ITU A|Z • Vol 14 No 2 • July 2017 • 31-41

The effect of the pedestrianization of *İstiklal Caddesi* on land values and the transformation of urban land use

Kerem Yavuz ARSLANLI[1], Vedia DÖKMECİ[2], Hakan KOLCU[3]
[1] arslanli@itu.edu.tr • Institute of Social Sciences, Istanbul Technical University, Istanbul, Turkey
[2] vediadokmeci@gmail.com • Department of Urban and Regional Planning, Faculty of Architecture, Istanbul Technical University, Istanbul, Turkey
[3] maslak2006@gmail.com • Istanbul Metropolitan Municipality, Istanbul, Turkey

Received: December 2016 • Final Acceptance: June 2017

Abstract
This study is focused on the effects of the pedestrianization of *İstiklal Caddesi* (Beyoğlu) on the land prices and the transformation of urban land use. Beyoğlu represents the modern culture and way of life that arose from Istanbul's relationship with European countries; first, it began as a respectable neighborhood and from there modernization spread to the rest of the city. After the 1970s, the construction of the Bosphorus Bridge and the city's ring roads, the multi-center development of the city and the abandonment of the old city center by higher and middle income people have caused the decline of the old city center. In 1986, the pedestrianization of *İstiklal Caddesi* was proposed as a means to revitalize the neighborhood. After the implementation of the project, there was a rapid increase in land values, which is still continuing. As a result of this, the restoration of historic buildings has accelerated and the area has become a focal point of domestic and foreign investment. The manufacturing and storage areas have been turned into hotels, coffee shops, restaurants, cultural centers, bookstores, galleries and music shops. Pedestrian flow is very high in this area, and the revitalization project is regarded as one of the most successful in the world. For this study, the factors which produce increases in land values have been analyzed by means of a regression analysis. According to the results, the relationship between the land values and the distance to Taksim square was negative.

Keywords
Urban transformation, Restoration, Urban planning, Gentrification.

doi: 10.5505/itujfa.2017.60490

1. Introduction

During the industrialization era, suburbanization and the migration of the middle and upper classes to the peripheries, which was then followed by commercial ventures, resulted in the decline of many city centers. The pedestrianization of city center commercial axes has been implemented in many countries to generate their economic revitalization. However, although there have been some successes, others have failed (Rubenstein, 1992; Hass-Klau, 1993; Smith et al., 1996; Robertson, 2004). In this study, the physical and economic effects of pedestrianization of *İstiklal Caddesi* [Independence Street], of the Beyoğlu district of İstanbul will be examined as an example fromwithin a developing country. The reason for choosing this subject is that the socio-economic impact of the pedestrianization of *İstiklal Caddesi* has been highly successful, and on an average day the area is visited by 1.5 million people (Arslanlı et al., 2011).

Over the last 30 years, rapid population growth, the improvement of transportation infrastructure and greater economic development set the commercial potential of İstanbul in motion and transformed many elements of the city's structure. The construction of the bridges across the Bosphorus and their connected highways, suburbanization, new office buildings, and the development of new consumer spaces triggered a multi-center city development and this caused the historical center to decline socio-economically (Dökmeci and Berköz, 1994; Terzi and Dökmeci, 2008; Ozus et al., 2011; Öktem, 2011).

In 1980s, a decision to revive Beyoğlu socio-economically by pedestrianizing *İstiklal Caddesi* was taken by a consortium of businesses, city planners and the municipality. The project was prepared in 1986 and applied in 1990. This socio-economic development of Beyoğlu became achievable due to its central location in the city, its being a hub of various transportation systems, its Golden Horn and Bosphorus shorelines (complete with seascapes and historical buildings), and the supportive roles played by banks, hotels, and the interest of the middle classes and the artistic community. The development shows similarities with the settlement of artists in southeast Manhattan, including the initiall incentives given to real estate investors (Sassen, 2013).

Generally, the historical centers have a potential for economic recovery due to their aesthetic values and rare historical monuments. It is possible to give examples of various studies regarding this subject (Porter, 1995; Tiesdale et al., 1996; Helms, 2003). In the USA, the Main Street Program was implemented by hundreds of cities, and has been successful in the development of their city centers (Keister, 1990; Smith et al., 1996; Robertson, 2004). This program's implementation first started in small cities and, according to those screened, was successful in 16 cases out of 57. Later, the program was implemented in larger cities, such as Baltimore, Boston and San Diego (Robertson, 2004).

In Europe, City Center Administration Programs have helped to solve some of the problems faced by city centers. Although the methods of each city can be said to have developed to deal with their characteristic problems, and therefore can not be generalized, it is possible to state that the UK has been implementing the most advanced City Center Administration Program. For this purpose, partnerships between public and private interests have played a major role in producing successful results (Balsas, 2000).

The international research into this subject has examined how investment in residential areas affects the development of city centers. There are examples from Cleveland, Ohio (Ding et al., 2000; Ding, Knaap, 2003); Minneapolis (Hammel, 1999); Chicago, Milwaukee, St. Paul and Washington (Wyly and Hammel, 1998); and three settlements in Philadelphia (Beauregard, 1990). There are an additional 145 cities in the USA as well as Utrecht in Holland (Van Kempen and Van Weesep, 1994) and Stockholm in Sweden (Millard-Ball, 2000).

It is also possible to give successful examples of the preservation of historical districts from developing countries. For example, the studies of Erendil and Ulusoy (2002) regarding the recovery of Ankara Castle; and Uzun (2003) and

Ergun's (2004) comprehensive research which showed that the renovated and restored historical buildings in İstanbul's historical districts produce an effect on those districts' socio-economic development. In a similar study prepared by Özus and Dökmeci (2005), the effects on housing prices of the restoration of the historical buildings in Beyoğlu was examined using a regression analysis which took into account both the characteristics of the buildings and the environment. Later, Kolcu (2013) examined the effective factors of the transformation of the Historical Peninsula using a regression analysis, and concluded that the most effective factors differ from one neighborhood to another, and include proximity to a famous hotel, historical monument or transport axis. To give an example from another country, a study prepared by Fahmi and Sutton (2003), evaluated the role of the pedestrianization and revitalization of the main commercial axis of the historical center of Cairo. This was carried out with reference to the views reported both by the area's traders and the city planners, and it was decided that pedestrianization, as opposed to gentrification, would be appropriate for this area, and would better preserve its commercial and residential use. It is possible to state that to revitalize the depression zones of city centers, different methods should be employed according to the technological, socio-economic and cultural characteristics of that society. There is only one study (Dökmeci et al., 2007) made between 1986 and 2005 that examined the effects of pedestrianization on land values and land use preferences. The purpose of this study is to prepare a more comprehensive examination using more current data.

The organization of this article is as follows. A general overview of the historical development of Beyoğlu under the influence of European culture and the recession due to the economic prominence of other districts are given in the second part. In the third part, the changes in land use and the rise in land values as a result of the economic recovery of the main commercial axis of the district are explained. In the final part, the result of this research is examined and recommendations for the future are made.

2. General information about the development of Beyoğlu

İstanbul is the socio-economic center of Turkey and was the capital of three empires. The city has unique natural beauty, it is a tourism center with both cultural and historical value, and due to its strategic location, İstanbul is attractive for migrants and its population is constantly increasing. Between 1950 and 2013, rural migration played a major role in the increase of the population from 1,002,085 to 14 million. This rapid population growth caused unplanned developments on the periphery, and the city center became squalid and economically depressed from the influx of low income groups.

Beyoğlu, forms the northern side of the historical center of İstanbul. In the 16th century it consisted of embassies and the houses (quarters) of European merchants and the minority groups who served them (Dökmeci and Çıracı, 1999). In subsequent years, Beyoğlu became the foreign trade center and witnessed greatly increased trade with foreign countries. The greatest development of Beyoğlu occurred in the 19th century, after the Westernization movement and integration of the Ottoman and western economies. Westernization created a market based on a new life-style and the new western products that were only available in this district. In this case, the existing city structure and city services in Beyoğlu were insufficient to meet society's demands and physical and social improvements were made to improve this (Rosenthal, 1980). To allow the modernizing society to prosper, it was necessary to build such places as banks, insurance buildings, office buildings, hotels, theaters, department stores, hospitals, schools, archaeological research institutes, apartments, mansions, churches, coffee shops, restaurants, social clubs and post offices. All of these investments caused the district to eventually become İstanbul's most exclusive business, residential and entertainment center (Çelik, 1993; Dökmeci and Balta 1999). Even though many foreign companies left İstanbul after the disintegration of Otto-

Figure 1. *İstiklal Caddesi, pre- and post-pedestrianization, in the 1980s and 2000s.*

man Empire at the end of World War I, Beyoğlu remained the most prestigious district, and *İstiklal Caddesi* remained the most popular shopping street and entertainment center until the 1960s (Dökmeci and Çıracı, 1990).

In the 1970s, the construction of the Bosphorus Bridge and the ring roads, as well as the ineffectiveness of the historical center to meet the demand for adequate infrastructure promoted the multi-center development of İstanbul (Dökmeci and Berköz, 1994; Öktem, 2011), as had also happened in other major world cities (McDonald and Prather, 1991; Gordon and Richardson, 1996).

This development led to a partial desertion of the historical center by businesses and its complete desertion by high income groups. Meanwhile, although Beyoğlu continued to attract many visitors with its entertainment facilities and historical buildings, it did not draw the interest of large investors. In Beyoğlu between 1960 and 1990, the percentage of firms decreased from 30.4% to 15.5% and between 1970 and 1985 the service sector percentage decreased from 20.9% to 17.0% (Dökmeci and Berköz, 1994). New companies could not find suitable places due to the small lot sizes and height restrictions that the conservation regulations stipulated. In addition, the masonry structure of the historical buildings could not provide the flexibility required for modern office floor adjustments. Moreover, the traffic problem and parking shortage caused big firms to prefer the surrounding areas. In the mid-1980s, shopping malls started to be built around the periphery of the city and this caused a transformation of the traditional street trade. In response, the site selection of the retail trade became more independent, and followed the movement and location pattern of the high income groups, as had been previously observed in developed countries (Bromley and Thomas, 1993). These developments compromised the trade in Beyoğlu, again as had happened in some historical city centers of other countries (Bahr, 1994); together, they caused a fall in real estate prices, the closure of some businesses and a subsequent increase in the number of empty buildings. Cinemas and theaters began to close down.

Another reason for the abandonment of historical buildings is the relocation of the historical harbor, closely followed by its related business facilities and services. In addition, domestic and foreign commercial road and air connections gained supremacy over sea transportation after the 1970s, which caused Beyoğlu to lose its dominance over the newly established business centers nearby. The social and economic revitalization of Beyoğlu became important, not only for itself but also for the whole city's social-economic health due to its very strategic location. If we look at the other examples

in the world, there are various policies implemented on similar cases (Greenberg, Temkin and Rohe, 1996). Among the foremost solutions is the pedestrianization of the main commercial axis, and in this regard it is possible to give several examples from the USA and Europe (Smith et al., 1996; Balsas, 2000).

In addition, the influence of traditional European architecture can be seen on many streets in Beyoğlu. There are many schools, churches and consulates scattered around the district which form a visual harmony with the residential areas. The historical buildings fronting onto *İstiklal Caddesi* create a visual integrity and an artistic atmosphere. All these characteristics create an attractive venue with a great potential to attract pedestrians and investors.

It was decided to pedestrianize the main commercial axis in the city center to restore its economic vitality, in line with similar projects undertaken in western countries. The protection and beautification project was planned in 1986 and implemented in 1990. The widening of Tarlabaşı, a street running parallel to *İstiklal Caddesi*, relieved the traffic and a multi-story parking lot was built to at least partially meet the needs of this issue. The flagstones were replaced and the lightening system was renovated. Although the investment of the municipality was very limited, it was effective enough to encourage the owners of the historical buildings to restore their properties. As a result of both public and private investment, prices increased and many manufacturing and storage areas (especially on higher floors) were converted to offices, coffee shops, multi-story department stores and cultural centers (Dökmeci et al., 2007). Movie and music festivals and book fairs were held, and these encouraged the opening of bookstores and music shops, and the reopening of the cinemas and theaters. Thus Beyoğlu was revived as an entertainment center of İstanbul. It has since become one of the city's most visited commercial axis. It is visited by an average of 1.5 million people on a daily basis. In particular, young people prefer this commercial axis due to the presence of many foreign brands. Reviving the retail, entertainment and cultural activities regenerated the area's unique characteristics and boosted its economy at the same time. The increase in trade in areas where there are less exhaust fumes and traffic has also been observed in other countries (Hass-Klau, 1993: Sandahl and Lindh, 1995; Dickens and Ford; Chiquetto, 1997). The subway connection with Büyükdere Caddesi in İstanbul's new central business district, has also spurred Beyoğlu's economic development, as also happened in the Baltimore Project in Maryland, USA (Craig-Smith and Fagence, 1995).

As a consequence, and as Listokin et al. stated (1998), the conservation of historical structures and the pedestrianization of the main commercial axis served as a catalyst for the revival of Beyoğlu. Later, this vitality has also spread to the neighborhoods surrounding *İstiklal Caddesi* due to the settlement of artists and young professionals, and investment from domestic and foreign firms following incentives offered by the municipality. The effort shown by users and public and private companies cooperatively allowed Beyoğlu to develop. In addition, before pedestrianization, Beyoğlu had one of the highest crime rates but this rate decreased after pedestrianization (Ergun and Yirmibeşoğlu, 2007). The reflection of this socio-economic and physical development on land use and land prices are examined in the next section.

3. Transformation of land use and land prices on *İstiklal Caddesi*

For this study, the impact of pedestrianization on *İstiklal Caddesi* on changes in land prices and land use were investigated. Land price and land use data was obtained from the Beyoğlu municipality. The land use and land price values before (1986) and after (2005) pedestrianization were compared in the study conducted by Dökmeci et al. (2007) using this data. The results show that while the commercial function continued as the basic use of the ground floors, the rate of banks increased from 4% to 12%. The number of fast-food restaurants, restaurants, coffee shops, bars and bookstores also increased. On the upper floors, the rate

Figure 2. *İstiklal Caddesi ground floor and upper floor land use (2006).*

of office space increased from 11% to 43%, and that of cinemas increased from 3% to 7%. In addition to these, hotels, theaters, cultural centers and bars were opened. As stated by Rubenstein (1992), the presence of cultural facilities plays a major role in success of pedestrianized axes due to their providing heavy traffic flow, and the same applies to facilities such as schools. The presence of two squares, one at Taksim, another at Tünel, at either end of this pedestrian axis, together with its transportation links are also considered to be important factors for the success of its pedestrianization (Rubenstein, 1992).

Land price previous to pedestrianization along the whole street according to the values in 1986 was 300,000TL/m² ($500/m²). For İstanbul, this was the second highest value after Nişantaşı (500,000TL/m² – $917/m²). In 1990, after pedestrianization, land value between Taksim and Galatasaray became 2,500,000TL/m². As for the land value between Galatasaray and Tünel, it was 1,500,000 TL/m². Therefore, as the accessibility from Taksim to Tünel decreased, the prices started to decline. After the metro connection between Taksim Square and the Büyükdere axis (the business district), was built in 2000, land prices increased rapidly and reached 5,202,764TL/m² ($3,865.35/m²) between Taksim and Galatasaray and 4,687,174,800TL/m² ($ 3,482.30/m²) between Galatasaray and Tünel. These values are the highest land prices in İstanbul, displacing the 1,872,000,000TL/m² ($1.390,79/m²) value of land in Nişantaşı to second place. The increases in both pedestrian flow and land price show that the pedestrianization of the main street was a success (Dökmeci et al., 2007).

According to the land use analysis conducted in 2006 (Appendix Table 3), ground floor usage rates between Taksim and Galatasaray were: 3.76% cultural facilities, 2.14% consulates, 13.38% high schools, 8.9% hotels, and 54.72% commercial, with 7.8% standing vacant. As for the area between Galatasaray and Tünel, ground floor usage rates were: 8.74% churches, 8.74% administrative centers, 4.0% consulates, 7.74 cultural facilities, 7.2% high schools, 4.68% hotels, and 51.1% commercial, with 8.31% standing vacant. These results show that between Galatasaray and Tünel, the share of ground floor use for cultural facilites, consulates, churches and empty spaces increased while that for commercial use decreased.

The upper floor land use analysis conducted in 2006 (Appendix Table 4) shows that usage rates between Taksim and Galatasaray were: 1.8% consulates, 15.7% high schools, 1.7% cultural facilities, 4.8% hotels, 3.29% NGOs, 4.50% historical buildings (Maksem), 40.86% offices, and 7.96 commercial. The usage rates between Galatasaray and Tünel were 2.9% residences, 8.74% churches, 7.97% consulates, 4.65% administrative centers, 6.05% cultural facilities, 0.88% high schools, 2.20% hotels, 1.61% NGOs, 34.39% offices, 3.14% commercial+manufacturing, 7.65% commercial, and 2.92% manufacture+storage, with 10.99% standing vacant. As a result, between Galatasaray and Tünel

Table 1. *Beyoğlu District İstiklal Caddesi 2006 land prices.*

Neighborhoods		Land Price (TL)
TAKSİM-GALATASARAY	Şehit Muhtar Neighborhood	7,500
	Katip Çelebi Neighborhood	7,500
	Kuloğlu Neighborhood	7,500
	Hüseyinağa Neighborhood	7,500
GALATASARAY-TÜNEL	Asmalı Mescit Neighborhood	7,200
	Şahkulu Neighborhood	7,200
	Tomtom Neighborhood	7,200

Table 2. *Beyoğlu District İstiklal Caddesi 2010 land prices.*

Neighborhoods		Land Price (TL)
TAKSİM-GALATASARAY	Şehit Muhtar Neighborhood	20,000
	Katip Çelebi Neighborhood	20,000
	Kuloğlu Neighborhood	20,000
	Hüseyinağa Neighborhood	20,000
GALATASARAY-TÜNEL	Asmalı Mescit Neighborhood	18,000
	Şahkulu Neighborhood	17,000
	Tomtom Neighborhood	17,000

residential, the usage rates for churches, cultural facilities, administrative centers, manufacturing and storage areas and those left to stand vacant increased while the usage rates of offices, NGOs and hotels decreased. Therefore, it is possible to state that a decrease in accessibility plays a role in the decrease of some functions.

According to land price analysis conducted in 2006, between Taksim and Galatasaray the unit price was 7,500.00 TL/m² while between Galatasaray and Tünel it was 7,200.00 TL/m² (Table 1). However, in 2010, the unit price between Taksim and Galatasaray was 20,000.00TL/m² while it was 17,000.00-18,000.00TL/m² between Galatasaray and Tünel (Table 2). In short, prices in the area have tripled over the past 4 years. The effect of pedestrianization has continued to increase with newly restored buildings and the arrival of ever-more multi-national firms. Meanwhile, the difference can also be observed not only between Taksim and Tünel, but also between Asmalı Mescit and Tünel. Therefore, although there was a single homogeneous land price adaptation before pedestrianization, the developments after pedestrianization have produced a gradual decrease in comparative land values between Taksim and Tünel.

The number of shops, offices, cultural facilities, coffee shops, restaurants, cinemas and theaters increased while manufacturing, storage and vacant areas decreased as a consequence of the economic development of pedestrianization. In regard to land prices, the prices in 2010 are 20 times higher than the prices before pedestrianization, and the real land prices are much higher than these values. The land prices on *İstiklal Caddesi* are the second highest land price in İstanbul after those of Gümüşsuyu. However, the rise in land prices in Gümüşsuyu, which started with the effects of globalization, are part of a curve that passed through Cihangir, Asmalı Mescit and Elmadağı (Kardaş,2004) and eventually returned to Gümüşsuyu. This dynamism of real estate values in a city center is referred to as "Brownian Motion", and the examples in the USA which are parallel to this subject area were investigated by Case et al. (2004).

Beyoğlu is still the entertainment center of İstanbul and remains the choice of cultured middle and high income groups. This success has been achieved by users, public and private enterprises all supporting each other. This characteristic is also seen in the economic recovery of many post-modern cities (Sassen, 2013).

4. Conclusion

Beyoğlu has a very long history, which accounts for it being one the districts within the İstanbul metropolitan area with a large amount of historical buildings. This study examined the effects on land prices of the pedestrianization of *İstiklal Caddesi* in 1990, and indicates its role on the economic development of the area. Generally, projects to reconstruct the stressed zones of a city choose developed countries as examples. This study was carried out with the intention of giving an example from the perspective of a developing country. The economic recovery project conducted in Beyoğlu enabled a previously neglected commercial area to transform into a business and entertainment center.

The pedestrianization of the main trade axis, restoration of historical buildings, the renovation of the flag-

stones and the lightening system ignited a socio-economic recovery in Beyoğlu, and the physical and cultural developments in the environmental conditions have encouraged an increase in the number of pedestrians, in particular young people and artists. In turn, this has caused an increase in the number of businesses, coffee shops and restaurants and entertainment venues which benefit from this trading potential and has increased the quality of life.

Easing the traffic congestion by widening Tarlabaşı, which runs parallel to *İstiklal Caddesi* and building a large multi-story car park helped to make the pedestrianization project successful. Beyoğlu increased its potential for a wider economic recovery due to its attractive historical buildings, its central location and its alternative transportation facilities. In addition, annually held book fairs, movie, music and theater festivals attracted a large number of pedestrians to *İstiklal Caddesi* and boosted trade, as has also happened in many other post-modern cities.

The distribution of land use and land prices before and after pedestrianization were investigated for this study. Previously closed theaters and cinemas were reopened and the number of book stores, multi-story department stores, coffee shops and restaurants increased after pedestrianization. Manufacturing and storage areas occupying the upper floors were vacated due to rising rents, and these became occupied by offices, hotels and cultural centers.

Although there was only one type of land price accepted by the municipality before pedestrianization, the land prices both increased and became divided between Taksim and Galatasaray and Galatasaray and Tünel. The results of this study show that land price is based on proximity to Taksim Square. In the year 2010, *İstiklal Caddesi* had second highest land values after Gümüşsuyu. Other real estate prices have also increased and Beyoğlu has drawn the interest of local and foreign real estate investors. Under this influence, the neighborhoods around *İstiklal Caddesi* began to develop economically. This development draws a spiral called "Brownian Motion" in western examples, and in İstanbul the economic boom is always centered on *İstiklal Caddesi*. Through this process, the number of day and night visitors increased and related to this, trade volumes increased. A new culture, entertainment and trade center emerged in which people can live, work and have fun. This success was obtained through collaboration between public and private enterprises and physical development, in addition to a socio-economic development plan. The identity of the district (in a wide perspective) was largely preserved despite the pursuit of economic recovery.

Despite all the socio-economic progression in Beyoğlu, it is still possible to come across abandoned buildings in some of the slum neighborhoods. Such neighborhoods form potential development areas for new investors and their development is vital not only for Beyoğlu but also for the whole city. For this reason, the socio-economic development areas should include the whole neighborhood and aim for equality, rather than any partial solutions, and the municipalities should provide financial and technical support for this purpose. In addition, ensuring the equal distribution of nationwide investment, providing new employment (business) opportunities and raising living standards will also allow better conservation of historical districts in metropolitan areas.

It is hoped that the results of this study will prove to be beneficial for urban and regional planners, administrators, economists, conservationists, tourism professionals and investors. Investigating the factors and catalysts dependent on location and time which effect the values of restored historical buildings in historically conserved neighborhoods using spatial statistics methods may prove to be worthy of further research. In addition, a comparative study of the socio-economic development levels of other districts with historical neighborhoods by taking their location in the metropolitan area and building attributes into consideration may prove beneficial.

Note: *İstiklal Caddesi* Data for 2006 and 2010 are provided by Hakan Kolcu.

References

Arslanlı, K., Unlukara, T., Dökmeci, V. (2011). Transformation of public spaces in Istanbul. *European Planning Studies* 19(6), 1061-189.

Bahr, J.(1994) Intra-urban migration of lower income groups and peripheral growth of Latin American areas The impact of political and socio-economic factors, *Applied Geography and Development* 34, 7-30.

Balsas, C.J.L.(2000). City center revitalisation in Portugal: Lessons from two medium size cities, *Cities* 17(1), 19-31.

Beauregard, R.A.(1990) Trajectories of neighborhood change: The case of gentrification, *Environment and Planning B,* 22(7), 855-874.

Bromley, R., Hall, M. , Thomas, C. (2003) The impact of environmental improvements on town center regeneration, *Town Planning Review,* 74(2), 143-165.

Case, B., Clapp, J., Dubin, R., Rodriguez, M.(2004) Modeling spatial and temporal house price patterns: A comparison of four models, *The Journal of Real Estate* 29(2), 167-191.

Chiquetto,S.(1997) The environmental impacts from the implementation of a pedestrianisation scheme? *Transport Research Part D: Transport and Environment* 2, 133-146.

Craig-Smith, S.J. ve Fagence, M. Eds. (1995) Recreation and Tourism as a catalyst for Urban Waterfront Revelopment: An International Survey , New York Westport, CT: Praeger publishers.

Çelik, Z.(1993). The Remaking of Istanbul: Portrait of an Ottoman City in the Nineteenth Century , Berkeley, CA: University of California Press.

Dickins, I., Ford, A.(1996). The economics of pedestrianization, *Town and Country Planning* ,March 1996, 92-93.

Ding, C., Simons,R., Baku, E.(2000). The effects of residential investment on nearby property values: Evidence from Cleveland, Ohio, *Journal of Real Estate Research* 19(2), 23-48.

Ding, C., Knaap, G.(2003). Property values in inner-city neighborhoods: The effects of home ownership, housing investment, and economic development, *Housing Policy Debate* 13(4), 701-727.

Dökmeci, V., Çıracı, H.(1990). Tarihsel Gelişim Sürecinde Beyoğlu, İstanbul: Türkiye Turing ve Otomobil Kurumu.

Dökmeci, V., Berköz, L.(1994). Transformation of Istanbul from a monocentric to a polycentric city, *European Planning Studies* 2(2), 193-205.

Dökmeci, V., Balta, N.(1999). The evolution and distribution of hotels in Istanbul, *European Planning Studies* 7(1), 99-109.

Dökmeci, V., Çıracı, H.(1999). From westernization to globalization : An old district of İstanbul. *Planning History: Bulletin of the İnternational Planning History Society* 21(1), 13-22.

Dokmeci, V., Altunbas, U., Yazgi, B.(2007). Revitalization of the main Street of a distinguished old neighborhood in Istanbul, *European Planning Studies* 15(1), 153-166.

Erendil, A.T. ve Ulusoy, Z.(2002). Reinvention of tradition as an urban image: The case of Ankara Citadel, *Environment and Planning B*, 29(1), 655-672.

Ergun, N.(2004). Gentrification in Istanbul, Cities 21(5), 391-405.

Ergun, N. and Yirmibeşoğlu, F.(2007). Distribution of crime rates in different districts in Istanbul, *Turkish Studies* 8(3), 435-455.

Fahmi, W., Sutton, K.(2003). Reviving historical Cairo through pedestrianisation : The al-Azhar Street Street axis, *International Development Planning Review* 25(4), 407-431.

Gordon, P., Richardson, H.W.(1996). Beyond polycentricity: The disperseed metropolis, Los Angeles, 1970-1990, *Journal of the American Planning Association* ,62(3), Summer, 289-295.

Greenberg, M.R.(1999). Improving neighborhood quality: A hierarchy of needs, *Housing Policy Debate* 10(3), 601-624.

Hammel, D.J.(1999). Gentrification and land rent: A historical view of the rent gap in Minneapolis, *Urban Geography* 20(2), 116-145.

Hass-Klau, C.(1993). Impact of pedestrianization and traffic calming on retailing, *Transport Policy*, 1(1), 21-23.

Helms, A.C. (2003). Understanding gentrification: An empirical analysis of the determinants of urban housing renovation, *Journal of Urban Economics,* 54(1), 474-498.

Kardaş, Y.(2004). Tarihi Kent Merkezlerindeki Konut Değerlerinin Analizi , Master Tezi., İTÜ, Istanbul.

Keister, K. (1990). Main Street makes good, *Historic Preservation* 41(5), 38-45.

Kolcu, H.(2013) Analysis of factors which effect land use in Istanbul's historical center, *International Journal of Electronic, Mechanical and Mechatronics Engineering* 3(1), 477-492.

Listokin, D., Listokin, B., Lahr, M. (1998). The contribution of Historic preservation to housing and economic development, *Housing Policy Debate* 9(3), 431-478.

McDonald, J.F., Prather, P.J. (1991). A Poycentric Employment Density Model for the Chicago Urbanised Area, Chicago, University of Illinois Press.

Millard-Ball, A.(2000). Moving beyond the gentrification gaps: Social change, tenure change and gap theories in Stockholm, *Urban Studies* 37(9), 1678-1693.

Öktem, B.(2011). The role of global city discourses in the development and transformation of the Büyükdere-Maslak Axis into the international business district of Istanbul, *International Planning Studies* 16(1), 27-42.

Özus, E., Dokmeci, V.(2005). Effects of revitalization in historical city center of Istanbul, *International Real Estate Review* 8(1), 477-492.

Özus, E., Türk, Ş.Ş., Dökmeci, V.(2011. Urban restructuring of Istanbul, *European Planning Studies* 19(2), 331-356.

Porter, M. (1995). The comparative advantage of the inner city, *Harvard Business Review*, May-June, 55-71.

Robertson, K.(2004). The main street approach to downtown development: An examination of the four-point program, *Journal of the Architectural and Planning Research* 21(1), 55-73.

Rosenthal, S.T.(1980). The Politics of Dependency: Urban Reform in Istanbul , Westport, CT: Greewood Press.

Rubenstein, H.M.(1992). Pedestrian malls, streetscapes and urban space, New York: John Wiley.

Sandahl, J., Lindh, C.(1995). Impact of improving the attractiveness of town centers, *Transport Policy* , 2(1), 51-56.

Sassen, S.(2013). The Global City , Princeton, New Jersey: Princeton University Press.

Terzi, F., Dokmeci, V.(2008). İstanbul'da Gayrimenkul Pazarı , İstanbul: İstanbul Ticaret Odası Yayınları.

Smith, K., Glisson, L.S., Joncas, K., Parrish, B., Dane, S.G.(1996). Revitalizing Downtown , Washington: National Main Street Center, National Trust for Historic Preservation.

Temkin, K. Ve Rohe, W.M. (1996). Neighborhood change and urban policy, *Journal of Planning Education and Research* 15(1), 159-170.

Tiesdale, S., Oc, T., Heath, T.(1996). Revitalizing Historic Urban Quarters , Oxford: Architectural Press.

Uzun, C.N.(2003). The impact of urban renewal and gentrification on urban fabric: Three cases in Istanbul, *Tijdschrift voor Economische en Sociale Geographie* 44(4), 363-375.

Van Kempen, R., Van Weesep, J.(1994). Gentrification and the urban poor: Urban restructuring and housing policy in Utrecht, *Urban Studies* 31(7), 1043-1056.

Wyly, E.K., Hammel, D.J.(1998). Modelling the context and contigency of gentrification, *Journal of Urban Affairs* 20(3), 303-326.

Appendix

Table 3. *Ground floor use of buildings/parcels facing İstiklal Caddesi.*

	Galatasaray-Taksim Ground Floor Use				Tünel-Galatasaray Ground Floor Use			
Function	Structure Count	%	Total Structure Area	%	Structure Count	%	Total Structure Area	%
Residence	0	0.00	0.00	0.00	4	1.67	426.77	0.82
Lodgement	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Mosque+Prayer Room	3	1.26	395.89	0.70	0	0.00	0.00	0.00
Church	0	0.00	0.00	0.00	14	5.83	4,402.36	8.44
Consulate	5	2.10	1,205.89	2.14	11	4.58	4,039.04	7.74
Administrative centers	0	0.00	0.00	0.00	6	2.50	2,125.11	4.07
Cultural facilities	6	2.52	2.116.10	3.76	7	2.92	3,757.72	7.20
Course+Prep School	0	0.00	0.00	0.00	0	0.00	0.00	0.00
High school	2	0.84	7,532.57	13.38	1	0.42	445.08	0.85
Private Teaching Institution	1	0.42	259.85	0.46	0	0.00	0.00	0.00
Hotel+Hostel	13	5.46	5.010.24	8.90	9	3.75	2,443.63	4.68
Dormitory	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Non-Governmental Organization	0	0.00	0.00	0.00	2	0.83	508.10	0.97
Sports facilities	1	0.42	120.92	0.21	0	0.00	0.00	0.00
Historical Structure Without Any Function	9	3.78	2,121.48	3.77	15	6.25	591.16	1.13
Shrine+Fountain+Public Fountain	11	4.62	283.68	0.50	8	3.33	801.24	1.54
Commerce	150	63.03	30,801.58	54.72	120	50.00	26,662.06	51.10
Commerce+Residence	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Commerce+Residence+Manifacture	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Commerce+Warehouse	1	0.42	1,268.84	2.25	1	0.42	72.44	0.14
Commerce+Manifacture	0	0.00	0.00	0.00	1	0.42	195.56	0.37
Commerce+Administrative	0	0.00	0.00	0.00	2	0.83	637.90	1.22
Commerce+Non-Govermental Organization	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Manifacture	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Manifacture+Warehouse	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Warehouse	1	0.42	58.29	0.10	5	2.08	263.56	0.51
Other structures	15	6.30	881.75	1.57	9	3.75	470.33	0.90
Construction+Renovation	2	0.84	132.10	0.23	0	0.00	0.00	0.00
Vacant	18	7.56	4.095.29	7.28	25	10.42	4,334.82	8.31
Total	238	100.00	56,284.48	100.00	240	100.00	52,176.88	100.00

Table 4. *Upper floor use of buildings/parcels facing İstiklal Caddesi.*

	Galatasaray-Taksim Upper Floor Use				Tünel-Galatasaray Upper Floor Use			
Function	Structure Count	%	Total Structure Area	%	Structure Count	%	Total Structure Area	%
Residence	0	0.00	0.00	0.00	10	4.31	1,460.62	2.90
Lodgement	2	1.04	214.23	0.45	0	0.00	0.00	0.00
Mosque+Prayer Room	4	2.07	490.68	1.02	0	0.00	0.00	0.00
Church	0	0.00	0.00	0.00	14	6.03	4,402.36	8.74
Consulate	2	1.04	862.57	1.80	11	4.74	4,4018.96	7.97
Administrative centers	1	0.52	467.36	0.97	7	3.02	2,341.82	4.65
Cultural facilities	3	1.55	559.59	1.17	6	2.59	3,051.62	6.05
Course+Prep School	2	1.04	407.33	0.85	1	0.43	93.62	0.19
High school	2	1.04	7,532.57	15.70	1	0.43	445.08	0.88
Private Teaching Institution	1	0.52	259.85	0.54	0	0.00	0.00	0.00
Hotel+Hostel	7	3.63	2,310.57	4.81	5	2.16	1,016.20	2.02
Dormitory	0	0.00	0.00	0.00	1	0.43	200.09	0.40
Non-Governmental Organization	5	2.59	1,576.94	3.29	3	1.29	813.72	1.61
Sports facilities	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Historical Structure Without Any Function	11	5.70	2,186.52	4.56	14	6.03	579.24	1.15
Shrine+Fountain+Public Fountain	11	5.70	283.68	0.59	8	3.45	801.24	1.59
Commerce+Office	101	52.33	19,607.07	40.86	78	33.62	17,331.30	34.39
Commerce+Residence	4	2.07	703.56	1.47	2	0.86	253.50	0.50
Commerce+Residence+Manifacture	1	0.52	61.99	0.13	0	0.00	0.00	0.00
Commerce+Warehouse	2	1.04	101.00	0.21	6	2.59	687.52	1.36
Commerce+Manifacture	2	1.04	793.56	1.65	1	0.43	1,583.62	3.14
Commerce+Administrative	0	0.00	0.00	0.00	0	0.00	0.00	0.00
Commerce+Non-Govermental Organization	9	4.66	3,820.38	7.96	8	3.45	3,857.13	7.65
Manifacture	1	0.52	58.29	0.12	1	0.43	13.17	0.03
Manifacture+Warehouse	0	0.00	0.00	0.00	1	0.43	591.02	1.17
Warehouse	1	0.52	40.20	0.08	12	5.17	877.57	1.74
Other structures	0	0.00	0.00	0.00	2	0.86	160.66	0.32
Construction+Renovation	3	1.55	836.94	1.74	2	0.86	282.18	0.56
Vacant	18	9.33	4,814.53	10.03	38	16.38	5,536.86	10.99
Total	193	100.00	47,989.40	100.00	232	100.00	50,398.97	100.00