Full Length Research Paper

Social interaction in urban transformation areas and the characteristics of urban outdoor spaces: A case study from Turkey

Aysel Uslu¹* and Şafak Gökçe²

¹Department of Landscape Architecture, Faculty of Agriculture, Ankara University 06110 Dişkapi, Ankara/ Turkey.

²The Ministry of Public Works and Settlement, Turkish Republic Ankara / Turkey

Accepted 23 August, 2010

This study defends that solution to environmental and even social problems faced around the house which is the basic habitat has relations with space design. Therefore, spatial characteristics supporting social togetherness, cohesion and communication especially among different social groups living together in urban transformation areas have been analyzed. The research question of the article has been set as "How must the landscape characteristics be to support social interaction of the individuals around the house?". In this study, the importance of landscape design as a tool to lead individuals to outside spaces, socializing and being together has been tried to be stressed and space design tools that can be used to provide social interaction and the feeling of being a community especially in transformation places which are problematic have been examined. Cukurambar District which has gone through a very fast transformation period has been chosen as a research area. Existence of some places which have not transformed has given chance to examine the spatial behaviors of individuals from different physical and social conditions. In order to concretize the study and to get quantitative data, a questionnaire which examines the relationships among individuals, places and neighborhoods has been conducted in the transformation area and the results are evaluated. It is the aim of this study to be a guide for the spaces which will be transformed and new residents in creating social interaction places.

Key words: Landscape design, social conflict, social interaction, social cohesion, urban transformation

INTRODUCTION

Cities of today are having a collapsing period due to excessive population distribution, irregular constructions and being unplanned. This is not just a physical collapse. Housing types and negative environment of housing in cities has led people towards loneliness, lack of communication, individualizing. This study has been done in order to bring along a suggestion for a solution for the physical and social chaotic structure of cities.

"Community" is one of the most important concepts taken up in connection with surroundings of the house. It is argued that the community where primary relations prevail has not vanished as a result of modernization and

that it exists in new forms and it is observed as coming together in different flexibilities named "new tribes" in the global world (Maffesoli, 1996). Beginning from old utopias trying to arrange every minute of the people's daily lives through architectural solutions, "good society designers" believe in the necessity of changing the spatial structure in order to change life. It is possible to create a new social order in the city through spatial arrangements. Complex social diseases can be cured through different house surroundings, parks and new spatial arrangements (Öğdül, 1999).

Changes and transformation faced as a result of globalization have inevitably become the center of social dynamics. In this context, cities have become foci of social, cultural and spatial problems and processes. Cities of our days continue to lose their local characteristics and to develop in a manner without any

^{*}Corresponding author. E-mail: uslu@agri.ankara.edu.tr. Tel: +90312 5961699. Fax: +90312 3176467.

root, identity or spatial images giving the inhabitants a feeling of non-belonging. Such a spatial development estranges the people, individualizes and pushes them to loneliness, and alienates the individual to the society he or she is living in.

SOCIAL INTERACTION AND URBAN OUTDOOR CHARACTERISTICS

For a healthy development of an individual, all aspects of his or her life (physical, emotional, cognitive and psychological) must develop in equilibrium and in entirety. Such healthy development must be reflected and felt not only in individual lives but also in the entire society. Just as the construction of a house cannot identify itself directly with "home", designing a group of houses caring only for physical and visual requirements but not considering the way of life and relations of the people to be living there cannot create a feeling of belonging. In this context, in recent years concepts of "developing a society" or "sustainable society" have become important parts of housing development planning and design approaches in developed countries.

A new social order can be created through urban spatial arrangements. It is possible to find solutions to complex social problems using different house surroundings, parks and new spatial series. Urban image in human minds and thereby the human behaviors can be oriented through symbolic elements to be created in cities (Lang, 1994).

The surrounding of the house is perceived as a whole of the living and activity spaces beginning from the house and opening to outside, and displayed as a series of spaces originating from the house and developing towards the urban. In a general meaning, the surrounding of the house comprising the neighboring houses, transportation system, open green areas, car parks, play grounds and common activity spaces has, beyond its functional aspects, effects on personal development, too.

The researches made defended that outdoor space characteristics supported by natural elements and green areas have effects on social contacts of the people and provide benefits in many areas including social health. social togetherness etc. Effects of public open and green areas on social togetherness (Peters et al., 2009), perception of such spaces by different cultures (Buijs et al., 2009), or design of public spaces for sustainable societies and their effects on urban plans (Peacock et al., 2007) have been researched. Peters et al. (2009) found that urban green places offer opportunities to different ethnic groups to relax and enjoy outdoor life in a green and relaxing environment. Their study suggests that urban parks can be seen as inclusive places, that is, places where people of different ethnicities spend their leisure time. They also emphasized the importance of park design on social cohesion. They show that urban

green areas that are designed to meet different cultural needs and to facilitate social interaction may contribute to social cohesion in the culturally diverse cities and towns of the modern society.

Characteristics of the urban outdoor spaces also affect behaviors and trends of the individuals. Many researches have been made on how the design of outdoor spaces, streets and parks affects the social lives of the people. Sauter and Huettenmoser (2008) discuss how street design and traffic affect social relations in urban neighborhoods. They studied three street types in the city of Basel, Switzerland. They showed that urban neighborhoods are still very lively places, despite their often lamented anonymity and individualization. Streets with slow moving traffic, limited space for parking and good environmental qualities offer a large potential for personal development, contentment and social integration. Livable streets in urban neighborhoods can be great places for public life and social inclusion. For a sustainable community development, convenient activity spaces must be designed for all different individuals (the elderly, women, children and the disabled). Green areas designed using natural elements contribute to socialization of the members of the society as much as they are important places for their health. It has been found that areas with natural landscaping, green neighborhoods meeting places, group-based nature activities such as walking and shared gardens for the elderly can facilitate social contact, which has been shown to reduce the risk of developing chronic disease such as depression and disease (Peacock cardiovascular et al.. 2007: HCNDACRSP, 2004). Also it is important that parks and open spaces should be accessible for everybody in the city. There is a significant relationship between health and greenness.

Research evidence shows that close proximity to green space is clearly associated with reduced prevalence of depression, anxiety or other health problems. The relationship has been shown to be strongest for children and people with low incomes (Townsend and Weerasuriye, 2010). They also claimed that green spaces closer to home appeared to play a major role in morbidity prevention, relative to green spaces some distance away. It is recommended that people living in towns and cities should have an accessible natural green space of at least two hectares in size, located no more than 300 m (or five minutes walking distance) from home (Natural England's Accessible natural Green space Standard-ANGST, 2010.)

Another study carried out by Stigsdotter (2005) also shows same results about the relationship between health and green areas. There is a positive and significant relationship between stress and having or not having a garden adjacent to the home. Urban green spaces could constitute an element of city planning of importance to public health. If such spaces are appropriately designed, they could help reduce city dwellers' experience

of stress. Such health effects, however, require that green spaces be an integrated part of people's everyday living environments by being near the home and workplace.

The serious health and well-being implications of reduced access to green open spaces for people living in socio-economically disadvantaged areas is significant and warrants serious consideration in future urban renewal and development projects (Townsend and Weerasuriye, 2010). Social interaction and communication of the people among themselves and their environment mean formation of an environment of cultural, behavioral and sensuous exchange.

The role of the environment is less immediate in the human-interaction group which includes the issues of social interaction, citizen participation in the design process and community identity.

Matsuoka and Kaplan (2008) reviewed the studies in their article and they offer continued evidence that the design of urban landscapes strongly influences the wellbeing and behavior of users and nearby inhabitants.

Many researches emphasize that there is a relation between urban landscape characteristics and human health and social relations.

According to Baum and Palmer (2002) "opportunity structures" such as well-maintained parks, community cafes, local shops should be designed for people to go out and about in their local area. These places affect the social contact with residents.

Environmental design and layout can influence social interactions. The provision of decent housing, safe playing areas, transport, green areas, street lighting, street cleaning, schools, shops, banks, etc. impact upon participation in that their presence facilitates social interaction and a "feel good" sense about a place (Baum and Plamer, 2002). Macdougall and colleagues have shown that features of the physical environment (safety or urban design, for example) affect the rate at which people undertake exercise (MacDougall et al., 2002).

A feeling of belonging has been seen as central to definitions of a "sense of community" (McMillan and Chavis, 1986). Buijs et al. (2009) showed that image of nature and landscape preferences vary among different cultures. They also showed that the concept of image of nature may provide a stronger and more substantially meaningful predictor of landscape preferences than traditional predictors like age, education and gender. Peters et al. (2009) found that urban parks are more inclusive green places than non-urban green areas and those urban parks can promote social cohesion in their study. Urban parks can provide a vital locality where everybody's experiences are shared and negotiated with a variety of people.

Each physical environment includes a social environment and each social environment includes a physical environment. In this sense, all social/cultural systems from the most primitive to the most developed have been

perceived as integral physical and social environments (Güvenç 1996). Gehl (1987) indicates that all meaningful social activities, experiences and dialogues take place when the people are on foot. Being a "pedestrian" is defined as the most functional situation in terms of meaningful communication and information. An activity in a space is the reason for creation of further activities. Presence of an activity determines liveliness of the environment in this sense. Presence of an activity in the environment carries the people from home to outdoors and orientates them to outdoor spaces. Monotonous boring and empty spaces cause the people to stay away from outdoor spaces and direct them to interiors. As a result, social interaction decreases.

SPACE DESIGN AND NEIGHBOURHOOD UNIT FOR SOCIAL INTERACTION

Sense of belonging to a community is one of the basic needs of the individual (Maslow, 1954) and an important determinant of his or her social behaviors (Alexander. 1977). When this need is not met the individual begins to grow a feeling of loneliness, rootless and isolation. Creation of a livable environment and a sense of community as well as provision of social interaction have emerged as very important shortcomings following the negative impacts of modernism on all global cities. In this context, buildings of Pruitt-Igoe housing project (St. Louis, Missouri, USA) which were demolished due to failure in meeting social needs proved the alienating effects of modernist design and considered by many theoreticians and critics as the end of modernism in addition to drawing attention to the effects of environmental design on human behavior (Oktay 2001).

Alexander (1977) finds that tall buildings have negative psychological influences on individuals. Tall buildings have disadvantages like damaging formation of open spaces, deteriorating social life and urban structure, making life difficult for children, and causing damage to light, air and appearance. It is a reality that life in tall buildings take people to isolation and therefore to personal collapse as a result of harming their self-esteem and identity. A cut in communication harms the house-environment-user-identity interaction and cannot take the relation between the individual, the house and the immediate surrounding of the house to a further point.

The "street space" is important in terms of social interaction, recognition of group identity and communicating with places and people. Streets which have lost their human dimension and turned into passages for vehicles instead of being activity places (Kaplan, 1993) are evaluated in this respect. The relation of the house with the street is also important in terms of socialization. With its relation with the house the street which shows cultural differences in terms of usage plays an important role in extroverting the house. The image of the street supports

the feeling of belonging, the sense of locality and grades the experience around the house.

Outdoor activities have direct influences on the interaction between neighbours. Social activities like meeting, communication, protection, speaking etc. affects the frequency of coming together. Formation of spaces appropriate for such activities can be realized with an understanding of design concentrating on interaction beyond architectural solutions (Gehl, 1987).

Factors like speed of movement, scale, directions, social interaction environment and degree of interaction create social interaction and in connection therewith increase communication of people with other individuals and places. By doing so, the individuals can find relations between their own identity and the physical and social environment and feel existing.

THE RELATION BETWEEN SOCIAL INTERACTION AND LANDSCAPE DESIGN

Landscape design is one of the most effective tools which can help the individual embrace the environment he or she is living in, to gain a feel of belonging, and have an image of the environment. Therefore, landscape design around the house must, without breaking apart from the immediate upper scale of the housing area, adopt an integral and functional design concept which fosters a sense of community.

One of the most important parts of the urban tradition is the open spaces. Such spaces add a further value to the city as they are the most important elements of urban architecture and contribute to social and psychological development of the community and ecologically provide benefits for the whole city.

Well- designed, planned and managed urban green spaces provide significant aesthetic, social, psychological and environmental benefits for their users (Townsend and Weerasuriye, 2010). Efforts must be made to improve quality of life in all neighborhoods and cities through increasing access to natural environments. Outdoor spaces have an unquestionable role in designing housing areas. Results of researches made in various countries to measure user satisfaction from urban housing blocks show that the success of the blocks is linked to how the spaces between the houses are designed rather than the quality of the interior spaces (Cooper et al., 1995).

The most important part of a social system is the common activity spaces (Alexander, 1977). The reason is that such spaces are important places where social interaction takes place. Landscape design can create common activity spaces in different scales which in urban scale are shopping centers, parks, squares, pedestrian roads and in district scale district parks, streets, school gardens, local clubs and colors and in building scale entrances, yards, balconies and terraces. When planned in combination with correct architecture and principles of

landscape design such spaces can contribute to development of a sense of community and formation of an identity caring for his or her environment.

Symbolic elements like parks, gardens, physical activity areas (walks, bicycle roads etc) and social interaction spaces like streets, house entrances, common spaces, balconies and terraces are elements of landscape design and contribute to formation of identity and community consciousness around the house.

Urban green spaces provide space for human interacttions, relieve stress and restore mental fatigue, thus reducing aggression. Kazmierczak and James' call for green space creation and improvement in socially excluded areas to improve the quality of life of their residents and to create cohesive and inclusive communities. Public spaces, especially in high density housing are essential places that enable residents to establish social interaction and recognition. In other words, they can become "social arenas" (Carr et al., 1992). The research shows that the most highly valued spaces are those which enhance the positive qualities of urban life, variety of opportunities and physical settings; sociability and cultural diversity. Therefore green spaces should be included in plans of economic, environmental and social regeneration (Swanwick et al., 2003) and made accessible to all urban residents (Burgess et al., 1988). Urban green spaces can facilitate social inclusion of individuals and cohesion of communities. Green spaces relieve stress and mental fatigue and are social areas which offer opportunities for voluntary involvement. De Vries et al. (2003) examined the impact of green spaces on community health. Their study has shown that people that live close to green areas are generally those that live in built up city environment.

Mass et al. (2006) showed that the percentage of green space inside a one kilometer and a three kilometer radius has a significant relation to perceive general health. Green space seems to be more than just a luxury and consequently the development of green space should be allocated a more central position in spatial planning policy (Mass et al., 2006). Mass et al. (2009) found in their studies that less green space in people's living environment coincided with feelings of loneliness and with perceived shortage of social support. Sukkweon et al. (1998) claimed that the use of green outdoor common spaces predicted both the strength of neighborhood social ties and sense of community. Characteristics of outdoor common spaces can play a role in the formation and maintenance of social ties among older adult residents of inner-city neighborhoods. The study of Sukkweon et al. (1998) showed that the results have implications for designers, managers and residents of housing developments.

MATERIALS AND METHODS

In this study, physical characteristics of space and their social

Table 1. Distribution of research population by age (%)

Age	< 16	17 - 24	25 - 34	35 - 44	45 - 54	55 - 64
Percentage (%)	25.7	7	23.4	9.1	25.7	9.1

interaction with individuals, the relation between social interaction and space and the possibilities of landscape design which can enhance social interaction have been investigated. The research area chosen for this purpose is Çukurambar Quarter in Ankara which is undergoing a rapid urban transformation and sheltering different social groups. Relevant literature, maps, aerial photographs and on-site observations as well as analytical studies and survey results have been used. A descriptive research model has been adopted for the study and Çukurambar Quarter has been chosen as the "universe of research". The 457th street has been taken as the sampling area. A survey comprising 16 questions intended to measure level of social interaction and its relation with space has been made with 175 persons. A data base has been set up using Mat Lab 6.0 software and necessary analyses have been made.

Background of research area

The research area was an agricultural land in 1960's. It lost its agricultural properties with subsequent immigration from rural areas to cities and entered into a transformation process. It turned into a quarter of squatter houses built by people coming to Capital Ankara from rural areas. It is located at 4 to 7 km from Kızılay which is the center of the city. The quarter which up to 1972 was the least densely populated part of Ankara with 14 people per hectare (Akçura, 1971) later on became an independent area (Erşahin 2002). Footpaths, single storey squatter houses, gardens and empty spaces between houses and parcels were reflections of the organic structure of the quarter when it was a squatter area. Main roads and streets as well as impasses were distinctive characteristics of the area. Impasses reflect spaces where children can play and people can meet and chat. Spatial and social structure of Cukurambar quarter was defined with expressions like complexity, diversity, flexibility etc.

Şenyapili (1981) indicates that social and economic changes of the squatter areas go in parallel. Squatter areas have flexibility; therefore, each house may have new additions with new requirements. There is no standard size for the houses in Çukurambar which as a result show diversity. Open spaces, gardens, and streets are spaces where neighborhood relations and communication take place. With changing economic conditions in the course of time new units have been added to the squatters and complexity has further increased with different arrangements.

Urban transformation of the research area

In order to improve the unhealthy living conditions of the squatters transformation began while Çukurambar was showing a rapid and unhealthy development, facing difficulties in adapting itself to urban conditions and with its proximity to city center creating opportunities of unearned income due to increases in land prices. It was planned to have a dense and qualified residential area to be transformed from a squatter area. Population per hectare is 500 in a heavily populated area while it is 250 in a moderately populated one (Erşahin, 2002). The density increased 3 fold in the said quarter as a result of transformation. The quarter has been transformed from a quarter of single storey squatter area to a residential area with buildings rising up to 34 m. Traces of an old squatter area has been

narrowed and preserved. Building and population density has been increased as a result of an approach targeting to increase the number of storey and flats. Gardens around the buildings are mainly those belonging to private residences. Number of public green areas is low in quarter scale. Inhabitants of the monotonous multi-storey buildings are former owners of the squatters and the newcomers. In this sense, a certain degree of gentrification has been achieved and higher income groups, too have begun living in these high quality multi-storey buildings. From time to time conflicts are seen between different social structures due to differences in life styles and urban culture. One of the main problems of the transformation areas is failure to have transformation in social sense together with physical (spatial) transformation. Private groups (land owners, developers etc.) are trying to get the maximum benefit from valuable urban lands.

Due to freely located and spread single blocks of residences in new Çukurambar, the streets do not show a formal consistence with the nearby built up elements. The distance between building fronts and pedestrian roads are increasing as a result of which a healthy relation cannot be established. Furthermore, building elevations make the necessary communication impossible. Building fronts, roads and elevations of solid elements do not allow sensuous, visual or physical contact (Gökçe, 2007).

At this point, interesting inconsistencies in formation of physical elements arise. Cukurambar is built by private initiatives but it is considered as a public housing project (Erşahin, 2002). While it is expected to see reflections of diversity and different users on the quarter, it is monotony that characterizes this place. The basic reason is the desire to maximize the gains by increasing the number of storey.

According to the records of the quarter headman, there are single dwellers as well as families with members between seven and nine. In this sense, the diversity created to establish neighborhood unit has been automatically achieved (Gökçe, 2007).

A survey to understand the neighborhood relations, expectations of the inhabitants and the level of social interaction has been made in the 457th Street and its vicinity representing the quarter. Results of the survey provide information about why people have chosen to live in this quarter, neighborhood relations and their expectations.

FINDINGS OF THE SURVEY

The street where the survey was conducted comprises four apartment buildings each with approximately forty flats. The apartment buildings have their own gardens and there are squatters nearby. This street where people both from low and high income groups live was particularly chosen.

Socio-demographic characteristics of research population

25.7% of the respondents are between age 45 and 54. Respondents below 16 are 25.7% (Table 1). Of the respondents 40% are married and have children; 11%

Table 2. Distribution of research population by level of education (%).

Level of education	Undergraduate	Student	High school	Primary school	Graduate, doctorate etc.	Primary school drop-outs
Percentage (%)	33	23.4	23.1	9.1	9.1	2.2

Table 3. Distribution of research population by Occupation (%).

Occupation	Student	Pensioner	Self employed	Housewife	Public servant	Other	Liberal profession	Unemployed
Percentage (%)	25.8	23.4	19.2	12	7.4	6.8	3.2	2.2

Table 4. Distribution of the reasons why the research population prefer the quarter with priority (%).

Reasons to prefer living in this quarter with priority	%
High construction quality of the houses	38.6
Easy transportation, prestigious quarter, closeness to work,	21.7
Closeness to market place, parks, green areas and shopping centers	2.2
Good neighborhood relations	4.5
Those living here obligatorily without the right of choosing	6.8
Not evaluated	4.5
Total	100

Table 5. Perception of the research population about neighborhood relations (%).

Perception of research population about their relations with neighbors	%
I do not know anyone. Therefore, no comment	17.1
I think I am of similar social structure	33.1
We are very different. We even have conflicts from time to time	45.3
I don't want to establish relations	4.5
Total	100

are married and without children; 47% are single and 2% widowed. A great part of the respondents are students and pensioners Table 2 shows education levels and Table 3 shows occupations.

The perception of research population about their living environments

38% of the respondents have been living in Çukurambar Quarter for more than 5 years; 16.5% for less than 1 year, 29% for 1 to 3 years and 16.5% for 3.1 to 5 years.

Reasons why the research population prefer this quarter with priority

38.6% of the respondents show the high construction quality of the houses as the primary reason of living in

Çukurambar. 21.7% ticked the choice "I had a title on the land before it turned into an apartment house"; another 21.7% ticked "conditions are convenient for me (transportation facilities, prestigious quarter, close to work, rentals are fair etc.)"; 2.2% ticked "presence of nearby services (parks, green areas, shopping centers and market place)"; 4.5% ticked "good neighborhood relations"; 6.8% ticked "in fact it is not my choice to live here"; and responses of 4.5% were not evaluated (Table 4).

The perception of the research population about neighborhood relations

40.9% of the research population think that they are of similar social structure with their neighbors. Rate of those who think that they are different from their neighbors and even face conflicts with them is 45.3% (Table 5).

Table 6. Places where the research population meet their neighbors.

Places	In the garden (%)	At the building entrance (%)	In front of the door (%)	Other (%)	In the park%
Percent of respondents	37.7	27.1	16.5	14.2	4.5

Table 7. Perception of the research population about the need for more common places of socialization in the quarter (%).

I definitely agree (need for more common places of socialization in the quarter) (%)	I agree partly (%)	I do not agree definitely (%)	I do not agree partly (%)	No comment (%)	Total (%)
52	32.2	4.5	6.8	4.5	100

Places where the research population meet with their neighbors

Answering the question "Where do you meet your neighbors out of the houses?" 37.7% of the research population said in the garden, 16.5% of the research population said in front of the flat, 27.1% at the building entrance, 4.5% in the parks and 14.2% in other places (Table 6).

Perception of the research population about the effects of the housing areas in terms of house types and outdoor characteristics on the relation between individualization and social problems

Rate of the respondents who think that insufficiency or absence of common places, between multi-storey housing lots has effects on individualization is 40%. Rate of respondents who share this view in part is 36.8%. 4.5% do not share this view. 14.2% do not share this view in part while 4.5% had no comments.

Perception of the research population about sufficiency of places of socialization

52% of the respondents defended that *there should be more common places of socialization* in the quarter they live, while 32.2% share this view partly and 4.5% find the existing places sufficient and do not definitely agree. 6.8% do not share this view partly and 4.5% has made no comments (Table 7).

Perception of the research population about apartment house life and social relations

40% of the respondents definitely agree that "Multi-storey apartment house life and lack of public places is an important reason of individualization and weakening social relations" (Table 8).

76% of the respondents think that functions around the house and housing style may contribute to reduction of social conflicts and foster neighborhood relations. 20% of the research population refuses this idea while 17.2% have no comments.

Factors that the research population find important for social interaction

In response to the question "What is the most important factor in terms of social interaction with the house and its surrounding?" 57.1% of the respondents say that the most important factor is presence of a common garden belonging to each apartment house. This answer is followed by number of storey, presence of a common garden or a common entrance, parks in walking distance, structures like clubs etc., organizations, organized communities and similar social groups living together (Table 9).

Perception about life style and neighborhood relations in dense housing blocks

57.2% of the respondents definitely agree that "Neighborhood relations are negatively influenced by dense and too close housing blocks, noise, limited privacy and insufficiency of open green spaces", while 31.5% partly agree on this idea and 4.5% do not. 6.8% do not agree partly.

Places where research population pass time together with their children

40.2% of the respondents pass time together with their children mostly in parks and secondly in shopping centers (Table 10).

Communication of the research population with other people

59.2% of the respondents say that they communicate

Table 8. Perception of the research population about apartment house life and social relations.

I definitely agree (%)	I agree partly (%)	I definitely do not agree (%)	I do not agree partly (%)	No comment (%)
40	36.8	4.5	14	4.5

Table 9. Factors that the research population find most important for social interaction.

Factors most important for social interaction	%
Presence of a common garden	57.1
Presence of at most 4 to 5 storey-high buildings	18.8
Presence of parks in walking distance	6.8
Presence of organizations	4.5
Presence of organized communities	4.5
Presence of similar social groups living together	3.4
Presence of structures like clubs etc.	2.2
Presence of a common garden and entrance	2.2

Table 10. Places where research population use together with their children.

	Park	Shopping center	Street	Other	Houses of friends
Percentage of respondents (%)	40.2	29.5	12.4	11.4	6.5

with other people by speaking or making eye contact with them when they go to parks, shopping centers etc. 14.4% of the respondents say that they do not even have eye contacts with their neighbors while 26.4% often communicate with them.

Perception of the research population about the negative effects of multi-storey buildings and insufficiency of green areas on neighborhood relations

57.2% of the respondents agree that dense housing blocks and insufficient green areas have negative effects on neighborhood relations, while 31.5% do not definitely agree and 6.8% had no comments. The survey made has led to the following conclusions:

- (1) Most of the respondents prefer to live in these apartment houses due to the quality of houses and some advantages (including transportation, rentals etc.). In other words, characteristics of nearby surroundings and neighborhood relations are in the second and even third place for the respondents in terms of importance. However, as the answers to other questions show, the respondents think that life in less dense housing areas with lesser storey houses where there are friendly neighborhood relations that may be called traditional life style and where the streets are always lively and active is suitable in terms of developing social relations.
- (2) Our streets which show a continuous change,

transformation and a changing identity in physical sense cannot, unfortunately, show development in terms of socialization and human relations. Answers given by the respondents show once more that social life and human relations must also be considered when a street or a housing area is being physically planned. Answers of some respondents show that they are not interested in issues like social interaction, neighborhood relations and characteristics of the surroundings of the house. This is related to the individuals' level of awareness. The designers will contribute to bringing up individuals with high communication abilities and to improvement of social consciousness in long term by increasing this level and making space design focused on social interaction and aimed at orienting the people to outdoors.

(3) Social diversity must be turned into an advantage and importance must be placed on spatial design. Parks, structures and car park entrances, simple spatial designs where people can meet and come together (courtyards, common entrances etc.) and play grounds for children will be important instruments of communication. Furthermore, creation of common areas for recreation, walking and activities or definition of such areas using landscape designing elements (like different plants in each street), diversifying scales of streets and alleys and creation of visual angles and vistas will be distinguishing characteristics for the spaces. Streets narrowing or broadening from place to place, tiny plazas, pocket parks and special vegetal designs will be social arenas. Streets with personality and known designs must be constructed and common places which will bring different social

groups together and spaces where people can walk, watch the streets and pass time with neighbors must be created.

Conclusion

The need to have a feeling of belonging to a certain environment can be still felt no matter how the developments, in communication technology changes the perceptions about it. Because, the most important means of social interaction is the space and in this context it must be possible to design the housing areas from the largest scale down to a house unit as integral spaces which could foster social affiliation (Oktay, 2001).

In the post-modern era there have been quests to "livable environments" and spaces personality which take the human as the center and are in harmony with the nature and where ties with the past have not been broken and local characteristics are emphasized. One of these guests is the new urbanization trend. The new urbanization trend emphasizes, as an alternative to the driven lives, return to traditional urban tissue, mixed usage instead of dividing the city by functions, human scale instead of vehicle scale, revitalization of shops under the houses or in the corners instead of big shopping centers, and public spaces like squares and parks where people can meet and talk. As the primary habitat of human being, the house and its vicinity are elements influencing development of the individuals' personality, their communication with others, arousal of a feeling of belonging, and the ability to establish a link between space and identity. Therefore, formation of social interaction places must begin from such spaces. This study, based on the foregoing grounds, primarily emphasizes the importance and necessity of creating social interaction spaces through landscape design around the houses.

Landscape design has an indisputable role in maintaining a balance around the house between interior and exterior spaces. People will go out of the "house", participate in social life, interact with different social groups and develop social consciousness through creation of semi-open and open spaces, natural areas and common and accessible spaces (which can be used in common by young or old people and by children and disabled). Even a creative arrangement made using only plants can lead people to outdoors and to communication with others.

In the light of the above, transformation areas where there are problems in respect of social interaction like Qukurambar Quarter chosen as the research area, are considered suitable for purpose of designing, focused on providing social interaction. Generally in the transformation areas, there is a medium of conflict and social rupture which can only be solved through correct space design.

Furthermore, transformation areas are places with

adequate diversity and potential of reconstruction in terms of improving social interaction and sense of community. Spatial designs to be made in such places based on providing communication without changing the existing basic characteristics will create cohesion among different social groups and remind us of consciousness of being a society and the traditional life style.

This study sets off from Çukurambar Quarter and aims at putting forth physical and social problems which can be faced in a typical transformation area. The problems have been described and physical and social structure of the quarter, before and after transformation have been examined. In line with these examinations there have been made proposals for solving the problems. In the specificity of Çukurambar Quarter, these solutions are flexible enough to be implemented in all transformation areas and new settlements.

Proposals for landscape design intended to increase social interaction in the settlement areas.

- (1) The settlements must have a limit which should be defined by roads or natural structures, and have as its focus public squares where there are public structures.
- (2) In order to decrease dependence to center of the city, the settlements must be planned so as to cover not only the houses, but also various businesses and services.
- (3) Diversity must be provided in housing typologies using traditional models.
- (4) Pedestrians, bicycles and collective transportation must be given priority instead of using cars.
- (5) Public spaces must enjoy a special attention and buildings, streets and parks must be used as elements defining public places.
- (6) Corridors must be created as an urban element with visibility and continuity defined by the neighbors and the quarter providing them access and exit. Corridors have sometimes uniting and sometimes separating functions between the neighbors and the quarter. They may be natural (like water courses or foot paths) or man-made (like railroads, bicycle roads, or green belts separating functions or intended for recreational purposes).
- (7) In determining the optimum size of neighborhood unit and for the relation between houses and schools, commercial spaces and other activities, walking distance must be taken as a criterion. By doing so, the people can be given the opportunity to use the city more when going to work, shopping or entertainment places and meet, talk to and develop social relations with others.
- (8) Street design is important for developing social relations, and preserving traditional tissue. Care must be taken when designing the streets, places must be created for common use, and traditional life must be revitalized through remembrances by using traditional street elements (like fountains, courtyard-like squares, lights etc.).
- (9) Surroundings of the house contain data like symbols, rituals, stories, etc. important in terms of reflecting the

individual's relation with the place and a "sense of locality", and make a set off point for reaching the individual. Around the house, landscape elements reflecting the identity of the place and in harmony with the design concept must be used; a landscape design reflecting a certain story must be implemented and organizations aimed at bringing people together (like exhibitions, street theaters, garden parties etc.) must be held.

In the cities of our time the individual seeks for a meaning vis-a-vis his/her environment, and faces difficulties in communicating with physical and social surroundings and establishing a relation between his/her identity and the identity of the surroundings. Going far from and reducing the individual to units deteriorates meaningfulness and diversity stemming from differences, the sense of locality and the identity of the place.

Of course, it cannot be expected to solve the conflicts and the problem of communication only through landscape design. However, landscape design has the potential of contributing to improvement of the existing conditions and increasing the communication between the people through spatial design. Landscape design is also the part of suitable spatial planning to encourage more social interaction.

REFERENCES

- Akçura T (1971) Capital of the Republic of Turkey on the Monographic A Research, London. Middle East Technical University Faculty of Architecture Press, Ankara, Turkey.
- Alexander C (1977). A Pattern Language: Towns, Buildings, Construction. Oxford University Press, New York.
- Baum F, Palmer C (2002). "Oppurtunity Structures" urban landscape, social capital and health promotion in Australia. Helath Promotion International. Oxford University Press, 17(4): 351-361
- Buijs A, Elands BHM, Langers F (2009). No wilderness for immigrants: cultural differences in images of nature and landscape preference. Landscape Urban Plann., 91(3): 113-123.
- Burgess J, Harrison CM, Limb M (1988). People, parks and the urban green: A study of popular meanings and values for open spaces in the city, Urban Stud. December, 25(6): 455-473.
- Carr S, Francis M, Rivlin LG, Stone M (1992). Public Space, Cambridge University Press, Cambridge.
- Cooper M, Clare, Sarkissian Wendy (1995). Housing As If People Mattered. University of California Press, Berkeley.
- Devries S, Verheij RA, Groenewegen PP, Spreeuwenberg P (2003). Natural environments- healthy environments? An exploratory analysis of the relationship between greenspace and health. Environ. Plann. A, 35(10): 1717-1731.
- Erşahin RE (2002) Re-Defining Roles Of Architecture And Urban Design In The Production Of Urban Space In Turkey: The Transformation Of Çukurambar In Ankara. METU, Ankara.
- Gehl J (1987). Life between Buildings: Using Public Space. New York: Van Nostrand Reinhold Com.
- Gökçe Ş (2007). A study on landscape design, develop social interaction: The Case of Çukurambar Mahhallesi. Ankara University Graduate School of Science, Department of Landscape Architecture Unpublished Master Thesis, Ankara....
- Güvenç B (1996). İnsan ve Kültür.İstanbul, Remzi Kitabevi. Health Council of the Netherlands and Dutch Advisory Council for Research on Spatial Planning Nature and the Environment [HCNDACRSP] (2004). Nature and Health. The Influence of nature on social

- psycological and physical wellbeing. The Hauge: Health Council of The Hetharlans and RMNO.
- Öğdül, H G (1999). Improvement of Residential Areas in the Role of Social Bonds. Mimar Sinan University, Institute of Science and Ph.D. in City and Regional Planning Department of City Planning. Mimar Sinan University, Istanbul
- Kaplan H (1993) Design of Residential Areas Street Shared Path Spaces Regulations, and our cities Uygulanabilirliği.Kentsel Woonerf Design Principles Design and Applications Symposium, Mimar Sinan University, Istanbul, Turkey.
- Lang J(1994). Creating Architectural Theory. Reinhold, New York.
- MacDougall C, Wright C, Atkinson R (2002). Supportive environments for physical activity and the local government agenda: A south Australian example. Aust. Health Rev., 24: 178-184.
- Maffesoli M (1996). The Times of Tribes, The Decline of Individualism in Mass Society. Sage Publication, London.
- Mass J, van Dillen SM, Verheij RA, Groenewegen PP (2009). Social contacts as a possible mechanism behind the relation between green space and health. Health Place, June, 15(2): 586-595.
- Mass J, Verheiji RA, Groenewegen PP, de Vries S, Spreeuwenberg P (2006). Evidence based public health policy and practice: nGreen space, urbanity and health: How strong is the relation? Journal of Epidemiol Community Health., 10.1136/jech.2005.043125. 60: 587-592. Dol.
- Maslow A (1954). Motivation and Pesonality.Harper and Row, New York.
- Matsuoka RH, Kaplan R (2008). People needs in the urban landscape: Analysis of landscape and urban planning contributions. Landscape Urban Plann., Elsevier, Amsterdam, 84: 7-19.
- Mc Millan DW, Chavis DM (1986). Sense of community: A definition and a theory. J. Comm. Psychol., 14: 6-23.
- Natural England's Accessible Natural Greenspace Standard (ANGST), (2010) (undated) available at: http://www.naturalengland.org.uk/ourwork/enjoying/places/greenspace/greenspace.standards.aspx Accessed: 25 march 2010, verified: 21 April.
- Oktay D (2001). Theoretical Framework of Urban Design in Contemporary Perspective: Our cities, Quality of Life and Sustainability. Archit. Mag. 302: 45-49.
- Şenyapili T (1981) Gecekondu. METU yayını, Ankara.
- Peters K, Elands B, Buijs A (2009). Social interactions in urban parks: Stimulating social cohesion? (Article in Press, corrected proof)Urban forestry and urban greening, Doi: 10.1016/j.ufug.2009.11.003
- Peacock J, Hine R, Pretty J (2007). Got the blues, then find some greenspace: The mental health benefits of green exercise activities and green care. MIND Week report, February.
- Sauter D, Huettenmoser M (2008). Liveable streets and social inclusion. Urban Design Int., summer, 13: 67-69. Doi: 10.1057/audi. 2008. 15 accessed at http://www. palgrave-journals.com/udi/journal/lv13/n2/full/udi200815a.html
- Stigsdotter UA (2005). Urban green spaces: Promoting health through city planning. Available at: http://www.sundskap.se/publikationo1pdf/NAEP%2005%20Stigsdotte r%20 PAPER.pdf accessed: 13 April 2010.
- Swanwick C, Dunnett N, Woolley H (2003). Nature, role and value of green space in towns and cities. An overview, Built Environ., 29(2): 94-106.
- Sukkweon B, Sullivan WC, Willey AR (1998). Green common spaces and the social integration of inner-city older adults. Environment and Behavior, November, 30(6): 832-858, Sage Publications Inc.
- Townsend M, Weerasuriye R (2010). Beyond blue to green: The benefits of contact with nature for mental health and well-being. Project conducted by Deakin University Australia. A literature review from the school of health and social development, Deakin University, prepared for beyond blue; the natural depression initiative. Available at http://www. Beyondblue.org.au. accessed 17 march 2010, verified 17 April 2010.