



## THE IMPACT OF DIFFERENT IMPLEMENTATIONS OF URBAN TRANSFORMATION TO SPATIAL SET-UP: EXAMPLE MAMAK IN ANKARA PROVINCE

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### Abstract

In our country, it became mandatory for local administrations and central government to implement Urban Transformation due to unqualified living circumstances via conurbanization, unplanned growth and over-migration, and earthquakes. In this study, spatial evaluation of transformation implementations, which has been realized in different processes, is aimed. In this context, Mamak district in Ankara, in which a dense formation of “shanty settlement” and various kinds of urban transformation are witnessed, is chosen as a study area. Two different kinds of samples which are the subject of urban transformation are chosen as far as implementation is concerned and it was aimed to analyze the differences in urban transformation in terms of space in Mamak area. Urban transformation is implemented via methods of interference such as preservation, rehabilitation, revitalization, gentrification, improvement and regeneration; and while New Mamak Urban Transformation and Development Project is an example of rehabilitation –one of the methods of urban transformation, Royal Residence Project is an example of revitalization. The main construct of the study was determined via the design aspect of urban transformation which is a multi-dimensional implementation including physical, economic, social and administrative aspects. It is determined that implementation of urban transformation with keeping all the criteria, which will raise the standards as far as space, social, and economics are concerned, in mind is the main factor for a successful transformation.

## 1. INTRODUCTION

Urban transformation is described as the revitalization and reconstruction period of the old fashioned, derelict areas of cities, places such as industrial areas that lost their function, settlements with disaster risk, unplanned “shanty settlement” areas and historical places which do not please citizens as far as spatial quality is concerned and lose its economic, social and physical attraction by taking every aspect of modern planning, architecture and design philosophy into consideration. (URL)

Since cities have an organic and a dynamic structure, they are prone to change and transformation. While a transformation may occur by the public where there are urban deteriorations, urban areas may also be included in the process of transformation via any urban focus or a triggering factor. Throughout the world and in our country, due to some urban deteriorations and needs, implementations of transformation have been realized.

While implementing urban transformation, methods of urban interference regarding the problem of the space subject to transformation are implemented. These methods are preservation, rehabilitation, revitalization, gentrification, improvement and regeneration.

Scientific studies regarding planning, design, economic, legal, social etc. aspects of urban transformation implementations realized throughout the world and in our country have been conducted. As the notion of urban transformation is a dynamic and a continuous implementation, it is useful to continue studies to increase the performance of implementations. For this reason, in order to direct urban transformation

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implementations which have been continuing densely, studying the design aspect of transformation implementations has risen as a requirement. Two different implementations regarding the transformation in Mamak, Ankara, in which “shanty” settlements are dense and urban transformation has been continuing, were chosen as examples to this study.

With this study, the transformation of an area in Mamak, Ankara, in which transformation works have been implemented densely due to unplanned structuring and migrations, is examined. When we examine the area in general, it is observed that there are urban areas together with examples of transformation via the public and some factors triggering urban mobility.

The scope of this study consists of the concept of urban transformation and various transformation implementations in the city. In different implementations which were conducted both via private sector and the public, differences and similarities of the implementations were tried to be shown with regard to close urban vicinity, inner spatial organization and façade language.

In this respect, New Mamak urban transformation project which is situated on 19 Mayıs Boulevard in Mamak district, the biggest urban rehabilitation in the area with regard to size, and implementation of which is conducted by Ankara Metropolitan Municipality, also Royal Residence Project, one of the many examples of projects found amidst the dynamism of transformation which has been happening on its own along the axis of Doğukent street cutting 19 Mayıs boulevard vertically, and which is a part of the transformation and change around it due to the implementation of NataVega Mall-Residence towers were chosen as examples to be evaluated as far as decisions regarding layout plan, inner spatial set-up and approaches to façade. During this evaluation, the above mentioned projects were analyzed under certain parameters.

## 2. URBAN TRANSFORMATION

Cities can be defined as dynamic systems which are shaped via the impact of social dynamics occurring in them, which are prone to take a new shape and which are not stable. (Göksu,2005).

According to the definition of Thomas, urban transformation is “A wide-ranging vision and act which provides a solution to urban problems and aims to provide a permanent solution to the physical, social and environmental conditions of a city undergoing a change.” (Thomas, 2003 via Yüksel, 2007).

Urban transformation must aim creating a lively, dynamic city life, preserving culture of neighborhood, producing spaces which are natural, creating social and economic value, and settlements durable to risks in which social transformation is not ignored.

As solutions to urban problems which occur in time, urban areas are reconstructed via different methods of intervention with regard to the prominent qualities of the city. While derelict and unhealthy areas are renewed via technical interventions, economic regeneration is aimed for areas which lost their economic appeal. For areas which are degenerated socially, a social rehabilitation is made. Although these problems can occur one at a time, social, physical, economic and cultural problems may appear all at once at one area. (Ilica Erzene,2013)

Different methods such as conservation, rehabilitation, revitalization, improvement, regeneration and gentrification of pieces of a city, which lose their quality due to different reasons, are implemented. Although there are some differences between these methods, urban transformation can be used as an inclusive concept for these methods. (Kaş, 2014)

In this context, 6 main implementation methods of urban transformation are summarized.

Conservation – preservation

Rehabilitation

Revitalization

Improvement

Regeneration

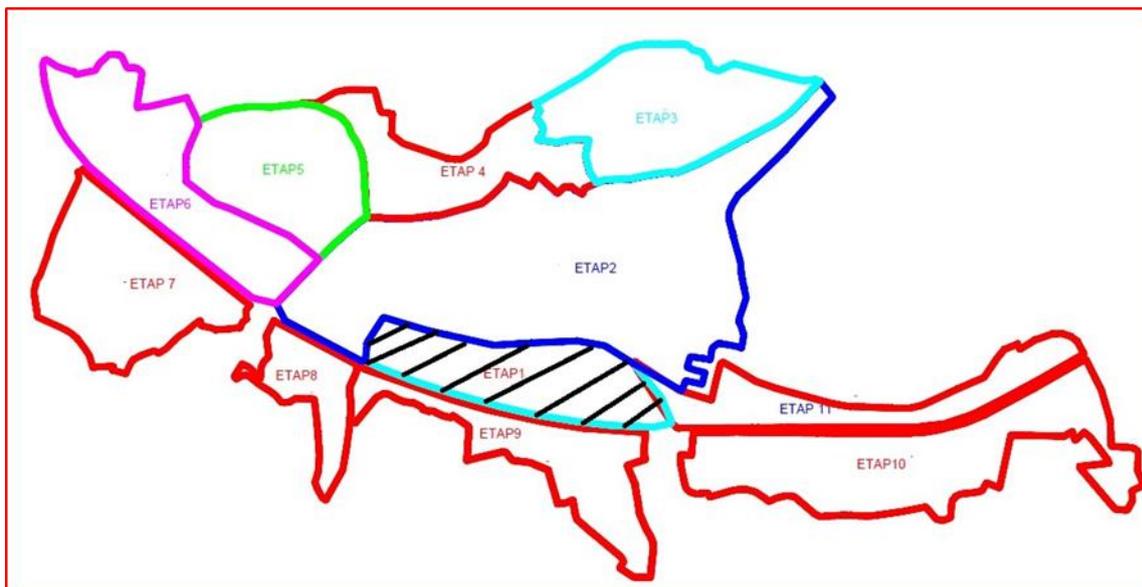
The spatial organizations of cities are shaped via local processes and dynamics specific to each city. Urban transformation implementations are realized with parameters suitable to each country. Transformation implementations in the big cities in our country are realized via the interaction of physical, economic, social and administrative variables. For this reason, during the realization of urban transformation implementations, suitable transformation model has to be applied while physical, economic, social and administrative processes are taken into consideration. (Ataöv A., Osmay S, 2007)

Urban transformation is a process which includes physical, economic, social and administrative aspects, and the process have to proceed with balance as to meet the needs of its partners. Today, transformation is regarded as a physical change in space in our country; Mostly, social and economic changes have been ignored. In transformation implementations, in which only space is rehabilitated, social inequality, disruption of historical and cultural environment, and projects in which employment is ignored, occur. (Güzel D, 2010)

In our country, generally, only steps with regard to the rehabilitation of physical space have been taken when urban problems occur; social, cultural, environmental and economic aspects have been ignored. Urban transformation can only be successful when it is implemented with an extensive understanding including social and economic development, sensitivity to environment and criteria for sustainability in mind as well as physical improvement in urban areas. (Şişman, Kibaroglu, 2009).

### 3. IMPACT OF URBAN TRANSFORMATION ON SPATIAL ORGANIZATION: EXAMPLE OF MAMAK DISTRICT OF ANKARA PROVINCE

Since, along with migration, there is conurbanization lacking quality, in especially Altındağ and Mamak districts of Ankara, urban transformation projects realized in these districts are critical. The first of the 2 projects selected as study area in the thesis is the New Mamak Urban Transformation and Development Project, located in Mamak district and conducted by Metropolitan Municipality of Ankara. New Mamak Urban Transformation and Development Project is an example of improvement (rehabilitation), which is one of the urban transformation implementation methods.

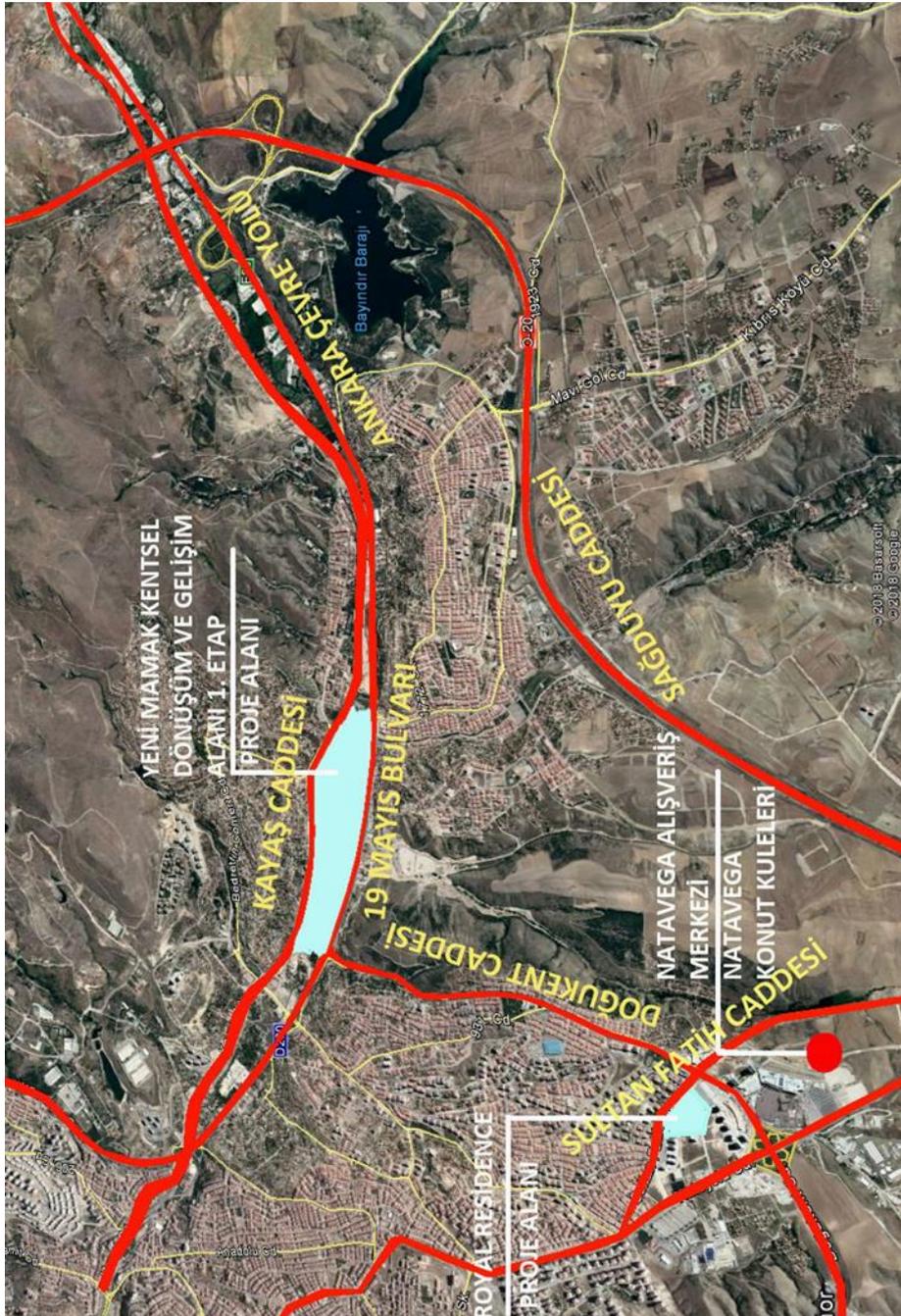


**Figure:** Project stages

Attempts were made to revive the area by removal of unhealthy and poor-quality, mostly unlicensed, building stock and construction of urban service areas, as well as social and technical infrastructure areas.

The Project consists of 11 stages and there are on-going works throughout the Project. The 1st stage of the transformation project, which covers a rather large area, will be analyzed. The 1st Stage project area is located between Ankara highway and Kayaş Road at the intersection with Doğukent Road.

The 2nd project example to be analyzed in the thesis study is Royal Residence housing. Such project is located at the south of New Mamak Urban Transformation and Development Project area on Sultan Fatih Road that is crossing Doğukent Road. 2011 yılında Natavega Construction of Natavega mall and residential towers in 2011 have led to the revival of the region and a transformation- restructuring in the area. The population density in the region increased and the area has become more commercially active. At the current state, there are many on-going residential and commercial constructions surrounding the mall.

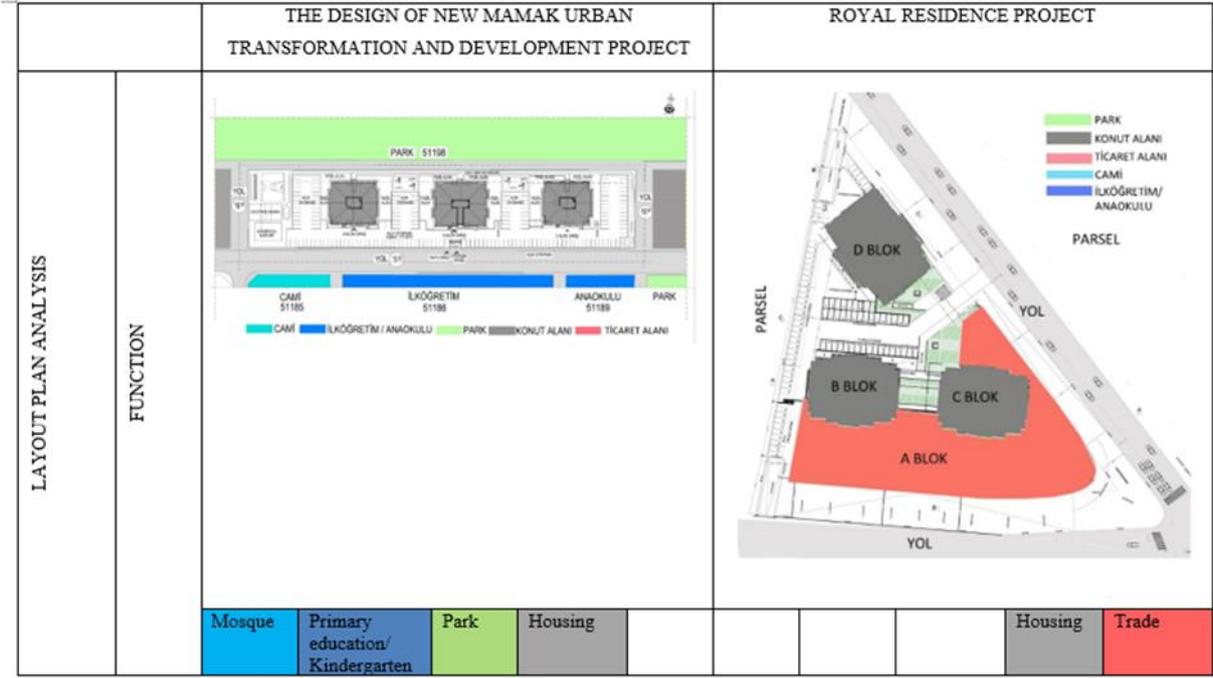


**Figure:** Analyzed project area and connections

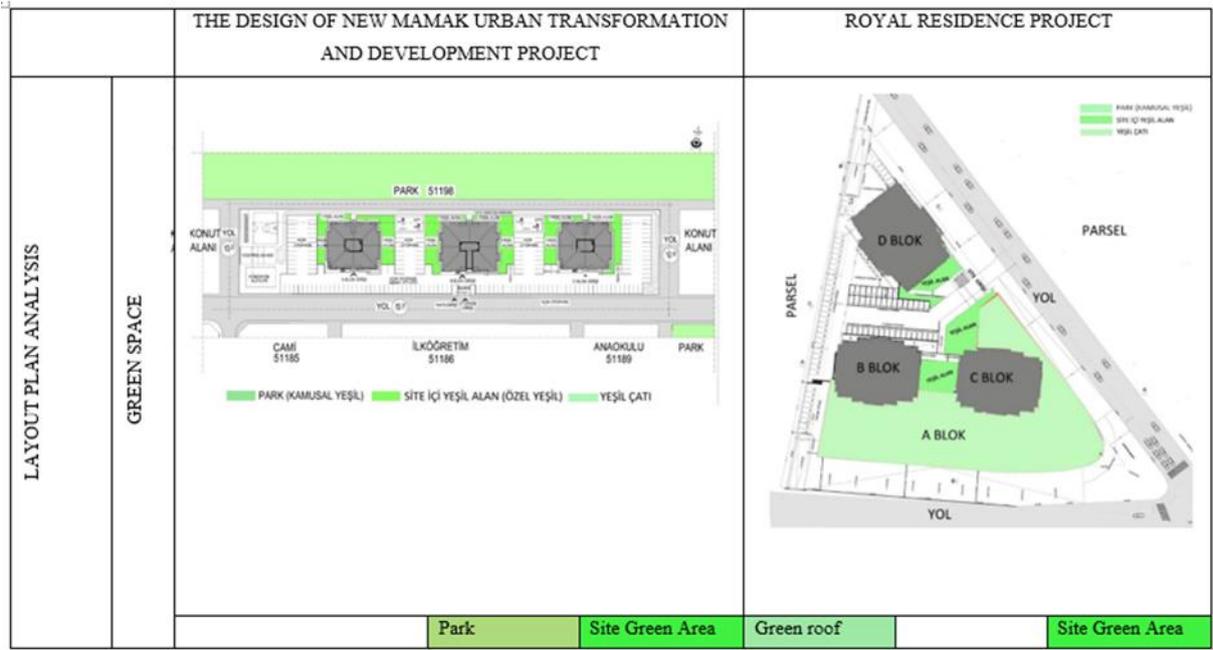
#### 4. ANALYSIS METHOD

Selected projects were analyzed by parameters of function, green space, transportation circulation, area usage, accessibility, orientation under layout plan heading; by parameters of function, privacy, open-closed area relationship, utilizing daylight under spatial organization at plan scale heading; and by parameters of functional readability and cultural data under façade heading.

Parameters of the Analysis	
Layout Plan Analysis	Function
	Green Space
	Transportation Circulation
	Area Usage
	Accessibility
	Orientation
Spatial Organization at Plan Scale Analysis	Function
	Privacy
	Open-Closed Space Relationship
	Utilizing Daylight
Façade Analysis	Functional Legibility
	Cultural Data



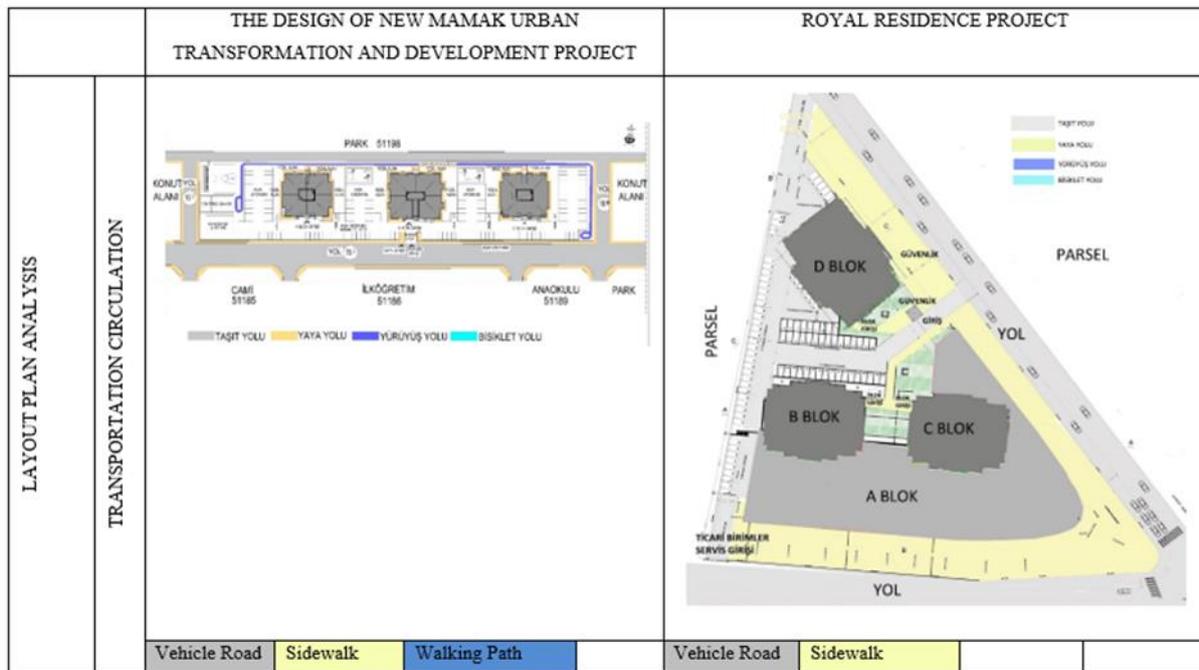
The design of New Mamak Urban Transformation and Development Project, which includes 3 towers on block 51187 solution, is a part of an integral plan; and is situated in the vicinity of social equipment areas such as mosques, schools, parks. The block examined is composed of residential area only, whereas Royal Residence Project is suitable for residential + commercial use. The commercial area in addition to the residence provides the area with economic activity.



When the 2 reviewed projects are seen under the light of green space approach; it is seen in the New Mamak Urban Transformation and Development Project that a public park is located at the north of the layout that includes the 3 towers on block 51187 solution. Similarly, it is observed that areas other than areas reserved

for open car park usage within the area surrounding the 3 towers were designed as green spaces. Since the necessity for a car park is resolved with the use of outdoor area, it is seen that the green space organization around the blocks was limited.

When green space approach of the Royal Residence Project is examined; it is seen that, even though car park requirement is met by an indoor car park, there are areas reserved for parking cars between the blocks and areas other than such spaces were designed as green space. It is observed that the amount of green space reserved at the ground level is little, however there is a green roof installment on the mezzanine floor located below towers B and C.



When the immediate surroundings of the layout that includes the 3 towers on block 51187 solution in the New Mamak Urban Transformation and Development Project is examined; it is seen that vehicle roads and pedestrian walkways are identified and there is a walking trail at the north of the area. There is no arrangement for a bicycle way in the project.

In the Royal Residence Project it is seen that car park entrance and exits, outdoor car park block entrance and exits are identified, however no walking trail or bicycle way is designed in the site.

When the layout including 3 towers on block 51187 solution in the New Mamak Urban Transformation and Development Project is examined, areas around the block are reserved mostly for car parking purposes, since the car park requirement is met outdoors. It is seen that areas other than those used for outdoor car park are allocated as green space and sports area.

In Royal Residence Project it is observed that area usage is mostly designed as hard soil with an outdoor car park and limited green space.

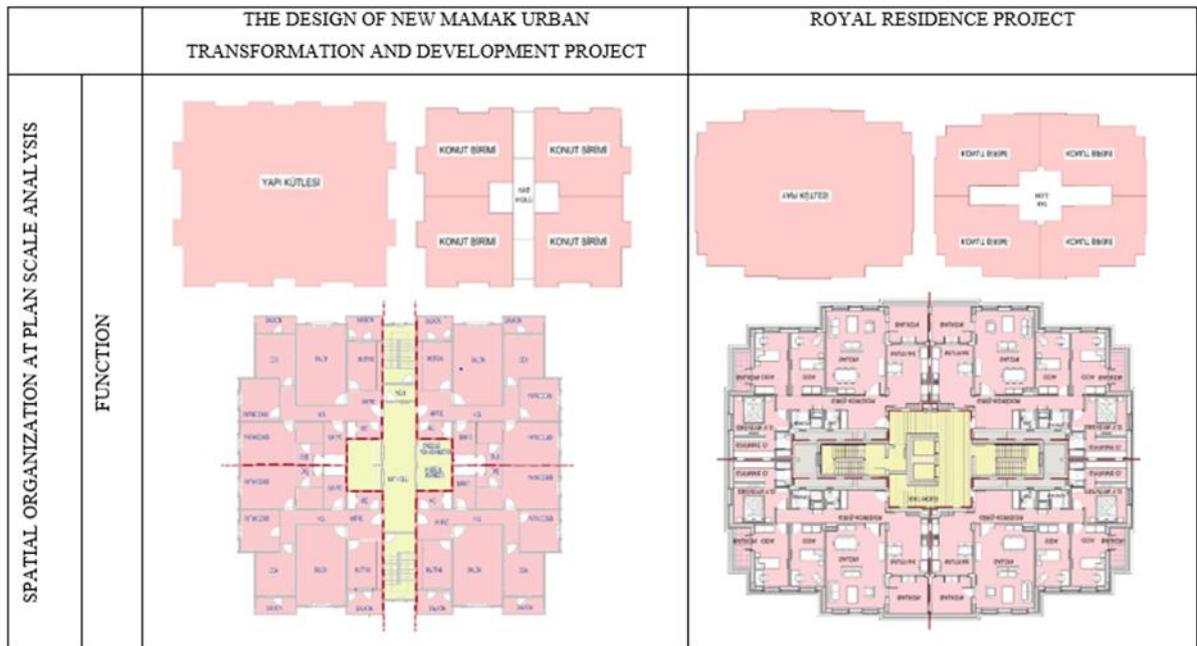
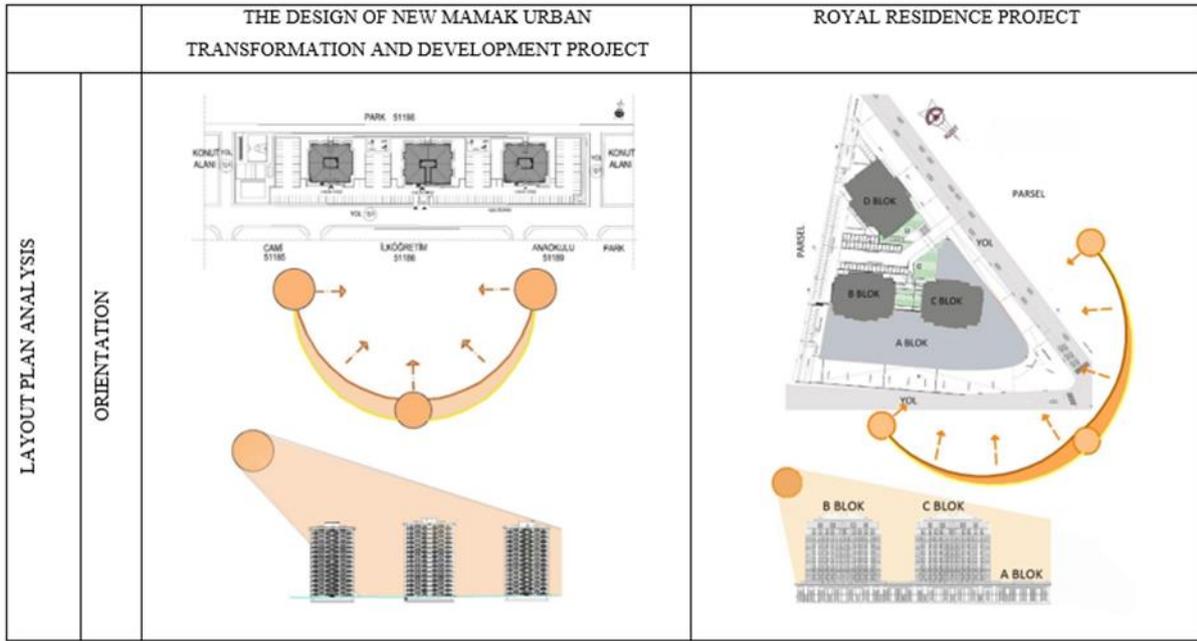
		THE DESIGN OF NEW MAMAK URBAN TRANSFORMATION AND DEVELOPMENT PROJECT	ROYAL RESIDENCE PROJECT
LAYOUT PLAN ANALYSIS	ACCESSIBILITY		
		<p>Ramp </p> <p>Disabled Parking </p>	<p>Ramp </p> <p>Disabled Parking </p>

Accessibility is at the top of parameters to be considered during design of buildings. When the entrance of tower B located on block 51187 and the site entrance are examined in the New Mamak Urban Transformation and Development Project, it is seen that they were constructed to be compatible with entrance, exit and circulation areas of the people with disabilities. However, there is no ramp solution at the fire escape of tower B, which is located on the North, as only a stairway entrance was built.

In the Royal Residence Project; it is observed that the site entrance and tower entrances were designed to be suitable for movements of the people with disabilities, and ramps are used for the level differences due to elevation.

In the New Mamak Urban Transformation and Development Project, it is seen that the mass layout of the 3 towers on block 51187 is situated from east to west in accordance with the shape of the lot. It can be said that it is beneficial for the Towers to be, although partially, facing the South.

In the Royal Residence Project it is seen that the mass layout of the 3 towers is designed fully suitable for the triangular lot shape and direction regarding façades was not taken into account in terms of layout plan decisions.



It is observed that plan schemes of residences of different type and dimensions designed for a variety of user profiles are similar and residential units are distributed along a floor hallway.

It is seen that units distributed along the floor hallway are uniform and 3 + 1 in the New Mamak Urban Transformation and Development Project, whereas they vary in the Royal Residence Project as 3+1, 4+1, 5+1 plan types.

		THE DESIGN OF NEW MAMAK URBAN TRANSFORMATION AND DEVELOPMENT PROJECT	ROYAL RESIDENCE PROJECT
SPATIAL ORGANIZATION AT PLAN SCALE ANALYSIS			
	PRIVACY		

The concept of privacy is a necessity individuals prioritize in terms of protecting their personal living spaces. When the New Mamak Urban Transformation and Development Project and the Royal Residence Project are examined; it is seen that in both Projects, common living quarters such as the kitchen, living room are located at the entrance of the residential unit, bedrooms are at the back of the unit, and common and private areas are distinguished with a daytime nighttime hallway separation. It is seen that spatial organization does not change pursuant to privacy.

The New Mamak Urban Transformation and Development Project was realized through improvement method by removal of shanty settlement areas. The Royal Residence Project is also located near a region where shanty settlement is dense. Shanty settlement areas are composed of structures directly connected to green areas with few floors. In order to enable the routine of the people living in the area and reinforce their sense of belonging; it is required to ensure their connection with their routine and the environment in the structures designed under the transformation project. Multi-purpose balcony use is observed in projects, in which a transformation from structures with few floors to structures with multi-floors occurs. There is a balcony accessible from the kitchen and the living room in the residential units.

		THE DESIGN OF NEW MAMAK URBAN TRANSFORMATION AND DEVELOPMENT PROJECT	ROYAL RESIDENCE PROJECT
SPATIAL ORGANIZATION AT PLAN SCALE ANALYSIS	UTILIZING DAYLIGHT		

When the layout of the residential units in the floor plan in both projects, it is possible to say that direction was not considered. The structures were designed as point block, core solution was placed in the middle of residential unit and the structure gained its form with a view towards functionality.

While residential units facing the South side of the buildings are more advantageous in terms of daylight and heating during winter and summer; it is seen that other sides receive less sunlight

		THE DESIGN OF NEW MAMAK URBAN TRANSFORMATION AND DEVELOPMENT PROJECT	ROYAL RESIDENCE PROJECT
FAÇADE ANALYSIS	FUNCTIONAL LEGIBILITY		

Human oriented housing and housing at human scale is directly effective for urban people to connect with natural environment. When the reviewed projects are examined, it is seen that multi-floor housing was designed, which is incompatible with proximity to soil and horizontal settlement elements.

When the New Mamak Urban Transformation and Development Project is examined; indoor and outdoor spaces and connected spaces as well as floor hallway which is outside the residential units that come into focus with mass movement are easily readable.

		THE DESIGN OF NEW MAMAK URBAN TRANSFORMATION AND DEVELOPMENT PROJECT	ROYAL RESIDENCE PROJECT
CEPHE ANALİZİ	CULTURAL DATA		

Sustainability is considered as a significant approach within the framework of development of cities. Ensuring social sustainability in addition to sustainability in the physical environment and economic sustainability is crucial for the improvement of cities. Places that compose the physical environment contain many hints and clues with regard to the lifestyle of the people, etc.; and play an important role in sustaining cultural values and continuity.

Façades of the structures rank among the top of the most important factors that impact urban identity in a structured environment. A city with an identity is only possible with a structured environment with an identity. The façade directly influences identity in physical spaces. When the New Mamak Urban Transformation and Development Project is examined; it is seen that no design elements were reflected on the façade and as an urban transformation project that is implemented on a large area and influences the identity of the city, it does not contribute to the identity of the city; there is no design effort nor a specific design language on the floors or different façades of the buildings. It can be said that the uniformity of the façades lead to façades without an identity and the construction was made without any aesthetic concerns.

When the Royal Residence Project is examined; differentiating sides due to different floor plans and the protruding parts of the floors enrich the façade of the building. Wrought iron works on the façade was effective in breaking monotony. Even though it was not designed with a local or traditional sense of architecture, it is possible to say an integrated sense of design was employed on the sides, especially with the mansard roof and French balconies.

## 5. CONCLUSION

Mamak district, which is one of the unfortunate regions of Ankara in terms of urbanization, is inhabited by people migrating to the district for various reasons and the majority of the housing is as shanty settlement. Regions, where people cannot control their sense of belonging, which they cannot feel in them, are always prone to various problems. In today's conditions human expectations and demands change, and the emerging need for change and development also applies to the physical spaces.

When urban transformation projects are realized, they should be implemented with ensuring the participation of the local people and without causing any gentrification in the area. Expectations and demands of the individuals living in the area should be taken into account, and a transformation with standards suitable for their socio-cultural and economic levels should be ensured.

Urban transformation projects in our country are usually addressed with problems on the carrier systems of the buildings, earthquake risks, problems due to unplanned housing. Since the city is a whole and an integrated system within itself, a transformation of any part of the city affects the city as a whole.

Urban Transformation Projects Implemented in our country are implemented towards improving poor and unhealthy living conditions and planning of physical environment. The transformation is important on many levels and while solutions are attained on economic and administrative aspects, socio-cultural and environmental aspects are usually overlooked, and socio-cultural standards should also be improved at least as much as spatial standards.

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