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A Proposal for Sustainable Urban Conservation and Rehabilitation of Ulucanlar District, Ankara

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ABSTRACT

The aim of the paper is, to identify the problems and provide solutions in the terms of sustainable conservation and survival for Ulucanlar district. In the study, anchorages for conservation, social surveys have been made and the decisions are taken afterwards by the help of the tables, that produced from overlapping them. The final data and the study itself compared with the study that conducted in 1993 by a team headed by N. Akçura. The situation, determined in the context of physical and social surveys improved by the past 15 years, has discussed in terms of conservation. Again, the suggestions were made in the context of sustainable conservation about the area and the buildings, based on the data obtained.

Keywords: *Ulucanlar district , socio-cultural sustainability, rehabilitation, urban conservation*

1. INTRODUCTION

Arriving in Ankara in 1908, the author of the newspaper "*Tanin*" regarded it as an undeveloped city of Anatolia, and complained that constitutionalism had never reached there and referred to minority neighborhoods as the liveliest sections of the city. Parts of Ankara were at the point of collapse, due to a fire that destroyed the Armenian quarter, in addition to the despair and poverty of the war years [1]. The first steps to change this situation were taken in 1925, with a project developed by an Austrian company. Even though the following Lörcher plan covered the castle and Yenimahalle region, first study regarding Ulucanlar district came about in the city plan conducted by Jansen in 1932. Jansen suggested that the Old City and inner parts of Ulus should be renovated by the government. Jansen described this region as a "protocol area" and considered it necessary to protect it. He proposed the new city to develop in a completely different area, which was linked to the old city. Establishing connections between the old and new parts of the city did not reduce but instead increased the pressure on Ulus and its surroundings, located at the center of the city; the old city became a collapse area as a result of exposition to processes such as multi-level renovation, function changes, increase in use intensity and use of the buildings without repair [2].

When it was realized that the Yücel – Ubaydin plan, coming into force in 1957, did not meet the expectations [3], a 'district floor order' plan was introduced in 1961. The increase in density, templates inappropriate for the historical environment, and planning applications for increasing floor areas by combining smaller parcels, which were all proposed by this plan, led to functional and socio-cultural change in the historical city-center and Ulucanlar district, and thereby accelerated dilapidation and decay.

Among the other factors affecting the decline of housing stock in the region were the opening of Ulucanlar Street in 1955; the construction of Hacettepe Hospital in the 1960s; compulsory-purchase and demolition of many dwellings during the development of the Hasırcılar – Denizciler Street connection in the years 1979-80; and the designation of the remaining areas to the west of the road due to this connection as a Ankara Universty. medical faculty extension area [2].

Identification and registration activities in the area were launched by the Ministry of Culture in 1964, and were updated by GEEAYK in 1972 and the Ministry of

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Culture General Directorate of Antiquities and Museums and Ankara Municipality in 1979. A protection - development project was introduced as a transition measure until the implementation of a reconstruction and protection plan, but this project failed to provide a solution to the problem. In recent years, municipal and private enterprises have initiated restoration and rehabilitation activities in an attempt to "save" the region.

The available data means it is not possible to date the buildings located in the study area. However, based on the ceiling decorations, Akçura was able to date one of the buildings in the area, which retained its traditional features, to the 17th century [4].

2. PHISICAL AND ARCHITECTURAL ANALYSIS OF THE STUDY AREA

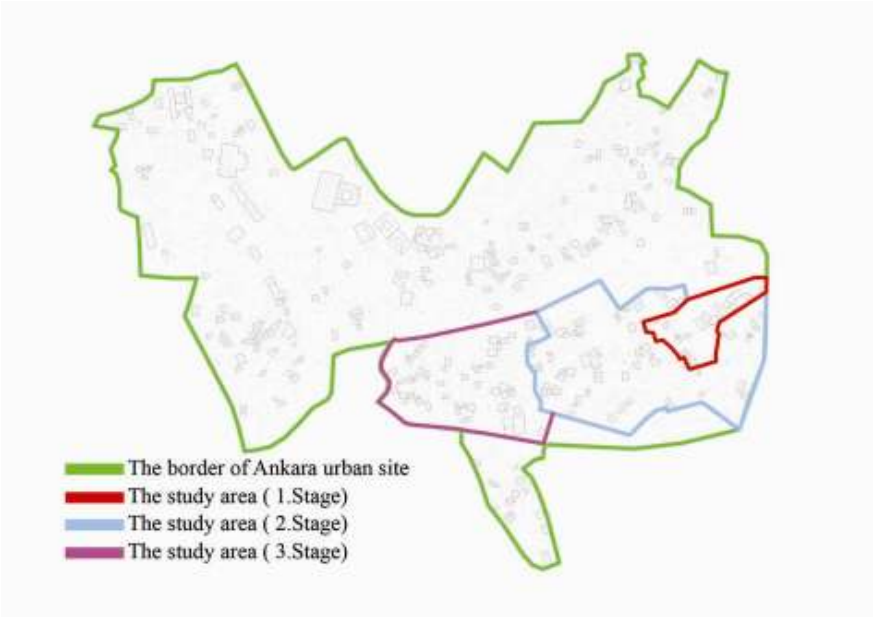


Fig.1. The study area

The study area is within a historical part of city bordered by Ulucanlar Street, Cevizli Street, Eylül Street and Uzunkavak Street to the north; Basamaklı Street and Altındağ Municipality to the west; Talat Paşa Avenue, Çağlayan and Engin Streets to the south; and Kestane Street to the east. The study area has a slope generally ascending in a north – northwest direction. Even though commercial use has started to be intense on the peripheries of the area, general use is predominantly residential.

Fig.2.The study areas worked between 2007-2009, and the functions in these areas [7,8,9]

A new pattern of housing is seen on the peripheries, but the texture is generally protected, though it has started to deteriorate due to factors such as annexation of new buildings, problems created by functional changes in the buildings, changing family sizes and decreasing socio-cultural level, use of empty plots for different purposes or annexation of new buildings.

The present study lasted for 3 years. The 1st stage was conducted in 2007[7]; the 2nd stage was conducted in 2008 [8]; and the 3rd stage was conducted in 2009[9]. The first activity in the area, where 1st stage of the study was conducted, was realized in November 1993 by a team from the Middle East Technical University, constituted under the presidency of Necva Akçura[4].

The projects examining the whole space in the urban protected area were scheduled to take 4 years. The duration between the first activity within the area in 1993 and the activity within the scope of the 1st Stage in 2007 is 15 years. No professional intervention – in the sense of rehabilitation – was made during this period. The ongoing situation during this period, attributable to a failure in protection, is very similar to that of many other protected areas in Turkey.

2.1. Comparison of The Studies

The number of storeys in the area increased with the construction of new buildings. It is seen that, generally, floors were added to buildings through interventions made by the users, and buildings were divided for occupation by multiple families by forming separate entrances to the additional floors. Moreover, based on the field studies and table below, it can be seen that many single-storey buildings were destroyed and replaced by new, higher buildings.

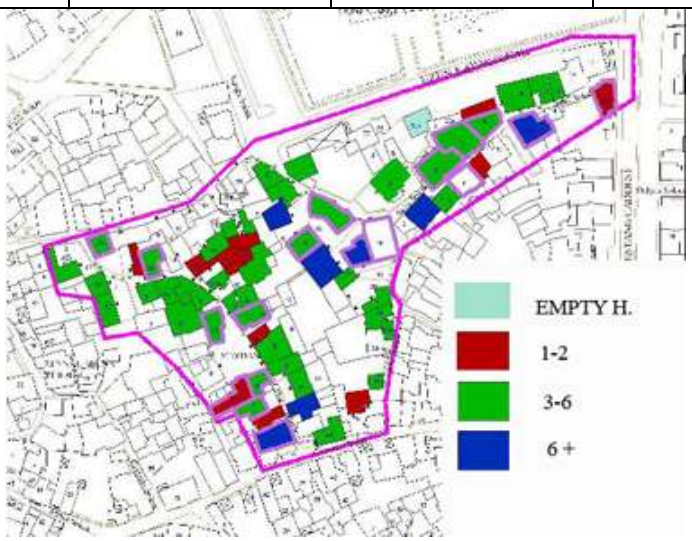
Table 1. The comparison of the number of storeys

	Single storey House	2 storey House	3 storey House
1993 [4]	%38	%55	%7
2007	%25	%61	%14

Another factor increasing the sub-division of buildings is larger family sizes. The proposition that the study area has become a transition zone is supported by data that show a 6 times rise in multi-child families.

Table 2. The comparison of the family size

	1-2 person family	3-6 person family	6+ person family
1993 [4]	%28	%70	%2
2007	%19	%70	%12



It can be seen that, over the past 15 years, the usage pattern in the area has shifted from residential housing to commercial use, especially in Kestane Street and Uzunkavak Street. The study conducted in 1993 reported that the only building with a function other than housing was Hemhüm Masjid. However, at the present time, it is seen that a lack of planning control has allowed houses to be converted into "stores" such as junk shops, cafes, repair shops and bottled gas stores, either with additional units or just functionally in accordance with commercial functions , to the detriment of the originality of the buildings.

Fig.3. The examples for the commercial uses.

In addition, it can be seen that new buildings increase in the areas where commerce is dense. However, the distance of the area from Ulucanlar Street enabled the houses, most of which are single-storey and two-storey, not to be overwhelmed by multi-storey buildings. Therefore, it effectively protected the urban texture. Buildings are generally frame houses, and the gaps are adobe or brick-filled and plastered. In addition, adobe and brick masonry buildings are also present. Damage and inappropriate modifications in the existing buildings have increased over time.

Table 3. The comparison of the deformations in the buildings

	Buildings in good condition	Buildings in middle case	Buildings in poor condition
1993 [4]	%40	%44	%16
2007	%22	%40	%38

Buildings in good condition: The buildings which don't have problems in terms of constitutional and structural, requiring limited repair such as material and component.

Buildings in middle case: The buildings, that need repair about floor, ceiling, equipment or components.

Buildings in poor condition: The buildings that need extensive structural repairs and has a risk of failure.

One of the most important reasons for the increase in the rate of deformations in the buildings is the low rate of home ownership. Home ownership, which was 25% in 1993, has fallen to 21% at the present time. The historical texture within the study area and its surrounding is used as a transition zone for people coming to the city or recently-established families. On the other hand, a relatively high proportion of the residents prefer to stay in the area for reasons such as neighborhood relations, closeness to their workplace and easy access to the city. This can also be seen by looking at the rise in the number of retired people living in the area.

Table 4. The age of the head of household.

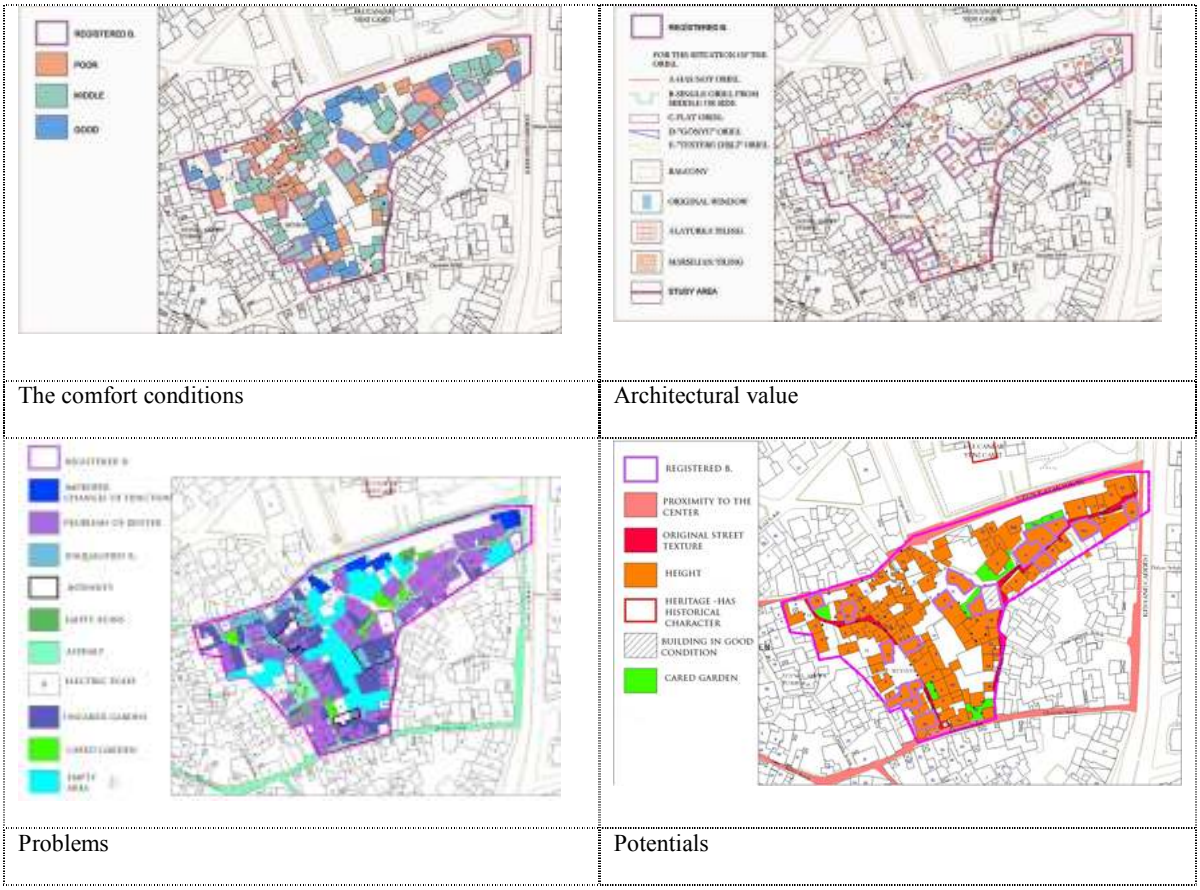
	Age- 20-40	Age 40-60	Age 60+
1993 [4]	%51	%29	%15
2007	%37	%53	%10

Table 5. The occupation of the head of household

	Officer	Private sec.	Self Employed	Worker	Uncertain	Retired
1993 [4]	%19	%18	%21	%16	-	%23
2007	%7	%10	%37	-	%7	%39

Comfort conditions in the buildings located in the area are inadequate because the buildings were sub-divided and went through many changes. As a result of these modifications and sub-divisions, there are quite small windowless rooms, areas of damp and circulation areas.

In addition, it is seen that the quality of the area has also decreased due to the functional changes. This is also reflected in the façades; the unregulated modifications have resulted in the installation of doors and windows independently from the original building; and altered the original relationships that buildings established with the street and courtyards.



The comfort conditions | Architectural value

Problems | Potentials

Fig.4. The comfort conditions, architectural value, problems and potentials of the study area.

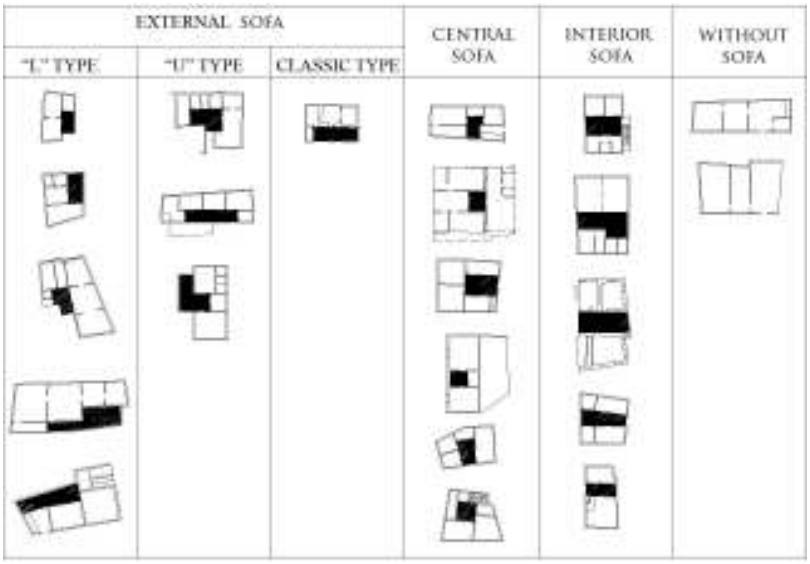


Fig.5. Plan typology

Looking at the typologies of the houses in the area according to the positioning of the anteroom in the upstairs planimetry, 4 different types of houses can be seen. Most of the houses were changed through annexations over time; they were divided or combined for the use of different families; they went through radical changes to improve comfort; and damaged parts of them were demolished. Therefore, it was not possible to compare current houses with 1993 data [4]. Any houses that went through so many changes that it is impossible to reach definite information about the original building, were omitted from the typology.

a. External sofa-type: In most of the houses with an external anteroom, rooms were arranged in an L-shape around the anteroom. There are also a small number of examples in which rooms were arranged in a U-shape around the anteroom. It was seen that the front of the anteroom originally opened onto the adjacent space; in all of the later examples, this was enclosed with a window or wall. Access to the open anteroom is provided with stairs, which are generally wooden, providing access to the upper storey from the courtyard. Within the study area, there is just one example of the plan type we describe as the classical type. This plan type in accordance with the traditional scheme, in which rooms and the kitchen are positioned on one side of an open, external anteroom. In this example, the open anteroom is also reached via stairs.

b. Central sofa type: Plan examples in which rooms or a vertical circulation element together with rooms are positioned on four sides of the sofa were defined as central sofa type

c. Interior sofa type: This scheme, which is common around the castle in Anatolia and Ankara, also occurs frequently in the study area. This scheme features a large anteroom, rooms and kitchen in the center. Access to the upper floor is provided via stairs into the anteroom. The stairs are generally wooden, but may also include several stone steps. Early and late period examples of this scheme, designed as open and enclosed anterooms, were encountered

d. Buildings without sofa: This plan scheme was generally encountered in late period buildings. In these examples, the kitchen is accessed through a door that opens to the space from the courtyard. They are single-storey and there is a limited number of these examples in the area.

Examining the houses in the area in terms of entrance façades, two-storey houses were encountered; they are not generally rich in terms of decoration and most have a plain projections or bay window. The beems of the projections were generally corbelled, as seen in Ankara houses; but the number of houses with saw tooth projections and projections running along the façade are quite high. It was found that the balcony was designed in the original construction of some buildings, but was later additions in other buildings. It was seen that the ‘’sofa’’ was used as a semi-open space in external-sofa type units (in a small number of examples in which the ‘’sofa’’ was used without being enclosed).

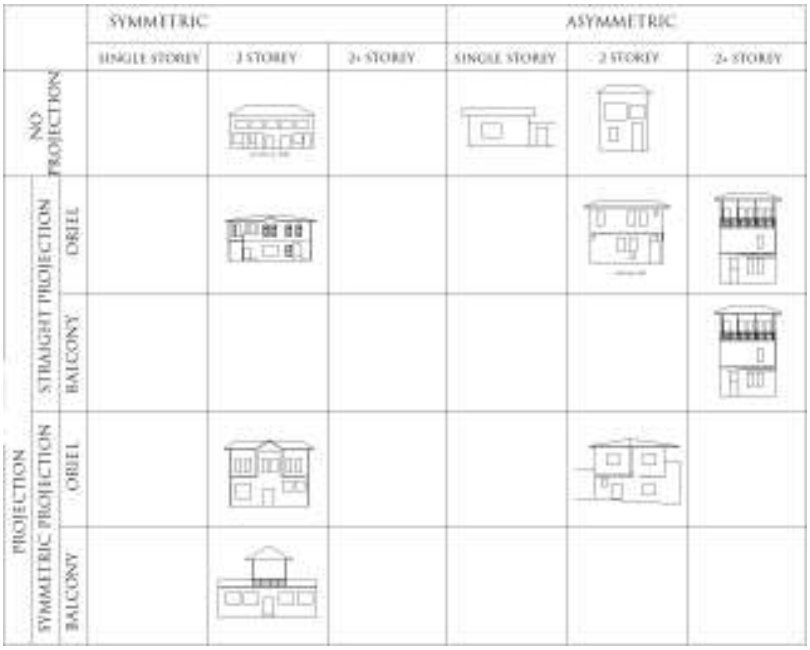


Fig. 6. Facade typology

The study area also includes buildings that have retained their original architectural character. Most of the buildings that remain in good condition are registered buildings in terms of scarcity, characteristics or quality. In addition, there are also buildings designed in harmony with the scale of the neighborhood and existing buildings, based on a reconstruction plan to protect the neighborhood and privacy.

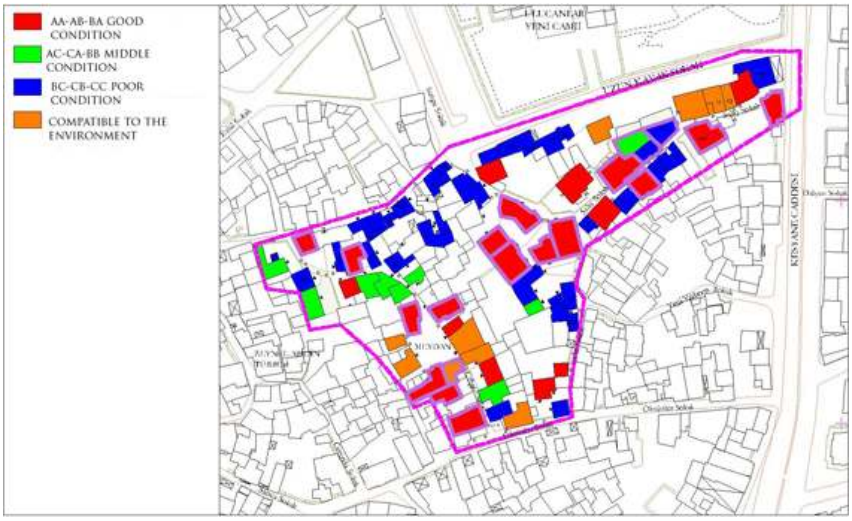


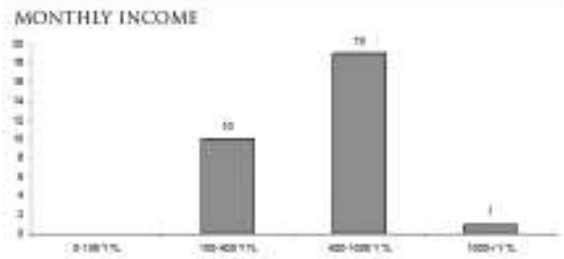
Fig.7. Architectural value - decisions

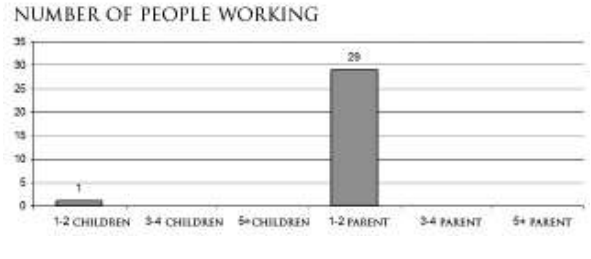
Fig 8. Examples of buildings at the study area

3. RESULTS AND DISCUSSION

The location of the study area within the city results in a number of problems, including exposure to intense traffic due to its proximity to Ulucanlar and Kestane Streets. This area remains the focus of commercial activity because of the closeness to these streets and the historical center, and changes of use have occurred accordingly. It was found that the peripheral buildings located close to these streets was used either partly or wholly as commercial stores.

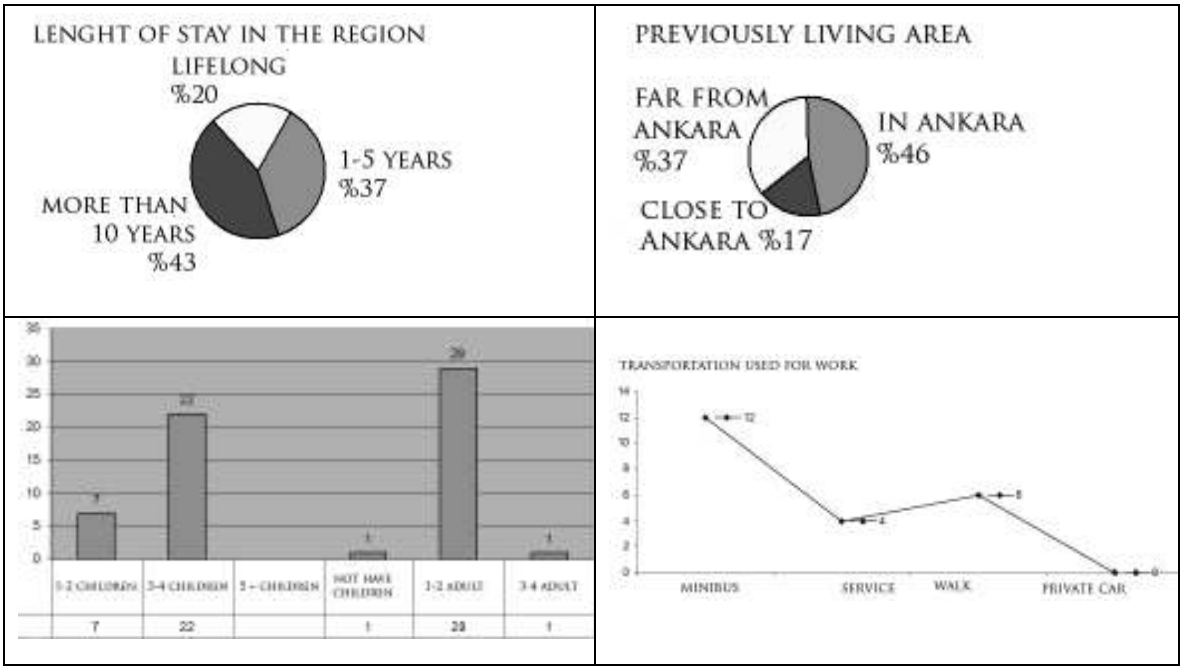
Table 6. The values about monthly income and number of people working in the household





The real owners of the houses left the buildings due to disrepair and the lower cultural status of the newly settling residents; over time, this turned the area into a cheap accommodation zone for low-income migrants to the region. The charts also indicate that the area is a transition zone. The social surveys indicated that, in many of the families settling in the area, only the heads of the families were in employment, generally as unskilled labors or in part-time jobs, and they were shuttled to the working place from the country or peripheral settlements by a comfortable transportation vehicle. Annexations, divisions and inappropriate modifications and repairs conducted by these users and the dilapidation triggered by low income and non-adoption accelerate the deterioration of the buildings.

Table 7. The values about length of stay in the region, previously living area, number of children in the family and transportation used for going to work.



As stated, most of the buildings in the area are frame houses, and the gaps are adobe or brick-filled and plastered. In addition, adobe and brick masonry buildings are also present in the area. Structural examinations indicated that the loss of external plaster on many buildings resulted in water damage and section loss in the adobe structures exposed to atmospheric factors. Examining repairs made by the residents, it was found that restoration of the original sections using cement-based plaster could not ensure adherence to the old material; and that spills increased and the effect of salt in the cement caused more damage to the building. Spalling and splits are evident in wooden architectural elements, due to the loss of plaster and non-renewable protective paint, resulting in discoloration and exposure to the effects of rain, snow and sun.

Fig.9. The examples for deterioration

The high number of vehicles and the intensity of traffic in the narrow streets have caused potholes and collapses of the road surface due to abrasion, breakage and vibration. The use of spaces in the area for parking during the day is one of the factors accelerating the deterioration.

Fig.10. The examples for parking at the streets or the areas between the houses

4. CONCLUSION

There are mostly registered and high quality buildings in the study area. However, the area is under increasing pressure due to the construction of additional storey and new housing. The most crucial problem within the area is that commercial usage leads to functional and physical change in the buildings, due to its proximity to the commercial axes. Physical change also covers unauthorized annexations to the buildings in addition to the deficiencies on the basis of square meter. In order to stop this process, it is necessary to allocate defined functions to the buildings and prevent unauthorized annexations.

The central location of the area will provide positive benefits, particularly for functional changes, in addition to its potentials and opportunities (Fig.4.) However, it is necessary to examine the whole region at a large scale and with different details in order to make decisions regarding the change – rehabilitation of the region.

Fig.11. The environmental values of the study area

Looking at potentials and opportunities of the study area, it is seen that many streets and buildings have trained their historical features. Sympathetic renovation should be conducted for these buildings, streets and street elements; further detriment of those buildings damaged by environmental effects should be eliminated based on projects prepared by a specialized team based macro scale assessment; environmental factors such as litter, intense traffic and deficiency of children's playgrounds should be improved; open – closed spaces should be developed to ensure socialization; while doing all this, it should be ensured that interventions appropriate for the traditional texture are conducted and decisions are taken which will not result in long-term deterioration of the texture.

It can be seen that the original street covering disappeared following highway repairs using asphalt. In order to restore the character of the area, it is necessary to remove this covering and reconstruct the roads with original materials. In the same way, it is necessary to restore the garden walls, which act to complete the street, and to reconstruct these walls with original material in their original locations. Another factor reducing visual amenity in the area is telephone and electricity poles and wires. It is necessary to relocate the infrastructure necessary for these services in underground conduits, together with repair of the sewerage system.

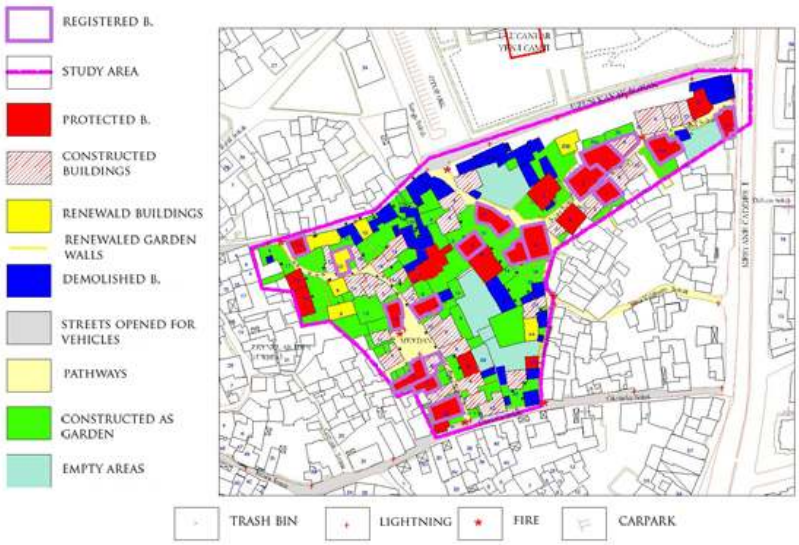


Fig. 12. The decisions

Among the buildings in the area, 6 qualified but non-registered buildings were detected. In addition to these buildings, there are 8 more buildings that are not exceptional but worthwhile examples of traditional Ankara houses, with their frontal and planning features. Although the area is within the urban protected area, these buildings should be registered immediately. There are problems resulting from atmospheric effects, traffic, vandalism and social problems originating from the residents and users. These are increasingly difficult to remedy and individual problems should be identified for each building, projects should be prepared and necessary precautions should be taken.


Fire cock


Hemhüm masjid


Fountain


street

Fig.13. The examples of the historical texture, structure and materials from the study area

There is the urgency of preparing restoration suggestions which provide minimum comfortable conditions for houses which are the parts composing the whole within historic texture. It is possible to adopt policies to encourage the building owners back to live in the area and to thereby ensure the sustainability of restoration works conducted in the area. These buildings may be turned into a part of the whole through restoration of their facades. When multi-storey building parcels in the immediate periphery of the area reach the end of their economic lives, it is necessary to immediately redevelop these sites to make them appropriate to the urban texture of the wider area.

Fig.14. Examples of unqualified buildings from the study area

Socio-cultural reformation of the area requires larger scale research and expert opinions. However, physical transformation of the area will make positive contributions to the socio-cultural and therefore economic transformation of the area. The most urgent step that should be taken in order to sustain rehabilitation works in the area is to raise awareness of conservation and protection issues among the residents. However, economic stimulus may be provided an alternative form of financial structure for protection and maintenance and to support the new functions that will emerge within the area. Considering that the area is mainly residential usage, it is possible to convert some of the dwellings into hostels, according to their appropriate size, location and consent of the owners, while other dwellings should retain their present function. The potential of the immediate surroundings should also be taken into consideration. It is thought that economic opportunities for temporary accommodation may be created in this area , since there is an eye hospital in the northern part of the area and the former Ulucanlar Prison, which is on the eastern part of the area, is proposed as an arts and cultural centre. Economical input is an important criterion to draw house owners back to the area and this contributes to establishing a "protect-and-use" balance.

In conclusion, urban protection includes physical protection of urban areas, which are privileged in historical and cultural terms; and also their maintenance and transfer to future generations. With the blending of the concepts of urban innovation, urban transformation and urban protection, the context of urban protection has come to incorporate the concept of maintainability. The necessity has emerged of protecting the historical value of the parts of the city in the memory of the city and its inhabitants, not in terms of building but on the basis of texture; and, in these terms, protecting the relationships and connections between the parts. It will not be possible to ensure holistic protection in physical, social, cultural and historical terms for the part of the city unless the logic of spatial organization, which forms the relationships between the components, is comprehended and maintained [6]. It is necessary to redefine a legal economical frame in order to sustain protection measures through research, activities and instruments designed to protect the historical environment and the texture that constitutes this environment. It should not be forgotten that the area, which is located in the city centre, has a significant economic potential in terms of housing stock. In addition to physical rehabilitation of the housing stock, the socio-cultural structure also requires revitalization. However, this overall process of regeneration should define various organization models and processes in order to keep the present users in the area; in other words, without making the area abstract. Physical rehabilitation of the housing stock requires achieving certain standards in terms of environmental conditions. Accordingly, there is a need for decisions relating to the functions, density, the areas which are not used effectively, road system infrastructure and activities which are planned according to these decisions.

Unless there is a plan for area-wide protection, it will not be possible to protect isolated monumental buildings, which will eventually lose their relationship with their urban context and their place in the city memory, through "becoming independent of the things that have been lost".

REFERENCES

[1]. Tankut, G. "Jansen planı uygulama sorunları ve cumhuriyet demokrasisinin kent planına yaklaşımı" Tarih içinde Ankara – Eylül 1981 seminer bildirileri, ***METU Faculty of architecture publications***, Ankara s.,304 (1984).

[2]. Tunçer, M., "Ankara'da tarihsel çevrenin korunmasına yönelik politikalar" ,Tarih içinde Ankara II, ***METU Faculty of architecture publications***,, Ankara, s.75-78, (2001).

[3]. Cengizkan ,A., "1957 Yücel – Ubaydin imar planı ve Ankara şehir mimarisi", Cumhuriyetin Ankara'sı, ***ODTU geliştirme vakfı yayıncılık ve iletişim A.Ş***., s.46,(2005).

[4]. Akçura N.; Şahin Güçhan N.; Ülkenli Z.; Vd., "Tarihi çevrede konut – yapı ilişkileri – Ulucanlar örneği", ***TC Başbakanlık toplu konut idaresi başkanlığı yayınları – konut araştırmaları dizisi*** s.12,19,20,25,26,27,43,47 (1996).

[5]. Şerif A.;'Anadolu'da Tanin', ***Hilal matbaacılık kolektif şti.***,İstanbul, s.97-98, (1977).

[6]. Gültekin N.T.; "Kentsel korumada yenileme tercihli yasal yaptırımlar" Kent ve bölge üzerine çalışmalar Prof. Dr. Orhan Kuntay'a armağan, Ankara, ***Gazi Üniversitesi İletişim Fakültesi basımevi***, s.379,(2007).

[7]. İnici S.; Bakkal İ.; Ayaz İ.;vd "Project report of Mim 539 designs in conservation and development of historic urban areas lecture", ***Gazi University Faculty of Architecture*** (2007).

[8]. Böke F.; Bölükbaş E.; Özen E.; vd. "Project report of Mim 539 designs in conservation and development of historic urban areas lecture", ***Gazi University Faculty of Architecture*** (2008).

[9]. İbrahimgil A.; Uzun E.B.; Arslan T.; vd. "Project report of Mim 539 designs in conservation and development of historic urban areas lecture", ***Gazi University Faculty of Architecture*** (2009)