Research Proposal:
Sustainable Neighborhood Criteria: Temporal and Spatial Changes

Introduction

In recent years, sustainable urban development has been considered as one of the prevalent theories and policies, devoting a major portion of urban-planning literature. As a consequence of contemporary changes in urban structures and the replacement of former urban environments with newer urban structures, urban neighborhoods have found substantial significance. Older neighborhoods have been formed during a long period of time, aimed the accomplishment of personal and social requirements of its residents. However, it seems that changes in various economic, social, environmental and physical factors in cities in general and specifically in neighborhoods, has had significant negative impacts on their efficiency in fulfilling residential requirements. The present research is an effort towards analyzing sustainable neighborhood development aspects, in the form of a comparison between neighborhoods over time.
In response to the vast growth in development plans in recent decade resulting in various problems for the environment, several approaches have been presented for future developments. Sustainable Development, Compact Cities, Environmental Justice, New Urbanism and Smart Growth are among these new ideas (Barton, et al., 2003: 18). According to the definition presented by the International Committee of Environment, “A development which is capable of fulfilling contemporary requirements without losing the ability to fulfill those of the future generation, is a Sustainable Development” (Chapman, 1996). Barton believes that “Sustainable Development is the focus of development on people and establishing justice for present and future generations”. He emphasizes that development is not merely related to economic success, in fact, different aspects such as health care, social life, quality of life and environmental conditions are also affected (Barton, 2003:5 and Evans et al, 2004).

While it can be asserted that sustainable development has not yet been clearly defined at the scale of neighborhood, the definition and the criteria for a good and sustainable neighborhood may change over time. Changes in family structures and generations, increase or decrease in transportation and traffic, delicacy of environmental issues such as open space, destruction of natural environment and over-consuming sources are factors influencing the neighborhood scale. Regarding physical aspects and quality of life indices, we can mention accessibility to services and equipment, convenience to career location, housing quality, effect of new transportation systems on communication networks, structure of road networks, accomplishment of urban planning ideas, different construction methods and imposing urban planning regulations.

Generally, the term neighborhood can be defined from different social, psychological, mental, perceiving, architectural (physical) and political points of view. In other words, each of the various aspects presents its own definition of neighborhood. On the other hand, these interpretations can be different in various societies and historical eras. The framework of a neighborhood can be a substantial factor in its definition. The daily life of citizens can be perceived in the scale of a neighborhood. The level of issues examined in the scale of a neighborhood can be variable from different aspects. For some, localization of residential
blocks in one region and for others size and area of a neighborhood are considered. However, the concept of cultural and social atmosphere between residents of a place might be predominant (Wheeler, 2004: 181).

Factors such as population, area, and shape can not characterize a neighborhood, similar to cities with different size, form, density and other characteristics. In fact, factors such as distinct identification, residential perception, reputation and physical boundaries are representatives of a neighborhood. Neighborhoods experience major variations through generation replacements and changes in economic and social conditions. Economic, social, cultural and environmental changes during periods of time, mainly affects people’s characteristics and necessities resulting in physical changes in the structures of neighborhoods.

Several principles and criteria can be mentioned and analyzed for neighborhoods, including liveliness, identification, symbolization, diversity, accessibility and conveniences. In recognition of a neighborhood, symbols can be implemented as important elements of guidance and direction. These symbols can appear in specific and unique buildings, spectacular views, shape of roads, high buildings and special physical elements (Chapman, 1996). Most of the old neighborhoods which consisted of structures of lively areas were the result of a long period of improvement which takes advantage from maintenance plans.

Movement in a neighborhood can possess various dimensions in the form of different goals. The most significant difference in movements and accessibility in the scale of a neighborhood compared to larger scales are in its phenomenal and direct relationship with living issues and families. Accessibility in a neighborhood is not only devoted to daily traffic, but an area with different functions. Accessibilities can be assumed as means of enjoying the process of movement (Chapman, 1996 and Barton et al, 2003: 117).

Density which is a concept used in different meanings and contexts (population, building, and residential density or net and gross density) and different physical-spatial levels, is considered as a substantial and influential issue. Density has a cause and effect relation with economic, social, cultural, environmental and physical factors and creates the basis for planning, designing and legislating policies regarding
development plans (Azizi, 2003). The analysis and planning of density in the scales of a neighborhood is considered as one of the substantial elements in the strategies of accomplishing a sustainable neighborhood (Barton et al, 2003: 207; Wheeler, 2004: 190).

The construction and creation of a neighborhood requires local perception and deep analysis where all factors and forces mentioned above are considered. After the transition from classical urban development plans (master plans) to structural and strategic plans, recent theories are also worth mentioning which include sustainable urban development and the complex city. The development of sustainable neighborhood creates an important basis for recognizing many principles and criteria stated in theories and ideas of sustainable urban development. Although some existed neighborhoods may be considered as sustainable neighborhoods, the tolerable capacity of the neighborhood is likely to reach its threshold with the continuation of the current construction process and increase in population and construction density.

Changes and alteration in urban areas is an irresistible fact, and various forces including social, cultural, economic, population, technological and environmental forces affect the process and the intensity of changes. The criteria of identity, liveliness, reliance, symbolization, security, accessibility and conveniences may be examined in neighborhoods with different ages.

**Research Questions**

1. Is there any different between criteria for sustainable neighborhoods in various spatial conditions and temporal changes? If yes:
2. How can we define sustainability principles and criteria in neighborhoods for various periods of time and different spatial circumstances?

**Research Aim**

The main purpose of this research is recognition of changes in criteria for sustainable neighborhoods based on temporal and spatial changes.
**Hypotheses**

Neighborhoods are the coinciding location for interactions and social, economic, physical and environmental factors. Changes in any of the above conditions, factors and specifications as social and economic motives, can generate physical alterations of a neighborhood over time. In other words, neighborhood development criteria change based on different spatial conditions and varies over time.

**Research Methods**

According to the theoretical framework and research method, selected criteria of sustainability are examined by means of case studies with different spatial characteristics as well as ages of development. The main basis of questions is related to identity, liveliness, diversity, security, accessibility to services and tolerable capacity of neighborhood. While examining the conditions of criteria in older and new neighborhoods, a comparative study of these neighborhoods may be analyzed.