healthy	6	1,046	3	1,222	4	1,544
Economic	6	,870	4	1,582	4	1,762

8 Medians and Standard deviation (S.D) for the variables of the aesthetic dimension taken for the three settings; the Old Suq, King Faisal Street and Rafidya Street.

Variables	Old Suq		King Faisal St.		Rafidya St.	
	M	S.D	M	S.D	M	S.D
Lay men						
Good	6	1,732	6	1,787	6	1,642
Artistic	6	1,722	3	2,006	4	2,119
Beautiful	6	1,795	4	1,958	5	1,650
Pleasant	6	1,887	4	2,001	6	1,655
Attractive	5	1,953	4	2,004	5	1,808
Charming	5	2,165	2	2,034	4	2,092
Professionals						
Good	4	2,092	4	1,779	4	1,687
Artistic	5	1,226	2	1,116	4	1,568
Beautiful	6	1,186	2	1,607	3	1,600
Pleasant	6	1,455	2	1,363	4	1,687
Attractive	6	1,355	2	1,476	3	1,630
Charming	5	1,440	2	1,478	3	1,504

8.4.2 Interpretation of the Descriptive Analysis:

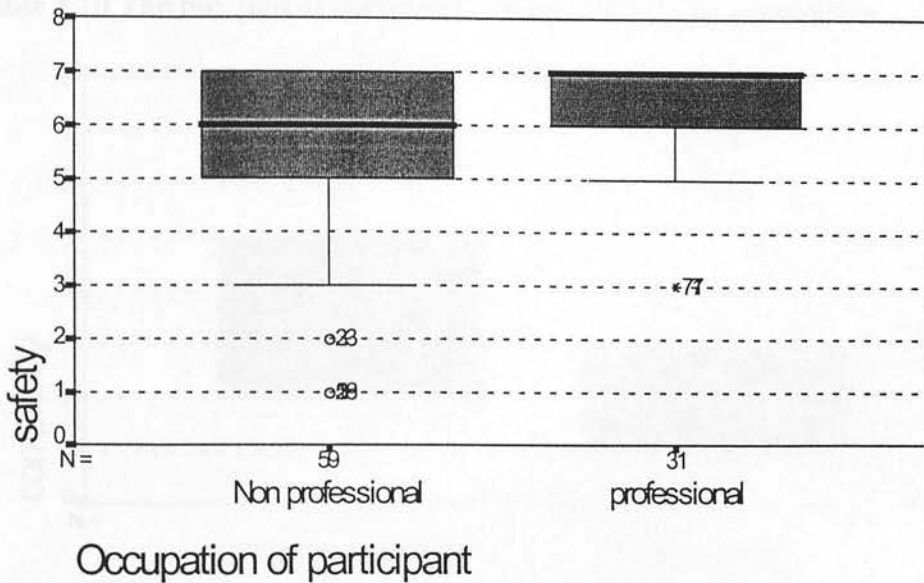
A general observation is that professionals have a clearer perception of their built environment than do the lay people.

Results show that the SD of rating the three settings by the professionals is smaller than the SD of rating the same settings by the lay people. This could reflect the fact that the professionals have a more agreed perception of the built environment than the lay people. This could be a result of the professionals' training gained through years of education and experience.

In other words the clarity of interpretation of functional efficiency is affected by the type of the building. Lay people have an image that certain settings are associated with a degree of functional efficiency and convenience. That is why they sometimes prefer a modern setting although it does not address their values and culture. Modern settings have the advantage of having facilities for comfort. Lay people, for example, like Rafidya street because it has parking places, whereas in the Old Suq, although it is safer, it is still not convenient to shop, because you have to carry the goods for quite a distance before reaching mobile accessibility.

Table 8.9 the box plot for the safety of the Old Suq for the two groups explains clearly that mentioned earlier. The spread of lay people's responses for the factor of safety in the Old Suq is bigger than that for the professionals, which means that professionals are clearer in their image or perception of the built environment. This is also clear in the 50% responses for both groups for the same variables. You can see that 50% of professional's responses lie in the range between 6 to 7. On the other hand, 50% of lay people's responses lie in the range of 5 to 7.

Table 8.9 The box plot of safety for the Old Suq by both groups.



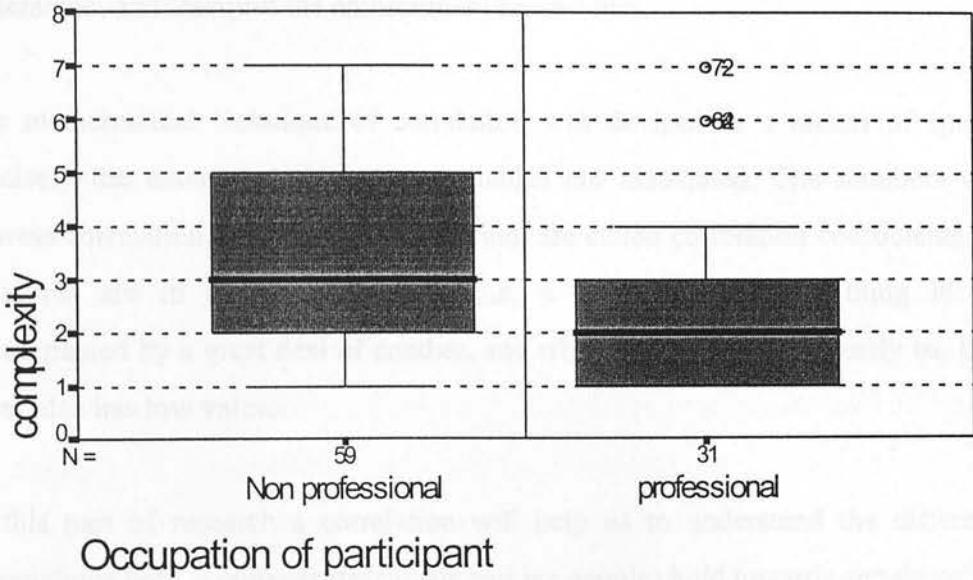
Complexity of a setting is one of the aspects that underlies the considerable difference in perception of both groups. This might be that the complexity in the image of the lay people and the professionals have different associations. For the lay man, complexity could be associated with spatial experience, whereas complexity for the professional is associated with physical attributes and structure of the place. That is why professionals look at the Old Suq as a very rich and diverse place having interesting form, structure and variety of colors. Perception and cognition of a place is affected by past experience and culture. Lay people have a clear understanding of the Old Suq so they can identify and orient themselves very easily compared to other modern spaces.

This is clear from table 8.10, the box plot for the complexity of the Old Suq. You can see that the spread of rating the complexity by the lay people is much greater than the spread for rating the same variable by the professionals. This also applies for the 50% of the responses where you can see that 50% of the lay people's responses were lie between 2 and 5, whereas the professionals' responses for rating of complexity lie between 1 and 3. Also, the rating of complexity by the professionals is higher than that for the lay people (See figure 8.9).

8.5 Correlation Analysis

Conclusion is one of the ways to study the statistical significance and is the interpretation of data. Most of the time, it is used to study the relationship between two variables. It is a statistical method that is used to study the relationship between two variables.

Table 8.10 The box plot of complexity of the Old Suq by occupation.



8.5.1 Findings of Correlation Analysis

Correlation between variables was conducted for the two different groups in the three different settings: the Old Suq, Falecya St and King Fahad St. The following table describes the significant correlations between the variables used in the research that were observed in each setting.

According to the large number of significant relations variables obtained in using significant, certain variables have been chosen to be included in a questionnaire. This way to facilitate and help the author to understand the main relationships in the 'Isle' and professional' with questionnaire. These variables were included in the research to be important in dealing with the interpretation process. A general overview of the relationship and structure of variables between variables from different dimensions in the same setting for both groups, and between variables of dimension for both groups in different settings is also included in this chapter.

8.5 Correlation Analysis:

Correlation is one of the means to study the association system in the interpretation process. Man in general builds up different associations in his cognitive structure towards certain environments. According to these associations he can perceive, understand, and interpret the environment around him.

The mathematical technique of correlation was devised as a means of specifying precisely the extent to which two variables are associated. The numbers used to express correlation, or extent of association, are called correlation coefficients. If two measures are in perfect association, i.e. a great deal of one thing is always accompanied by a great deal of another, and when one is absent or nearly so, then the other also has low value.

In this part of research a correlation will help us to understand the difference of associations both groups (professionals and lay people) hold towards certain settings.

8.5.1 Findings of Correlation Analysis:

Correlation between variables was conducted for the two different groups to the three different settings: the Old Suq, Rafedya St. and King Faisal St. The following text describes the significant correlations between the variables used in the dimension that were observed in each setting.

According to the large numbers of correlations between variables observed as being significant, certain variables have been chosen to be studied in a more comprehensive way to facilitate and help the author to understand the main correlations in lay people's and professionals' interpretation system. These variables come out through the research to be important in dealing with the interpretation process. A general overview of the relationship and structure of correlation between variables from different dimensions in the same setting for both groups, and between variables of dimension for both groups in different settings is also included in this chapter.

8.5.2 Interpretation of Correlation Analysis:

The previous findings of correlation in PCP shows that professionals have shown more tendency to associate more variables than lay people. This part of this research shows that this observation depends on the type of built environment, where we can see that lay people tend to associate more variables in old settings, as in the case of the Old Suq. See tables 8.11a, 8.11b. This could be related to peoples' image and concepts about their own cultural environment. These images and concepts are strong because they have been shaped according to their needs and values. So they have the tendency to be better established in their cognitive structure.

Other observations from the analysis of the correlation result show **that association is affected by the type of built environment and the preference level of emotional satisfaction.** In other words, people hold more associations for traditional spaces than for the modern ones because they are attached more to these places. Also the more people like a place, the more association they had for it. This was observed in the case of Rafidya Street. People hold more association to Rafidya street rather than King Faisal Street.

In certain settings, lay people have more associations than professionals. This was clear if you have a look at Tables 8.11a, 8.11b, 8.12a, 8.12b, 8.13a, and 8.13b. The associations between variables of proposed dimensions for interpreting the three streets occurred more by for lay people than for the professionals.

In the case of the Old Suq by lay people, no association was observed in the aesthetic dimension. People do not associate the historical dimension with the aesthetic one. This means that an old building or setting is not always associated with beauty. Lay people have more association between variables of the evaluative dimension. This could be because the lay people are more objective in judging the built environment than the professionals, so they understand it according to the emotional feelings they have when they experience the built environment.

Table 8.11a Correlation table of variables used by the professionals, the case of the Old Suq.

Variables	Old	Historic	Worth keeping	Makes you think	Valuable	Distinguished	Harmony	Tidy	Visual unity	Complexity	Safety	Lively	Comfortable	Healthy	Artistic	Beauty	Pleasant	Attractive
History																		
History	a																	
Worth keeping																		
Makes you think			a															
Valuable			a	a														
Distinguished			a	b	a													
Physical																		
Ornate																		
Harmony						a												
Symmetry																		
Human scale					b			b										
Size																		
Tidy																		
Visual unity						a												
Color																		
Complexity							a											
Evaluative																		
Friendly			a	b			b		b									
Private																		
Safety			a				a											
Alive											b							
Human			a	a		a	a				b	a						
Deserted																		
Comfortable																		
Pollution								b										
Mysterious																		
Health		a																
Economics																		
Aesthetic																		
Good												a	a					
Artistic						a	a					a						
Beautiful						a						a		a				
Pleasant						a						a		a	a			
Attractive														a	a	a		
Charming					a	a						a		a	a	a	a	

a = $p < 0.001$, b = $p < 0.002$

Table 8.11b Correlation table of variables used by the lay people, the case of the Old Suq.

Variables	Old	Historic	Worth keeping	Makes you think	Valuable	Harmony	Symetry	Size	Tidy	Visual unity	Friendly	Safety	Lively	Human	Comfortable	Pollution	Healthy	Economics	Good	Artistic	Beauty	Pleasant	
Historicity																							
Old																							
History	a																						
Worth keeping	a	a																					
Makes you think	a	a	a																				
Valuable		a	a	a																			
Distinguished				a	a																		
Physical																							
Ornate		a	a																				
Harmony																							
Symmetry						a																	
Human scale							a																
Size																							
Tidy								a															
Visual unity						a	a		a														
Color																							
Complexity																							
Evaluative																							
Friendly																							
Private																							
Safety									a														
Alive									a	a		a											
Human										a			a										
Deserted																							
Comfortable									a			a	a										
Pollution																							
Mysterious																							
Health																	a						
Economics										a		a	a	a	a			a					
Aesthetic																							
Good									a				a	a	a			a					
Artistic				a															a				
Beautiful			a							a		a	a	a					a	a			
Pleasant							a												a	a	a		
Attractive				a	a		a	a						a	a				a	a	a	a	
Charming							a													a	a	a	

a = $p < 0.001$, b = $p < 0.002$

Table 8.12a Correlation table of variables used by the professionals, the case of King Faisal Street.

Variables	Old	Historic	Makes you think	Distinguished	Harmony	Tidy	Complexity	Friendly	Human	Good	Artistic	Beautiful	Pleasant	Attractive
Historicity														
History	b													
Worth keeping														
Makes you think	b	a												
Valuable			a											
Distinguished			a											
Physical														
Ornate														
Harmony				a										
Symmetry														
Human scale														
Size														
Tidy														
Visual unity				a	b	a								
Color														
Complexity														
Evaluative														
Friendly				a										
Private		a												
Safety	a													
Alive														
Human														
Deserted														
Comfortable														
Pollution														
Mysterious							a							
Health														
Economics														
Aesthetic														
Good														
Artistic		b						a						
Beautiful										a	a			
Pleasant								a				a		
Attractive				b	a			a				a	a	a
Charming								a	a			a	a	a

a = $p < 0.001$, b = $p < 0.002$

Table 8.12b Correlation table of variables used by the lay people, the case of King Faisal Street.

Variables	Old	Worth keeping	Makes you	Distinguished	Ornate	Harmony	Symmetry	Human scale	Size	Tidy	Complex	Lively	Comfortable	Healthy	Economics	Artistic	Beautiful	Pleasant	Attractive
Historical																			
History	a																		
Worth keeping																			
Makes you think																			
Valuable		a																	
Distinguished			a																
Physical																			
Ornate				a															
Harmony				a															
Symmetry				a	a														
Human scale																			
Size				a															
Tidy								a											
Visual unity																			
Color					a														
Complexity					a														
Evaluative																			
Friendly																			
Private																			
Safety																			
Alive																			
Human																			
Deserted												a							
Comfortable																			
Pollution																			
Mysterious											a								
Health									a										
Economics													a						
Aesthetic																			
Good															a				
Artistic			a																
Beautiful										a			a	a		a			
Pleasant				a									a				a		
Attractive				a			a	a					a			a		a	
Charming																a	a	a	a

a = p < 0.001, b = p < 0.002

Table 8.13a Correlation table of variables used by the professionals, the case of Rafidya Street.

Variables	Old	Historic	Valuable	Ornate	Harmony	Human scale	Tidy	Friendly	Safety	Lively	Human	Comfortable	Good	Artistic	Obeautiful	Pleasant	Attractive
Historicity																	
History	a																
Worth keeping																	
Makes you think	a	a															
Valuable																	
Distinguished																	
Physical																	
Ornate																	
Harmony			a														
Symmetry			b	a													
Human scale																	
Size																	
Tidy			a	a													
Visual unity			a	a	a												
Color																	
Complexity				a													
Evaluative																	
Friendly																	
Private																	
Safety							b	a									
Alive					b												
Human											a						
Deserted																	
Comfortable												a	a				
Pollution																	
Mysterious																	
Health														a			
Economics																	
Aesthetic																	
Good																	
Artistic															b		
Beautiful			a		b			b				a		a	a		
Pleasant			a			a				a							a
Attractive			a	a		a				a							a
Charming				a			a			b					b		

a = p < 0.001, b = p < 0.002

Table 8.13b Correlation table of variables used by the lay people, the case of Rafidya Street.

Variables	Old	Historic	Worth	Valuable	Distinguished	Ornate	Harmony	Human scale	Tidy	Visual unity	Safety	Lively	Human	Comfortable	Pollution	Healthy	Economics	Good	Artistic	Beautiful	Pleasant	
Historicity																						
History	a																					
Worth keeping																						
Makes you think		a																				
Valuable			a																			
Distinguished																						
Physical																						
Ornate					a																	
Harmony					a																	
Symmetry							a															
Human scale																						
Size																						
Tidy				a				a														
Visual unity									a													
Color																						
Complexity						a																
Evaluative																						
Friendly								a	a													
Private										a												
Safety								a														
Alive																						
Human								a					a									
Deserted																						
Comfortable											a											
Pollution																						
Mysterious																						
Health				a					a	a				a	a							
Economics																						
Aesthetic																						
Good													a	a		a	a					
Artistic								a	a							a						
Beautiful									a				a			a	a	a				
Pleasant												a				a	a	a	a			
Attractive												a						a	a	a		
Charming																						a

a = $p < 0.001$, b = $p < 0.002$

In the case of Rafidya Street, associations were mostly observed to occur with the lay people between variables of the evaluative and physical dimensions, and between variables of evaluative and aesthetic dimensions, whereas associations observed by the professionals were between variables of the evaluative dimension, and between variables of the evaluative dimension and aesthetic dimension.

According to the large number of correlations between variables, certain variables from the evaluative and physical dimensions have been chosen for their importance to be studied in a more detailed way with reference to their association with other variables of different dimensions. The variables are: liveliness, harmony, comfort, and tidiness.

In the case of Old Suq by professionals, the rating for harmony correlates significantly with the variables artistic, $r = .5775 (30) p < 0.001$, Complexity, $r = -.5356 (30) p < 0.002$, friendly, $r = .5344 (30) p < 0.002$, Human, $r = .5930 (30) p < 0.001$, and Safety, $r = .6136 (30) p < 0.001$.

The rating of harmony in the case of King Faisal by the professionals correlates significantly with the variables alive, $r = .5702 (30) p < 0.001$, attractive, $r = .6836 (30) p < 0.001$, charming, $r = .5716 (30) p < 0.001$, Symmetry, $r = .6624 (30) p < 0.001$, tidy $r = .6403 (30) p < 0.001$, and Visual unity, $r = .6343 (30) p < 0.001$. The rating for harmony in the case of the Rafedya Street by the professionals correlates significantly with attractiveness, $r = .5887 (30) p < 0.001$ and visual unity, $r = .5564 (29) p < 0.002$.

In the case of the Old Suq by the lay people, the rating of harmony correlates significantly with symmetry, $r = .5717 (60) p < 0.001$ and visual unity, $r = .5768 (60) p < 0.001$.

The rating of harmony in the case of King Faisal Street by lay people correlates significantly with symmetry, $r = .7735 (59) p < 0.001$. In the case of Rafidya Street by lay people, the rating for harmony correlates significantly with symmetry, $r = .5908 (60) p < 0.001$. See table 8.13.

As we can see, harmony is one of the important variables in the physical dimension that has been associated with many variables, but mainly (as observed in table 8.14) it is associated with symmetry.

For lay people, harmony is associated with physical qualities of a structure such as symmetry and visual unity; this might be that symmetry is one of the aspects that affects harmony because symmetry is accepted by human perception as it is one of the principles of balance. Man experiences the concept of symmetry everywhere, for example, our body is built on symmetry.

The professionals associate the aspect of harmony in two ways. Firstly it is associated with physical attributes of symmetry and visual unity as in the case of lay people, and second with affective attributes of friendliness, safety, and complexity.

The concept of harmony is linked to the way the mind classifies the information in order to achieve a progressively more efficient and comprehensible model of the world (Smith, 1987).

Symmetry is related to harmony through the concept of order. Weiss argues that we impose order on the world as we look at it to study it, in this very nature of our perceptions. While disorder, as Weiss states, is also an excess of order, it occurs when there are too many orders imposed upon a set of entities.

The concept of harmony as stated by Smith, 1987 tends to be interpreted in two ways. The first associates it with a musical relationship that can be mathematically described, while the second is much vaguer and concerns the degree to which disparate elements conform to a pattern.

Weyle discusses a different type of order, bilateral symmetry. This is often used by architects, especially in the classic area, as the symmetry of left and right, while Stanley has summarized the historical attitudes towards symmetry when he says,

Symmetry, indeed, has been grossly over-emphasized in both art and science: its main value is in giving meaning to its absence, dissymmetry, without which there could be no hierarchy.

Table 8.14 Correlation of the harmony for Old Suq, King Faisal Street, and Rafidya Street respectively by the professionals and lay people.

Variables	Old Suq Prof.	Old Suq Lay people	King Faisal Prof.	King Faisal Lay people	Rafidya Prof.	Rafidya Lay People
Alive			.5702 0.000			
Artistic	.5775 0.000					
Attractive			.6836 0.000		.5887 0.000	
Charming			.5716 0.000			
Complexity	-.5356 0.001					
Friendly	.5344 0.001					
Human	.5930 0.000					
Safety	.6136 0.000					
Symmetry		.5717 0.000	.6624 0.000	.7735 0.000		.5908 0.000
Tidy			.6403 0.000			
Visual unity		.5768 0.000	.6343 0.000		.5564 0.001	

The rating of tidiness, in table 8.14, for the case of Old Suq by the professionals correlates significantly with Complexity, $r = -.6949 (30) p < 0.001$ and pollution, $r = -.5074 (30) p < 0.002$. The rating for tidiness in the case of King Faisal Street by professionals correlates significantly with safety $r = .5876 (29) p < 0.002$ and Visual unity, $r = .6334 (30) p < 0.001$. The rating for tidiness in the case of Rafedya Street by the professionals correlates significantly with Attractiveness, $r = .6078 (30) p < 0.001$ and visual unit, $r = .6048 (30) p < 0.001$.

The rating for tidiness in the case of the Old Suq by the lay people correlates significantly with the variables; alive, $r = .5470 (60) p < 0.001$, attractiveness, $r = .5236 (60) p < 0.001$, comfort, $r = .5460 (60) p < 0.001$, goodness, $r = .5950 (60) p < 0.001$, safety, $r = .5765 (60) p < 0.001$, and visual unity, $r = .5592 (59) p < 0.001$.

The rating for tidiness in the case of King Faisal Street by the lay people correlates significantly with friendliness, $r = .5996 (60) p < 0.001$ and visual unity, $r = .5801 (60) p < 0.001$.

The rating for tidiness in the case of Rafidya Street by lay people correlates significantly with beautiful, $r = .5002 (60) p < 0.001$ and Health, $r = .5246 (60) p < 0.001$. See table 8.15

Table 8.15 Correlation for the tidiness of Old Suq, King Faisal Street, and Rafidya Street respectively by the professionals and lay people.

Variables	Old Suq Prof.	Old Suq Lay people	King Faisal Prof.	King Faisal Lay people	Rafidya Prof.	Rafidya Lay People
Alive		.5470 0.000				
Attractive		.5236 0.000			.6078 0.000	
Beautiful						.5002 0.000
Comfortable		.5460 0.000				
Complexity	-.6949 0.000					
Friendly				.5996 0.000		
Good		.5950 0.000				
Healthy						.5246 0.000
Pollution	-.5074 0.001					
Safety		.5765 0.000	.5876 0.001			
Visual unity		.5592 0.000	.6334 0.000	.5801 0.000	.6048 0.000	

As we can see, tidiness, which means sense of order or consistency, correlates with visual unity in most cases. This could reflect the fact that the order, which exists in the structure in a varying degree, affects the visual unity. Berlyne 1974 sees that art has evolved as a way of creating complexity so as to present the challenge of discovering the underlying order. So, complexity is often deliberately created in order to achieve reward when it gives way to orderliness.

Tidiness or order is related with visual unity and both help the individual to understand the environment around him. He can locate and orient himself better, and as a result obtains a sense of security. A well –functioning environment also provides people with the ability to know where they are in space and time, to be able to organize the universe and people in it into some meaningful whole (Maslow, 1987). The need is for people to be able to orient themselves and to find their way around cities and other places. It has to do with the world being stable, predictable, and a usable place (Lang, 1994).

In order to have a sense of security many people need to know where they are geographically, to be able to find their way around a place, and to be able to develop an image of the overall environmental layout and its opportunities in their minds. We feel more secure, more in control of our lives if we know where are spatially. Similarly, there is a feeling of greater security or control over one's life if one knows what time of day it is, or what time of a year, not simply by one's watch or the calendar but through reminders from the surrounding milieu.

The sense of security, if achieved, could affect people's interpretation of a place , by associating it with being friendly, comfortable, alive, less complex, and beautiful, as we see in table 8.15.

What is obvious in table 8.14 is that the lay people have related the aspect of tidiness or order with many aspects of the evaluative and aesthetic dimensions, while the professionals have linked the aspect of tidiness or order negatively with pollution and complexity. See Table 8.15.

Table 8.15 shows the variables that have been associated with the aspect of liveliness. The rating for liveliness of the Old Suq by the professionals correlates significantly with human, $r = .7166 (30) p < 0.000$.

The rating of liveliness in the case of King Faisal by the professionals correlates significantly with comfortable, $r = .5778 (30) p < 0.002$ and human, $r = .6608 (30) p < 0.001$.

The rating for liveliness in the case of the Old Suq by the lay people correlates significantly with beautiful, $r = .5468 (60) p < 0.001$, comfortable, $r = .5023 (60) p < 0.001$, economics, $r = .6406 (60) p < 0.001$, goodness, $r = .5925 (60) p < 0.001$, and Human, $r = .7245 (60) p < 0.001$.

The rating for liveliness in the case of King Faisal Street by lay people correlates significantly with human, $r = .5124 (60) p < 0.001$.

The rating for liveliness in the case of Rafidya Street by lay people correlates significantly with deserted, $r = -.5770 (60) p < 0.001$. See Table 8.15

Table 8.16 Correlation for the liveliness of Old Suq, King Faisal Street, and Rafidya Street respectively by the professional and lay people.

Variables	Old Suq Prof.	Old Suq Lay people	King Faisal Prof.	King Faisal Lay people	Rafidya Prof.	Rafidya Lay People
Beautiful		.5468 0.000				
Comfortable		.5023 0.000	.5778 0.001			
Deserted						-.5770 0.000
Economic		.6406 0.000				
Good		.5925 0.000				
Human	.7166 0.000	.7245 0.000	.6608 0.000	.5124 0.000		

Table 8.16 shows that liveliness has been associated with certain variables in different cases. The liveliness of a place has been related mainly with the aspect of being human. Liveliness, being one of the qualities, which is important in people's evaluation of a place, could mean different things. Firstly physical liveliness, which comes from the physical richness and diversity of a place such as the color and materials organization. Secondly it could mean the richness of the experience of a place as being full of people, activities, and movements. In general, people in the city of Nablus, like in any other Middle Eastern city, like to socialize, and social interaction is one of the qualities of the urban environment.

So a human place, which satisfies people's needs and aspirations, will influence its liveliness, and a lively place could be evaluated as a human place. So both human and lively are interrelated and affect each other. Other aspects that are associated with liveliness of a place (drawn from table 8.16) are mainly aesthetic ones such as good and beautiful, which means that a lively place is perceived by people as a preferred place.

Table 8.16 shows all the variables that have been associated with comfort. The rating for comfort in the case of Old Suq by the professionals correlates significantly with the variables artistic, $r = .5945 (30) p < 0.001$, beautiful, $r = .5895 (30) p < 0.001$, charming, $r = .5536 (30) p < 0.001$, goodness, $r = .7267 (30) p < 0.001$, and pleasant, $r = .6504 (30) p < 0.001$.

The rating for comfort in the case of the King Faisal Street by the professionals correlates significantly with healthy, $r = .6657 (30) p < 0.001$. The rating for comfort in the case of the Old Suq by the lay people correlates significantly with attractiveness, $r = .5125 (60) p < 0.001$, beautiful, $r = .5064 (60) p < 0.001$, economic, $r = .5662 (60) p < 0.001$, and good, $r = .5348 (60) p < 0.001$.

The rating for comfort in the case of King Faisal Street by the lay people correlates significantly with good, $r = .5384 (60) p < 0.001$, and healthy, $r = .5801 (60) p < 0.001$. The rating for comfort in the case of Rafidya Street by the lay people correlates significantly with the variables; attractiveness, $r = .5810 (60) p < 0.001$, beautiful, $r = .5176 (60) p < 0.001$, and pleasant, $r = .6246 (60) p < 0.001$.

Table 8.17 represents all the variables that have been correlated with the variable comfort. Both groups have associated the degree of comfort of the Old Suq with aesthetic qualities such as artistic, attractive, beautiful, good, and pleasant.

In King Faisal Street lay people have related comfort with the goodness and healthiness of the street, while professionals have linked the degree of comfort of the street with the health aspect of it only. See Table 8.17

Table 8.17 Correlation for the comfort of Old Suq, King Faisal Street, and Rafidya Street respectively by the professionals and lay people.

Variables	Old Suq Prof.	Old Suq Lay people	King Faisal Prof.	King Faisal Lay people	Rafidya Prof.	Rafidya Lay People
Artistic	.5945 0.000					
Attractive		.5125 0.000				.5810 0.000
Beautiful	.5895 0.000	.5064 0.000				.5176 0.000
Charming	.5536 0.000					
Economics		.5662 0.000				
Good	.7267 0.000	.5348 0.000		.5384 0.000		
Healthy			.6657 0.000	.5801 0.000		
Pleasant	.6504 0.000					.6246 0.000

Comfort at the minimal level implies a freedom from pain on all dimensions of the environmental experience (Lang,1994). Biological comfort has to do with a person's assessment of the level of stimulation to which his or her body is being subjected; the pressure on the skin and joints from the patterns of the physical environment and from wind, the ambient and radiant temperatures, and air moisture levels of a behavior setting are the major contributing factors of perceptions of comfort. There is considerable individual variation in subjective assessment of comfort for both

physiological and psychological reasons. Much depends on habituation levels. Psychological comfort has to do with the feelings of safety and security. The quality of a place is a complex function of how well it provides physiological support for desired activities and its character. The fundamental concern is with the nature of the horizontal surface, enclosing elements, furnishings, and the nature of illumination.

Visual comfort -the ease of seeing- is very much related to activities and subject to considerable individual variability. The basic requirement is to have sufficient illumination to see the environment without ambiguities in order to carry out activities, to read signs and to see details of people. Sonic comfort depends not only on the decibel level of sound, but also on its pitch and the nature of the source, whereas the metabolic comfort of a person depends on the level of activity of that individual and on the air temperature, humidity, radiation, air movement, and clothing worn. The degree of acclimatization and adaptation of the individual is an intervening variable in subjective views of comfort. All these factors are affected by the layout of the environment.

The built environment is very much a statement of continuity and change (Lynch, 1972). Old buildings give us the cycle of life. It is clear that major social changes are often accompanied by strong movement to retain the old, because old buildings give a feeling of the stability of life.

8.6 Chi Square Analysis :

A chi-square is a non – parametric test which can be used when you have an independent group. The test looks for the difference between groups. A chi square analysis was performed to define the areas of differences in rating the three settings amongst the two groups and to define modes of differences in the dimensions used to rate these settings.

Table 8.18 shows the results of the chi-square tests, with significant differences highlighted. This shows that fewer differences between occupational groups' ratings occurred in the Old Suq than in RafIdya Street or King Faisal Street.

Lay people thought the same as the professionals in evaluating the Old Suq aesthetically. No significant differences were found between them on affective ratings. In other words, lay people and professionals held the same idea about traditional urban spaces, and there were more significant differences in evaluating the new modern urban spaces.

Few differences were observed within the physical and affective dimensions in the case of the Old Suq; lay people and professionals did not differ greatly in rating the Old Suq. It has been found that professionals rated the Old Suq more historical than lay people. They also found the Old Suq healthier, more economical and less polluted than the lay people. For the physical dimension, most professionals thought the Old Suq more complex than the lay people. Lay people think that the Old Suq is more colorful than the professionals.

In the case of King Faisal Street, differences in ratings between the two groups occurred mostly in the evaluative and aesthetic dimensions, which means that the two groups felt differently and held different ideas about the aesthetic qualities of the street. Professionals think that King Faisal Street is worth keeping more than the lay people. For the physical interpretations, professionals thought that the street was tidier and more spacious than lay people, on the other hand lay people thought that King Faisal Street was more complex than the professionals.

For the evaluative dimension, it seems that professionals were not consistent in setting their criteria about their feelings for that street. Results show that professionals found King Faisal Street friendly and human but not lively, while lay people thought King Faisal Street is neither friendly nor lively nor human. On the other hand, professionals were not sure about the healthiness of the street and lay people found King Faisal Street was not healthy.

For the aesthetic dimension, professionals rated King Faisal Street more positively than the lay people who also differ amongst themselves when rating the street aesthetically.

Table 8.18 Occupation differences between the two groups by applying Chi-square (Pearson coefficient) for the three settings ; the Old Suq, King Faisal St. and Rafidya ST.

Dimension	Old Suq		King Faisal St.		Rafidya St.	
	DF	Sig.	DF	Sig.	DF	Sig.
Physical						
Old	4	,06676	6	,23876	6	,23418
History	5	,02864*	6	,61937	6	,09140
Worth keeping	5	,35429	6	,06288	6	,37455
Makes you think	6	,41205	6	,01882*	6	,03389*
Valuable	4	,39145	6	,51220	6	,00836*
Distinguished	6	,48037	6	,40273	6	,10655
Physical						
Ornate	6	,52368	6	,76612	6	,72336
Harmony	6	,21976	6	,47481	6	,09259
Symmetry	6	,26409	6	,05698	6	,00789*
Human scale	6	,91418	6	,09262	6	,55512
Size	6	,19655	6	,37623	6	,30890
Tidy	6	,08807	6	,00095*	6	,01496*
Visual unity	5	,92451	6	,00852*	6	,12521
Color	6	,02055*	6	,73723	6	,03485*
Complex	7	,03170*	5	,00999*	6	,02245*
Affective						
Friendly	5	,68160	6	,02517*	6	,03041*
Privacy	6	,84105	6	,22310	6	,12721
Safety	6	,41975	6	,06397	6	,03103*
Lively	6	,57694	6	,00927*	6	,14596
Human	6	,15975	6	,03735*	6	,04865*
Desert	4	,25173	5	,25420	6	,72092
Mysterious	6	,21028	5	,07406	6	,03575*
Satisfactory						
Comfortable	6	,63118	6	,52988	6	,17191
Pollution	6	,04389*	6	,19144	6	,22029
Healthy	6	,01156*	6	,00102**	6	,01348*
Economic	6	,03047*	6	,13057	6	,03956*
Aesthetic						
Good	6	,11411	6	,00270*	6	,01958*
Artistic	6	,23569	6	,03391*	6	,19197
Beautiful	6	,13097	6	,02604*	6	,00696*
Pleasant	6	,11688	6	,01150*	6	,01973*
Attractive	6	,08277	6	,19306	6	,00281*
Charming	6	,24491	6	,49176	6	,01680*

* approaching at the $p < 0.05$ level

** stat. sig. At $p < 0.001$.

In the case of Rafidya Street, differences occurred in all dimensions and mostly in the aesthetic and evaluative dimensions. Lay people found Rafidya Street was not valuable but they should consider thinking about its value. On the other hand, the professionals found the street less valuable than the laymen.

Table 8.18 shows the result of the chi-square tests, with significant differences

For the physical dimension, professionals thought Rafidya Street was tidier than lay people. Professionals also thought that Rafidya Street had more symmetry than the lay people did. Lay people thought that the street was less tidier and more colorful and complex than did the professionals.

In the case of the affective dimension, differences were observed in the following variables: lay people thought that Rafidya Street was more friendly than the professionals who were not consistent about the friendliness of the street. Regarding the safety of Rafidya Street, the professionals thought that the street was moderately safe, while the lay people thought it was unsafe. Lay people thought that Rafidya Street was more human, healthier and more economical than did the professionals.

For the aesthetic dimension, the professionals did not agree about the aesthetic value of the street, while lay people thought that it was neither beautiful nor attractive or pleasant.

A chi square analysis was performed to define the area of age differences in rating the three settings amongst the lay people groups; the first group is below thirty years old and the second one is above thirty.

Table 8.19 shows the results of the chi-square tests, with significant differences highlighted. These show that there is a trend for rating the variables deserted and value differently between the two age groups in the Old Suq. People under thirty did not agree about the beauty of King Faisal Street, while people above thirty thought that the street was moderately beautiful. People under thirty did not agree about the value of the street, while people over thirty thought that the street is not valuable.

A chi-square analysis was performed to define the area of sex differences in rating the three settings amongst the sex groups and to define the areas of differences in the dimensions used to rate these settings.

Table 8.20 shows the result of the chi-square tests, with significant differences highlighted. These show that there is no significant difference observed only a trend for the rating of attractiveness to be different between males and females in the Old Suq. In the case of Rafedya Street, there is a trend for the rating of historicity and goodness to be different between the female and male groups.

Setting	Dimension	df	Chi-Square	Significance
Old Suq	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns
	Goodness	1	1.234	ns
	Usefulness	1	1.234	ns
	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns
	Goodness	1	1.234	ns
	Usefulness	1	1.234	ns
	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns
Rafedya Street	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns
	Goodness	1	1.234	ns
	Usefulness	1	1.234	ns
	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns
	Goodness	1	1.234	ns
	Usefulness	1	1.234	ns
	Attractiveness	1	1.234	ns
	Historicity	1	1.234	ns

* Significance at the p < 0.05 level.
 ** ns, not significant.

Table 8.19 Age differences among lay men by applying Chi- Square (Pearson coefficient) for the three settings ; the Old Suq, King Faisal St. and Rafidya St.

Dimension	Old Suq		King Faisal St.		Rafidya St.	
	DF	Sig.	DF	Sig.	DF	Sig.
Physical						
Old	3	,44399	6	,52341	6	,74862
History	5	,14316	6	,47438	5	,88058
Worth keeping	5	,09682	6	,59394	6	,37800
Makes you think	6	,47006	6	,13943	6	,30711
Valuable	4	,25897	6	,07739	6	,03136*
Distinguished	6	,80024	6	,32947	6	,42908
Physical						
Ornate	6	,21880	6	,52537	6	,18097
Harmony	6	,61928	6	,48109	6	,11064
Symmetry	5	,79368	6	,85298	6	,41363
Human scale	6	,14445	6	,47963	6	,09599
Size	6	,64239	6	,16969	6	,07420
Tidy	6	,68763	6	,07309	6	,18513
Visual unity	4	,20569	6	,17541	6	,05825
Color	6	,52173	6	,29085	6	,16407
Complex	6	,47950	5	,30415	6	,27671
Affective						
Friendly	5	,20702	6	,81900	6	,56703
Privacy	6	,37401	6	,43017	6	,78755
Safety	6	,44543	6	,19977	6	,67903
Lively	6	,11801	6	,37693	6	,44561
Human	5	,08726	6	,05876	6	,19915
Desert	3	,04181*	5	,61422	6	,94548
Mysterious	6	,51014	5	,62935	5	,52462
Satisfactory						
Comfortable	6	,61498	6	,08565	6	,84769
Pollution	6	,75924	6	,92773	6	,17829
Healthy	6	,27427	6	,17626	6	,52282
Economic	6	,06898	6	,15861	6	,43402
Aesthetic						
Good	6	,61392	6	,59143	6	,45645
Artistic	6	,53107	6	,47900	6	,60356
Beautiful	5	,40726	6	,00840*	6	,61313
Pleasant	6	,66974	6	,18644	6	,09754
Attractive	6	,15525	6	,20853	6	,08047
Charming	6	,66436	6	,18182	6	,59741

* approaching at the $p > 0.05$ level

** stat. sig. $P < 0.001$.

Table 8.20 Sex differences for lay men by applying Chi- Sqaure (Pearson coefficient) for the three settings ; the Old Suq, King Faisal St. and Rafidya St.

Dimension	Old Suq		King Faisal St.		Rafidya St.	
	DF	Sig.	DF	Sig.	DF	Sig.
Physical						
Old	3	,25197	6	,24555	6	,18369
History	5	,80379	6	,87113	5	,04159*
Worth keeping	5	,47334	6	,34837	6	,48814
Makes you think	6	,32362	6	,22301	6	,33947
Valuable	4	,21227	6	,92009	6	,79551
Distinguished	6	,55717	6	,75873	6	,36463
Physical						
Ornate	6	,57220	6	,75609	6	,77396
Harmony	6	,25872	6	,55347	6	,28193
Symmetry	5	,62834	6	,93606	6	,87064
Human scale	6	,79334	6	,29440	6	,09374
Size	6	,26984	6	,96174	6	,94642
Tidy	6	,29026	6	,38616	6	,54605
Visual unity	4	,51956	6	,31789	6	,20826
Color	6	,38156	6	,66777	6	,36459
Complex	6	,89603	5	,77248	6	,05475
Affective						
Friendly	5	,56551	6	,32455	6	,05721
Privacy	6	,30981	6	,15719	6	,39205
Safety	6	,28819	6	,46758	6	,30678
Lively	6	,51890	6	,23537	6	,07297
Human	5	,66693	6	,65295	6	,10350
Desert	3	,92604	5	,61157	6	,39340
Mysterious	6	,24288	5	,98184	5	,16803
Satisfactory						
Comfortable	6	,98381	6	,62470	6	,25003
Pollution	6	,63220	6	,78911	6	,46343
Healthy	6	,15744	6	,78338	6	,73524
Economic	6	,60590	6	,81024	6	,10524
Aesthetic						
Good	6	,55067	6	,43658	6	,04348*
Artistic	6	,47843	6	,44265	6	,47330
Beautiful	5	,26776	6	,74789	6	,66685
Pleasant	6	,09395	6	,94753	6	,37718
Attractive	6	,01966*	6	,72625	6	,51770
Charming	6	,56270	6	,32044	6	,15775

* approaching at the $p < 0.05$ level

** stat. sig. At $p < 0.001$.

8.7 Summary:

Because associational meanings are more important than perceptual meanings, traditional streets are preferred by individuals to modern ones. This is because a set of associational values is attached to tradition in our culture, so those perceptual characteristics such as harmony or symmetry are not used to discriminate between the two sets.

Not only does the associational meaning influence a person's preference system, but it also affects the clarity of interpretation. The clarity of image both groups (the lay people and professionals) hold towards a traditional setting (Old Suq) is more than that for a modern one (King Faisal Street and Rafidya Street) . This could be related to the importance of schemata for organizing past and present behavior and experience. The aesthetic and historic dimensions both groups hold for the Old Suq is clear and confirmed .

A general observation is that professionals have a clearer perception of their built environment than do the lay people, consequently the professionals have a more agreed perception of the built environment than the lay people. This could be a result of professional training gained through years of education and experience.

The clarity of interpretation of functional efficiency is affected by the type of settings. Lay people have an image that certain settings are associated with a degree of functional efficiency and convenience. That is why they sometimes prefer a modern setting although it does not address their values and culture. Modern settings have the advantage of being equipped with all kinds of comfort facilities.

In general, we could say that association is affected by the type of built environment and the preference level of emotional satisfaction. In other words, people hold more associations for traditional spaces than for the modern ones because they are attached more to these places. Also, the more people like a place, the more association they have for it. Attachment to a place (which is stronger in old streets) has a role in people's evaluation of a place.

In certain settings, lay people have more associations than professionals. The associations between variables of proposed dimensions for interpreting the three streets occurred more for the lay people than for the professionals.

Age and sex differences of a group do not have a major influence on their interpretation of the three streets.

Kaplan, 1978 argues:

The general aesthetic values we hold have taken shape over time; they are cumulative. The so-called tastelessness of the modern environment is a product of its non-cumulative character. Although opinions can be perpetuated on an international scale through propaganda, they create only fleeting values that may be temporarily powerful, but are easily replaced. The old is engraved on stone and sometimes difficult to read; the new although often sparkling and startling, is scratched on thin ice.

CHAPTER NINE

9.0 Introduction:

**THE STUDY IMPLICATIONS
EMERGING POSTULATES**

In this chapter, the author will explore the implications of the study findings in terms of emerging postulates. The author will explore the implications of the study findings in terms of emerging postulates. The author will explore the implications of the study findings in terms of emerging postulates. The author will explore the implications of the study findings in terms of emerging postulates.

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CHAPTER EIGHT: THE STUDY IMPLICATIONS; EMERGING POSTULATES

9.0 Introduction:

In the previous chapters of this research, mainly the empirical work, the author was trying to explore people's interpretation of the built environment by identifying their deep constructs through different aspects and dimensions involved in the process of interpretation. This was conducted by applying the various techniques of open-ended questionnaire, Personal Construct Psychology, and semantic differential which enable us to obtain a better understanding of the interpretation process.

Initially the author was interested in people's perception and interaction with the built environment. However, in the process of achieving this research, the author has come across many other areas which are very important, which have enhanced her approach to the response of the main research objectives, for example, identifying the direction that characterises the latest development in the city.

The value of a contextual way of examining an environmental phenomenon is to find out what the problem is, and to look for clues or notions to how it might be solved.

The main objective of this chapter is to tie together these findings and put them in a framework. This framework will address the phenomena of the main problem, which were elicited from the research. The lack of communication between the professionals and the lay people was a phenomenon observed and traced in many areas of the research. This framework will introduce a language shared by these two groups, where people could have an equal and shared understanding, and then act on the process of the city development.

As mentioned earlier, through the main findings of the research, the author has defined certain areas and notions of concern. These notions are not isolated, but belong to a system. They are components engaged in the system, which is specific to the place. The system that relates these entities operates differently from one culture to another.

These entities are components in a system of transformation where cultural awareness is the catalyst and communication, participation, and conservation are related and interconnected components in the system. Cultural awareness is not necessarily culture itself, but it could be addressed in a different way. Cultural awareness allows people to be aware of their own survival and continuity.

In indigenous settlements, people's experience of cultural awareness consciously is not needed, and they unconsciously communicate through verbal and non-verbal means that are inherited in the culture itself. Culture should not be objectified. It is a system which is knowledge oriented and helps societies to deal with different entities operating in transforming the physical setting to a shared language of symbols. In other word culture enables the society to transfer the physical entities into a body of knowledge which is subconsciously embedded in peoples' perception.

The structuralist method offers us a very concrete understanding of the nature of each phenomenon, and examining against the notion of transformation of its history and the time factor. Our understanding of the environment and how we are located in our own system is achieved through a diachronic analysis. The diachronic method is concerned therefore with gathering of contextual knowledge as to what a certain phenomenon is or how it inter-relates with its surroundings, rather than looking at it in isolation. It holds to a belief in reality as a wholeness, a process forever undergoing transformation; at the same time it assumes a value in scientific inquiry as well as philosophical thought. There is an implicit assumption that its findings should be useful in practical and observable development.

The implication of this is that we need to deal with Nablus not as it appears to us, but rather we have to understand its history and why any problem in it became what it is now. In addition, we need to introduce a framework that will not deal with Nablus as it existed in the past, but allows it to develop using its own internal language systems of indigenous meaning.

In the following part the author will introduce the Structure Theory, which provides such a framework of understanding.

9.1 Structuralism:

According to structuralism, a structure is a system of transformations. In as much as it is a system and not merely a collection of elements and their properties, Piaget argues that:

These transformations involve laws: the structure is preserved or enriched by the interplay of its transformation laws, which never yield results external to the system nor employ elements that are external to it. In short, the notion of the structure is comprised of three key ideas: the idea of wholeness, the idea of transformation, and the idea of self-regulation.

He also argues the fundamental contrast between structures and aggregates, saying that:

The former 'structures' being wholes, the latter 'aggregates' composites formed of elements that are independent of the complexes into which they are enter. To insist on this distinction is not to deny that structure is subordinated to law, and it is in terms of these laws that the structure qua whole or system is defined. Moreover, the laws governing a structure's composition are not reducible to commutative one-by-one association of its elements: they confer on the whole as such over-all properties distinct from the properties of its elements.

The idea of the system is introduced as a different way of understanding the universe and the scientific explanation in physics which prevailed for some time (Bertalanffy, 1968). The universe and the environment were seen as offering chunks of information and hence each element in the universe would be studied as a unique entity.

According to Bertalanffy, who initiated General System Theory during the fifties, a system is a complex made up of entities of lesser order, forming patterns of relationships that are in some sense regular. Since very simple and irreducible objects have nowhere been discovered, it is clear that there exists nothing which in Bertalanffy's terms could not be described as a system. The application of system

thinking has extended to numerous areas and disciplines, particularly the social sciences and biology where systems are considered to be open. Similarly the environment could be seen as consisting of a number of entities tied with particular relationships which are governed by laws.

Very recently the system approach has been applied in planning and urban design. However it was suggested that a field or an environment is not an aggregation of elements, but an expression describing a set of relations between things governed by overriding formative law, (Bertalanffy, 1968).

Buildings as well as cities are therefore systems, which incorporate a number of components and their relationships. This could be very useful in explaining many environmental phenomena or architectural patterns only as they appear to the observer at the time of observation. This is the case particularly when the concept of a system excludes time as an integral component and hence no reference is made to the history of that phenomenon and how it evolved.

Systems, therefore, are concerned with the construction of new models of social and cultural phenomena from the stand point outside of itself, (Hillier & Leaman 1973); this remark enables us to distinguish between system and structure. Structure is a system of transformation, which takes place in time. Such an approach forms the essence of the theory of structuralism whose models attempt to produce the underlying reality that exists within the system.

The idea of evolution then is linked to transformation of forms and contents which constitute structure, (Piaget, 1971). It follows that in architecture the various components acquire their contents (i.e. meaning) as much as they form part of a structure which includes people's perception and symbolic values. Maintaining the order in architecture would imply that changes, which are observed in building designs, will only be understood from within culture as far as they are the result of social transformation. Piaget, (1971) argues that:

The very centrality of the idea of transformation makes the question of origin, that is, of the relation between transformation and formation, inevitable.

Certainly, the elements of a structure must be differentiated from the transformation laws, which apply to them. Because it is the former which undergo transformation or change, it is easy to think of the latter as immutable.

So buildings are systems of transformation of physical and underlying socio-cultural realities which cannot be comprehended through the three dimensionality of buildings. This applies equally to almost every phenomenon. Myths for example, are structures in which particular forms in nature have been transformed over time into mental structures which resemble the original forms of nature but which have acquired a new content. According to Piaget these contents could be forms of previous contents and contents to new forms and so on.

9.1.1 Diachronic Analysis:

The diachronic method is concerned with the understanding of any phenomenon not by looking at it in isolation, but by gathering contextual knowledge as to how a certain phenomenon is related with its surroundings. It is believed that this methodology can give a more real sense of the problem than other methods. The idea of diachronic analysis is to highlight the context using different theories, to give room for the problem to emerge in that context. It is important that the researcher looks at the problem in context and the context must always be seen in terms of a continual flow across space and through time.

The research began with a question rooted in experience; a case study was chosen which used three objective techniques from the discipline of psychology. The analysis of the qualitative and quantitative results then led to the emergence of a defined problem. The main problem is lack of communication firstly between man and his environment, and secondly between professionals and lay people. The author thinks that this problem refers mainly to the level of cultural awareness of the individuals in society. Cultural awareness, is the main catalyst in the entities, which are components of the system.

It is suggested that architectural education should extend its approach to understanding the phenomena of architecture on a more semantic base than those synchronic views currently applied.

9.2 Culture and Cultural Awareness:

People see and understand their own environment in its context, therefore this understanding or knowledge is relativistic and is nothing other than culture itself. What societies are facing in the present time is a very complicated situation. There is a tendency towards adopting a global culture, which is influenced by the methods and approaches coming from industrial countries resulting in a series of conflicts with the indigenous and local values. This conflict has affected people's awareness of their own culture and as a result societies in a way are detached from their culture. This is exactly what is happening in the city of Nablus. As a consequence, there is a necessity for increased cultural awareness, with which people could value their tradition in order to sustain it in a particular world.

Culture could be defined simply as the way of life of a group of people. This is consistent with its definition as a learned and shared pattern of behaviour, characteristic of a group living within fairly defined boundaries and interacting socially among themselves.

But culture as a structure of knowledge is not a phenomenon, which is subject to the physical characteristic of its particular territory only. Culture extends beyond its geographical boundaries to include an interpretation of the world of cosmology. Culture is also capable of interpreting other cultures and the way in which other people construe the world, (Barati, 1997). This is a very distinctive view of culture which relates it to nature and the universe as opposed to those views which relate culture to technology, history, economics or other ideologies(see Altman, 1980). Culture, as well as values and thought, also includes other more conspicuous elements such as artefact and behaviour. Behaviour is particularly important due to its direct implication in providing an understanding of both the individual and the group and how they connect to the environment. A person's behaviour is based on a commonly shared system of values, beliefs, and attitudes, which are pertinent to a society.

Culture, according to various definitions, can be associated with what people do, how they do it, or what they think (Rapoport 1980,1981; Altman, 1980).

Barati, (1997) has identified a number of roles of culture:

- 1) Culture enables us to communicate with others through a language that we have learned and that we share in common. This language is not only verbal, but also non-verbal.
- 2) Culture makes it possible to anticipate how an environment, including other people in our society, are likely to respond to our actions.
- 3) Culture includes a value system by which one can distinguish between what is considered right and wrong, beautiful and ugly, reasonable and unreasonable, tragic and humorous, safe and dangerous.
- 4) Culture provides knowledge and is necessary for meeting sustenance needs. It also provides vital knowledge for people to cope with the external world.
- 5) Culture enables us to achieve a sense of unity with a particular environment, which includes ourselves in the same category as other people of a similar background.

Much of human behaviour is governed by culture, the system of shared attitudes and symbols that characterise a group of people. The people's culture is a shared schema that designates regularities in a group's thinking and behaviour. Individuals are socialised with culture, but their behaviour also shapes the culture so it is not something static, but rather something that evolves over time. Each culture is unique because it has its own history. This does not mean that certain values are not held by many cultures. Each culture is a result of the past efforts of people to deal with its physical and social environment. People can deal with their own cultures in a collective conscious way. As a result of being socialised into a culture, an individual has the ability to know the appropriate behaviour (Masaud, 1996).

The emergence of the General System Theory and Structuralism, and the increasing publication of holistic views and approaches by scientists particularly in physics and chemistry due to new discoveries in these fields, have reinforced the importance of

relativism and cultural views and cosmologies. No doubt these holistic approaches have similar significance when applied to human and environmental studies within different cultural contexts.

Rapoport, 1980 suggests that there are three types of views about culture. The first view is that cultures or their constitutional elements are seen as people's attributes in which they maintain their identity and relate themselves to their own environment. The second is the view of culture as a mechanism to control what human beings do. The third one is to see culture as a kind of structure that makes particulars meaningful. These views have led to three general definitions in the classification of culture. The first one defines culture "as a way of life typical to a group", the second as "a set of adaptive strategies for survivals related to ecology and resources" and finally the third as "a system of symbols, meanings, and cognitive schemata transmitted through symbolic codes".

One of the significant characteristics of all cultures is the process of evolutionary transition. Culture's attributes, (beliefs, worldview, and symbols) are learned and transmitted. This process creates a system of rules and habits, which reflect ideas and create lifestyle, guiding behaviour, roles, and the built form (Rapoport 1977).

Rapoport argues that the peripheral part of the culture is always flexible and continually exchanging information with new situations. The peripheral part of culture comprises those recently acquired elements or attributes from outside or those that are not considered as so crucial and significant as others.

The problem sometimes with culture is to try to objectify it, so culture is considered as a "thing" rather than a "process".

Culture is a system of connectedness, it interprets and holds a sense of unity and oneness within a group of people, providing laws, symbols and an agreed structure for the discrimination and interaction between things, through which an individual can interpret his or her world and act within it.

Cultural awareness or knowledge is a common understanding about reality which is handed down through generations and within groups, so that interpretations of reality are established, and man as a result can communicate with world around him.

This means that cultural awareness of the real world is relative, in spite of the unity of the world. Thus people's awareness and knowledge about reality is not absolute and unique, to the extent that it is possible to say that even space, time and reality change when we move from one culture to another.

Cultural awareness is important for the individual to enable him to sustain life in a particular world. This awareness makes it possible for him to notice and to interpret phenomena in the surrounding environment. The quality of people's life itself is threatened if it lacks awareness. When one is aware of his culture, this can guide his action in relation to that thing to produce an overall situation that is harmonious and free from contradiction and confusion, (Bohm, 1980). This is to say that local alternatives should be based on local awareness, and this local awareness should be considered as the basis of people- environment organisation or reorganisation.

Our physical surroundings are shaped by many forces. Even those aspects that are influenced by a human agency derive that influence from a great variety of sources, clients, designers, investors, local authorities, government controls and different professional bodies. This is apparent whether it is the design of a building that is being considered, or the design of a region. There should, therefore, be no surprise in learning that within the plethora of pushes and pulls out of which places are formed, it is not uncommon for the views and experiences of the people who will eventually live and work in those places to be ignored (Canter, Stea, and Krampen, 1988).

In the previous parts of this research, findings of the case study show that man has been disturbed by many factors imposed on his system to communicate with the environment. This, in consequence, affects his perception and understanding of his own environment. An approach based on strengthening the communication between people and their environment may help to enhance environmental communication through participation. The issue not only includes communication of man with his own environment, but also between the different sectors and individuals. In other words,

between the people who live in those environments, and the professionals who are responsible for shaping them.

One of the consequences of broadening the concept of environmental participation is the opportunity it provides to understand some of the mechanisms that are implicit in all participation procedures. The central mechanism is that of communication. Not only is participation a means by which users can inform environmental decision makers of their actions and aspirations, but also a means whereby participants themselves can gain a richer understanding of the environmental shaping processes that are significant to them.

In the next part of this chapter, the author will discuss the issue of participation as a way of enhancing environmental communication. The importance of adopting a cultural development approach to assess the human dimension through involving people of the different aspect of development will be discussed. The option of participation of people in conservation of their cultural heritage, and any decisions which influence future development is also discussed in this chapter, followed by a summary of recommendations and guidelines for the role of the key player in this process.

9.3 Communication:

How do we communicate with one another ? methods include the spoken word, either direct or by telephone or radio and the written or printed word, transmitted by hand, by post, or by telegraph. These are obvious and common forms of communication, but there are many others. A nod or a drink, a drumbeat in the jungle, a gesture pictured on a television screen, the blinking of a signal light, a bit of music that reminds one of an event in the past, puffs of smoke in the desert air, the movement and posturing in a ballet- all of these are means that one uses to convey ideas.

In modern society different people communicate in different ways, as do people in different societies around the world. The way people communicate is the way they live. It is their culture. Who talks with whom? How? And about what? These are questions of communication and culture which are inseparable elements.

A communication system is symbolically represented as an information source which selects a desired message out of a set of possible messages. The transmitter changes this message into a signal, which is sent over the communication channel to the receiver. The receiver is a sort of inverse transmitter, changing the transmitted signal back into a message, and handling this message onto the destination; for example, my vocal system is the transmitter, and your ear is the receiver.

Alfred Smith suggested that there are three kinds of investigators who have made the most of the empirical studies of human communication: mathematician, social psychologist, and linguistic anthropologist. Human communication has also been divided into three principal parts: syntactic, semantic, and pragmatic. These investigators and parts cut across one another.

The basic concern of the mathematical studies is the transmission of messages, either exactly or approximately, from one point to another. This linear transmission involves many problems, and the mathematical answers to these problems have developed such new concepts such as noise and redundancy, channels and equilibrium. These kind of concepts help to answer such electronic questions as:

- 1) How much of the living quality of the human voice does a telephone have to transmit for the message to be intelligible?
- 2) What is its relationship with the speed of transmission, as in playing a phonograph or tape recorder at a different speed.

The mathematical concepts used to answer these questions have led to a linear model of communication that has helped to illuminate many other aspects of human behaviour.

The mathematical studies also stem from the concept of feedback. This refers to a circular process rather than a linear one, and it is the basis of automatic control devices. When a guided missile such as a rocket to the moon is launched, it is set on a course. It is given a set of instructions or messages that says: Do x until y happens and then do z. If the missile shifts from its course by doing $X+1$ instead of X, its deviation is fed

back to change the original instructions automatically, from Z to $Z - 1$. The study of such automatic control systems is termed cybernetics. Among other things, cybernetics has stimulated automation in industry, led to new studies of automatic changes in our physiological system, such as changes of blood pressure and endocrine output, and has produced new studies of the social controls that are a part of our social system. So feedback is a matter of communication, of transmitting information. Since the response to one message often controls the next message to be sent, feedback and cybernetics are keystones for understanding human communication generally.

Through communication, people control one another's behaviour and unite themselves into groups. It is the social psychologist who studies how people interact in these ways. What are the lines of communication within the group? Do leaders use the same channels that the other members use? Are some kinds of communicational organisations more efficient than others? The social psychologist also studies how social interaction affects the attitudes of the individuals within the group. How do the media of mass interaction such as newspapers and television affect an individual's opinion?

As the mathematical theory of communication is related to electronic engineering, but is also distinct from it, so the social psychology of communication is related to the sociology and psychology of language. Language is one of the many forms of human communication. It is basically a matter of talking and listening.

While the mathematician is concerned with electronic signals, the linguistic anthropologist studies human signals, and the social psychologist is generally concerned with human communication in his own culture in his own time. All these are approaches to human communication.

Human communication can be divided into three parts as we have mentioned before: the syntactic, the semantic, and the pragmatic. These terms were first used by philosophers such as Pierce and Morris. Syntactic studies show how signs are related to each other, semantic studies indicate how these signs are related to things. while pragmatic studies demonstrate how they are related to people. These three divisions

study different kinds of relationships, not different kinds of substances or entities. These divisions have many doors and windows for communicating between one another. They are not sealed compartments.

Syntactic studies show the relations of sign to sign, and most empirical studies of human communication have been devoted to syntax. In a sentence, for example, each word is related to the other words. This is the syntax of the sentence. One way these words are related is in their position arrangement; another way is in their inflection or grammatical form.

Mathematicians and linguistic anthropologists are primarily concerned with syntax. The mathematicians find that signs are related to each other in being too predictable, which is redundancy, or being unpredictable, which is entropy. The linguistic anthropologist finds other kinds of relationships in the syntax of German. He finds for example, that the adjectives must agree with nouns. This repetition of gender is a kind of redundancy. It is a matter of syntax, of the relation between signs and signs.

While the mathematicians and linguistic anthropologists have analysed the syntax within messages, the social psychologists have analysed the syntax between messages. Redundancy is the relation not only within the messages 'I hate him, I hate him' but also exists between messages as in dialogue "Good morning", "Good morning".

Space forms one important relation between messages. Messages are sent across space, from point A to point B. When people communicate with one another they organise this space into communication networks. Social psychologists have found that different groups organise their social distances into different syntactic structures, just as different languages have different grammars.

The three kinds of investigator are not equally concerned with semantics. The mathematicians are generally concerned with the transmission of messages and not with the meaning of these messages. However, meaning is a product of coding, and coding is a form of behaviour that is learned and shared by members of the communicating group. An Arab learns to code like Arab, and a Mexican learns to code

like a Mexican. This is how their words, gestures, and other forms of communication can carry any meaning. Coding is learned and shared, and behaviour that is learned and shared is cultural.

To look at the world around us is a form of behaviour. Each of us learns to look at it in the way that other members of our communication group have to learned to look at it. Our perception is behaviour that is learned and shared, and it is mediated by symbols. Culture is a code we learn to share, and learning and sharing require communication. Thus communication requires coding and symbols, which must learned and shared. Communication and culture are inseparable.

The importance of culture, in the sense of way of life, modes of thought and behaviour of the different people of the world, is more and more widely recognised and in many cases, taken specifically into account by development officials. Thus, there have been references to the need to have regard for cultural identity, and to have the population participate in their own development projects and to grant them the right of access to culture.

To maintain the continuity of any society, one should be able to promote cultural development. We all know that to succeed, cities can no longer depend on the good fortune of being near a good port, near coalmines or just being part of a successful national economy. They have to build on their own strengths and many of those are cultural ones. There are three levels of culture which have to be organised, planned, and thought about. The first of these is the idea of the city, a sense of its past and future, of things in its heritage that people care about and feel proud of. The second level is the industries that sell things on the world market, for example designs, fashions, music, CD roms, and films. The third is the life of the city, what Raymond Williams called ‘ the structure of feelings’, which manifests itself in practical terms in the life of streets, public spaces, and restaurants.

Communication is one of the aspects that enhances the level of participation. So the key issues behind understanding the environment through man-environment, and man to man interaction is communication. Communication is a tool for understanding the

man- environment relationship. To understand how people interpret or evaluate the environment one should know how to communicate with them.

As apparent, communication is here used in its broadest sense, that is to say, communication is not limited to mechanised ‘ messages ’ sent from the source to a destination, rather communication is the being, the becoming and all of their combinational relationships.

The question to be studied is that a communication system has to do with mainly two things. Firstly the amount of information, and secondly the coding process that may be used to change messages into a shared language. When one of these is deformed, it will affect system of communication between man and his environment. Information is not stable especially nowadays with the enormous flux of information available to society through different means of technology. This critical situation is relevant to our indigenous culture in the city of Nablus, which has been influenced and deformed as a result of unnecessary information offered to its people from outside. The second factor is culture based, in which the holistic local knowledge about a certain society, is gradually and continuously being transformed.

Smith (1966) classifies the problems one could find in the communication system at three levels: technical, semantic, and influential.

- 1) Technical problems: are concerned with the accuracy of transference of information from the sender to receiver. They are inherent in all forms of communication, whether by sets of discrete symbols (written speech), or by varying signal (telephonic or radio transmission of voice or music), or by a varying two-dimensional pattern (television).
- 2) The semantic problems are concerned with the interpretation of meaning by the receiver, as compared with the intended meaning of the sender.
- 3) Influential: the problems of influence or effectiveness are concerned with the success with which the meaning conveyed to the receiver leads to the desired conduct of his part.

Our concern in this research is to work on the influential problems of the system of communication. As has been stated earlier, the enormous flow of information received influences the success with which the meaning of the built environment, based on culture, has been received and lead to the desired conduct. In the case of this research, the communication system has been deformed. The city of Nablus is under pressure from external resources which are trying to interfere and break down the system within the culture. We need to prevent what is happening. An adequate level of cultural awareness is needed to enable sustainable continuity of the society. Cultural awareness will enable the individuals to value their tradition, history, thoughts, and customs.

The author has traced many areas through the different techniques applied in this research where different groups in society have different perception and interpretation of their environment. These two groups are the professionals and lay people. As a result, there is a lack of communication between these two groups on the one hand , and between the society and the environment on the other.

Architecture is viewed by Minai (1989) as intercommunication between individuals, society, and professionals as a means to communicate symbolic information. Communication is not restricted to limited use, such as architectural presentation; rather, it is the essence of architecture. It is a holistic approach to the design of the totality of the aesthetic environment from perception to design conception, to presentation, and actualisation.

Minai says:

Communication is not what the appearance of an object presents, but rather its structural and substantive integrity perceived through the order of its components relative to total space-time object-event patterns. Within this context, a chair is not a chair because of that which appears in an isolated shape, but rather as a system of functioning components complementing the roles played by other sub-components of the total environmental communication system.

Architecture as defined by Minai (1989) is the total environment, including the socio-cultural, psychological, and biological, encompassing total human experience. Space and its activities are considered the extension of man, having resulted from his

interaction with his surroundings. He added also that architecture, or total human environment, is defined as a mega communication system between various cosmic components and life forms. Their functions and their interactions are a gigantic interplay of systems, constituted via three basic components. The first is matter shaping the cosmic order in objects and communicating through environmental cues. The second is energy characterised in event patterns and communicating through behavioural cues. Finally, the last basic component is the interconnection of the above two within space-time reference, which is formulated through dispositional properties of matter energy and communicated through associative cues.

In the previous part of the research we discovered that the imageability of the environment improves one's understanding and attachment to the environment. People in Nablus found they could identify themselves with certain buildings and objects mainly from the old city. Monuments such as mosques of the old city, beautiful old palaces and baths, are all objects in the city structure which enhance the place identity. According to Lynch (1960) imageability of the environment is dependent upon both its identity and its structure. Strengthening environmental imageability improves our understanding of it and as a result we can communicate better with the world around us.

There is another kind of imageability, social imageability, which is the capacity of the place to evoke vivid and collectively held social meaning among its occupants. Places, in order to be imageable and communicable, acquire social imageability to the extent that they are regularly and predictably associated with patterns of individual and or collective behaviour (AL Zoabi, 1993).

Socio-cultural activities also communicate via the conscious and / or subconscious patterns manifested in cultural patterns or the disposition of the ' hidden dimension' of their representative objects, i.e., the properties of space between parties from two cultures engaged in a conversation are subconsciously structured into their own socio-cultural value system.

There is a need in Nablus to consider the importance of socio cultural variables, and culture supportive environment. This could be achieved through promoting associative activities in our new buildings that carry symbolic meaning and encourage life style. For example, we should try to encourage design that is congruent to the design of the Old Suq in the old city of Nablus, essentially, people like the old suqs and Bazars not only because of their physical character, but also because these physical characteristics are associated with their activities as being lively and being a container for social interaction.

It is believed that architectural design is neither formulated through the subjective view of the architect, who intends to create a space to fit some activities or provoke new activity patterns or life style for its users, nor through the socio-psychological 'concept' perceived by social scientists, who formulate human behaviour into certain norms for which architectural space can then be created. Human aesthetic and value systems do not dictate to either of the above two, nor are they dictated by them, rather, they are a product of integration of all three objects, events, and associations. Understanding the nature of these three sets of component systems interlocking them all into a human environment, is the subject of any architectural study and theory.

Minai (1989) argues:

Every object or event by virtue of its being is communicating via the similarities and differences it makes with its immediate or distant (space and time) pattern dispositions. In linguistic terms, here we only deal with verbs and no nouns. Objects are named based on their functioning act of communication. Objects or events continuously communicate to their surrounding environment via the order and structure of their dispositional properties relative to the ever-increasing body of historical data bank of such information. Events are also physical fields, whether that state be in reference to space and / or time continuum or the substantive information of a phenomenon.

Associations are spaceless, timeless entities, or cultural communication routed in our value system and formed in our perception, representing interrelationships of various objects-events in comparative context with their relevant associative patterns of the past, present and future or their frame of references, expressed as architecture. One of Louis Kahn's assertions might be interpreted to mean that virtually a brick communicates, telling the designers and the users, I am a brick; use me as a brick; I want to be a brick and nothing else. One could say that the functional properties of any

object are constantly at work and , thus, also communicating, i.e., when a brick cannot carry a certain load, it acts and reacts and finally bursts into pieces, indicating its functional limits as a load bearing element.

Smith (1966) says:

To look at the world around us is a form of behaviour. Each of us learns to look at it in the way that other members of our communicating group have learned to look at it. We learned to see it as more than the buzzing blooming confusion we saw when we first born. We look at it now through learned concepts, categories, and labels: animal, vegetable, and mineral; eatable, drinkable, and desirable; good, bad, and indifferent. Our perception is behaviour that is learned and shared, and it is mediated by symbols, which must be learned and shared. Communication and culture are inseparable.

We need to know how symbols and symbolic systems enable people to comprehend and communicate with the environment, because not only the reality of the outside world, but also its symbolic meaning is ultimately significant. In other words, there are relative symbolic “realities” which are contained in specific frameworks that are called culture. People, through many thousands of years of interaction with the world, have learned that every single phenomenon in the environment, significantly, has to have a symbolic meaning that represents its relative existence. This relative symbolic meaning enables us to cope with our environment and to develop it. In other words, symbols, which could be seen as a kind of human knowledge, do not depend on individuals only but also on the whole society. According to George Kelly, this symbolic world combines meanings that can be best understood when contrasting two-pole forms which are found in each meaning such as, for example, good/bad, black/white (Kelley, 1955). Of course the reality of symbolic understanding is not so simple, and between the poles of each dual concept could exist degrees of ranking. For example, we cannot say that something in the environment is either absolutely good or bad. It must be somewhere in between. These meanings and their manifestations in the environment are strongly influenced by verbal and non-verbal cues that already exist in the social context.

Consequently, the way people see and interpret various elements in the environment depends upon symbolic meaning, which has already been given through a prior social agreement. This social sharing and agreement is one of the most important bases for

communicating with other members of the community as well with the environment itself.

The reason for this is that communication about a subject needs mutual agreement about the meaning between the sender of the message and the receiver. When a sender and a receiver can come to a consensus -which depends mainly on the cultural awareness- on validating an interpretation, then communication can be successful (Ruesch et. al. 1964). Therefore there should be a common accepted criterion in the built environment as well as in the human mind and in the symbols in order to make communication possible. The less agreement and unity there is between these three elements, the less successful the communication will be.

9.4 Communication and Participation:

There has been a growing interest in public participation in the last two decades, particularly in urban planning. Together with this, there has been a process of change in the concept itself. In the sixties, citizens were only given the job of offering their ideas to those who are responsible for planning, but beginning in the seventies, participation has taken on connotations of community power in which the public has an increasing influence decision making (Murphy, 1978). The people themselves have been sensing an increasing necessity to influence the formulation and carrying out of plans that before were made on their behalf, and to do so they have to intervene with the planning process.

The different aspects of citizen participation have their roots in non-western countries. All indigenous settings are a reflection of people's involvement in shaping these environments. In Islamic countries citizen participation has been reflected in many aspects. Sharif, (1996) introduced different aspects of citizen participation in the Islamic context. Principles based on rules such as the avoidance of harm, the right of purification, and the right of first that deal with the relationship and behaviours between neighbours of the same community on one hand, and public authority on the other.

The system depends mainly on sharing responsibilities between public authority and the citizen, and the right of precedence. The Islamic participation tries to minimise the public authority and maximise private responsibilities.

Participation has been defined in various ways. Edelman and Kohlner (1968) show that participation is the transmission of information about users' needs through questionnaires, as well as the choices that they then make concerning the options which the experts offer them, and the pressures which the group leaders exercise in order to influence some planning aspects.

More recently, Susskind and Elliot (1983), based on European experiences, have indicated that there are three types of participation that coincide with the degree to which a citizen becomes involved in the process. The first is the pattern of paternalistic participation which characterised the centralised state; the second is the conflictive one in which people struggle against centralisation, and the third is coproductive in which the major characteristic is negotiation, or the agreement that people make together to elaborate and carry out policies and social programs.

Stringer (1977) also identifies three participation styles, which are similar to those above, and which are related to the theory of personal constructs. In the first, the role of the user is limited to accepting the idea which the expert has of the design. In the second, the user takes on a more active role and tries to impose his own point of view on the designers. In the third, the idea of the user and the designer form an active part of the finished product, both being modified in the process. To Stringer (1982) and Lawrence (1982), however, true participation is characterised by this last 'interactive' style.

It can be seen that participation in these conceptions is associated with collective action which takes place in relation to a number of problems such as urban, educational, or political issues, and in which a citizen can become involved, either actively or passively. In passive involvement, people transmit information about the needs or choose between alternatives which are generated by experts, without decision control. In active involvement, citizen control can be complete, when they initiate and develop

the process, or it can be partial when the power of decision is shared with a planner (Juilian, Reischl, and Katterinich, 1997).

The key issue of cultural planning is how you can include people, and how you can bring them into digital space as well as into physical space. As communities change, it is critically important to develop mechanisms that promote participation and to understand its benefits. One factor promoting participation may be the individual's own psychological benefit. Psychological benefits attributed to participation include sense of community, and empowerment (McMillan and Chavis 1986) . Sarson (1974) defines sense of community as “the sense that one belongs in and is meaningfully a part of a larger collectively”. Zimmerman and Rapoport (1988) describe empowerment as the connection between a sense of personal competence (I believe I am competent) and a willingness to take action (I am able to exercise my competencies). Planners should be able to promote participation through mechanisms that enhance sense of community and empowerment and thus improve the quality of individual and community life.

Arnstein (1969) defined citizen participation in terms of a ladder, with eight rungs corresponding to the degrees of power available to participants, and representing three levels of involvement, as nonparticipatory; examples are participation on ‘ rubber stamping’ advisory boards and programs that aim to fix or cure participation. The next three rungs, the second level of involvement, are defined as precursors to participation, exemplified by situations where participants either listen to or provide advice to traditional powerbrokers. Arnstein defined the last three rungs as partnership, delegated power, and citizen control, representing true participation in that a citizen can directly influence policy.

On the other hand, Striftel (1983) suggested that a participation mechanism that allows for dialogue or two-way communication is superior to those that are limited to one-way communication.

Yet Striftel's empirical analysis of citizen participation in 94 public meetings concerning water quality in North Carolina found no evidence that dialogue increased

participants' knowledge about water planning issues or congruence of their attitudes with those of the planning staff. Stiffler noted that these results are contrary to traditional participation practices and to principles established from small group research, and they cast doubt on the superiority of dialogue in participation. It should be noted, however, that Stiffler and his colleagues did not measure empowerment or the extent to which participants believed they influenced policy decisions.

In explaining his results, Stiffler (1983) argued that the presence or absence of dialogue is an insufficient measure of participation. More relevant information might be the frequency of communication originating from participants and from the staff, and the extent to which communication influences the listener. Perhaps the extent to which participants feel empowered is also an important variable related to the success of citizen participation. In situations where participants felt empowered, dialogue might indeed increase their knowledge and the congruence of participant and staff positions. One would certainly expect congruence to increase if participants were influencing policy.

Power may be an important variable affecting the degree to which citizens are willing to participate in public affairs. Evidence has suggested that participation can lead to empowerment that can ultimately produce community improvements.

Theories also suggest that participation may have psychological benefits for the individual participant. The claim is that participation, by providing a mechanism for citizen input into policy formulation, promotes a feeling of control (Peattie 1986; Checkoway 1977; Zimmerman and Rapoport 1988). The literature surveyed above suggests that participation, sense of community, and empowerment interact and support one another.

Smith (1983) makes a useful contribution to our discussion concerning community participation in Palestine; he suggests several issues that have to take place if it is to be effective;

- 1) Allow the community to determine their priorities and needs and also to point out which of them are feasible given resource constraints.

- 2) Encourage the community to participate at their own pace and in whatever form is convenient to them.
- 3) Show successful projects where a community either initiated or implemented through participation.

The people of Nablus, however, should be given the chance to make active decisions about their environment. This is a fundamental human need. It is a need to create and to control. If they have the opportunity to upgrade their historic environment, they will do so, enjoy it, and gain enormous satisfaction from what they have done. They should be given a chance to identify with the part of the environment in which they live. They want some sense of ownership, identity and territory.

There is a need to bring the components of community development programmes in Nablus, especially in historic areas, together with the resources both of public and private sectors as well as local NGOs (Non Governmental Organisations). “They need the “government and voluntary resources available to stimulate self-help, and urban community organisers to locate and develop indigenous leaders and to translate their problem in such a way that they can be adequately interpreted by government and private agencies” (Clinard, 1966).

Palestinian NGOs and community –based organisations, as with other donor organisations may play a significant role in the development and reconstruction process both as facilitators in addressing community needs and as providers of some of these needs, particularly in the area of improving and upgrading the existing housing stock. The long lasting Palestinian situation has in fact been the main area for the development of many community-based initiatives, largely by the United Nations and local NGOs. However, it is essential that the activities are consistent with political and national objectives of priorities.

The fact that community organisations which were established during and as a result of the years of the occupation have already empowered themselves to take care of their communities is an asset we can draw from, support and reinforce in the process of development, reconstruction and conservation.

Proponents of community development applied to problems experienced in the historic city cores have put together a list of “Golden rules” that should, where possible, be followed:

- 1) Create a sense of neighbourhood cohesion and strengthen group interrelationship.
- 2) Encourage and stimulate self-help through individuals in the community.
- 3) Develop civic consciousness and acceptance of civic responsibility.
- 4) Use professional and technical assistance in direct support of the people involved.

We should not consider our people’s participation as some kind of quantifiable ingredient to be injected into a development or conservation project. It should be essentially considered as a qualitative process, which, if it is to be meaningful, should imply some fundamental shifts in thinking and action. As a result it should emerge as a result of some kind of bottom-up process.

Community participation in Nablus should be recognised as a form of training in itself, which can ensure that “project” outputs are not only achieved but maintained. It should be seen as a two-way process and not just a means by which our people can express opinions on alternatives set before them. An attempt must be made to give them a sufficient amount of information to make them aware of the wider implications of their choice. In other words, participation should be seen as an adductive process. This could be achieved through programs of action which bring together all actors within a partnership so that formal and informal channels of communication are opened among and between them.

9.5 Participation and Cultural Development:

The importance of culture, in the sense of the way of life, modes of thought and behaviour of different people of the world, is more and more widely recognised and in many cases, taken specifically into account by development officials. Thus, there have been references to the need to have regard for cultural identity, to have population participate in their own development projects and to grant them the right of access to culture.

In fact, in the face of change, culture defines implicit and explicit hierarchies of consent, which determine the acceptability of development action. Thus, attitudes and aptitudes are the elements that control the permanence and transformation of culture. There is a hierarchy of cultural values, which largely determines their compatibility (or potential for conflict) with development values and in which traditions, beliefs, value systems and norms play fundamental role. It is in terms of these elements that, within a given time-frame, populations are able to decode the components of development projects, reinterpret them and make them their own.

It is necessary to explore the question of development and its ideology, in order that we may better understand what a development project means for the values, beliefs, customs and behaviour of population.

There is equally a need for a new consciousness of heritage values. After all, conservation of cultural heritage is fundamentally a cultural problem; there is a need to establish a basis for a balanced judgement where cultural, economic and financial values are taken into account in the context of the decision making process concerning the planning and management of the built environment.

It is clear that the subject of the conservation process is city life as a whole, in both its material and symbolic (immaterial) configuration, with its elements of state and process. Conservation thus seeks to maintain the urban environment, together with the cultural practice of its use. It is therefore an activity involving the conservation of the material elements – the built and the natural environment – as well as the cultural process that together comprises the urban structure.

When thinking of urban conservation, we are, directly or indirectly, considering the latent conflict that exists between continuity and change in the urban structures and elements, incorporating minor transformations to adapt them to new activities and style of urban life. Change in opposition may be interpreted as the process of radical modification of urban structures to the extent of major transformations or even substitution of the urban elements in order to meet the same social requirement.

Continuity and change are undoubtedly processes that form the basis of any urban culture or society, (Jokilehto 1997).

As Jokilehto says:

The first point to recognise is that values are social categories, the results of human thought defined in a cultural context, and not natural, relative to the attributes. The matter (physical world) is neutral, relative to the attributes that human thought attaches there to. Values do not exist per se; they are always relative attributes of the things, and depend on the process of realising comparisons or relationships between things.

In modern, 'westernised' countries, the identification of cultural values in relation to the urban structures happens mainly through the use of symbolic systems of reference, such as history, aesthetics (art), or, quite simply, age. This process is subject to permanent criticism or reassessment because it operates at the ideological level, and is thus related to political power games associated with the process of forming images, memories and representation in a given society.

At the end of the twentieth century, urban planners in the imagined city would be faced with challenges ranging from the conservation of material elements (monuments and buildings) to the maintenance of the social processes (cultural, artistic and economical) that permit the realisation of urban life, characterised by the continuous generation of new issues within a continuous process. The result of this process is that the city becomes the locus of a great diversity of interrelated forms in a complex environment. This diversity can be interpreted as specificity of the place, and it is a necessary component of the social memory. It helps to maintain the past through living continuity forms in objects (with juxtaposition, overlapping, stratification, and so on). Such qualified diversity can also become a source of inspiration for the generation of new forms.

In Nablus, professionals and decision makers have to promote approaches which are not only concerned with maintaining the physical structure, but also with conserving the urban social life embedded in these forms. In other words, our final goal is not only conserving the old suqs, palaces, and mosques. There is an equal necessity to maintain the social process and permit an urban life in its streets and public spaces. For example,

people in the previous part of the research have mentioned that they greatly missed the social life and past memories they had experienced in going to the old baths in the city of Nablus.

All values that are integrated into the conservation process are also interrelated in a dynamic process; they change in time as a system, and they can continue to be regenerated only as a dynamic system. This mode of associating change and continuity of values will allow a town to evolve almost as a social organism, and a balance between the two processes is vital for its development. The interruption of one can cause enormous problems for the urban structure; urban elements are generally in continuous change, but they must also maintain a link with their past, (Jokilehto, 1997).

To summarise the above, when one needs to identify the values of a city within the unity of its diversity (specificity), we cannot look for a single value for the whole city- even if it existed, it would be in continuous change. The values of a city are associated with its capacity to regenerate itself in forms that permit its citizens to identify a line of continuity between past, present and future. This is the process of urban transformation, aiming to maintain a creative process of regeneration of diversity within the context of the communication and unity of the community. It requires the upkeep and control of all types of values, related to both states and processes.

Change and continuity are processes that are determined by decisions taken by many different actors, and who have the power to change the urban structure. The actors represent the public and the private sectors, and include property owners, building investors, residents and civil servants. Their decisions depend on expectations and interests formed both at an individual and group level.

Urban conservation planning process, as defined by Jokilehto (1997) is an activity that aims to preserve the creative change of values within the context of continuity of the urban structure.

Sustainable development is seen today as a powerful motivation for urban conservation planning. Basically, it would consist of a process of urban development based on the constant reuse of existing built and natural resources, associated with a low input of energy for adaptation to new requirements conceived in society. It is also viewed as a process founded in the local culture, in an equitable distribution of urban services, the use of democratic principles of management, and the maintenance and regeneration of traditional social values and practices.

From the perspective of sustainability, cultural heritage is understood as a non-renewable resource. It carries some of the most important cultural values of a society (identity, memory, self-consciousness and artistry), and is a resource capable of attributing values to new things through the creation of new processes based on established values. As a product of humanity, a city is an artefact composed of several historically recognisable parts of strata. There may be no historic centre as such, nor specified historic areas, but rather historic urban structure that regenerates itself through the use of characteristic elements and processes.

The policy of implementing a sustainable approach has led to an immediate thought-conservation is a process that involves the entire city. This approach is quite different from the traditional view of restoration and rehabilitation, which was based on the identification of specially valuable elements such as monuments, sites or historic centres. Following on from the sustainable approach, the city is understood to be a unique ensemble that needs to be conserved in its historical integrity. This means understanding the city as a dynamic process, a structure in continuous change. As with other structures, it has both states and processes; these elements and their unity characterise the city. There are states possessing greater stability than others, because through out history they have acquired values that are fundamental to urban life, but there are also processes that are strongly rooted in city life, and for this reason, have become conceived as values.

Conservation of a city should not aim to halt the process of change, or prohibit the introduction of novelties into city life, as has been commonly propagated by some critics of conservation (particularly those still embedded in the ideology of

modernism). On the contrary, it can well be a way to perpetuate a process of generation of novelty that can be appreciated on a more collective basis (social, cultural, economic and technical).

This issue has been observed in different areas of the empirical work. People have shown preferences for some modern buildings, which offer them a certain level of comfort, but at the same time they realise that the old traditional architecture could be better for them if some modification were made. Old buildings have the advantage of being a symbol of their cultural identity. So the main concern in Nablus is to apply strategies of conservation, starting with conservating the physical structure of the monuments and ending with maintaining our cultural values.

It is necessary for professionals in Nablus to try to encourage adaptive approaches that satisfy people's needs through a process of rehabilitation and reuse of the old buildings. For example, there are about thirty soap factories known for their unique architectural character, consisting of stone cross vaults. These soap factories are considered as monuments that used to be important features of the old city. With help, we should seek other uses that enable the structure to exist as it has in the past. Through minimum changes and by using modern technology we could ensure the regeneration of people's values and aspirations. Because ultimately they believe that their indigenous architecture is capable of satisfying their needs and aspirations.

A sustainable approach to urban conservation must be seen in the context of diversity, and specificity of cultural and socio-economic development. The globalisation of the world economy and formation of the post –industrial society is still partial, and confined to certain regions of the world.

In conclusion, there is a need to stress that any form of sustainable approach in urban planning should be conditioned by a series analysis of existing values, and the process of their formation or regeneration. Values have appeared in the urban planning process only in a veiled form, almost imperceptible to the untrained eye. Normally, the moment when values are conceived is the moment when the objectives of the planning process are being discussed.

In order to ensure a sustainable approach in thinking about urban development, there is a need to encourage the debate about values as the central issue of the planning process.

9.6 Participation and Conservation:

We conserve because, as in our personal lives, we cannot draw the line between the present, the past and the future. The latter does not exist, yet the present is but a fleeting moment; therefore only the past, since it constitutes the only conditioning elements, which we can analyse, is important. In a nation's history, its past and its heritage are the exact concept of its future, justifying the present and conditioning the future.

Conservation in Palestine faces many challenges, the most important one being the lack of resources to finance a comprehensive programme. Conservation is not considered a top priority by people who are struggling to feed, educate and provide decent shelter for their families. Nor, perhaps, will it be a top priority for the Palestinian National Authority, which still exists on the denotation from the rich countries and which is struggling to maintain the basic infrastructure needed to provide health care and to create jobs.

The present conservation concept is one which adopts the western technique and approach, that depends primarily on the conservation of monuments. However if this continues in this way, many historic areas will be lost.

Modernisation and technological advances have greatly encouraged the neglect of people in Nablus of the importance of their heritage, particularly of historic quarters, which have undergone a drastic change in the past few decades. These quarters, which comprise most of the greatest national monuments as well as the finest examples of our traditional architecture, have been ruined in the cause of the progress, and modernisation. Many historic structures in the West Bank such as hammams, soap factories, and palaces in the historic cores have been destroyed. Yet many of these

structures such as Suqs and Bazars, are still appreciated by the general public and considered one of the aspects that attributes to their cultural identity.

However a civilisation's heritage not only consists of major works, such as these monuments and works of art, but also of every day objects i.e. those elements which perhaps individually bear no important message but together contribute to specify the whole. Monuments in fact rarely outline the characteristics of a city, compared with their ensemble. We can see for ourselves how the protection of the monuments alone and the destruction of the rest have altered not only the formal and figurative aspects of our town but also the comprehension of the so-called constants of civilisation.

This is observed now in the city of Ramallah, which is 40 km south of Nablus, where in the name of development and expansion, many old structures have been destroyed to be displaced by high buildings. As a consequence, this has altered the physical image of the city. Thus, a need to adopt a rehabilitation and adaptation philosophy, especially when conserving the historical environment, is required. Restoration and re-use of old buildings have proved viable in many cases and old cities must continue to be competitive economically if they are to emerge from their current state of physical and social deterioration. We can see this in many historic areas in Nablus, especially the residential quarter. Most houses in the old city of Nablus have been deserted by their occupants. Conservationists should not be passive participants in the conservation process; instead, they should seek to reuse old buildings that are compatible with the need of local communities. For example, we should seek new use for the palaces in Nablus. Through conservation, these Palaces could be adapted for other uses, such as a community centre, library, or cultural and recreation building that will offer people of the community facilities they need in their neighbourhood.

Ideas of rehabilitation should be promoted by using an approach of regeneration of old structures. That is to say, it is part of our history to select that heritage to be conserved for future generations, and to reject this in favour of total conservation would lead to the same counterfeiting as general destruction. To turn a town, or part of it, into a museum is to condemn it to death because, whilst it is true that a town lives on if its

historical heritage is conserved, it is also true that, in order to ensure a town's survival, people must be able to live in it, move around it, and use it.

Any conservation project in Nablus should be designed to stimulate citizen participation in coping with the conditions of the historic quarters and preventing further deterioration in them, as well as in developing a sense of civic consciousness. It should be designed as a realistic and practical approach to upgrade, largely through the resources most readily available i.e. thousands of hands and the small financial resources of the inhabitants themselves.

The conservation approach should involve re-orientating the paternalistic relationship between the local authorities and residents by consultation and the physical aspects of the conservation programme, which also includes other aspects of planning, decision-making, administrative, managerial, financial and maintenance operations.

Establishing a community training centre to advise the local residents on how to adapt, renew and properly maintain their properties, can act as a communicative medium to pass information and encourage debate and collaboration between experts, the local authorities, and the residents. It could provide the right communicative link to pass on local knowledge and expertise to the decision-makers and the researchers. It could also transmit skills from crafts-persons to local residents, thus smoothly transferring the responsibility to the community, as the project becomes sustainable without outside help (Ata, 1996).

Developing an information campaign by using all available means could provide the right climate for participation. The education of the public, especially within schools, can promote more understanding and pride in the traditional environment. The Palestinian universities should play a major role in establishing an information bank of the built heritage, as well as utilising student potential to document and maintain some of the traditional settings.

Communication with and participation by local communities should be established. There is also an urgent need for partnership between the various 'actors' in the

conservation process (local municipalities, local experts and professionals, the educational institutions and citizens' groups) on policies and program formulation, not only at the planning stage but also at later stages of implementation and maintenance.

Finally there is a need to establish a pro-conservation infrastructure and environment through working on awareness issues of the cultural heritage. Awareness of the value and significance of the cultural heritage should not be underestimated. In the West Bank, this awareness should target all levels of society, including employees in different governmental agencies, especially the ones involved with planning, public works and development.

The initial priority is to work on the awareness before getting into the problem. It is important to understand how much we know, and how much we do not (Daher, 1996).

Building a sense of pride in the historical and cultural heritage is part of establishing a pro-conservation environment. This can be done through programs in architectural conservation at different academic institutions, the graduate courses in the Palestinian universities, and through public media run by the local authorities.

Conservation advocacy in a society like the West Bank with very few conservationists implies that these individuals should play an interactive role in the conservation movement. One of their responsibilities is to publicise the few examples of successful conservation projects, and to promote the rehabilitation and adaptive use of the historical and cultural resources, seeking new uses for old settings.

If conservation is to be effective and provide the sense of continuity embodied in our traditional settings and cultural values, the above suggestions need to be implemented. It is only then that our people will realise that conservation is, first of all, for their own benefit.

9.7 Participation and Future Development:

The central position occupied by tradition in the interplay between culture and development cannot, however, be considered in purely negative terms. It is linked with the notion of the heritage, cultural identity and historical continuity of a society. It meets the need of every human community to see itself as the possessor of a rich heritage and as firmly rooted in its often mythical origin.

It is the realisation of the inadequacy, if not the outright failure, of purely economic development strategies, together with awareness of human objectives of development, that has led to the content of the term development being re-examined from an entirely different point of view.

Steve Bee and John Rowland (1994) discuss the aspect of public consultation and involvement, which influences the final product of any project. They argued that the initiative and pressure for participation must come from the community if a project is to be successful. Participation in this case takes either the form of change that will ensure a community becomes formally engaged in a project, or an insertion of community development workers, who are there to catalyse and channel the community efforts. This element has become one of the platforms of 'sustainability', to the extent that few people question the validity of community participation. Steve Bee and John Rowland added that the concept of involving the public in any project could be by consulting on ideas which have already been generated rather than expect them to initiate original work.

Although community involvement in planning has to be approached through all the phases of the planing process, the professionals should work on this issue. Bee and Rowland (1994) list the lessons to be learned by urban designers when dealing with community involvement. These lessons are:

1. **No great expectations:** do not expect the goals, the objectives and the issues to be agreed upon, do not expect to be trusted until you have proved yourself.
2. **Publicity:** there is no such thing as too much. Use it but do not rely on the media
3. **Honesty:** do not promise the local people more than the team can deliver. It is important to draw a realistic parameter, at least in any initial project.

4. **Inclusive:** make every effort, from the outset, to draw all opinions and interests into the project. We faced the problem of a small group setting up in competition with few resources and incomplete appreciation of the problems. Their efforts were wasted, but they could have been a valuable source of enthusiasm and local knowledge within the project.

5. **Talking to people:** spend as much time as the budget will allow. Get ideas down on paper and sketch plans, models, and drawings as soon as possible. Everybody responds more constructively to ideas set out visually. Forcing people to reconcile conflicting expectations helps them to recognise the importance of consensus, so too do prioritism and funding constraints. The strength of opinion often comes with the level of self-interest.

One cannot but sympathise with a policy designed to involve the layman more fully in the planning process: anything that might improve the tarnished public relations of our local authorities is welcome. It is not thought of as participation on the initiative of the citizen in the design of their own environment, but as a means of facilitating the work of the planner himself (Touqan, 1995).

When restoring the physical condition of the historic city and its building in Nablus, consideration should be taken of its settings and the area around it to ensure that the historic core is being protected, along with its environment and its social, commercial and cultural activities. Accordingly, any urban renewal policy should also consider the available spaces and activities which exist in the old city. Such a policy should recognise an area's potential in playing a major role in the future development process.

In addition, the policy should plan to integrate historic centres with other parts of the city. It is therefore proposed that the area immediately outside the old city, while not part of a conservation programme, be treated as an area of special character. Accordingly, special urban design and architectural guidelines for this area should be included in any conservation agenda, in terms of heights, opening details and external finishes.

This will guarantee that, aesthetically, this area continues to provide a transition between the old city and the new, more modern centre, thus presenting a suitable physical introduction to this valuable historic core and providing the link between the economic and social activities in the old and new parts of the city.

Final word is to say, participation of residents and users, supported by local level authorities and guided by professionals, can transfer the way of life onto a more economic, natural and regenerating way of life. Using layman's language make it possible to obtain public consensus, where public and private interest do not destroy each other.

CONCLUSION

Through the literature survey, the interviews and the case study, this research has explored the people's perception of their built environment and how they interact with it. People are not passive recipients of the world by accepting it, or by adapting to it. A critical interrelationship is established through which the human being can transform the material world and contribute to it. People act on a certain way shaping their environment which then creates a certain environment giving children life, and what are proper environments and affecting their perception of environments generally and the people with whom they are associated.

Do not think that with this case study contributing to a set of the problems and the arbitrary growth of the city of Habibi. At the same time the researcher had his aim to make readers of a contribution to his discipline from the academic and theoretical point of view. Thus the conclusion will be partly on the case study and partly theoretical.

To achieve the main objectives of this research which concentrates on understanding the process of interpretation, a case study approach was applied in order to give the researcher a better understanding of the complexity of the problem. This has been carried through an open-ended questionnaire, Personal Contract Psychology and semantic differential techniques. In each of the mentioned tools questionnaires were developed to study certain aspects of the process of interpretation.

The open-ended questionnaire has allowed the reader to identify the role of many aspects involved in people's judgement of the environment which is not in itself a very simple process. The perception of the built environment reflects the complexity of man-environment interaction. Environmental evaluation is influenced by expectations, values, cultural norms, and previous experience, which influence the standard of measuring or the comparison level through adaptation. Physical environment should be the sustainer and spatial form of culture and related habits.

CONCLUSION

Through the literature survey, the fieldwork and the case study, this research has attempted to explore people's perception of their built environment and how they attribute meaning to their environment. People link themselves to the world by interpreting it, or by adding meaning to it. A mutual interrelationship is established through which the human mind can understand the external world and contribute to it. People act in a certain way shaping their environment which then becomes a socialising medium giving children ideas about what are proper environments and affecting their perception of environments generally and the people with which they are associated.

So the thesis deals with the case study contributing to it in terms of the problems and the arbitrary growth of the city of Nablus. At the same time the research led the author to make numbers of contributions to this discipline from the academic and theoretic point of view. Thus the conclusion will be partly on the case study and partly theoretical.

To achieve the main objectives of this research which concentrate on understanding the process of interpretation, a case study approach was applied in order to give the researcher a better understanding of the specificity of the problem. This has been carried through an open-ended questionnaire, Personal Construct Psychology and semantic differential technique. In each of the mentioned technique there was an effort to study certain aspects of the process of interpretation.

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In Personal Construct Psychology an attempt is made to identify the dimensions used for the interpretation of the built environment. Given these differences among different cultures and subcultures depending on cognitive styles, education, training and experience, one would expect that planners and designers constitute a group with very special values, abilities and ways of seeing the world and that there should be major differences in the way the public evaluate environmental quality.

The PCP main findings were reassuring about the issue whether occupational status (professional, lay) influences one's interpretation of the built environment. This leads to the following findings;

- 1- Professionals and laymen will not differ greatly in the underlying dimensions of meaning used to judge architecture.
- 2- Difference in specific judgements of meaning will occur most often on the affective and evaluative dimensions.
- 3- Clarity of interpretation is affected by the type of the built environment.
- 4- There is a higher clarity of interpretation of the traditional settings than the modern one. This could be linked to reasons of historicity and identity.
- 5- Interpretation of the built environment is related more to the historicity than to functional efficiency.

The Semantic Differential technique's findings in a way confirmed the findings of the PCP through study of the images and attitudes with which people relate to certain settings. Environmental evaluation, then, is more a matter of overall affective response than of a detailed analysis of specific aspects; it is more a matter of latent than manifest function, and it is largely affected by images and ideals. It can however, be clarified by identifying some of its constituent elements. The concept of image seems to offer possibilities of becoming an organising concept in man –environment interaction. Understanding the images may be a very important towards understanding man-environment interaction. They are an efficient and effective way of embodying values and beliefs, they help simplify the complexity of the world.

Other areas have emerged in the research that enabled the researcher to understand the phenomenon through a holistic approach and diachronic analysis. Because diachronic holistic approach to the environment requires to see the culture as a central factor for

development. Every culture seeks for itself a kind of balance because it is always derived from nature. Culture is a dynamic, sustainable, unifying process. Wholeness is a flow of systematic composition, which governs the transformation of the systems that it structures. The whole is not the sum of the parts but includes their transformational relations and their special order Barati (1997).

Communication, participation, and conservation have to be addressed in our future. They are components in the system of transformation by which cultural awareness is a catalyst among these components. Communication enhances and strengthens participation of a society, and we need participation of people for keeping good harmonious environment that is culturally based adopted through new view of conservation.

In order to survive, people need to know the meaning of the external world; to live in a given society they have to have shared values, with other people and with the environment. These environmental meanings are not just what an individual invents or suggests. These meanings, which are shared with the society, are stored in the local cultural awareness, they are representations of that culture embodied in the built environment.

What people say about the environment depends on their cultural awareness, on what they have in mind, what the environment offers and on how closely these factors are adapted to each other, because environmental evaluation is influenced by expectations, values, cultural norms, and previous experience. Then environmental evaluation, is more a matter of overall affective response of a holistic mechanism that all factors were interacting continuously in a certain time.

Communication is a tool for understanding the man- environment relationship. To understand how people interpret or evaluate the environment you should know how to communicate with them. The way people see and interpret various elements in the environment depends upon symbolic meaning, which has already been given through a prior social agreement. This social sharing and agreement is one of the most important

bases for communicating with other members of the community as well with the environment itself.

We should be aware of encoding our environment with irrelevant information that will make new generations confused about their culture and their identity. It can also leave them with no sense of belonging. The built environment should be treated as part of the culture, where communicability and legibility of the built environment go back to the need for sharedness.

The key issue of cultural planning is how can you include people, how can you bring them into the digital space as well as into physical space. As communities change, it is critically important to develop mechanisms that promote participation and to understand its benefits. However we should not consider people's participation as some kind of quantifiable ingredient to be injected into a development or conservation project. It should be essentially considered as a qualitative process, which, if it is to be meaningful, should imply some fundamental shifts in thinking and action. As a result it should emerge as a result of some kind of bottom-up process.

Judicious interaction between conservation and development can result in meaningful architectural and urban settings which will act as a catalyst for physical, social, economic and cultural improvement. This means, however, accepting the management of change in ways compatible with the heritage of the past, while meeting the present and future needs of inhabitants who are the main resources for maintaining the heritage through their participation and involvement.

To achieve these goals, new strategies should be applied which combine state-of-the-art restoration, conservation and urban development principles with community-based institutions through promoting internal decision-making within the community and to work through people and their representatives, rather than imposing programmes from outside.

Hassan Fathey called this a contemporarity city in which the reality coincides with the ideal. Contemporarity in planning means consonance with the current stage of change in knowledge and science. Thus contemporarity in his idea means to be wholly

relevant to the present. But the 'present' is an instant. Always changing, and always with us, in the ever-changing social configuration. There is a need for planners to understand the problem of human settlement in its totality, and to realise the wide range of sciences that must be consulted in making any sort of planning decision, because in the end architecture concerns human beings, and buildings; planning concerns human beings, society and building. For all great architecture is contemporary-of its time, relevant to its situation in space, time and human society- but also eternal.

The conservation approach should involve re-orienting the imposed paternalistic relationship between the local authorities and the residents by establishing one of cooperation and partnership, which is not limited to consultation and the physical aspects of the conservation programme but which includes other aspects of planning, decision making, administration, management, finance and maintenance.

The reuse of old buildings is numerous. A building can be restored and saved and provide a new use and living, thus avoiding further new buildings and environmental pressure, while making maximum use of land which is very scarce in the West Bank. A successful adaptation of one building can encourage others to follow.

Finally whatever the development of the city in the future, some principles based on the constancy of human characteristics will need to be considered since these constancies underlie the cultural variability so that evidence of certain long-standing patterns of human behaviour may lead to the rejection of certain current theories about the future city, the variety of which is staggering.

Guidelines for cultural development: Role of Key Players:

The Palestinian nation, which is young from a political point of view, but old culturally and historically speaking, is in a great need of strengthening its cultural identity in support of its political existence. The situation of the "West Bank" where our culture has been suppressed, signifies that the improvement of its heritage cannot be taken for granted; the physical remains of our cultural heritage are the most significant medium for creating a base for our future. Through cultural awareness people could realise that

what they have from the past could be a solid referent for the future generation. The next part is a try to identify certain roles of key players in Palestine future development.

Role of private sectors

The private sector, which comprises business, larger contracting companies and subcontractors, corporate real-estate developers, and industrial enterprise, is expected to play a major role in the development, reconstruction and conservation process. At the moment businesses are looked on as partial financial providers, but they will generally only invest where they stand to gain. But with reduced public funds for development and conservation, and with the severe economic situation, there is an important role for the private sector in the West Bank. It should be encouraged to invest in certain projects, perhaps through paying in a levy to a revolving fund, in order to help get work started. Further, the private sector's contribution to improving what is after all its own built environment, and conserving its built heritage could also be more substantial, through promoting the adaptation of old buildings for contemporary uses.

The role of community

Palestinian NGOs and community –based organisation, as well as international NGOs and other donor organisations may play a significant role in the development and reconstruction process, both as facilitators in addressing community needs and providers of some of these needs, particularly in the area of improving and upgrading the existing housing stock. However, it is essential that the activities of all NGOs be closely co-ordinated with the PNA, local authorities and local communities in order to avoid unproductive duplication of effort and to ensure their activities are consistent with political and national objectives.

The fact is that community organisations which were established during and as a result of the years of the occupation, have already empowered themselves to take care of their communities.

The author believes that our people will work hard to improve their living conditions if they have access to the necessary resources. By working directly with community-

based organisations, to inform them, a local community development team might be established. Its task would be to stimulate community organisation. by working with residents, local authorities, conservation bodies and professionals. The team should be aware and have the skills necessary to assemble. The team's duties would be both to understand the residents' needs and aspirations and to enable them to create an organisation, which will act as a body for their interests.

The role of professionals:

To participate positively, however, professionals must primarily be open-minded and willing to learn from people. The professionals can propose (but not impose) innovations consistent with their indigenous pattern, supported by their experience and skills. They can help to raise the level of consciousness of the community about different possible alternatives.

The professionals should work on educating the public to understand and appreciate the value of their cultural heritage. It is an important step. This could be done through initiating programmes in schools, universities, and other academic institutions. Conservation should be included within education programmes at the university level. This subject is winning considerable support and interest from the lecturers and students, and is being introduced progressively into the architectural education programmes at the universities.

The role of educational institutions:

Educational Institutions could be helpful and responsible for raising the community awareness of cultural heritage. Better programming and planning, therefore can make research, survey, and study of our built heritage possible. Not only could this result in the academic accumulation of records and documentation, much needed, but could also be quite influential on public opinion. To offer training programmes that will encourage a better understanding of our cultural heritage could be very supportive to people's awareness. Also provide training programmes for school teachers; environmental health workers, architects and other professionals, building technicians, craftsmen, and contracting enterprise is needed. Necessary steps to include

conservation measures in the general education programmes at all levels should be considered.

The role of the local council:

Since the Israeli occupation of the West Bank in 1967, municipal and local councils have been dissolved, replaced by military councils, or forced to resign. All issues related to planning, land use, development and financial policies were placed under jurisdiction of the Military Authority and its civil administration. The municipal governments and local council therefore operate under very difficult conditions.

With the peace process in train, Municipal Councils are expected to take the major responsibilities and worked during the interim period. Although they have coped under the most difficult conditions since 1967, they lack managerial, professional and technical expertise to be able to deal with the tasks now expected of them, especially in the fields of development and also the available professional, technical and managerial resources.

The education of the residents would be an on-going process. It is envisaged that the local authorities, the area officers, together with area communities, and other resident organisations, undertake at the outset an educational campaign for a cleaner and healthier environment, through reminding the residents and the city authorities alike of their respective responsibilities. The leading agencies should initiate hard-hitting educational programmes in order to overcome the apathy and the carelessness of the local residents towards their environment. Increase awareness among the general public through the most appropriate media and means. Accompany education of the public about their heritage by more general activities to provide ties to provide appropriate motivating information. Take the opportunity of national events, especially the anniversary of the Intifada to publicise our Palestinian heritage. And finally consult with Al-Waqf Department so that Friday mosques can be used to send out messages to the public to take much better care of their built heritage and their local environment.

Local authorities and various social and conservation bodies must take the necessary steps to restore confidence among residents, not only in the historic quarter but also in

newly built areas as well. The community must be persuaded to be more willing to participate in actual project implementation to upgrade their particular community. The actual process of community participation can build self-confidence and community spirit and encourage residents to believe in their ability to improve their living conditions in co-operation with local authorities.

Final word to say is as a conclusion is about the encouragement for forming partnerships between the various actors in the process of cultural development. This means that the local authorities, local business, community-based organisations and the professionals should work hand in hand for the realisation of the main object. That is to keep our historical continuity.

Table 8.1 Guidelines for any citizen participation in the development.

Recommendation	Action	Agents
Awareness of cultural heritage	<ol style="list-style-type: none"> 1) Information Campaign, using available techniques to provide the right climate for participation. Education of public, especially in schools, to promote more understanding and pride in the traditional environment. 2) Establish an information bank of the built heritage and run programmes and workshop for public education in their cultural heritage. 3) Encouraging a pro cultural strategy in the educational courses, such as establishing conservation courses, and encouraging students to adopt cultural approach in their design. 4) Advocacy for more interactive role in the conservation movement. Publicity for successful conservation projects 5) Initiating hard-hitting educational programmes. 6) Accompany education of the public about their heritage by more general activities to provide ties for appropriate motivation information. 7) Taking the opportunity of national events, especially the anniversary of the Intifada to publicise our Palestinian heritage. 8) Consultation with Al-Waqf Department so that Friday mosques can be used to send out messages to the public to take much better care of their heritage and their local environment. 	<p>Local Authorities</p> <p>Academic Institutions</p> <p>Academic Institutions</p> <p>Media</p> <p>Academic Institution</p> <p>Local Authorities</p> <p>Local Authorities</p> <p>Local & Religious Authorities</p>

Recommendation	Action	Agent
Encourage to invest in pro-culture project	Encourage the private sector to invest in certain projects that will conserve the built heritage, projects such as rehabilitation of old buildings and adaptation of historic buildings to a new use.	Private Sectors
Empowerment of community	Community based organisation could be facilitators in addressing community needs. Contact with the community representatives through meetings and discussion will help to understand the needs that can be addressed later to the local authorities.	NGOs and Community based Organisations
Listen to the public	<ol style="list-style-type: none"> 1) Professionals should be open minded and willing to learn from people. Professionals can propose but not impose. With their experience they can help to raise the level of consciousness of the community about possible alternatives in any projects. 2) Local authorities should try to consider people's participation in the process of any future development at all stages of the project. This includes, planning, implementing, managing, and administrative stages. 	<p>Professionals</p> <p>Local Authorities</p>
Conservation revaluation Strategies.	<ol style="list-style-type: none"> 1) Documentation process for the historic area thorough inventory and historical investigation and analysis. 2) Priority project restoration and conservation for the significant monuments in the old city. 3) Encourage Rehabilitation approaches and seek other uses for deserted old buildings in the historic areas. 	<p>Academic Institutions and Local authorities.</p> <p>Local authorities.</p> <p>Local authorities.</p>

Recommendation	Action	Agent
BIBLIOGRAPHY	<p>4) Promote strategies of urban conservation where cultural values are the main target.</p> <p>5) Establish an integrated conservation policy where the old and new areas are considered as one whole in the planing decision.</p> <p>6) Prepare the community to take part in the rehabilitation process.</p>	<p>Local Authorities.</p> <p>Local Authorities.</p> <p>Community representatives.</p>
Establish a community centre	<p>1) Establish a community centre that could provide the right means of communication through meetings of the local communities among themselves and with the local authorities. This will enable a good base for their empowerment.</p> <p>2) Persuade the community to be more willing to participate in actual projects.</p> <p>3) Build a self-confidence and community spirit and encourage residents to believe in their ability to improve their living conditions in co-operation with local authorities.</p>	<p>Local Authorities</p> <p>Community representatives</p> <p>Community representatives.</p>

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APPENDICIES

Page No. 1

Date: / /

Dear Sir/Madam,

I am writing you a research to collect in your opinion on the said questionnaire as part of my PhD study which I am doing at Heriot-Watt University, Edinburgh, Scotland. I would appreciate it very much if you could kindly respond to the questionnaire on the city of Harlow which I enclosed to you. This will help me very much in my studies.

You don't need to answer all questions but the more you answer the better for the purpose of my research. Thank you very much for your kind response. Your attention is due to the fact that I am a graduate.

Yours,

Yours name

Department

Street

Address

Age

Sex

Are you resident of Harlow?

If you have long leave you live in the city

If you are not in Harlow, please send the questionnaire to the following address: Harlow, Essex, UK. If you are in Harlow, please send the questionnaire to the following address: Harlow, Essex, UK.

First name

Age: 12

Age: 13

Age: 14

Second name

Age: 15

Age: 16

Age: 17

Third name

Age: 18

Age: 19

Appendix 5.1 the English translation of the questionnaire

Eman Assi
An-Najah National University
P. O. Box 7
Nablus Palestine

Dear Sir/ Madame,

I am carrying out a research to explore people's opinion on the built environment as part of my PHD study which I undertake at Herriot- Watt University, Edinburgh, Scotland. I would appreciate it very much if you could kindly respond to the questionnaire on the city of Nablus which I enclosed to you, this will help me very much in my studies.

You don't need to answer all questions but the more you answer the better for the purpose of my research. You may not need to worry about repeating your answers in the different parts of the questionnaire.

Thanks
Eman Assi

Occupation : -----
Status : -----
Address : -----

Age : -----
Sex : -----
Are you resident of Nablus,
If yes how long have you been in the city: -----

1)What are the three most important areas (such as Rafidia, Ras el-ain, ...) in the city of Nablus, Give three reasons why each area is important.

First area	Reason 1)	----- -----
	Reason 2)	----- -----
	Reason 3)	----- -----
Second area	Reason 1)	----- -----
	Reason 2)	----- -----
	Reason 3)	----- -----
Third area	Reason 1)	----- -----
	Reason 2)	-----

Reason 3)

2) What are the five most important buildings in Nablus. Give two reason for each.

First building

Reason 1)

Reason 2)

Second building

Reason 1)

Reason 2)

Third building

Reason 1)

Reason 2)

Fourth building

Reason 1)

Reason 2)

Fifth building

Reason 1)

Reason 2)

3) What are the five most important features that give identity to the city of Nablus. Give two reason for each.

First feature

Reason 1)

Reason 2)

Second feature

Reason 1)

Reason 2)

Third feature

Reason 1)

Reason 2)

Fourth feature

Reason 1)

Reason 2)

Fifth feature

Reason 1)

Reason 2)

4) Mention three areas you don't like to live in the city of Nablus. Give two reason for each.

First area

Reason 1)

Reason 2)

Second area

Reason 1)

Reason 2)

Third area

Reason 1)

Reason 2)

5) Mention three areas you like to live in the city of Nablus. Give two reasons for each.

First area	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Second area	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Third area	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----

6) Mention three buildings you like in the city of Nablus. Give two reasons for each.

First building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Second building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Third building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----

7) Mention three buildings you don't like to live in the city of Nablus. Give two reasons for each.

First building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Second building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Third building	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----

8) Mention three streets you like in the city. Give two reasons for each.

First street	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Second street	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Third street	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----

9) Mention three streets you don't like in the city. Give two reason for each.

First street	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----
Second street	Reason 1)	----- ----- -----
	Reason 2)	----- ----- -----

Third street	Reason 1)	----- ----- -----
	Reason 2)	----- -----

10) Mention three building materials you like to see being used in the buildings of the city. Give two reasons for each.

First material	Reason 1)	----- -----
	Reason 2)	----- -----
Second material	Reason 1)	----- -----
	Reason 2)	----- -----
Third material	Reason 1)	----- -----
	Reason 2)	----- -----

11)Mention three building materials you don't like to see being used in the building of the city. Give two reasons for each.

First material	Reason 1)	----- -----
	Reason 2)	----- -----
Second material	Reason 1)	----- -----
	Reason 2)	----- -----
Third material	Reason 1)	----- -----
	Reason 2)	----- -----

12) Mention three most important features you like which characterize building in Nablus. Give two reasons for each.

First feature	Reason 1)	----- -----
	Reason 2)	----- -----
Second feature	Reason 1)	----- -----
	Reason 2)	----- -----
Third feature	Reason 1)	----- -----
	Reason 2)	----- -----

13)Mention five things give identity to the old town of Nablus. Give three reason for each.

First thing	Reason 1)	----- -----
	Reason 2)	----- -----
	Reason 3)	----- -----
Second thing	Reason 1)	----- -----
	Reason 2)	----- -----
	Reason 3)	----- -----
Third thing	Reason 1)	----- -----

	Reason 2)	-----

	Reason 3)	-----

Fourth thing	Reason 1)	-----

	Reason 2)	-----

	Reason 3)	-----

Fifth thing	Reason 1)	-----

	Reason 2)	-----

	Reason 3)	-----

14) Mention three things make the city of Nablus different from the other West Bank cities. Give two reasons for each.

First thing	Reason 1)	-----

	Reason 2)	-----

Second thing	Reason 1)	-----

	Reason 2)	-----

Third thing	Reason 1)	-----

	Reason 2)	-----

15)Mention the five important features outside the city of Nablus. Give two reason for each.

First feature	Reason 1)	-----

	Reason 2)	-----

Second feature	Reason 1)	-----

	Reason 2)	-----

Third feature	Reason 1)	-----

	Reason 2)	-----

Fourth feature	Reason 1)	-----

	Reason 2)	-----

Fifth feature	Reason 1)	-----

	Reason 2)	-----

16)Mention three things you would like to see happening in Nablus in the future which will enhance the quality of life in the city. Give two reasons for each.

First thing	Reason 1)	-----

	Reason 2)	-----

Second thing	Reason 1)	-----

	Reason 2)	-----

Third thing	Reason 1)	-----

	Reason 2)	-----

17) Mention three things you like from the past time of the city. Give two reasons for each.

First thing	Reason 1)	-----

	Reason 2)	-----

Second thing	Reason 1)	-----

	Reason 2)	-----

Third thing	Reason 1)	-----

	Reason 2)	-----

18) Mention five historical events which are important in the city. Give two reasons for each.

First event	Reason 1)	-----

	Reason 2)	-----

Second event	Reason 1)	-----

	Reason 2)	-----

Third event	Reason 1)	-----

	Reason 2)	-----

Fourth event	Reason 1)	-----

	Reason 2)	-----

Fifth event	Reason 1)	-----

	Reason 2)	-----

19) Mention three changes in the city you wish they didn't happen. Give two reason for each.

First one	Reason 1)	-----

	Reason 2)	-----

Second one	Reason 1)	-----

	Reason 2)	-----

Third one	Reason 1)	-----

	Reason 2)	-----

20) Mention the three most important customs or traditions which characterize the city.

First custom	Where	-----
Second custom	Where	-----
Third custom	Where	-----

21) Mention the three most busiest places in Nablus. Give two reason for each.

First place	Reason 1)	-----

	Reason 2)	-----

Second place	Reason 1)	-----

	Reason 2)	-----

Third place	Reason 1)	-----

	Reason 2)	-----

22) Mention three places you like to go for recreation. Give two reasons for each.

First place	Reason 1)	-----

	Reason 2)	-----

Second place	Reason 1)	-----

	Reason 2)	-----

Third place	Reason 1)	-----

	Reason 2)	-----

23) Mention three places you prefer to meet your friends in. give two reason for each.

First place	Reason 1)	-----

	Reason 2)	-----

Second place	Reason 1)	-----

	Reason 2)	-----

Third place	Reason 1)	-----

	Reason 2)	-----

24) Mention three places you like to take your children to play. Give two reason for each.

First place	Reason 1)	-----

	Reason 2)	-----

Second place	Reason 1)	-----

	Reason 2)	-----

Third place	Reason 1)	-----

	Reason 2)	-----

25) Mention three places you would like to do your shopping. Give two reason for each.

First place	Reason 1)	-----

	Reason 2)	-----

Second place	Reason 1)	-----

third place

Reason 1

" 2

3

Appendix 7.3 (continued)

Third place

Reason 2)

Reason 1)

Reason 2)

Year	Country	Reason 1)	Reason 2)
2000	USA	...	...
2001	USA	...	...
2002	USA	...	...
2003	USA	...	...
2004	USA	...	...
2005	USA	...	...
2006	USA	...	...
2007	USA	...	...
2008	USA	...	...
2009	USA	...	...
2010	USA	...	...
2011	USA	...	...
2012	USA	...	...
2013	USA	...	...
2014	USA	...	...
2015	USA	...	...
2016	USA	...	...
2017	USA	...	...
2018	USA	...	...
2019	USA	...	...
2020	USA	...	...
2021	USA	...	...
2022	USA	...	...
2023	USA	...	...
2024	USA	...	...
2025	USA	...	...
2026	USA	...	...
2027	USA	...	...
2028	USA	...	...
2029	USA	...	...
2030	USA	...	...

Variance of transformed data= 1 Variance of derived data= .8970053
 Correlation transformed, derived .9471036

Residual matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	-0.06	0.29	-0.17	0.17	0.18	-0.48	0.39	-0.10	0.20	0.10	-0.38	0.16	-0.32
2	-0.16	-0.08	0.30	0.01	-0.04	-0.03	-0.08	0.25	-0.11	0.10	-0.07	-0.24	0.16
3	-0.24	0.11	0.53	0.30	-0.16	-0.56	0.54	-0.02	-0.18	0.50	-0.47	-0.33	-0.01
4	0.00	0.26	-0.19	0.07	-0.02	-0.13	0.23	-0.09	0.10	-0.04	-0.13	0.20	-0.25
5	-0.09	-0.02	0.28	0.11	-0.10	-0.19	0.19	-0.02	-0.12	0.23	-0.15	-0.19	0.06
6	-0.26	0.25	-0.18	0.01	0.41	-0.35	-0.07	0.46	0.30	-0.11	-0.38	0.10	-0.19
7	0.11	-0.24	0.33	0.17	-0.10	-0.23	0.31	-0.40	-0.19	0.40	-0.05	-0.26	0.15
8	0.10	0.18	0.55	0.27	-1.09	0.13	0.81	-0.67	-0.59	0.42	0.12	-0.17	-0.07
9	0.17	-0.21	-0.15	0.09	0.46	-0.39	0.10	-0.31	0.19	0.18	-0.15	0.01	0.01
10	-0.27	0.06	0.22	0.08	0.18	-0.34	0.02	0.35	0.04	0.14	-0.34	-0.19	0.03
11	0.49	-0.12	-0.02	0.21	-0.41	-0.03	0.66	-1.12	-0.22	0.34	0.22	0.09	-0.10
12	-0.15	0.23	0.50	0.09	-0.87	0.30	0.32	-0.01	-0.46	0.13	0.11	-0.18	0.01
13	0.20	0.16	-0.26	0.01	-0.22	0.15	0.21	-0.17	0.00	-0.10	0.15	0.27	-0.21
14	-0.09	0.66	-0.31	0.06	-0.36	0.03	0.38	0.01	0.08	-0.23	-0.13	0.42	-0.52
15	0.59	-0.59	-0.13	0.28	0.59	-0.70	0.50	-1.20	0.15	0.61	-0.11	-0.07	0.09
16	0.25	-0.83	0.22	0.03	0.66	-0.33	-0.25	-0.33	0.03	0.41	0.03	-0.42	0.53
17	0.14	-0.26	0.05	0.05	0.18	-0.15	0.04	-0.26	0.00	0.18	0.00	-0.11	0.13
18	-0.68	0.06	0.47	0.03	0.50	-0.55	-0.31	1.12	0.13	0.13	-0.64	-0.45	0.19
19	-0.31	0.18	0.28	-0.12	-0.40	0.38	-0.25	0.59	-0.21	-0.19	0.09	-0.13	0.09
20	-0.65	1.21	-0.00	0.27	-0.43	-0.51	0.74	0.63	0.11	-0.08	-0.79	0.30	-0.78
21	0.03	-0.09	-0.53	-0.24	0.65	0.10	-0.60	0.36	0.41	-0.42	0.07	0.25	-0.01
22	-0.08	0.27	-0.26	0.15	0.38	-0.55	0.29	-0.01	0.30	0.07	-0.43	0.18	-0.31
23	0.09	0.28	-0.15	0.05	-0.35	0.12	0.29	-0.25	-0.05	-0.07	0.07	0.23	-0.25
24	-0.31	0.53	0.41	0.14	-0.86	0.12	0.46	0.18	-0.36	0.07	-0.12	-0.06	-0.21
25	0.19	-0.07	0.12	0.04	-0.42	0.23	0.20	-0.42	-0.24	0.10	0.25	-0.02	0.04
26	-0.24	0.07	0.32	0.14	0.01	-0.34	0.18	0.20	-0.06	0.24	-0.32	-0.23	0.02
27	0.31	0.39	-0.34	0.26	-0.32	-0.26	0.85	-0.89	0.04	0.16	-0.10	0.41	-0.52
28	-0.15	-0.28	0.02	0.05	0.89	-0.66	-0.21	0.30	0.33	0.20	-0.44	-0.22	0.16
29	-0.19	-0.19	0.79	0.12	-0.48	0.01	0.16	0.07	-0.46	0.40	-0.02	-0.54	0.34
30	0.07	-0.07	-0.12	0.03	0.25	-0.19	0.03	-0.12	0.13	0.05	-0.08	0.04	-0.03
31	-0.25	0.53	-0.10	0.15	-0.02	-0.39	0.38	0.21	0.15	-0.00	-0.44	0.18	-0.40
32	0.32	-0.45	-0.11	0.02	0.42	-0.17	-0.06	-0.46	0.10	0.18	0.09	-0.06	0.19
33	0.04	0.14	-0.22	-0.10	-0.09	0.25	-0.11	0.05	0.05	-0.24	0.15	0.20	-0.11
34	0.02	-0.08	0.25	-0.13	-0.58	0.62	-0.18	0.04	-0.35	-0.12	0.42	-0.11	0.20
35	0.07	-0.02	-0.45	-0.17	0.43	0.09	-0.37	0.17	0.30	-0.32	0.08	0.25	-0.06
36	0.13	-0.54	0.16	-0.09	0.27	0.09	-0.36	-0.05	-0.05	0.11	0.20	-0.27	0.41
37	0.03	-0.12	-0.20	-0.25	0.09	0.45	-0.53	0.28	0.06	-0.36	0.32	0.09	0.13
38	0.27	0.05	-0.20	0.21	0.05	-0.37	0.54	-0.69	0.08	0.25	-0.13	0.17	-0.24
39	0.15	0.16	-0.68	-0.14	0.39	0.06	-0.20	-0.00	0.39	-0.39	0.06	0.46	-0.27

Table of VARIMAX rotated components

POLE	/CONTRAST	VBL.	1	2	3	4	5	6	7	8	DIST.
primitive	/technology	1	0.253	-0.817	0.008	-0.300	0.032	0.174	0.156	-0.231	0.965
productive	/not productive	2	0.052	0.181	-0.671	0.599	-0.227	0.235	-0.024	0.159	0.988
urban	/landscape	3	-0.385	0.002	0.241	0.040	0.285	0.598	-0.349	-0.320	0.933
lively	/deserted	4	-0.874	0.042	-0.295	-0.149	-0.177	-0.053	-0.196	0.166	0.988
residential	/commercial	5	0.049	0.110	0.951	0.056	0.193	0.109	-0.021	0.065	0.988
organised	/random	6	-0.006	0.210	-0.037	0.296	-0.392	0.068	0.710	0.361	0.963
human	/not human	7	0.471	0.028	-0.067	-0.095	-0.125	-0.077	0.810	0.150	0.968
lasting	/not lasting	8	-0.152	0.440	-0.208	0.482	-0.067	-0.057	0.491	-0.064	0.863
defined space	/not defined space	9	0.287	-0.355	-0.607	-0.181	0.111	0.265	0.443	-0.244	0.974
residential	/not residential	10	0.455	-0.173	0.744	-0.345	-0.108	0.077	0.167	0.014	0.978
dull	/colourful	11	0.119	-0.350	0.125	0.098	0.058	0.720	-0.201	0.304	0.904
relaxing	/tiering	12	-0.058	0.515	-0.063	-0.035	-0.677	-0.239	0.230	0.196	0.938
private	/public	13	0.519	0.473	0.610	0.169	-0.121	0.012	0.009	-0.223	0.979
modern	/original	14	-0.758	0.177	0.128	0.189	0.457	0.052	-0.137	-0.091	0.947
green	/not green	15	-0.274	0.251	0.152	0.378	-0.026	-0.628	-0.104	0.034	0.843
productive	/not productive	16	-0.064	0.732	-0.191	-0.019	-0.485	-0.040	0.115	-0.090	0.914
civilised	/not civilised	17	0.481	-0.257	-0.376	-0.304	0.059	0.350	0.469	-0.318	0.989
readable	/not readable	18	-0.329	-0.209	-0.220	0.725	-0.114	0.005	-0.015	0.102	0.866
low	/high	19	0.643	-0.449	0.385	-0.323	-0.127	-0.083	0.147	0.073	0.959
centralised	/not centralised	20	0.478	0.085	-0.967	0.032	0.049	0.022	0.251	-0.111	0.798
artificial	/not artificial	21	-0.446	0.085	0.232	-0.436	0.444	0.066	0.276	-0.379	0.933
old	/new	22	0.294	-0.872	-0.010	-0.187	-0.102	0.067	0.073	-0.107	0.956
green areas	/no green areas	23	0.043	-0.011	0.142	0.056	-0.198	-0.940	-0.055	-0.098	0.980
not isolated	/isolated	24	-0.098	-0.332	0.077	-0.768	0.158	0.325	0.070	-0.114	0.930
crowded	/calm	25	-0.921	-0.099	-0.104	0.030	-0.229	-0.115	-0.118	-0.044	0.975
sunny	/not sunny	26	-0.076	0.507	0.737	-0.320	-0.000	-0.058	-0.204	0.040	0.977
uni colour	/multi colour	27	0.232	0.322	0.283	0.522	-0.031	0.296	0.257	0.369	0.895
ventilation	/no ventilation	28	0.173	0.788	0.302	-0.175	-0.159	-0.011	-0.222	0.090	0.925
no symmetry	/symetry	29	-0.037	-0.062	0.014	-0.083	0.871	0.224	0.071	0.200	0.930
rich details	/plain details	30	0.713	-0.104	-0.202	-0.571	-0.005	0.026	0.208	0.239	0.994
lively	/depressed	31	-0.122	0.601	-0.005	0.066	-0.344	-0.521	-0.021	0.380	0.956
pleasing	/frustrating	32	-0.110	-0.845	-0.246	-0.108	0.093	0.246	-0.249	0.087	0.968
artificial materials/natural materials	/public	33	0.528	-0.109	-0.317	-0.296	-0.149	0.368	0.550	-0.193	0.989
private	/no future extension	34	0.912	-0.013	-0.097	-0.206	-0.061	-0.043	0.110	0.073	0.953
future extension	/flat window	35	0.051	0.134	0.110	0.208	0.135	0.137	0.210	0.882	0.966
arc window	/moderate climate	36	0.141	-0.122	0.040	-0.080	0.289	-0.126	0.832	0.064	0.967
acid climate	/anti social	37	-0.364	0.134	0.361	0.270	-0.509	0.552	0.094	0.014	0.963
social	/not functional	38	0.271	-0.133	0.016	-0.887	-0.136	0.002	-0.006	-0.086	0.951
functional		39	0.298	0.684	0.125	0.299	0.269	0.334	0.221	-0.074	0.948
WVARIANCE			17.269	15.837	12.249	11.792	7.871	9.555	9.571	5.559	89.702

Transformation matrix

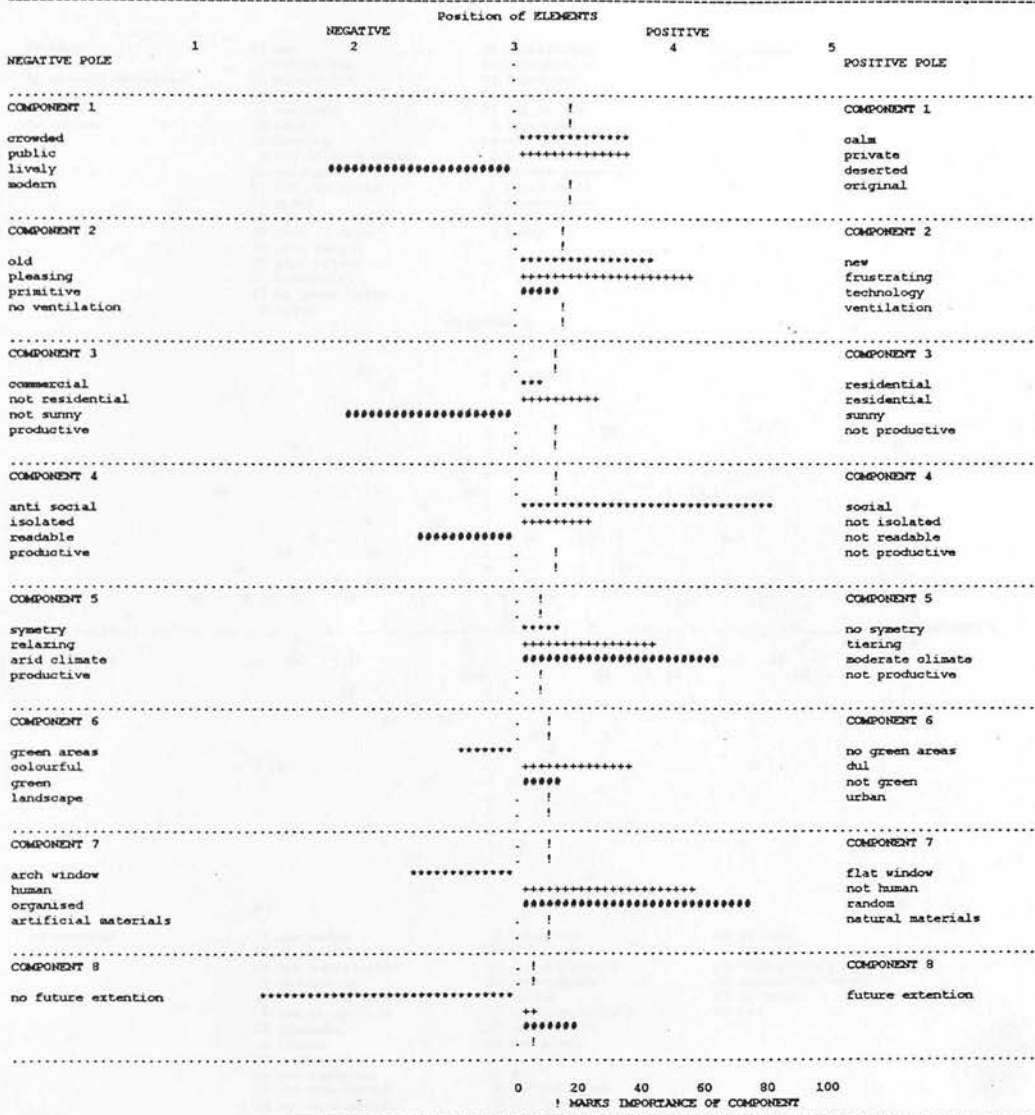
	1	2	3	4	5	6	7	8
1	0.622	-0.525	-0.122	-0.432	0.109	0.203	0.271	-0.102
2	0.572	0.592	0.111	0.126	-0.279	-0.174	0.393	0.178
3	0.080	0.128	0.847	-0.389	0.181	-0.006	-0.267	-0.068
4	0.046	0.078	0.177	0.445	0.373	0.761	0.164	0.134
5	-0.257	0.523	-0.279	-0.505	0.196	0.242	0.258	-0.405
6	-0.066	0.002	0.024	-0.206	-0.785	0.533	-0.210	0.090
7	-0.453	-0.250	0.114	-0.105	-0.152	-0.082	0.736	0.226
8	-0.041	0.128	-0.218	-0.373	0.246	0.021	-0.148	0.844

Rotated factor scores

VBL.	1	2	3	4	5	6	7	8	DIST.	
A	1	1.172	1.932	-1.299	0.277	-0.326	0.983	1.028	0.557	3.051
B	2	1.190	-0.257	1.084	-0.641	-1.276	-0.237	1.514	-0.347	2.677
C	3	-0.305	-0.218	-0.273	0.991	0.690	0.921	1.120	-1.857	2.688
D	4	1.259	-0.466	-1.249	-0.937	1.765	-1.913	-0.326	-0.048	3.335
E	5	-0.736	-1.150	-0.494	0.487	-0.856	-0.740	1.138	-0.083	2.220
F	6	-1.605	0.148	0.329	0.062	0.759	-1.154	1.128	0.952	2.607
G	7	-0.700	-0.862	-0.139	1.621	-0.259	0.366	-0.682	1.622	2.679
H	8	0.057	0.893	-1.152	0.285	-0.429	0.220	-1.095	0.792	2.066

ANALYSIS based on rotated results

Definition of ELEMENTS: TYPICAL *
 IDEAL +
 WORST 0

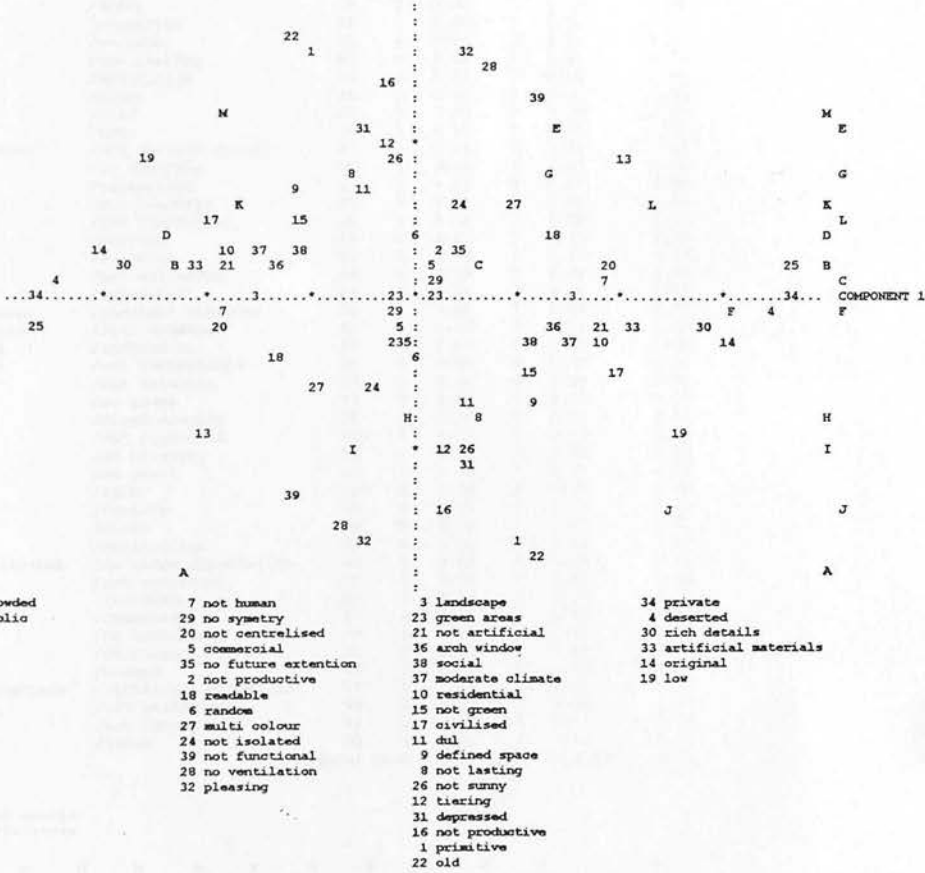


ANALYSIS based on rotated results

Axis 1 has been reflected
 Axis 2 has been reflected
 ELEMENT 5 picked as an IDEAL

- | | | | |
|----------------------|---------------------|---------------------|------------|
| 19 high | 22 new | 32 frustrating | 13 private |
| 14 modern | 1 technology | 28 ventilation | 25 calm |
| 33 natural materials | 16 productive | 39 functional | |
| 30 plain details | 31 lively | 24 isolated | |
| 4 lively | 12 relaxing | 27 uni colour | |
| 34 public | 26 sunny | 6 organised | |
| | 8 lasting | 18 not readable | |
| | 9 not defined space | 2 productive | |
| | 11 colourful | 35 future extention | |
| | 17 not civilised | 5 residential | |
| | 15 green | 20 centralised | |
| | 10 not residential | 29 symetry | |
| | 37 arid climate | 7 human | |
| | 38 anti social | | |
| | 36 flat window | | |
| | 21 artificial | | |
| | 23 no green areas | | |
| | 3 urban | | |

COMPONENT 2



appendix 7.2 Outcome of PCP results for the professionals.

LEXIGRID v4.0 Feb. 1987. File: arch Time: 09-05-1996 14:30:07
 Copyright (C) 1987 by Finn Tschudi. University of Oslo. NORWAY
 RID title: arch.1
 PCA analysis *****

data transformation: 1): Correlate CONSTRUCTS (standardize CONSTRUCTS): MOST COMMON
 Maximal nr. of components = 8
 Minimum relative variance of a component (1 recommended by Kaiser) 1
 If b) gives K components then nr. of components will be: M = MIN(8 , K)
 Maximal nr. of components for VARIMAX = 8
 ROT and/or TARGET from ROTATED matrices
 Printout of transformed and residual matrices

This table provides you with the minimum, mean, maximum and standard deviation of each variable

CODE	/CONTRAST	VBL.	MIN.	MEAN	MAX.	STD.DEV.	% OF TOTAL VAR.
social	/not social	1	1	3.23	7	2.29	2.52
common housing	/technology	2	1	4.31	7	2.05	2.02
artificial	/natural	3	1	3.46	7	2.13	2.19
colourful	/dul	4	1	4.85	7	2.14	2.21
dirty	/clean	5	1	4.92	7	2.46	2.92
islamic	/modern	6	1	4.92	7	2.16	2.25
social	/not social	7	1	3.31	7	2.40	2.76
complicated	/simple	8	1	4.62	7	2.43	2.85
clean	/dirty	9	1	2.54	7	1.78	1.52
technology	/primitive	10	1	3.85	7	2.54	3.09
eastern	/western	11	1	3.85	7	2.25	2.43
healthy	/not healthy	12	2	2.92	6	1.21	0.70
natural	/artificial	13	1	5.54	7	2.06	2.04
mysterious	/clear	14	1	5.85	7	1.70	1.39
live	/dead	15	1	3.62	7	1.69	1.37
close	/open	16	1	4.77	7	1.89	1.71
defined spaces	/not defined spaces	17	1	4.38	7	2.62	3.29
services	/no services	18	1	3.46	7	2.17	2.26
housing	/commercial	19	1	2.38	7	2.27	2.48
readable	/not readable	20	3	5.77	7	1.67	1.34
identified	/not identified	21	1	2.69	6	1.86	1.65
public	/private	22	1	4.23	7	2.45	2.89
relaxing	/relaxing	23	1	5.15	7	1.75	1.47
colourful	/not colourful	24	1	4.00	7	2.29	2.51
dense	/seperated	25	1	4.38	7	2.40	2.77
curved windows	/straight windows	26	1	4.85	7	2.48	2.94
plain details	/rich details	27	1	4.23	7	2.01	1.93
residential	/industrial	28	1	2.31	7	1.81	1.58
comfortable	/not comfortable	29	1	3.85	6	1.70	1.39
valuable	/not valuable	30	1	2.00	6	1.24	0.74
green	/no green	31	1	3.92	7	2.16	2.25
one hieght	/mixed hieghts	32	1	2.15	7	1.61	1.24
practical	/not practical	33	1	3.69	7	1.90	1.73
hierarchy	/no hierarchy	34	1	3.38	7	1.82	1.59
court	/no court	35	1	4.38	7	2.17	2.26
poor	/rich	36	1	3.92	7	1.82	1.59
monotony	/variety	37	1	4.15	7	2.07	2.06
clean	/dirty	38	1	2.69	7	1.77	1.51
commercial	/residential	39	1	4.46	7	2.06	2.04
clear orientation	/no clear orientation	40	1	3.46	5	1.39	0.93
contextual	/not contextual	41	1	3.54	7	2.10	2.11
active	/isolated	42	1	4.23	7	2.55	3.11
random	/organised	43	1	5.38	7	1.98	1.89
technology	/no technology	44	1	4.31	7	2.01	1.95
exposed	/enclosed	45	1	5.00	7	2.29	2.51
old	/modern	46	1	2.38	7	2.10	2.11
natural materials	/artificial materials	47	1	1.38	3	0.74	0.26
historical	/not historical	48	1	4.00	7	2.04	1.99
luxury	/not luxury	49	1	3.46	7	2.21	2.34
landscape	/urban	50	1	4.62	7	1.64	1.30
Total mean				3.90		Mean var.	4.16

Transformed matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	0.34	1.21	0.34	-0.10	1.21	-0.97	-0.97	-0.97	-0.97	-0.97	-0.97	1.64	1.21
2	-1.61	1.31	-0.64	0.82	-1.61	0.34	-0.64	-0.15	0.34	-1.12	0.82	0.82	1.31
3	-1.15	-1.15	1.19	-0.22	-1.15	0.25	0.25	-0.68	0.25	1.66	0.25	1.66	-1.15
4	-0.39	0.54	0.54	1.01	1.01	1.01	-1.79	-1.33	-1.79	0.54	-0.39	0.54	0.54
5	-1.59	-0.37	-0.37	0.84	-1.59	-1.59	0.84	-0.37	0.84	0.84	0.84	0.84	0.84
6	-0.43	0.96	0.96	0.96	-0.43	-0.43	-0.43	-1.81	-1.81	-0.43	0.96	0.96	0.96
7	-0.96	-0.96	0.29	-0.96	0.29	0.29	-0.96	1.54	-0.96	1.54	0.29	1.54	-0.96
8	0.98	-1.48	0.98	-1.48	0.98	-0.66	0.98	-0.25	-0.25	0.98	-0.25	0.98	-1.48
9	2.51	1.38	0.26	0.82	0.26	-0.30	-0.86	-0.86	-0.30	-0.86	-0.86	-0.86	-0.30
10	0.06	-1.12	-1.12	-0.73	0.06	1.24	1.24	0.85	1.24	1.24	-0.73	-1.12	-1.12
11	0.96	0.96	0.51	0.07	0.51	-1.27	-0.38	-1.27	-1.27	-1.27	-0.38	1.40	1.40
12	0.89	2.55	0.06	-0.77	0.06	-0.77	-0.77	-0.77	-0.77	0.89	-0.77	-0.77	0.89
13	0.22	0.22	-1.23	0.71	0.71	0.71	0.71	-0.26	0.71	0.71	0.71	-2.20	-1.72
14	0.09	-0.50	-0.50	0.68	0.68	0.68	0.68	0.68	-1.08	-2.85	0.68	0.68	0.09
15	-0.96	0.82	0.23	-0.36	-0.96	0.23	1.41	-0.36	-1.55	2.00	-0.96	0.82	-0.36
16	0.65	1.18	0.12	1.18	-0.41	-1.47	-1.47	0.12	0.65	-2.00	0.65	0.65	0.12
17	1.00	1.00	1.00	1.00	0.24	-0.91	-1.29	-0.91	-1.29	-1.29	-0.53	1.00	1.00
18	1.63	-1.13	-0.67	-0.67	0.71	0.71	-0.21	-0.21	1.17	1.63	-0.67	-1.13	-1.13
19	-0.61	2.03	-0.61	-0.61	-0.61	-0.61	-0.61	-0.61	1.15	0.27	-0.61	-0.61	2.03
20	0.74	0.74	-1.66	-1.66	-0.46	0.74	0.74	0.74	0.74	-1.66	-0.46	0.74	0.74
21	-0.37	1.78	0.70	-0.37	1.78	-0.91	-0.91	-0.91	-0.91	-0.37	-0.91	1.24	0.17
22	-1.32	-1.32	0.31	-1.32	0.72	1.13	1.13	-0.50	0.31	1.13	-0.09	1.13	-1.32
23	-1.23	0.48	0.48	-0.09	-0.09	1.06	-2.38	0.48	1.06	-1.23	0.48	-0.09	1.06
24	0.44	0.87	-0.87	1.31	1.31	-0.44	-1.31	1.31	-0.87	-0.44	0.87	-1.31	-0.87

5	-1.41	-1.41	0.67	-0.99	0.67	1.09	1.09	-1.41	-0.58	1.09	0.26	1.09	-0.16																												
6	0.87	0.87	0.47	0.06	0.87	-1.55	-1.15	0.47	-1.55	-1.55	0.47	0.87	0.87																												
7	-1.61	-0.12	-0.12	-0.61	-0.12	0.88	1.38	-0.61	1.38	-1.61	0.38	1.38	-0.61																												
8	-0.72	2.59	-0.17	-0.17	-0.72	-0.72	-0.72	-0.72	0.93	0.93	-0.72	-0.72	0.93																												
9	0.68	1.26	0.68	1.26	-0.50	-1.08	-1.08	0.09	-0.50	-1.08	0.68	-1.67	1.26																												
0	3.22	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.81	-0.81	-0.81	-0.00	-0.81	-0.00																												
1	-0.89	-0.43	-0.89	-0.43	0.04	-0.43	1.42	-0.43	1.42	1.42	1.42	-1.35	-0.89																												
2	-0.72	3.01	-0.72	-0.10	-0.10	-0.10	-0.10	-0.10	-0.72	-0.72	-0.10	1.15	-0.72																												
3	1.22	0.69	0.69	1.22	0.16	-0.36	-0.36	-0.89	-1.42	1.74	-0.36	-1.42	-0.89																												
4	-0.76	0.89	0.34	-0.21	-0.76	0.89	0.89	-1.31	-0.76	-1.31	-0.76	1.99	0.89																												
5	-1.10	1.21	0.28	-0.64	0.75	-1.10	-1.56	-1.10	0.75	1.21	0.75	1.21	-0.64																												
6	0.59	-1.06	0.59	-1.06	0.59	-1.61	0.04	1.14	0.04	-1.61	0.04	1.69	0.59																												
7	1.38	0.89	-0.56	1.38	0.41	-0.07	-1.04	-1.52	-0.56	-1.04	-1.04	0.41	1.38																												
8	2.43	1.87	-0.39	0.17	0.17	-0.39	-0.96	-0.39	-0.39	-0.39	-0.96	-0.96	0.17																												
9	-0.71	-1.19	0.26	0.75	0.75	0.75	1.23	1.23	-1.68	0.26	-1.19	0.75	-1.19																												
0	1.10	-0.33	1.10	-0.33	1.10	-0.33	-0.33	-0.33	1.10	-0.33	-1.77	1.10	-1.77																												
1	0.22	0.70	0.70	1.65	0.70	-0.26	-1.21	-1.21	-0.26	-0.26	-1.21	-1.21	1.65																												
2	1.09	-1.27	-0.48	1.09	1.09	0.30	0.30	-0.48	-1.27	-1.27	1.09	1.09	-1.27																												
3	-2.21	-1.71	-0.19	0.81	0.31	-0.70	0.81	0.81	0.31	-0.70	0.81	0.81	0.31																												
4	1.34	0.34	0.84	-1.15	0.84	-0.15	0.34	0.84	0.84	0.34	-1.15	-1.64	-1.64																												
5	0.44	-1.75	-0.87	0.44	-0.00	0.87	0.44	0.87	0.87	0.87	0.87	-1.75	-1.31																												
6	-0.66	-0.18	0.29	-0.18	0.29	-0.66	2.20	-0.66	-0.66	-0.66	-0.66	2.20																													
7	-0.52	2.19	0.83	2.19	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52																												
8	1.47	0.49	1.47	0.49	0.49	-1.47	-0.98	-0.98	-1.47	-0.98	0.49	0.49	1.47																												
9	1.60	-0.66	0.70	0.24	0.24	-1.12	-1.12	1.15	-1.12	1.60	0.24	-1.12	-0.66																												
0	0.84	1.45	-0.37	1.45	-0.37	-0.37	-0.37	-0.37	-0.37	-0.37	-2.20	1.45																													

Correlation table, showing the relationships between all the variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	1.00																				
2	0.16	1.00																			
3	-0.26	-0.03	1.00																		
4	0.54	0.12	0.03	1.00																	
5	-0.16	0.49	0.45	-0.28	1.00																
6	0.79	0.30	-0.29	0.58	-0.16	1.00															
7	-0.10	-0.19	0.56	0.16	-0.01	-0.14	1.00														
8	-0.04	-0.79	0.46	-0.19	-0.17	-0.24	0.43	1.00													
9	0.38	-0.19	-0.55	0.24	-0.53	0.29	-0.56	-0.13	1.00												
0	-0.75	-0.46	0.13	-0.50	-0.12	-0.81	0.13	0.28	-0.31	1.00											
1	0.92	0.18	-0.27	0.41	-0.06	0.79	-0.28	-0.02	0.46	-0.83	1.00										
2	0.48	0.01	-0.37	0.32	-0.21	0.20	-0.26	-0.19	0.56	-0.33	0.45	1.00									
3	-0.63	-0.31	-0.20	-0.21	-0.19	-0.53	-0.25	-0.05	0.13	0.60	-0.63	-0.08	1.00								
4	0.19	0.21	-0.38	-0.01	-0.24	0.54	-0.14	-0.16	0.03	-0.25	0.28	-0.46	-0.13	1.00							
5	-0.02	-0.03	0.52	0.17	0.25	-0.03	0.33	0.23	-0.29	0.11	-0.04	0.25	-0.12	-0.37	1.00						
6	0.44	0.48	-0.36	0.01	0.10	0.45	-0.34	-0.42	0.47	-0.68	0.50	0.13	-0.26	0.30	-0.56	1.00					
7	0.84	0.22	-0.28	0.57	-0.16	0.83	-0.25	-0.19	0.62	-0.88	0.90	0.42	-0.57	0.25	-0.14	0.64	1.00				
8	-0.44	-0.72	0.04	-0.18	-0.38	-0.73	0.06	0.44	0.17	0.74	-0.51	-0.02	0.56	-0.46	-0.12	-0.46	-0.49	1.00			
9	0.29	0.50	-0.32	0.01	0.27	0.02	-0.42	-0.57	0.12	-0.20	0.22	0.66	-0.16	-0.42	0.02	0.22	0.14	-0.19	1.00		
0	0.11	0.24	-0.40	-0.44	-0.17	-0.07	-0.21	-0.15	0.02	0.17	0.11	0.03	-0.16	0.37	-0.17	0.11	-0.10	-0.06	0.29	1.00	
1	0.88	0.02	-0.14	0.57	-0.24	0.70	0.06	0.08	0.31	-0.61	0.71	0.54	-0.40	0.01	0.13	0.29	0.66	-0.35	0.25	-0.07	
2	-0.28	-0.33	0.70	-0.07	0.04	-0.34	0.54	0.63	-0.64	0.50	-0.41	-0.46	0.08	-0.14	0.41	-0.70	-0.58	0.28	-0.42	-0.08	
3	0.14	0.59	-0.16	0.25	-0.09	0.21	0.03	-0.60	-0.08	-0.31	-0.01	-0.03	-0.26	0.11	-0.50	0.41	0.17	-0.30	0.37	0.12	
4	-0.00	-0.07	-0.58	0.19	-0.37	0.19	0.00	-0.32	0.38	-0.13	-0.06	0.14	0.44	0.26	-0.40	0.37	0.15	0.02	-0.15	-0.20	
5	-0.07	-0.20	0.67	0.22	0.13	-0.07	0.41	0.51	-0.61	0.19	-0.12	-0.33	-0.10	-0.08	0.47	-0.69	-0.30	0.05	-0.32	-0.23	
6	0.75	0.13	-0.45	0.30	-0.20	0.76	-0.02	-0.09	0.40	-0.81	0.80	0.33	-0.53	0.43	-0.29	0.65	0.80	-0.53	0.04	0.07	
7	-0.08	0.36	0.30	-0.31	0.24	0.00	-0.06	0.03	-0.47	0.11	-0.11	-0.53	-0.07	0.37	-0.02	-0.01	-0.28	-0.29	-0.07	0.41	
8	0.22	0.41	-0.16	0.11	0.25	-0.01	-0.32	-0.50	0.21	-0.19	0.12	0.75	-0.00	-0.61	0.21	0.20	0.14	-0.13	0.90	0.02	
9	0.23	0.32	-0.59	0.16	-0.02	0.41	-0.53	-0.61	0.56	-0.59	0.38	0.44	-0.04	0.10	-0.40	0.64	0.57	-0.38	0.37	-0.17	
0	0.16	-0.39	-0.46	0.03	-0.53	0.09	-0.47	0.15	0.80	-0.12	0.39	0.31	0.12	0.18	-0.29	0.20	0.40	0.31	-0.16	0.15	
1	-0.69	-0.17	0.22	-0.52	0.40	-0.72	-0.05	0.15	-0.43	0.59	-0.65	-0.21	0.68	-0.38	0.08	-0.40	-0.80	0.38	0.02	-0.15	
2	0.45	0.47	-0.15	0.21	-0.04	0.42	-0.03	-0.32	0.19	-0.39	0.35	0.44	-0.09	0.15	0.30	0.37	0.31	-0.50	0.32	0.30	
3	-0.02	-0.43	-0.02	0.42	-0.24	0.01	-0.10	0.11	0.55	-0.06	0.04	0.49	0.38	-0.42	0.30	-0.13	0.23	0.31	-0.12	-0.65	
4	0.51	0.50	0.17	0.27	0.13	0.55	-0.15	-0.14	-0.06	-0.42	0.54	0.05	-0.57	0.34	0.37	0.07	0.40	-0.61	0.17	0.36	
5	0.34	0.15	0.36	0.29	0.24	0.02	0.32	0.12	-0.11	-0.32	0.15	0.31	-0.12	-0.48	0.10	0.21	0.12	-0.07	0.30	-0.29	
6	0.41	-0.10	-0.07	-0.30	0.02	0.31	0.20	0.38	-0.11	-0.32	0.45	-0.25	-0.65	0.42	-0.34	0.35	0.30	-0.28	-0.20	0.	

40	0.35	0.28	-0.16	-0.14	0.04	0.02	0.13	-0.18	-0.36	0.18	-0.24	-0.03	0.05	-0.01	0.20	0.32	0.08	0.18	0.19	1.00
41	0.38	-0.58	0.27	0.21	-0.30	0.28	-0.45	0.42	0.65	0.24	-0.40	-0.05	0.43	0.05	-0.01	-0.25	0.74	0.50	-0.25	-0.03
42	0.02	0.10	-0.28	0.29	0.15	0.30	0.13	-0.78	-0.13	0.39	-0.18	-0.05	0.05	0.06	-0.20	0.25	0.20	-0.05	0.39	0.19
43	-0.20	0.23	0.14	-0.12	0.29	-0.02	0.44	-0.35	-0.16	-0.63	0.19	-0.24	-0.58	0.09	-0.07	0.37	-0.31	-0.80	0.30	-0.29
44	-0.04	0.08	-0.25	0.17	-0.23	-0.19	-0.23	0.02	-0.08	0.31	0.18	-0.16	0.31	-0.51	-0.12	-0.04	-0.29	0.37	0.06	0.55
45	-0.80	0.22	-0.19	0.25	0.00	-0.61	-0.10	-0.41	-0.22	0.05	0.62	-0.58	0.12	-0.72	-0.36	-0.33	-0.50	-0.23	0.16	-0.10
46	0.07	-0.06	-0.25	-0.37	0.22	0.07	0.13	0.07	0.15	0.00	0.02	-0.13	-0.14	0.38	-0.39	0.15	0.15	-0.11	0.07	-0.32
47	0.37	-0.52	0.13	0.36	-0.43	0.24	-0.16	0.49	0.60	-0.00	-0.27	0.53	0.47	0.18	0.15	-0.38	0.41	0.38	-0.07	-0.02
48	0.55	-0.49	-0.02	0.21	-0.22	0.82	-0.38	-0.04	0.58	0.55	-0.56	0.12	0.36	0.15	0.16	0.37	0.57	0.47	-0.20	0.16
49	-0.10	-0.25	-0.28	0.47	-0.28	0.21	-0.86	-0.15	0.26	0.37	-0.02	-0.37	0.66	-0.73	-0.02	0.01	-0.12	0.31	0.11	0.08
50	0.01	-0.84	0.10	0.41	-0.64	0.21	-0.53	0.50	0.83	0.42	-0.14	0.08	0.46	-0.13	-0.28	-0.40	0.58	0.67	-0.40	-0.39

	41	42	43	44	45	46	47	48	49	50
41	1.00									
42	-0.18	1.00								
43	-0.20	0.15	1.00							
44	-0.09	-0.19	-0.53	1.00						
45	-0.34	0.16	0.07	0.35	1.00					
46	0.29	-0.18	0.33	-0.19	-0.30	1.00				
47	0.56	-0.09	-0.21	-0.08	-0.36	-0.05	1.00			
48	0.45	0.36	-0.23	-0.11	-0.54	0.07	0.36	1.00		
49	0.08	0.06	-0.32	0.42	0.34	-0.34	-0.01	0.33	1.00	
50	0.75	-0.25	-0.33	0.01	-0.08	0.29	0.57	0.28	0.16	1.00

Intensity (root mean square) +0.363 Mean absolute value +0.298

Table of principal components

POLE	VAR-R	%ACC.	/CONTRAST	VBL.	1	2	3	4	5	6	7	8	DIST.
social	1.000	92.631	/not social	1	0.774	0.378	0.291	0.244	0.187	-0.054	-0.029	-0.036	0.962
common housing	1.000	93.280	/technology	2	0.350	0.530	-0.661	-0.178	-0.154	-0.066	0.180	-0.021	0.966
artificial	1.000	81.971	/natural	3	-0.554	0.385	0.108	0.497	-0.234	-0.088	-0.068	-0.196	0.905
colourful	1.000	84.501	/dul	4	0.477	0.104	0.217	0.429	-0.409	0.173	0.300	-0.296	0.919
dirty	1.000	74.298	/clean	5	-0.179	0.421	-0.513	0.076	-0.292	-0.006	-0.422	0.025	0.862
islamic	1.000	93.871	/modern	6	0.753	0.450	0.283	-0.039	-0.181	0.188	0.121	0.066	0.969
social	1.000	83.950	/not social	7	-0.448	0.264	0.357	0.306	-0.319	-0.415	0.057	0.266	0.916
complicated	1.000	95.177	/simple	8	-0.466	-0.012	0.727	0.300	0.218	-0.078	-0.250	0.027	0.976
clean	1.000	95.522	/dirty	9	0.696	-0.572	0.229	-0.018	0.223	0.068	0.144	-0.129	0.977
technology	1.000	94.735	/primitive	10	-0.818	-0.397	-0.104	-0.054	0.268	0.126	0.132	0.037	0.973
eastern	1.000	96.298	/western	11	0.814	0.336	0.308	0.098	0.165	0.101	-0.212	-0.014	0.981
healthy	1.000	95.568	/not healthy	12	0.623	-0.345	-0.193	0.541	0.236	0.007	-0.074	0.240	0.978
natural	1.000	83.092	/artificial	13	-0.376	-0.669	-0.194	-0.121	-0.099	0.139	0.398	-0.040	0.912
mysterious	1.000	98.505	/clear	14	0.195	0.381	0.325	-0.747	-0.024	0.205	0.288	0.113	0.992
live	1.000	94.955	/dead	15	-0.217	0.206	-0.035	0.702	-0.059	0.418	0.054	0.430	0.974
close	1.000	85.484	/open	16	0.698	0.088	-0.070	-0.358	-0.058	-0.466	0.038	-0.073	0.925
defined spaces	1.000	98.323	/not defined spaces	17	0.912	0.173	0.306	0.065	-0.079	0.019	-0.065	-0.114	0.992
services	1.000	94.567	/no services	18	-0.484	-0.705	0.193	0.136	0.270	-0.064	0.002	-0.286	0.972
housing	1.000	96.029	/commercial	19	0.428	0.003	-0.755	0.256	0.320	-0.088	-0.178	-0.003	0.980
readable	1.000	91.956	/not readable	20	0.038	0.207	-0.162	-0.399	0.784	-0.033	0.134	0.238	0.959
identified	1.000	84.719	/not identified	21	0.618	0.287	0.278	0.484	0.112	-0.159	0.175	0.061	0.920
public	1.000	97.122	/private	22	-0.781	0.348	0.247	0.348	0.107	0.055	0.163	-0.131	0.986
exiting	1.000	71.536	/relaxing	23	0.278	0.235	-0.387	-0.207	-0.102	-0.465	0.199	-0.351	0.846
colourful	1.000	90.405	/not colourful	24	0.318	-0.483	0.092	-0.317	-0.440	-0.260	0.352	0.275	0.951
dense	1.000	89.899	/seperated	25	-0.539	0.479	0.235	0.404	-0.057	0.310	-0.019	-0.247	0.948
curved windows	1.000	97.009	/straight windoows	26	0.773	0.188	0.380	-0.177	-0.089	-0.252	-0.154	0.258	0.985
plain details	1.000	87.637	/rich details	27	-0.338	0.670	-0.156	-0.205	0.333	0.006	0.322	-0.180	0.936
residential	1.000	98.839	/industrial	28	0.405	-0.140	-0.710	0.504	0.161	-0.130	-0.005	0.064	0.994
comfortable	1.000	93.724	/not comfortable	29	0.754	-0.314	-0.267	-0.264	-0.290	-0.022	-0.205	0.043	0.968
valuable	1.000	85.863	/not valuable	30	0.400	-0.543	0.430	-0.233	0.291	0.235	-0.119	-0.098	0.927
green	1.000	68.655	/no green	31	-0.666	-0.249	-0.406	0.043	-0.056	-0.010	-0.102	0.001	0.829
one hieght	1.000	94.161	/mixed hieghts	32	0.446	0.280	-0.182	0.239	0.152	-0.126	0.584	0.441	0.970
pactical	1.000	97.060	/not practical	33	0.229	-0.671	0.203	0.465	-0.370	0.268	0.030	0.032	0.985
hirarchy	1.000	94.401	/no hirarchy	34	0.299	0.742	-0.020	0.143	0.296	0.392	0.197	-0.043	0.972
court	1.000	85.557	/no court	35	0.108	0.203	-0.105	0.615	-0.107	-0.608	0.083	-0.158	0.925

poor 1.000 97.949	/rich	36	0.126	0.445	0.478	-0.351	0.250	-0.368	-0.436	0.160	0.990
monotony 1.000 87.587	/variety	37	0.822	-0.049	0.080	-0.030	0.119	0.256	0.078	-0.325	0.936
clean 1.000 98.050	/dirty	38	0.694	-0.607	0.076	0.055	0.327	0.005	0.097	0.077	0.990
commercial 1.000 83.354	/residential	39	-0.377	0.191	0.529	0.012	-0.265	0.365	0.261	0.323	0.913
clear orientation 1.000 74.222	/no clear orientation	40	-0.034	-0.079	0.586	0.221	0.404	-0.285	0.153	-0.274	0.862
contextual 1.000 85.439	/not contextual	41	0.705	-0.236	-0.143	0.128	-0.187	0.272	-0.093	-0.384	0.924
active 1.000 82.201	/isolated	42	0.012	0.106	0.695	-0.413	-0.217	0.142	0.271	-0.130	0.907
random 1.000 86.424	/organised	43	-0.307	0.629	-0.118	-0.393	-0.390	0.007	-0.232	0.000	0.930
technology 1.000 77.631	/no technology	44	-0.209	-0.668	0.244	0.107	0.399	-0.175	0.050	0.152	0.881
exposed 1.000 99.556	/enclosed	45	-0.699	-0.564	-0.030	-0.359	-0.206	0.012	0.064	-0.106	0.998
old 1.000 84.360	/modern	46	0.142	0.282	-0.161	-0.081	0.172	0.670	-0.464	0.135	0.918
natural materials 1.000 74.410	/artificial materials	47	0.617	-0.102	-0.234	0.182	-0.351	0.106	0.355	0.066	0.863
historical 1.000 90.742	/not historical	48	0.758	0.012	0.478	0.045	-0.158	-0.057	-0.260	-0.073	0.953
luxury 1.000 97.475	/not luxury	49	0.015	-0.656	0.402	0.131	-0.398	-0.228	-0.326	0.222	0.987
landscape 1.000 99.398	/urban	50	0.643	-0.512	-0.416	-0.141	-0.103	0.329	-0.078	0.023	0.997
σVARIANCE			28.264	16.772	12.534	9.968	7.143	6.147	5.077	3.696	89.602

Factor scores

	VBL.	1	2	3	4	5	6	7	8	DIST-N	*	DIST.	VAR-R	σACC.
A	1	0.887	-1.972	1.586	-0.618	1.286	0.076	-0.644	-0.203	3.113	*	1.170	1.435	95.373
B	2	1.882	-0.273	-1.353	1.144	0.744	-0.350	1.441	1.348	3.365	*	1.262	1.611	98.880
C	3	0.384	0.331	0.947	0.931	-0.566	-0.192	-0.875	-0.609	1.875	*	0.580	0.499	67.434
D	4	0.887	-0.380	-0.242	-0.737	-2.143	0.954	0.699	-0.726	2.837	*	0.858	0.822	89.575
E	5	0.185	-0.211	1.470	0.086	0.049	-0.235	0.590	-0.382	1.673	*	0.561	0.572	55.127
F	6	-0.907	0.034	-0.159	-0.250	0.344	1.075	2.051	-1.013	2.724	*	0.757	0.711	80.654
G	7	-1.320	0.500	-0.037	-0.378	0.949	2.185	-0.420	1.199	3.070	*	0.984	1.055	91.747
H	8	-0.685	-0.260	0.095	-1.327	-0.424	-1.225	-0.052	2.187	2.962	*	0.776	0.703	85.693
I	9	-0.952	-0.296	-1.511	-0.461	1.345	-1.470	-0.187	-1.631	3.187	*	0.970	0.990	94.997
J	10	-1.366	-1.091	-0.366	2.462	-0.898	-0.004	-0.726	0.245	3.263	*	1.198	1.464	98.021
K	11	-0.403	0.247	-0.388	-1.062	-1.350	-0.923	-0.241	-0.022	2.058	*	0.611	0.563	66.322
L	12	0.095	2.523	1.191	0.604	0.428	-0.788	0.314	-0.035	3.010	*	1.158	1.406	95.352
M	13	1.313	0.847	-1.232	-0.395	0.235	0.897	-1.950	-0.359	2.985	*	1.032	1.169	91.110

Variance of transformed data= 1.000001 Variance of derived data= .8960211
Correlation transformed, derived .9465831

Residual matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	-0.18	-0.10	-0.54	0.06	0.68	-0.16	-0.07	0.04	0.03	0.16	-0.19	0.01	0.26
2	0.38	-0.03	-0.11	0.02	-0.70	0.22	-0.14	-0.04	-0.15	0.12	0.16	0.31	-0.04
3	0.46	0.08	0.38	0.30	-1.22	-0.01	0.14	-0.09	0.09	-0.08	0.09	0.36	-0.49
4	-0.04	-0.20	-0.40	-0.48	0.35	0.62	-0.56	0.28	-0.41	0.25	-0.02	-0.08	0.68
5	0.37	0.08	-0.55	0.79	-0.45	-0.83	0.49	-0.45	0.40	0.11	0.05	0.62	-0.62
6	-0.37	0.03	0.37	-0.10	0.51	-0.04	0.07	0.14	0.10	-0.18	-0.21	-0.37	0.06
7	0.11	-0.26	-0.30	-0.29	-0.14	0.71	-0.64	0.45	-0.37	0.28	-0.29	0.11	0.62
8	-0.03	0.16	0.10	0.06	0.10	-0.35	0.34	-0.32	0.13	-0.13	0.32	-0.07	-0.31
9	0.16	0.07	0.17	0.25	-0.46	-0.20	0.20	-0.11	0.15	-0.07	0.02	0.16	-0.33
10	-0.13	-0.16	-0.21	0.17	0.24	0.03	-0.18	0.32	0.07	0.11	-0.55	0.06	0.23
11	0.11	0.06	-0.38	0.02	0.11	-0.21	0.13	-0.31	-0.02	0.08	0.36	0.13	-0.08
12	-0.00	0.01	-0.17	-0.37	0.24	0.22	-0.13	-0.11	-0.24	0.06	0.38	-0.12	0.22
13	-0.16	0.23	-0.27	-0.00	0.72	-0.64	0.50	-0.60	0.15	-0.10	0.61	-0.15	-0.28
14	-0.08	0.05	0.04	-0.19	0.23	0.02	0.03	-0.10	-0.07	-0.04	0.22	-0.15	0.04
15	0.30	-0.03	-0.02	0.16	-0.65	0.09	-0.06	0.02	-0.02	0.07	-0.03	0.29	-0.12
16	0.22	0.13	0.09	0.56	-0.54	-0.57	0.45	-0.28	0.35	-0.10	0.00	0.31	-0.62
17	0.12	-0.02	0.07	0.15	-0.35	-0.00	0.00	0.05	0.05	0.00	-0.12	0.14	-0.11
18	0.05	-0.15	-0.59	0.07	0.22	0.04	-0.21	0.10	-0.07	0.25	-0.18	0.20	0.28
19	-0.15	-0.10	-0.29	-0.09	0.47	0.07	-0.16	0.12	-0.06	0.11	-0.15	-0.06	0.30
20	0.25	-0.15	-0.52	-0.16	-0.19	0.37	-0.37	0.08	-0.28	0.29	0.08	0.25	0.35
21	-0.50	0.05	-0.12	-0.07	1.16	-0.36	0.19	-0.07	0.15	-0.09	-0.06	-0.39	0.12
22	-0.18	0.07	0.07	-0.21	0.41	-0.03	0.07	-0.10	-0.04	-0.08	0.20	-0.24	0.05
23	-0.31	-0.16	0.67	-0.66	0.14	0.96	-0.60	0.66	-0.37	-0.09	-0.36	-0.52	0.64
24	-0.27	-0.01	-0.45	-0.11	0.90	-0.21	0.04	-0.11	0.00	0.08	0.08	-0.16	0.23
25	-0.12	0.10	-0.02	-0.56	0.49	0.20	-0.03	-0.24	-0.28	-0.04	0.64	-0.33	0.20
26	-0.07	0.04	-0.17	-0.25	0.36	0.04	-0.02	-0.14	-0.13	0.03	0.31	-0.13	0.13
27	-0.13	0.26	0.49	0.10	0.06	-0.49	0.54	-0.37	0.26	-0.32	0.33	-0.21	-0.53
28	-0.11	0.00	0.03	0.14	0.16	-0.18	0.10	0.02	0.13	-0.04	-0.17	-0.03	-0.06
29	-0.10	0.14	0.67	-0.21	-0.14	0.09	0.14	-0.05	-0.01	-0.26	0.22	-0.30	-0.19
30	0.48	0.12	-0.12	-0.22	-0.73	0.19	0.01	-0.40	-0.27	0.08	0.79	0.25	-0.18
31	-0.11	0.35	-0.33	-0.04	0.76	-0.84	0.70	-0.90	0.16	-0.14	0.99	-0.15	-0.46
32	0.16	0.14	-0.19	0.10	-0.09	-0.34	0.28	-0.41	0.07	-0.01	0.44	0.14	-0.30
33	0.14	0.10	0.09	0.11	-0.28	-0.17	0.20	-0.21	0.07	-0.06	0.22	0.09	-0.28
34	0.27	0.03	0.25	-0.00	-0.70	0.19	-0.04	-0.01	-0.08	-0.03	0.13	0.14	-0.16
35	-0.04	0.17	-0.50	-0.05	0.62	-0.51	0.36	-0.59	0.04	0.02	0.66	-0.03	-0.16
36	-0.16	-0.03	0.06	0.16	0.21	-0.16	0.06	0.12	0.16	-0.04	-0.31	-0.05	-0.02
37	0.22	-0.20	-0.92	0.35	0.02	-0.13	-0.19	0.06	0.02	0.38	-0.29	0.49	0.20
38	0.19	-0.05	-0.26	0.07	-0.24	0.05	-0.09	-0.02	-0.06	0.13	0.03	0.22	0.03
39	-0.28	-0.22	0.18	0.42	0.15	-0.02	-0.16	0.63	0.29	-0.01	-1.13	-0.01	0.15
40	-0.27	-0.00	0.52	0.81	-0.07	-0.64	0.40	0.29	0.65	-0.25	-0.99	0.02	-0.48
41	-0.48	-0.15	0.15	0.12	0.70	-0.03	-0.12	0.49	0.19	-0.06	-0.82	-0.28	0.28
42	0.35	0.15	-0.73	0.10	-0.04	-0.45	0.30	-0.68	-0.03	0.17	0.80	0.36	-0.28
43	-0.40	-0.04	-0.23	0.33	0.86	-0.51	0.20	0.09	0.34	-0.02	-0.50	-0.12	0.02
44	-0.55	0.13	1.14	0.02	0.34	-0.15	0.29	0.27	0.33	-0.49	-0.46	-0.61	-0.24

45	0.05	-0.01	-0.18	-0.00	0.02	-0.02	-0.02	-0.06	-0.04	0.06	0.08	0.07	0.03
46	-0.57	0.09	0.27	-0.15	1.04	-0.28	0.23	-0.01	0.16	-0.23	-0.08	-0.54	0.05
47	-0.10	0.17	0.86	0.63	-0.47	-0.60	0.57	-0.01	0.57	-0.40	-0.43	-0.03	-0.76
48	0.12	0.23	0.31	-0.18	-0.23	-0.12	0.30	-0.44	-0.04	-0.18	0.70	-0.11	-0.35
49	0.11	-0.09	-0.01	-0.07	-0.26	0.29	-0.23	0.19	-0.13	0.08	-0.11	0.08	0.16
50	-0.10	-0.03	0.02	0.02	0.16	-0.01	-0.02	0.09	0.04	-0.01	-0.15	-0.06	0.06

Table of VARIMAX rotated components

POLE	/CONTRAST	VBL.	1	2	3	4	5	6	7	8	DIST.
social	/not social	1	0.931	-0.140	-0.124	-0.033	0.137	-0.026	0.037	0.054	0.962
common housing	/technology	2	0.188	0.654	-0.228	-0.243	0.445	-0.303	0.101	0.243	0.966
artificial	/natural	3	-0.110	0.214	-0.062	0.841	-0.038	0.033	0.165	-0.142	0.905
colourful	/dul	4	0.510	-0.035	0.056	0.101	-0.076	-0.062	0.745	0.075	0.919
dirty	/clean	5	-0.076	0.756	-0.323	0.157	0.006	0.048	-0.070	-0.169	0.862
islamic	/modern	6	0.851	0.166	0.252	-0.189	0.115	0.047	0.200	0.179	0.969
social	/not social	7	-0.022	0.111	0.151	0.751	-0.358	-0.081	-0.139	0.292	0.916
complicated	/simple	8	0.023	-0.447	0.203	0.657	-0.255	0.271	-0.285	-0.242	0.976
clean	/dirty	9	0.341	-0.643	-0.032	-0.594	-0.128	-0.072	0.226	-0.005	0.977
technology	/primitive	10	-0.876	-0.279	0.046	0.180	0.090	0.199	-0.132	-0.042	0.973
eastern	/western	11	0.943	-0.068	-0.046	-0.195	0.088	0.107	-0.024	-0.095	0.981
healthy	/not healthy	12	0.361	-0.330	-0.679	-0.316	-0.184	0.209	0.159	0.230	0.978
natural	/artificial	13	-0.756	-0.270	0.109	-0.226	-0.099	-0.028	0.303	0.144	0.912
mysterious	/clear	14	0.259	0.160	0.790	-0.284	0.350	-0.043	-0.200	0.155	0.993
live	/dead	15	0.011	0.110	-0.265	0.450	-0.008	0.704	0.245	0.330	0.974
close	/open	16	0.498	0.088	-0.014	-0.450	-0.025	-0.603	-0.138	0.118	0.925
defined spaces	/not defined spaces	17	0.914	-0.074	0.031	-0.294	-0.067	-0.095	0.199	-0.033	0.992
services	/no services	18	-0.591	-0.674	-0.044	0.124	-0.206	-0.020	0.037	-0.305	0.972
housing	/commercial	19	0.118	0.141	-0.858	-0.355	0.248	-0.060	-0.008	0.025	0.980
readable	/not readable	20	-0.016	-0.188	-0.047	-0.247	0.640	0.035	-0.614	0.180	0.959
identified	/not identified	21	0.781	-0.228	-0.209	0.169	0.040	-0.045	0.162	0.287	0.920
public	/private	22	-0.309	-0.066	0.144	0.871	0.244	0.172	0.017	-0.060	0.986
exiting	/relaxing	23	0.119	0.262	-0.153	-0.134	0.238	-0.726	0.068	0.043	0.846
colourful	/not colourful	24	-0.042	-0.090	0.298	-0.465	-0.483	-0.333	0.135	0.476	0.951
dense	/separated	25	-0.048	0.132	0.135	0.769	0.237	0.320	0.218	-0.254	0.948
curved windows	/straight windows	26	0.829	0.014	0.156	-0.288	-0.257	-0.147	-0.239	0.172	0.985
plain details	/rich details	27	-0.100	0.205	0.154	0.342	0.792	-0.146	-0.182	0.046	0.936
residential	/industrial	28	0.071	0.043	-0.908	-0.238	0.070	-0.054	0.211	0.221	0.994
comfortable	/not comfortable	29	0.312	0.186	-0.148	-0.794	-0.322	-0.180	0.132	-0.009	0.968
valuable	/not valuable	30	0.201	-0.613	0.220	-0.522	-0.154	0.155	-0.030	-0.270	0.927
green	/no green	31	-0.758	0.150	-0.210	0.155	-0.077	0.057	-0.040	-0.100	0.829
one hieght	/mixed hieghts	32	0.361	-0.030	-0.223	-0.051	0.303	-0.037	0.078	0.812	0.970
pactical	/not practical	33	0.012	-0.345	-0.090	-0.160	-0.609	0.282	0.605	0.044	0.985
hirarchy	/no hirarchy	34	0.536	0.171	-0.006	0.138	0.719	0.269	0.106	0.088	0.972
court	/no court	35	0.258	0.002	-0.511	0.500	-0.134	-0.451	0.161	0.172	0.925
poor	/rich	36	0.511	0.044	0.260	0.140	-0.036	-0.116	-0.764	-0.176	0.990
monotony	/variety	37	0.609	-0.224	-0.022	-0.511	0.198	-0.056	0.355	-0.158	0.936
clean	/dirty	38	0.291	-0.628	-0.237	-0.631	-0.148	0.002	0.091	0.133	0.990
commercial	/residential	39	-0.056	0.026	0.632	0.387	-0.076	0.443	0.095	0.264	0.913
clear orientation	/no clear orientation	40	0.204	-0.698	0.097	0.379	0.042	-0.197	-0.085	-0.114	0.862
contextual	/not contextual	41	0.396	-0.029	-0.212	-0.507	-0.078	-0.042	0.560	-0.271	0.924
active	/isolated	42	0.201	-0.146	0.863	0.048	-0.013	-0.073	0.081	-0.033	0.907
random	/organised	43	-0.042	0.787	0.334	0.212	0.111	-0.073	-0.215	-0.153	0.930
technology	/no technology	44	-0.335	-0.728	-0.095	-0.033	-0.262	0.068	-0.216	0.068	0.881
exposed	/enclosed	45	-0.881	-0.090	0.332	-0.043	-0.257	-0.090	0.004	-0.161	0.998
old	/modern	46	0.200	0.333	-0.071	-0.254	0.266	0.664	-0.110	-0.315	0.918
natural materials	/artificial materials	47	0.302	0.104	-0.149	-0.373	-0.077	-0.086	0.557	0.397	0.863
historical	/not historical	48	0.821	-0.134	0.110	-0.223	-0.346	-0.061	0.080	-0.156	0.953
luxury	/not luxury	49	-0.047	-0.253	0.066	-0.058	-0.948	0.037	-0.009	-0.040	0.987
landscape	/urban	50	0.068	0.014	-0.257	-0.889	-0.134	0.106	0.321	-0.017	0.997
%VARIANCE			22.337	11.270	10.768	17.203	9.435	6.269	7.405	4.917	89.604

Transformation matrix

	1	2	3	4	5	6	7	8
1	0.766	-0.064	-0.167	-0.566	-0.025	-0.126	0.178	0.112
2	0.449	0.549	0.111	0.449	0.503	-0.007	-0.166	0.052
3	0.391	-0.479	0.626	0.332	-0.282	0.122	-0.099	-0.103
4	0.180	-0.202	-0.599	0.543	-0.168	0.257	0.407	0.112
5	0.020	-0.574	-0.288	-0.050	0.569	0.143	-0.483	-0.085
6	-0.050	0.077	0.228	-0.241	0.288	0.776	0.399	-0.192
7	-0.153	-0.267	0.273	0.043	0.398	-0.252	0.422	0.655
8	0.006	0.132	-0.021	-0.094	-0.272	0.465	-0.441	0.699

Rotated factor scores

VBL.	1	2	3	4	5	6	7	8	DIST.	
A	1	0.423	-2.362	0.471	-1.288	-0.806	0.247	-0.699	-0.924	3.113
B	2	0.814	-0.512	-1.806	-1.034	0.535	-0.009	0.497	2.353	3.365
C	3	1.110	-0.022	-0.099	0.846	-0.826	0.013	0.395	-0.846	1.875
D	4	0.079	1.022	1.140	-1.180	-0.490	-0.408	1.975	-0.028	2.837
E	5	0.558	-1.104	0.915	0.451	-0.241	-0.322	0.257	0.028	1.673
F	6	-1.154	-0.593	0.932	0.246	1.724	-0.074	1.322	0.288	2.724
G	7	-0.889	0.346	0.564	0.050	1.034	2.556	-0.762	-0.098	3.070
H	8	-0.770	0.577	0.722	-0.308	-1.127	-0.223	-1.900	1.518	2.962
I	9	-1.416	-0.335	-1.282	0.086	1.091	-1.841	-0.754	-1.113	3.187
J	10	-1.141	-0.093	-1.542	1.492	-1.691	0.933	0.994	-0.121	3.263
K	11	-0.485	1.328	0.601	-0.084	-0.702	-1.130	-0.315	0.008	2.058
L	12	1.779	0.290	0.432	1.990	0.980	-0.374	-0.646	0.383	3.010
M	13	1.090	1.458	-1.046	-1.265	0.520	0.632	-0.365	-1.448	2.985

GRID TITLE: arch.1

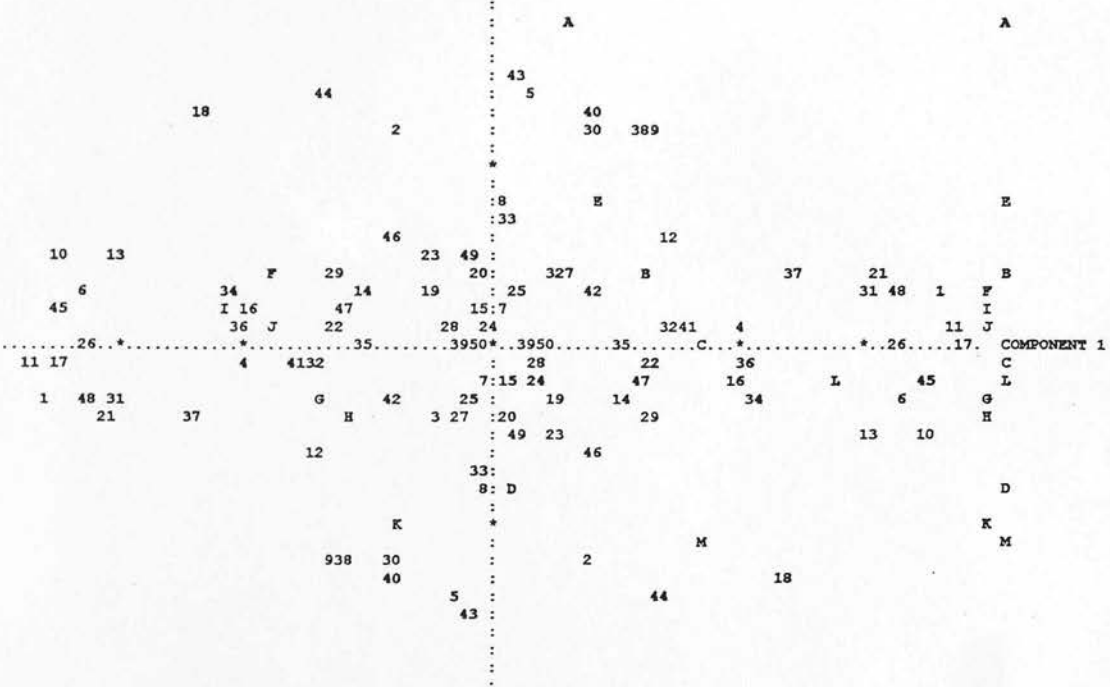
PLOT *****

ANALYSIS based on rotated results

Axis 2 has been reflected
ELEMENT 2 picked as an IDEAL

- | | | | |
|-------------------|----------------------|-------------------------|-----------------------|
| 18 no services | 44 no technology | 43 random | 21 not identified |
| 10 primitive | 2 common housing | 5 dirty | 37 variety |
| 13 artificial | 46 old | 40 no clear orientation | 31 green |
| 34 hierarchy | 23 exiting | 9 dirty | 1 not social |
| 6 Islamic | 49 not luxury | 38 dirty | 48 not historical |
| 45 enclosed | 20 not readable | 30 not valuable | 17 not defined spaces |
| 26 curved windows | 29 comfortable | 8 simple | 11 western |
| | 14 mysterious | 33 not practical | |
| | 19 housing | 12 not healthy | |
| | 15 live | 3 artificial | |
| | 47 natural materials | 27 plain details | |
| | 24 not colorful | 42 isolated | |
| | 16 close | 25 dense | |
| | 22 private | 7 social | |
| | 36 poor | 4 dull | |
| | 28 residential | 32 mixed heights | |
| | 50 landscape | 41 not contextual | |
| | 35 court | 39 commercial | |

COMPONENT 2



- | | | | |
|-------------------|----------------------|-------------------------|---------------------|
| 11 eastern | 39 residential | 35 no court | 26 straight windows |
| 17 defined spaces | 41 contextual | 50 urban | 45 exposed |
| 48 historical | 32 one height | 28 industrial | 6 modern |
| 1 social | 4 colorful | 36 rich | 34 no hierarchy |
| 31 no green | 7 not social | 22 public | 13 natural |
| 37 monotony | 25 separated | 16 open | 10 technology |
| 21 identified | 42 active | 24 colorful | 18 services |
| | 27 rich details | 47 artificial materials | |
| | 3 natural | 15 dead | |
| | 12 healthy | 19 commercial | |
| | 33 practical | 14 clear | |
| | 8 complicated | 29 not comfortable | |
| | 30 valuable | 20 readable | |
| | 38 clean | 49 luxury | |
| | 9 clean | 23 relaxing | |
| | 40 clear orientation | 46 modern | |
| | 5 clean | 2 technology | |
| | 43 organized | 44 technology | |
