In Pursuit of Diversity in Neighbourhoods: An Evaluation of Four Neighbourhoods in Famagusta

Sanaz Saeidi

Submitted to the
Institute of Graduate Studies and Research
in partial fulfilment of the requirements for the Degree of

Master of Science
in
Urban Design

Eastern Mediterranean University
December 2011
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

Prof. Dr. Elvan Yılmaz
Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Science in Urban Design.

Assoc. Prof. Dr. Özgür Dinçyürek
Chair, Department of Architecture

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Urban Design.

Prof. Dr. Derya Oktay
Supervisor

Examining Committee

1. Prof. Dr. Derya Oktay
2. Prof. Dr. Robert W. Marans
3. Prof. Dr. Şebnem Önal Hoşkara

ABSTRACT

Since the beginning of Modernisation, there have been obvious shortcomings in planners' contribution to the concept of "Diversity" in urban spaces. That is to say, many of the newly developed settlements specifically suburban developments have simply disregarded the significance of diversity in their physical, spatial, functional and socio-economic qualities as they became specialized zones of single use. Furthermore, lack of diversity in certain areas – mostly from the functional and socio-economic aspects – has caused considerable decline in their functionality that makes the inhabitants unable to meet their needs within the environment.

Diversity among urban spaces refers to a wide range of issues – forms, uses and users – which together can bring variety of experiences and perceptual meanings attached to a particular area. This concept within the neighbourhood environments in terms of "form" refers to variety of housing typologies, building (and other structural) forms and outdoor spaces (public, semi-public and private outdoor spaces) as well as natural elements; diversity of "use" encompasses variety of facilities and services needed in residents' daily life – in a fine grained mixture – located within a reasonable distance of residential units. Thereupon, it can be assumed that a balanced mix of uses and facilities, well-arranged in a rich contextual pattern integrated with natural environment would benefit variety of users within the neighbourhood that is more likely to provide the environment with a condition which results in an effective communal life.

This study focuses on the objective measures of diversity based on site analysis in four identical neighbourhoods of Famagusta, North Cyprus. As the same neighbourhoods were focused within a comprehensive user survey ("Famagusta Area Study", by Oktay, 2010) which determined the subjective measures of quality of life, this study will set out the possibilities for further explorations through comparing the objective and subjective measures, and finally seek out the possible impact of diversity on functionality of the neighbourhood environments.

Keywords: Neighbourhood, diversity, objective measures, Famagusta neighbourhoods.

ÖZ

Modernizasyonun en başından beri kent plancılarının, kent mekanlarında ‘çeşitlilik’ kavramının gelişmesine yeterli katkıları olmadığı görülmektedir. Daha açık bir deyişle, yeni gelişmekte olan yerleşimlerde, özellikle kent dışı konut alanlarında tek kullanımın egemen hale gelmesiyle çeşitlilik kavramının önemi fiziksel, mekansal, fonksiyonel ve sosyo-ekonomik olarak göz ardı edilmiştir. Ayrıca, çeşitliliğin hissedilemediği yerlerde, çoğunlukla fonksiyonel ve sosyo-ekonomik açıdan, insanların ihtiyaçlarını karşılayamamalarına neden olacak şekilde büyük bozulmalar yaşanmıştır.

Kentsel alanlardaki çeşitlilik, (biçim, kullanım ve kullanıcılar olmak üzere) birçok konuyu kapsar. Bu çeşitlilik algısal deneyimde çeşitliliği ve bunun bir alana üç boyuttaki yansımasını sağlar.Çeşitlilik kavram, mahalle kapsamında, konut tipolojileri, bina (ve diğer yapısal) biçimleri ve dış mekanları (kamu, yarı kamu ve özel açık alanlar) ve doğal elemanlarla ilintilidir. Öte yandan kullanımların ve işlevlerin iyi dengelendiği bir çeşitlilik içinde insanlar pek çok yarar yanında daha iyi bir sosyal yaşama sahip olurlar.

Bu çalışma Gazimağusa’nın birbirinden farklı özelliklere sahip dört mahallesinde analizlere dayalı olarak yapılan objektif göstergelere yoğunlaşır. Söz konusu mahalleler, aynı zamanda daha önce gerçekleştirilen kapsamlı bir kullanıcı araştırmasında “Gazimagusa Alan Çalışması, Oktay, 2010” öznel (subjektif) değerlendirmelerin yapıldığı alanlar olduğundan, nesnel (objektif) ve öznel (subjektif) değerlendirmelerin

karşılaştırılarak, çeşitliliğin mahallenin işlevselliğine olası etkilerinin anlaşılmasına zemin hazırlayacaktır.

Anahtar Sözcükler: Mahalleler, çeşitlilik, Nesnel (objektif) ölçüler, Gazimağusa mahalleleri.

To Mum

ACKNOWLEDGMENT

I would like to give my warmest thanks to Professor Dr. Derya Oktay not only for her support and guidance in preparation of this study, but also for introducing me to the wonders and frustrations of scientific research. Whenever I encountered the difficulties and disappointments, she gave me the confidence to go on; I will never forget what she had kindly done for me.

Besides, I sincerely appreciate Professor Dr. Robert Marans and Professor Dr. Şebnem Önal Hoşkara for reading the previous drafts of this dissertation; I deeply feel honoured bound to have them as my jury members.

My gratitude also goes to other lecturers of MS in Urban Design Program in Architecture Department of Eastern Mediterranean University whom helped me a lot to broaden my knowledge within the past two years. Also, I would like to thank all my friends in this university for providing me with their great cares.

Last, but not the least, I owe quite a lot to my family who encouraged me to travel all the way from Iran to Cyprus; their support and care helped me to stay focused on my study; I would like to dedicate this study to them as an indication of their impact in my whole life.

PREFACE

We gladly write a preface to an intelligent and sensitive study in urban design with its focus on diversity in community development in the city of Famagusta, northern Cyprus. This study is not simply about Famagusta, but suggests themes beyond the "pursuit of diversity in neighbourhoods", ushering in the central theme of modernity. This study is an important contribution to the idea of modernity, located on the island in the eastern Mediterranean. We suggest that anyone holding this study in their hands, or focus the eyes on the computer screen, read carefully and with respect that this study deserves.

Reading this study led my memory back to the city of modernity in the first part of the twentieth century: Berlin. We want to, simply, in a nutshell, recall how Berlin produced architects and urban designers involved in modern housing projects that showed the way for subsequent generations.

It was the Prussian architect Hermann Muthesius who studies the "Garden City Movement" in England during the transition from the 19th to the 20th century. There was great interest in this movement, especially in Germany in the late 19th century, since industrialization hit the major cities in that country. It was realized that the poor and socially disadvantaged in Bismarck's country had to be taken care in order to win them for the enormous efforts in industrial production and coal mining energy sector. Social security, Kindergartens and football clubs were founded in order to sustain the next generation for the coal mines and factories. The issue was put on the front burner

by the sociologist Ferdinand Tönnis in his celebrated work, Gemeinschaft und Gesellschaft (Community and Society, 1870s), wherein he noticed the different societal structures and living conditions between the province (community) and the urban areas (society). This study focuses on the community (Turkish: Mahalle; German: Gemeinschaft; English: community or neighbourhood); however, as the study makes clear, at the beginning of the 21st century, it is not such a clear dichotomy, differentiating between urbanity and community, since the demography and socio-economic structures have become far more subtle and differentiated than it was during the late 19th and early 20th century in Europe.

Muthesius introduced the "Garden City Idea" to another Berlin architect and painter of the new generation, namely Bruno Taut. In the Berlin of the 1920s there was enormous need for social housing to shelter, especially, the poor and the lower middle classes. Taut, along with Berlin's chief architect Martin Wagner, and the new generation of architects, entered into developing Modernist Housing Projects, residential development, and city planning. In short, modern urban design was born: aside from Taut, Martin Wagner, Walter Gropius, the founder of the Bauhaus Weimar/Dessau in 1919, as well as Le Corbusier, participated. Especially, the famous urban design project known as the "Weissenhofsiedlung Housing Exihibiton" in Stuttgart 1927 was to point the way towards an amalgam between "Garden City", glass and style, as well as environmental concerns. It should be mentioned that the Modernist Housing Estates of Berlin was recognized as a UNESCO World Heritage Site.

Historical events were to show that architecture, urban and city planning are not devoid of politics. In due course, with the advent of Nazi Germany, Bruno Taut, Martin Wagner, and Fritz Reuter, as well as many other professional and intellectual persons were forced into exile.

It was in great appreciation that Taut, Wagner, and Reuter, as well as the musician Paul Hindemith, were offered refuge by the newly founded Republic of Turkey with its leader Atatürk, in Istanbul and Ankara, during the 1930s. This chapter between Germany's professional and intellectual elite, including many architects, urban designers, city planners, philosophers, medical people, and university professors, and the young Turkish Republic is not as well known as it should, and is, no doubt, an exemplary moment in history in solidarity and humaneness between different nationalities, exemplified by the newly founded Turkish Republic, Atatürk, and Inönü, the second president of the Republic.

Fritz Reuter, who was to become the famous mayor of Berlin-West in the 1950s, was to introduce the first courses in urban design at Ankara University in late 1930s; Bruno Taut honored himself, with the approval of the city of Ankara, with his famous building, known as the "Dil ve Tarih Cografya Fakültesi Binasi" in the district of Sihhiye, down town Ankara. Martin Wagner and his Austrian colleague Clemens Holzmeister participated in the urban planning of modern Ankara itself. This explains why, the writer of this preface, felt at home immediately, when he started his tenure as visiting professor at METU in the late 1980s.

Modernity and Berlin: this means in the arts the paintings of Otto Dix, Georg Grosz, and Max Beckmann depicting the shortcomings of architectural and modern urban design; the classic silent film by Fritz Lang, "Metropolis" (1927) shows to an astonishing internet student generation, the essential issues of urban design and planning. In philosophic-sociological literature we find relevance in the works of Max Weber, as well as Georg Simmel, and Siegfried Kracauer. Careful readers will find highly relevant and interesting issues of modernity debated by these luminaries of the early period of the modern age movement.

The present study, its carefully crafted methodology, enmeshing text, illustrations, graphs, demographic statistics, digital photography, and, not the least, careful and critical observations, yields to the careful reader precious insights and suggestions as to realize diversity in unity, in urban design, as to promote civilized life worth living.

Professor Dr. Ernest Wolf-Gazo
December 2, 2011
Cairo, Egypt

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF MAPS

Chapter 1

INTRODUCTION

1.1 Background and Significance

Importance of diversity or variety has been recognized by social scientists and many of the research reports focus on the problems of the environments without diversity, stressing the negative effects of monotony – the quality of environments lacking visual variety and leading disorientation (Lozano 1974, 358, Rapoport 1977; in Oktay 1995). The underlying purpose of this study is to evaluate the physical and spatial qualities that create diversity in uses and users which are being considered the basis of well-functioning of the neighbourhood environment. Jacobs (1961), in her seminal book *The Death and Life of Great American Cities*, and Bentley et al (1985), in their highly influential book Responsive Environments, highlight that diversity is one of the key qualities in urban environments and to achieve a greater diversity in practice, variety of experiences must be offered by urban places. Bentley et al (1985) find variety of experiences closely dependent upon the variety of land use and variety of forms. Furthermore, a good mixture of uses is essential to ensure diverse inhabitants from different walks of life cut across age groups. In other words, if development is not diverse in the mentioned ways, it would result in homogeneous built form, monotonous urban landscape and segregated social communities that will more or less lead to an overall increase in traffic congestion and air pollution; a condition that not only causes

physical, functional and spatial disorder, but also creates social, psychological and environmental problems that negatively affects the quality of communal lives (Wheeler, 2004).

In the last few decades, cities have experienced dramatic changes due to the pressure by huge concentration of population and dominance of vehicular movement as well as inappropriate urban planning approaches. These can be considered as the undesirable side effects of modernisation that have profoundly transformed shape of the cities in many developed and developing countries; their urban blocks have been typically amalgamated into larger units, diversity within them has been reduced significantly and ultimately they have been specialized zones of single use with high dependency on car (Bentley, 1985).

Famagusta, the second largest city in North Cyprus, reflects considerable changes in its urban areas following to the huge wave of population movement into the city after the war 1974 and more importantly after establishing Eastern Mediterranean University in 1986. The growth pattern of the city has shown a random and haphazard type of development in the same direction of the university and also at the northern suburbs of the city. In addition to the serious defects in design of the newly developed quarters within and outside of the city, traditional settlements also face some obvious shortcomings which make them appear somewhat isolated from the rest of the city. On balance, either in newly developed settlements or in the traditional areas, the city demonstrates sort of disregard in offering experiential variety which has decreased the level of social interactions and communal use of outdoor environments.

1.2 Research Problem Statement

Lack of experiential variety within most of the neighbourhoods of the city of Famagusta is the major concern of this study; that is to say, the residential settlements of this city have been fallen into a considerable decline in terms of offering effective communal outdoor activities. In fact, monotonous environments have completely replaced diverse and sociable urban places. In particular, newly developed residential areas reflect a high level of monotony due to repetition of multi-storey blocks in single use zones; lack of defined public and semi-public outdoor spaces as well as wrong urban planning policies such as zoning– not offering variety of uses in fine grained mixture. These can be considered as the consequences of rapid and unplanned development of the city that has brought an apparent increase in dependency on car which greatly discourage walking and cycling within the neighbourhoods while the great opportunity for a rich experiential meaning and effective communal life is ignored. On the other hand, since industrialization era, traditional settlements of the city are no longer satisfying places to live and work since they could not adjust with the recent generation's needs; hence, they are predominantly inhabited by elderly and lower income groups of people which has made the environment look rather lifeless, dull and inert. In other words, lack of variety of experiences in both newly developed settlements and traditional quarters of the city of Famagusta, has failed to provide a sociable and well-functioning environment. Above all, it is believed that the isolated character of the island leads to a sort of monotony in its own nature; therefore, diversity might be applied as an important criterion for confronting this issue.

1.3 Research Objectives

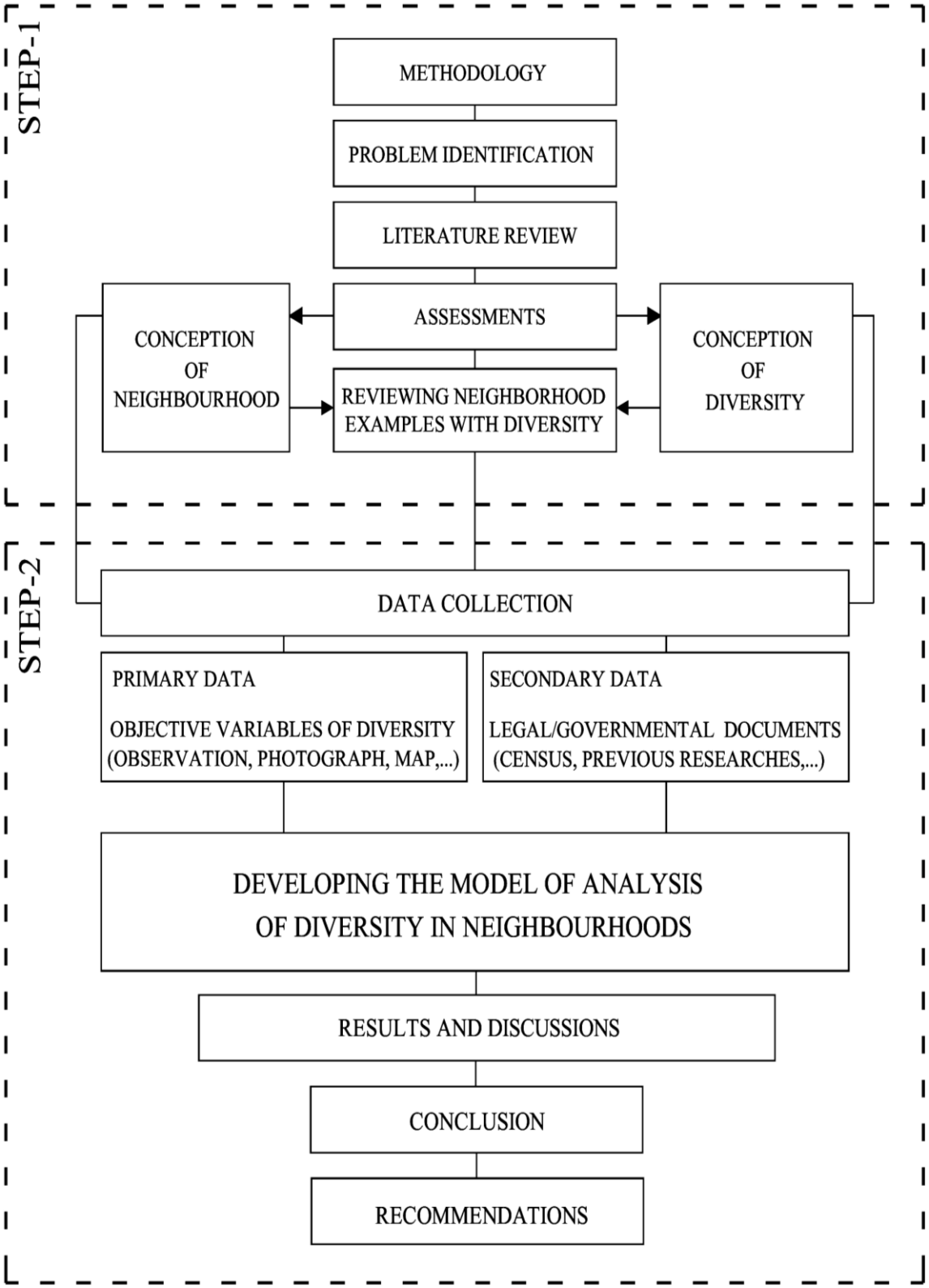
The main aim (Longer term) of this study is to put forward series of recommendations for achieving the utmost experiential variety within the neighbourhoods in order to make them more sociable and well-functioning environments to live and work; that is, bringing more meaningful social life to those neighbourhoods. In order to reach the main objective of the research, specific objectives should be formulated in advance.

Thus, the study seeks to briefly review the two conceptions of neighbourhood and diversity to be able to explore the possible impact of diversity on neighbourhoods' communal life. Therefore, it tries to obtain a complete set of objective variables affecting variety of experiences in neighbourhoods in order to develop an analytical model in which the determined variables would assess the conception of diversity among neighbourhood environments. This will also specify the degree to which these attributes exist in the certain neighbourhoods of Famagusta.

1.4 Research Conceptual Framework

The following schematic diagram (Table1.1) is designed as a conceptual framework of this study that includes two major phases which are opened to define the procedure of the research. It therefore helps the research to establish a logical structure to serve as basis for organizing the thesis.

Table 1.1. Conceptual Framework of the Study



(Source: Author 2011)

The first step of the study seeks to carry out a comprehensive literature review to acquire a deep understanding on the major conceptions of this study: “Neighbourhood” and “Diversity in Neighbourhoods”. Afterwards, it goes through a theoretical analysis of certain noticeable examples as both traditional and newly developed neighbourhoods that offer a good variety of experiences from various regions of the world.

In the second step, based on the carried literature review and the theoretical examinations, the study seeks to acquire a complete set of data to develop a model for assessing diversity within neighbourhood environments. As discussed before, the model will be designed on the basis of the objective variables which will be obtained through both fieldwork and pre-fieldwork steps. More detailed information on research methodology and also the methods adopted for collecting the data will be given in Chapter 4.

The proposed model of this study will then assess the level of diversity within four certain neighbourhoods in the city of Famagusta, namely: Suriçi (The Walled City), Baykal, Karakol, and Tuzla. To sum up, regarding the findings of both theoretical and analytical assessments on the case studies of this research, a series of recommendations on the examined neighbourhoods of Famagusta will be made up towards the significance of experiential variety and a better communal life among residential settlements.

1.5 Structure of the Thesis

This thesis is made up of five main chapters as pointed below:

Chapter 1 Introduction

This chapter presents the conceptual and methodological aspects of the research. It briefly describes the significance and background of the research, defines problems, declares the main and specific research objectives and finally provides a comprehensive framework for outlining the methodology and research methods of this study.

Chapter 2 Understanding the Conception of Neighbourhood

Chapter 2 holds out a theoretical review on the concept of "Neighbourhood", reaching a general understanding on history and development of neighbourhoods (*Mahalle* in Turkish); afterwards, it will focus on the conscious development of the neighbourhoods as planning idea for designing neighbourhoods in contemporary urban environments.

Chapter 3 Understanding the Conception of Diversity in Neighbourhoods

In line with the previous section, this chapter continues the theoretical review of this research likewise; it develops a profound understanding on the concept of "Diversity in Neighbourhoods", evaluating different scholars' theories and assumptions so that a suitable framework for analysing this concept can be established accordingly. Then, it will represent different neighbourhood examples around the world in both traditional and newly developed environments which offer diversity among their physical, functional and socio-economic structures; this will also help the research find useful clues about a well-functioning neighbourhood.

Chapter 4 Famagusta Neighbourhoods (Analytical Case Studies)

This chapter comprises a brief overview on development of the city of Famagusta and study areas of this research as well. Afterwards, on the basis of the understandings provided on the conception of "Diversity in Neighbourhoods" along with the acquired measures for assessing this concept, the study develops a comprehensive model for analysing diversity in neighbourhood environments which will be then implemented on four neighbourhoods of Famagusta.

Chapter 5 Conclusion and Recommendations

Major findings derived from the carried analytical assessments of this study will be discussed in this chapter with the purpose of putting forward recommendations on significance of experiential variety within the neighbourhoods to ensure the effective communal transactions among the environments for making them better places to live and work.

Chapter 2

UNDERSTANDING THE CONCEPT OF NEIGHBOURHOOD

2.1 Introduction

When the term neighbourhood is used it brings to mind the word 'neighbour' from which it derives. In the English dictionary, a neighbour is "one living or located near another" and neighbourhood is defined as "a section lived in by neighbours and…having distinguishing characteristics" (Webster's Ninth New Collegiate Dictionary, 1991). In the literature, there is no agreement on the exact definition of a neighbourhood but certain characteristics that describe it persist in all the available definitions. For instance, Alexander et al. (1977) conceived a neighbourhood as a spatial and sub-cultural unit, in their 'community of 7000,' within a larger city pattern that are "small and self-governing" with identifiable boundaries (Alexander et al. 1977, pp. 69-90). Pacione (2005) defines it as "an urban district, in a strict sense defined as one in which there is an identifiable subculture to which the majority of residents conform" (Pacione 2005, p. 672). It is conceived as a spatially defined specific geographic area and a functionally defined set of social networks. In this context, they are assumed to be the spatial units in which face-to-face social interactions occur; the personal settings and situations where residents seek to realize common values, socialize, and maintain effective social control

(Schuck et al., 2006). This conceptualization of the neighbourhood while relevant to the industrial city can no longer hold for today's cities as modern planning had since consigned the concept to a catchment area comprising super blocks defined by major roads – the car determined where one neighbourhood ends and where another began. However, in the postmodern literature and practice, several other attempts have been made foremost by the New Urbanism Movement to include traditional and modern practices into a new urban practice. They conceive neighbourhoods (or better stated, good neighbourhood planning) as compact, mixed-use, pedestrian friendly developments that include public facilities and services for their inhabitants.

It can be concluded that although no exact definition exists, there are several characteristics of a good neighbourhood planning that have evolved with time (as discussed in the following sections 2.2 and 2.3). Moreover, common to all the different characterization of a neighbourhood is the fact that it is an entity that has spatial, functional and social dimensions. Therefore, an exact definition in this study is not the matter of concern, but what is needed is a set of recommendations for a good neighbourhood planning.

2.2 Neighbourhoods in Traditional Settlements

The practice of neighbourhood development has a long history, most probably dating from the earliest cities inasmuch as the excavations have revealed their physical trace as spatial division of cities into residential zones (Smith, 2010). Urban scholar Lewis Mumford noted that,

"neighbourhoods, in some primitive, inchoate fashion exist wherever human beings congregate, in permanent family dwellings; and many of the functions of the city tend to be distributed naturally—that is, without any theoretical preoccupation or political direction—into neighbourhoods" (Mumford, 1954:258).

As the above quotation implies the very essence of human existence in communities presupposes the creation of neighbourhoods and certainly this has been the norm in traditional pre-industrial settlements from Mesopotamia to China and from Anatolia to Persia. The description of these settlements has been dealt with in several publications and there is no need to take that historical journey in this study. However, the readings from these settlements regarding their general characteristics will be treated here.

According to Rudin and Falk (1999) and several historians and urban theorists, the cradles of human civilization starts from Mesopotamia and the Nile Valley in Pharoanic Egypt and spread to Greek and Rome that consequently shaped European civilization. These cities were, without a doubt, "centres for religion, trade and culture." The cities down to the middle ages were relatively small, compact, mixed-use and configured basically on the necessity of travel by foot (Rudin and Falk 1999, p. 11). One prime example of a traditional city that is based on the cluster of neighbourhoods is the Turkish or Ottoman city. The main distinguishing characteristic of the Ottoman city, according to Oktay (2004), "was its compartmentalization by *mahalles* (quarters), the outcome of ethnic particularities and religious differences." (Figure 2.1) *Mahalle* was a self-sufficient socio-cultural unit "based on the social order of Ottomans," complete with its own religious centre, "small local market, fountains, imaret (open kitchen) and, at

times, a workshop" spatially marked by a somewhat diffused geography bordered by either groups of trees or vegetable gardens (Oktay 2004, pp. 26-27).

Figure 2.1. Neighbourhood (*Mahalle*) as a Socio-Spatial Entity
(Source: Tαρεογλh, 1963 in Oktay, 1999)

2.3 Neighbourhoods in Contemporary Settlements

In the examples of traditional neighbourhoods in the previous section, it is clear that most of the arrangement and conception of the neighbourhood, though consciously done, were in most part not a result of rigorous planning ideas. That means, although neighbourhoods have always been part of the socio-spatial arrangements in these settlements "as comprehensive residential systems," it is modern urban planning which consciously developed it as a planning idea for new settlements (Kallus and Yone, 1997). This started in 19th century Britain "…as a reaction against the industrialization which had created such great inequalities in living conditions by exploiting for profit whatever did not have to be paid for directly, such as housing, air, water and workers' health" (Relph 1987, p. 49). This evolution in urban planning continued throughout the

twentieth century but although it lead to a “great variety of urban forms,” these forms either mostly did not express local cultures or did not care about the impacts which they had upon the local environments. This can be seen in the spatial formation of cities in contemporary times. However, it is more prevalent in the ‘developed world’ as seen in the much criticized ‘urban sprawl’ that has become “the primary form of urban development”, “because of its negative environmental, social and economic effects” (Newman and Kenworthy, 1989; Ewing, 1997; Hillman, 1996; de Roo and Miller, 2000; Burton, 2000; Jenks et. al., 1996; Breheny, 1992; Elkin et. al., 1991).

To put this into historical context, Krueckeberg (1983) highlights, as several other sources have done, the revolutionary change that took place with the emergence of the industrial revolution in the 19th century. During this period significant changes occurred with the invention of the steam engine and the subsequent appearance of the railroad which led to changes in how human society was structured in Europe and America foremost. To feed the emerging industries with labour, whole rural populations migrated into cities where industries were located leading to massive urbanization and the subsequent growth of the cities (Krueckeberg, 1983).

The accompanying growth of population brought its own problems in terms of inadequate public facilities, overcrowding, pollution, poor sanitary conditions of workers and an increase in the rate of crime. In response to these emerged “new town concepts such as the Garden City, the Superblock, and Greenbelt towns, which emerged during the late 19th century and the early 20th century” where “a major expansion of planning activities occurred in the early 20th century” (Boonyanunt, 1996).

The most remarkable feature of the industrial city was the automobile and the increase in car ownership and the building of super and interstate highways which increased the geographical spread of populations and settlements along the highways. This meant that there were no more restrictions on how far one could live away from the centres of cities and workplaces. Suburban living was the new lifestyle aimed at moving far away from environmental pollution of noise and fumes from traffic and looking for privacy, greenery and a breath of fresh air. This caused serious problems for the inner cities as life was taken out especially at night time and crime was in the increase while traffic accidents for commuters was having its toll not to talk about the sprawl and the banal environments that emerged as utopias. The first such attempts in planning theory dealing with the squalor and blight of the industrial city and laying the fundamentals of suburban living goes back the Garden City Movement of Ebenezer Howard in England in the 1890s. Cristoforidis (1994) and Javis (1993) give a chronology of these as follows:

- Garden Cities (1890's)
- The Superblock concept (1930's)
- Greenbelt Towns (1930's)
- New Towns (1960's and 1970's)
- Planned Unit Developments (1970's and 1980's)
- Neo-Traditional Developments or New Urbanism (1990's)

As mentioned above, the original concept of the modern neighbourhoods goes back to Ebenezer Howard. The concept was introduced as the Garden City in his 1898 book entitled, 'Tomorrow: A Peaceful Path to Real Reform.' Motivated by the deteriorating

hygienic conditions in the urban and rural England brought about by the industrial revolution, Howard proposed a scheme a city of 32,000 inhabitants (Figure 2.2). This was an attempt to stem overcrowding caused by rural-urban migration as populations from the country flooded into cities in search of employment opportunities (Aalen 1992). He also had concerns for the rural areas as neglect left the rural population without "proper drainage and proper sanitary facilities" (Meacham 1999). In this conception, the garden city would be surrounded by a greenbelt and within this area the development of facilities such as farms, hospitals, convalescent homes, and schools were proposed. The greenbelt would also act as a growth boundary for the garden city, which would thus eliminate the risk of urban sprawl.

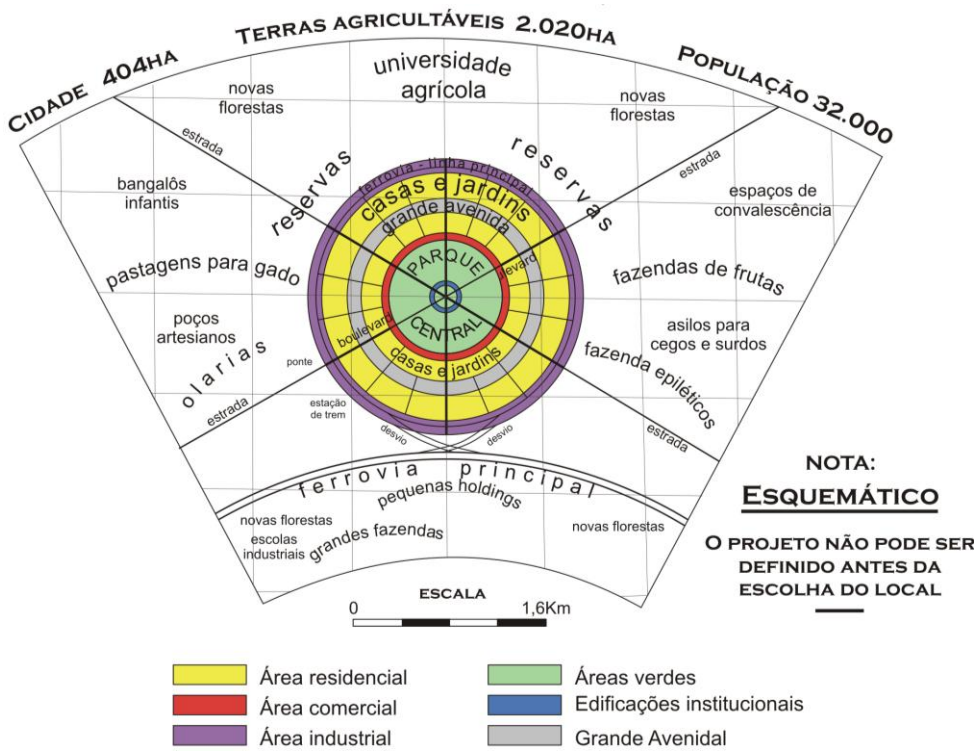


Figure 2.2. Ebenezer Howard's Garden City Plan for 32,000 inhabitants.
(Source: Tomorrow: A Peaceful Path to Real Reform, 1902)

In figure 2.3 below, Howard conceptualizes his three magnets for reforming the 20th century city of tomorrow. Contemporary critics deplore the polarity of this scheme and have therefore called for a less polarized city that will ensure a return of people to the city centres. Instead of Howard's19th and early 20th century combination of Town, Country and Town-Country, Rudlin and Falk changed the polarity of the magnets to suit the altered times and demographics of the 21st century 'Suburban Sprawl' vies with the 'Inner City' in terms of their inbuilt contradiction, and this dilemma is resolved by The Urban Neighbourhood taking the place of Howard's third 'Town-Country' magnet representing the Garden City (Rudlin and Falk 1999, p. 5).

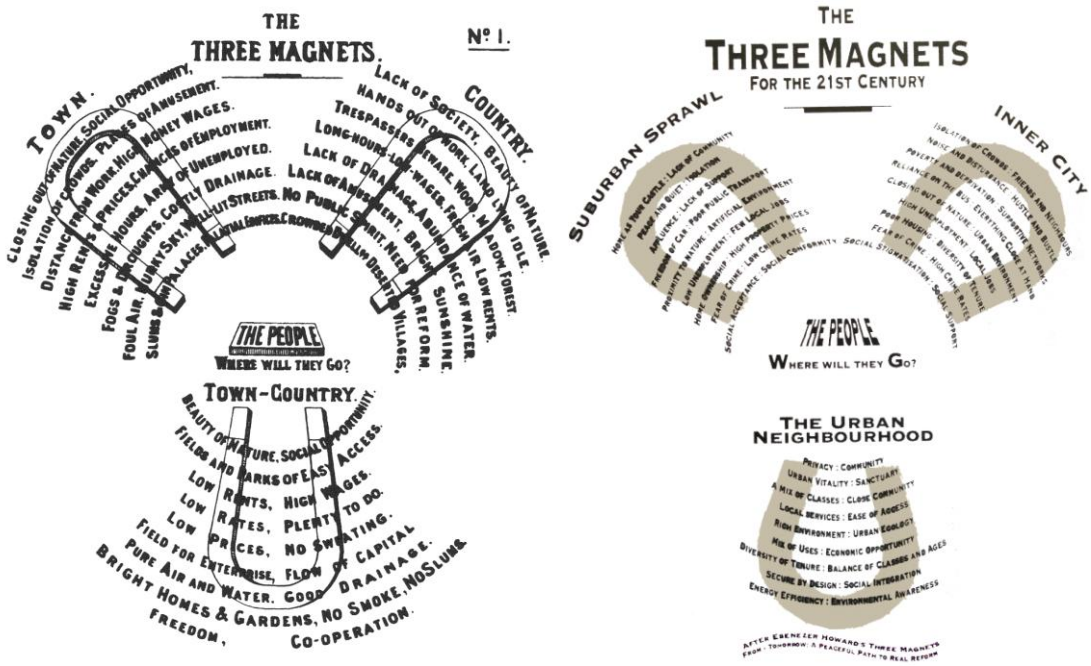


Figure 2.3. Amended 'Three Magnets' diagram, Rudlin and Falk, 1999. Ebenezer Howard's original compelling diagram has been cleverly updated to account for modern circumstance and aspirations (Reproduced from Building the 21st Century Home)

(Source: Rudlin and Falk, 1999)

Following from Howard's garden city concept, the Garden Suburb idea was conceived in the United States in the 1920's (Ward, 1992). It is from the garden city idea that two other important innovations; the *"Neighbourhood Unit"* concept developed by Clarence Perry in 1929 and the *"Radburn Idea"* conceived by Clarence Stein and Henry Wright in 1926. These two were equally as influential in the urban planning tradition around the world as Howard's garden city concept. However, one major difference between these and Howard's scheme is in the mode of transportation around which the schemes were conceived. Howard's garden city plans in continental Europe were cantered on the railway while American planners had to deal with the automobile (Rudlin and Falk, 1999).

Clarence Perry and the Neighbourhood Unit: Unlike in the Garden City idea of residential neighbourhoods proposed by Howard, this new approach, in addition to its programmatic inclusion of local services such as schools, parks, and churches for a strong sense of community, had to deal with traffic and safety issues that came about as a result of the increase in automobile traffic. The resolution of this problem lay in the modification to the residential layout found in Howard's concept. Consequently, the neighbourhood unit envisaged was one that was cantered on the school and insulated from traffic (Ward 1992).

Figure 2.4 below is a sketch published by Perry in 1929. It illustrates a neighbourhood unit with a central core by schools and civic space at its very heart and shopping facilities at the fringes where main roads intersected. This arrangement was conceived to place residences and other neighbourhood facilities in close proximity allowing

residents' to walk to the facilities they need on a daily basis, such as shops, schools and playgrounds. Thus, a five minute walk from the centre to the edge of the neighbourhood determined its size in Perry's program. The proposed population densities of 5000 people per neighbourhood in this scheme was envisaged as the normal number of people that was small enough to ensure a sense of community but adequate at the same time to support local shops (Broadbent 1990, p.126). "The street pattern was a mixture of radial avenues interspersed with irregular straight and curving grids with small parks and playgrounds liberally scattered throughout as befitted Perry's emphasis on the safety and welfare of children" (Walters, 2007).

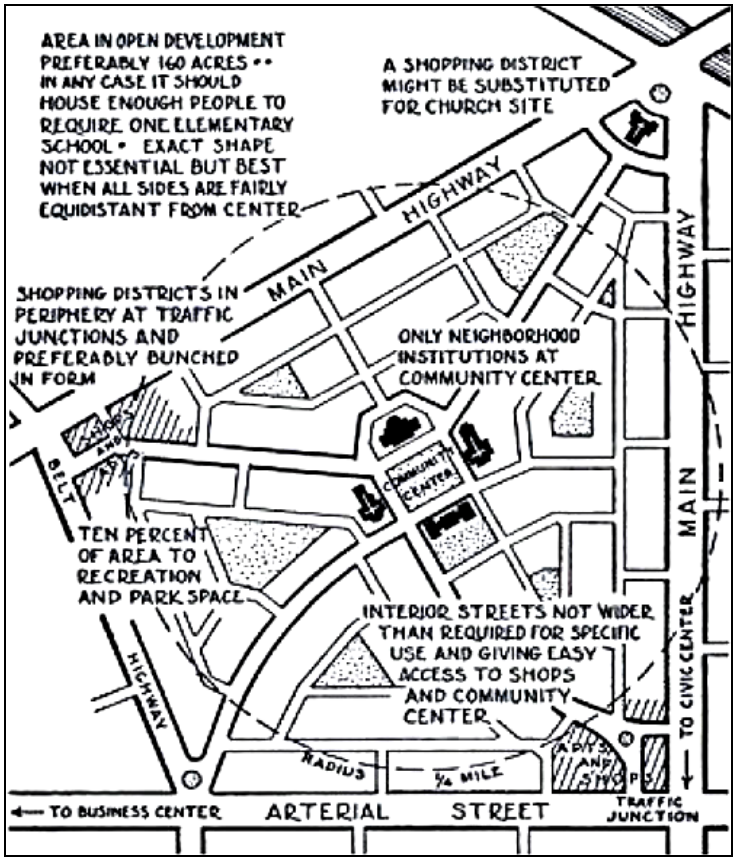


Figure 2.4. Clarence Perry's Neighbourhood Unit, 1929.The circle illustrates a five-minute walk edge
(Source: Diagram 2002 - Courtesy of Duany Plater-Zyberck and Co.)

Clarence Stein, Henry Wright and the New Towns: As discussed earlier, another planning concept of the 1920s devised in the United States that took its cues from Howard's Garden City concept was the "new town" or "Radburn idea" developed by planners Clarence Stein and Henry Wright (Figure 2.5). The Radburn project was built between 1926 and 1929 in rural New Jersey. In discussing Radburn's Garden City roots, Stein wrote: "We believed thoroughly in green belts, and towns of a limited size planned for work as well as for living" (Stein 1966, p. 37).

This project is believed to have Radburn been a more advanced improvement on the garden city idea in terms of community planning. Its main scheme comprised: the introduction of a hierarchy of roadways; the conscious and deliberate separation of pedestrian and automobile traffic; the residential "superblock;" and the orientation of residences onto parkland rather than onto streets. Here again, like Perry's scheme, the automobile plays a pivotal role in the design of the neighbourhood. In order to provide for community safety a strict separation of pedestrian and vehicular traffic they introduced a hierarchy of specialized roads and pathways throughout the community. Smaller roads were built for exclusive uses, including service lanes and culs-de-sac that provided access to houses. Secondary collector roads ran around the superblocks, while main thoroughfares linked the different neighbourhoods and provided access to the expressways that connected Radburn to the outside. Overpasses and underpasses were built where these routes intersected (Rudlin and Falk, 1999).

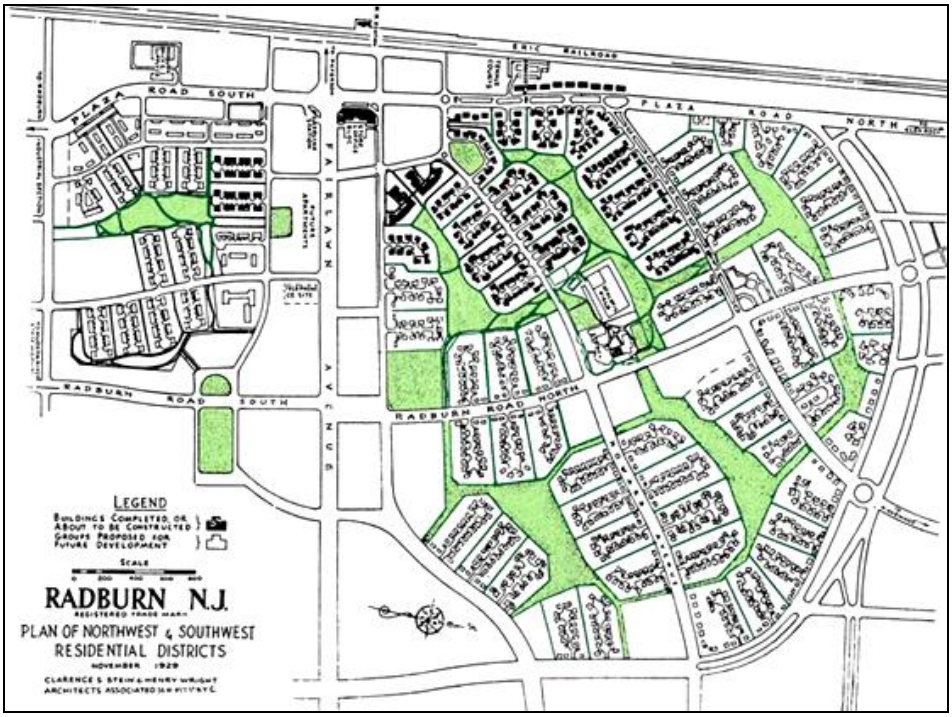


Figure 2.5. The "Radburn Idea." Neighbourhood Layout with large "superblocks" designed to separate automobiles from pedestrians.
(Source: Schaffer 1992)

New Urbanism and the Neighbourhood Concept: As head of a group of designers from the American West Coast, Peter Calthorpe joined with Andres Duany and Elizabeth Plater-Zyberk to found the Congress of the New Urbanism (CNU) in 1992. Duany and Plater-Zybrek brought the Neo-Traditional ideas to the table while Calthorpe and his group contributed their idea of a Transit-Oriented Development (TOD). The neo-traditional idea looks back at existing urban traditions from the whole spectrum of traditional settlements to good modern practices. The TOD on the other hand focuses on pedestrian-oriented neighbourhoods with a transit corridor (Calthorpe, 1993). These two ideas form the basis of the movement of the New Urbanism. Together they represent an updated version of good practices with a historical undercurrent developed for the American urban conditions at the start of the 21st century (Figure 2.6).

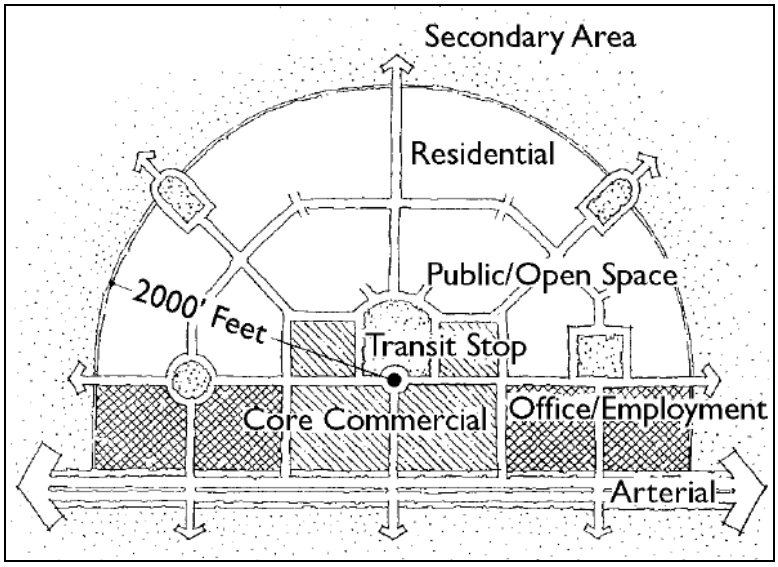


Figure 2.6. Transit-Oriented Development
(Source: Calthorpe, 1993)

However, it should be stressed that the Duany-Plater-Zyberk idea was apparently influenced by Perry's neighbourhood unit concept in that, they illustrated a similar sized urban area, bounded by highways and scaled to the five minute. In this contemporary version, more extensive commercial development is located along the edges of the bounding highways, and the street of mixed-use buildings leads from one corner into the central public park, where community institutions and some local shops are located. The school has moved to the edge, due to the much larger space requirements for playing fields and parking, and this educational facility is now shared between neighbourhoods. The Duany- Plater-Zybrek street grid is tighter and more organized than Perry's but similar in concept to the original (Walters, 2007) (Figure 2.7).

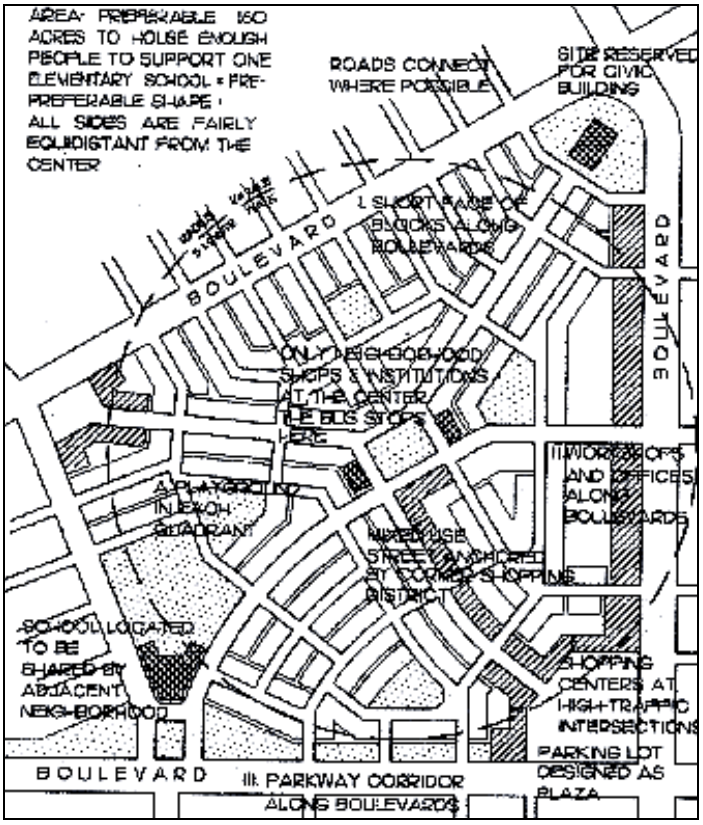


Figure 2.7. Traditional Neighbourhood, 1997, update of Perry's concept. As before, the radius of the circle is a quarter of a mile.
(Source: Diagram 2002 - Courtesy of Duany Plater-Zyberck and Co.)

Nevertheless, the new urbanist practice has its sets of principles divided into three main categories, the region, metropolis, city and town; the neighbourhood, the district and the corridor; and the block, the street and the building. For the purpose of this study, the neighbourhood principles it stipulated in the charter of the Congress for the New Urbanism and which every new urbanist advocates are summarized as follows (see CNU charter, 2001):

- Neighbourhoods with identifiable centres and edges
- Compact development
- Mixed land uses rather than single-use pods

- Infill development to revitalize city centres
- Interconnected streets friendly to both pedestrians and cyclists
- Transit-oriented development (TOD)
- Well-designed and sited civic buildings and public gathering places
- The use of building, building typologies to create coherent urban forms. That is, diversity and variety
- High quality parks and conservation lands used to define and connect neighbourhoods and districts
- Architectural design that shows respect to local history and regional character

2.4 Summary and Conclusion

Although the term 'neighbourhood' has been defined in different ways according to different time and purpose, its understanding as spatial and social entity is a common theme. In the urban literature, today it is perceived as a geographical entity with its own character and identity with clear or subtle boundaries in which people live in close proximity with each other and within walking distance to their daily necessities of life. Its history has however been mixed. It represented a small close-knit community with its own social and economic amenities and variety of uses in traditional settlements. With the advent of the industrial revolution and emergence of the automobile the neighbourhood lost most of its character and community image. Industrial cities became congested, unhygienic and banal.

In reaction to this urban plight, several attempts by planners were made foremost amongst them, the English urban planner Ebenezer Howard and his Garden City

Movement. Later, others like Clarence Perry, Clarence Stein and Henry Wright in America followed his lead. The modern urban and suburban areas has led into a sort of downfall in terms of experiential variety which can be specifically referred to the pressure by huge concentration of population, domination of vehicular movement as well as zoning approaches and sprawl.

Yet, another movement called the New Urbanism that clearly saw the modern urban space as meaningless, purposeless and banal sought to go back to good urban planning practices by revisiting historical examples as well as contemporary ones. New Urbanists are of the opinion that neighbourhoods in compact model of development with integrated and mixed uses, pedestrian oriented design, covering the fundamental public facilities and services that offer a wider experiential variety and are more likely to provide inhabitants with a sociable environment.

Chapter 3

UNDERSTANDING THE CONCEPT OF DIVERSITY IN NEIGHBOURHOODS

3.1 Introduction

In the last few decades, cities have grown dramatically as a result of migration and urbanization in the case of less developed and developing countries. This experience has brought with it enormous pressure on cities as populations are mostly concentrated in urban centres. Added to this is the proliferation and domination of vehicular traffic as urban planning practices have remained largely inadequate.

Specifically, the hollowing-out of city centres due largely to urban out-migration into suburban neighbourhood environments has meant that inner city neighbourhoods in cities of many developed and developing countries have fallen into considerable decline as diversity within the urban blocks has been reduced significantly and they have been amalgamated into larger units as they became specialized zones of single use with low density and high dependency on car (Bentley, 1985). This has caused physical, functional and spatial disorder as well as social, psychological and environmental problems that affect the quality of their lives.

3.2 Definition of Diversity

In her seminal book entitled, *The Death and Life of Great American Cities*, Jacobs (1961), and Bentley et al. (1985), in their highly influential book, *Responsive Environments*, have considered diversity as one of the key qualities in an urban environment and that greater diversity can practically be achieve by the variety of experiences offered by urban places. One tool used in contemporary planning to achieve diversity is the mix of uses, users and forms. An urban environment which caters to people's need and their senses and sensibilities should be able to offer different functional uses for different users in its built form.

As wheeler (2004) and several theorists and practitioners dealing with the urban environment have observed, lack of diversity and variety in experience in urban places lead to "homogeneous built form, monotonous urban landscape, segregation of social groups, and increased driving, congestion, and air pollution" (Wheeler, 2004).

Similar sentiments about the inadequacy of variety of experiences and meaningful social transactions in contemporary cities have been echoed by Jacobs (1961) and Krier (1984) in a long list of persistent critics of modernist urban form. They observe that to achieve variety in any urban environment is a function of the number and variety of activities located within it. This is further achieved by the provision of a variety of building types and forms which in turn offer a high degree of visual variety. Variety of use has therefore been considered the most significant level of experiential variety (Jacobs, 1961) (Figure 3.1).

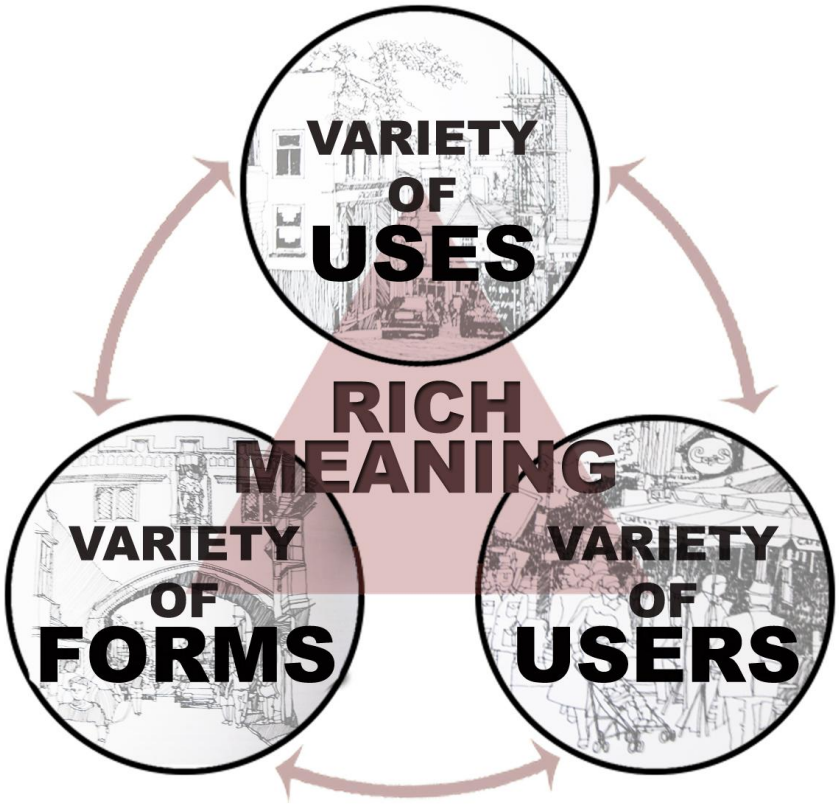


Figure 3.1. Different Levels of Variety
(Source: After Bentley et al. 1985)

As highlighted by Saeidi and Oktay (2011), at the smaller scale, an ideal neighbourhood that meets all users' requirements is more likely to be in a format that is widely diverse in terms of form, use and users; as it is believed that a balanced mix of uses and facilities is more likely to be in a prosperous form of development which is well integrated with natural environment and holds various groups of residents together. In fact, diverse users in age, gender, education, income level etc. have the chance to fulfil their needs through various uses and facilities available there, then the opportunity to get over a variety of experiences within the environment is offered that will also bring about a richer perceptual meaning to the area. Since different people interpret the environments in different ways and there will be more valuable and meaningful social transactions.

While on the contrary, lack of diversity in specialized zones of single use (Figures 3.2, 3.3 and 3.4), makes those environments unable to come through variety of experiences, therefore the conception of meaning that has its roots in experiential variety and is highly dependent on variety of forms, uses and users within such environments, remains quite missing (Bentley, 1985; Saeidi and Oktay, 2011).

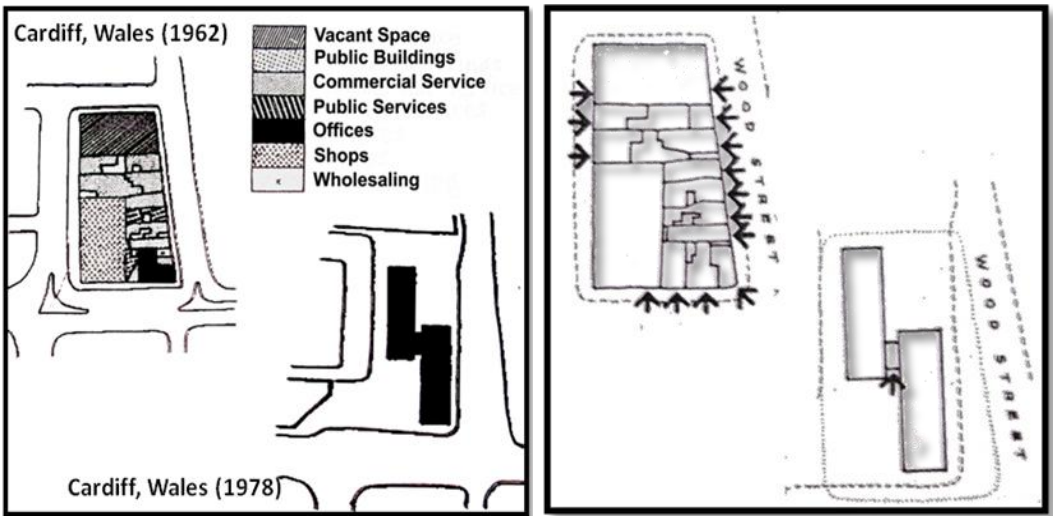


Figure3.2 and 3.3. Amalgamation of Sites into Larger Units
(Source: Bentley et al. 1985)

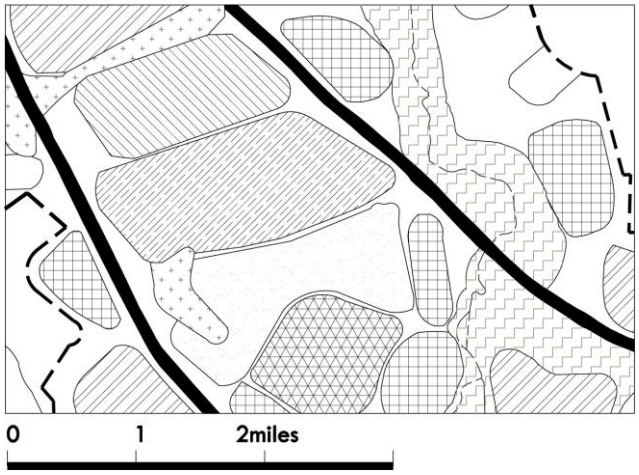


Figure3.4. Specialized Zones of Single Use
(Source: Bentley et al. 1985)

Jane Jacobs (1961) determines four essential prerequisite for creating diversity in urban environments: “dense concentration of people and activities; mix of primary uses; short and pedestrian-friendly blocks and streetscapes; mix of building types in age and condition”. The neighbourhood unit then must be compact, pedestrian-friendly, and mixed-use by reason that when the fundamental uses and functions are being clustered together closely, people will comfortably get the opportunity to walk for finding their needs within their neighbourhood (LEED-ND; Farr, 2008). Such condition provides users with opportunities for more effective neighbourhood transactions and pleasant social life which together enhances the quality of community life.

This said, diversity remains a complicated concept. Talen (2008, 2006) the biggest challenge to diversity has been the already establish practice of modern planning that has given rise to spatial separation. She argues that separation is antithetical to diversity and that although racial segregation is still evident in the United States, class separation is on the increase. “The emerging settlements are more of gentrified neighbourhoods where even the mix of income levels is impossible. She believes that even with the difficulty in bringing diverse racial and economic entities together, certain “design principles can help sustain diverse neighbourhoods” (Talen 2008, p. 7; pp. 15-32).

However, on the other side of the argument, there are sceptics who doubt planners’ abilities to use design to achieve social diversity. For instance, Lang (2005) is sceptical about current planning practices where there is an emphasis on bringing people with different income levels and social tendencies together in the name of diversity. Drawing on the failures of such schemes like CIAM’s (Congress International d’ Architecture

Modern - International Congress of Modern Architecture) Pruitt-Igoe, he recognizes the fact that people with means in a democratic society will always live where they want and they have the market to make that possible. “It is the poor and powerless who are always left out to take whatever is leftover by the powerful and more affluent in a society, and therefore it is this group’s “needs that require special attention.” Despite Talen’s (2008) critique of his thesis, he does advocate diversity but one with sub-areas designed for one population “while larger areas cater for the whole variety of people living within them,” thus his concept of “micro-segregation with macro-integration” (Lang 2005, p. 369. See also Talen 2008, p. 6-7 for her critique on Lang). It does seem from both arguments that certain planning or design principles do work to achieve diversity only the details of how that is done may differ.

3.2.1 Diversity of Forms in Neighbourhoods

Built Environment: Diversity in built environment intends to establish a perfect physical setting for a well-functioning, sociable neighbourhood (Talen, 2002). In this context, aspects such as form of development, existence of a legible centre and a legible edge (boundaries), density, the size and the shape of urban blocks, formation of street network, circulation facilities for vehicles, pedestrians, and needs of less-able and disabled users need to be investigated. In addition, a neighbourhood with a wide range of housing types and sizes can support a diverse population that includes students, families, seniors, group housing, young singles, or couples.

Natural Environment: Diversity in natural environment within neighbourhoods is an important determinant in shaping the urban form that includes hills, waterfronts, natural parks and green open spaces, trees in streets and greenery in private and semi-private

outdoor spaces. Presence of green public outdoor spaces or waterfronts for instance not only provide people with a place to engage with a range of recreational activities, but also offer them to escape from routines of daily life, make them happier, healthier, and more relaxed, and ultimately improve the quality of their life (Duany, 2000).

3.2.2 Diversity of Uses in Neighbourhoods

Diversity of uses or functional diversity is essential to promote community liveability, transportation efficiency, and walkability. The diverse uses of blended neighbourhoods tend to support each other and reinforce a sense of neighbourhood character. It covers mix range of uses and activities including housing, educational facilities, retail, entertainment, cultural institutions, playgrounds, and parks etc. within a walkable distance of a set of residential units. On that ground, Murrain's (1993) definition of good mixed-use as "a finely grained mix of primary land uses, namely a variety of dwellings and workplaces with housing predominant, closely integrated with all other support services, within convenient distance of the majority of the homes" is useful.

Conventional zoning often results in segregation of residential and commercial land uses. In contrast, mixed-use development locates land uses with complementary functions close together. Complementary uses may include housing, retail, offices, restaurants, and services—destinations that people travel to on a regular basis. In this respect, in order to offer a rich diversity in uses and activities, it is necessary to follow it up in both vertical and horizontal grain as shown in figure 3.5 (Montgomery, 1993).

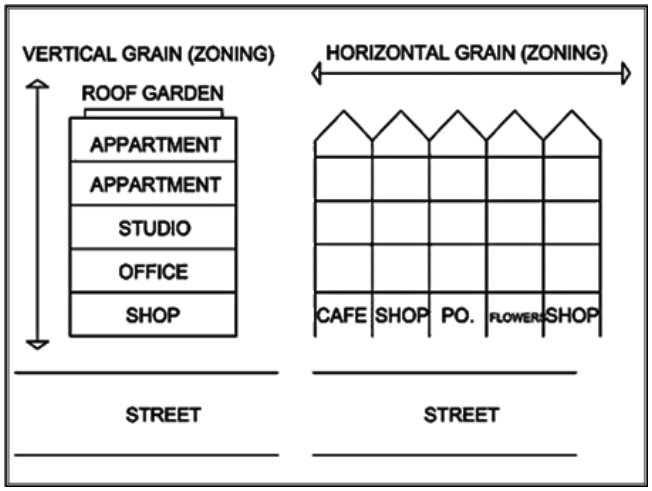


Figure 3.5. Vertical and Horizontal Mixture of Uses (grain)
(Source: Montgomery, 1993)

3.2.3 Diversity of Users in Neighbourhoods

The possibility of enhancing social life through diverse users including students, families, seniors (elderly), couples and young singles for making a complete neighbourhood has generated wide interest in urban studies. This mix reinforces neighbourhood stability by allowing people to stay in the same community throughout different stages of their lives. A diverse range of housing can allow members of an extended family to live in the same neighbourhood; it can provide housing for those who work nearby, such as young professionals new to the workforce, teachers, emergency responders and service workers; when neighbourhoods serve a variety of ages and incomes, they are more resistant to cycles of abandonment and decline, and to unhealthy concentrations of poverty. However, it should be restated here that it is this category of diversity that has attracted the most disagreement between urban theorists and practitioners, like the one discussed before between Talen (2008) and Lang (2005). This is because users are not homogenous as they may belong to different, cultural, religious, social, political and economic backgrounds. So, diversity of users should be approached

with caution, ingenuity and creativity. Several contemporary examples like those of the new urbanists (whose principles form the basis of analysis in this thesis) have proved to be workable. Also, in order to encourage diversity of users, LEED-ND (Leadership in Energy and Environmental Design for Neighbourhood Development) Rating System proposes inclusion of a sufficient variety of housing sizes and types.

LEED is recognized internationally as a green building certification system developed in March, 2000 by the US Green Building Council (USGBC) in partnership with the Congress for New Urbanism (CNU) and the US Natural Resources Defence Council (NRDC). LEED-ND is a rating system to certify projects that fulfil its requirements for "sustainable building and development practices". The rating system is based on the principles of smart growth, new urbanism and green building (www.usgbc.org).

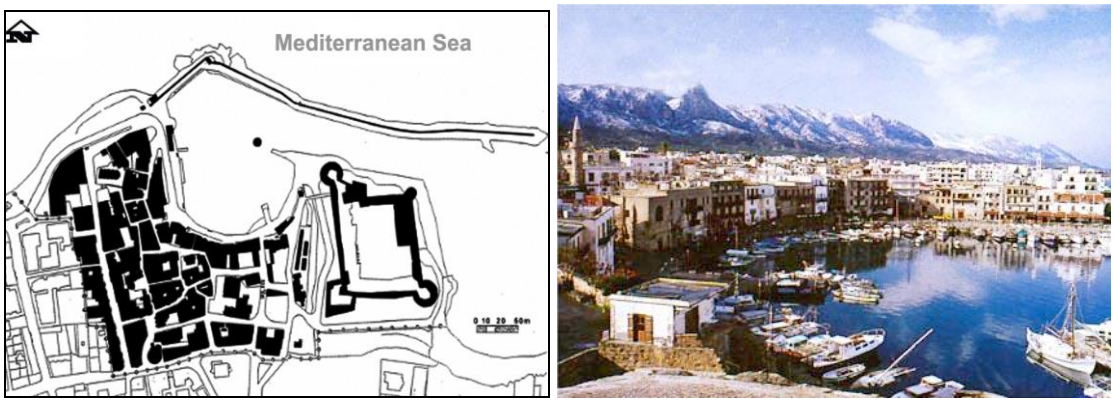
3.2.4 Examples of Neighbourhoods with Diversity

At this point, some neighbourhoods which reveal diversity in certain senses from different regions of the world have been selected and introduced in short. This tried to provide a better understanding on general perception of the term of diversity in practice, also aims to build a kind of connection between the theoretical and analytical part of the study. The collected data for the general description, photos and maps demonstrating the quality of diversity within them have been entirely gained through reviewing previously carried researches. Among the neighbourhoods are both traditional ones in Cyprus and Iran and contemporary ones in Iran and US as explained below:

-Limanarkasi, Kyrenia, Cyprus (In Traditional Settlement)

Limanarkasi (from Turkish '*liman'*: port or harbour; *arka*: back or behind) as its Turkish name implies, location behind the harbour or port, it refers to a neighbourhood located

behind the seaport of Kyrenia. Kyrenia itself is a historical and popular resort town in North Cyprus in the Eastern Mediterranean whose urban history can be traced back to the Hellenistic period (Oktay, 2006)(Maps 3.1 and Figure 3.6).



Map 3.1. Limanarkasi Mahalle, Kyrenia, Cyprus and Figure 3.6. Kyrenia Harbour
(Source Map 3.1: Oktay and Source Figure 3.6: http://www.itusozluk.com/gorseller/)

It is situated "at the foot of the northern range of mountains, the Besparmak (five fingers) Range" near to a medieval castle. As stated by Oktay (1998, P. 19-20), its traditional urban pattern echoes a "medieval organic character with well-scaled narrow streets that ascend and descend the hillside." Some parts of the neighbourhood still have their Ottoman character comprising shops and a mosque. However, other visible influences are churches that have been built by the Greeks who later acquired property there. However, the dominant group that lives in this area now is the low to middle income and ageing Turkish Cypriot population. The physical landscape in this neighbourhood is characterized by inclined and undulating planes where the user or pedestrian is always ascending and descending while they navigate. Sited by the seaside, the water feature also adds to its diversity and experience. Variety of identical built forms along with the organic pattern of this area responding to local needs and natural

environment has brought about a meaningful vibrant environment (Oktay, 2006) (Figures 3.7, 3.8 and 3.9).

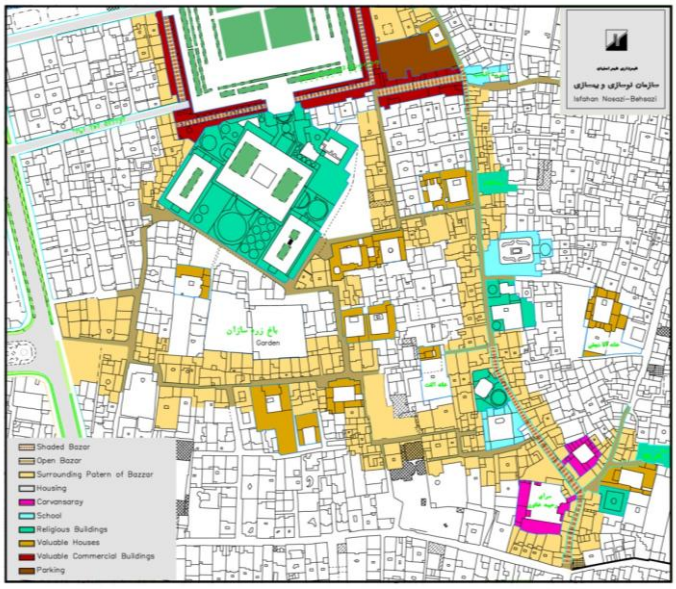
Figure 3.7., Figure 3.8 and Figure 3.9. Variety of Built Forms in Limanarkasi
(Source: http://www.mizahvecizgi.com/gezdik_gorduk_orta.php)

This neighbourhood comprises different housing typologies; religious functions: a mosque, some churches; Commercial and recreational functions: the area is replete with shops of different kinds and several recreational facilities – thanks to the harbour and it massive tourist opportunities which altogether provide a good opportunity for communal transactions and variety of experiences as a result (Figures 3.10 and 3.11).

Figures 3.10. and Figure 3.11. Mixed Use Streets in Limanarkasi
(Source: Siavash Jalaleddini)

-Masjed-Shah, Isfahan, Iran (In Traditional Settlement)

"This neighbourhood is well known for its vicinity to Naghsh-e-Jahan Square, bounding the impressive structure of Masjed-Shah accompanied with other identical built forms such as bazaar, public baths, schools, and caravansary with well contribution to public's social life (Map 3.2).



Map 3.2. Masjed-Shah Neighbourhood, Isfahan, Iran
(Source: Nosazi-Behsazi Isfahan, 2011)

Figure 3.12. Aerial Photo of Masjed-Shah, Isfahan, Iran
(Source: Unknown)

Dense and compact development and human scale buildings of the area have considerably strengthened richness of the urban fabric of this neighbourhood (Figure 3.12); also, thank to the architectural characteristics and ornamental features of the historic built forms, the neighbourhood has revealed a unique identity. (Alten, 1958; Najimi, 1988). Meanwhile, based on the religious values and the demand for privacy, morphology and spatial patterns of traditional settlements has been formed in a way that it could bring about security and privacy for families through a certain circulation system including semi-private, semi-public and public spaces (Abu-Lughod 1983; Kostof 1992; Madanipour 1998; Tabrizian, 2010) (Figures 3.13, 3.14 and 3.15).

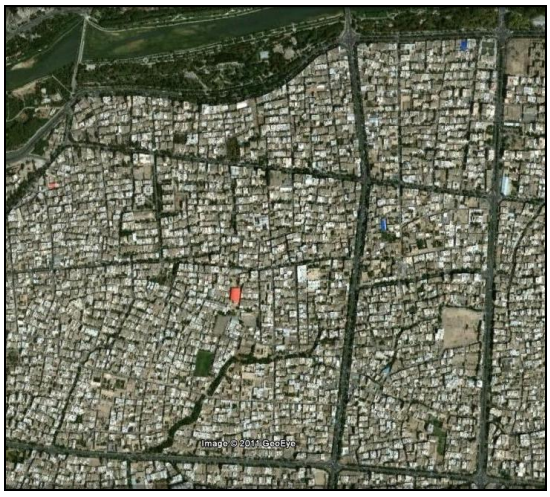
Figure 3.13., Figure 3.14 and Figure 3.15. Hierarchy of Open Spaces in Masjed-Shah (Source: Personal Archive)

Housing diversity within this neighbourhood can be seen in size and appearance of the buildings; normally, wealthy households would expand or sub-divide their houses to create new living spaces to extend their family for new generations so to live together based on the culture of Iranian settlements for social living (Tabrizian, 2010).

-Jolfa, Isfahan, Iran (In Traditional Settlement)

This neighbourhood is located in the southern part of Isfahan, close to Zayandeh-Roud River, and has no clear boundary; rather seems more perceptual by inhabitants (Map

3.3). Distinguished character of this area results from its rich historical, cultural, social and religious background which altogether had a great impact on configuration of the physical and functional development of the area. This neighbourhood was first founded for relocation of Armenian people who were forced to flee from Jolfa in Armenia because of Ottoman attacks (Afushteei Natanzi, 1971).



Map3.3. Jolfa Neighbourhood, Isfahan Iran
(Source: Google map)

Well adaption of building forms in different periods of development has offered a rich visual and physical variety to the neighbourhood (Figures 3.16 and 3.17).

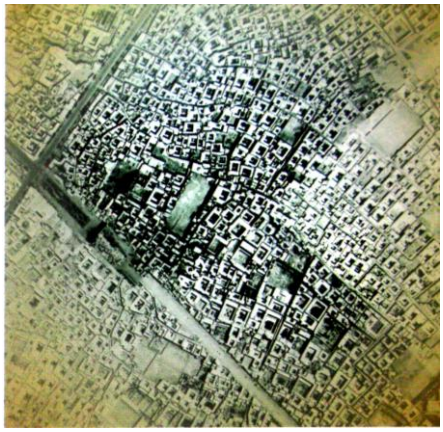
Figure 3.16.Variety in Development Periods and Figure 3.17. Vank Cathedral in Jolfa
(Source Figure 3.16: http://robertsafarian.blogspot.com
and Source Figure 3.16: Google image)

Diversity in natural elements including waterfronts, green corridors and mountain vista as well as the built up public spaces such as community gathering spaces, pedestrianized streets and green promenades has a positive impact on encouraging inhabitants in outdoor activities and social transactions (Figure 3.18 and 3.19).

Figure 3.18. Green Corridor along the Main Streets with Mountain Vista, Figure 3.19. Zayande-Roud Waterfront in Isfahan (Source: Google image)

-Gazorgah, Yazd, Iran (In Traditional Settlement)

Yazd, the centre of Zoroastrians, due to the history and generations of adaptations to its desert surroundings, has unique architectural and urban pattern characteristics (Map 3.4 and Figure 3.20).



Map3.4. Gazorgah Neighbourhood, Yazd, Iran, Figure 3.20. Aerial Photo of Gazorgah (Source: Khademzadeh, 2007)

“Community inhabitants provide their daily needs from the neighbourhood centre and socialize within the existing public spaces and paths which spatially animate common spots for people to get together within the neighbourhood. More importantly, based on the religious considerations, the hierarchical access to reach the houses is highly appreciated by dwellers grants a sense of security and community within the neighbourhood” (Khademzadeh, 2007).

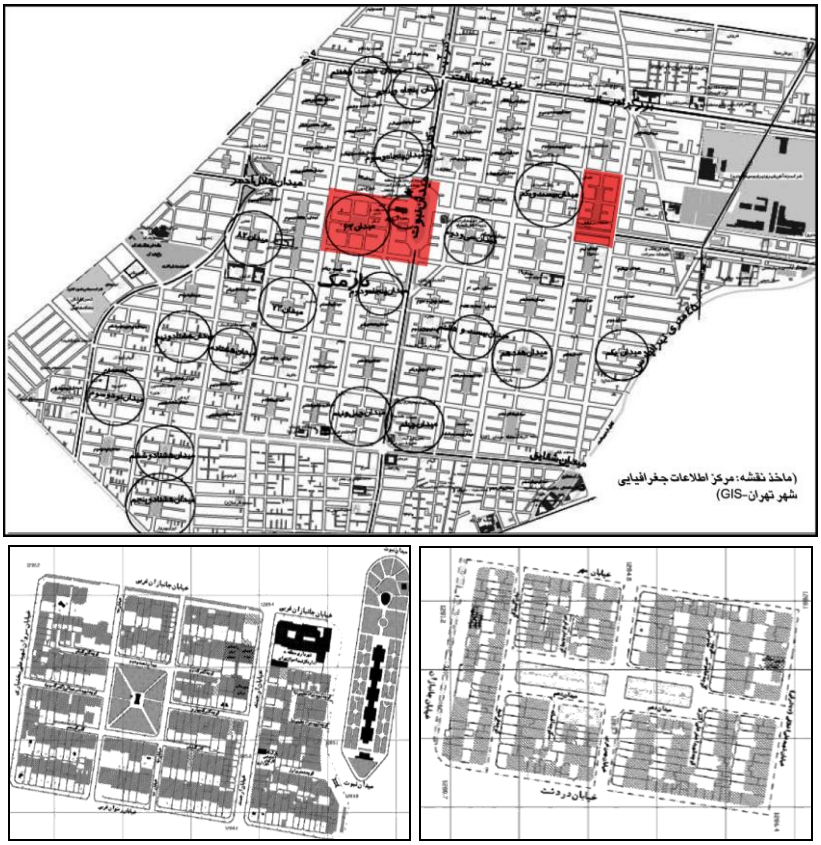
The special ventilation structures, wind-catcher, has proven to be the best approach for confronting the harsh natural conditions of this area. They are different in terms of height, size, numbers, construction style and material; they also reveal the economic situation of the households; poor households were content to make a few scuttles either on the walls or in the ceiling opposite of each other to ventilate their homes (A'zami, 2005) (Figures 3.21 and 3.22).


Figure 3.21.Wealthy Wind-catchers in Yazd, Figure 3.22.Poor Wind-catchers in Yazd
(Source Figure 3.21: http://www.kasraian.com/, Source Figure 3.22: Google Image)

-Narmak, Tehran, Iran (Contemporary Neighbourhood)

This neighbourhood is located in a flat site in eastern part of Tehran, composed of a multitude number of neighbourhood units in a rectangular grid network pattern. It is a

product of contemporary planning which has evolved and transformed during different certain periods (Azizi, 2006). It contains a large plaza – the major community centre – at the intersection of its main roots and numerous small parks at the minor streets' intersections (Map 3.5).



Map 3.5. Narmak Neighbourhood,Tehran, Iran
(Source: Azizi, 2006)

The built form arrangement follows the geometric rules and geometry of land parcels which seemingly has limited diversity in physical forms and brought about a kind of repetition of forms; creating monotony rather than variety. Still, among this neighbourhood some sort of mixture in housing typology, age and condition of the built environment can be perceived, however, they lack variety in forms because of the rigid geometric framework of the planning (Figures 3.23 and 3.24).


Figure 3.23. and Figure 3.24. Monotony in Built Forms of Narmak, Tehran
(Source: Personal Archive)

Diversity in Natural environment and greenery in different scales has offered variety of opportunities for various groups of people to spend time, promenade and socialize in outdoor their homes. They vary from cosy ones for sitting and relaxing as semi public spaces to some larger ones containing more public provisions such playground, sport facilities, water elements, amphitheatre etc. (Figures 3.25 and 3.26).

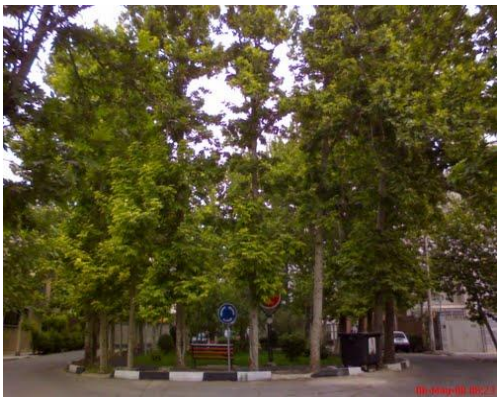



Figure 3.25. and Figure 3.26. Neighbourhood Unit Parks of Narmak, Tehran
(Source: Personal Archive)

In addition, each neighbourhood unit contains the necessary daily needs; retails and grocery shops, educational, cultural, medical, recreational and sport centres which are located in proximity of the residential units.

-Shahrak-gharb, Tehran, Iran (Contemporary Neighbourhood)

This neighbourhood stands on a large scale hilly site in the north-west part of Tehran (Map 3.6); within this area a broad range of housing typologies varying from villa type houses, social housing complexes, row-houses as well as high rise apartments have given the chance to various groups of people from different walks of life to live there (Figure 3.27).

Map 3.6. Shahrak-e-Gharb Neighbourhood and
Figure 3.27. Aerial Photos of Shahrak-gharb, Tehran, Iran
(Source Map 3.6: Google map and Source Figure 3.39:http://www.bartarinha.ir/fa/)

The neighbourhood in terms of natural diversity looks relatively rich, as it has been a large garden formerly, so the trace of old trees and greenery elements as well as newly built parks is fairly visible in between the buildings. They make enormous contribution to the convenience and satisfaction of local communal activities. Also the geographic position of the neighbourhood on the hilly site and its vicinity to the mountain provides many picturesque vistas all around the neighbourhood (Figures 3.28 and 3.29).

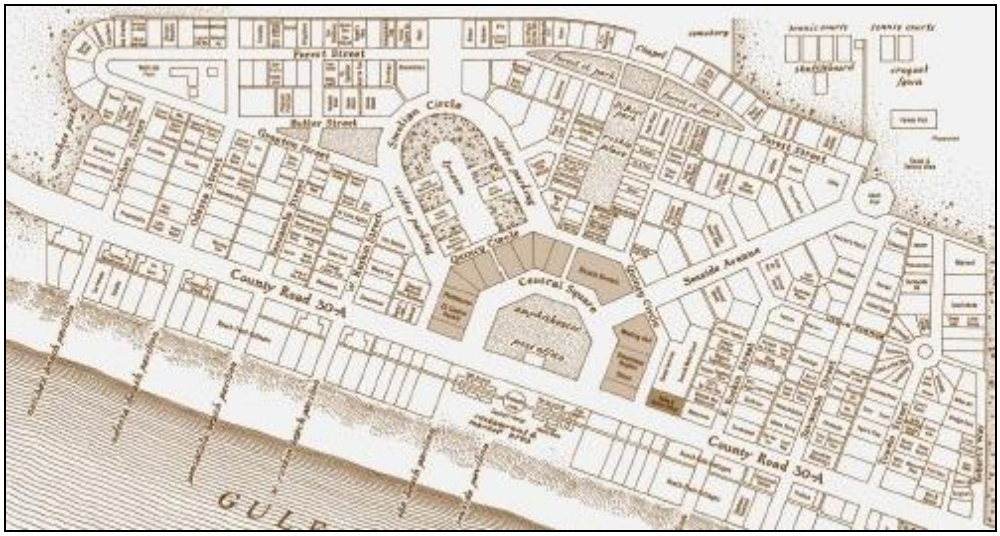

Figure 3.28. Local Park in Shahrak-gharb, Tehran, Figure 3.29. Natural Greenery and Mountain Vista in Shahrak-gharb, Tehran
(Source: Google image)

Daily needs, different public services and facilities are available within this neighbourhood. There are many gathering spaces built as multifunctional complexes containing commercial and cultural centres, recreational and sport facilities, restaurants and eateries, parks and community acting as powerful social and economic magnets; however, in mixed use development it is more recommended to distribute the functions uniformly among the environment not in special zones as complexes and malls (Figures 3.30 and 3.31).


Figure 3.30 and 3.31. Shopping Centres and Major Gathering Zones of Shahrak-gharb
(Sources : http://fa.wikipedia.org/wiki, http://weblogina.com)

-Seaside, Florida, United State (Contemporary Neighbourhood)

Seaside, Florida is deemed the prototype of new town communities designed or created by the new urbanist movement. Located in the Florida panhandle, its development started in 1981 on an 80 acre land on the shores of the Gulf of Mexico (Map 3.7).



Map 3.7. Master plan for Seaside, Florida, 1982.
(Source: http: //www.dpz.com)

This apparently underlines the neo-traditional concept and the anti-sprawl fundamentals and principles of the new urbanists. The scheme of the project is based on a centralized core with retail facilities, conference facility and town hall, a chapel, a primary school, a fire station and a post office (Figure 3.32).

In the words of its progenitors – Andres Duany and Elizabeth Plater-Zyberk, "it was originally conceived to approximate the scale and character of historic southern towns. [It] proposes traditional American settlement patterns as an alternative to contemporary methods of real estate development" (Steuteville 2002; Duany and Plater-Zyberk: www.dpz.com/projects.aspx).

Figure 3.32. Aerial Photo of Seaside, Florida.
(Source: http: //www.dpz.com)

It also provides a host of movement patterns for both pedestrians and the automobile but one that is scale according to pedestrian need but at the same time accommodative to the automobile. To achieve variety in forms, the project allowed individual buildings to be designed by owners of the plots and their architects (http: //www.dpz.com).



Figure 3.33., Figure 3.34. and Figure 3.35. Variety in Built Forms in Seaside, Florida
(Source: http: //www.dpz.com)

3.3 Summary and Conclusion

This chapter has discussed diversity in its different dimensions of form, use and users. It argues that for a good and sustainable neighbourhood design a mix of uses, activities and the diversity and variety of building types and users should be encouraged to achieve a sense of community, sense of place, walkability, safety, availability of people's daily needs that will in turn lead to a healthy environment and good quality of life.

There are, however, arguments about the feasibility of designing for diversity as separation and spatial and social segregation are on the increase. Can design achieve these aims? The answer to that is that with the right objectives set, design can achieve some level of diversity and some practices like the new urbanism have had some impressive successes in this area.

Organizations such as LEED-ND have been set to encourage diversity at its different levels for a sustainable building and practices through their rating systems. But design can just recommend and provide the enabling environments but it cannot practically force people in a democracy to live one kind of life or another if they do not choose to do so.

The reviewed examples on traditional settlements showed valuable contexts with a remarkable historic continuity and diverse dimensions in their designs which are compatible with environment, climate, society, and economy. It is believed that people tend to dwell in a place in which they can experience the environment as meaningful; based on the concept of diversity, neighbourhoods might be called meaningful when they hold physical, functional and socio-economic variety (Bentley, 1985; Saeidi and Oktay, 2011).

“Mixture of various functions and uses within the mentioned neighbourhoods has provided a vigorous content of meaning which results from a fine mixture of physical, functional and social components offering wide experiential variety” (Alizadeh, 2005). However, in the traditional cores of the cities, the side effects of modernisation need to

be taken into account so that they could maintain their liveability and attractiveness for younger generations.

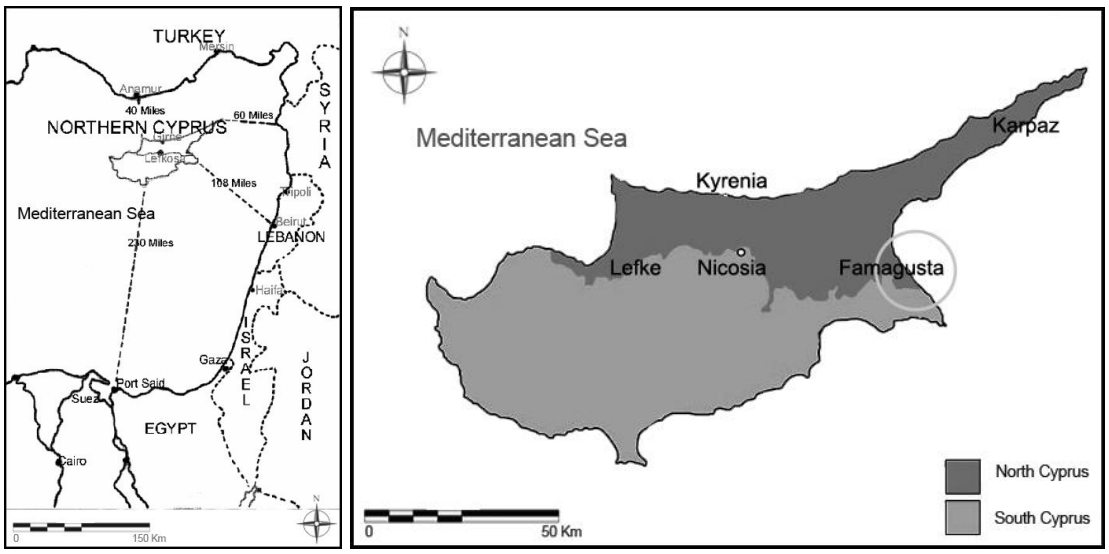
On the other hand New Urbanists are of the opinion that neighbourhoods in compact model of development with integrated and mixed uses, pedestrian oriented design, covering the fundamental public facilities and services, unlike the segregated land use pattern or unplanned spontaneous design in both urban and suburban environments, offer a wider experiential variety and are more likely to provide inhabitants with a sociable environment.

Chapter 4

CASE STUDIES: FAMAGUSTA NEIGHBOURHOODS

4.1 History and Development of the City

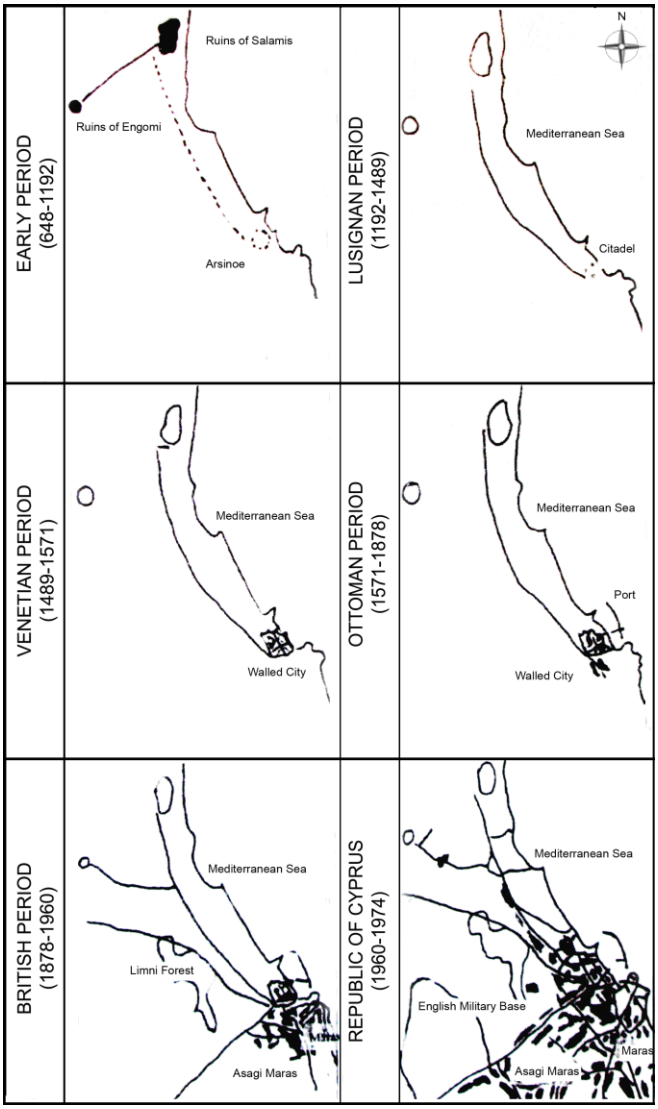
Famagusta (*Gazimağusa* in Turkish), the second largest city of North Cyprus, is a coastal city which is located at the eastern part of the island with dominant Mediterranean climate, dry and hot during most of the times of the year (Maps 4.1 and 4.2).



Map 4.1. Location of Cyprus, Map 4.2. Location of the City of Famagusta in the island (Source map 4.1: Onal, S., Dagli, U., Doratli, N., 1999)

Famagusta was initially founded in 300 BC on the old settlement of Arsinoe and remained a small fishing village for a while; gradually as a result of evacuation of Salamis, it turned to a small port. Different conquerors has ruled the city and developed

it in various ways at particular periods as shown in the Map 4.3 (http://www.magusa.org/English/f_story.htm).



Map 4.3. Development of Famagusta by Periods
(Source: Onal, S., Dagli, U., Doratli, N., 1999)

Venetians has transformed Famagusta into a fortified city with a military base (Pumpyansky, A., 2006). During the British period (1878-1960), Famagusta port became so important and the city expanded significantly towards the south, outside The Walled City. At this period the inhabitants of two ethnic groups – Turks and Greeks – were separated; Turks were accommodated inside The Walled City while Greeks settled in

Maras district (Doratli, N., Hoskara, S., Zafer, N., Ozgurun, A., 2003). Famagusta urban development has undergone drastic changes after 1974 war; this city faced a great wave of population movement from Turkey and south Cyprus in 1975 (Table 4.1), however no considerable construction has occurred until 1986, since this period was considered as period of great uncertainties. Additionally, this city that once upon a time has been an important centre of attraction for tourists lost its touristic value after the war.

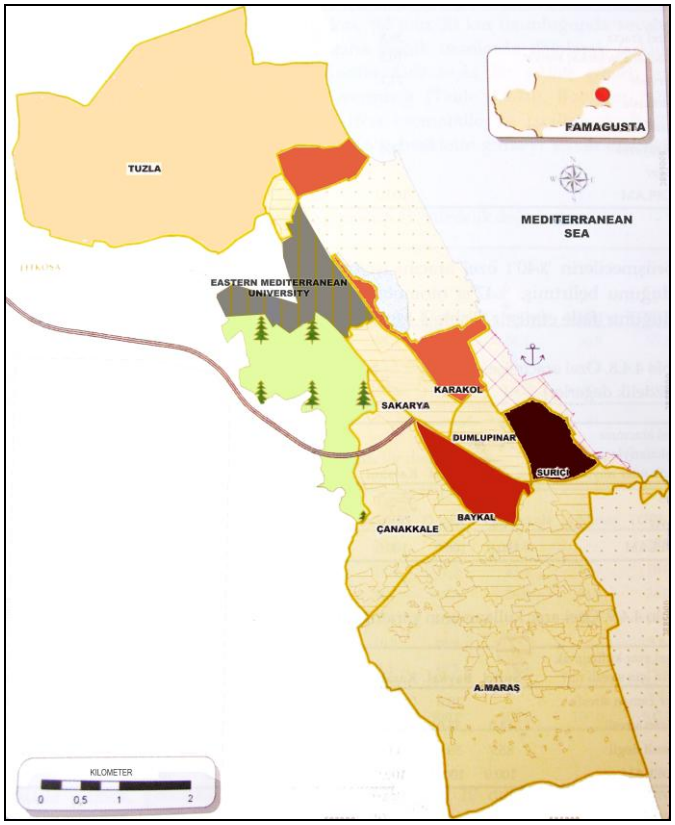
Table 4.1. Population of Famagusta (1960-2006)

Date	Total	Male	Female	Greek Cypriot	Turkish Cypriot	Marounites & Armenians	Others
11.12.1960 (Rep.of Cyprus census)	**34,774**	**17,284**	**17,490**	**24,506**	**6,120**	**176**	**3,972**
1.04.1973	39,000	-	-	26,500	8,500	4,000	
19.10.1974	8,400	-	-				
10.01.1975	8,400	-	-				
1.10.1975	13,552	-	-				
31.12.1976	14,929	-	-				
April 1978 (SPO census)	**17,786**	**8,976**	**8,810**				
22.03.1981	18,055	-	-				
10.03.1985	19,188	-	-				
1986 (approx.)	19,717	-	-				
14.01.1990	21,192	-	-				
19.09.1993	21,246	-	-				
15.12.1996 (SPO census)	**27,637**	**15,408**	**12,229**				
January 1998	29,000	-	-				
December 2000 (approx.)	31,800	-	-				
December 2003 (approx.)	33,500	-	-				
30 April 2006 (SPO census)	**35,453**	**19,373**	**16,080**	SPO 2006 Population & Housing Census (De-Jure results)			
30 April 2006 (SPO census)	**35,381**	**19,226**	**16,155**	SPO 2006 Population & Housing Census (De-Facto results)			

http://www.magusa.org/English/population.htm
(Source: SPO, 15.12.1996 and 30.04.2006 Census)

After 1986, with the establishment of Eastern Mediterranean University (EMU), the city found a new underlying dynamic for growth; however, the rapid increase in number of

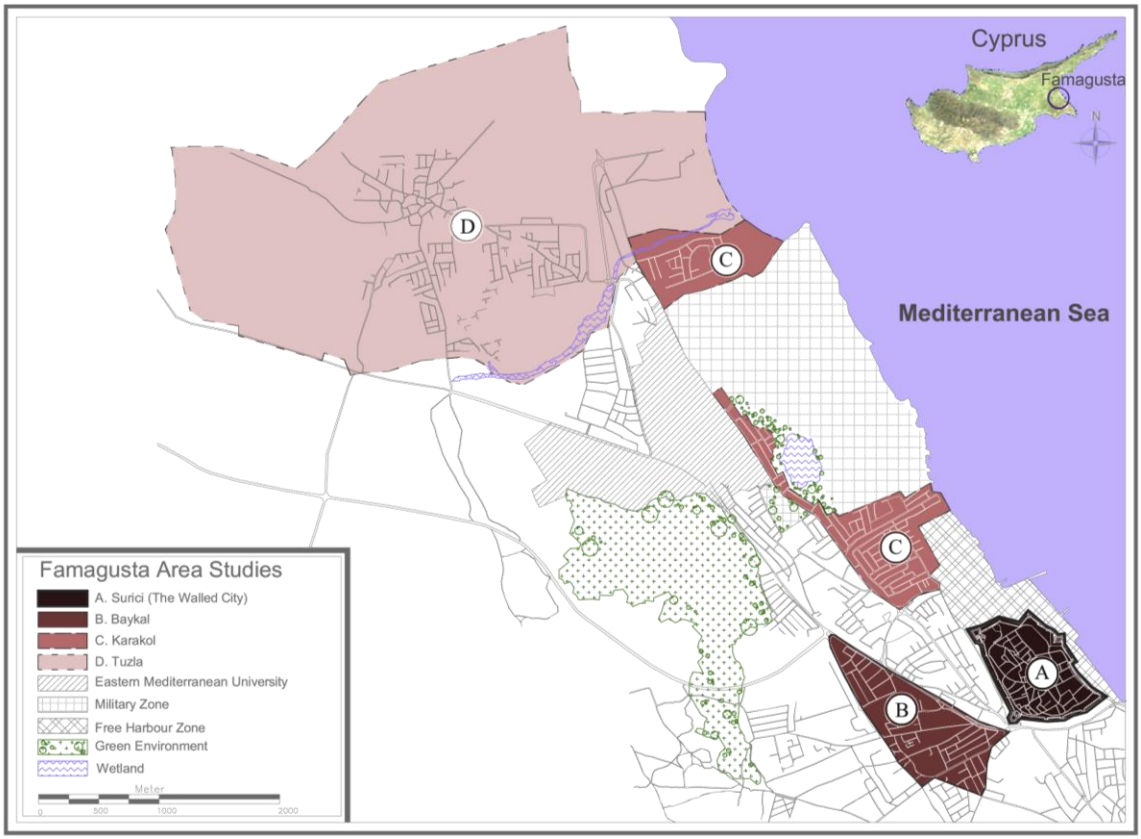
university students starting from 1,000 in 1986 to about 14,000 in 2007 has caused major transformations in terms of housing construction and other facilities within the city. The main change in the overall structure of the city at this period was the conversion of the urban growth direction towards the university. Nevertheless, there was no construction plan for controlling the urban growth and as of date the city is suffering from lack of master plan. Today, the city is composed of eight main districts as shown in the Map 4.4; four of them based on their historical, physical and socio-spatial character have been chosen as the cases of this study. The historic quarter of the city reveals marvellous physical and spatial identity, while the newly developed areas show quite different fashion to the character of the old city with regards to architectural and urban features also they differ considerably in terms of socio spatial distribution.



Map 4.4. Famagusta Districts (Based on Famagusta Area Study, in Oktay 2010)

4.2. Introduction of Case Studies: Surici (The Walled City), Baykal, Karakol, Tuzla

The selected cases of this study are four different identical residential settlements within the city of Famagusta that have been previously investigated in terms of quality of life among them – Famagusta Area study by Oktay, 2011 – namely Surici (The Walled City), Baykal, Karakol and Tuzla as shown in Map 4.5, involving both traditional and newly developed environments of the city as explained below.



Map 4.5. The Map of Famagusta and Selected Neighbourhoods
(Drawn by Author through earth.google.com, Based on Famagusta Area Study, in Oktay 2010)

"Surici (The Walled City) is the historic core of the city with embedded remarkable remains of historical, architectural and cultural heritage" (Oktay, 2009). This district has

developed and changed gradually during the early periods, Lusignan period, Venetian period, Ottoman period, British period, period of Republic of Cyprus and specially after the war 1974 as discussed in Map 4.3.

“The traditional urban pattern in the Walled City of Famagusta has a medieval character with its overall organic urban pattern, well-scaled narrow streets and cul-de-sacs, a number of public buildings and irregularly shaped public spaces at the intersection of streets and/or in front of public buildings” (Oktay, 2001). “This urban pattern, and thus the organic fabric and dynamic silhouette, which give today's Walled City’s image, are the products of history” (Doratlı, 2009). Baykal and Karakol are two of the newly developed settlements of the city which have been rapidly and consecutively grown outside the Walled City; they encompass a large number of apartment blocks and also various types of inhabitants thanks to the Eastern Mediterranean University. Like other newly developments of the city, random growth in these two neighbourhoods has refused to offer well defined public outdoor spaces and take human considerations for outdoor life into account. Tuzla, the sprawling suburb of Famagusta, which used to be a small village today shows an uncontrollable and haphazard growth due to lack of master plan and private sector massive construction techniques; the single used character of this settlement established in low density without connection to its surroundings and to the village core, have produced the most car dependent area of the city which greatly has ignored the need for meaningful outdoor life (Onal, S., Dagli, U., Doratli, N., 1999). To sum up, the mentioned noticeable features of these four neighbourhoods has produced significant qualities in terms of variety of forms, uses and users that made the author choose them as the cases of this study.

4.3 Developing the Model for Analysis of Diversity in Neighbourhoods

In line with the carried literature review on the conceptions of "Diversity in Neighbourhoods" and investigations on the selected cases of this study, a comprehensive model was developed in order to outline a methodology for assessing diversity in neighbourhood environments (Table. 4.2). The model is founded based on the three levels of diversity (variety) as described before: Diversity of Forms, Diversity of Uses and Diversity of Users. As mentioned earlier, in this study a complete set of objective variables will be determined and classified under a certain model that will be then applied to the selected neighbourhoods of the city of Famagusta; they have been rated as unavailable, poor (partially available), fair (partially available), and good (available).

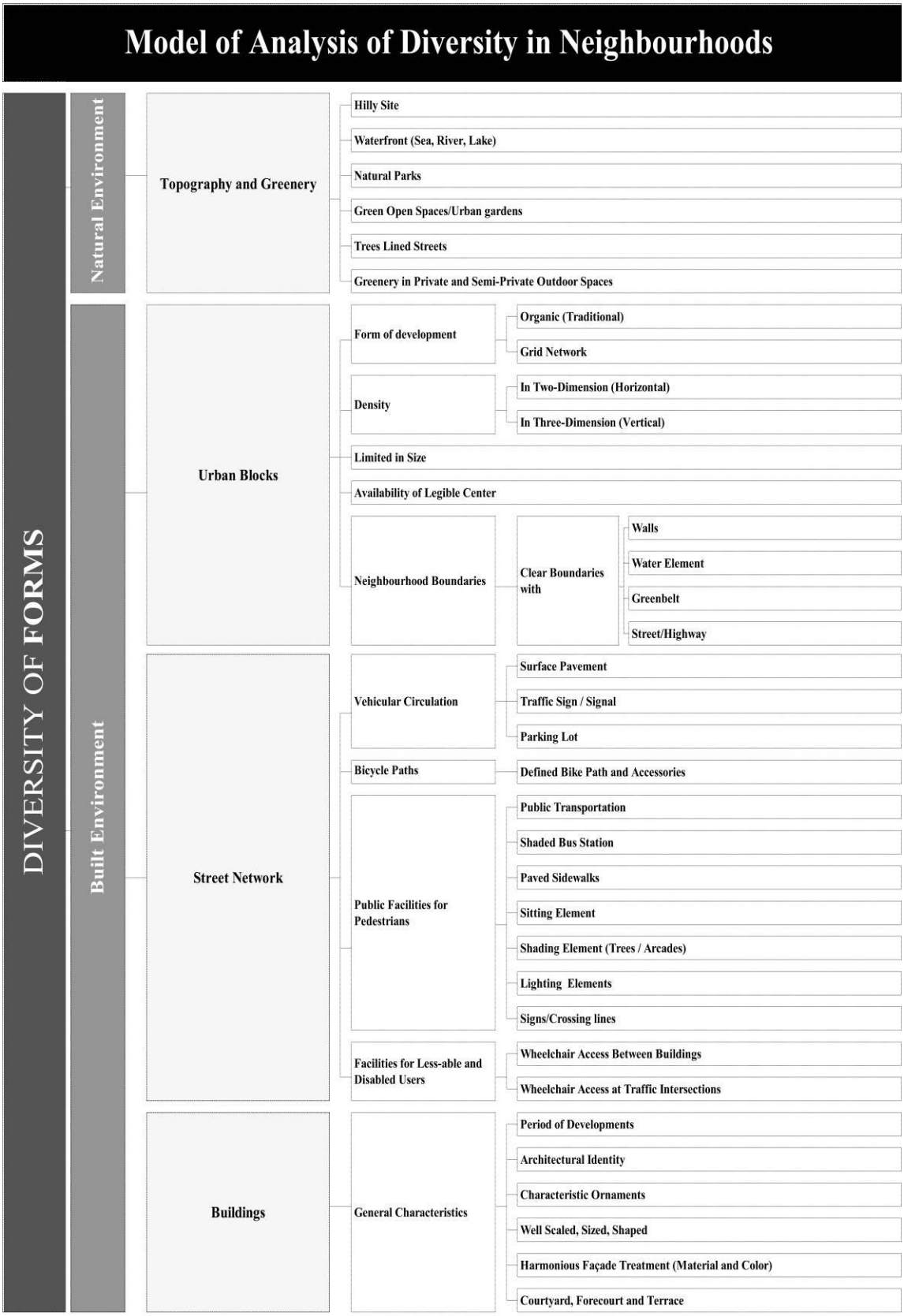
-*Diversity of Forms:* In order that diversity of forms can be investigated, the major physical components of the neighbourhood environments need to be set on in advance; they are categorized under the main headings of 'Natural Environment' and 'Built Environment'; the first investigates variety of natural elements in terms of topography features, availability of wetlands, natural parks and greenery in outdoor public and semi-public spaces; then, their level of contribution to human communal life within the environments will be discussed. The second headline, diversity in built environment, involves with variety of built forms in urban blocks, street networks and buildings' physical characteristics. Variety of forms in urban blocks is being sought through form of development, density, size of the neighbourhood as well as existence of legible centres and edge (boundaries); then, among the street networks, variety in circulation facilities for vehicles, pedestrians, less-able and disabled users etc. will be examined; and lastly, variety in buildings explores existence of different development periods,

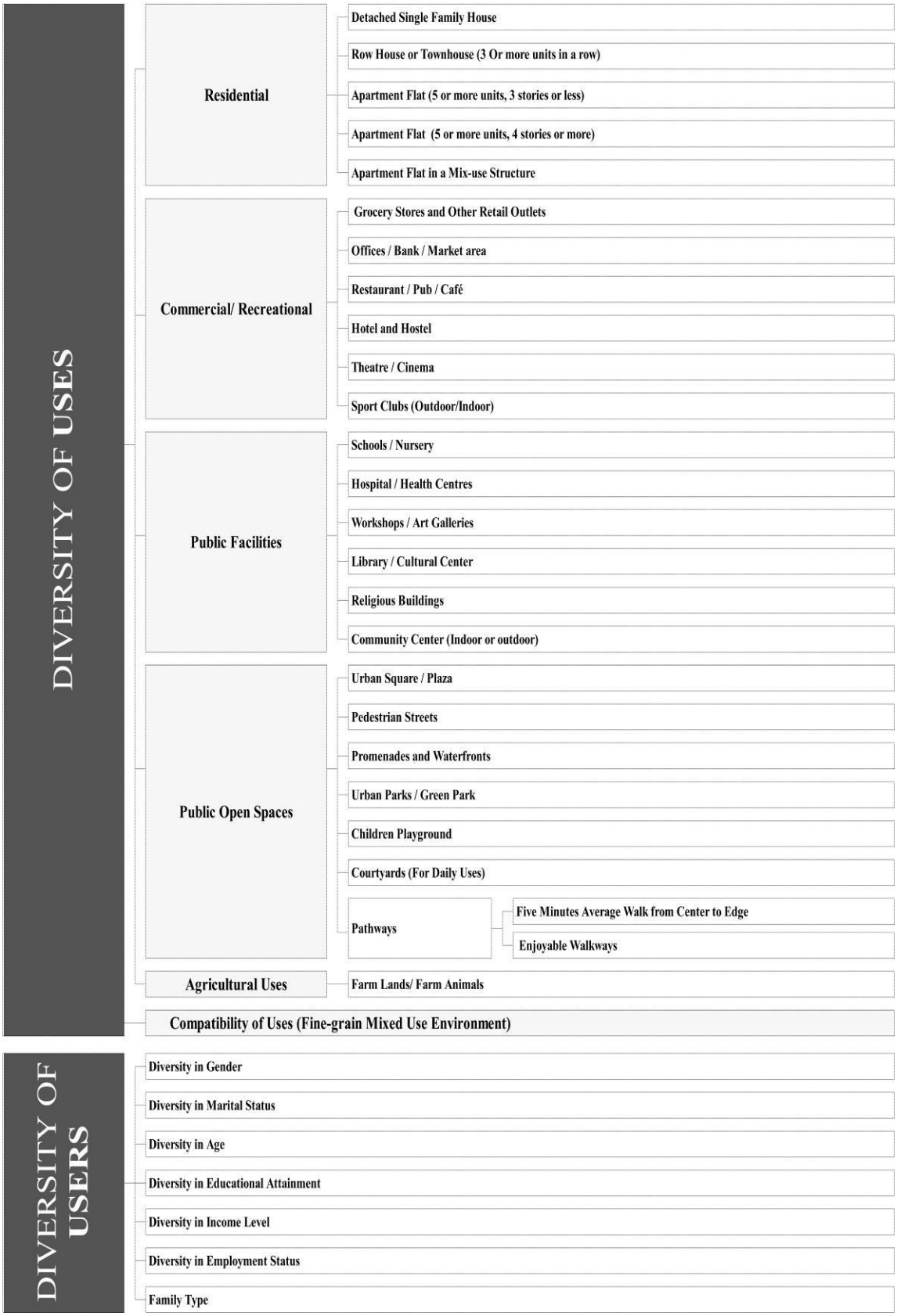
architectural identity, characteristic ornaments, scale, size, shape, facade treatment and availability of courtyards, forecourts and terraces. Therefore, variety in physical qualities of the neighbourhood environments can be revealed through analysing the mentioned variables.

-*Diversity of Uses:* For investigating diversity in neighbourhood environments at this level, variety of uses and activities will be sought in varied housing typologies, commercial and recreational functions, public facilities, public open spaces; then, availability and accessibility of critical catchments can be objectively evaluated. In fact, diversity of uses is looking for the possibility of holding up different groups of inhabitants within the bounds of the available buildings and open spaces at different times for different reasons. It further seeks the relationship between them, compatibility of uses, flexibility of each function and finally the general functionality of the neighbourhood environment along varied times.

-*Diversity of Users:* Investigation of user features search for existence of various types of inhabitants varying in gender, marital status, age, educational attainment, income level, employment status and family type. The results of users' profile information will be then correlated to the physical and functional setting of those environments so that the mutual impact of diversity in people and environment on each other can be revealed.

Table 4.2.The Model of Analysis of Diversity in Neighbourhoods





(Source: Saeidi and Oktay, 2011)

4.4 Data Collection

4.4.1 On-site Analysis (Primary Phase)

In this study, on-site analysis was considered the primary phase of the data collection and has been used for gaining the firsthand information. Whilst, for extracting the necessary information and reduce the amount of data, after performing a general on-site analysis on the whole areas of study, a specific more detailed investigation on defined sample layouts in each neighbourhood has been carried out (Layouts A, B, C and D). This was done with careful and detailed observation on the certain defined sample areas; photography was also applied as a useful tool for recording the physical, functional and social characteristics of the environments. Afterwards, all the data were put into computer and by means of AutoCAD, Photoshop and 3dstudio Max a series of maps images and sketches were produced to visualize the neighbourhoods' conditions. Then the required information for investigating the physical and functional variables was grasped through the relevant produced documents.

4.4.2 Other Methods (Secondary Phase)

The secondary phase of data collection in this study was involved with socio-economic conditions of the neighbourhoods' inhabitants through dealing with information obtained from previously carried researches in journal articles and also some other local information on Famagusta neighbourhoods in legal and governmental documents such as municipality archives and Census records. Then, the achieved information have been correlated together and they built up a comprehensive set of information in terms of variety of forms, variety of uses and variety of users in four neighbourhoods of the city of Famagusta. The results of the analysis drawn on each neighbourhood case studies are provided in the succeeding maps and Table 4.2.r:

Chapter 5

CONCLUSION AND RECOMMENDATIONS

5.1 Major Findings on Study Areas

5.1.1 Surici (The Walled City)

5.1.1.1 Form Characteristics

Surici (The Walled City) reveals a great experiential variety owing to the presence of layers created by monumental buildings and remains of different cultures (Gothic, Ottoman and Modern Architecture), one or two-story courtyard houses lined along the narrow streets, shops, cafes/restaurants and warehouses. Meanwhile, variety of utilized materials reveal a rich diversity as cut-stone dominates in historic buildings while mud-brick and stone are used in most of the houses. In addition, reinforced concrete is being used in recent applications and has added a lot to the notion of variety although it is somewhat questionable in terms of harmony with the old historic buildings (Figure 5.1 and Figure 5.2).

Figure 5.1. Public Open Spaces in Surici (The Walled City), Namik Kemal Square and Figure 5.2. Public Open Spaces in Surici (The Walled City), Istiklal Street (Source: Personal Archive)

The traditional urban texture is characterized by fair density at the two-dimensional framework (compactness), small and permeable urban blocks, well-scaled narrow streets and cul-de-sacs, and organic, irregular urban spaces (Maps 4.5.A, 4.5.A-1 and 4.5.A-2). However, within the traditional urban form, the circulation system does not accommodate proper vehicular paths, bike lanes, disable access and pedestrian sidewalks (Figures 5.3, 5.4 and 5.5).

Figure 5.3., Figure 5.4. and Figure 5.5. Movement Patterns in Surici (The Walled City) (Source: Personal Archive)

The single and double story courtyard houses which are dominant in this neighbourhood have revealed fair integration with greenery in their semi-private open spaces in which variety of activities used to be offered (Map 4.5.A-3).

However, despite the essential need for contribution of natural environments to provide shading elements in hot-arid climate of Cyprus, public open areas are almost missing vegetation and green elements. Moreover, despite being located close to the sea, there is no effective use of its waterfront in locals' communal activity as the harbour is mostly used for port purposes and storage facilities.

5.1.1.2 Use Characteristics

In Surici (The Walled City), existence of functions such as men's coffeehouses, wells and fountains in outdoor environments facilitated social cohesion among the neighbours in the older times (Figures 5.6 and 5.7) (Oktay 2001).

Figure 5.6. Old Socializing around Wells and Fountains (Ταρεογλh, 1963 in Oktay, 2001), Figure 5.7. Present Condition of the Fountains, Kuru çeşme
(Source Figure 5.7: Personal Archive)

Today, except the socialization among the neighbours in some streets, the district is far from possessing a rich functional diversity, especially in terms of variety of recreational activities and community facilities, greenery and shaded public open spaces as well as other services for youth and children (Figures 5.8 and 5.9) (Map 4.5.A-4).

Thus, the neighbourhood remains rather detached from the rest of the city and looks inactive at most of the times especially at nights. Although Namik Kemal Square is considered as the main centre of the whole Walled City which has great dynamics for attracting people, not enough strong communal activities for local are offered there.


Figure 5.8. Lack of Recreational Facilities for Children, Figure 5.9. Lack of Night Life
(Source: Personal Archive)

The major threatening problems of "The Walled City" today are the neglected spaces which have a great potential to be utilized; the vacant historic buildings and the public spaces around them (Figure 5.10); existence of trash and litter as well as abandoned cars in open areas (Figure 5.11); the incompatible uses, such as repair shops, depots, etc. which do not fit to the character of the historic environment (Figure 5.12); and also the inappropriate interventions and restorations especially to the facades of historic buildings. Besides, low flexibility of the buildings has not let them to adjust new functions, so many of the buildings has left vacant or transformed into other improper uses.



Figure 5.10. Neglected Historic Building, Figure 5.11. Abandoned Car in Vacant Lands and Figure 5.12. Repair Shop as an Incompatible Uses
(Source: Personal Archive)

5.1.1.3 User Characteristics

Surici (The Walled City) is predominantly inhabited by the local people, born in Cyprus, with lowest educational and income level, and more than half of them are over 60 years of age (Figure 5.13) (TRNC 2006 Population and Dwelling Census; Oktay 2010).



Figure 5.13. Local Inhabitants (Source: Personal Archive), Figure 5.14. Foreign Tourists (Source: Personal Archive), Figure 5.15. Famagusta Harbour (Google image)

Although the historical and identical characteristic features of this neighbourhood attract many tourists, lack of enough experiential variety has intensified the isolated character of this environment. That is to say, the insufficient contribution of the dynamics available within the area – such as historic remnants and waterfront – to the communal practices has failed to invite variety of users from other districts of the city specifically university students (Figures 5.14 and 5.15). More importantly, the existing shortcomings in the area have led to a sharp decline in population during recent years (Table 5.1).

Table 5.1. Population in Surici (The Walled City) (1996-2006)

Neighbourhood	2006 Result			1996 Result			Change		
Surici (The Walled City)	Total	Male	Female	Total	Male	Female	Total	Male	Female
	2,026	1,111	915	2,316	1,461	885	-12.5%	-24%	7%

http://www.magusa.org/English/population.htm
Source: SPO, 15.12.1996 and 30.04.2006 Census

5.1.1.4 Discussion and Specific Recommendations

Availability of ample invaluable physical and functional opportunities in this neighbourhood can make enormous contribution to enhance variety of meaningful experiences in outdoor environment. They include a rich historic urban context with remarkable buildings and natural setting; in fact, activating them can offer the chance to serve better communal transactions to both local and tourists. By taking a glance on the harbour in Kyrenia, it can be understood that the wonderful chance for having diverse and meaningful communal activities in Surici (The Walled City) is missed to a great extent; effective use of waterfront can offer a wide range of activities in addition to its present usage for port facilities. Furthermore, considering the great opportunity provided by Eastern Mediterranean University, some new schemes for accommodating students within this environment would be highly beneficial in vibrancy of this neighbourhood since they will bring other supportive functions with themselves such as such as recreational and entertainment activities as well as night life. Thus, the neighbourhood would hold more various types of dwellers and more meaningful outdoor transactions as a result; and both locals and new comers will get more benefit of the environment.

5.1.2 Baykal

5.1.2.1 Form Characteristics

Baykal is clearly bounded by two major streets that reveals an established form with relatively higher density with mainly apartment blocks built dominantly with reinforced concrete. Even though its rapid development has caused some weaknesses in terms of lack of a legible centre and regarding building characteristics as well as public outdoor facilities, one can still feel a sort of diversity in this neighbourhood (Maps 4.5.B, 4.5.B-1, 4.5.B-2 and 4.5.B-3).

Availability of different edible trees and other types of greenery throughout the local personalization in the semi-public open space of the houses along the streets within this neighbourhood has provided a pleasant variety of natural elements. However, along the streets and other open areas random growth of trees has not succeeded to make an organized enjoyable paths and walkways (Figures 5.16, 5.17 and 5.18).

Figure 5.16. Scattered Greenery along Streets (Source: Personal Archive), Figure 5.17. Fruit Trees (Source: Personal Archive), Figure 5.18. Greenery in Courtyards (Source: Personal Archive)

5.1.2.2 Use Characteristics

In Baykal, variety of housing forms – apartments and detached houses – along with a range of uses and activities clustered together has facilitated the way for encouraging variety of users and hence experiential variety, although compatibility of uses is questionable also well designed outdoor public facilities are missing (Map 4.5.B-4).

5.1.2.3 User Characteristics

Baykal accommodates a fair mixture of gender, age, income level, educational attainment and family type owing to the variety of forms in built and natural environment as well as essential uses and activities in a short distance within the neighbourhood (Figures 5.19 and 5.20) (TRNC 2006 Population and Dwelling Census).


Figure 5.19. and Figure 5.20. Diversity in Neighbourhood Inhabitants
(Source: Personal Archive)

Complete development of the area along with the report of TRNC 2006 Population and Dwelling Census shows an apparent increase in population growth within this neighbourhood (Table 5.2).

Table 5.2. Population in Baykal (1996-2006)

Neighbourhood	2006 Result			1996 Result			Change		
Baykal	Total	Male	Female	Total	Male	Female	Total	Male	Female
	3,136	1,684	1,452	2,245	1,245	1,000	39.7%	35.3%	45.2%

http://www.magusa.org/English/population.htm
Source: SPO, 15.12.1996 and 30.04.2006 Census

5.1.2.4 Discussion and Specific Recommendations

This neighbourhood represents a satisfactory level of variety in terms of physical, functional and also socio-economic dimensions; however, for achieving better community life and more meaningful interactions among this neighbourhood there are certain effective strategies that can be applied in practice. Since Baykal has a quite complete development, the major attention for improving diversity should be paid on the outdoor spaces as follow: providing the area with well designed public and semi-public spaces in between the buildings integrating with more defined greenery and furnishing elements; taking public facilities into consideration with regards to transportation, tree-

lined sidewalks and streets, shaded open spaces, recreational and sport facilities; clustering variety of functions at the centre of the neighbourhood to provide a strong magnet functioning as community centre to make locals get together frequently and to avoid incompatibility of uses.

As a result of the mentioned points, more different types of users varying in age and social level are willing to get involved with outdoor activities as they will find more enjoyable and meaningful experiences; therefore the neighbourhood will be able to reveal stronger communal transactions and outdoor life.

5.1.3 Karakol

5.1.3.1 Form Characteristics

In Karakol, rapid and unplanned growth like other newly developed settlements has led to a serious neglect to the quality of outdoor environment. The area does not have strong and clear boundaries and also a legible centre, although it accommodates the major commercial strip of the city (Salamis Road). Moreover, the military zone which occupies a vast area of this neighbourhood has divided it into two which has made the northern part completely isolated zone (Map 4.5.C); additionally it lacks an identifiable character and does not reveal positive transition and interaction between indoor and outdoor spaces either (Oktay, 2001).

Furthermore, although the district is neighbouring the sea and contains a seasonal lake and also some scattered green elements and old trees, no considerable connection between users and natural environment exists (Figures 5.21 and 5.22) (Map 4.5.C-1, 4.5.C-2 and 4.5.C-3).


Figure 5.21. Wetlands without Contribution to the Communal uses,
Figure 5.22. Random Greenery and Old Trees
(Source: Personal Archive)

5.1.3.2 Use Characteristics

In Karakol, diversity of uses and activities has been spread along the major commercial strip of the city (Salamis Road) in a random fashion. However, despite availability of five minutes distance to most of the daily needs within the neighbourhood, no effective communal use of outdoor environments can be found within this neighbourhood, due to inconvenience of the streets and sidewalks and lack of comfort and safety for bikes (Figures 5.23 and 5.24). Another significant discouraging point in use of outdoor spaces is the existence of unfinished buildings and vacant lands and their negative functional, environmental and visual defects (Map 4.5.C-4).


Figure 5.23. Car Dependency, Figure 5.24. Sidewalks' Condition
(Source: Personal Archive)

5.1.3.3 User Characteristics

In Karakol, nearly half of the residents are non-local residents and a good mixture of users from different social and income level with higher education or graduate degrees is available there; since university is in close proximity to this neighbourhood, the majority of population are university students who make the environment reflect a vibrant quality (TRNC 2006 Population and Dwelling Census). As discussed previously, the area has faced a huge wave of population after development of the university (Table 5.3). However this rapid growth was not under accurate control and still seems ongoing without sufficient considerations for its urban growth.

Table 5.3. Population in Karakol (1996-2006)

Neighbourhood	2006 Result			1996 Result			Change		
Karakol	Total	Male	Female	Total	Male	Female	Total	Male	Female
	5,585	3,298	2,287	3,133	1,973	1,160	78.3%	67.2%	97.2%

http://www.magusa.org/English/population.htm
Source: SPO, 15.12.1996 and 30.04.2006 Census

5.1.3.4 Discussion and Specific Recommendations

Although diversity of the inhabitants in this neighbourhood is somewhat considerable, the physical and functional attributes need to be taken into serious consideration. Karakol encompasses the major commercial strip of the city which offers quite good variety of uses and activities but lacks some fundamental public facilities such as public transportation, parking lots, well defined and shaded public and semi-public open spaces, tree-lined streets, paved sidewalks, well designed furnishing elements etc. Thus, use of car in this area has become by far preferable while walking and cycling are greatly ignored. Besides, despite availability of various uses and functions along the main commercial street of the city, Salamis Road, and also presence of university

students around this neighbourhood, high level of functional incompatibilities and poor quality of the physical setting of this neighbourhood cannot be able to offer the desirable meaningful social transactions in outdoor environments. Hence, existence of a large number of lost spaces and unfinished constructions, wetlands, old trees and open areas which are currently considered as weaknesses of the neighbourhood, can provide ample opportunities for removing the negative effects of the rapid and haphazard development of this area; building up multi-storey or basement parkings, recreational public outdoor spaces with well combination to natural elements including variety of activities for different age groups; all in all making more enjoyable and meaningful outdoor life.

5.1.4. Tuzla

5.1.4.1 Form Characteristics

In the peri-urban district of Tuzla, the sprawled form of development lacking clear boundaries, appropriate density and connections to surrounding environments, has posed a serious challenge on the quality of communal life; from this point of view, it is even questionable whether the area could be considered a neighbourhood (Map 4.5.D, 4.5.D-1, 4.5.D-2, and 4.5.D-3). The outdoor spaces between and around buildings along with the streets, which are merely used for vehicular traffic, have no spatial definition for communal use. The villas and apartment buildings, which are all built with reinforced concrete as the only used material, are mostly painted in monotonous colours while some of them simply lack semi-private outdoor spaces.

Additionally, similar to Karakol, efficient use of waterfronts – sea and a river which has been presently wiped out – and green fields have been ignored to a large extent that has

caused an absolute decline in use of outdoor environments and has increased the use of car accordingly (Figures 5.25 and 5.26) (Map 4.5.D-4).


Figure 5.25. , Figure 5.26. Neglected Wetlands in Tuzla
(Source: Personal Archive)

5.1.4.2 Use Characteristics

The absence of experiential variety in peri-urban Tuzla, apart from lack of diversity of forms, can be referred to its pure single use character. Despite availability of various types of housing and families, the neighbourhood clearly lacks functional and socio-economic variety, i.e. primary school, grocery and retail, public and semi-public open spaces, recreational facilities, etc. within a reasonable distance which has inevitably led to an absolute dependency on car even for daily needs.

Therefore, no enough opportunities for outdoor life are available for the residents in as much as some houses have to build up their own playgrounds inside the semi-private space of their houses, however it cannot constitute the need for parks and playgrounds. Furthermore, some housing structures had to be completely turned into other functions in order to meet some of the essential locals' needs such as nursery and supermarket (Map 4.5.D-4).

Figure 5.27. Typical Forecourts in Tuzla, Figure 5.28. Refunctioned Newly Constructed Building in Tuzla
(Source: Personal Archive)

5.1.4.3 User Characteristics

The majority of the inhabitants of Tuzla are higher-income people and a good mixture of age, gender, family type, educational attainment exists in the neighbourhood (TRNC 2006 Population and Dwelling Census). However, since the neighbourhood is established as purely monofunctional settlement, these characteristics are not reflected in general image of the district. In fact, it is believed that such developments lead to so-called dormitory suburban that greatly leads to unsuccessful communal life. In recent years the rate of increase in population in Tuzla has been the highest within the whole city that has probably occurred by reason of getting around the inappropriate physical, functional and environmental condition of the inner city neighbourhoods (Table 5.4).

Table 5.4. Population in Tuzla (1996-2006)

Neighbourhood	2006 Result			1996 Result			Change		
Tuzla	Total	Male	Female	Total	Male	Female	Total	Male	Female
	1,877	1,012	865	702	376	326	167.4%	169.1%	165.3%

http://www.magusa.org/English/population.htm
Source: SPO, 15.12.1996 and 30.04.2006 Census

5.1.4.4 Discussion and Specific Recommendations

The least variety of experiences among the whole neighbourhoods of the city of Famagusta can be referred to the sprawling suburban development of Tuzla; vast scattered lost spaces with the lowest density of built environment, not connected to its surroundings and extremely poor in terms of functional diversity has turned down the chance to provide the area with outdoor communal interactions. In this regard, 'New Urbanism' approaches for increasing variety of experiences and enhancing the social life among this neighbourhood are more likely to be a satisfactory solution for confronting the shortcomings. In fact, it is believed that a neighbourhood in a compact and pedestrian oriented model of development with fine grain mixture of uses and activities also covering the fundamental public facilities and services is able to offer wider experiential variety and through more divers inhabitants, providing them with more sociable and well functioning environment. Therefore, since the development of this area has not completed yet and still is randomly and carelessly developing, there is an urgent need to turn this type of growth into an organized and planned type of development with diversified physical and functional characteristics and take the advantage of existing various types of dwellers to make the utmost experiential variety and meaningful social interactions among the neighbourhood.

5.2 Conclusion and General Recommendations

The key concern of this study has been the possibility of improving communal life through enhancing variety of experiences; in fact, it was intended to underline the need for increasing variety of experiences in order to offer a more meaningful and valuable social interactions among neighbourhoods. Therefore, the study first investigated the

issue of “diversity” within neighbourhoods and highlighted its significance in achieving more experiential variety; it then examined this concept by objective physical, spatial, functional and socio-economic variables among the neighbourhood environments. Taking into account, it is believed that physical qualities which create variety of uses and users are the basis of well-functioning of the environments. Thus, based on the mentioned assumptions, the findings of analysis in this study indicate a general lack of diversity of forms in the newly developed neighbourhoods of Famagusta (Baykal, Karakol and Tuzla), and a serious lack of diversity of uses and users in the historic core and newly developed suburban district of the city (Surici and Tuzla).

Following the careful investigations on the neighbourhoods of the city of Famagusta and also more detailed analysis on the quality of diversity in the four cases of this study and evaluating their results, some certain strategies towards diversity for better community life among them were necessitated as discussed before; moreover, some general recommendations for enhancing variety of meaningful experiences within the neighbourhoods of Famagusta, are pointed out to this spot as below:

- The study underlined the fact that the existing condition of the four examined neighbourhoods increases dependency on car and discourages walking and cycling while the opportunity for a rich experiential meaning and effective community life is ignored. Whilst, the aim of planning policies and urban design solutions must reduce the need for movement, and create new developments, permeable and accessible to the existing neighbourhoods (Oktay, 2002).

- Transport connections have to be improved in a way that promotes efficiency, remains environmentally sensitive, and prioritizes the needs of pedestrians, cyclists, less-able and disabled people and public transport users.

- Form of development should not be oriented towards creating a monotonous image both in terms of built masses and open space environments.

- Spaces between buildings require a deep concern to human needs in a way that attracts people and hold them in outdoors to enhance their communal social life.

- Spaces between buildings should be well integrated with natural environments and other types of well-designed furnishing elements (sitting, lighting, shading, pavement signs etc.) to comfortably accommodate pedestrians.

- Public spaces should be paid great attention not only in their central districts, but also, and most importantly, in the urban edge and newly developed settlements, where the space between is becoming more important as densities increase (Oktay, 2002).

- Physical maintenance of the neighbourhoods in terms of natural, built and environmental conditions, noticing litters and rubbishes, abandoned cars and houses, vacant lands, unfinished constructions etc. should be of top concerns for promoting the use of outdoor environments.

- The neighbourhoods should accommodate diverse functions and activities so that local can meet their daily needs within the neighbourhood, otherwise, they have to leave their environment to fulfil their needs which leads to increases in car dependency.

- Variety of recreational activities within the neighbourhoods extends the choices and variety of experiences, offers the chance for occasional visits, improves social interactions as a result while prevents monotony. Besides, lack of recreational facilities make the neighbourhood unattractive and dead especially at nights.

- Rich meaning and effective community life will not be reachable unless variety of users from different walks of life cut across age group would benefit the environment at the same time; for that purpose there is a special need of tightly clustered uses in a prosperous form of development; in other words, variety of forms and uses must strongly associate together to meet various types of users.

5.3 Research Limitations and Future Research

Based on the results of previously carried researches on the traditional core of the city, Surici (The Walled City), declaring that this area is functionally isolated (Oktay, 2010) from the rest of the city, as well as the results of this study pointing lack of diversity in uses and users, there is an essential need to further studies on this area, coming up with more clear and accurate strategies for preventing the future defects. However, for putting forward constructive suggestions in this area, more detailed theoretical reviews on

different cases all around the world are needed which was out of the framework of the present study.

On the other hand, the sprawl type of development in northern part of the city (Tuzla) is considered as a consequence of lack of master plan (Oktay, 2010); so, first and foremost, there is an urgent need that responsible authorities take this issue into consideration. Meanwhile, a stronger detailed study on suburban growth of Tuzla and the possibility of new urbanism approaches for dealing with its failure to meet the standards of neighbourhood is highly needed.

In addition to the mentioned disorders raised by rapid and unplanned growth of the city, having no respect to the conception of diversity, there is a serious neglect to human satisfaction and their everyday community life which needs further study as well. Thus, the long-term hypothesis of this research would dispute whether diversity in neighbourhoods can be a determinant of residents' quality of life and to what extent it might impact neighbourhoods' level of satisfaction; however, it requires a subjective evaluation of the neighbourhoods by the users themselves in addition to these assessments with objective measures. Therefore, it is the author's intention to compare the results of this study which was based on the objective investigation with the results of the future subjective analysis of diversity within the neighbourhood environments.

BIBLIOGRAPHY

Aalen, F. H. A. (1992). English origins. In S. V. Ward (Ed.), The garden city: Past, present, and future (pp. 28-51). *E and FN Spon*. London.

Abu-Lughod, J. (1983). Contemporary Relevance of Islamic Urban Principles. in Islamic Architecture and Urbanism. A. Germen (ed). Dammam, *King Faisal University*: 64-70.

Afushteei Natanzi, M. (1971). Niqavat-ul-Athar Fi Zikril Akhabr. *Bongah-e Tarjomeh va Nashr-e Ketab*. Tehran.

Alexander, C., Ishikawa, S., Silverstein, M. (1977). A Pattern Language. *Oxford University Press*. New York.

Alizadeh, H. (2005). The design principles of traditional urban cores in Iran: A case study of Qatar-chyän quarter, Sanandaj. *Published thesis in University of Newcastle Upon Tyne.* Newcastle. (http://hdl.handle.net/10443/874)

Alten, I. (1958). Sanandaj, a Town Plan. Sanandaj, United State Operation Mission to Iran.

A'zami, A. (2005). Badgir in traditional Iranian architecture. *International Conference "Passive and Low Energy Cooling for the Built Environment.* Santorini, Greece.

Azizi, M. (2006). Sustainable Residential Neighborhood: The Case Study of Narmak Neighborhood, Tehran. *Honar-Ha-Ye-Ziba*. VOL.27. 35-46.

Barton, H. (ed) (2000). Sustainable Communities: the potential for Eco-Neighbourhoods. *Earthscan*. London.

Beatley, T. (2000). Green Urbanism: Learning from Euopean cities. *Island Press*. Washington DC.

Bentley, I., Alcock, A., Murrain, P., McGlynn, S., and Smith, G. (1985). Responsive Environments: A Manual for Designers. *Architectural Press*. London.

Bentley, I. (1993). Community Development and Urban Design, Making better places: Urban Design Now. *Butterworth Architecture*. Oxford. 72-79.

Bonine, M. E. (1979). The Morphogenesis of Iranian Cities. *Annals of the Association of American Geographers*. VOL 69(2). 208-224.

Boonyat, Ch. (1996). The New Town of Williamsburg: A Study of the New Urbanism. *Published Thesis in Virginia Polytechnic Institute and State University*. Virginia.

Broadbent, G. (1990). Emerging Concepts in Urban Space Design. *Van Nostrand Reinhold*. New York.

Burton E. (2000). The Compact City: Just or just compact? A preliminary analysis *Urban Studies*. 37(11): 1969-2007.

Breheny, M. (1992). Sustainable Development and Urban Form. *Pion*, London.

Calthorpe, P. (1993). The Next American Metropolis: Ecology, Community, and the American Dream. *Princeton Architectural Press*. New York.

Carmona, M. (2003). Public Places Urban Spaces. *Architectural Press an imprint of Elsevier*. Oxford.

CHN (Cultural Heritage News Agency). [Online Nov. 2011]. (http://www.chn.ir/news/)

CNU (2001). Charter of the New Urbanism. [Online Nov. 2011]. Available: (http://www.cnu.org/sites/www.cnu.org/files/Charter.pdf)

Costanza, R. et. al. (2008). An Integrative Approach to Quality of Life Measurement, Research, and Policy. *S.A.P.I.EN.S.* VOL.1, No: 1.

Cullen, G. (l971). The Concise Townscape. Butterworth Architecture. London.

Christoforidis, A. (1994). New Alternatives to the Suburb: Neo-traditional Developments. *Journal of Planning Literature.* 8, No.4. 429-440.

Davies, L. (2000). Urban Design Compendium. *English Partnerships*. London.

de Roo, G. and Miller, D. (2000) Compact Cities and Sustainable Urban Development, (Introduction), *Ashgate*, Hampshire.

Doratli, N., Önal Hoşkara, S., Zafer, N. and Ozgurun A., (2003). The Walled City Of Famagusta (Gazimagusa): An Opportunity for Planned Transformation, Proceeding of "The Planned City?" *ISUF* International Conference. VOL. II, pp.443-448.

Duany, A., and Plater-Zyberk, E. and Speck, J., (2000) Suburban nation: The rise of sprawl and the decline of the American dream. *NY: North Point Press*. New York.

Duany, A., and Plater-Zyberk, E. (1996). The town of Seaside, Florida Paper presented at The Technique of Traditional Town Planning Workshop Charlotte, North Carolina.

Duany, A., and Plater-Zyberk, E. (1994). The neighbourhood, the district and the corridor. In The New Urbanism: Toward an Architecture of Community. In P. Katz (Ed.), *NY: McGrawhill*, New York.

Duany, A. (1991). Suburban Sprawl or Livable Neighborhoods Paper presented at AICP Planners Training Conference on Neotraditional Town PlanningNewport Beach. California.

Duany, A. (1989). Traditional towns. *Architectural Design, 59* (1989), pp. 60–64.

Ehlers, E. and Floor, W. (1993). Urban Change in Iran, 1920-1941 in Iranian Studies. *Taylor and Francis, Ltd. on behalf of International Society for Iranian Studies*. Vol. 26,No. ¾. pp. 251-27.

Elkin, T., McLaren, D. and Hillman, M. (1991). Reviving the City: towards sustainable urban development. *Friends of the Earth*. London.

Ewing, R. (1997). Is Los Angeles-style sprawl desirable? *Journal of the American Planning Association*, 63(1): 107-125.

Famagusta Municipality. (Nov. 2011). (http://www.magusa.org/English/f_story.htm)

Farr, D. (2008). Sustainable Urbanism: urban design with nature. *John Wiley and Sons*. New York.

Fulton, W. (1996). The New Urbanism: Hope or Hype for American Communities? *Lincoln Institute of Land Policy*. Cambridge.

Hillman, M. (1996) 'In Favour of the Compact City', in Jenks, M., Burton, E. and Williams, K. (eds.) The Compact City: a sustainable urban form? *E and FN Spoon*. London: 36-44.

Howard, E. (1902). Garden cities of to-morrow. *Swan Sonnenschein and Co*. London.

Jacobs, J. (1961). The Death and Life of Great American Cities. *Random House*. New York.

Jenks, M., Burton, E. and Williams, K. (1996). Compact Cities and Sustainability: an introduction. in Jenks, M., Burton, E. and Williams, K. (eds.) The Compact City: a sustainable urban form? *E and FN Spoon*, London: 3-8.

Kallus, R. and Law-Yone, H. (1997). Neighbourhood–The Metamorphosis of an Idea. *Journal of Architecture and Planning Research*. 107, 14:2. Chicago.

Katz, P. (1993). The New Urbanism, Toward an Architecture of Community. *McGraw-Hill*. New York.

Khademzadeh, M.H. (2007). Historical Communities of Yazd. *Sobhan-e-Noor Cultural Heritage Base Of Historical Yazd City*. Tehran.

Kostof, S. (1992). The City Assembled : the elements of urban form through history. *Thames and Hudson*. London.

Krieger, A. (1995). Reinventing Public Space. *Architectural Record*. 183/6, s. 76-77.

Krier, R. (1984). Urban Space. *Rizzoli*. New York.

Krier, L. (1991). Afterword in Andres Duany and Elizabeth Plater-Zyberk: Towns and Town-Making Principles. *Rizzoli*. New York.

Krueckeberg, D. A. (1983). The American Planner: Biographies and Recollections. *Methuen*. New York and London.

Javis, F. D. (1993). Site Planning and Community Design for Great Neighborhoods. *Home Builder Press, National Association of Home Builders*. Washington, DC.

Lang, J. (2005). Urban Design: A Typology of Procedures and Products. *Architectural Press*. Oxford.

Langdon, P. (1988). A good place to live. *Atlantic Monthly*. 261 Suppl. No.:1.

Langdon, P. (1994). A Better Place to Live. Reshaping the American Suburb. *Harper Perennial*. New York.

Lozano, E. (1974). Visual Needs in the Environment. *Town Planning Review*, VOL. 45, No.4, pp. 351-374.

LEED Update for Neighbourhood Development Rating System, (2009). US Green Building Council.

Madanipour, A. (1998). Tehran: the making of a metropolis. *John Wiley*. England.

Madanipour, A. R. (2003). Public and Private Spaces of the City. *Routledge.* London and New York.

McLaughlin, E and McLaughlin, T. (1978). Cost effective self-sufficiency, or the middle-class peasant. David and Charles. London.

Meacham, S. (1999). Regaining Paradise: Englishness and the Early Garden City Movement. *Yale University Press*. New Haven.

Montgomery, J. (1993). Making a City: Urbanity, Vitality and Urban Design, *Journal of Urban Design*, VOL.3, No. 1.

Mumford, L. (1954). The Neighborhood and the Neighborhood Unit. Town Planning Review. *Princeton Architectural Press*. New York.

Murrain, P. (1993) Urban expansion: look back and learn, in Hayward and McGlynn (Eds.) Making better places: urban design now. *JCUD*. Oxford.

Najimi, A. W. (1988). Herat, the Islamic City: a City in Urban Conservation. *Curzon Press LTD*. Copenhagen.

Newman, P. and Kenworthy, J. (1989). Cities and automobile dependence: a sourcebook, *Aldershot*, Hants.

Oktay, D. and Marans, R.W. (2010). Overall Quality of Urban Life and Neighborhood Satisfaction: A Household Survey in the Walled City of Famagusta. *Open house international*. VOL. 35, Issue 3, pp 27-36.

Oktay, D. (2010). Gazimağusa'da Kentsel Yaşam Kalitesi: Araştırma, Planlama ve Yönetim İçin Göstergeler (Quality of Urban Life in Famagusta: Implications for Research, Planning and Politics). published for the Urban Research and Development Center, *EMU Press*, Famagusta.

Oktay, D. (2010). Overall quality of urban life and neighbourhood satisfaction. *Open House International*. VOL.35, No: 3.

Oktay, D., Rüstemli, A. and Marans, R.W. (2009). Neighbourhood Satisfaction, Sense of Community and Attachment: Inital Findings from Famagusta (Gazimagusa) Quality of Life Study. *ITU A/Z Journal*, 6/1, pp 6-20.

Oktay, D. (2006). How can urban context maintain urban identity and sustainability?: Evaluations of Taormina (Sicily) and Kyrenia (North Cyprus), *Web journal on cultural patrimony*. VOL. 1, No. 2.

Oktay, D. (2004). Urban Design for Sustainability: A Study on the Turkish City. *International Journal of Sustainable Development and World Ecology*. Vol. 1. pp 24-35. Oxford.

Oktay, D. (2004). Sustainability of Housing Environments: Assessments in Cypriot Settlements. The Power of Imagination (Ed: T. Mann), *EDRA Publ., Edmond*. pp 147-158. Oklahoma.

Oktay, D. (2001). Planning Housing Environments for Sustainability: Evaluations in Cypriot Settlements. *YEM (Building and Research Center) Publications*. Istanbul.

Oktay, D. (1998). Vitality of Urban Spaces: Attempts for A More Livable Waterfront in Girne (Kyrenia), *The 44th IFHP World Congress - Changing Cities, Strategies for Quality, Lisbon, Portugal*. 13-17.

Oktay, D. (1995). Designing for choices: Evaluations of the Environmental Qualities in Social Housing Complexes in North Cyprus. *IAHS* Conference. Singapore.

Onal, Ş., Dağlı, D. and Doratlı, N. (1999). The Urban Problems of Gazimagusta and Proposals for the Future. *Elsevier Science Ltd. cities*, Vol.16, No.5, p.333-351.

Pacione, M. (1982). The use of objective and subjective measures of quality of life in human geography. *Prog. Hum. Geogr*. 6 (4), 495–514.

Pacione, M. (1993). The quality of the urban life space – a geographical perspective. In: Bonnes, M. (Ed.), Perception and Evaluation of Urban Environmental Quality. *UNESCO*, Rome, pp. 17–42.

Pacione, M. (2005). Urban Geography, a Global Perspective. *Routledge*. London/New York.

Perry, C. (1998). The Neighbourhood Unit (1929) Reprinted *Routledge/Thoemmes*. London.

Rapoport, A. (1977). Human Aspects of Urban Form, *Pergamon Press*. Oxford.

Relph, E. (1987). Place and Placeness: The Modern Urban Landscape. *Croom Helm*. London.

Rudin, D. and Falk, N. (1999). Building the 21st century home: The sustainable urban neighborhood. *Architectural Press.* Oxford.

Saeidi, S. and Oktay, D. (2011). Diversity for Better Community Life: Evaluations in Famagusta Neighbourhoods. Asian International Conference on Environment-Behaviour Studies, 7-9 December 2011, Famagusta. (accepted for publication in Elsevier Procedia Social and Behavioral Science).

Schaefer, J. M., et al. (1992). Expanding into the urban arena: a wildlife initiative. *J. of Exten*. 9-10.

Schuck, A. and Dennis R. (2006). Promoting Safe and Healthy Neighbourhoods: What Research Tells Us about Intervention. *The Aspen Institute*. Washington D.C.

Smith, R. (1975). Measuring Neighbourhood Cohesion, Human Ecology, 3(3), 143-160.

Smith, M. E. (2010). The archaeological study of neighborhoods and districts in ancient cities. *Journal of Anthropological Archaeology.* VOL. 29, 137-154.

Stein, C.S. (1996). Towards New Towns for America. *MIT Press*. Cambridge.

Steuteville, R. (2002). The new urbanism: An alternative to modern, automobile-oriented planning and development. New Urban News. [Available online]. (http://www.newurbannews.com/AboutNewUrbanism.html)

Tabrizian, P. (2010). From City-Hills to Metropolis: The Origins and Dilemmas of Landscape Urbanism in Iran. (http://www.n-aerus.net/web/sat/workshops/2010/pdf/PAPER_tabrizian_p.pdf)

Ταρεογλh, A. (1963). Κυπροε., ΕκΔοεειε 'Αλφ', I.M. Σκαzikh, Αθhαi, Vol. A/B.

Talen, E. (2008). Design for diversity: exploring socially mixed neighbourhoods. *Architectural Press.* Oxford.

Talen, E. (2002). The Social Goals of New Urbanism, *Housing Policy Debate*, VOL. 13, No. 1: 165-187.

Talen, E. (1999). Sense of community and neighbourhood form: an assessment of the social doctrine of new urbanism, *Urban Studies*, 36, 8, 1361-1379.

US Green Building Council (2009). LEED for Neighbourhood Development Rating System. Washington D.C. (http://www.usgbc.org/)

Walters, D. (2007). Designing Community. *Architectural Press*. Oxford

Ward, S.V. (1992). The Garden City Introduced. In The garden city: past, present and future, S. V. Ward, ed. *E and FN Spon*. London.

Webster's Ninth New Collegiate Dictionary (1991). Springfield: Merriam-Webster.

Wheeler, S. (2004). Planning for Sustainability: Creating Liveable, Equitable and Ecological Communities, *Routledge*. London.