

VISUAL, MORPHOLOGICAL AND CONTEXTUAL CHANGES IN DETACHED HOUSING AND HOUSING AREA: KONYA OGRET MEN HOUSES – TURKEY

Dicle Aydin^{1*}, Berin Dikici Koseoglu²

¹ Necmettin Erbakan University, Department of Architecture, Konya, 42060, Turkey

² Babalık Mahallesi, Vatan Caddesi, Selay Is Hani 6/303, Konya, 42060, Turkey

Abstract

The residential textures in cities form the perceptible majority as area. The changes in residences and residential areas are factors for the change of cities and can be seen as observable changes. The changes in dwelling areas so in cities depends on the economical, social, cultural and communal reasons, these changes are in architectural area when they are thought on parcel basis and texture basis in sectional and totalities way. The starting point of the study is the character of these observable changes and how these changes happen in detached dwelling areas. These changes which effect the urban change especially in the morphological and contextual meaning are important as they bring the identity change with themselves. The aim of this study is determining the physical changes on building and urban texture basis in detached dwelling areas as visual, morphological and contextual changes and exposing the reasons. In the direction of this aim, analysis and synthesis method are used depending on the plans and decisions belonging to research areas, interviews, observation and visual sources. The visual changes are handled as the ones occurred by the needs and wills of the users in dwelling basis and the ones perceived by the citizens in the study. Morphological changes are in general meaning, the changes in second and third dimension (building height, parcel dimensions, setback distance, density, building arrangement) in parcel basis staying within the planning control. Contextual changes are determined as the character and functional change occurred by the effect of morphological change.

Key words

Change in dwelling; dwelling texture; change; morphological change; contextual change

To cite this paper: *Aydin, D., Koseoglu, B.D. (2014). Visual, morphological and contextual changes in detached housing and housing area: Konya Ogretmen houses – Turkey, In conference proceedings of People, Buildings and Environment 2014, an international scientific conference, Kroměříž, Czech Republic, pp. 631-640, ISSN: 1805-6784.*

*Corresponding author: Tel.: +90-542-3681755, Fax: +90-332-236-2140
E-mail address: dicleaydin@konya.edu.tr

1 INTRODUCTION

The meaning and the role of the city have started to change since 1970s. By the interactions during the process of globalization, the transformation process in the urban space has been also observed in addition to the locations and functions of the cities in the international platform [1]. During this process, the functions and the meanings of the “dwelling” in which people spend a significant part of their lives also experience transformations. The residential areas constitute a noticeable majority in the city texture. The changes experienced as single parcel or total texture in the residential areas encountered as effective dominant development elements in terms of physical appearance may be effective on the physical changes of the urban [2]. In this context, the dwelling and dwelling textures can be accepted as a type of global communication tool carrying historical information directly from past to present [3]. The standpoint of this study includes the analysis of the contextual changes on a definite dwelling texture which include the visual changes performed by the users on their dwellings in the course of time as a result of their requirements, the morphological changes based on the formal differentiation and the character-functional changes.

The objective of the study is to deal with the dimensions of the observable changes on the texture of a detached public housing area existing in Konya City under the topics defined as visual, morphological and contextual changes by setting the changes in the basis of construction lands formed by the coexistence of parcels, buildings and detached houses together, discuss the triggering components of the changes and evaluate them in the urban texture.

2 CHANGES IN DWELLING AND DWELLING AREAS

The dwellings forming the dense textures in the urban space have responded to the people's needs and wishes throughout the history, and the production and spatial based changes have been the causes of the structural changes in the urban areas. The spatial arrangement change and formal differentiation have begun in Anatolia in 1930s. The places formerly called as a ‘room’ after while came across us with privatizations such as “living room”, “bedroom” and etc. The apartment housing and low cost housing that were in agenda at the same time in these years became the triggering component of cooperative mode of house production due to the scarcity of houses and increasing rentals [2]. Until 1950s, the cooperative mode of house production has been accepted mostly for detached houses since the smallest unit defined for independent property was parcel [4].

The modernization experienced in Turkey after 1950 revealed itself also in dwelling, and the house production continued in different variety for different social classes [5]. The apartment housing process started in 1950s and lasted till the late 1960s had the development level of producing a single block with many houses to large-scale dwelling production in 1970s and continued after. The chronological and concrete changes occurred on the dwelling caused the change in the spatial arrangement of the dwelling together with the other factors on one hand and presented new formations in the urban on the other [6]. These new formations, the conformation of the settlements, the various changes on the buildings together with the land uses remain in the planning control, and the constructed environment experience functional, spatial, visual, morphological and contextual changes.

As the changes might be in terms of parcel based, they were encountered at the construction islands in a totalitarian manner [7]. The observable morphological changes become deterministic on the changes of the urban characteristics and bring the positive or negative results together.

The morphological changes on the basis of parcels; can be defined as the building height, parcel dimensions, setback distance, density, building arrangement. The visual changes on the basis of building can be defined as everything that causes any type of change on the appearance of the building. They can be listed as the color change of the building, the change in building material, the dimensional change of the windows and closing the half-open spaces such as balcony etc. Especially the morphological changes also bring the character change on the urban texture by which the functional changes of the buildings cause changes on the contextual values.

3 METHOD

For the analyses in the area, the architectural projects of the research areas which were taken from the municipality achieve, the in-situ investigations and determinations became the main material, and a conclusion was drawn after evaluating the obtained data. In the case study, an analysis and synthesis method based on the plans of the research area, zoning decisions, negotiations, observations and visual resources was used.

The evaluations were made in terms of parcel and detached dwelling changes depending on the years, and concrete results were aimed to be reached using the tables, figures and photographs by determining the visual, morphological and contextual changes as seen in Figure 1.

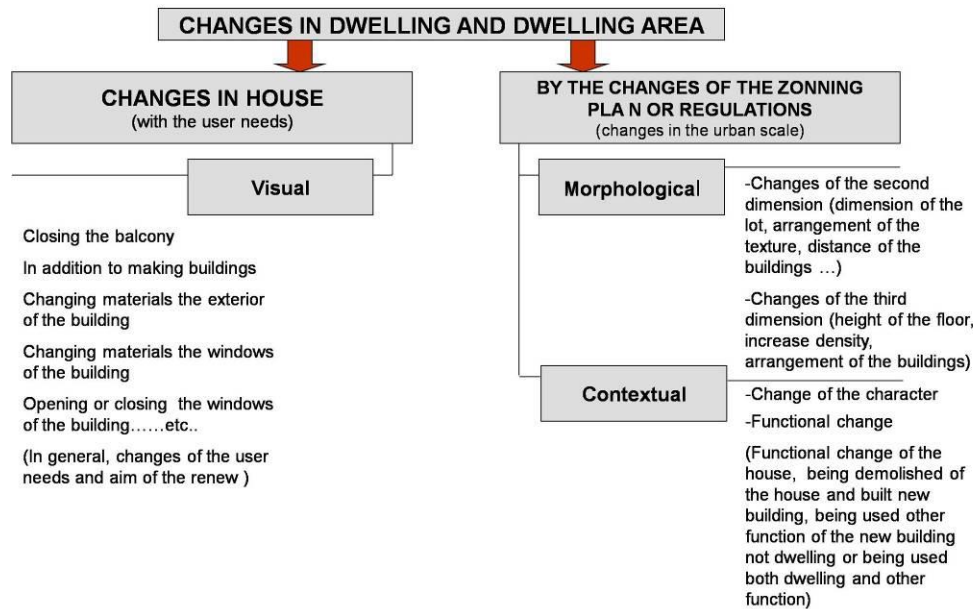


Fig.1: Changes in the study area for the analyses

4 RESEARCH AREA: KONYA OGRET MEN DWELLINGS

Konya Ogretmen Dwellings have been started to be constructed on six structural islands as a Structural Cooperative Construction established by teachers in 1954. The stadium and the train station respectively located at the northeastern and southeastern sides of the residential area are still observed as landmarks from past to present (Figure 2).

51 dwellings have been constructed in three different types due to the diversity of the user demands (Table 1a-1b) and located parallel to the streets they exist. The entrances of the dwellings of 118 m², 86 m² and 80 – 82 m² were accessed by three stairs and designed to take place at the side façade. The dwellings presenting similar plan schemes have been constructed by the same construction system using the same construction materials.

The number of rooms of the dwellings having square-like shape in general changes the size of the building. The living room has the middle/central space character in every dwelling plan type as a transition space/hall providing the access to other rooms. The detached dwellings had façades to all directions.



Fig. 2: The location of the Konya Ogretmen Dwellings in the urban area and the site plan [6]

Tab. 1a: The types of the Konya Ogretmen houses [6]

Type 1	Type 2
<p>-The entry door opens to the entrance that is connected to the guest room and living room. -Kitchen, toilet and bedroom are connected to the hall located nearby the entrance. -The day and night places are not separated from each other definitely. -Two bedrooms and a bathroom are opened to the night hall connected to the living room.</p>	<p>-The entry door opens to the entrance to which the hall is connected, and by the hall the kitchen and toilet space is reached. -The room directly reached from the entry doorway at the right side of the entrance has another entry from the living room. -Type 1 living room carrying the middle space character has connection with the hall that is used to reach the bathroom and the other two rooms.</p>

Tab. 1b: The types of the Konya Ogretmen houses [6]

Type 3 Ground Floor	Type 3 First Floor
<p>-The type 3 having 2-floors contains one separate flat at each floor. -Both flat designs are the same; however the kitchen is opened to a balcony at the first floor. As in the other types, the layout of the plan scheme is made from 3 halls.</p>	

-The first entrance hall is connected to the living room and the second hall from which the kitchen, the shower and the pantry located under the stairs are reached.
-From the night hall connected to the living room, you can reach to two bedrooms and the bathroom.

The integrity with outdoor space and indoor-outdoor flow is provided with the living room on the front façade and the spacious balconies/terraces connected with the side space. The window dimensions were determined depending on the function of the space; for instance, the horizontal view design became dominant for the windows of the wet volumes, the living room and guestroom windows were designed as spacious windows to benefit from the daylight.

4.1 The Analysis of change in Konya Ogretmen Dwellings

Before analyzing the changes in Konya Ogretmen dwellings, it was thought that considering the density, the development plans and especially the urban texture next to our research area would be in general useful for the evaluations. The developments in terms of training, organization, design and application were observed in Konya in 1950s.

The economy was invigorated by introducing the tractors in rural regions, and the population increased by 41.3% between years 1950-1955 [8]. Konya Sugar Factory and Konya Meat Industrial Complex were opened in years 1954 and 1956, respectively, and population growth increased by 87.5% until 1960 [9] has brought the need for dwellings. When the development plan prepared for Konya City in 1944 has become insufficient, the development plan covering 912 ha area has been implemented in which the residential areas have been suggested to take place at the northern, western and southwestern regions of the city [10]. And also new dwelling areas adjacent to our research area have begun to be settled and changed. However, the development plans, the plan decisions and transportation decisions can be regarded as the most important causes of the change.

The location of the stadium was set in 1946 plan, and the urban development direction was planned to be through the west part of the train station. The Meram Old Street on which transportation is provided and Konya Ogretmen Dwellings are located extended up to the historical center of commercial intensity, and the strengthening of the axle has brought vitality to the area.

In 1955, Konya Ogretmen Dwellings area was defined as the “dwelling area” due to the residences shifted through the eastern part of the train station. By setting the university area at the eastern part of the railway in 1966, this region has gained even more value. Giving permission for detached layout and constructing 3 or 5 floors on the parcels close of the dwellings area with the 1969 plan became a precedent for the research area. In 1987, Konya City had the status of metropolitan municipality that was divided into three central district municipalities. Opening the Ahmet Özcan Street in 1997, the relation of the region with the city center was strengthened and triggered the trading inside the region favorably [6].

As a result of the development plan changes, the region became more valuable, the commercial activities shifted to this region, many dwellings were terminated and high buildings were constructed on their parcels instead of giving them the “opportunity to live” as Aydınlı [11] stated. In this way, the process of urban change has started. 82% user of the Konya Ogretmen Dwellings changed since 1955. The old users still live only in 9 houses out of 51. Due to the changing users and also their changing preferences or requirements in the course of time affected the physical appearances of the dwellings [6].

Visual changes

The visual changes considered in the study are the perceptible, determinable, observable changes. The exterior facade of 72% of the houses has gone through changes at most of which the traces of the original facade can be seen. Also additional changes such as color change (90%), material change (stone facing 5%), the application of window jamps (5%) were also carried out. The windows of %17 of the dwellings were changed in terms of size, shape and material. The changes on the windows were determined as PVC joinery, wood joinery and window bracket addition. Other changes carried out in Konya Ogretmen Houses are the applications performed at the balconies by closing 14% of them but including 3% of them to the room volume. Also some arrangements were made at the roof to increase the using area (6%). The changes such as adding windbreaker to the building entrance (%27), widening the entry (%6) and adding eaves (%6) are other observable changes.

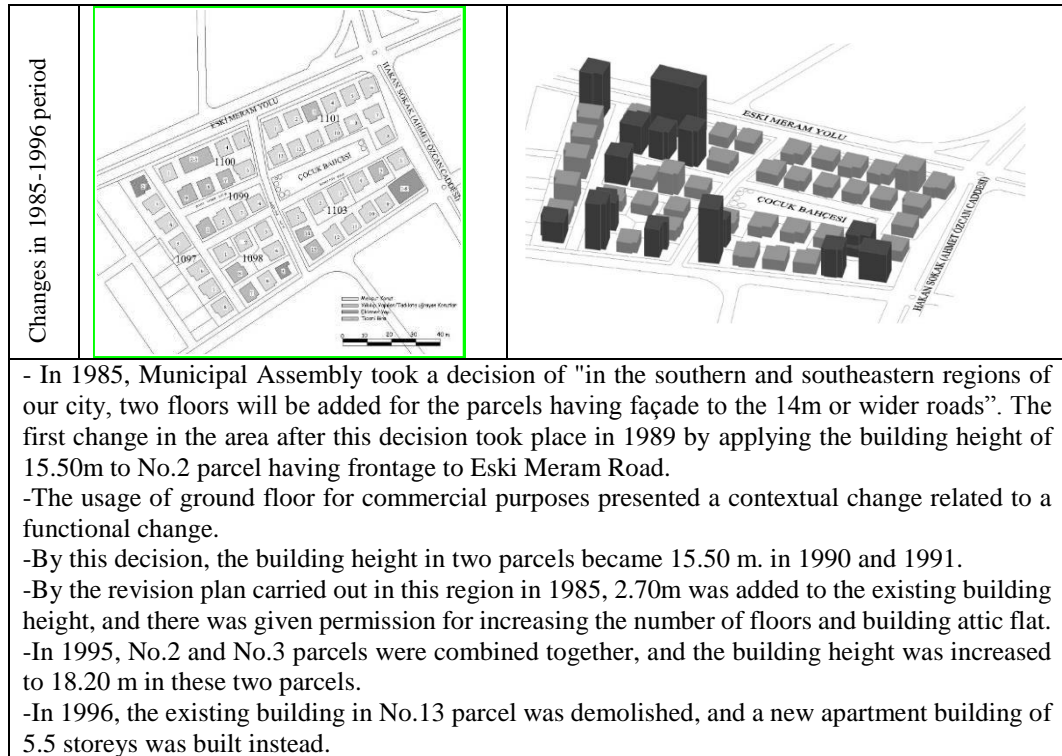
Changes in Urban Dimensions (Morphological and Contextual Changes)

The first cadastral survey for Konya Ogretmen Houses was arranged in 1st April 1968. According to the information on the cadastral survey, the second and third dimension morphological and contextual changes experienced in Konya Ogretmen Houses started in 1970. The changes from 1970 to present are summarized in Table 2a, 2b and 2c.

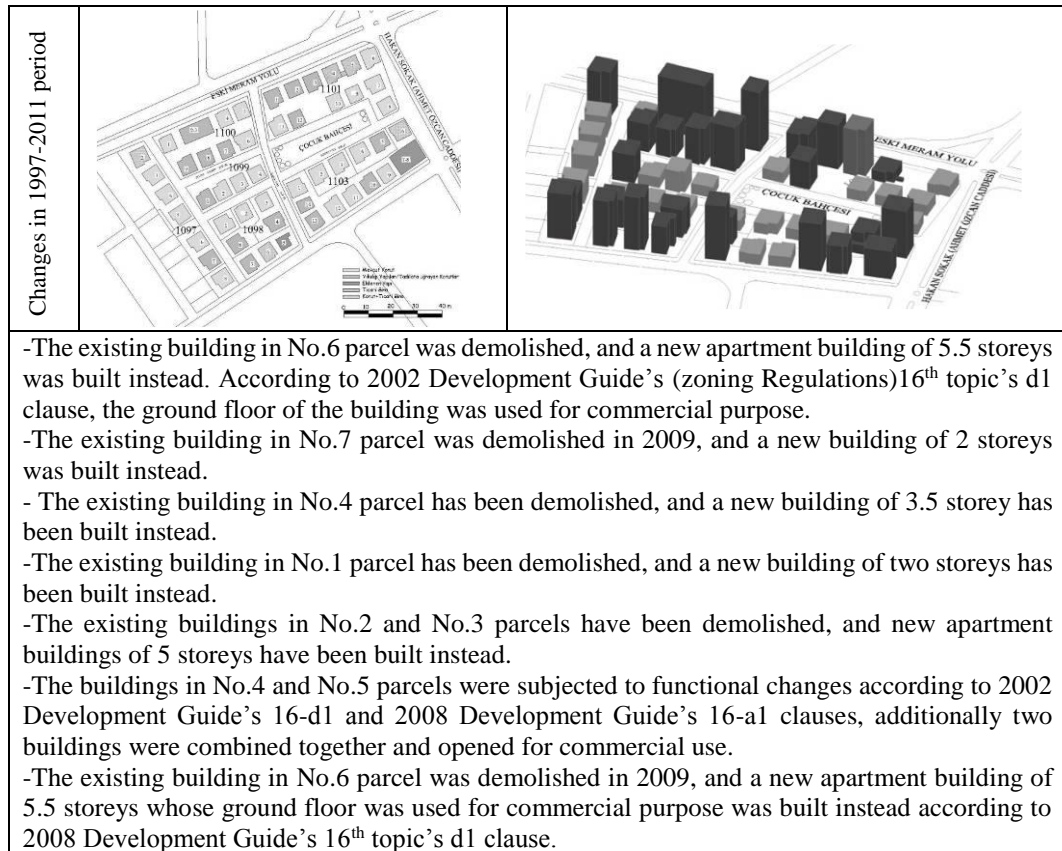
Tab. 2a: The contextual and morphological changes in housing patterns by year

Changes in 1970-1977 period		
<p>- In 1971 and 1972, the building height was increased to 9.50 m for three parcels. - In 1974, two separate parcels were combined, and a building of 9.50 m height was constructed.</p>		
Changes in 1978-1984 period		
<p>- In 1978, the permission of increasing the floor number was given to the existing texture. By this decision, the building height was increased to 9.50 m. for one parcel in 1978 and another parcel in 1979.</p>		

Tab. 2b: *The contextual and morphological changes in housing patterns by year*



Tab. 2c: *The contextual and morphological changes in housing patterns by year*



The trigger effect for the contextual change caused by the functional change in the area is Ahmet Ozcan Street opened in 1997. The new street in the region strengthened the relation with the

city center, and new residential and commercial areas of different characters began to take place at the street edge.

Konya Ogretmen Dwellings area has also entered into the changing process by the changes lived at the region, and the original texture began to disappear. Most of the changes (26 dwellings, 51 %) in Konya Ogretmen Dwellings consist of the increasing number of floors of the buildings. 22 of these dwellings were demolished, and new dwellings were constructed instead of them by increasing the number of floors (%85). Floor addition was made to 3 of them (%12), however although one of them was demolished, a new one was not constructed instead (%3). In recent years, the existence of commercial functions was observed in all the buildings designed as residential purposes. Moreover, some of these houses were subsequently changed into commercial houses (10%) or residential + commercial houses (8%) completely.

5 CONCLUSION

The change in buildings and urban textures is inevitable. It can be said that the visual changes for buildings occur depending on the user requirements and physical obsolescence of the buildings. However, the morphological and contextual changes occur as a result of sampling the surrounding structures with the urban triggering components, considering a change in a region due to its economically attractive characteristic. In this study, the visual, contextual and morphological changes on the detached houses texture having building density, green areas-building integrity, texture characteristics, formal unity and rhythm are summarized in Table 3.

Tab. 3: Visual, morphological and contextual changes in Konya Teacher Houses

Changes in the housing	Visual changes	<ul style="list-style-type: none"> -Changing the building material and color of the façade. -Changing the windows materials and the dimensions of the windows. -Closing the balcony and/or including it into the room. -Adding windbreaker to the building entrance, widening the entry and adding eaves. -Arranging the outdoor space/garden, making additions (like pool, coop..etc.)
Changes in the urban texture	Morphological	<ul style="list-style-type: none"> -Changes in the second dimension in terms of parcel scale. -Changing the setback-distance of the buildings. -Changing the dimensions of the lots by making (applying) allotting-joinder, -Using the lot as a car park by destroying the existing building, -Changes in the third dimension, -Changing of the height of the building, -Increasing density by increasing the number of the floors.
	Contextual	<ul style="list-style-type: none"> -Using the houses for trade, trade/house purposes by applying functional changes. -The character change due to the changes on the existing texture.

As a result, the urban texture reflecting the architectural character of its construction period and having distinctive architectural style and identity began to exhibit different characteristics parallel to the experienced changes. For a single parcel, varying design concept has emerged instead of a totalitarian design concept respectful to the adjacent parcels and having an architectural language. While one-storey or two-storey residence texture was existing with its own garden and green space the apartments with more than 2-storey severed from green with inadequate garden size in the same area. The increase in user density parallel to the increasing number of residents has also revealed the deficiency of commonly used areas in the outdoor.

The density increase and the change in formal meaning experienced in the texture caused the change of the architectural identity. The increase in the structural intensity, the differentiation of the parcel arrangements, the prevalence of exemplary individual applications, the diversity as a result of all these, experiencing the identity and character changes have destroyed the traces of the old texture in the course of time.

Although changes are inevitable, the positive values of the original texture can be listed as; low-rise constructions integrated with green texture (with the garden), sufficient outdoor space area (for parking, etc.), the exhibition of same architectural character and integrity assurance, the lack of building intensity and the architectural arrangement where buildings do not obstruct the sun and air sources of each other.

The responsibility of the texture change consisting of a part of the city and improving the value of the city with its intensity and character is mainly on the local administrations (municipalities). If the experience of the changes depending on time is inevitable, the solutions to protect the positive qualities of the original texture should be aimed rather than the applications based on unearned income.

ACKNOWLEDGEMENT

It is utilized of the Berrin Dikici Köseoğlu's master thesis in this study, which was accepted December 08, 2009. Assoc. Prof. Dr. Dicle AYDIN was advisor of this thesis. This thesis name was "1950–1970 Yılları Arasında Yapılan Müstakil Konut Alanlarında Değişim: Konya Örneği" in Turkish. All figures and drawings in the text are taken this thesis.

REFERENCES

- [1] Massey, D. (1993). *Power-Geometry and A Progressive Sense of Place*. Mapping The Futures Local Cultures Global Change. (Ed. J.Bird-B.Curtis). London: Routledge Publications.
- [2] Dikici Koseoglu, B. and Aydın, D. (2009). Müstakil Konut Alanlarında Morfolojik ve Bağlamsal Değişim: Konya Meram Öğretmen Evleri, *BAÜ FBE Dergisi*, **11**(2), pp.110-123.
- [3] Çıkış, Ş. and Ek, F. İ. (2009). *Konutta Lüks Kavramının İmgesel Dönüşümü: İzmir Kent Merkezinde Çok Katlı Lüks Konutlar*. Mimarlık Dergisi, **348**.
- [4] Uçar, Ö. M. and Özsoy, A. (2006). *Sınır Kavramına Mekânsal Bir Yaklaşım: Bahçelievler Örneği*, İTÜ Dergisi, İstanbul, pp.11-24.
- [5] Bilgin, İ. (1998). *Modernleşmenin ve Toplumsal Hareketliliğin Yörüngesinde Cumhuriyetin İmarı*, 75 Yılda Değişen Kent ve Mimarlık, Editör: Sey, Y., Tarih Vakfı Yurt Yayınları, İstanbul, pp.255-272.
- [6] Köseoğlu, B. (2009). *1950–1970 Yılları Arasında Yapılan Müstakil Konut Alanlarında Değişim: Konya Örneği*, Master of Thesis, Selcuk University, Graduate School of Natural Science, Konya, Turkey.
- [7] Ünlü, T. (2006). *Mersin'de Değişen Kentsel Mekân; Çamlıbel'de Morfolojik Değişim*, Megaron Dergisi, **1**(4).
- [8] Gökçe, O. and Çukurçayır, A. (1999). *Cumhuriyetin 75. Yılında Konya'da Kentleşme ve Belediyecilik*. Milli Mücadeleden Günümüze Konya-Cilt 1, TC Konya Valiliği, İl Kültür Müdürlüğü, Konya, pp. 211-227.
- [9] Komisyon. (1964). *Konya İl Analitik Etüdüleri*. Şark Matbaası, Ankara.
- [10] Erdem, R. at all. (1998). *Konya'nın Şehirleşmesi*. Mozaik Dergisi, **33**, pp.71-79.
- [11] Aydın, S. (2009) *Kentsel Dönüşüm Olgusu Üzerine Düşünceler*. Tol Dergisi, Kayseri, pp. 9-14.