

A diachronic approach on heterochronic urban space

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Abstract

As the fourth principle of heterotopias defined in Foucault's controversial yet inspiring text named "Of Other Spaces", heterochronies define places that accumulate time, as well as temporary spatial formations. This study interprets urban spaces with historical backgrounds, which can accommodate both the accumulation of time and the temporariness, as heterochronic urban spaces.

This study aims to evaluate the reflection of socio-cultural background of historical neighbourhoods on the morphological and semantic change of their heterochronic elements throughout history. The deconstructive methodology of the study consists of a diachronic research involving three parts: deconstructing, analysing and reconstructing history. By "deconstructing history" through a multi-layered "timeline" developed with important historical thresholds and a "zoning", morphological or socio-cultural changes and "situations" are defined. "Analysing deconstructed history" involves the syntactic analyses of these "situations" in terms of historically persistent elements and temporary formations, to grasp the morphological and socio-cultural evolution of the heterochronic urban space. "Reconstructing history", as a synthesis, semantically interprets syntactic findings signaling accumulations, discontinuities, shifts or losses of meaning.

The case study is Kuzguncuk neighbourhood, a heterochronic urban space on the Asian side of Istanbul, an old Bosphorus village, which mainly used to consist mostly of a welcoming and peaceful residential area co-inhabited by Jews, Christians and Muslims, later by Black Sea migrants. The area is gentrified within the last thirty years. The findings of the case study show that Kuzguncuk is one of the heterochronic urban spaces, as well as a palimpsest where a majority of meanings perish, leading to fake re-valuation.

Keywords

Diachronic research, Heterochrony, Kuzguncuk, Space syntax.

1. Introduction

Heterochronies, as in Foucault's fourth principle of heterotopias, define multiple temporalities in a single place. Besides architectural interpretations such as libraries and museums, heterochronies can also define urban spaces in smaller or bigger scales, collecting various morphological and socio-cultural traces of time. In fact, so-called "heterotopic urban spaces" construct a perpetual time accumulation and become timeless.

The first section of this paper aims to discuss how temporality is handled in Foucault's heterotopias in "Of Other Spaces" and define what heterochrony means as a spatio-temporal notion interpreting similar and following studies mainly about architectural and urban heterochronic spaces, notably the ones of Heidegger, Sartre, Merleau-Ponty, and Rossi. This part of the work concentrates in theoretically describing "heterochronic urban space".

The second section explains the deconstructive methodology that is adopted in this study to examine heterochronic urban space in depth. The methodology consists of three parts: deconstructing, analysing and reconstructing history. This methodology aims to uncover the history by deconstructing and layering historical data of a heterochronic urban space within a "timeline", analyse layered historical components using Space Syntax, and finally holistically reconstruct history, as today's reality, with a synthesis of syntactic findings and their semantic interpretation.

The third chapter concentrates on the case study. The case study involves the historical evolution of the Kuzguncuk neighbourhood, an old Bosphorus village on the Asian side of Istanbul using Space Syntax, diachronically analysing changing syntactic values of heterochronies: historically persistent elements as "heterochronic constants", gatherings and "situations" as "heterochronic variables" between the years 1932 and 2014.

Finally, the conclusion of the study focuses on the semantic interpretation of the current state of the neighbourhood to answer the question to what extents Kuzguncuk can be defined as

a heterochronic urban space. As the final step of the three-fold methodology, this holistic interpretation attempts to do a synthesis of the case study.

2. Heterochrony: Temporality in Foucault's heterotopias and its translation into urban spaces

Heterotopias are closely linked to concerns about time, notably time intervals, breaks, accumulations and transitions. Between the eternal and the temporary, heterotopic spaces refer to temporal formations in different contexts. Among the principles of heterotopias in Foucault's highly controversial text "Of Other Spaces", it is indicated that there is not a universal form of heterotopia; functions of heterotopias are variable, and that heterotopias can gather multiple incompatible spaces together. They have an opening-closing system, and are generally not freely accessible like public spaces. They always have a function relating to external spaces (Foucault, 1986). According to the fourth principle of heterotopias, which is the main concern of this paper, heterotopias linked to "slices of time" named as "heterochronies". Heterotopias are working at full capacity in case of rupture of the traditional time for humans, as in the case of a cemetery, an intersection of loss of life and eternal rest. The first significant type of heterochrony is indefinite time accumulation as for libraries and museums. It is an endless gathering of things, accumulating and archiving in a specific place, a place that becomes itself out of time. Another type of heterotopias stands out as quite the opposite of the previous one, defining spaces as temporary structures, fugacious and finite occurrences. These heterochronies are strictly temporal and can be translated to many architectural and spatial experiences such as fairgrounds, vacation villages or Olympic villages. These two entirely opposite sides of heterochronies reflect the eternal and the temporary at the same time (Foucault, 1986).

Can urban spaces really be studied as heterochronies? McLeod (1996) criticizes Foucault for having forsaken the "messy and in-between urban spaces" such as the residence, the

workplace, the street and many others. The limited illustration and description of spaces depicted as heterotopias in "Of Other Spaces" seem to restrain the boundaries of the concept, referencing pre-defined spaces. However, the idea of heterochrony itself can be subject to define a double-sided reality of permanence and transience of the actual urban pattern. It can be assumed that heterochronies create a bridge between time and space. The combination of accumulation of time and fugitive experiences form them, and like in every heterotopic case, they show several inconsistencies. Heterochronic urban spaces reflect continuity and iteration, depicting history and present at the same time. Everyday experiences actualize together in urban spaces with references to the past. In that way urban space as heterochrony, can verify Foucault's argument that urban spaces as heterochronies are sources of immediate knowledge. Like museums and libraries, they offer finite, compiled and quick information. However, the everydayness of heterochronic environments is not to be undermined. Because places such as library, a museum, a fairground or a farmers' market welcome everyday strollers, readers, contemplators, chatters and shoppers. Two-sided experience of the urban space as heterochrony, constructs a bridge between accumulation/deletion of historical traces through time and everyday "situations" involving cultural, social changes, not in a way that a museum exposes an agglomeration of time segments, but experiential space through which different indicators of time accumulation find a place for themselves.

In respect of the communities and the situations that define them, heterochronies are surrounded by discontinuities, altering and sometimes decaying meanings. The changing nature of heterochronies appears more clearly, especially with everydayness, collective experience of co-habitant communities. Otherness becomes valuable, in most of the circumstances, as each moment in history and the collective memory associated to it become a particular "situation" of its own. Many philosophers studied the spatiality of

"situation" such as Sartre and Merleau-Ponty who primarily investigated the anthropological depth and the conception of embodiment of "situation" (Ha, n.d.), according importance to personal and sociological insights of what embodies the self. However Heidegger differentiated the conception of "situation" from the general situation depicting inauthentic spatiality of the "They" (das Man) therefore, "situation" has a more socio-cultural potential (Heidegger, 1996; Ha, n.d.). Each situation has its own characteristics and cultural phenomena related to it, defining moments and slices of lived spaces. In architectural thought, "situation" might be equivalently studied with the idea of "urban artefact" (Rossi, 1982). An urban artefact can appear as a square, a building or a street that signifies a certain moment in history, in a constantly changing urban pattern (Rossi, 1982). Urban artefacts coexist and therefore form a city, which brings back the argument of the Collage City (Koetter & Rowe, 1978) suggesting a theory of urban fragmentation. Another conception, "palimpsest" that means writing, erasing and rewriting on parchment; describes a "non-contemporaneity with itself of the living present" in Derrida's words (Derrida, 1994). Its urban interpretation "urban palimpsest" (Huysen, 2003; Bjarke & Azimzadeh, 2007) explains the multi-layered and diachronic attributes of urban environments, and especially the need to explore present pasts in order to understand past and present experiences and sensibility of time, from both historical and phenomenological viewpoints. Sometimes in urban palimpsests, urban artefacts or their cultural and sociological "situations" cannot overcome decay. At this point, it is also relevant to talk about temporal and spatial discontinuities; especially "historical discontinuities" (Teyssot, 1980) that can reflect the segmented nature of heterochronies, especially when sociological or cultural corruptions affect some "situations", and let them become new "situations". In historical urban areas, migration and gentrification tend to shift "situations". In postmodern urban landscapes, historical architectural forms are amalgamated into new

buildings, to recall a collective memory (Boyer, 1996, Mills, 2004) however in case of shifting situations, amalgams can appear fake and without identity, resulting in a decay of meaning.

Time collection is the most significant issue that constructs the idea of heterochrony in urban spaces. Although Foucault's approach seems to involve a relatively artificial time accumulation, as time accumulating heterochronies are defined as artificial collections that have been gathered from different periods in history and put in a context to which they do not belong; a majority of heterochronies in urban context has a steady and natural time accumulation. For instance, urban spaces gather different slices of time together, with buildings and street patterns that belong to various timescapes, and not at once, but in a long term, they ensure the accumulation of time in themselves. According to Rossi (1982), urban artefacts sometimes remain as they are, however sometimes they decay, and then their forms, their physical marks stay persistent. This permanence is called "locus" and it solidifies with collective memory. Locus 'emphasizes the conditions and qualities within undifferentiated space which are necessary for understanding an urban artefact' (Rossi, 1982). Therefore, locus witnesses many 'situations' and is the most interesting pathway to the exploration of an urban artefact. Rossi (1982) also points out the importance of rituals and collective nature of religious activity in the formation of historically permanent elements (monuments), as they determine the initiation of a certain religious and socio-cultural activity in an urban pattern, and provides a key to understand urban contexts. "The theory of permanences" suggests that it is incorrect to think of a persistent urban artefact as it is related to only one historical period. The dynamic nature of the city leans towards an evolutionary process that not only helps the preservation of historically permanent elements but also presents them as promoters of evolution (Rossi, 1982). This view of evolutionary process somehow contradicts with the idea of "palimpsest" which supports a more realistic viewpoint on

the change of urban pattern; given that the historically permanent elements do not always evolve but they sometimes perish as well.

3. Methodology

Any urban space can accumulate time, as Doreen Massey (1995) argues, "The past of a place is as open to a multiplicity of readings as is the present". However, historical urban spaces are more likely to host several periods of time with different social, cultural as well as morphological settings where their changes and breaks are more apparent and easier to compare than they are in newer urban environments. Historical backgrounds are suitable to uncover different fashions, interrelated slices of time and significant events, transformations, thresholds and milestones.

This research aims to make a diachronic research on shifting "situations" and permanent elements of historical neighbourhoods with syntactic analysis. In order to achieve this, a three-fold deconstructive methodology is adopted:

- Deconstructing history through a "timeline"
- Analysing deconstructed history through "Space Syntax"
- Reconstructing history through a "semantic interpretation".

The methodology is schematized in relation with the theoretical section and the case study in Figure 1, and then each step is explained in detail.

3.1. Deconstructing history through "timeline" and "zoning"

Heterochronic neighbourhoods can have a chaotic and multi-layered historical background. Therefore, an ex-

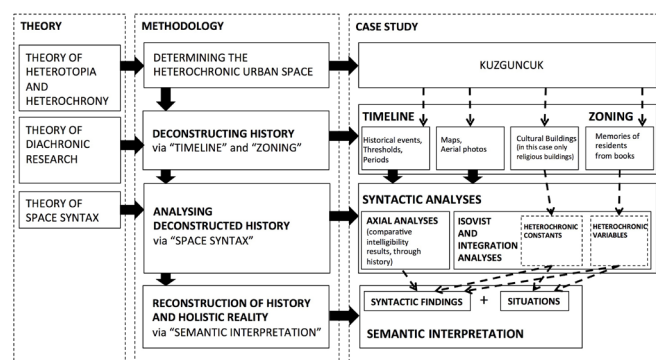


Figure 1. Schematic representation of the methodology.

tensive historical research about the history of the neighbourhood is indispensable in order to understand the temporal interrelations of important events, shifting situations, architectural and urban changes. This deconstruction will be made through a multi-layered timeline that aims to represent several aspects of time relating to the neighbourhood. Multiple temporalities are investigated with historically persistent elements, temporary formations, and socio-cultural and morphological thresholds. Therefore, the timeline is crucial in order to understand the dynamics of the current state of the neighbourhood, as many different cultural and social backgrounds are intermingled. The “timeline” concentrates on historical events, thresholds and periods (if any), maps, aerial photos, and the construction culturally significant buildings later used in the study as “heterochronic constants”.

The “zoning” represents the temporary patterns of formations such as cultural gatherings or functions on a map. The zoning of residential patterns of different cultural gatherings is later used in the syntactic integration assessment of “heterochronic variables” in this study.

3.2. Analysing deconstructed history through “space syntax”

A morphological-syntactical study (Griffiths, 2012) on the deconstructed history will be presented in two different methods: The first method involves the axial map analysis, in order to analyse visual interrelations and depth for comparing maps in which urban morphology changed significantly. The axial map analysis will include the comparative general intelligibility (local-global scattergram and regression analysis) and integration grid analysis of different maps referring to distinct maps throughout history, to understand the overall evolution of the syntactical pattern and intelligibility and to make inferences on the change of local/global integration levels of the area and their correlations through time.

The second method will involve two different kinds of analysis: In order to understand the “situations” given in the timeline, isovist and integration analy-

ses concerning “heterochronic constants” and “heterochronic variables” will be put forward. Heterochronic constants are historically persistent elements (ex. cultural buildings, ritual buildings, monuments) and heterochronic variables are more temporary formations (ex. cultural gatherings and their housing zones) both found in urban heterochronic spaces.

The first step is to detect “heterochronic constants”. According to Levy this kind of diachronic research “focuses on the role of constants, or historically persistent elements, in the fabric as the city evolves from one stage to the next. These elements play an important role in the determining the present configuration of the city” (Levy, 1999). In this study, these historically persistent elements are called “heterochronic constants”, buildings or monuments having cultural, ethnic or religious significance, associated with urban artefacts and their underlying meanings, similar to the concept of “monuments” in “The Architecture of the City” (Rossi, 1982). They signify the locus, the time accumulation, and one or several related urban artefacts throughout their entire existence. Places of rituals, as the key to understand urban context, a reference to the foundation of a city, possess a collective nature and most importantly signify an unchanging reality remaining out of time (Rossi, 1982). That is why as houses of myths and rituals, religious buildings’ time accumulation and locus would be significant to understand the alteration of their syntactic values, especially their integration on a global scale. Average depth of morphological and functional imprints on the historical area, their comparative values and mutual effects of integration/segregation degrees and sociological/cultural meanings are analysed. Isovists (area and perimeter values) are equally important to understand their impacts and visibility from surroundings, as well as their strategic location and the amount of visible area. Their syntactic significance can be measured according to the interrelated alterations of integration and isovist values. If they both rise, visually, functionally and meaningfully, those ritual spaces become more integrated in the

area. If they both decrease, those ritual spaces become more segregated. In both circumstances, the social and cultural context and historical data will be investigated in order to understand any enhancement or decay of meaning. If integration values and isovist values alter inversely proportional, that means either the building is more integrated but less perceivable or vice versa. This shows that there may be complex issues with the building, its surroundings and its users. The historical data about the building will be explored to explain this complexity. The other isovist-based parameter that is used for measuring in order to understand the convexity of spaces is circularity. High circularity levels accentuate the shape of a circle in a space, but the centrality of the viewpoint also a determinant (Edgü et al, 2012). Therefore, in smaller urban settings, circularity is a parameter that promotes enclosure and embodiment, determining a level of perceptive inclusion.

Another way to examine “situations” is to reveal more temporary formations and their evolution. These types of buildings are secondary elements constructing urban form, however their meanings remain very crucial for the society and the collective memory of citizens. In this study, they are called “heterochronic variables”. They form the everyday experiences of neighbourhood life, and according to shifting “situations”, they can change appearance, function or even disappear. Their mutual relations and patterns can alter. The first category of these less persistent formations is “gatherings”, having a rapidly changing housing pattern, as they are subject to restoration and renewal, or even abandonment, resulting from many reasons but mainly social and cultural changes in the community using them, such as migration and gentrification. This study examines cultural gatherings as changing aspects of “situations” and analyse the integration values of their settlement localizations in order to explain the social integration, daily lives and permanence in the area, comparing integration values with each other, examining every gatherings’ relation with its ritual space(s) according to integration val-

ues of respective heterochronic “variable” (gathering) and “constant” (ritual place).

All syntactical analyses in this study will be made with the software “Syntax2D” developed in University of Michigan using the parameters area, perimeter, circularity to determine isovist characteristics of space, and the ease of spatial perception in heterochronic constants; and integration parameter to analyse both heterochronic constants’ and variables’ degree of adaptation in terms of integration/segregation to the global system.

3.3. Reconstructing history through a “semantic interpretation”

In the conclusion section of the study, the findings of the case study will be semantically interpreted. The aim of this interpretation is to holistically evaluate what has really happened in the heterochronic urban space. The first step is to concentrate on “situations”. Situations are discovered while creating the timeline and the zoning, or while examining heterochronic constants and variables. The idea is to retrieve useful information from syntactic findings, and to make a commentary with the aid of current and past “situations”. A more general synthesis can be retrieved from the semantic interpretation of the case study. The aim of this synthesis is not to generalise all similar cases, but to create an opening to discuss the resilience of multi-cultural heterochronic urban spaces.

4. A heterochronic case in Istanbul: history and evolution of Kuzguncuk

4.1. Kuzguncuk as a heterochronic urban space

Kuzguncuk can be described as a heterochronic urban space because it involves many properties significant to the accumulation of time, as well as fleeting aspect of temporality. We can mention several heterochronic elements in the area, mainly of two different types: first, called “heterochronic constants” in this study, mainly investigate strategic places that remain intact over centuries. As ritual places witness the entire existence of a cultural gathering in an urban space, re-

ligious buildings of Kuzguncuk (Greek and Armenian churches, a synagogue and a mosque) compose the only typology of “heterochronic constants” in this study. “Heterochronic constants” symbolize the cultural gathering spaces and ensure the existence of those gatherings, however they can lose impact with changing “situations”, and dying urban artefacts. Second, called “heterochronic variables” include the temporary characteristics and changing aspects of urban space, especially “situations” and different social and cultural gatherings deriving from those “situations”. Greeks, Armenians, Jews, Muslims, migrants and gentrifiers are some of the gatherings in Kuzguncuk throughout history, and the arrival of some of these gatherings are interrelated with new situations. For example, when gentrifiers entered the neighbourhood, “gentrification” became a new situation.

4.2. Deconstructing the history of Kuzguncuk with “timeline” and “zoning”

On the Asian shore of the Bosphorus, one of the small neighbourhoods along the shoreline, Kuzguncuk was once known as a mixed community of Greeks, Jews, and Armenians (Akin, 1994). Although many sources indicate that Kuzguncuk’s name once was Chrysokeramos, many historians have not agreed this idea, as it stood for neighbourhood and church names in three adjacent Bosphorus villages Kuzguncuk, Beylerbeyi and Çengelköy (Bektaş, 1996). According to İnciyan, the name Kuzguncuk is a derivation from “Kosinitsa”, the old name of the district (İnciyan, 1976; Bektaş, 1996).

Kuzguncuk was a Jewish neighbourhood in the beginning, although when Jews settled is still unknown. There is a strong possibility that they settled into the area after emigrating from Spain in 1492. In 18th century, Armenians started to move into the area and started to grow their community in the 19th century (Bektaş, 1996). Starting from 18th century, mostly Jews, Greeks and few Armenians were residents of Kuzguncuk. Hagios Georgios Church was one of the churches that belonged to the Greeks in Kuzguncuk

and was constructed in 1821 on İcadiye Street (Tonguç & Yale, 2012). Another Greek Church, Hagios Pantalemon, was built in 1831 and its bell tower was added in 1890. Armenians had built the Surp Krikor Lusavoric Church in 1831, which was later rebuilt in 1861. Two synagogues were built, one in 1878 (although other sources indicate 1818) named Beth Ya’akov Synagogue, also known as the Big Synagogue on İcadiye Street, along with a smaller one in Yakup Street named Kal de Ariva Synagogue built in 1840. Finally, there are two mosques, the older one named Üryanizade Mosque with the simple building but with an interesting wooden minaret, built in 1860 on the shoreline, and the new mosque built in 1952, named Kuzguncuk Mosque.

Other important landmarks are two baths: Small Bath and Mountain Bath; three fountains: İsmet Bey Fountain, İskele Fountain and Hacı Ahmed Efendi Fountain (destroyed); Kuzguncuk Pier and finally Old Police Station (destroyed). There are three cemeteries in Kuzguncuk: Jewish Cemetery, Greek Orthodox Cemetery and Nakkaş Baba Muslim Cemetery. Housing patterns in Kuzguncuk are also worth mentioning. According to Bektaş (1996) besides important mansions by the shore (yali), the housing pattern that address to people with middle income are very interesting. Greek houses commonly used timber frame and wood, while Armenians preferred masonry houses. A very special housing pattern is found in Üryanizade Street, consisting of row houses with small jetties, wooden houses with embellished façades in Simitçi Tahir Street and are some of most famous patterns in Kuzguncuk



Figure 2. Current state of Kuzguncuk neighborhood.

(Figure 2).

Non-Muslim “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). The main crisis was about an incident on 6th and 7th of September 1955. Greeks, Jews, and Armenians who had not left the area after this incident, moved to newer areas in Istanbul. According to Tümertekin (1997), in a research he conducted during 60’s and 70’s, Kuzguncuk’s residents mainly consist from Istanbulians with 46% of the total residents, the majority of them live closer to the shoreline, whereas migrants settle in the rear side of the area (Figure 4). Black Sea migrant community forms the majority of Kuzguncuk (İcadiye) residents today, and has since late 1930s when they migrated to larger cities. Presently, non-Muslims form a minority of the residents. (Mills, 2004). In the 1980s, with the first process of gentrification in Istanbul, Kuzguncuk become a popular place (Ergun, 2004). Many Turkish architects, poets and artists followed famous architect Cengiz Bektaş, who first bought a house in Kuzguncuk that he renovated afterwards and made a participative planning and renovation process without any charge during the following years in the area (Ergun, 2004; Uzun, 2002), making possible the first wave of gentrification in Istanbul (Ergun, 2004).

The first morphological findings about Kuzguncuk show that a few buildings are present close to the shoreline and a triangular street pattern is depicted on Kauffer Map (1776), Kon-

stantin Kaminar Map (1813) as well as Moltke Map (1837). With Stolpe map (1863-1880), connections of the area with Üsküdar and İcadiye become more visible (Bektaş, 1996). Starting from the first quarter of the 1800’s, many heterochronic constants, especially religious buildings have been constructed and a majority of them survived until our days. Thresholds are related to the start of different housing developments occupied by distinct cultural groups, and important events significant to the cultural or morphological change of the area. Different maps, thresholds and heterochronic constants of Kuzguncuk and their dates can be seen on the timeline (Figure 3).

Kuzguncuk has seen many changes, ruptures and historical discontinuities, that is why gatherings symbolizing different “situations” have locational importance, and their integration to the system is crucial in order to understand their subsistence. The mapping of these gatherings is made with reference to memories of a very small sample of interviewees in books and theses (Bektaş, 1996, Mills, 2004). According to the zoning, along the main street (İcadiye Street) there are mainly shops and residential area, however wealthy Turkish residents are situated along the shoreline road (Paşalimanı Avenue). There are two large residential areas, one in the centre of Kuzguncuk, where residents from all backgrounds live together; another in the outskirts of the neighbourhood towards İcadiye, mostly occupied by Black Sea migrants. Finally, Üryanizade Street is known with the start of gentrification in Kuzguncuk. The area around Üryanizade Street still welcomes many new residents as a



Figure 3. Timeline: thresholds, maps and heterochronic constants.



Figure 4. Zoning of Kuzguncuk neighborhood.

result of gentrification (Figure 4).

4.3. Analysing deconstructed history of Kuzguncuk through “space syntax”

From the timeline, three maps are used for syntactic analysis. These maps and aerial photos are chosen accordingly to important dates in history and morphological and sociological changes in the area. 1932 Pervititch insurance map shows all heterochronic constants except the mosque, and all non-Muslim gatherings are present. 1966 aerial photo shows a situation after the 1955 incident when many non-Muslims left and migrants settled. Finally, 2014 map is a reflection of the present where all heterochronic constants are present and residents, migrants and gentrifiers live together. The boundaries of the analysed area are based on the Pervititch insurance map and are exactly applied to the other two sources.

To understand the area globally, first axial line and grid integration analyses of the whole system are shown in Table

1. Axial line analysis shows the most integrated streets, and grid integration analysis shows the most integrated areas in the system. Intelligibility is the correlation between connectivity and integration, which permits the understanding of the global relation of space from what can be observed (Klarqvist, 1993). Looking at the intelligibility values of three maps, the r-squared value of the total system changes slightly according to the axial lines of three subsequent periods. In 1932, r-squared value is 0.96 and according to axial lines and integration values the void space towards the west is generally integrated in the system. In 1966, r-squared value slightly increases to 0.97, and the system becomes slightly more intelligible as well, and the shoreline and all heterochronic constants through it is more integrated in the system. In 2014, however, there was a decrease in the r-squared value to 0.94; the system becomes less intelligible, leaving only the intersection of the main street and the shoreline as the most integrated area in the system. According to axial line analysis, the secondary street in the east is more visually integrated than it was in the past (Table 1).

Table 2 investigates the alterations of heterochronic constants and variables during the defined period. The comparative syntactic analysis of heterochronic constants is made referring to five religious buildings that are found in the spectrum of the map boundary: Hagios Panteleimon Greek Church, Hagios Georgios Greek Church, Beth Yaakov Synagogue (Main Synagogue), Kuzguncuk Mosque and finally Surp Krikor Armenian Church.

Hagios Panteleimon Greek Church has still a great imprint on the area, due to its bell tower as a special feature, although its integration values severely decrease from 851 to 405 then to 352. Its isovist area and perimeter respectively decrease in 1966, and rises again in 2014. Hagios Georgios Greek Church similarly becomes less integrated by time, however its isovist (area and perimeter) values stay steady. The reason behind this might be the decline of the main avenue's overall integration statistics. The circularity also decreases gradually for both Greek churches, de-

rising from the dominant linearity of the main avenue.

Beth Ya'akov Synagogue entry has very close integration values to Hagios Georgios Greek Church, showing approximate fashions with it as they are neighbouring (Table 2). However Beth Ya'akov Synagogue's isovist area and perimeter values decrease respectively from 3.674 and 620 in 1932, to 3.382 and 544 in 1966, and then increase to 3.625 and 585. Its circularity values first decreased from 104 to 87 then went up to 94. Beth Ya'akov Synagogue and Hagios Georgios Greek Church entrances seem visually hidden from the main street, and do not appear at first to everyday stroller unless they are searched for. The reason behind this fact could be that the actual religious buildings are behind the entrance walls, which separate the street from the buildings.

The mosque did not exist in 1932, thus the slightly larger building in its place had an integration value of 268, which in 1966, after the construction of the mosque in 1952, rises to 293 becoming more integrated as well as the

shoreline axis, whereas in 2014 it decreases to 235, as the system's highest integration values concentrate on the main road/shoreline intersection (Table 2). Its isovist area decreased from 2707 in 1966 to 2522 in 2014, although its perimeter increased from 499 to 608, as well as circularity rising from 91 to 146, less perceivable and less embodied as a result of the reconstruction across the road (Table 2).

The most important increase in integration values are marked with Surp Krikor Armenian Church, which from 1932 to 1966 has tripled its integration values, followed by a slight decrease in 2014. Same fashions for isovist area/perimeter/circularity values: the increase in 1966 may have been resulted from the widening of the coastline road and the demolition of the old wooden house on the coast, but both buildings (Armenian Church and Mosque) became more likely to be perceived and situated in a more embodied space (Table 2).

Although according to axial line analysis (Table 1), the main (İcadiye)

Table 1. Integration, axial line analysis and intelligibility of Kuzguncuk.

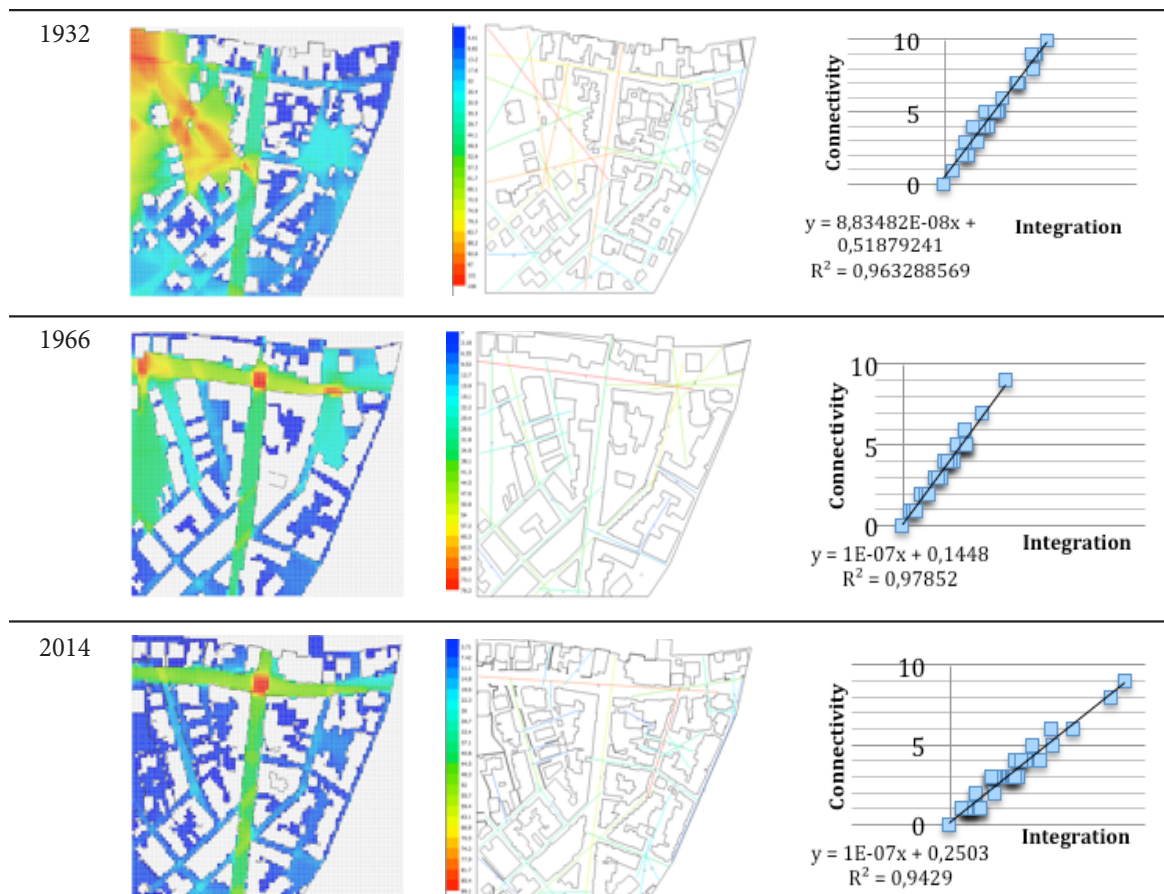
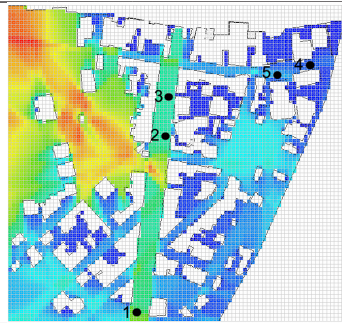
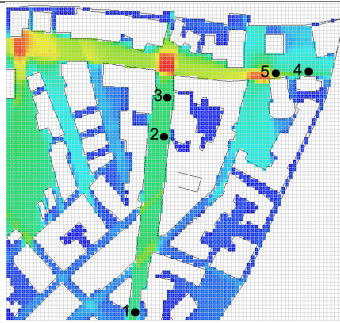


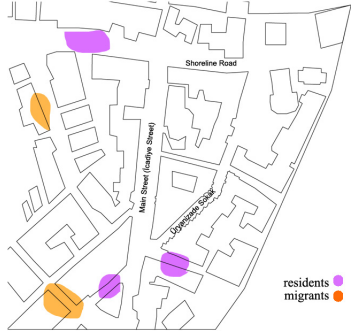
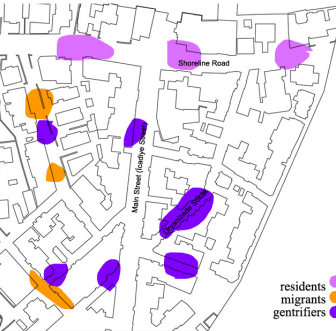


Table 2. Syntactic values of heterochronic constants and variables of Kuzguncuk.

HETEROCHRONIC CONSTANTS						
1932		1966		2014		
						
		1932	1966	2014		
Integration	1	Hagios Panteleimon (GC)	851	405	352	
	2	Hagios Georgios (GC)	604	380	317	
	3	Synagogue	601	386	335	
	4	Mosque	268	293	235	
	5	Surp Krikor (AC)	136	442	357	
Area	1	Hagios Panteleimon (GC)	5408	3726	3996	
	2	Hagios Georgios (GC)	3612	3387	3439	
	3	Synagogue	3674	3382	3625	
	4	Mosque	1796	2709	2522	
	5	Surp Krikor (AC)	1056	4079	3839	
Perimeter	1	Hagios Panteleimon (GC)	1014	632	663	
	2	Hagios Georgios (GC)	631	560	524	
	3	Synagogue	620	544	585	
	4	Mosque	594	499	608	
	5	Surp Krikor (AC)	361	874	682	
Circularity	1	Hagios Panteleimon (GC)	190	107	108	
	2	Hagios Georgios (GC)	110	92	79	
	3	Synagogue	104	87	94	
	4	Mosque	196	91	146	
	5	Surp Krikor (AC)	123	187	116	
HETEROCHRONIC VARIABLES						
1932		1966		2014		
						
		1932	1966	2014		
Mean integration	residents	Jews	191,94			
		Turks	490,26			
		Armenians	216,51			
		Greeks	240,27			
	+movers	Residents	284,74	253,77	272,86	
		Migrants		157,09	90,81	
Gentrifiers				127,70		

street becomes highly integrated by time, isovist analysis (Table 2) shows that locally, heterochronic constants' integration values decrease regularly, with some small exceptions showing improvement closer to 2014. The shoreline is more and more integrated over time according to axial line analysis. However strategic importance of the Armenian Church and Mosque and the alteration of the building erections around them result in the elevation of integration values around 1966, followed by a slight decrease in 2014. The increase in the integration of the axial line along the street near the Armenian Church, perpendicular to the shoreline is very important for these two buildings to become more integrated into the system.

Heterochronic variables of 1932 consist of the cultural mosaic once found in Kuzguncuk that symbolized the mutual tolerance of the cultural gatherings. Jews are generally located in the rear parts of the main street, according to some witness memories (Bektaş, 1996). The mean integration of the area they lived is 191,94 a relatively low integration value, which may approve the fact that lower-income Jews settled in Kuzguncuk. The main synagogue's integration value however was 601, one of the highest values in heterochronic constants in 1932, which may mean that Jews in Kuzguncuk attach importance to their ritual places' location more than their homes, although the second synagogue (not included in the map) is located in a relatively segregated place. Turks living mostly along the coastline are wealthy people, their integration is highest (490,26) among others. Armenian and Greek settlements have similar integration values, 216,51 and 240,27 respectively, although Greek churches are more integrated with 851 and 604, the Armenian church is even more segregated than Armenians' settlement mean integration, with 136. Today, Surp Krikor Armenian Church is as integrated as all other ritual places in the system, despite the reduction in the number of Armenian residents.

In 1966, probably the political climate affected the integration of current residents decreasing from 284,74 to

253,77. Many non-Muslims moved and left their places to Black Sea migrants, whose locations have a mean integration of 157,09 which seems quite integrated, probably resulting from the moving decisions of non-Muslims and selling their properties to migrants below their value. In 2014 however, migrants had a lower mean integration of 90,81 and residents rise to 272,86 in consequence of the increasing economic gap between them. The integration of the mosque slightly drops in 2014 as well as the migrants' gathering mean integration. The "gentrifiers", more integrated than migrants but less integrated than residents with 127,70, probably prefer to rejuvenate more segregated places, but still be globally integrated and close to main street. They especially are numerous in Üryanizade Street.

5. Conclusion: Reconstructing history through a "semantic interpretation"

Today, Kuzguncuk known as a socially inclusive neighbourhood can still be considered as a welcoming urban space. The axial analysis approves that the main perpendicular lines along the shoreline and the neighbourhood, create an integrated space. Through many changes and accumulations of the sociological and cultural patterns; Kuzguncuk acquires syntactical-morphological and phenomenological multi-layered structure, which can be called in this case an urban palimpsest through which several heterochronic constants are collected along with many sociological "situations" as heterochronic variables.

Looking from today, Kuzguncuk's heterotopic constants are crucial for the richness of the area, as they contribute to its positive reputation and to the idea of an inclusive neighbourhood. However, many of these heterochronic constants became less integrated in 1966, then slightly ameliorated in 2014, They show that their meanings are determined by shifting "situations", which in this case are the desertion of non-Muslims and arrival of migrants just before 1966 resulting in the segregation; however re-appropriation and valuation of religious buildings by

gentrifiers before 2014 resulted in the higher integration of the heterochronic constants. In 2014, the integration values of heterochronic constants become closer; objectified and clarified of underlying meanings; only their “locus” is now present. When we look at the overall picture for heterochronic constants, their syntactic values seem to make sense with changing “situations”, however heterochronic variables have internal dynamics as well, such as the segregation of migrants’ settlements relation with their identity and social belonging issues.

From a wider perspective, through morphological or sociological interventions to the urban pattern, heterochrony as a notion is reinforced: heterochronic spaces have indicative traces of palimpsest environment. The definition of palimpsest is a highly sociological issue, depending on lives and lived experiences accorded with slices of time. Heterochrony has a fuzzy nature, dealing with both permanent and fleeting aspect of time and space, at this point; this study shows that even constant elements of the urban pattern result in “the loss and shift of meaning”. The loss or shift of meaning in heterochronies affect the urban fabric as a palimpsest as well, since the ageing urban palimpsest seem to accumulate a collection of memories and meanings relating to places, however in reality, a majority of these meanings perish, only their “locus” persist in heterochronic constants, giving opportunity in cases like gentrification to “fake re-valuation” of the aura of these traces amalgamated in the palimpsest, independent of lived experiences.

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Heterokronik kentsel mekanların artzamanlı yaklaşımla irdelenmesi

Foucault, pek çok düşünürü esin kaynağı olsa da aynı zamanda tartışma konusu olan “Başka Mekanlara Dair” adlı metninde tanımlanan heterotopya kavramının dördüncü özelliğine göre, heterokroni kavramı ile zaman biriktiren yerlerin yanısıra geçici mekanları da tanımlamaktadır. Bu çalışmada, hem zaman biriktirme hem de geçicilik özelliklerini birlikte barındıran tarihi mahalleler, heterokronik kentsel mekanlar olarak irdelenecektir.

Bu çalışma sosyo-kültürel etkilerin tarihi mahalleler üzerine yansımalarını, mahallelerdeki heterokronik öğelerin morfolojik, sentaktik ve semantik değişimini inceleyerek değerlendirmeyi amaçlamaktadır. Bu amaçla, çalışmada heterokronik kentsel mekanı derinlemesine irdelemek için, yapışökümcü bir metodoloji kullanılmıştır. Metodolojik kurgu, tarihin yapışökümü, mekansal dizim ile sentaktik irdeme ve tarihin yeniden inşası (sentez) olmak üzere üç aşamadan oluşmaktadır. Birinci evrede, heterokronik kentsel mekana ait önemli tarihi olaylar, binalar, çeşitli dönemleri yansıtan harita ve hava fotoğrafları, çok katmanlı bir zaman çizelgesi yardımıyla parçalara ayrılmıştır. Zaman çizelgesi heterokronik kentsel mekanın tarihindeki eşiklerin, morfolojik ve sosyo-kültürel değişimlerin ve bu değişimlerin arasında kalan zaman dilimlerinin belirlenmesinde rol oynamaktadır. İkinci aşamada, parçalarına ayrılmış zaman çizelgesinden yararlanarak, heterokronik bölgenin sentaktik irdelenmesi gerçekleştirilmektedir. Bu sentaktik irdeme,

heterokronik kentsel mekanın iki şekilde, yani tarihte iz bırakan kalıcı öğeler ile geçici oluşumlar üzerinden değerlendirilmesini, ve mekandaki morfolojik ve sosyo-kültürel evrimin anlaşılmasını sağlamaktadır. Tarihte iz bırakan kalıcı öğeler bu çalışma kapsamında “heterokronik sabitler” olarak değerlendirilmiştir, ve sadece farklı kültürel gruplara ait dini binalara indirgenmiştir. Morfolojik ve sosyolojik değişimleri oluşturan farklı “durumlar” (situations) ise “heterokronik değişkenler” olarak adlandırılmıştır, ve bu çalışmada farklı sosyo-kültürel toplulukların yerleşim dokuları üzerinden değerlendirilmiştir. Üçüncü aşama, “tarihin yeniden inşası”, parçalara ayrılarak sentaktik irdelenmesi yapılan mekanların, zaman çizelgesinden yararlanarak, semantik bir okuma ile holistik bir şekilde yorumlanmasıdır. Sentaktik bulgular, morfolojik veya sosyolojik değişimlere, anlam kaybı, anlamsal kayma, devamsızlık ve birikmelere işaret edebilir. Bu nedenle “tarihin yeniden inşası”, çalışmada sentaktik ve semantik anlamda bir bütünlük oluşturmayı, ve heterokronik kentsel mekanların artzamanlı evriminin sentezini yapmayı hedeflemektedir.

Alan araştırması, Kuzguncuk mahallesinde yapılmıştır. İstanbul’un Anadolu Yakası’nda bulunan bir boğaz köyü olan Kuzguncuk, çalışmadaki heterokronik kentsel mekan özelliklerine uyan bir mahalledir. Genel olarak, huzurlu ve yaşanılır olarak nitelendirilen mahallede, geçmişte çok sayıda Musevi, Ermeni, Rum ve Türk birlikte yaşamışlardır. Yakın geçmişte Karadeniz Bölgesi’nden çok sayıda göç

alan mahalle, son otuz yılda ise soylulaştırma (gentrifikasyon) yolu ile sosyo-kültürel deęişime uğramıştır. Alan çalışmasının sonuçlarına göre Kuzguncuk Mahallesi, bulanık bir kavram olan heterokroniyi güçlendirmektedir.

Palimpsest yapıdaki kentsel mekanda, yaşanmışlıktan ziyade, anlamsal bir birikme söz konusu olmuştur. Birçok anlam de geçicilik göstermiş, kaybolmuş veya deęişmiştir.