From Traditional Neighborhoods to Urban Enclaves: An investigation on the residents' perceptions of their residential territories*

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Abstract: The significance of spatial proximity in terms of social relations and access to resources have diminished in the recent era while near home environments are still vital components of urban space since they form the secondary territories of urban residents after their homes and constitute the majority of the urban built environment. Albeit, existing residential fabric is under the threat of fast-paced transformations while recent developments emerge in the form of insular subdivisions and residential enclaves. In this context, this research aims to examine the residential environments not through the conventional planning techniques but from the 'insider's perspective'. Hence, the research investigates how urban residents perceive their residential territories in the recent era within different spatial layouts. The extent and content of perceived territorial unit as residential territory, as well as territorial landmarks and also territorial gaps are examined within the scope of the research. In this regard, a comparative case study is conducted in two districts of Ankara, Turkey namely Kavaklıdere and Çukurambar. The results reveal both the consistencies and idiosyncrasies in residents' definition of their residential territories and reveal significant insights for the future planning and design of residential environments.

Keywords: residential environment; human territoriality; resident perception

Transforming Residential Patterns from Traditional Neighborhoods to Urban Enclaves

The significance of spatial proximity in terms of social relations and access to resources have diminished in the recent era while near home environments are still vital components of urban space since they form the secondary territories of urban residents after their homes and constitute the majority of the urban built environment. Although people rather use multiple territories in the recent era with the advances in mobility and communication technologies, near home environments still have a distinct position in daily life and importance in terms of quality of life (Banerjee and Baer, 1984). Yet, as a part of urban restructuring processes to address globalization, intercity competition

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and requirements of post-modernity, urban residential patterns and therefore territorial cognition at the scale of residential environment has transformed significantly.

Today, in the production of residential environments, the form of continuous fabric such as in the traditional neighborhoods has left its place to cellular developments and residential enclaves in the form of gated communities and mass housing developments based on economic segregation which neglect the basic principles of sustainability, livability, quality of life and sense of community for the sake of economic progress. In other words, *facility-based organization* of residential areas has left its place to *home-based* ones which in return affected the quality of experience and satisfaction of housing needs in the urban residential areas (Brower, 1996).

In the Turkish case, this transformation on the design of residential environments fostered with the introduction of neo-liberal policies in the 1980s with bigger and more speculative investments in the housing sector which resulted in higher rents, emphasized new meanings on housing and boosted spatial segregation between different social classes becoming more concrete in the form of high-security apartment blocks and gated communities surrounded by surveillance mechanisms (Arıkan, 2013). Another major transformation regarding residential environments in Turkey began with the introduction of Law no. 6306 on Transformation of Areas under Disaster Risk enacted in 2012. Along with the enactment of this law, massive urban transformation processes started in Turkey especially in historic residential areas. There has been controversial use of the law in order to transform these neighborhoods within the central areas for the sake of economic gain through increasing the building heights and floor space rather than creating better living spaces for all. These implementations caused a decrease in the environmental quality as well as infrastructural problems. To sum up, fostering social segregation, decreasing quality of environment, inability to meet human needs, fast-paced transformation, lack of identity, loss of sense of community and alienation can be denoted as the major problems that arose in Turkey with the fast-paced transformation of traditional neighborhoods and development of new areas in the form of gated communities and mass housing developments.

Consequently, the transformation in residential development patterns also caused shifts in terms of territoriality of urban residents. Within these new residential areas, the private domain takes on the role of the old neighborhoods and functions as local group territory in the form of well-equipped homes offering various facilities from laundry to social interactions within single building, while commercial and other services maintained at the neighborhood scale are also transferred to the city scale (Castell, 2010). In this context, the way residential environments are designed not only affected the notions of a sense of community and quality of life, but also transformed the ways residents perceive, utilize and behave in their residential territory. Hence, the extent and content of perceived residential unit as residential territory in the recent era within different spatial layouts will be further assessed within the scope of this research focusing on the two districts in the capital city of Turkey, Ankara both from a traditional and a contemporary residential area.

Residential Environment as Human Territory

Territory is defined as a space whose boundaries are well-defined and well known by its occupants (Sell, 1983). Regarding residential environments, territorial organization of space at this scale is crucial to sustain cohabiting in a delimited space; whereas defining the extent and content of the residential territory have been one of the main tasks of urban planning. Yet, the difficulty in defining

behaviorally meaningful and unambiguous boundaries on residential environments to derive better fit indicators and interventions is associated by Galster (2001) to variations among local actors (households, businesses, property owners and local government) on the perception of its boundaries.

In this regard, there are many measures for designating the boundaries of residential environments such as physical thresholds, statistical areas, character areas (based on building type), community facility service areas (such as the elementary school), land-use and ethnic group concentrations residing in certain locales. Besides, various models have been developed for the designation of the optimum extent of residential territory in planning theory. For instance, the 'neighborhood unit' developed by Perry in the early 20th century based on the principle of an optimal size that corresponds to a five minutes walking distance to a primary school is one of the pioneer models which has later been replaced by a concern for neighborhood functionality.

In this context, official clear boundaries such as census units, planning districts, neighborhoods, or zip code areas are preferred in empirical research due to the availability of large amount of information such as crime reports and housing values, while resident's perceptions may offer a more meaningful and relevant representation of the unit (Coulton *et al.*, 2001) and better express the actual boundaries of the unit in the daily life of its residents (Park and Rogers, 2014). On the other hand, there are also phenomenological approaches that investigate the subjectively designated boundaries that are grounded on the lived experience of the residents (Campbell *et al.*, 2009). In order to determine the boundaries of identifiable subunits, Keller (1968) puts forth a more holistic approach and states that both objective (census tract data etc.) and subjective (respondents indicating the boundaries) indicators can be used simultaneously. Hence, subjective indicators can be utilized to check on the accuracy of the objective indicators. Moreover, Galster (2001) puts forth a framework to indicate that distinct spatial scales of the boundaries refer to different aspects of the neighborhood by presenting *'multi-scaled' boundaries* with respect to bundle of dynamic attributes associated with the residential territory.

To sum up, the type and extent of territorial boundaries of urban residential environments, so called neighborhoods, which have been at the focus of planning studies transformed significantly in the recent era parallel to the changing patterns in the development of residential areas from facility-based to home-based organizations. In this regard, intermingling the conceived boundaries of residents with the administrative boundaries should be at the focus of planning studies in order to better comprehend the complex and dynamic structure of residential environments and to provide better solutions in meeting human needs within these areas. In this context, this research has a phenomenological approach with a schema-based emphasis which tries to investigate the subjective definitions of urban residents on their residential territories in order to grasp their lived experience.

Territorial Cognition at the Scale of Residential Environments

Territorial cognition of residential environments as a delimited area with specific boundaries by its inhabitants is one of the most important preconditions to define that area as a meaningful territorial unit. In addition to this, although territorial cognition is unique to each individual, consensus among the residents and the extent and type of territorial boundaries also reveals the significance of that area as a socio-spatial whole.

Territorial cognitions in near home territories are the perceptions and relations of residents with a particular delimited area, whereas these cognitions may also result in certain affections to the locale such as feelings of security, satisfaction, responsibility, association or problems associated with the area (Taylor, 1988). Hence, territorial cognition of residential areas is often studied in relation to its implications on residential satisfaction, attachment to territory, feelings of safety, development of children and youth as well as environmental quality. In this context, cognitive mapping as a method takes a crucial role regarding the investigations on the extent and content of territorial boundaries of residential environments defined by its residents (Table 1). In other words, cognitive maps are helpful tools in depicting the tacit knowledge of resident's territoriality into research.

Table 1. Some of the previous studies in which an average size for perceived residential territory is investigated.

Author	Case		Average Perceived Neighborhood Size
Lee (1968/1970)	Cambridge		Less than half a mile (>~ 130 ha)
Haney and Knowles (1978)	Green Bay, Wisconsin	Inner city Outer city Suburb	20 acres (~ 8 ha) 48 acres (~ 19 ha) 155 acres (~ 63 ha)
Guest and Lee (1984)	Seattle		Less than half a mile (<0.79 square miles, ~ 205 ha)
Banerjee and Baer (1984)	Los Angeles	Lower income Higher income	0.05 square miles (~ 13 ha) 13 square miles (~ 3.3367 ha)
Lee and Campbell (1997)	Nashville		14.8 blocks
Coulton et al. (2001)	Cleveland		0.32 square miles (~ 83 ha)
Talen and Shah (2007)	Urbana, Illionis		10-400 acres (~ 10 - 161 ha)
Lohmann and Mcmurran (2009)	Los Angeles suburban area before (1998) and after (2004) the construction of the freeway	**City scale** before construction after construction **Near the freeway** before construction after construction	**City scale** 0.50 square miles (~ 129 ha) 0.89 square miles (~ 230 ha) **Near the freeway** 0.61 square miles (~ 158 ha) 0.36 square miles (~ 93 ha)
Minnery et al. (2009)	Brisbane, Australia		Mean max. distance to perimeter: 1500 meters (~ 706 ha)
Pebley and Sastry (2009)	Los Angeles		Several blocks from home
Coulton et al. (2013)	10 cities in US (Denver, Des Moines, Hartford, Indianapolis, Louisville, Milwaukee, Oakland, Providence, San Antonio, and Seattle/White Center)		0.90 square miles (~ 233 ha)
Saghatoleslami (2014)	Mashhad, Iran		36 ha

It is also important to note that, cognitive maps are also affected by exogenous factors. These factors are listed by Evans (1980) under three main titles as; (i) *Different Stages of Knowledge Acquisition* (developmental aspects (children and elderly) and familiarity (length of residence), (ii) *Individual Variables*, (iii) *Physical Features* (environmental structure (such as grid structure of the street layout) and landmarks). For instance, in their study Lee and Campbell (1997) revealed that physical attributes such as size and map complexity differed vastly among how residents define their neighborhoods through a survey conducted in Nashville and denoted this inconsistency as 'respondents' definitional idiosyncrasies. A more recent study conducted by Pebley and Sastry (2009) in sample neighborhoods of Los Angeles also revealed that there is variation among residents' perception of their residential territory with respect to both individual (age, participation in and exposure to neighborhood, socio-economic status etc.) and neighborhood (density, residential stability etc.) characteristics. Besides, the location of the residential area within the urban space is also an important parameter with respect to the size of the perceived residential area. For instance, in their research on neighborhood perception of residents in inner city, outer city and suburban neighborhoods of Green Bay, Wisconsin, Haney and

Knowles (1978) put forth that centrality of the neighborhood differs the content of the territory, such as the number of features and important locations included in the maps, as well as the size of territory.

All in all, cognitive mapping as a method for territorial definition is useful in terms of addressing planning issues at the scale of residential areas since it reflects the residents own experience of place. Yet, not only the boundaries of the territorial unit and consensus among residents but also the content within the defined boundaries provide many inputs for planning interventions. For instance, what is included or excluded from the territory, what constitutes the core of the territory and differences with respect to individual's characteristics may provide fruitful insights for future planning studies. In this context, cognitive mapping is used as a method through this research in order to examine how urban residents perceive their residential territories based on the type and extent of territorial boundaries, landmarks as well as territorial gaps.

Research Methodology and Brief Introduction to Case Study Areas

As discussed in the previous sections, the main aim of this research is to investigate how urban residents perceive their residential territories in the recent era within different spatial layouts. Hence, territorial extent and content of perceived residential unit is examined through a comparative case study conducted in two districts of Ankara, Turkey namely Kavaklıdere and Çukurambar[1].

The first case study district Kavaklıdere[2] is associated with the early-republican era (formed in the 1950s) and has a continuous fabric as in the traditional neighborhoods, while Çukurambar[3] district, which has transformed into a high rise, 'prestigious', luxury residential area after the 1990's with high amounts of gated-communities, is a typical example of contemporary residential developments in Ankara. The case study areas are selected as for being alike in terms of their central location within

[1] The total area covered in the case studies is at the scale of a district which consists of identifiable neighborhoods. Hence, Kavaklıdere district consists of Barbaros, Kavaklıdere and Remzi Oğuz Arık neighborhoods, and Çukurambar district consists of Çukurambar and Kızılırmak neighborhoods.

[2] Kavaklıdere district took its name from the creek that passes through the area with many poplar trees and had a rural character with many vineyards till the second half of the 1930s. In the beginning of 1950s the district transformed from a rural area to a suburban district with 1,2 storey detached houses and later transformed to a 'modern' residential district with the emergence of high-rise apartment blocks in the late 1950s (Resuloğlu and Altan Ergut, 2015). In the 1970s the district took a sub-center character with many commercial and institutional functions. The district since then functions both as a residential district and a sub-center, while parcel-based transformations started in the area in the 2000s.

[3] Çukurambar (a place with granaries - geographically located on a pit land) district used to be agricultural lands till the 1960s with wheat fields and storehouses for cereals. With the mass migrations from rural to major urban areas in Turkey and especially Ankara, Çukurambar district hosted mainly 'gecekondu' (squatter) developments from 1960s till the 1990s. Later, in 1990s the area transformed from gecekondu area to a high rise, 'prestigious', luxury residential area with planning interventions (Durmaz, 2014). Today, Çukurambar is still among the most luxurious and prestigious districts of Ankara.

the urban fabric, articulation to the main developmental axis of the city and besides being prominent examples reflecting the residential area design approaches of their periods as well as for being distinct in terms of patterns of residential development.

During the case study, data is collected through questionnaires[4] that included two main parts; primarily demographic information is collected from the respondents and later a cognitive mapping study is applied for the assessment of territorial cognition. In terms of selecting the respondents, systematic sampling is used during the questionnaires to obtain a representative sample of households in each district[5]. Consequently, 300 questionnaires are conducted in each district and the results are processed and analyzed both statistically and spatially[6].

Territorial Cognition of Urban Residents in Kavaklıdere and Çukurambar Districts

Territorial cognition patterns of respondents in Kavaklıdere and Çukurambar districts is further examined in terms of types of designating boundaries, territorial extent of perceived residential environments as well as consensus on these boundaries, shared core of the territory, territorial landmarks and territorial gaps in this section.

Types of designating boundaries

As a part of investigations on territorial cognition, respondents of the questionnaire were primarily asked to draw the territorial boundaries of their residential environment. In this regard, Appleyard (1970) studied the ways in which people structured their cities based on inhabitants' maps of their local areas and the whole city. Hence, the results of his study put forth two main types of residents' maps in terms of structuring the city which are; the maps predominantly using sequential elements (roads) or spatial elements (individual buildings, landmarks, or districts). In a similar manner, the types of structuring that are utilized by the respondents during designating the boundaries are investigated in this research. In this regard, four prominent types of structuring are used by the respondents to bound neighborhoods;

- *Abstract boundaries:* home-centered abstract shapes are drawn by the respondents based on an approximate size
- *Road-based boundaries:* respondents connected the frequently used and well-known streets in order to set the boundaries of the area

[4] The questionnaires are conducted with the residents of the districts above the age 18 in Kavaklıdere District during April, 2018 and in Çukurambar District during December, 2017.

[5] Questionnaires are assigned for each sub region in the districts based on the housing density. Later, each street in the sub region is assigned to a pollster in order to provide an even spatial distribution of the respondents.

[6] The questionnaire responses are processed and analyzed with IBM SPSS Statistics 21.0 and ArcMap 10.4. programs.

- *Function-based boundaries*: respondents draw an abstract form containing the location of certain frequently visited places (parks, schools etc.)
- *Daily-routine based boundaries*: respondents draw the path among the daily used facilities and frequently passed streets combined with the area of these facilities.

In this context, it can be claimed that the road-based and daily routine-based constructions of the respondents are similar to the sequential cognitive maps while abstract and function-based designations resemble more of spatial cognitive maps defined by Appleyard (1970).

In terms of bounding their residential areas respondents used different types of structuring during the questionnaires, while the main type of designating boundaries in both districts is road-based whereas in Kavaklıdere function-based boundaries are also utilized. Thus, it can be claimed that major roads with heavy car traffic are perceived as the prominent thresholds in bounding the residential territories in the recent era in both traditional and new fabrics. On the other hand, identification of well-defined boundaries is a positive aspect of territoriality, however major roads are less permeable elements in terms of connecting the territory to adjacent territories thus becoming separators rather than boundaries.

There are also shared boundaries referred by the majority of the respondents in each district. In Kavaklıdere, most of the respondents referred to Güvenlik Avenue (commercial street) at the west, Esat Avenue at the east, Karum (shopping mall) and Kuğulupark at the south, and Olgunlar Street and Kocatepe mosque at the north for bounding the residential area. In Çukurambar, 1516. Avenue at the west, Muhsin Yazıcıoğlu Avenue (commercial street) at the east, 1505. Avenue at the south and Öğretmenler Avenue (dividing the residential area from the large non-residential uses located at the north of the district) at the north are mainly set as boundaries. Hence, although major streets are conceived as the main boundaries of the residential territory in both cases, existence of a monumental structure acting as a landmark (as in the case of Kocatepe mosque) or a historical site with strong identity (as in the case of Kuğulupark) may also orientate residents by acting as a boundary mechanisms through marking the starting or ending point of the residential territory.

Extent of Perceived Territorial Unit

During the questionnaires, when respondents were asked to draw the boundaries of their residential territory, the term ‘neighborhood’ was avoided and the given base map was almost 3 times larger than the actual administrative neighborhood boundaries in order not to canalize the responses to administrative boundaries of the residential areas. As a result, respondents draw boundaries ranging from 2 to 483 ha. Hence, the it can be claimed that there is lack of consensus over the extent of the boundaries among the respondent’s which is defined by Lee and Campbell (1997) as respondents’ definitional idiosyncrasies. However, the drawn boundaries are overlapped to acquire a consensus map of each district (Figure 1) for future inquiries.

In terms of territorial extent, total average size of the perceived boundaries is 75 ha which is similar to the assumptions of planning theory that is shaped by the walking-distance principle (5-10 min walking distance that is 500 meters, approx. 64 ha). On the other hand, the average size of the perceived boundaries in Kavaklıdere decreases to 60 ha while it increases to 90 ha in Çukurambar. In Kavaklıdere, majority of the boundaries (70,7%) are below 80 ha, while in Çukurambar nearly half of the respondent’s maps (42%) are above 80 ha. Thus, it can be claimed that in Kavaklıdere the

perceived size (territorial extent) of the residential area is closer to the assumptions of planning theory that is shaped by the walking-distance principle, while in Çukurambar it exceeds this size and refers more to a driving-distance scale.

Figure 1. Consensus map of Kavaklıdere District (on the left) and Çukurambar District (on the right).

On the other hand, the extent of the boundaries designated by the respondents do not often match with the administrative boundaries. In this regard, the average size of the perceived boundaries in Kavaklıdere District is similar to the size of the administrative boundaries of Kavaklıdere and Remzi Oğuz Arık neighborhoods while it is larger than Barbaros neighborhood. However, in Çukurambar the average designated boundaries are smaller (almost half size) than both Çukurambar and Kızılırmak neighborhoods administrative boundaries. In the case of Çukurambar, smaller perceived size of the residential territory than administrative boundaries of the neighborhoods can be related to the large non-residential uses located at the north of the district such as Çankaya University campus and MTA (General Directorate of Mineral Research and Exploration).

Moreover, in order to measure the impact of individual characteristics on the perceived size of the residential territory further statistical analysis are carried out. According to the results, car ownership and age are the main determinant factors on the perceived size of the residential territory in Kavaklıdere[7]. The larger perceived residential territory by the respondents who own a car in

[7] In Kavaklıdere district, as a result of the Mann Whitney U test there is a statistically significant difference in terms of perceived residential territory size between car owners and non-car owners ($p < 0.05$) and according to the results of Kruskal Wallis test there is a statistically significant difference ($p < 0.05$) between age groups and occupations.

Kavaklıdere is related with the access to a larger area. Younger and student respondents tend to perceive a smaller area which connotes to a block-scale, this result can be interrelated with the use of multiple-territories in their daily lives and higher mobility of younger people while older and retired people are more dependent on their near-home residential territories in terms of access to certain services and facilities. In addition to these, retired people also tend to perceive larger areas as their residential territory than other occupational groups which still refers to the scale of a walking-distance neighborhood. Thus, it can be claimed that older people, especially the retired, are both more dependent and more actively using their near-home territories resulting in larger areas perceived as residential territory.

In Çukurambar, sex and education are the main determinant factors on the perceived size of the residential territory according to the results[8]. Hence, women tend to perceive significantly smaller areas as their residential territory than men. This can be a result of higher number of housewives among the respondents of Çukurambar whom use their near-home territories more actively while man travel larger distances in terms of reaching to work and other territories. Besides, respondents with graduate degrees tend to perceive bigger areas as their residential territory than other educational levels which can be related to the university campuses located at the surrounding of the area that are often perceived as within their residential territory by the students of higher education.

Territorial Core

There is lack of consensus over the extent of the boundaries among the respondents as discussed previously, while there is a shared 'core area' agreed by the majority of the respondents in both cases. The shared 'core area' connotes to the center of the residential territory most of the residents use in their daily lives and intermingle in terms of social interactions. The size of the core area is similar in both cases; a 20-ha area in Kavaklıdere and a 17-ha area in Çukurambar. The core area of Kavaklıdere district extends along Tunalı Hilmi Avenue from Esat Crossroads to Kuğulupark. Tunalı Hilmi Avenue is a busy commercial avenue on which lots of cafes, restaurants and shops are located and Kuğulupark is one of the most well-known and historic parks of Ankara. On the other hand, the core area of Çukurambar extend along the two main shopping streets (1425. and 1459. Avenues) including also Teoman Öztürk Park. This area contains also many commercial facilities, but dominantly stores for grocery and other shopping as well as cafes and restaurants. The results reveal that, the shared core area depicted by the respondents in both residential districts refers to a nearly 20 ha area with mostly commercial uses. Hence, it can be claimed that the commercial axis at the core of the residential areas act as the center of the districts in both traditional and new fabrics.

Territorial Landmarks

In the second part of the cognitive mapping, respondents were asked to designate what features of the built environment they recalled as territorial landmarks. Hence, respondents were asked to point

[8] In Çukurambar, as a result of the Mann Whitney U test there is a statistically significant difference in terms of perceived residential territory size between men and women ($p < 0.05$) and according to the results of the Kruskal Wallis test there is a statistically significant difference ($p < 0.05$) between education levels.

‘important reference points in their residential areas such as memorable buildings, streets or open spaces, or places they use while giving directions to someone’[9]. In both cases majority of the respondents were able to identify a landmark in their residential area.

According to the results, the most frequently mentioned landmarks in Kavaklıdere are; Esat crossroads, Tunalı Hilmi Avenue, Kocatepe Mosque, Güven Hospital and Kuğulupark. On the other hand, the most frequently mentioned landmarks in Çukurambar are; Nişantaşı Bazaar (market), Liva Pastry Shop (café and restaurant), Safa Mosque and its park, MTA (General Directorate of Mineral Research and Exploration), Muhsin Yazıcıoğlu Avenue and Arjantin Elementary School. Yet, the higher number of buildings within the most frequently mentioned landmarks and also in the total number of buildings mentioned as landmarks in Çukurambar can be resulting from street names given based on a numbering system rather than actual names which makes it harder to memorize a street as a landmark. In addition to this, majority of the most frequently mentioned landmarks in Kavaklıdere are located within the shared core area derived from the respondent’s maps, while in the case of Çukurambar the landmarks are more dispersed in the district with only the most frequently mentioned landmark (Nişantaşı Bazaar) located within the shared core area.

In the overall distribution among the landmarks mentioned in both cases, 7,7% are open spaces, 4,7 % are an area referring both to a street and an open space (such as crossroads and bus stops), 18,3 % are an area referring both to a building and an open space (such as schools, malls etc.), 21,4% are streets and 47,8% are buildings. Thus, it can be claimed that buildings are the most memorable spatial elements in terms of landmarks. However, the dominance of buildings perceived as landmarks as well as exclusion of open spaces such as parks and squares point out to the lack of open spaces with memorable layouts or characteristics that people can refer to as landmarks in both residential environments.

***Territorial* Gaps**

In the last part of the cognitive mapping, respondents were asked to demarcate and explain areas where they feel uncomfortable or insecure while crossing or areas avoided especially at night in their residential territory. Since, these zones are avoided by the respondents during their daily lives and excluded from the residential territory by the respondents they are referred as ‘territorial gaps’ within this research. The areas depicted by the respondents are later overlapped to designate areas where respondents feel the most uncomfortable. In this context, very few responses were given in terms of territorial gaps during the questionnaires. Thus, it can be claimed that security is not seen as a premise problem within the districts.

Although the number of territorial gaps is low in both cases, there is differentiation between the two districts. In Kavaklıdere, only 41 respondents demarcated an area as fear or discomfort zones among the 300 respondents while in Çukurambar this number increases up to 113. Besides, the most frequently demarcated areas are overlapping only 7 times in Kavaklıdere, while this number also

[9] Only a few well-known landmarks were pre-existing on the base maps, in order to better orientate the respondent as well as overcoming the difficulties of map reading and drawing by the respondents.

increases to 19 in Çukurambar. Besides, the most frequently mentioned territorial gaps in Kavaklıdere are embassies located at the west of the district along Atatürk Boulevard due to security emergencies occurring time to time as well as bars and restaurants along Tunus Avenue which are declared as discomfort zones due to late closing hours creating noise pollution, parking problems for the residents as well as crowding in the area. On the other hand, the most frequently mentioned territorial gaps in Çukurambar are vacant lots, construction sites and areas on which few squatters are existing. Yet, parks are also referred as discomfort zones due to inadequate lightning and stray dogs.

To sum up, territorial gaps depicted by the respondents living in the districts are areas where the residents feel the most uncomfortable or insecure. Hence, the results reveal that non-residential uses creating infrastructural problems such as parking as well as noise and crowding in addition to vacant lots and construction sites due to security issues are the prominent types of territorial gaps in residential territories. Furthermore, depiction of territorial gaps from the perspective of the residents provides more accurate and relevant insights for the locus of planning interventions at this scale.

In Lieu of a Conclusion

This empirical research aims to investigate residents' perceptions of their residential territories in terms of extent and content through cognitive mapping. The results reveal that, the perceived territorial extent of residential environment is unique for each individual, whereas a consensus area, as in the consensus maps, can be derived from these idiosyncrasies to define the boundaries of the residential territories from the perspective of its residents. The use of consensus maps provides an alternative source of inquiry into urban residential space than conventional solely quantitative mechanistic methods. Yet, consensus maps can be used as a tool for uniting the spatial aspects of the phenomenon such as extent, proximity and layout with the social aspects such as demographic characteristics of the residing population. Besides, consensus maps reveal the accurate representation of residents' experience of space which can guide planners and policy-makers to enhance this experience through the design of the spatial environment.

Besides, although each schema is unique for each resident, overlapping areas as well as differences with respect to individuals' characteristics such as age, sex, education level, ownership or income also reveals important insights. Yet, the weight of these factors differs for each locale. Hence, in order to attain the main aim of urban design is meet the diverging needs of the whole population residing in the same area, the divergences on territorial perception based on individual factors can provide a basis.

Moreover, the results of the study reveal that residents are able to define the subjective boundaries of their residential territory and mention at least one landmark within the area. Hence, it can be claimed that respondents in both cases conceive their residential territory as a meaningful territorial unit. On the other hand, the findings also show that regarding territorial cognition there are both similarities and variances between the traditional neighborhood fabrics and contemporary residential areas. At the cognitive level, the two districts show similarities in terms of the prominent type of designation of boundaries based on major roads as well as the size and main functions within the shared core area. Whereas, districts differ in terms of extent of the perceived boundary of residential territory.

In this regard, the respondents from traditional urban residential environments with continuous fabric (as in the case of Kavaklıdere) tend to perceive smaller units which connotes to a walking distance

scale, while the respondents from contemporary residential environments organized in the form of 'enclaves' and comprises mainly of gated communities (as in the case of Çukurambar) tend to perceive larger areas as their residential territory that connotes to a driving distance scale. Based on these results, it can be claimed that in Çukurambar, and most of the newly developed residential areas in Ankara, perception of driving-distance scale territories makes it especially difficult for disadvantaged groups with lower mobility whom also rely on their near-home territories as their primary resource-base. At the same time, the dependence on car transforms the experience of all residents in their near home environments. Furthermore, the perception of residential territory within driving distances can be associated with the design of the physical environment in the form of enclaves with narrow sidewalks adjoined by passive interface zones bounded with high walls or fences resulting in lack of defensibility of space, less number of eyes on the street and decrease the ability of the residents to actively use their near home environments as well as vacant lots increasing the fear of crime and creating unpleasant environments for walking. All in all, based on these findings it can be claimed that the spatial organization of space is a prominent factor causing the differences in territorial perception patterns at the residential scale.

Furthermore, the boundaries designated by the respondents do not often match with the administrative boundaries. Hence, the subdivision of urban areas into smaller spatial (residential) units by planners falls short in explaining the territorial extent of the residential environment. In this regard, in addition to administrative boundaries, that is useful for the availability of a large amount of information, resident's consensus maps that reveal the lived-in territorial extent of residential space can be used during planning decisions at this scale such as the distribution of services and facilities.

Yet, not only the extent of the territorial unit and consensus among residents but also the content within the defined boundaries, what is included/excluded, provide many inputs for planning interventions. In this regard, consensus maps also reveal the shared core of the residential territory which connotes to the center of the area most of the residents use in their daily lives and intermingle in terms of social interactions. Thus, it can be claimed that the planning interventions at the shared core can result in consequences at the social-group level. On the other hand, the lack of public open spaces both at the shared core of the residential territory as well as the landmarks mentioned by the residents put forth the lack and inadequate distribution of open public territories in both residential environments which is a problematic issue at the residential scale that planning discipline should confront.

In terms of content of the maps, excluded sites, territorial gaps that is the fear and discomfort zones delimited by the respondents during cognitive mapping, are important part of territorial cognition at the residential scale which directly impacts the everyday experience of the residents. Territorial gaps are mainly depicted as non-residential uses resulting in infrastructure, environmental as well as crowding problems in both cases as well as vacant lots and construction sites. The depiction of territorial gaps from the perspective of the residents provides more accurate and relevant insights for planning interventions in terms of revealing the locus of dissatisfaction in residential environments from the insider's perspective. In this regard, territorial gaps can be seen as places of priority for planning interventions.

All in all, it is also important to note that, this research does not try to emphasize the residents subjectively defined boundaries as a sole determinant of the territorial extent of residential

environments, but rather tries to put forth that in addition to conventional methods the use of resident's perceptions of their lived space can reveal different insights for the decision makers regarding spatial developments. Hence, rather than relying on a single basis, planning studies can use a diverse amalgam of approaches to unfold the nature of the lived experience of the environment in order to guide future interventions and production of new residential patterns more responsive to diverse human needs.

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