

URBAN TRANSFORMATION URBAN FRONTIERS AND ISTANBUL EXAMPLE

DR. PELIN YIGIT

Istanbul Nisantasi University, Istanbul, Turkey

DOI: <https://doi.org/10.5281/zenodo.15050786>

Published Date: 19-March-2025

Abstract: It is the production and implementation of projects for demolition, reconstruction, revitalization, rehabilitation or restructuring in order to reconsider urban development in terms of social, economic and spatial aspects and to make problematic areas in the city healthy and livable. In summary, urban transformation means eliminating the problems that disrupt the fabric of a city. In slum transformation/urban renewal projects, it is aimed to "restructure the illegal construction areas and areas that have reached the end of their economic life in the city, in accordance with the rezoning standards, by providing all the necessary urban and social equipment services and taking into account all possible natural disaster risks." Urban transformation should not turn into a practice of dispossessing and displacing the urban poor; This resource transfer should not proceed through the liquidation of slum areas and informal settlements, which are the places of lower income groups, through urban transformation and the opening of their lands to expensive projects (Harvey 2008). In Istanbul, worn-out historical areas within the city (Sulukule, Tarlabası, Fener, Balat, Ayvansaray, Tokludedede Türk Mahallesi, etc.) and slum areas (Küçükçekmece Ayazma, etc.) are being liquidated through urban transformation. The process is carried out in cooperation with local governments and TOKİ.

Keywords: Developing countries, housing finance, quality, design, architecture, real estate, capital markets, appraisal applications.

1. INTRODUCTION

Cities are undergoing transformation due to reasons specific to the urban development process, such as industrialization and migration, as well as extraordinary reasons such as war and disasters. Areas subject to urban transformation are areas that have become obsolete or have somehow been excluded from current planning. For example; such as old central business areas that have lost their charm, urban protected areas, unhealthy and illegal buildings in the city, and slum areas. In addition, the need for urban transformation may arise due to disasters such as fire and earthquake; Urban transformation practices can also be carried out in order to eliminate the destruction that occurs after the disaster or to reduce possible damages before the disaster occurs. In our country, the issue of urban transformation has become one of the most talked about and debated issues in recent years, especially with the urbanization and settlement problems that have become more visible with the destruction experienced in the 1999 Marmara and Duzce Earthquakes. Urban transformation projects have begun to be implemented for various purposes, especially reducing disaster risks and transforming slum areas; TOKİ and metropolitan municipalities played the leading role in these. The legal basis for these practices has been tried to be created by the Urban Transformation Bill, which aims to eliminate unhealthy built-up areas of cities, especially natural disaster risks, as well as new local government laws that give local governments authority regarding urban transformation. However, both the design and the practices are criticized for various reasons.

1.1. City

As stated below, although there are differences regarding the definition of city in our country, there are some values that they all accept as common. Apart from these definitions made by the authors, the Turkish Language Association also explains the concept of city as follows. The city is defined as places where 10,000 or more people live and where non-agricultural activities and especially the services sector come to the fore (Turkish Language Association, 2017).

According to Keleş (1998), the city; It is determined by law and must exceed a certain population, where the population is more dense than in villages, where neighborly relations are reduced compared to rural areas, where there is a certain administrative organization, where the needs of the society such as work, entertainment, housing and transportation are met and is in constant development, These are settlements where very few people engage in agricultural activities as in rural areas, where the services sector is more developed and where people continue their lives.

Cities are places where people continue their lives and meet their social and vital needs, and they stand out as settlements around the world that are the focal point of the surrounding settlements and where the economic and social needs of these areas are met (Duru and Alkan, 2002). Sarıbay (2002) stated that the concept of city is a reflection of cultural formation.

1.2. Urbanization

Keleş (1984) defines urbanization as the process of population accumulation that results in the growth of cities and the increase in the number of cities due to industrialization and economic development, leading to increasing organization, specialization in society and urban-specific changes in interpersonal relations. Işık (1983) defined urbanization as the migration of the population from lower density settlements to urban areas where larger and more dense settlements are concentrated compared to rural areas.

However, it is not enough to see urbanization only as a population movement. The reason for this is that the concept of urbanization emerges from the changes in the economic and social structure of people, and therefore it would be wrong to reduce urbanization only to the population; therefore, the economic and social factors that reveal the population movement should also be included when defining it (Keleş, 1993). At this stage, urbanization is an indicator of the transition from rural to urban society, but also indicates that there is a continuous growth process within the city borders.

it is a proof (Özer, 2002).

While this process continues in a balanced and stable manner in developed countries today, the urbanization process in developing countries brings disorder, chaos and unplanned construction. As a result, it is seen that the fertile agricultural lands on the city periphery are under the pressure of urbanization. The rapid population growth and its consequences are straining the carrying capacity of the city, and agricultural areas are seen as the only solution to meet the need for urban space. This is especially the case in developing countries it emerges as a result of urbanization (Kara, 2007).

1.3. Urban Growth

In the definition of the concept of urban growth, one of the basic criteria compared to the concept of urbanization is considered to be population. Cities, which have become more densely populated compared to the surrounding settlements with the increasing population, will become more in-demand cities with the arrival of services that will appeal to the increasing population, and thus, growing cities will form metropolises. Accordingly, the growth and development of cities is directly proportional to the growth of the area they serve.

Another factor that triggers urban growth is the choice of location based on natural resources and as a result, cities become attractive. For example, settlements that choose a location near a natural resource (oil, marble, aquaculture, etc.) will, over time, enable the city to grow and more population to come to the city due to its economic contribution such as processing and marketing of this resource. According to this approach, it is seen that the city grows depending on the area it chooses (Dağlı, 2007).

When different definitions of the concept of urban growth are examined, it is seen that urban growth does not depend only on population or space, but also includes many factors, and also concerns the entire city. At this stage, it can be seen that the concepts of urban growth and urban sprawl are separated from each other. While urban growth is the increase in population in the city as a whole due to different factors, urban sprawl refers to the settlements that occur mostly on the city periphery. There are also sources that describe urban growth as a concept that includes urban sprawl.

Cities are always seen as more attractive places because they have more economic and social opportunities than rural areas. However, the increase in population density and spatial growth in cities continues rapidly. Small settlements under the influence of urban centers also become centers of attraction over time. The density of city centers and the high cost of living direct people to small settlements close to the center and within the influence area of the central city. Although this situation seems to reduce the density of cities, the density actually continues to increase. Especially in cities that develop rapidly and become focal points, urban functions spread to the urban fringes over time, and this process puts agricultural areas and rural settlements under pressure in the future.

1.4. Urban Transformation

Urban transformation is expressed as a comprehensive vision and set of actions that provide solutions to urban problems and try to provide a permanent solution to the economic, physical, social and environmental conditions of a changing region (Özbek, 2005).

Declines in social and economic systems in cities reveal the need for urban transformation. Economic declines in cities over time and the resulting decline in environmental and social living areas require a planned intervention in these areas. Urban transformation practices aim to eliminate the spatial problems experienced in cities, as well as to develop policies to ensure economic growth and increase social welfare (Eren, 2006).

According to Keleş, urban transformation is not a process that occurs spontaneously, but is a term used to express the renewal of slum areas created by aging city parts and illegal construction (Yerebasmaz, 2006).

Urban transformation is the process of renewing unhealthy and illegal buildings in the city, adding new functions to places that have lost their functions for the use of the society again, aiming to make safe the structures that will threaten the safety of life and property due to natural disasters, and renewing the infrastructure areas in the city during this change process (Kocamemi, 2006).

While Linchfield (2000) defines urban transformation as a consensus on the results obtained in the transformation to be carried out, arising from the need to better understand urban degradation processes, Roberts (2000) defines it as a comprehensive and integrated vision and action, which aims to continuously improve the economic, physical, social and environmental conditions of an area. defined as trying to ensure improvement.

The English words "Urban Regeneration" in the urbanism literature have been translated into our language as Urban Transformation, and the English words "Urban Transformation" and "Urban Metamorphosis" are also concepts translated into our language as urban transformation (Eren, 2006).

The concept of urban transformation is conveyed incorrectly in some sections translated into Turkish from foreign sources. Although the concept of "Urban Regeneration" is conveyed as "Urban Renewal" in some sources, it is actually the exact equivalent of the concept of urban transformation. The English equivalent of the concept of "Urban Renewal", which has settled in the urbanism terminology, is the words "Urban Renewal" and is used in this way. The meaning of the word Regeneration is to give life again or revitalize. The concept of Urban Renewal is expressed as a restructuring practice that includes the demolition of a part of any physical space (İnce, 2006).

Urban transformation is a concept used to revitalize areas that have emerged as a result of unplanned construction and lost their function. In order for urban transformation projects to be beneficial to the society, projects in which the public is represented in the planning process should be developed. Projects where a common planning language and parties work in coordination with each other will achieve greater success and gain continuity.

1.5. Urban Periphery and Urban Fringe

The concept of "periphery" was first used by T.L. It was put forward by Smith in 1937 and defined as "the built-up area outside the built-up areas of the city". Pryor, on the other hand, expresses the concept of "periphery" as the area between the growing city center and the rural hinterland of the center, in other words, the area that is not clearly defined, that is, the area between two opposite poles (rural and urban) (Emiroğlu, 1987).

The spatial pattern consisting of spaces within the city periphery and along the main roads on the periphery, as well as areas with low urban use density, is referred to as "urban fringe". The general physical and local characteristics of metropolitan city peripheries and the socio-economic situations of the people living in these peripheries vary between countries and even cities within the same country, in proportion to the conditions they are in (Clawson, 1962).

Later, subheadings were brought to the term fringe and it was graded. According to this binary distinction made as "urban fringe" and "rural fringe", "urban fringe" refers to the city that is in relationship with the main city. It is defined as the area where residential, commercial, industrial land uses and non-agricultural vacant areas are observed, which are adjacent or close to each other and whose housing density is higher than the average density of the entire perimeter area, and where a faster transformation in land use and regular daily arrivals and departures to the main city are observed in these areas. is stated. "Rural fringe" is defined as areas adjacent to the urban fringe area, where the average housing density is lower than

the average density of the entire fringe area, where a higher proportion of agricultural areas and structures are observed, and where a lower rate of population growth and land use conversion is observed (Emiroğlu, 1987).

The formation of urban sprawl occurs especially with the rapid development of large cities and the introduction of different factors. As the residential areas in the city centers turn into central functions over time, in other words, as the residences in the center turn into commercial buildings over time, it is seen that people belonging to the upper income group are withdrawn from the city centers to the peripheries. Air pollution in city centres, increased crime rates, high housing and land prices, noise, density, excess of vehicles and traffic problems, lack of open and green areas, population growth, demand for larger houses, higher incomes due to the conversion of agricultural lands to urban use. Providing income and land speculation are the main factors affecting the formation of urban sprawl (Özdemir, 1993).

This formation; It differentiated production, administration and control functions and caused the separation of routine administration and control functions. Routine administrative and production functions required more space due to new technologies and were separated from other functions and moved out of the city. While some industrial branches settled in satellite cities, residential sub-cities and special cities were formed. As a result, residential and industrial suburbs dependent on the central city have formed in the metropolitan areas of these countries. The last development that completed this process is the emergence of large shopping centers in residential areas, in parallel with large organizations in production (Kıray, 1982).

This process, which explains the metropolitanization process in underdeveloped countries and the phenomenon of fringes on the periphery as a whole, can be summarized as follows: In underdeveloped countries that export food and raw materials to countries entering the industrialization phase, a single dominant city (primate city) has developed instead of a gradual settlement pattern, causing the surrounding settlements to shrink. has led to. As a result of the developments in transportation, communication and production technologies, the structure of this dominant city has changed, it has entered into two-way relations with its environment and has begun to gain the characteristics of a metropolitan city. The nature of the settlements in the metropolitan area that started to form in these countries after 1965; The location selection of capital-intensive, advanced technology, the location selection of the medium-sized industry that grows with its own internal dynamism, and the settlement patterns of rural-to-urban migrants in the metropolitan area are affected (Kıray, 1982).

In the formation of a metropolitan area, production units with advanced technology chose a location away from the central city, while medium-sized production units chose a location just outside the central city. People who left the countryside and came to the city and could not find a place in the existing land and housing market initially built their homes in the areas immediately adjacent to the central city, but as medium-sized industries moved to the periphery, they began to create residential areas around and near them. These areas, which were not initially adjacent to the central city and each other, grew, spread, united and formed the growth form of the metropolitan city (Kıray, 1982).

After the location selection of high-tech production units within the metropolitan area, away from the central city, the agricultural lands and villages between this area and the central city have also entered a process of change, with new, irregular, different and low-quality housing being built on or near main roads, in old village settlements. and small workplaces began to emerge (Kıray, 1982).

When larger investments and organizations are formed, upper middle class residences, apartments and site settlements occur in the form of fringes on the periphery. Although a similar process is followed in developed countries, the main difference of the metropolitanization process in underdeveloped countries is that it is unorganized, of poor quality and still continues in a very rapid motion (Kıray, 1982).

In parallel with the transformation process summarized above, the phenomenon of transformation and sprawl is also experienced in the peripheries of the metropolitan areas of our country. In order to further detail and understand this transformation process, research has been concentrated since 1985 and determinations have been made specifically for Ankara. These determinations can be expressed as follows: While the city developed as an expansion of the existing settlement spot until 1970, from 1985 onwards, it has been realized with housing cooperatives, contractor companies and public housing areas built by the state. In rural settlements located on the periphery, urban structures are being built (Büyükalıntaş, 1985).

The transformation of the rural structure in the periphery begins with the change in the structure of the existing capital, and in Ankara, the state capital; The housing policy, the move of official institutions to the periphery and the public transportation facilities provided had a great impact on the transformation of the periphery (Emiroğlu, 1987).

The transformation of rural settlements and villages located on the urban fringe can be summarized as follows: agricultural land turns into urban land, land is divided into small pieces, and land speculation is intense. Thus, agricultural production begins to disappear and these villages become the first choice areas for the population migrating to the city. The percentage of commuters to the central city is high and the proportion of workers in non-agricultural sectors increases. "Tenancy" also begins to appear in residences (Işık, 1988).

2. CONCEPT OF PERIPHERAL BELT AREA

Fringe belt areas are urban units that were formed between construction cycles, were initially on the city periphery, but were buried in the inner regions with the growth of the city, and differ from the densely built areas of the city in terms of texture and use. The first comprehensive definition of this concept was given by M.R.G. Made by Conzen (1969): "A fringe zone is a belt-like region that originates from a temporary or very slowly growing urban periphery and consists of a characteristic mixture of land use units that initially seek space on the periphery." (Conzen, 1969) The fringe belt area may be subject to development, transformation and conservation plans over time, with government policies and recommendations from different disciplines. The concept of fringe belt is a potential in holistic planning policies, urban design management and organization of decision-making processes for urban ecology and urban sustainability (Gu, 2010). The existence of these areas is important in understanding the morphological evolution of the city (Barke, 1990). The fringe zone area is a reflection of the urban space needed beyond the residential and commercial sectors. It is valuable due to its cultural and natural features and should be reorganized based on its public value. While it offers planners and designers the opportunity to design lower density and more mixed environments in the city; On the other hand, they face the danger of losing their original characters (Conzen, 2009).

2.1. Peripheral Belt Formation and Differentiation Dynamics

Peripheral belt areas emerge spontaneously within the historical development of the city. Their continuity, like their formation, depends on physical, socio-economic and cultural interactions. These interactions show that the concept of fringe belt has the potential to be used as a planning tool in holistic planning, urban design, city management and decision-making processes. The reasons for choosing a location on the urban periphery for fringe belt uses may vary: the search for seclusion, the need for relatively cheap and large space, the attractiveness of geographical features, etc. The collection of mixed and dynamic land uses that seek space on the periphery for various reasons creates fringe belt areas. Green areas, urban agricultural areas, industrial uses, institutional uses, sports areas, low-density residential areas and recreation areas can be included in fringe belt uses (Barke, 1982).

However, it is still debated in the morphology literature whether low-density residential areas (e.g. slum areas) can be counted within the fringe zone (Vilagrassa, 1990). For this reason, in this study, slum areas in Istanbul are described as a "pre-alienation phase". Peripheral belt areas are divided into three according to their formation time, distance from the city center and their relationship with threshold lines: inner, middle and outer perimeter. belt areas. The inner wall belt area, which is the oldest wall belt formation in the city, usually forms around historical city centers following a threshold line (e.g. land walls). If fringe belt areas continue to be used for the purpose they were established, their existence within the city will be permanent, thus they will be consolidated as fringe belt areas (fb consolidation). If the fringe zone area is surrounded by urbanization, the change pressure it will be exposed to will be greater. Most of the change occurs on the original character of the fringe zone. However, even if the perimeter belt inevitably changes (fb modification), expands (fb expansion) or shrinks (fb reduction), they continue to be different from the surrounding fabric, with exceptions (Whitehand, 1967).

In border belt translation (fb translation), the area does not lose its border belt feature, but land use changes. As the city grows, the location of the fringe zone parcels within the city changes, and the inner fringe zone, which was once on the city periphery, may now be located on the periphery of the central business districts (CBD). In this case, as a result of the CBD and new residential area pressure, fringe zone alienation occurs and the fringe zone loses its original character (Conzen, 2009). The lack of urban strategies and holistic planning policies prevents the sustainability of fringe belt areas (Gu, 2010). Barke (1982) developed a fringe belt formation and change model regarding the possible consequences of the fringe zone area surrounded by urbanization. According to the model, there are four possibilities for the perimeter belt surrounded by urbanization: (1) the original form may continue, becoming consolidated (e.g. cemetery, mosque), (2) the original use may expand (e.g. university campus, hospital), (3) the original use may change or (e.g. conversion to residential area, alienation),

(4) the original use may migrate and be fixed by creating a new perimeter zone (e.g. relocation of industrial areas). In this study, Istanbul's inner and middle fringe belt areas are described through the Barke model (1982). Historical-Geographical Development of Istanbul and Peripheral Belt Areas Istanbul is Turkey's fastest growing city and metropolis today, with a population of more than 15 million (TUIK, 2017). The geographical importance and history of Istanbul dates back to 300 thousand years ago. However, the foundations of today's city date back to B.C. It was laid in the 7th century and AD. It was rebuilt by Emperor Constantine in the 4th century and made the capital. It served as the capital during the Roman, Byzantine and Ottoman periods for approximately 16 centuries. B.C. Between 680 and 660, the cities of "Byzantium" were founded in Halkedon and Sarayburnu in Kadıköy. Byzantium, M.S. It came under Roman rule in 146, was chosen as the administrative center of the Eastern Roman Empire, and acquired an important role in world culture and politics.

M.S. After the collapse of the Western Roman Empire in 476, the Eastern Roman Empire turned into the Byzantine Empire and Istanbul became the capital of the new empire named Constantinople (IBB, 2009).

2.2. Istanbul Peripheral Belt Analyzes

The first fringe belt analyzes of Istanbul were made within the scope of a master's thesis study carried out in the Interdisciplinary Urban Design program of Istanbul Technical University in 2011-2012 (Hazar, 2012). The bases used in the study were compiled from Istanbul 1/100,000 Environmental Plan and plan report, Istanbul Metropolitan Planning (IMP), relevant theses, historical maps and aerial photographs. It was obtained by superimposing historical maps, plans and aerial photographs. The main parameters taken into consideration when determining fringe zone areas are (1) land use, (2) parcel size, (3) building size, (4) number of buildings and (5) relationship with threshold lines in the area. Orchards within the city, urban gardens and agricultural areas on the rural-urban periphery are included in the use of fringe belts. Although the subject is still debated by researchers, cemetery areas, low-density slum areas, villas and coastal embankment areas are included in the use of fringe belts. Nature parks, botanical gardens, water beds, conservation areas, urban parks, ports, public uses and industrial uses are also included in the use of fringe belts (Figure 1). However, in later studies, it was evaluated that slum areas should be defined as a "pre-alienation phase" and that only agricultural areas (e.g. orchards) within the city should be included in the use of the perimeter zone.

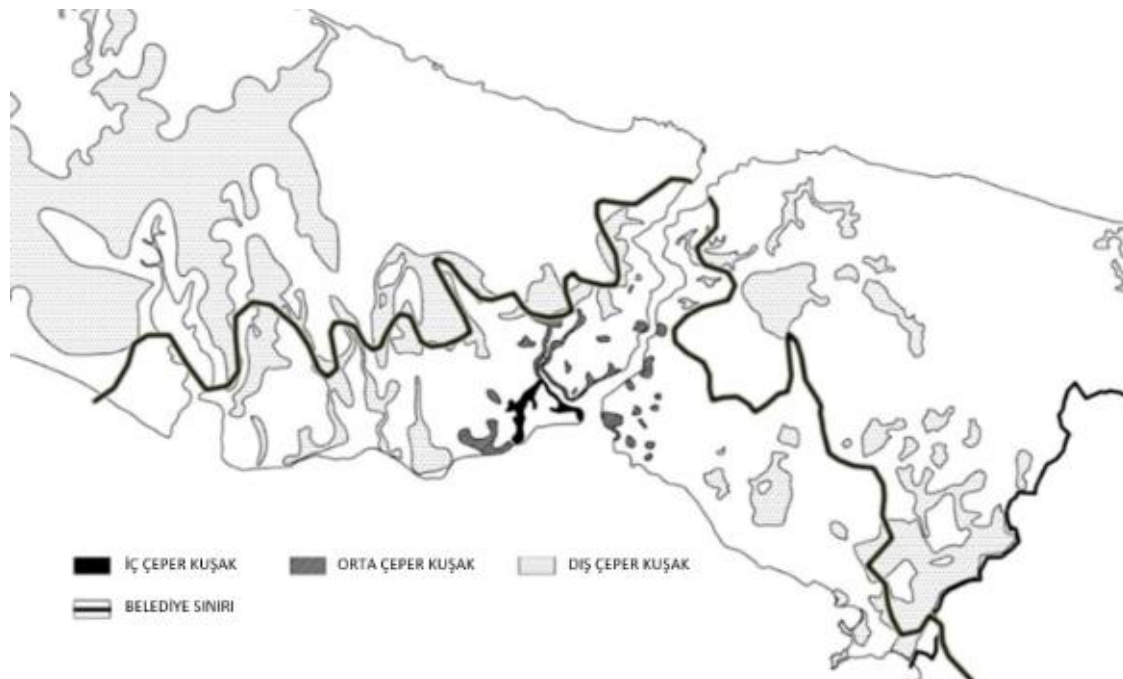


Figure 1. Istanbul fringe belt areas (Hazar & Kubat, 2015)

2.3. Istanbul Inner Wall Belt Analyzes

Istanbul's inner fringe area features a continuous green belt, including agricultural areas, cemeteries and city parks along the historical land walls, which are the threshold line. Vacant parcels, green areas, cemeteries, orchard areas, industrial areas, warehouse areas, institutional areas, slum areas, religious and monumental buildings were identified during the

observations made on the Edirnekapı-Yedikule-Yenikapı axis in the inner periphery of Istanbul. At the same time, parcels larger than 2000 and 5000 m² were analyzed and compared in the only GIS data obtained regarding the inner wall belt area. However, fringe belt formations can also be observed in smaller parcels. Although they are especially important in terms of open, green areas and local economy and historical-cultural values in fast-growing cities such as Istanbul, urban gardens and orchards are the most fragile and difficult to protect units of the city.

Yedikule City Gardens, categorized as "green commons to be protected" around the land walls of Istanbul, which is on the UNESCO World Heritage List, is an example of this situation as an inner perimeter belt area. According to historical maps, these gardens, which have a history of more than 1500 years, are internalized parts that limit and shape the urban form. Urban gardens and traditional agricultural production in the region developed in a linear line following the city walls. As a result of industrial development and rapid urban growth, some urban gardens in the renewed region have turned into recreation areas and parks. However, many of them have strengthened their original wall belt feature. City gardens are part of the inner perimeter belt area around the city walls and are a green belt. Plots owned by Fatih Municipality are rented to immigrants from low-income groups. Produced products are sold in markets, creating a local socio-economic network. After Fatih Municipality's project to transform the gardens into a city park, many groups reacted and "Yedikule Solidarity" was established to raise awareness about the area. In order to inform the public and increase the use of gardens, Lettuce Festival, Mother Earth Day, Yedikule Garden School, etc. are held in the area. events are held. Today, Yedikule City Gardens has become one of the common spaces of Istanbul and is inspiring to create new public forms.

In the Istanbul inner wall belt analysis, the main uses observed around the historical land walls are: cemeteries, mausoleums, mosques, churches, hospitals, sports fields, educational institutions and universities, parks, orchards, industrial and warehouse areas. In the inner wall belt analysis, the area is divided into three parts. In the studies carried out in the first section, Ayvansaray, parcel-based changes over the years were investigated. In the second section, Edirnekapı, an increase in the number of buildings on empty islands is noteworthy. In the third section, Yenikapı, gardens were transformed into residential areas in the historical process (Figure 9); and it was determined that peripheral zone alienation occurred in all three sections.

In March 2016, within the scope of the "An Overview to Urban Morphology with Conzenian School and Tradition" seminar, a draft study was carried out on the inner fringe belt area of Istanbul with M. Conzen, who came to Istanbul Technical University, Faculty of Architecture. According to this study, coastal filling and expansion areas (Yenikapı filling area) in the historical peninsula, whose sill line is the sea, are classified as new wall belt formation/expansion.

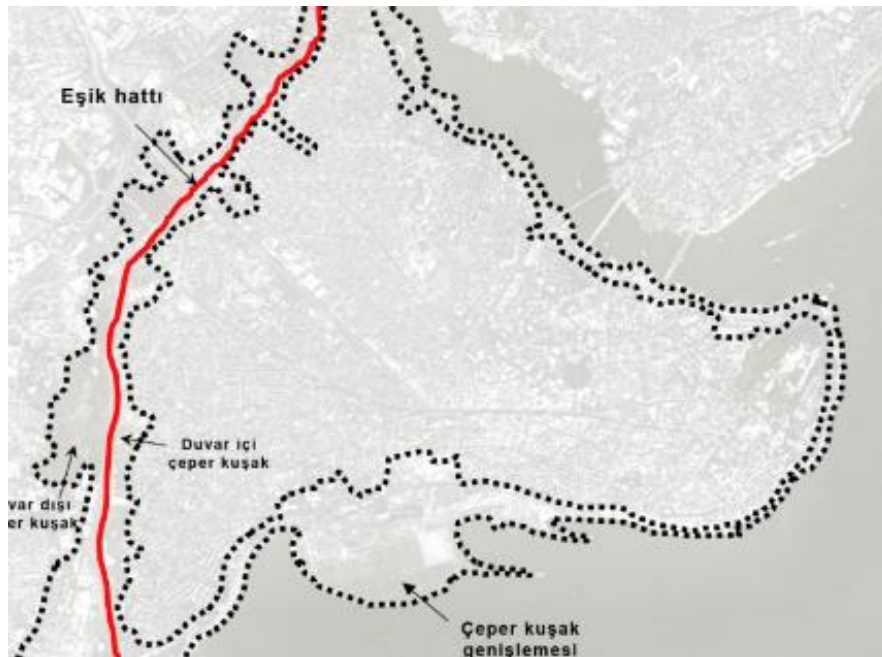


Figure 2. Istanbul inner wall belt area (Conzen & Kubat, 2016).



Figure 3. Yenikapı filling area (Hazar, 2016).

2.4. Istanbul Middle Periphery Belt Analyzes

In the study, after the inner wall belt analysis around the historical land walls, searches were made regarding the middle wall belt areas of Istanbul and common aspects were tried to be determined. Unlike European cities, fringe belt formations have been observed on a district basis in Istanbul, which is a polycentric metropolis.

The regional analyzes were concluded by compiling numerical data; For example, spatial changes (historical-geographic transformations) in land use in Kadıköy were evaluated on maps of 9 different historical periods from 1922 to the present.

In the second part of the middle fringe belt analysis, urban transformation dynamics in Büyükdere Caddesi Şişli - Levent - Maslak regions are focused on. Significant changes have been identified, especially since the 1970s: (1) Ali Sami Yen & Şişli Liqueur Factory - Torunlar & Quasar; (2) Eczacıbaşı – Kanyon; and (3) Turkish Highways - Zorlu Center were identified as three important examples of the alienation process (Figure 4).

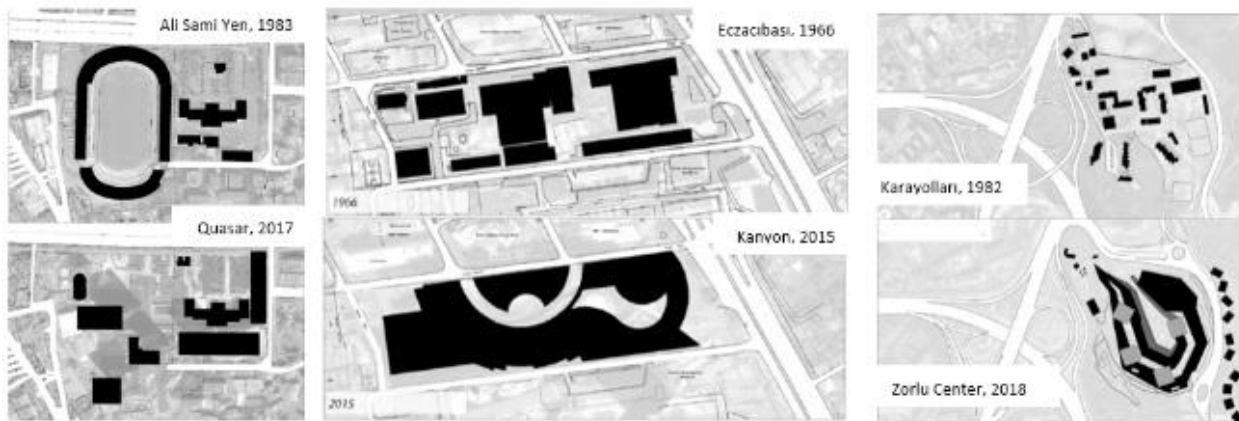


Figure 4. Büyükdere Street: Ali Sami Yen and Şişli Liqueur Factory to Quasar Istanbul and Torunlar; Eczacıbaşı Pharmaceutical Warehouse in Kanyon; Transformation of the Regional Directorate of Highways into Zorlu Center

These regions, which were previously located on the outer periphery of the city, became centers with the growth of the city; CBD has shifted from the historical peninsula to the Maslak line. With the opening of the Bosphorus Bridge and then the Fatih Sultan Mehmet Bridge, the CBD spread on the street axis, and after the increasing density and land prices, the fringe belt areas lost their characteristics and became alienated. Many former industrial areas have been replaced by mixed use or commercial. There has been a transition from single use to mixed use, and construction area, density and land prices have increased.

The industrialization process in the Golden Horn caused the changes in the coastal functions; It has undergone many urban transformations. Most of the historical texture and old uses have disappeared and the surrounding areas have changed. Empty areas on the coast were first turned into industrial areas, then green areas, university campuses, cultural centers, congress centers, museums, etc. It has transformed into other wall belt uses, and a wall belt transformation / translation has occurred in the area. The most continuous fringe belt in the region is the cemetery areas formed in the 1860s.

3. CONCLUSION AND EVALUATION

Although its suitability for planning practice is debated and its importance in implementation projects has not yet been sufficiently understood, fringe belt studies have attracted much attention in the field of urban morphology in recent years. Peripheral zones are urban areas that can regain their true identities as a result of many interactions and changes. However, very few of these interactions can reflect the real characteristics of the peripheral belts. While from an objective point of view, fringe belts give clues about the direction of physical development of the urban area, when examined in a deeper sense, they should be evaluated in terms of providing a framework of references that explain the phases of development around cities and the physical evidence of historical periods. This reflects the need to focus on studies that examine and interpret both historical and geographical structures in cities and to increase awareness of the subject.

When the projects carried out with a professional responsibility for urban environments and the world literature are examined, it is seen that fringe belt studies have been developed with an emphasis on small-scale cities that contain unique regions and structures or have special meaning (Pereira & Meneguetti, 2011). However, despite the fringe belt analyzes conducted in smaller-scale and slow-growing cities; It is also true that there is a need for more holistic and comprehensive studies in a multi-centered metropolis like Istanbul. Istanbul, which has grown polycentrically and developed accordingly; In addition to the "inner periphery" region that developed around the Historical Walls, analyzes to be carried out in the "middle periphery" regions that developed around Kadıköy, Maslak axis, Golden Horn Region, Üsküdar and various similar sub-centers are the planned future goals of this study. It is observed that the Istanbul "inner periphery" area is in a constant change and transformation depending on economic and historical periods. The fringe zone areas that remain within the city as a result of rapid urbanization and migration may be exposed to fringe zone alienation unless they are protected by strategic plans, conservation zoning plans, landscape and urban design projects.

Istanbul's land walls are on the UNESCO World Heritage list. It is important to preserve the historical and urban identity of the walls and the surrounding belts surrounding them. The land walls need maintenance and restoration. In addition, it is necessary to design the use of green areas around it, increase pedestrian access, protect agricultural areas and purify it from idle appearance and design it as an area with aesthetic and urban quality. Designs for the inner perimeter belt area can be helpful in improving urban identity, preserving history and increasing public awareness of urban memory. It is important for the public interest and urban ecological sustainability that the fringe belt areas are used predominantly as public and green areas throughout the city.

Peripheral belt areas, unlike densely built areas, are areas that can be utilized with alternative uses and give the city a breath of fresh air, and they should be defined as priority urban units that direct growth within the natural process of urban growth. In future wall belt analysis studies to be carried out in Istanbul, middle wall belt areas, old industrial areas, military areas, and coastal filling areas can be examined. The issues of whether low-density residential areas, slum areas or coastal filling areas can be considered as a fringe belt formation are still being discussed by different opinions. Slum areas can be defined as a "pre-alienation phase" in the process of fringe zone alienation that takes place between the open space and the residential area. The transformation of slum areas into residential areas or their displacement to other regions can be given as examples of periphery alienation and fringe migration, respectively (Barke, 1982).

In addition, after the military areas are moved out of the city, how these areas, which mostly contain green and large parcels and are potential city parks/public areas, will be designed and whether they will witness a marginal zone displacement/transformation or alienation is the subject of new research. Although fringe belt analysis studies are a new concept within urban morphology studies in our country, they have begun to be discussed more in recent years. Today, it is claimed that after the relocation of Atatürk Airport, which we can describe as the central fringe area of Istanbul, the area will be turned into a city park called "National Garden". This project, if realized, will be an example of fringe belt displacement. In this context, studies explaining the existence of relationships between green space planning and fringe belt areas within the city, such as examples in France and Russia, underline the importance of the subject.

In terms of the accuracy and reliability of the data, Geographic Information Systems (GIS), Remote Sensing etc. are used in fringe belt mapping. It is recommended to use tools. The main limitation of the study is that digital maps cannot be accessed from relevant institutions, but it is thought that this deficiency will be eliminated with the help of future studies and projects. For more comprehensive fringe belt analyses, each parcel should be examined considering its historical-geographical process and planning policies, and conservation development plans, landscape and design projects should be made for the fringe zone areas. Before making a plan, wall belt analyzes should be made, and precautions should be taken to protect the ring belt areas in the plan legend and notes. Protecting and improving periphery belt areas is important in terms of preserving urban memory, increasing urban quality and urban ecological sustainability.

REFERENCES

- [1] Conzen, M.R.G. (1962). The plan analysis of an English city centre. in Norborg, K. (ed.) Proceedings of the International Geographical Union Symposium in Urban Geography, Lund 1960 (Gleerup, Lund) 383-414.
- [2] Conzen, M.P., & Kubat, A. S. (2016). An Overview to Urban Morphology with Conzenian School and Tradition, Michael P. Conzen Semineri, 22-24 Mart 2016, İstanbul Teknik Üniversitesi, İstanbul.
- [3] Conzen, M.P. (2009). How cities internalize their former urban fringes: a cross-cultural comparison. *Urban Morphology* 13, 29-51. Ducom, E. (2003)., “Fringe Belts and Planning: a French example”, *Urban Morphology* 7, 103-4.
- [4] Ducom, E. (2008). Fringe belt analysis in France: A Conzenian approach to urban renewal, *Environment and Planning B: Planning and Design*. Durusoy, E.
- [5] Cihanger, D. (2016) ‘Historic Landscape vs. Urban Commodity? The Case of Yedikule Urban Gardens’, İstanbul.
- [6] Gu, K. (2010). Exploring the fringe belt concept in Auckland: An urban morphological idea and planning practice, *New Zealand Geographer* 66, 44-60.
- [7] Hazar, D. (2012). Fringe Belts in the Process of Urban Planning and Design: Comparative Analyses of Istanbul and Barcelona, MSc. Thesis, Istanbul Technical University, Interdisciplinary Urban Design Program, İstanbul.
- [8] 711“DeğişKent” Değişen Kent, Mekân ve BiçimTürkiye Kentsel Morfoloji Araştırma Ağı II. Kentsel Morfoloji SempozyumuISBN: 978-605-80820-1-4İstanbul’un Çeper Kuşak *elişim SüreFi
- [9] Hazar, D., & Kubat, A. S. (2015). Fringe belts in the process of urban planning and design: Comparative analyses of Istanbul and Barcelona, *ITU A|Z Vol. 12 No.1, March 2015*, 53-65, İstanbul.
- [10] Hazar, D., & Kubat, A. S. (2016). The Fringe Belt Development Process of Istanbul, Eds: Wowo Ding. Proceedings Book, ISUF 2016 XXIII International Conference: Urban Morphology and the Resilient City, 423-433. Hopkins, M. I. (2012). ‘The ecological significance of urban fringe belts’, *Urban Morphology*, 16(1), 41-54. IMP (2006) ‘1/100.000 Konut ve Yaşam Kalitesi Grubu Çalışmaları’. İstanbul Büyükşehir Belediyesi (İBB) (2009) ‘1/100.000 Ölçekli İstanbul Çevre Düzeni Planı Raporu’,
- [11] Kropf, K. (2009) ‘Aspects of urban form’, *Urban Morphology* 13 (2), 105-20.
- [12] Kuban, D. (1996) İstanbul, Bir Kent Tarihi, Türkiye Ekonomik ve Toplumsal Tarih Vakfı İstanbul.
- [13] Kubat A.S., (2018) “Exploring The Fringe Belt Phenomenon in The case of Istanbul” CyNUM-Cyprus Network of Urban Morphology, “Urban Morphology in South-Eastern Mediterranean Cities: Challenges and Opportunities”, Plenary (davetli konuşmacı), Nicosia, Kıbrıs.
- [14] Kubat A.S., Gümru B., (2014) “Investigating the fringe belt concept: The case of Istanbul”, Turkey ISUF-21st International Seminar on Urban Form, Proceedings book (Ed: V. Oliveria), ISUF-21st International Seminar on Urban Form, Porto, Portekiz.
- [15] Kukina .I. (2006) Fringe Belts and the Planning of Russian Cities”, *Urban Morphology* 10, 145-6
- [16] Pereira, J. A., & Meneguetti, K. S. (2011). Urban fringe belts in planned new towns: the case of Maringá–Brazil. Inunpublished paper presented to the Eighteenth International Seminar on Urban Form, Montréal, Kanada. TÜİK (2018). İstanbul 2018 nüfusu. <http://www.tuik.gov.tr>. Erişim tarihi: 16.06.2018.
- [17] Ünlü, T. & Baş, Y. (2016). Multi-nuclear growth patterns in a rapidly changing Turkish city: a fringe-belt perspective, *Urban Morphology* 20 (2), 107-21