

**Diachronic assessment of cultural diversity in historic neighbourhoods using space syntax
Studies of three neighbourhoods in Istanbul**

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DIACHRONIC ASSESSMENT OF CULTURAL DIVERSITY IN HISTORIC NEIGHBOURHOODS USING SPACE SYNTAX:

Studies of three neighbourhoods in Istanbul

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ABSTRACT

This paper investigates the mutual effects of cultural diversity and neighbourhood change in three historic neighbourhoods in Istanbul. Through history, some neighbourhoods in Istanbul have been home for people from different cultural and religious backgrounds. In some of these neighbourhoods, cultural diversity still exists. Some other neighbourhoods lose cultural diversity over time. The main reasons of this loss are socio-economic and cultural change, due to gentrification, decay or renewal. The study puts forward a comparative diachronic analysis of the three neighbourhoods, inspecting the relations between cultural diversity and neighbourhood change using space syntax. The change takes place in three levels: the level of socio-economic change, the level of physical change and the level of cultural diversity.

The results of the study show that historic neighbourhoods process continuity and change in their own ways. Samatya and Fener, undergo partial neighbourhood decay resulting in downgrading, decay on the built mass and segregation. They respond to cultural diversity differently. Kuzguncuk, is an example of neighbourhood gentrification, which maintains cultural diversity in a more balanced way due to high aesthetic qualities of the buildings, high local integration of the main street, and highly integrated main routes through the neighbourhood.

KEYWORDS

Diachronic research, Space Syntax, cultural diversity, historic neighbourhoods, urban transformation

1. INTRODUCTION

The aim of this paper is to examine the long-term effects of the change of cultural diversity in three historic neighbourhoods in Istanbul. Three case studies from Istanbul are examined to answer two research questions. How can cultural diversity contribute to historic neighbourhoods' continuity or change? What are the effects of historic neighbourhood change to cultural diversity?

The study first provides an in-depth literature review of cultural diversity in the context of historic neighbourhoods. The paper further investigates the effects of cultural diversity over neighbourhood continuity and change. It explains and exemplifies the formation and development of historic neighbourhoods and contributions of cultural diversity. It also tackles various scenarios that may happen in historic neighbourhoods, such as ethnic or cultural segregation, gentrification, neighbourhood decay and regeneration issues.

The proposed methodology consists of a comparative diachronic assessment of cultural diversity for three historic neighbourhoods in Istanbul: Kuzguncuk, Fener and Samatya. On a neighbourhood scale, axial and visual graph analyses are combined to make a diachronic interpretation on isovist levels and integration of cultural hubs and settlement patterns of different cultural groups in the neighbourhoods.

2. CULTURAL DIVERSITY AND NEIGHBOURHOOD CHANGE

The neighbourhood, as a unit of dwelling has a cultural signification. Mills (2004) defines the contemporary “mahalle” as an “urban cultural space created by social practices of neighbouring”. The concept of neighbourhood in the context of Turkish “mahalle” encloses collective memory, and familiarity. It also promotes common values and needs creating bonds between all neighbours (Fisher, 1984 in Choguill, 2008). Recently, cultural change has been effective on Istanbul, but historic landscapes such as the old “mahalle” still signify the collective memory of its residents. However, Mills argues that these social practices are decreasing in contemporary Istanbul (2004).

Two main reasons are stated to promote this decrease in Istanbul’s historic neighbourhoods:

- The loss of cultural diversity caused by the displacement of minority groups to newer areas in the city,
- The change of socio-economic factors in the city causing circumstances such as gentrification, decay and renewal.

Cultural diversity in neighbourhoods has been a factor in forming the socio-cultural balance of a neighbourhood. Cultural diversity involves neighbourhood heterogeneity (Cheung & Leung, 2011) as a result of dense city living (Lees, 2008). Cultural diversity also enables expressing group identity on the urban pattern, architecture, commemorative sites, street names and also forming collective urban memory through tangible and intangible traces as a result of everyday life interactions (Hebbert, 2005). In the historic neighbourhoods of Istanbul, usually several ethnic and cultural groups reside together due to Istanbul’s multi-cultural past. Istanbul houses several minority groups, mainly Armenian, Greeks and Jews who are settled into many historic and newer neighbourhoods, as well as migrant groups as a result of a major domestic migration movement from Anatolia to Istanbul and other major Turkish cities in the 1960s.

Cultural diversity has effects over neighbourhood continuity and change. Neighbourhood change is an economic, physical as well as a socio-cultural issue. Cultural segregation and economic upgrading/downgrading of the neighbourhood is effective on how migration patterns are formed. These migration patterns, in-migrants, out-migrants as well as non-migrants (Teernstra, 2013) determine the physical and socio-cultural consequences.

Various urban issues such as displacement, ethnic or cultural segregation, neighbourhood decay, gentrification, illusion, renewal and regeneration inevitably happen in historic neighbourhoods, which go through a loss of socio-cultural balance. These issues result in migration scenarios and change in the residential composition (Hochstenbach & van Gent, 2015) like white flight or out-migration of people due to a traumatic event (displacement), in-migration of the lower income migrants, in-migration of gentrifiers and out-migration of the lower income migrants.

The out-migrants leave the neighbourhood they live in, as a result of displacement due to a traumatic event or white flight. The in-migrants are those who arrive as a result of neighbourhood change: This replacement can be economically downgrading such as in the example of rural incomers to decayed neighbourhoods. Such “disadvantaged neighbourhoods—

including decaying infrastructure, lack of services and institutions, and a lack of organizations that foster social connectedness—can hamper residents’ abilities to maintain ties or form new relationships” (Cornwell& Behler, 2015). This change can alternatively be economically upgrading such as in the example of gentrification, a process of urban migration pattern that promote higher-income population to move into a neighbourhood, while lower-income residents are gradually displaced. First-wave of gentrification has lower impact on upgrading market values, however mature gentrification results in waves of gentrifiers with higher-income to move in (Hochstenbach & van Gent, 2015).

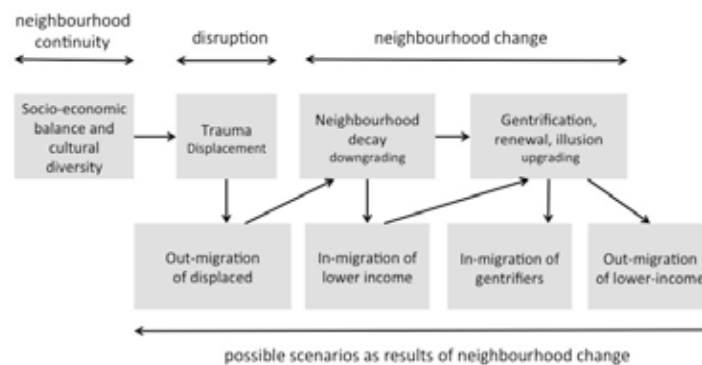


Figure 1 - Interrelations of cultural diversity and neighbourhood change

As well as incremental changes in neighbourhoods such as gentrification and neighbourhood decay, top-down and abrupt processes are also present, such as urban renewal or implementations of illusory urban spaces. However, Massey (1995) argues that the identity of a place is not necessarily subject to change and destruction by new importations. The identity of a place is primarily formed by urban memory. Cultural hubs play a primary role in determining how a historic neighbourhood is dealing with change. They provide an environment for cultural groups to integrate in the neighbourhood, place attachment, and in long-term local values that promote cultural diversity.

3. DATASETS AND METHODS

As discussed in the previous section, neighbourhood change and cultural diversity are interrelated concepts in the context of historic neighbourhoods. Previous studies on spatial capital and urbanity show that there is a strong correlation between accessibility, density and diversity in urban settlements (Marcus, 2010). The paper tries to uncover to mutual effects of cultural diversity and neighbourhood change, measuring visual accessibility of cultural hubs and social and physical interrelations of cultural groups on three different case studies.

The paper attempts to answer the following research questions:

- How does cultural diversity contribute to historic neighbourhoods’ continuity or change?
- What are the effects of historic neighbourhood change to cultural diversity?

The methodology of the case study attempts to answer the first research question by measuring the cultural diversity of the neighbourhoods using a diachronic approach. The approach is based on the spatial-locational histories (Griffiths, 2012) of three neighbourhoods and the mutual relation of morphological (syntactical) history and the “history of events” (Hanson, 1989; Griffiths, 2012) that occur in these spaces. The “history of events” is illustrated on a timeline that draws the major events and changes for the neighbourhoods. Some distinctive historical maps are chosen to infer the effects of historical events and change of cultural diversity on morphologic-syntactic change of the neighbourhoods. The morphologic-syntactic change also explains the socio-cultural alterations and issues such as decay, gentrification, renewal or illusion.

The comparative space syntax analysis puts forward the alteration of the integration levels of cultural hubs and dwelling patterns formed by cultural and ethnic groups (especially minorities) in different periods in history to determine how cultural diversity is affected by change.

Cultural hubs can be defined as buildings or landmarks having historical and cultural significance for the neighbourhood. They play a role in creating place attachment for communities and local touristic values for visitors. The spatial features of specific locations can be measured with the space syntax' visual graph analysis. The integration value of a specific location on the grid determines the level of visual perception and accessibility of that location in relation to all other points on the grid. Centrally located, perceivable buildings found on longer streets tend to be more integrated in the neighbourhood. Buildings found on secondary streets tend to be more segregated. The isovist values determine if the cultural hub has a higher perceptual level in terms of the area and the perimeter of the isovist. That means, if the building is opening to a larger street or a public square, its isovists tend to have a larger area and perimeter than those opening to a smaller and segregated street.

Settlement patterns are measured with global and local integration analyses of cultural groups' physical footprints. This analysis determines cultural groups' juxtapositions on neighbourhood level. The axial analysis gives the results of how cultural groups settled and integrated into the neighbourhood throughout history. These results give ideas about the inclusion of the groups in the area. If they are globally integrated, it means that they are more visible in the totality of the neighbourhood, and that they are placed on main roads, socio-economically integrated areas. If they are locally integrated, they are included into the neighbourhood on a social level. Locally integrated areas are mostly successful in social inclusion and liveability.

The answers to the second research question are given in the conclusion as an interpretation of the space syntax study findings. Space syntax interpretations are comparatively made according to three parameters: the level of physical change, the level of social change and the level of cultural diversity. For each parameter, the study provides findings based on observation and qualitative research, additionally to the space syntax findings. There are two indicators of physical change: first is the alteration in the integration and isovist value of the cultural hub, and second is the change in the physical condition of the building. The indicators of socio-economic change are the alteration in the settlement pattern integration levels, socio-cultural and economic conditions of the inhabitants, and property prices. The indicators of cultural diversity are the interrelations between settlement patterns of different cultural groups and the events causing a change in the cultural diversity of a neighbourhood.

	Space syntax indicators	Other indicators
Physical change	VGA integration and isovist value of the cultural hub	physical condition of the building
Socio-economic change	alteration in the settlement pattern integration levels (axial analysis)	socio-cultural and economic conditions of the inhabitants, property price
Cultural diversity	interrelations between settlement patterns of different cultural groups	events causing a change in the cultural diversity of a neighbourhood

4. RESULTS

The study explores the issue of cultural diversity and neighbourhood change over three cases studies in Istanbul: Kuzguncuk, Samatya and Fener. These are historic neighbourhoods, which has been home for a variety of cultural and ethnic groups. Currently, all of these neighbourhoods are experiencing change related to urban issues such as renewal, gentrification or decay.

Kuzguncuk is a neighbourhood in the Asian coast of Istanbul. It is known as one of the most welcoming neighbourhoods to different ethnic and cultural backgrounds. Kuzguncuk has been home for Armenians, Greeks and Jews of Istanbul for a long time as a mixed neighbourhood

(Akin, 1994). Many sources refer to Kuzguncuk as Chrysokeramos. However, many historians have not agreed this idea (Bektaş, 1996). İncicyan supports the view that the name Kuzguncuk is a derivation from "Kosinitsa", the old name of the district (İncicyan, 1976; Bektaş, 1996).

Kuzguncuk was known as a Jewish neighbourhood. When Jews settled in the neighbourhood is still unknown. Armenians started to settle into the area in 18th century, and started to grow their community in the 19th century (Bektaş, 1996). Jews, Greeks and few Armenians were residents of Kuzguncuk up until 19th century.

"Minorities left Istanbul in response to the frightening political climate between the 1940s and the 1960s. During this same period, rural-urban migration from Anatolian villages created a cultural shift in the old mahalle (neighbourhood)" (Mills, 2004). A tangible and intangible offense towards Istanbul's non-Muslim people is realized towards especially Greek residents during 6th and 7th of September 1955. It caused a trauma followed by a displacement of minorities in Istanbul¹. There had been also minority groups moving to newer areas in Istanbul as a result of this incident. Today, the majority of Kuzguncuk residents are formed mostly by Black Sea migrant community, caused by mainstream migration to larger cities in late 1930s until 1960s. Non-Muslims residents decreased in number (Mills, 2004).



Figure 2- Photos of the Kuzguncuk area

1 The Istanbul riots (or September events) were organized attacks towards Istanbul's Greek minority on 6–7 September 1955. The events were a result of the false news that the Turkish consulate in Thessaloniki had been bombed the day before.

The riots assaulted Istanbul's Greek community during 6 September evening until 7 September morning. Over a dozen people died, although killing was not aimed. Armenians were also harmed. Riots continued until the government declared martial law in İstanbul and called the army force.

Istanbul riots increased the emigration processes of Greeks from Turkey, especially in Istanbul region. The Greek population of Turkey decreased from 119,822 in 1927, to approximately 7,000 in 1978. In Istanbul, the Greek population decreased from 65,108 to 49,081 between 1955 and 1960.

With the first wave of gentrification in Istanbul in the 1980s, Kuzguncuk became one of the popular places (Ergun, 2004) where architects, poets and artists started to live. Famous architect Cengiz Bektaş, who played part in the gentrification of the area, buying a house for his family and making participative planning and renovation processes without charge (Ergun, 2004; Uzun, 2002), has inspired them to move to the neighbourhood.

Samatya is also a multi-cultural neighbourhood situated in the European coast of Istanbul. Samatya was named Psomathia, which means sandy lands (Türker, 2010). In its ancient name, Psomathia was one of the prestigious neighbourhoods because of its location near the Golden Gate (Hrisi Pili) of Constantinople in the Byzantine era. Victorious emperors were coming back to the city through this gate.

After the Ottomans conquered Istanbul, the Ottoman Empire made a call for other non-Muslim groups to settle in the area. Especially, the Ottoman Empire encouraged the settlement of the Armenian citizens in the neighbourhood by assigning the old Byzantine church to Armenian community. It functioned as a Greek Orthodox Church in the Byzantine era. A short time after conquering Istanbul, the Ottoman Empire converted this church to the Armenian Patriarchate of Istanbul. Armenian community still resides around the church currently named as Surp Kevork Armenian Church, after the Armenian Patriarchate moved to Kumkapı.

During centuries Greek, Armenian and Jew communities formed the majority of dwellers in Samatya. The Jew community had to leave the neighbourhood, as their houses were completely wiped out in a fire in the mid-1700. During and after the westernisation processes in the 1800's, many renovations have been made to maintain cultural heritage. These renovation and revitalization processes are also a result of many uncontrolled fires that happened in the 18th and the 19th century. An orthogonal plan in Samatya was designed and implemented, after a long period of organic incremental planning. This new plan reduced the fire risk. The largest effect was that the neighbourhood's spatial layout changed radically (Çelik, 1986).



Figure 3 - Photos of the Samatya area

Samatya was one of the places where 6th and 7th September 1955 incident was devastating because of its high number of non-Muslim residents. Many houses, shops, cultural buildings such as schools and churches have been destroyed. Non-Muslim women and children have been abused. Many Greek residents left the area after this incident (Mills, 2004). The neighbourhood suffered for a long time from a trauma caused by this incident. This incident was significant in terms of the balance of non-Muslims and Muslims residing in the area. A major part of the minorities, especially the Greeks left the city because of the trauma. A large amount of Kurdish and Turkish residents settled in their places in the neighbourhood.

Fener is the third case involving a multi-cultural neighbourhood environment. The neighbourhood is in close relation with Balat where a large Jew community resides. The neighbourhood existed in the Byzantine era. It has been home of the Greek Patriarchate and the centre of the Orthodox Church. Fener was an upper-class Greek neighbourhood in the Ottoman period until the 1960s (Belge, 2003, Akkar Ercan, 2011). Fener has also important historic buildings designed by Greeks. Wealthy people moving out of the neighbourhood, replaced by poor immigrants and the contamination of the Golden Horn caused the rapid decay of Fener as well as Balat (Özbiğçe, 2005, Akkar Ercan, 2011). The coastline was cleared. However, the measures taken have not been sufficient to stop deterioration. Fener is under threat of decay losing the integrity of its nineteenth-century grid plan, ornamented facades and important buildings such as churches, mosques and synagogues (Akkar Ercan, 2011). Fener underwent a regeneration initiative that was possible due to HABITAT II proposing 'integrated rehabilitation' for historic neighbourhoods of Istanbul based on simplistic measures taken by the inhabitants to preserve heritage and decent life standards (Altınsay Özgüner, 2009, Akkar Ercan, 2011).

A timeline concerning the major changes and events in these neighbourhoods is given in figure 4 to illustrate the comparative timeframes of the case studies.

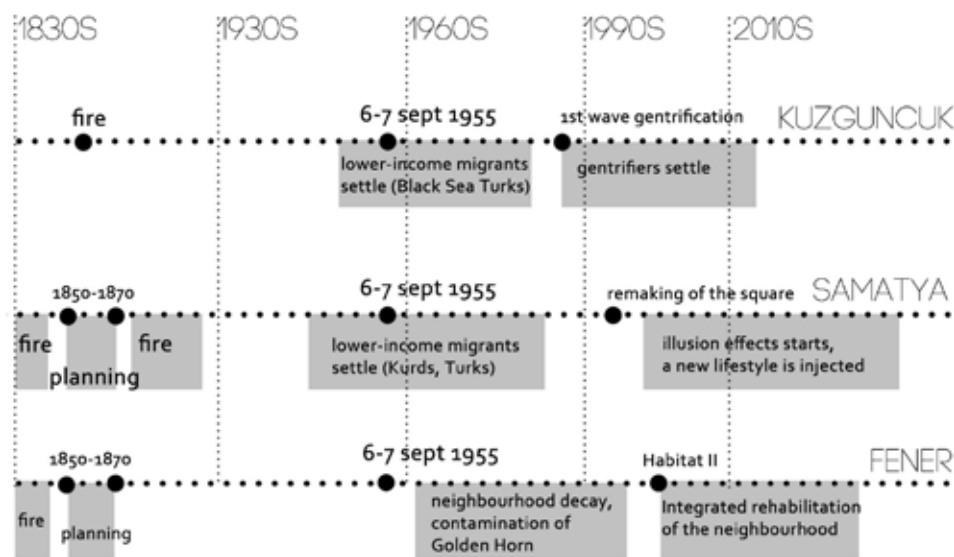


Figure 4 - A comparative timeline of the history of ethnic groups in Kuzguncuk, Samatya and Fener

Cultural hubs of the three neighbourhoods are analysed comparatively and diachronically (figure 5-6-7). According to the findings, Kuzguncuk Mosque (4) has increased in local integration and isovist area starting from the 1990's. Neighbouring ritual places, Beth Ya'akov Synagogue(3) and Hagios Georgios Greek Church(2) are showing approximate values throughout the history. However, a slight increase is seen in all the cultural hubs situated on the main street perpendicular to the shoreline as well as in Hagios Panteleimon Greek Church(1). All five cultural hubs in Kuzguncuk maintain their integrity and their physical conditions are excellent. All of these ritual

places culturally contribute to the development of the area, with a religious community taking care of the buildings and vicinities. Many of the hubs, especially Hagios Panteleimon Greek Church(1) being visually distinctive, have a positive effect on local tourism.

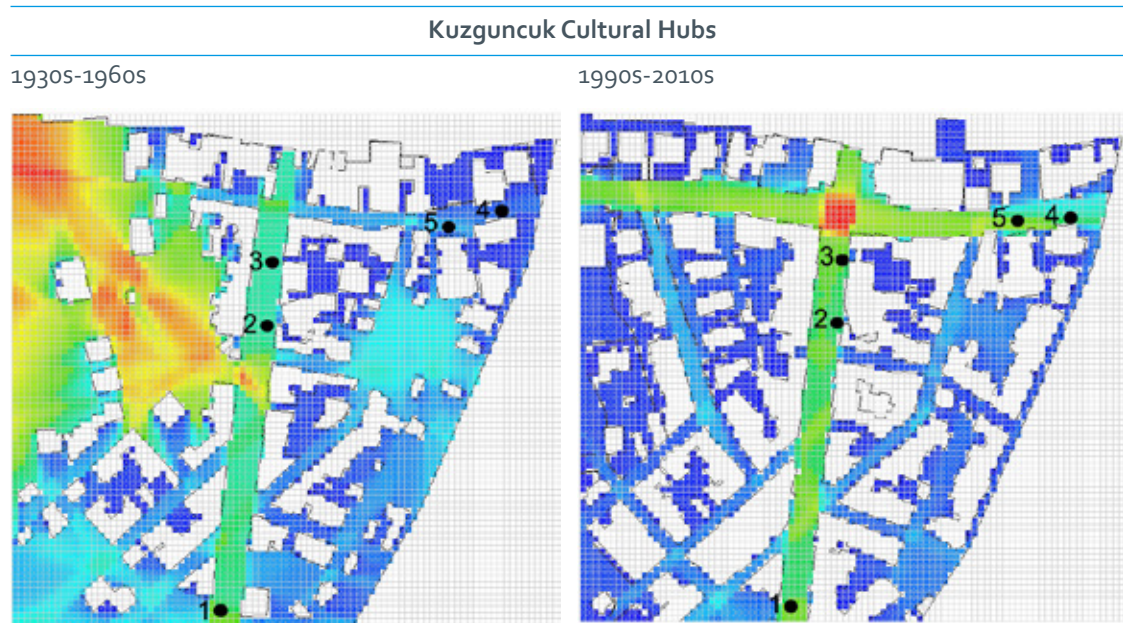


Figure 5 - Isovist analyses of Kuzguncuk with the location of cultural hubs.

Comparing Samatya's cultural hubs values from the years 1930-1960 to 1990-2010, all integration values except Analipsis Greek Church(2) have dropped. Some values decreased drastically. Surp Kevork Armenian Church(10) and Abdi Çelebi Mosque(8) are two of them, due to the decrease of integration in the main avenue (Marmara Avenue). However, the physical conditions and the maintenance of these two cultural hubs remain excellent. Their isovist values are steady, as Marmara Avenue has not changed in shape between these years. The integration value of Hagios Minas Greek Church(5) decreased a small amount. A reason for this result is that although the church is centrally located, its entrance is found on the upper street, which stays segregated throughout those years. The building is not maintained and is used as a shop.

The Armenian Catholic Church's(5) integration and isovist area both decreased, the building is in very good condition and is gated. Hagios Nikolaos Greek Church's(3) all values dropped, unlike Analipsis Greek Church(2) that has all its values increased. Both hubs are in decent condition. Hagios Georgios Greek Church's(7) integration and isovist values decreased, as it is located in a street gradually more segregated. The building is badly renovated. Sahakyan-Nunyan Armenian High School(11) and Anarad Hiğutyun Armenian Primary School(1) show the same spatial structure as Hagios Georgios Greek Church(7). Hacı Kadın Mosque(6) values remain steady. However, Ağa Bath (9) integration and isovist values decrease dramatically. Currently, Armenian hubs that are clustered together around Surp Kevork Armenian Church(10) contribute both culturally and economically to the area. Many shops, schools and religious ceremonial organisation companies are gathered around the church. However, Greek hubs lost their meanings as most of them became unused, as well as their configurative values.

Samatya Cultural Hubs

1930s-1960s

1990s-2010s

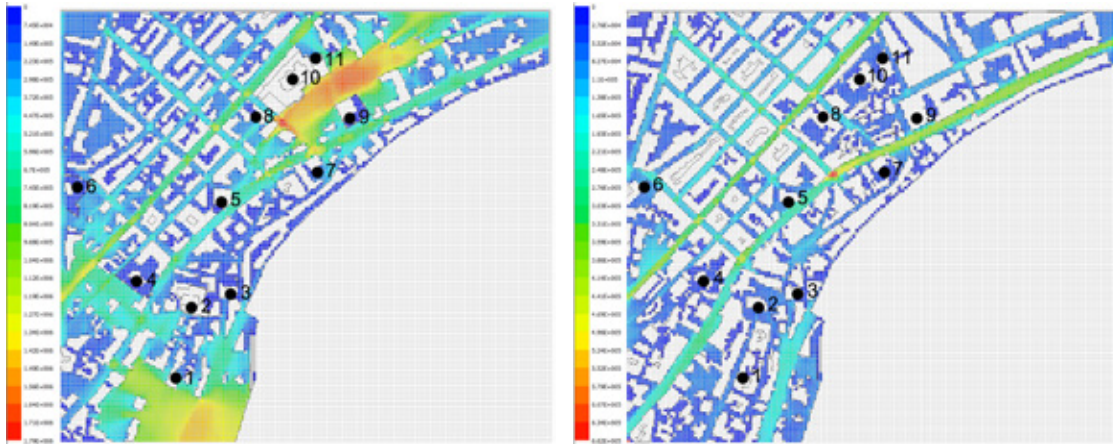


Figure 6 - Isovist analyses of Samatya with the location of cultural hubs.

Fener's cultural hubs are mostly constituted by Greek properties. The first cultural hub, Marasli Greek school (1) had a slight increase in terms of local integration value. However, the building lost its functional importance and is unused at the moment. Greek Church Hagios Yorghis(2) has a great imprint on the neighbourhood as well as great cultural value, as it stands also as the Orthodox Patriarchate of Istanbul. Its local integration value had a slight decrease. However, the building still maintains its physical integrity and spiritual importance. Greek school Yoakimion for boys (3) can be stated as the signature building of Fener. It has a great imprint on the area and strongly contributes to local tourism. The building has a high integration value and is integrated as before. Greek School Yoakimion for girls on the opposite side (5) of the building has similar integration values between 1930s and 2010s. However, the building has decayed and is unused at the moment. All students are now part of Fener Greek School (3). Between the two school buildings, the Byzantine church (4) maintains its integration levels with a slight increase. The building still functions as Church St. Mary of the Mongols.

Fener Cultural Hubs

1930s-1960s

1990s-2010s

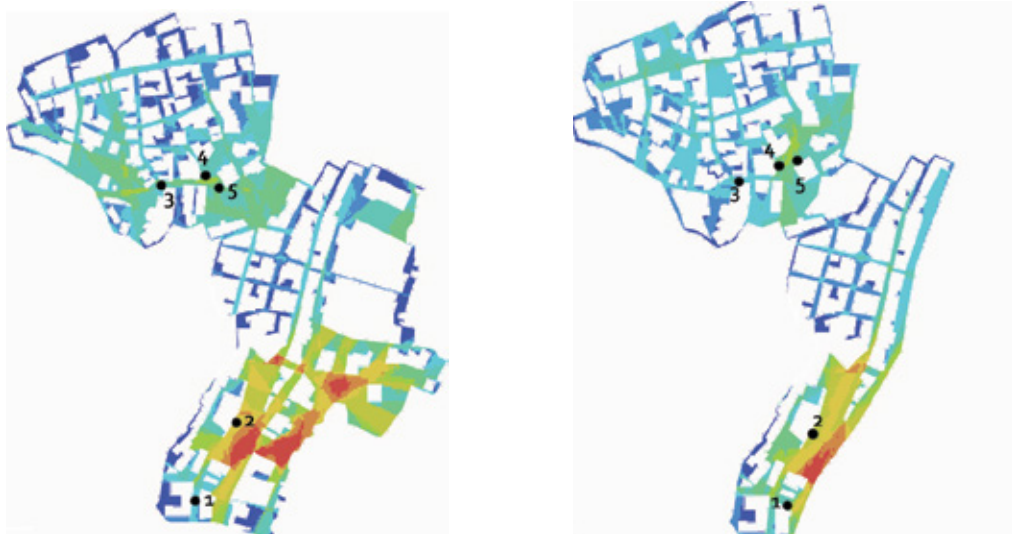


Figure 7 - Isovist analyses of Fener with the location of cultural hubs.

Settlement patterns of different cultural and ethnic groups and in-migrants are illustrated on a diachronic and comparative analysis (Figure 8-9-10). According to the findings, in Kuzguncuk between the years 1930 and 1960, Turks living along the coastline are wealthy people. The integration of the streets along the coastline is the highest in the area. Jew and Greek settlements have similar integration values, although Armenian settlement has the lowest integration value in the area.

In the recent years in Kuzguncuk, the number of minorities has dropped because of the 1955 trauma. After 1955 a high number of migrants moved in to the area. These migrants establish themselves along streets with a lower integration than the former multi-cultural residents. It is a result of the increasing economic gap between the new migrants and the residents. The gentrifiers prefer places that are more integrated than the migrants, but lesser integrated than the residents. They rejuvenated more segregated places, but still are globally integrated and close to the main street. They have a place preference: Üryanizade Street. The street is famous for its renovated houses of renowned people who came to Kuzguncuk after Cengiz Bektaş. There are quite significant differences regarding the dwellings' prices and sizes, especially the location of the houses on the shoreline (north of the map) are 10 to 15 times more expensive than a regular old-renovated gentrifier house in a street with average degree of integration. Apartment houses preferred by the migrants in segregated streets are mostly very accessible in price, and cost in general a quarter of an old-renovated gentrifier house.

For Samatya, the comparison between the 1930s and 1960s shows that the Armenian community uses the most globally integrated areas. The most integrated area shifts towards the south between Armenian and Greek Communities from 1930 to 1960. This implies that areas where Armenian and Greek communities intersect each other are very integrated in the neighbourhood. In 2010's, the Armenian Community and especially their main street Marmara Avenue becomes highly integrated. The Greek community is not a part of Samatya community anymore as they decided to a displacement. There are not more than 3-4 Greek families in Samatya. They were replaced by low-income in-migrants who prefer settling on the west part of the main street and its secondary streets. Generally, the streets are in worse conditions than the Armenian community area. There are many new constructions, including high-standard ones, which are aimed to attract the middle-class. These new constructions are concentrated around

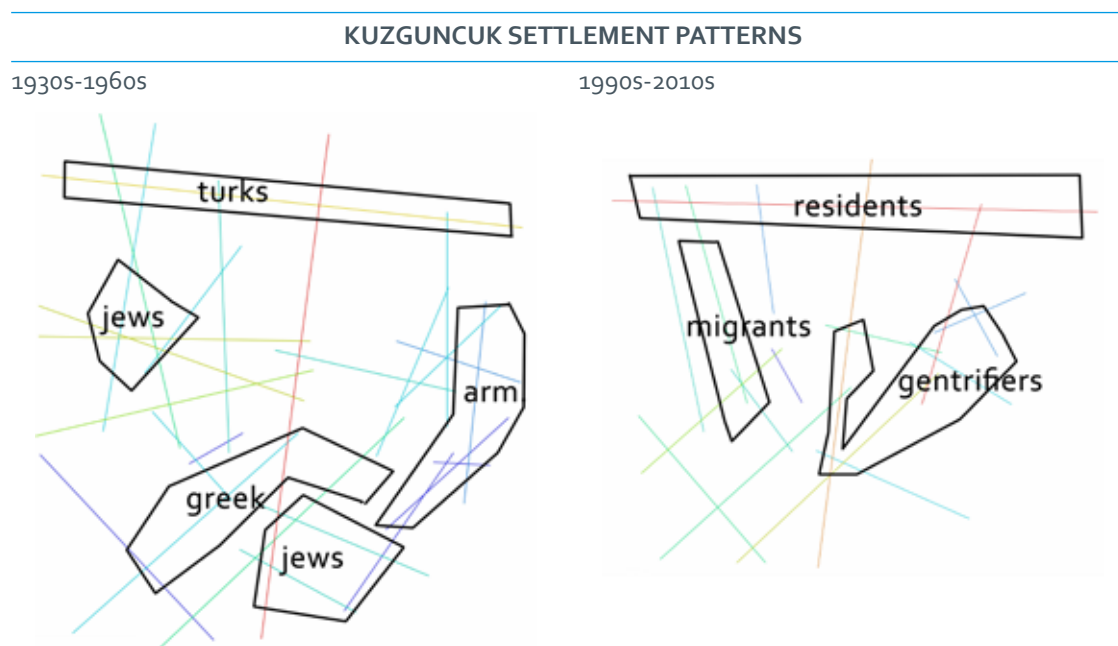


Figure 8 - Global integration analyses of Kuzguncuk with the location of various ethnic groups.

the west side of Marmara Avenue and around Merhaba Street, they are expected to have higher standards and higher market prices. Property prices for old renovated houses seem lower than the ones in Kuzguncuk ranging between half and a third of its equivalents. Seemingly, this fact results in larger in-migrant groups with lower income to settle in the neighbourhood.

SAMATYA SETTLEMENT PATTERNS

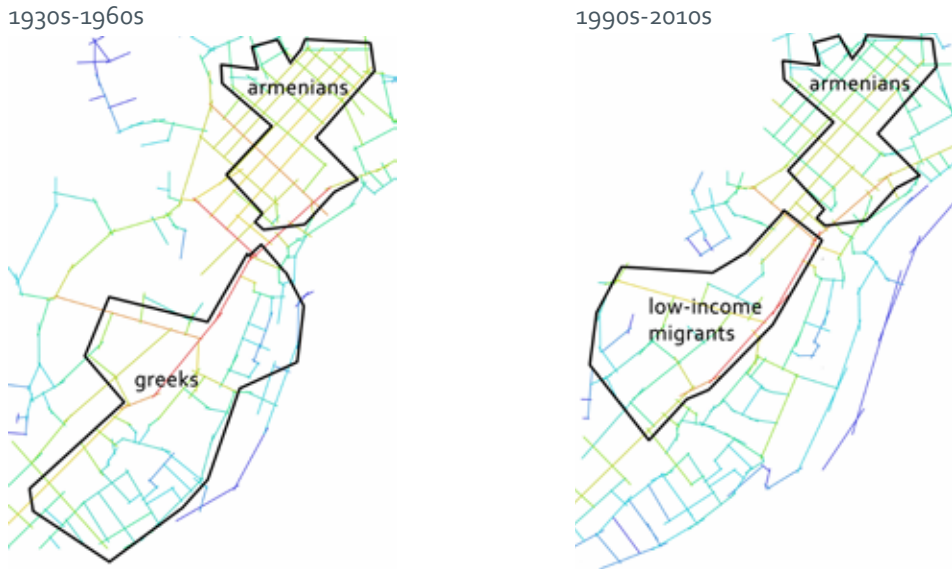


Figure 9 - Global integration analyses of Samatya with the location of various ethnical groups.

FENER SETTLEMENT PATTERNS

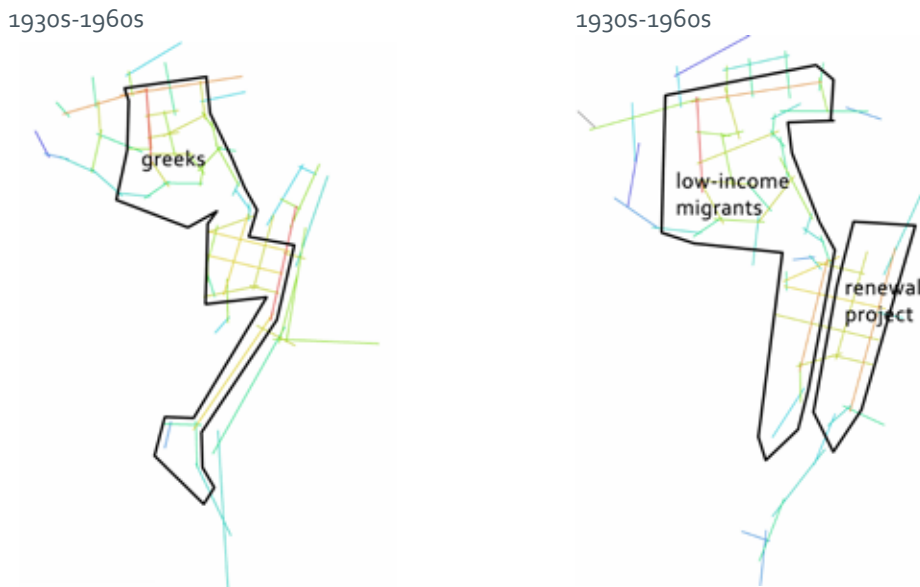


Figure 10 - Global integration analyses of Fener with the location of various ethnical groups.

In Fener, there is still a small Greek community. However, a quite large part of the neighbourhood belonged to the Greeks in the 1930s and 1960s with a relatively small Turkish community and a Jew community in neighbouring quarter Balat. In the 1990s and 2010s, a big change in the inhabitant profiles can be seen from the records. This resulted as an effect of the 1955 trauma and its consequences such as physical decay and loss of social interaction in Fener neighbourhood. The abrupt change resulted in the in-migration of lower-income migrants in the place of Greeks. Comparing the axial maps, the integration values increased significantly around the area close to the shoreline. That is the planned renewal area of Fener and currently some buildings are destructed in that area. This area houses properties with a variety of market prices, most of which are old-renovated Greek houses. A few of these houses are also found in the orthogonal street pattern where lower income in-migrants settle, with market values ranging lower than its equivalents in Kuzguncuk, but higher than those in Samatya.

5. CONCLUSIONS AND DISCUSSION

All three neighbourhoods had different cultural diversity experiences, and responded to neighbourhood change quite differently. Each neighbourhood is interpreted individually and comparatively.

The gentrification case: Kuzguncuk

The first case Kuzguncuk is defined to be a gentrified neighbourhood. It has an internal balance, even after gentrification processes. Gentrifier in-migrants are located at a favourable place and do not interfere with the entire residential composition. Cultural hubs are still physically intact and did not show severe decrease in the integration and isovist values during the last five decades. The residential emplacement of different groups is economically justifiable. These findings show that the neighbourhood is physically in good condition, socially balanced and economically favourable. However, its cultural diversity and being able to locate various cultural and ethnic groups decreased as a result of the political climate.

The neighbourhood decay and illusion case: Samatya

Samatya is unique because of the unprecedented continuity of a minority settlement. The Armenian community maintained their emplacement around their cultural hubs during the century, and accordingly, their integration value for cultural hubs and community footprints stayed at a high level. However, the Greek community was displaced and in-migrants with lower-income caused decay in the neighbourhood. The same structure applies for their cultural hubs. However, the integration values for their footprint had not changed. At present, newer constructions and high-standard housing complexes are implanted to attract new-middle class as potential gentrifiers. However, these illusions are insufficient to provide such a movement.

The neighbourhood decay, rehabilitation and renewal case: Fener

Fener provides an interesting case as some of the cultural hubs became completely disused. However, some of the cultural hubs are still as important as in the beginning of last century. Greek community left its place to low-income migrants who could not have the means to look after historical buildings. These circumstances caused decay as in the case of Samatya. Although, integration values are slightly increasing or decreasing during the century, a noticeable change appears on the shoreline where the renewal project will be implemented. Market values remain unsteady due to the on-going change.

In general, various cultures through history shape the physical layout of the built environment. Conversely, various in-migrant groups seek for places to settle for maintaining their culture as well as interfering with the economy of the host city. Seemingly, depending on economic resources/capacities and lifestyles of cultural groups influence where various communities will settle. Some cultures seem to prefer a more locally integrated local street pattern, whereas others prefer to settle along segregated streets.

From another perspective, the gentrifier in-migrants seek for places where they can exchange ideas and inspiration with others. Mostly, they prefer urban areas with a high diversity of various

ethnic groups combined with a built mass containing architectural qualities with a high degree of collective memory from the past. In most cases, it consists of old neighbourhoods with some highly locally integrated streets that are connected to the rest of the city. Their adaptation to the neighbourhood also tends to increase property market values.

Seemingly, a neighbourhood's gentrification process depend on high aesthetic qualities of the buildings, high local integration of the main street, and to have well integrated main routes through the neighbourhood. In addition, a strong unique local place identity seems to play a role. Conversely, a downgrading of a neighbourhood is influenced by decay on the built mass, the significant old iconic buildings disappear or are located along segregated streets, and the area is segregated and poorly connected to the rest of the city.

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