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**SOCIAL REPRODUCTION OF SPACE AND SOUNDSCAPES**

**ELİF SENA KARAHAN**

**115611065**

**DR. ÖĞR. ÜYESİ EMRAH ALTINOK**

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SOCIAL REPRODUCTION OF SPACE AND SOUNDSCAPES

MEKANIN TOPLUMSAL YENİDEN ÜRETİMİ VE SES PEYJAZLARI

ELİF SENA KARAHAN

115611065

Tez Danışmanı: Dr. Öğr. Üyesi Emrah Altınok  
İstanbul Bilgi Üniversitesi



Jüri Üyesi: Prof. Dr. Tolga Tüzün  
İstanbul Bilgi Üniversitesi



Jüri Üyesi: Dr. Öğr. Üyesi Pınar Çevikayak Yelmi  
Işık Üniversitesi



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## **Foreword**

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Architect  
Sena Karahan

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## **Abstract**

The aim of this study is to present a basic discussion of whether sound can be a factor in the process of the reproduction of social space. In order to examine this ubiquitous phenomenon, sound needs to be traced back to its source, the physical environment to which it is attached. In this context, the role of sound in urban areas requires urban morphological and demographical knowledge and this knowledge establishes the physical features of a sonic environment which was radically transformed after the industrial and the electricity revolutions. It is therefore necessary to examine the phenomenon through its historical roots which correspond to the 'modern' era, which has been practised by several thinkers from a variety of geographies. The common ground of these first studies was rapid urbanization. On the other hand, 'the experience of urban' was also becoming the question asked by modern intellectuals. Some of them, for instance, preferred to walk through the modern city and to narrate the modern way of life critically, for the first time, from the perspective of the individual, unlike the previous model-based analyses of urban sociologists and planners. In particular, Simmel, Benjamin, Lefebvre, de Certeau and Debord all structured theories and pioneering discussions of everyday life and the experience of space within this perspective.

Adopting an interpretive approach for this current study, I began by re-evaluating Lefebvre's 'rhythmanalysis' and Debord's 'psychogeography' for my research area, the sonic environment of Karaköy, in order to question the use of experience-based practices in the field of soundscape studies. In addition to these pioneers, a relatively new concept, the 'threshold spaces' of Stavros Stavrides, has also been used here as a basis for understanding soundscapes.

In this thesis, the continuums of sound, environment and individual experiences are discussed in the physical, perceptual, social and cultural contexts. It has been concluded that it is necessary to evaluate soundscape as a social sphere within the process of the social reproduction of space. This conclusion led me to study the



soundscape of Karaköy as a threshold space where the everyday flows of people, goods and services are considerably dynamic and diverse. In order to portray the sound environment of the area, the urban transformation of the Galata region is studied both morphologically and demographically. Some of the well-known soundscape research methods such as soundwalking and sound mapping were adopted for Karaköy's urban analysis. The recorded soundwalks help to identify the background and foreground sounds of the sonic environment. In addition to the soundwalks, a public survey was conducted to explore daily users' sound experiences. The findings show that sound has a critical role in everyday life for people who experience the space in a social context. As a final remark, it is concluded that sound must be also seen as one of the significant dimensions of urban analysis for scholars who seek to understand the urban strata multi- and/or omni-directionally in which sound has carried the historical roots of urban experiences for hundreds of years, and this long-lived sonic process also constitutes the process of the social reproduction of space.

## Özet

Bu araştırma sesin, toplumsal mekanın kurulumunda ve yeniden üretimindeki rolünü tartışmaktadır. Her an, her yerde var olan sesi incelemek için bu olgunun kaynağının ve mekanının sorgulanmasına ihtiyaç vardır. Bu bağlamda, sesin kentsel mekandaki rolünü ele almada, endüstriyel ve elektrik devrimleri sonrası radikal bir biçimde dönüşen şehrin morfoloji ve demografi bilgisi gerekir. Modern dünyanın kentselleşme süreciyle birlikte ele alınan ses peyzajları kavramı, gündelik hayat dinamiklerini değerlendiren kent teorileri (Simmel, Benjamin, Lefebvre, Debord, de Certeau) ve ritimanaliz (Lefebvre), psikocoğrafya (Debord) gibi deneyim pratikleriyle beraber incelenir. Materyal ve kültürel bir gerçeklik sunan ses, fiziksel ve toplumsal bir olgu olarak çok yönlü bir tartışma alanı açar. İstanbul'un yaşadığı endüstrileşme ve kentleşme sürecinin merkezinde kalan ve Galata'nın tarihe açılan kapılarından Karaköy, mekansallığında sürekli bir akışı, dinamizimi barındırır. Bu devinim beraberinde değişimi kaçınılmaz kılarken, sesin etkileşimli ve şimdi üzerinden kurduğu mekan Stavrides'in 'eşik mekanlar'ı nosyonuyla değerlendirilir, bu durum toplumsal mekanın yeniden üretimini tartışmasına çok boyutlu bir alan açar.

İlerleyen bölümlerde, ses, çevre ve birey arasında süreklilik arz eden ilişki, fiziksel, algısal, sosyal ve kültürel bağlamda tartışılmıştır. Ses peyzajları mekanın toplumsal yeniden üretimi sürecinde bir sosyal alan olarak değerlendirmenin gerekli olduğu sonucuna varmıştır. Alan araştırmasının gerçekleştiği, Karaköy'ün son iki yüzyılın kentselleşme tarihini taşıdığı coğrafyasında, demografik ve morfolojik araştırmalar kronolojik sırayla ele alınmıştır. Şehrin kültürel, sosyal ve fiziksel bir devinim bölgesi olarak karşımıza çıkan Karaköy'ün gündelik hayat deneyimi ses peyzajlarıyla tartışılmıştır. Bu bağlamda Karaköy'ün ses peyzajları, toplumsal olanın kurulmakta olduğu eşik mekanlar olarak değerlendirilmiştir. Ses yürüyüşleri, anket çalışmaları ve ses haritalamaları gibi deneyim üzerine kurulu kentsel ses peyzajları çalışmalarında kabul görmüş yöntemler uygulanarak, sonuçlar toplumsal mekanın kurulumunun analizinde değerlendirilmiştir.

Bulgular, sesin kentsel mekan deneyimindeki kalıcı ve geçici etkilerini ortaya çıkartırken, sesin toplumsal mekanın kurulumunuda aktif rolünü tartışmaya açmaktadır. Bu bağlamda ses peyzajları kentin yüzlerce yıllık katmanlarını analizine ve toplumsal mekanın yeniden üretimi süreçlerini anlamaya imkan tanımaktadır.



## INTRODUCTION

When we hear or physically experience for the first time a relatively low sound (a sound which does not have a powerful influence on us), we may not notice it. After a while, when we hear it again, then we might recognize it, or feel familiar with it, but often we cannot name it consciously. Repetition can create stronger connections with our brains; new patterns can be established by experiences which are lived on the threshold of individual and social awareness. There are many patterns which shape flows on the earth, and in our bodies, habits and traditions, and they accumulate individual and social strata. Today's urban everyday life presents no borders for any culture which can migrate into it just by a touch on a scene. The everyday sounds create unseen patterns which connect the intimate and the public spheres, and this can be questioned on both the micro and the macro scale.

When we try to understand the way in which a soundscape is generated, we have to consider the interaction between the built environment and the social practices on which it relies. In the modern world, the everyday life of an urban area produces different kinds of rhythm and experience. Listening to the movement and the effect of sound in a public space enables us to investigate the social reproduction of space in the present time and the present place. The flow of the quotidian, and the social, historical, geographical and physical strata connect to each other in each moment. 'Now' is the strata of a whole history and its reproduction, and in this current study, the exploration of the declared soundscape is the research method which I shall use (LaBelle, 2012).

In the middle of the eighteenth century, industrialization first appeared in England and later city boundaries were dissolved as new transportation networks were established and people started moving from rural to urban areas. The everyday life urban experience became a field for critical thinking as early as Engels's work in 1844 (for example, Simmel, 1903; Benjamin *et al.*, 1947; Debord, 1957; Jacobs,

1961; Certeau, 1984) and extends to today's urban condition. Technological improvements introduced during the industrial and electricity revolutions enriched the city and the urban soundscapes. Mass migrations during the twentieth century mixed the world's colonial texture and in the 1980s, the term 'the global city' emerged. The use of the proliferating communications media makes it possible for the current generation to contact each other in seconds regardless of vast physical distances. Space has lost its boundaries. The modern new world makes spaces global and both physical space and the encounters which occur within it have changed their forms dramatically.

Space is a physical and psychological phenomenon which is reproduced by each moment. In these moments, sound waves vibrate everything, and these vibrations affect our bodies and our eardrums. As an architect, I critically address and eventually create the experience of space. As a researcher, a human being and a listener, I have to choose the human perspective in terms of the point at which I listen. The dynamic relationship between time, space and energy is the crucial question for the reproduction of space. So observing the relationship between listener, environment and sound in urban space is about the social reproduction of space in everyday life.

### **The Aim of the Research**

In order to critically examine the social reproduction of space by sound, I chose a threshold space which is situated in one of the oldest commercial districts of Istanbul, Galata. Thousands of years ago, the name for Galata was Sycae, and it was the 'other' for Constantinople until the nineteenth century. On the outskirts of Galata, the old gate at Karaköy is the earliest industrialized area of Istanbul and it still sustains the public transportation flow by trams, subway trains and buses, and especially by the ferries which have been in service since the early nineteenth century. The transformation of Galata's cultural and built environment has continued to change under the effect of the political and economic forces of

urbanization. In the last two decades, the port has begun to undergo gentrification by various renovation and renewal projects. Life in the area has been layered by numerous radical events throughout its history leading to the point at which we ourselves are now situated in today's urban space. This multi-layered position helps us to investigate everyday life where the strata of space are unveiled. Everyday life here contains social (linear) and natural (circular) rhythms which are reproduced by repetitions and differences in a spatial and cultural environment. Discussing this social or common space therefore needs experience-based research. The role of sound emerges in this moment; the space which we share is inevitably connected with air, which is the medium through which sound travels. This is the way that sound creates a common space for all. Listening to a soundscape traces sounds which are physically reshaped by reflection, diffusion and absorption and is socially transformed by the perceptions of individuals and their cultural backgrounds.

In this study, the social, economic, spatial and political features of the city are discussed through the soundscape of Karaköy, just as the history of the modern world has been discussed by urban social theorists who experienced everyday life *in situ*. In order to do that, urban morphology and the acoustic dimension of everyday life in the existing urban soundscape study literature will be reviewed and Stavrides's notion of 'threshold spaces' will be applied to urban soundscapes, which are dynamic and fertile. Based on this review, I shall analyse the social reproduction of space in everyday life in Karaköy as the chosen location for this study.

### **Research Problem**

*Can sound be defined as a factor in the process of social reproduction of space?*

Soundscapes are the totality of all sounds within a location with an emphasis on the relationship between individual or society's perception of, understanding of

and interaction with the sonic environment. The concept of a soundscape was initially introduced by the Canadian composer Murray Schafer and his musician colleagues in the 1960s. Since then, research on soundscapes has been carried out in a number of different disciplines, such as acoustics, psychoacoustics, psychology, sociology, architecture, geography, landscape planning, engineering, music, sonic art, and anthropology (Panye, 2009).

Urban sounds became more critical after the mass industrialization of countries across the world. In 1967, one of the students of Kevin Lynch, Michael Southworth (1967:49), who carried out early studies of sensuous urbanism in the 1950s when technological progress was bringing city sounds to the threshold of bedlam, wrote that it was no longer sufficient to design environments without considering the soundscapes. Urban planners became aware of the everyday sounds of cities, and in the later decades of the twentieth century, musicians such as John Cage, Luigi Russolo and Edgard Varese listened to and composed the sounds of the transforming cities. The dynamic relationship between sound, listener and environment was explored by Truax (1984) in *Acoustic Communication*, in which he explained the socio-physical incomes and outcomes of the acoustic environment. The urban sonic experience was later studied by Augoyard and Torgue (2005), who put the emphasis on sound effects in everyday life.

Understanding urban life (the experience of the city) became more crucial in terms of the cultural and sociological perspectives in the last century, particularly for George Simmel, Walter Benjamin, Henri Lefebvre, Guy Debord, Jane Jacobs and Michel de Certeau. More recently, in established urban soundscape studies, analysing everyday sounds and experiences has been used as a quantitative and a qualitative research method (Payne *et al.*, 2009). In the last decades, sonic experience has attracted increasing attention in architectural, philosophical and social research. According to some pioneer scholars (for example, LaBelle, 2010; Blesser & Salter, 2007; Augoyard & Torgue, 2005; Thibaud, 2011, acoustic

spatiality is a shared social space which is fluid and intangible, and its experiential boundaries are perceived by listening. In this context, a listened space is a threshold (Stavrides, 2011) where the boundaries of the social sphere are ambiguous but fertile. By listening to these shared spaces, the soundscape concept is a way of spatial analysis for finding the acoustic commons in moment/movement, in experience but not on the lines of any map, and these experiences are reproducing what is common or public. The installation of the social is carried out continuously and sound can occur as both the source and the result of these spatial-social changes. In this current study, urban soundscapes are therefore considered as threshold spaces for critically examining the reproduction of social space.

## **Methodology**

The experience of the urban deals with the idea that “the everyday evidences a range of temporalities that makes it impossible to think of ‘modernity’ as a straightforward narrative. Everyday modernity begins to look like a patchwork of different times and spaces” (Highmore, 2002:174). Questioning the reproduction of social space by listening to everyday soundscapes needs to be handled in terms of three key dynamics, sound, environment and listener. This affective triangle was suggested by Truax (1984) to explain acoustic communication. This current study is structured on the sonic experience of urban space; in Chapter 1, I shall evaluate urban social theorists and their ideas by considering contemporary discussions of the phenomenon of sound. In Chapter 2, the physical, perceptual and cultural features of sound will be conceptualized in the urban context. In Chapter 3, the experienced space will be examined by means of field research using well-known methods for soundscape studies, such as soundwalks, a public survey and sound mapping. In order to analyse the spatial features of the field study in Karaköy, in Chapters 1 and 3, the transformation of the old city of Galata will be traced chronologically. In Chapter 3, the social reproduction of Karaköy will be conceptualized by its acoustic dimension and the experience of daily users.



## 1 URBANIZATION AND THE CHANGING RHYTHMS OF EVERYDAY LIFE

*How can everyday life be defined? It surrounds us, it besieges us, on all sides and from all directions. We are inside it and outside it.*

Henri Lefebvre, 'Clearing the Ground' (1961)

The colonial powers shifted the momentum of the world by the Industrial Revolution in the eighteenth century. Mass production, inventions and improvements in transportation led to rapid urbanization, and consequently cities lost their physical boundaries (Gehl & Svarre, 2013) and found themselves faced with related social and spatial problems. Although throughout human history western philosophers have questioned the idea of 'the city', the process by which the new industrial era created a new form of urban experience meant that cities became an area of study for social scientists rather than philosophers (Meagher, 2008).

The urban area was an uncontrolled orchestra and each day the instruments and situations changed. The transformation of everyday life continuously reproduced the urban experience and its culture. The urban condition, or the urban experience, became more and more critical, and the philosophy of the city shifted from the holistic view to the individual scale.

In the mid-nineteenth century, Engels examined the conditions of the working class in the streets of Manchester. Later, in Berlin, Simmel discussed capitalist society and the psychological effects of the metropolis, and his student Benjamin walked through Parisian passages as a *flaneur* to search for the affection on modern everyday life. They both had a dialectical approach to analysing the recently established capitalist society.

The French Marxist philosopher Henri Lefebvre defined everyday life as “what is left over” after all distinct, superior, specialized and structured activities have been removed (Lefebvre, 1991:97). He suggested that space is produced within a dialectic relationship between social action and spatialization, which corresponds to social construction, instead of being an absolute or naturally occurring phenomenon (Lefebvre, 1991). His dialectical approach to everyday life can be seen in his notion of spatiality, which included the body, action and the built environment. This dialectic approach enabled him to understand and think through the urban experience.

1. *Roars, Thunderings, Explosions, Hissing roars, Bangs, Booms*
2. *Whistling, Hissing, Puffing*
3. *Whispers, Murmurs, Mumbling, Muttering, Gurgling*
4. *Screeching, Creaking, Rustling, Buzzing, Crackling, Scraping*
5. *Noises obtained by beating on metals, woods, skins, stones, pottery, etc.*
6. *Voices of animals and people, Shouts, Screams, Shrieks, Wails, Hoots, Howls, Death rattles, Sobs*

Luigi Russolo (1913), ‘The Art of Noises; a Futurist Manifesto’  
(In Cox & Warner (eds),2017:15)

Mass production and the consequent mass consumption became the way of life in the new world. The Industrial Revolution and the Electricity Revolution transformed everyday life. Musicians of the ‘modern world’ listened to their environment where the sound sources were rich and diverse and they were able to record and reproduce the sounds which they heard. One of them, the Italian futurist composer Luigi Russolo, wrote in the ‘The Art of Noises; a Futurist Manifesto’ in 1913 that for those who listen, “the modern noise could make you appreciate the music of everyday sounds”.

*We delight much more in combining in our thoughts the noises of trams, of automobile engines, of carriages and brawling crowds, than in hearing again the*

*Eroica or the Pastoral and let us cross a large modern capital with our ears  
more attentive than eyes.*

(Ibid:25-26)

In the twentieth century, the forces of industrial development and the movement of the workforce from rural to urban areas enlarged the cities. The rise of communication technologies reconfigured space, and auditory devices began to create a new attitude to distance. Telephone and radio, as well as microphones and loudspeaker systems, separated sound from the location of its source, and the phonograph and gramophone detached sounds from the moment of time and place in which they first occurred.

*Once telephones, phonographs, and radios populated our world, sound had lost  
a little of its ephemeral character. The voice became a little more unmoored from  
the body, and people's ears could take them into the past or across vast  
distances.*

Sterne (2003:1)

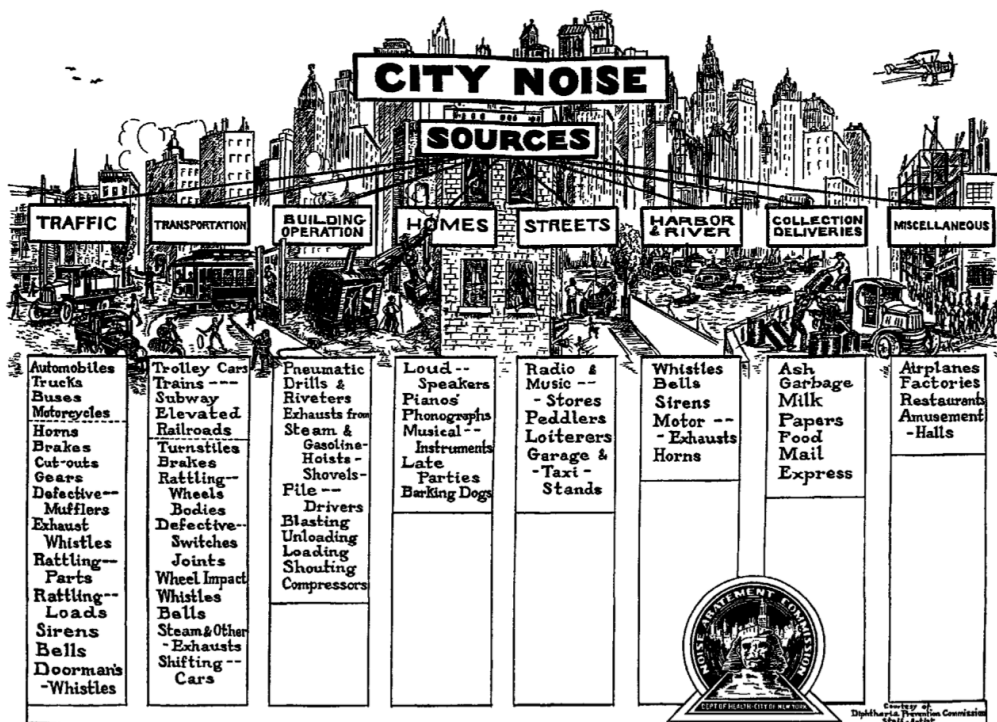


Figure 1.1: Edward Brown *et al.*; ‘Soundscape of the modern city’, New York Department of Health 1930 (Thompson, 2002:118).

In the everyday life of the modern world, the changing “economies, leisure habits and technologies have affected the distribution and aural character of segments of the city” (Atkinson, 2007:1909). Western musical production also gained different values as a consequence of city noises. Sound reproduction machines separated sound from its source. For Russolo, in the age of noise new musical instruments were needed, since “the traditional orchestra was no longer capable of capturing the imagination of immersed in noise” (Cox & Warner (eds), 2017:5). Modern music recorded sound and re-composed it. The noises of the modern world inspired jazz musicians and avant-garde composers to create new kinds of music (Thompson, 2004). Music or “organized sound” (Varese) reproduced the everyday features of the urban.

*For twenty-five centuries Western knowledge has tried to look upon the world. It has failed to understand that the world is not for beholding. It is for hearing ... Now we must learn to judge a society by its noise.*

‘The Political Economy of Noise’, Jacque Attali (1977)

The sound artist and philosopher Brandon LaBelle (2010) claimed that it is possible to find an entire history and culture within a single sound;

*... from its source to its destination sound is generative of a diverse range of experiences, as well as remaining specifically tied to a given context, as a deeper expressive and prolonged figure of culture.*

p.xvii

In *Acoustic Territories: Sound Culture and Everyday Life*, LaBelle (2010) discussed the acoustic politics of space and sought to further engage those concerns by examining the exchanges between environments and the people within them as registered through aural experience. By analysing the urban space, the work offered a rendering of auditory life and the weave of the private and the public found within it (*ibid.*:xvii). From this perspective, the urban sound environment is established as a critical concept for discussing the social reproduction of space.

### **1.1 Urban Everyday Life since the nineteenth century and Experience-based Urban Studies**

Everyday modernity begins to look like a patchwork of different times and spaces (Highmore, 2002:174). The theories of everyday life were founded in the industrialized era in the urban areas of England. By the mid-eighteenth century, Great Britain was the world’s leading commercial nation, and the new capitalist economy was established on the shoulders of the workers. To seek possible business opportunities, the son of a wealthy German Jewish merchant, Friedrich Engels (1820-1895) went to England. During his time there, he examined the

living and working conditions of the working class. His first critical study, a philosophy of the streets, was *The Condition of the Working Class in England* published in 1844. He described the life of the working class as “ruinous and miserable” and the portrayed towns as “unplanned wildernesses of one or two-storeyed terraced houses” where the hunger cries of children could not be heard by their fathers who worked in the noise of factories for more than eighteen hours a day (Chen *et al.*, 2015; Engels, 1845; Meagher, 2007). The life of the working class was a misery; their living conditions were devastating. Later, in London, in collaboration with the socialist philosopher and economist Karl Marx, Engels wrote the Communist Manifesto (1848), which is “the most famous text that deals with the revolutionary aspects of modernization” (Highmore, 2002:22).

*By connecting technological and social changes with changes in everyday experience, the Communist Manifesto becomes one of the first texts to posit modernity as a revolutionary experience to be located at the level of everyday life. (ibid.)*

In the late nineteenth century, one of the first social theorists of modernity itself,<sup>1</sup> the German philosopher Georg Simmel (1858-1918), found the essence of modernization in everyday life among people in the emerging metropolis (Chen *et al.*, 2015). In 1903, in an essay titled ‘Metropolis and Mental Life’, he wrote that Berlin “was a city of intense contrasts between wealth and poverty”. Rapid urbanization was creating tension between the traditional and the modern rhythms of life. Simmel saw the capitalist city as a sensorium which assaulted the urbanite with a cacophony of sights and sounds, including advertising, commodities, pedestrians, and vehicular traffic (Lin & Mele, 2013:2) and he questioned the transformation of the city and its culture in micro-scale. For him “a sensory situation that generates a psychological condition” needed to be investigated in the urban life of the metropolis (Highmore, 2002:41).

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<sup>1</sup> Sociological concern with urbanization began with sociology itself, for it was the rapidly

*The psychological foundation, upon which the metropolitan individuality is erected, is the intensification of emotional life due to the swift and continuous shift of external and internal stimuli.*

Simmel (1971:325)

Simmel's dialectic approach to everyday life and the experience of modernity was fragmented by micro-level behaviors. His method, which offered a dialectical transition between the personal and the social, provided a gate into how the modern world actually worked. In his famous essay, 'Bridge and Door', Simmel (1997:67) described the human being as "the connecting creature who must always separate and cannot connect without separating". This was the line between the personal and the social where experiences occur.

The everyday is linked to an experience of modernity that privileges the urban and the unconscious (or the non-conscious) (Highmore, 2002:32). The German philosopher and cultural critic Walter Benjamin (1892-1940), who was a student of Simmel, recognized "the everyday of modernity as assaulting the totality of the sensate body"(ibid.:26). Benjamin found the everyday experience of modernity in sensation and affection, which was also problematic in urban space. His critique of urban modernity was in where streets are the dwelling place of the collective (Benjamin ,2002:879). Not physical places such as streets, but 'porous' entities were another notion which also establish a social sphere; "Building and action interpenetrate in the courtyards, arcades and stairways" (Benjamin, 1979:169), or "only much more loudly, the street migrates into the living room" (Benjamin, 1985:174). Porous places are the spaces where the public and private encounter and reproduce their common space.

Simmel's 'Doors and Bridges' and Benjamin's 'porous' notion suggested a new way of understanding space where a dynamic and stormy modernity creates the cultural common in urban space. These in-between spaces will be discussed below using Stavrides's notion of threshold spaces.

In the introduction to *Understanding Henri Lefebvre*, Stuart Elden (2004) briefly summarized the French philosopher Henri Lefebvre's long adventure:

*Born eighteen years after Marx's death, and only six after Engels', Lefebvre was a youth of sixteen at the Russian Revolution, in his late thirties at the outbreak of World War Two, 60 at the time of the Cuban missile crisis, and still writing at the fall of the Berlin Wall.*

The tensions and ruptures in the twentieth century witnessed by Lefebvre also included the changing rhythms of everyday life. The modern industrialized world created two world wars, fascism, communism and always new ways of capitalism during a single century. During that century, a continuous flow of new inventions caused everyday life to change more rapidly than ever before. As an example, radio established a commonality even bigger than a battlefield, and a space could contain something which is not there, but everywhere. In 1938, Hitler wrote that “without the loudspeaker, we would never have conquered Germany” (Attalli, 1977:87).

In 1947, Lefebvre published *The Critique of Everyday Life*: he “focused on the urban environment as a space for the intensification of the alienation of everyday life, as well as a site for its possible transformation”(Highmore, 2002:31). His dialectical approach to everyday life was not a search for the total image which was created by the superpowers. He was not someone who questioned modern life more than a philosopher does. He was anyone, a taxi driver in Paris or a worker in a factory (Elden, 2014). For him “everything from a critique of urban planning to a poetics of movement” was a critical element of everyday life (Highmore, 2002:132-133). Almost three decades later, in *The Production of Space* (1976), he argued that a dialectic relationship between social action and spatialization produces space, which is not an absolute or naturally occurring phenomenon; space is more of a social construction.



In the post-war years, “the height of economic growth and booming construction” came at the end of the first period of change which started “with the dawning of industrialization in 1850” (Gehl & Svarre, 2013:39). In Europe, avant-garde artists, intellectuals and political theorists established an organization which they called Situationist International (SI) (1957-1972). Their laboratory was the urban space. In the early years of the organization, Guy Debord, a leading figure of the group, coined the term ‘psychogeography’ to describe the “study of the specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals” (Bauder & Mauro, 2008:23). As a method, psychogeography invited them to ‘drift’ (from the French *dérive*) around the city. They mapped Paris (see *Naked City*) as an individual experiment area. The movement of the drifter in the city was quite similar to Benjamin’s *flâneur* and “both can be seen as collage activities that can embody a dialectical approach that productively negates the coherency of modern culture by introducing other times and other spaces” (Highmore, 2002:139).

The sociology of urban theory was led by the ideas of the European theorists and also in particular by the sociologists of the Chicago School. During the 1950s, they applied their concepts to explore how the social order emerges and how social change takes place (Chen *et al.*, 2015). In urban planning, the experience of city was a new question for architects in the mid-twentieth century. In 1954, a research project entitled *Perceptual Form of the City* was conducted in New York by two American urban planners, Kevin Lynch and Gyorgy Kepes. They studied “sensuous qualities” in the everyday life of the city streets (Radicchi, 2018). Their sensuous attempt, not surprisingly, centered on Lynch’s view in the groundbreaking book *The Image of the City* (1960). In 1969, Lynch’s student Southworth studied ‘The Sonic Environment of Cities’ and investigated the perceptual form of the soundscape in Boston’s streets and squares.

In the same period, the works and ideas of the Bauhaus school<sup>2</sup> inspired the Canadian composer Murray Schafer's multi-disciplinary approach to soundscape studies; new methods from the social sciences, musicology, psychology and architecture were brought together in his methodological toolbox as carriers of cultural meanings, and the idea of environmental sounds was introduced into the discussion (Uimonen, 2008). "To judge a society by its noise" or everyday sound environment, soundscape research became "a critical theory of Urban Everyday Life" (Bull, 2000) as well as urban ambiances which developed into a multi-sensory study, established as a field in urban studies.

By the early 1970s, Schafer had enrolled his colleagues at Simon Fraser University into his work and the World Soundscape Project (WSP) was created. This was seen as an "excellent preparatory work in researching the city as an acoustic space" (Böhme *et al.*, 2014). The German philosopher Gernot Böhme believed that urban atmospheres concern the style and manner of unfolding urban life and described atmospheres as "[s]omething between subject and object. They are not something relational, but the relation itself" (Böhme, 2001:54) and they "constitute the 'In-between' between environmental qualities and human sensibilities" (Ferrington *et al.*, 2000:14). It was suggested that the cultural aspect of soundscape studies and urban ambiances centered on individual perception and experience:

*I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me.*

Juhanni Pallasmaa, 'The Eyes of the Skin: Architecture and the Senses' (2005:40)

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<sup>2</sup> The Bauhaus was founded in 1919 in the city of Weimar by German architect Walter Gropius. Its core objective was radical concept: to reimagine the material world to reflect the unity of all arts. Gropius explained this vision for a union crafts, art and technology in the *Programm des Staatlichen Bauhauses Weimar (1919)*, which described a utopian craft guild combining architecture, sculpture, and printing into a single creative expression [Gesamtkunstwerk]. Gropius developed a curriculum that would turn out artisans and designers capable of creating useful and beautiful objects appropriate to this new system of living (monoskop.org/Bauhaus).

Today, soundscape studies are incorporated into urban sociology, in which Lefebvre's notion of rhythmanalysis is widely used for the critical analysis of social space. Lefebvre's approach to everyday life gives us a critical insight into the investigation of social and natural rhythms in combination. Within the scope of experience-based methodologies such as Lefebvre's rhythmanalysis and SI's psychogeography, the concepts will be discussed later with examples in which similar methods have been adopted. These methodological foundations will support the current study's urban soundscape focused on the example of Istanbul's Karaköy in the chapters which follow.

### **1.1.1 Rhythmanalysis in Urban Everyday Life Research**

*Everybody thinks they know what this word means. In fact, everybody senses it in a manner that falls a long way short of knowledge: rhythm enters into the lived; though that does not mean it enters into the known.*

Henri Lefebvre and Catherine Régulier, 'The Rhythmanalytical Project'

The term rhythmanalysis was coined in 1931 by the Brazilian philosopher Pinheiro dos Santos. He "sought an ontology of vibration" in his unpublished work. The French philosopher of science Gaston Bachelard referred to *La Rythmanalyse* and dos Santos's book, and used the term as a chapter title in his *The Dialectic of Duration*. His text has been considered the most detailed exposition of dos Santos's theory and "was to prove foundational to Lefebvre's later writings in which he attempted to move beyond an analysis of the production of space for which he became renowned" (Goodman, 2009:85-86). In the 1980s, in an attempt to understand the rhythmic relationship between the human body and the urban environment, Lefebvre applied the word to everyday urban life (Adhitya, 2017):

*Rhythms. Rhythms. They reveal and they hide. Much more diverse than in music, or the so-called civil code of successions, relatively simple texts in relation to the city.*

Henri Lefebvre, 'Rhythmanalysis: Space, Time and Everyday Life'

Both natural and cultural processes are the subjects of rhythmanalysis. The rhythmanalyst "... should come to listen to them as a whole and unify them by taking [whom] own rhythms as a reference: by integrating the outside with the inside and *vice versa*" (Lefebvre, 2004:40).

As in urban studies, the notion of Lefebvre's rhythmanalysis has found a place in urban soundscape studies (Adhitya, 2017; Atanasovski, 2016; Goodman, 2009; LaBelle, 2010; Lacey, 2014; Özgün, 2013; Thibaud, 2015; Wunderlich, 2013). Analysing the linear and cyclical rhythms of everyday life helps to understand how sound, environment and the listener are co-constitutive of the reproduction of space in an urban setting.

Atanasovski (2016) put the listener at the center of rhythmanalysis, just as Lefebvre did. For Lefebvre, in the process of rhythmanalysis, the body works as a metronome, and before analysing external rhythms, the listener must perceived his/her own rhythms. Atanovski suggested that our bodies are captured by the external rhythms of capitalist society in what he termed a "policescape". He discussed the threshold spaces where fear of silence (*Horror Silenti*) occurred by uninterested sounds.

To evaluate the sound phenomenon in urban space, Adhitya (2004) developed sound cartography. In her approach to urban planning, she used rhythmanalysis as a way of understanding the city from its everyday sounds. She traced the urban sonification rhythms of Paris to distinguish the spatio-temporal representation in a sound map. Another rhythmanalytical study was conducted by the ethnomusicolog Şirin Özgün (2013) in Istanbul. In her research into everyday life, she

suggested that the rhythmanalysis and soundscape approaches can reveals patterns of Istanbul's social context where the dynamics are inherited to conflict and flow. In Lacey's (2014) doctoral thesis entitled 'Rupturing Urban Sound(scape)s: Spatial Sound Design for the Diversification of Affective Sonic Ecologies', he studied everyday sounds with a rhythmanalytical approach as a way of productivity in an affective manner. He reproduced his collected material as a soundscape design and located it in urban settings. All of the existing studies which have accepted sound as a material and a cultural phenomenon in an urban context have, not surprisingly, used Lefebvre's notion of rhythmanalysis on both micro and macro scales. In this current study, I have used the rhythmanalytical approach to the urban soundscape in order to trace the effects of urban morphology and urban commodities on the everyday life of Karaköy.

### 1.1.2 Psychogeography as a Practice for Understanding the Experience of the Urban Condition



**Figure 1.2:** An altered city experience; Haus-Rucker-Co artist group taking their cue from the Situationists' ideas of play as a means of engaging citizens. (spatialagency.net)

*There is no getting away from the fact that the social is inexorably also spatial.*

The history of modern maps began with the invention of the printing press by Johannes Gutenberg in the fifteenth century. On the early maps, the world was depicted as a flattened globe and showed areas occupied by western colonial powers. Previously unknown lands became the overseas territories of the colonizing countries. The power of maps reshaped the world, showing cities and how their lands were parceled. This created a static, two-dimensional reality which was not critical for any geographical purpose, but for political purposes and for depicting obligations.

Debord defined psychogeography in his 'Introduction to a Critique of Urban Geography' (1955) as the "study of the specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals". SI adherents sought to critique the transformation of urban life by the practices of psychogeography by considering the city as a social expression of mankind (Radicchi, 2018:9). They combined subjective and objective modes of study and the bi-directional relationship between individuals and the environment helped in the collective rethinking of the city.

The Situationists made maps in which subjectivity took power. They drifted around the streets of Paris and their practices turned into tools for surveying urban transformations in progress and contributed to the reform of cartography and to the creation of psychogeographic maps (*ibid.*:9). Their discussion was on experienced space which is not just a physical phenomenon but also social: physical boundaries are only one means of delineating a space, and they are not always the most useful for describing social interactions (Blessner & Salter, 2007:22).

Even before attempts such as psychogeography arose in the middle of the twentieth century, researchers had shown interest in unseen layers of mapping.

Radicchi (2018) summarized the historical perspective of the notions of soundscape and sensuous urbanism and pointed out that the earliest attempt to use the sound phenomenon in cartography had been made by the Finnish geographer Gabriel Granö in 1929, who concluded that compared with the other senses, the sense of hearing provides temporal information and this temporality gives a sense of time. That meant that the representation of sound in cartography could render a field of study in greater detail, the detail of the process.

In Canada, in the late 1960s, Schafer and his colleagues established soundscape studies. In soundscape studies, site mapping has a similar importance to field research. Schafer used sound walks and sound mapping in *Five Village Soundscapes*. Sound mapping and sound walking methods were subsequently taken up by other researchers who studied sound as a cultural, spatial, psychological and physical element in different disciplines (Blessner & Salter, 2007; Truax, 1984). The purpose of the current study is to question the role of sound in the process of the social reproduction of space. Critical spatial thinking is therefore necessary in the urban context. In the field research for this study, both methods were used to analyse urban everyday life as practices of psychogeography.

## **1.2 Threshold Spaces and the Molecular Differentiation of Everyday Life**

*Sonic materiality operates as 'micro-epistemologies', with the echo, vibration, the rhythmic, for instance, opening up to specific ways of the world.*

Labelle (2010:xxv)

The everyday evidences a range of temporalities which make it impossible to think of 'modernity' as a straight-forward narrative (Highmore, 2002:174). For example, the dwelling experience in our modern lives can be helpful. In the same apartment building, perhaps nobody sees their neighbors in their daily routine and people are barely conscious of the space which is just beyond a floor which is



only 15cm thick. In a quiet moment, the very familiar sound of a curtain being pulled carries knowledge from down there to here: you cannot see, you cannot touch, but you can hear that there is someone living there, and that now X is doing that. At that moment, sound creates an unseen dimension of space and carries knowledge which is about now, about here and there. That sound measures the distance between things and people, the distance which we do not really have in our urban life.

From a single apartment to the urban scale, in Istanbul, the whistles of the ferries are created by the urban morphology of hundreds of years and carry the climate and the geography of the city. Their piercing sounds enter through windows and even through walls. The distant settlement on the coast or on the hill hears the sound signals from the pier. This sound defines a common space for everyone. At that moment, the knowledge of the (shared) space for anyone is broader than simply 'here'. Or by the sound of the whistle, 'here' becomes more extensive than before (Blessner & Salter, 2007; Truax, 1984).

Sound blurs the fine border which stands between public and private in each moment and creates unseen commodities. As stated before, the experience-based urban sociology seeks to analyse everyday life at the point where the commons of society are transformed. The architect and activist Stavros Stavrides drew on the work of Simmel, Benjamin, Lefebvre and de Certeau in the context of the spatial and social dynamics of everyday life to form his notion of 'threshold spaces'. For him, "Considering common spaces as threshold spaces opens the possibility of studying practices of space-commoning"(Stavrides, 2016:5) and it is in threshold spaces that we can encounter the "molecular differentiation of everyday life" (*ibid.*).

Thresholds are dynamic spaces which are created by encounters between public and private in a social context. This notion helps to "describe urban space as a process rather than a series of physical entities"; Stavrides sought to "discover

practices that oppose a dominant will to fix spatial meanings and uses. These practices mold space and create new spatial articulations since they tend to produce threshold spaces, those in-between areas that relate rather than separate” (2006:174). The everyday life of a urban setting is a stage for action and reaction; it is affective and creates thresholds which “represent passages towards a possible future, already existing in the past” (*ibid.*:177) in the context of urban space.

In this current study, the notion of threshold spaces is correlated with urban soundscapes which are fertile contexts for discussing any particular urban condition. I shall build on the space which is established by sound and consciously or unconsciously experienced by its users. Listening to everyday sounds is a research method which can unveil the strata of historical accumulation and open a field for understanding the social reproduction of space. The field research for this study was undertaken in Karaköy, which is accepted as a physical and cultural threshold space in the urbanization history of İstanbul and as one of the centers of today’s urban flow.

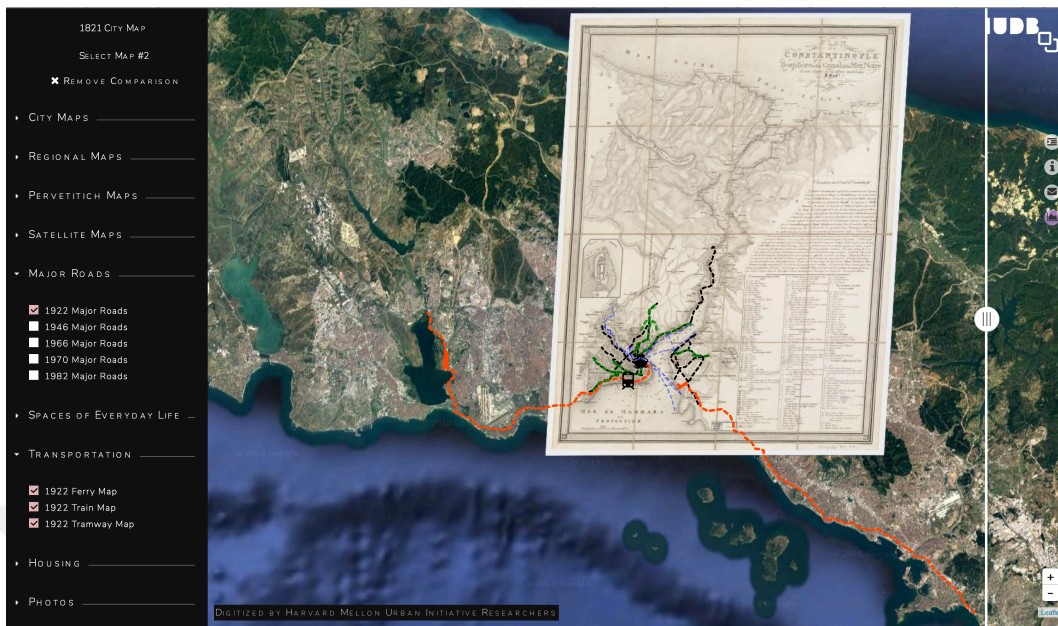
With modernity, everyday life has lost its homogeneity; physical space has lost its boundaries; walls no longer clearly determine the boundaries of cities. The global economy has changed the routes which people take to big cities from rural areas or from different continents. The end of wars or other crises can draw new boundaries in the middle of cities or can divide countries (Christidis, 2015); ‘all that is solid melts into air’ and a new solid is produced with new meanings, new forms, new ideas and new functions for a society.

Constantinople and Galata have always been both separated and connected by the Golden Horn. Every day throughout their long history, these two cities have listened to each other’s prayer calls and bells. Today’s Istanbul is a metropolis with more than fifteen million inhabitants. Its strata have been shaped throughout history. Earthquakes and the sea have formed and reformed the land, and sometimes destroyed the city on it. Natural disasters, invasions, wars, commercial

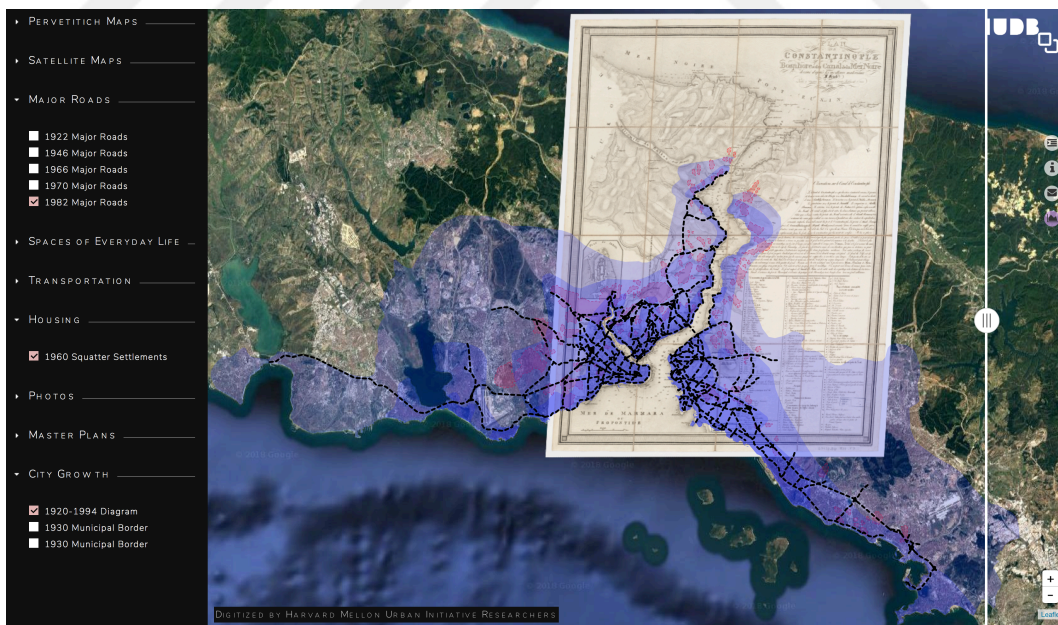
routes, religious missions, seasonal winds, industrial revolution and urbanization have all re-produced the city continuously, each in its own way. After each upheaval, the life in the city will eventually create new rhythms to perform and re-perform the evolutionary adaptation.

The industrialization of the city started with the arrival of new forms of public transport such as steamboats, horse-drawn trams and railways. In the nineteenth century, the population of Istanbul became more western by the activities of merchants who made Galata a center of finance and business. During the long history of the Ottoman Empire, most of the people in Galata lived in non-Muslim local communities (Inceoglu & Yürekli, 2011). The introduction of new technologies and new economic trade routes changed the form of Galata: outside the walled city, Pera was the preferred location of western newcomers, and this also changed its daily activities such as commerce, trade and banking (*Demographia World Urban Areas*, 2018; Ozenc, 2013).

The history of Istanbul in the twentieth century was similar to that of the world's other metropolises, adapting to the influences of nationalization movements, the application of urban master-plans, the uncontrolled urbanization caused by the new inhabitants who moved from rural to urban areas, and American influences on the economy and motorway-based transport routes. By the end of the century, Istanbul had become a global city. The dramatic expansion of the city was due to the uncontrolled growth of the urban population: in 1901 the population of Istanbul was 942,900, in 1955 it was 1,268,771, in 1975 it was 2,132,407, in 1985, it was 5,475,982, in 2000 it was 8,803,468, in 2010, it had reached 13,120,596, and in 2018, there were 13,995,000 people living there (*Demographia World Urban Areas*, 2018; Ozenc, 2013).



**Figure 1.3:** The layered maps show, in the background today's Istanbul satellite image; the 1821 city map and the 1922 major road and transportation maps of ferries, trains and tramways (www.istanbulurbandatbase.com designed by Nil Tuzcu).



**Figure 1.4:** The layered maps show, in the background today's Istanbul satellite image, the 1821 city map, the major roads in 1982, and the 1960 squatter settlements and 1920-1994 city growth (*ibid.*).

Comparison of the maps in Figures 1.3 and 1.4 and the size of the growing population show that within a century, almost half of the geographical area of the city was covered or occupied by human settlement. Ethnic labels can demonstrate the variety and the differences in the culture of the city, but in order to discuss the experience of the city and to trace the molecular differentiation in the city, it is necessary to question the flow of everyday life. The pieces of information presented here are the strata of today's urban space, and everyday life is what is left over from the radical interventions in the city. There is a space where we can hear the thousands of years of strata; the soundscapes of the city. These spaces make possible to discuss the now which stands between the past and the future. The sound phenomenon constantly connects and its movement creates thresholds where exchanges occur, not just in terms of numbers, maps or events, but what happens in the everyday urban spaces, and how the life of city is affected by its dynamic features. LaBelle suggested that if it is possible to find a whole history in a single sound, listening to the urban spaces will help us to analyse the space of social reproduction. The everyday life will talk another language, will build new ports for seaways, people are going to find a new spot for fishing, a prayer will call out from loudspeakers, people will migrate and find a place to live or will find a corner of a street, a church bell is going to stay but its community will have to go suddenly, in the long summer days people will be on the streets late into the evening, or a southwesterly wind will raise the temperature and make the city dwellers dizzy. It is the movement of the sound which gives the change for us to be able to capture what is happening.

## **2 RETHINKING SOUNDSCAPES IN THE CONTEXT OF THE SOCIAL REPRODUCTION OF URBAN SPACE**

*... by 1960, the only European city in which street cries could still regularly be heard was Istanbul.*

Schafer (1994)

*Istanbul, with its many bells and muezzins, calling people to prayer from minarets several times daily.*

Southworth (1967)

Acoustic space has gained exceptional importance in urban areas as a consequence of massive urbanization. In *The Soundscape of Modernity*, Emily Thompson focused on the period between 1900 and 1933 in America. The cities were noisier than ever before and “For the first time, scientists and engineers were able to measure noise with electro-acoustical instruments, and with this ability to measure came a powerful sense of mastery and control” (2004:119). Measuring noise became critical and scientific during the twentieth century, and the cultural aspect of the everyday sounds stayed in second position.

As early as the 1960s, media theorists Carpenter and McLuhan discussed acoustic space. They claimed that contrary to many preliterate cultures, in western society seeing was the reason to believe; trust the eye, not the ear (Carpenter & McLuhan, 1960). In contrast, “the essential feature of sound, however, is not its location, but that it *be*, that it fill space” (*ibid.*:67). Sound carries knowledge of the unseen, temporality and time.

*Auditory space has no point of favored focus. It's a sphere without fixed boundaries, space made by the thing itself, not space containing the thing. It is not pictorial space, boxed in, but dynamic, always in flux, creating its own dimensions moment by moment. It has no fixed boundaries; it is indifferent to background. (ibid.)*

Their anthropological and cultural gaze on acoustic space found a significant place in sound studies (Augoyard & Torgue, 2005; Goodman, 2009; Ihde, 2007; Kane, 2014; LaBelle, 2010; Schafer, 1994; Thompson, 2002; Truax, 1984). In a similar non-quantitative study of acoustics, Böhme discussed acoustic atmospheres as in-between spaces where emotions and social relations are merged. For him, the question of sound atmospheres is directly related to the

dimension of lifestyles, understood as generators of urban atmospheres (Thibaud, 2011). In France, these in-between spaces, the material and cultural concepts of the sonic environment, were investigated as sonic effects by Jean-François Augoyard, a philosopher, urban planner and musicologist. He founded the sonic research institute the Centre de recherche sur l'espace sonore et l'environnement urbain (CRESSON, *Ambiances architecturales et urbanies*) and instead of atmospheres, he preferred to use the term 'urban ambiances' for a sensuous research field. CRESSON researchers developed the concept of analysing the experience of everyday sounds in the contexts of architectural and urban spaces. In 'Sonic Experience: A Guide to Everyday Sounds' edited by Augoyard and Henry Torgue and translated into English in 2005, major and minor effects are explained by different domains, such as physical and applied acoustics, architecture and urbanism, the psychology and physiology of perception, sociology and everyday culture, musical and electroacoustic aesthetics and textual and media expressions. Some of these described major sound effects; cut-out, drone, mask and repetition will be discussed in Chapter 3. In this current chapter, sound and its relation with the environment are being reviewed in the social context. The everyday urban experience needs to be examined through its acoustic dimension which opens unseen layers of social, cultural and political power relations.

## **2.1 Sound in the Urban Context**

For an urban community, shared sound experiences are ubiquitous (Truax, 1984). To study the everyday experience of social space, the continuum of sound, environment and individual relationship has to be discussed in the physical, perceptual, social and cultural contexts.

### **2.1.1 Sound as Movement in Everyday Urban Flow**

*A space is like the word when it is spoken, that is, when it is caught in the ambiguity of an actualization, transformed into a term dependent upon many different conventions, situated as the act of a present (or of a time), and modified by the transformations caused by successive contexts. In contradistinction to the place, it has thus none of the univocity or stability of a 'proper'.*

Certeau (1984:117)

*All sounds are the result of dynamic action, periodic vibrations, sudden impacts, or oscillatory resonances.*

Blessner & Salter (2007:15)

As a physical phenomenon, sound is a form of energy and air forms the medium in which it moves. The movement of a sound ends when its energy turns into another form of energy. Physically, sound “consists of propagating patterns of compression (more dense) alternating with rarefaction (more diffuse concentrations) of molecules in a medium” (Groh, 2014:108).

The materiality of a sound can be found in a physical space, but also the movement of sound creates an invisible social network between things and people. Sound is not “the property of a thing but the result of an action” (Thibaud, 2011).

Silence is not possible in physical space; in 1951, John Cage entered an anechoic chamber at Harvard University expecting to hear silence, but later wrote, “I heard two sounds, one high and one low. When I described them to the engineer in charge, he informed me that the high one was my nervous system in operation, the low one my blood in circulation”.

Every movement creates sounds whether we can hear them with our ears or not. These sound waves touch anywhere they can reach and are absorbed, diffused, reflected and refracted by the surfaces of things. Not just the ears, but also the body hears;



*Touch is the most personal of the senses. Hearing and touch meet where the lower frequencies of audible sound pass over to tactile vibrations (at about 20 hertz). Hearing is a way of touching at a distance and the intimacy of the first sense is fused with sociability whenever people gather together to hear something special.*

Schafer (1994:11)

In an urban area where the density of things does not allow a distance between things, a way of touching at a distance establishes intimate relationships in a social context. The sonic materiality of everyday life;

*... operates by forming links, groupings, and conjunctions that accentuate individual identity as a relational project. The flows of surrounding sonority can be heard to weave an individual into a larger social fabric, filling relations with local sound, sonic culture, auditory memories, and the noises that move between, contributing to the making of shared spaces.*

LaBelle (2010:xxi)

Sound creates an holistic experience of a space. The individual body and the social body in a public sphere vibrate at the same moment; they move together within their built, physical and cultural environment. The acoustic world is essentially dynamic, allowing the sound phenomenon to occur separate from the sound source and temporalizing space and perception (Winkler, 2004:22). In this current study, walking through everyday life situations and flows is physically and metaphorically related to the movement of sound.

### **2.1.2 Temporality of Sound as a Creator of Everyday Rhythms**

*Sound is created by the physical motion of objects in the environment, and as acoustics tells us, it is the result of energy transfers.*

Truax (1984:15)

*The experience of hearing events in the world is the result of interaction between an object at a given time in a given environment.*

Raimbault & Dubois (2005:340)

*In a sense, the sound wave arriving at the ear is the analogue of the current state of the physical environment, because as the wave travels, it is changed by each interaction with the environment.*

Truax (1984:15)

*When the narrow relation between musical time and lived time was described – with music offering more to life than an image, therefore a regal gift, obscure life transformed into a work of art – everything was said and nothing was said.*

Lefebvre (2004:64)

In the relatively short urban history, temporality appears as a principal characteristic of urban areas. Urban everyday life has centers and satellite settlements where dwellers come and go from somewhere to somewhere else as soon as possible. These ‘global cities’ have common economic and social linear rhythms, but also in their specific location they have cyclic rhythms; seasons of a year, hours of a day, traditional events, customs and similar phenomena. The experience of individuals structures the urban condition. The body therefore appears as a main character in everyday activities. The walkers of the city throughout urban studies have discussed the situation from this point of view.

In Lefebvre’s notion of rhythmanalysis in everyday life, the bodily achievement of the rhythms relies on temporality. Research “has to be both centered on body and to be performed as an embodied activity” (Atanasovski, 2016:16). The researcher “listens – and first to his body; he learns rhythm from it, in order consequently to appreciate external rhythms. His body serves him as a metronome” (Lefebvre, 2004:19). To produce the critical knowledge of everyday

life, the researcher must think “with his body, not in the abstract, but in lived temporality” (*ibid.*:31).

Although “sound embodies the sense of time” (Ihde, 2007:85), it also establishes the commons in social space where the borders of the private and the public are ubiquitous. LaBelle (2010) described auditory knowledge as

*... a radical epistemological thrust that unfolds as a spatio-temporal event: sound opens up a field of interaction, to become a channel, a fluid, a flux of voice and urgency, of play and drama, of mutuality and sharing, to ultimately carve out a micro-geography of the moment, while always already disappearing, as a distributive and sensitive propagation.*

In LaBelle’s philosophy, sound can be heard as “this is our moment”, and “in the movement of sound, the making of an exchange is enacted; a place is generated by the temporality of the auditory”, which means that the moment eventually becomes our place. For him, “thinking and experiencing the contemporary condition, ... the momentary connection found in the arc of sound is equally a spatial formation whose temporary appearance requires occupation, as a continual project”. Therefore our place is also potentially our community (2010).

The soundscape space is a texture in the air that surrounds us all, and sounds define the community spatially and temporally, as well as socially and culturally (Foreman, 2011:269). The temporality of sound keeps the distance or recreates the intimacy, and the repetition of the difference establishes the rhythms of everyday life.

### **2.1.3 Sonic Rhythms of Everyday Life**

*Movement is an enduring phenomenon in nature. At all scales in the natural world, things and living forms are involved in constant or periodic motion.*

Seamon (2014)

*... hearing is orders of magnitude more sensitive to temporal changes. In a very real sense, sound is time.*

Blessner & Salter (2007:17)

*Everywhere where there is interaction between a place, a time and an expenditure of energy, there is rhythm.*

Lefebvre (2004)

Cage's 4'33" (1952) is a musical composition limited by the silence of the composer for a very specific time. He "calls for performer(s) to make no intentional sound, thus shifting the audience's attention to ambient sounds and background noise" (Cox & Warner (eds), 2017:24). The intention of hearing a piece of music was blocked by the composer and the subject which he set. There is no-one to compose except 'you' in the moment.

The unorganized sounds of the urban environment are not 'music', but in the everyday life of the urban there are massive movements of things and people, there are repetitions and there are rhythms. In musical studies, rhythm is defined as "the whole feeling of movement in time, including pulse, phrasing, harmony, and meter" (Large & Palmer 2002:2). From the perspective of cognitive science, musical rhythm is described as "the temporal patterning of event durations in an auditory sequence" (*ibid.*). As a metronome, the body experiences the movement of everything and is itself part of that movement. Urban sounds or a soundscape establish a network between everyday life rhythms and spatial rhythms. Throughout this dynamic space, the 'walker'/listener creates its composition or can hear everyday life rhythms by moving from there to there. From that point of view, the rhythm analysis (Lehtovuori & Koskela, 2013; Özgün, 2013; Wunderlich, 2008) of urban soundscapes "opens new insights to social production of urban space and city can be understood as a collective and creative work, *an oeuvre*" (Lehtovuori & Koskela, 2013:127).

In a soundscape study, the political power of the rhythms establishes a critical phenomenon in the environmental and the social contexts. Today's urban area starts with the density of the human flow, and the urban rhythms of everyday life contain individual media connections, mass migrations, in-migration, massive traffic, consumption, security warnings, and construction-demolition within a specific geography where the natural rhythms occur continuously. So the rhythms established by the sounds of everyday life need to be discussed in terms of individual perception, the built environment, and the source and meaning of sounds.

#### **2.1.4 Sound Perception and Acoustic Space**

*Many densities of sounds occur at sustained high levels that have no quiet space in their acoustic shape. This traditional lack of designed sounds and sound relationships is largely influenced by the concept of noise. This concept assumes a hierarchical value difference between meaningful and meaningless sounds.*

Fontana, 'The environment as a musical resource'  
<[www.resoundings.org](http://www.resoundings.org)>, 1990

*First, sound is ubiquitous. Unlike visual space, which is sectorial, acoustic space is non-locational, spherical and all-surrounding. Acoustic space has no obvious boundaries and tends to emphasize a space itself rather than objects in the space. Aural harmonization is temporal, whereas visual harmonization is spatial. Sounds, compared with things seen, are more transitory, more fluid, more unfocused, more lacking in context, less precise in terms of orientation and localization, and less capturable.*

Jian Kang, 'Urban Sonic Environment'

Sound travels at about 344 meters per second. The range of audible frequencies extends from 20 to 20,000 Hz and the unit of the Hertz is one cycle per second; "Individual pulses or cycles of the sound wave cannot be felt below 20 Hz

because of their ability to cause vibration and stimulate bodily resonances” (Truax, 1984:14).

To hear, the human brain compares “what is sensed at one ear and one point in time with what is sensed at the other ear at *another* point in time” (Groh, 2014:112-113); the distance between the two ears helps to the hearer to detect the direction from which the sound is coming.

*Our sense of personal placement through sound perception is stimulated by the fact that sound reaches us through our bodies as well as through our ears. It is easy to localize sound perception to the organs of hearing – our ears – but rapid changes in pressure gradients over time in our environment – what we call ‘acoustical energy’ – stimulate our bodies as well. We feel sound in our chest cavities and against the broad plain of muscle and skin of our backs.*

Stocker (2013:3)

On the other hand, when the sound signals reach a human body, they are “under a perspective distortion, a selection of information and an attribution of significance that depends on the abilities, psychology, culture, and social background of the listener”(Augoyard and Torgue, 2004:8) (also in Blesser & Salter, 2007; Kang, 2007; Schafer, 1994; Truax, 1984).

A soundscape's cultural aspects come under the scientific method of applied acoustics which studies how space, volume, shape and materials determine the propagation of sounds, and “the modern scientific distinction between the ‘objective’ acoustic parameters, such as intensity, frequency and waveform, and their psychoacoustic, ‘subjective’ counterparts, namely loudness, pitch and timbre, respectively, which describe the brain's response to those parameters” (Truax, 1984:5). However, the experience of a listener relies on the physical environment, and the social and cultural circumstances: “The social and cultural environment often shapes common rules of perception of sounds” (Kang, 2007:44).

In *Spaces Speak, are You Listening?*, Blesser and Salter (2007:5) discussed experienced architecture: 'aural architecture'. The adjective 'aural' refers to "the human experience of a sonic process; hearing, to the detection of sound; and listening, to active attention or reaction to the meaning, emotions, and symbolism contained within sound". As can be expected, acoustic design studies the physical properties of sound waves and the physical properties of space, whereas aural architecture listens. The experience of space gains importance; a 'cultural acoustic' becomes critical when it is listened to (*ibid.*).

Carpenter and McLuhan (1960) stated that acoustic space is "dynamic, always in flux, creating its own dimensions moment by moment". This ubiquitous space is fertile and worth considering as a ground for discussing the urban condition. Schafer's (1994:43) notion of a soundscape was more extensive: "any acoustic field of study". He posited two kind of soundscape: hi-fi and lo-fi: "The hi-fi soundscape is one in which discrete sounds can be heard clearly because of the low ambient noise level"(*ibid.*). In *The Soundscape* (1977), he described hi-fi soundscapes as natural soundscapes and the pre-industrial soundscapes, such as rural areas, towns and cities; he classified post-industrial soundscapes as lo-fi.

1711:	Sewing machine
1714:	Typewriter
1738:	Cast-iron rail tramway (at Whitehaven, England)
1740:	Cast steel
1755:	Iron wheels for coal cars
1756:	Cement manufacture
1761:	Air cylinders; piston worked by water wheel; more than tripled production of blast furnace
1765–69:	Improved steam pumping engine with separate condenser
1767:	Cast-iron rails (at Coalbrookdale)
1774:	Boring machine
1775:	Reciprocative engine with wheel
1776:	Reverberatory furnace
1781–86:	Steam engine as prime mover
1781:	Steamboat
1785:	First steam spinning mill (at Papplewick)
1785:	Power loom
1785:	Screw propeller
1787:	Iron steamship
1788:	Threshing machine
1790:	Sewing machine first patented
1791:	Gas engine
1793:	Signal telegraph
1795–1809:	Food canning
1796:	Hydraulic press
1797:	Screw-cutting lathe

**Figure 2.1:** Schafer’s list of early industrial products which started to be used in everyday life (Schafer, 1994).

“The lo-fi soundscape was introduced by the Industrial Revolution and was extended by the Electric Revolution which followed it”(ibid.:71); he added that “there is no perspective in the lo-fi soundscape (everything is present at once), similarly there is no sense of duration with the flat line in sound”(ibid.:78). The post-industrial era was not to be determined by its clearly heard sounds, but instead by the “overpopulation of sounds; there is so much acoustic information that little of it can emerge with clarity” (ibid.:71) and “individual acoustic signals are obscured in an over-dense population of sounds” (ibid.:43).



Schafer developed a terminology for identifying the main features: ‘keynote sounds’, ‘signals’ and ‘soundmarks’, which contributed to the structuring of soundscape studies and defining a soundscape.

The term ‘keynote sounds’ refers to the “tuning of a space” and these sounds are quite important “because they have an archetypal value and meaning and can be imprinted so deeply in the soul of the people who listen to them that life without these sounds could be perceived as an obvious impoverishment” (Radicchi, 2018:19). In a reference to Gestalt psychology, Schafer related the keynote to the background;

*The psychologist of visual perception speaks of ‘figure’ and ‘ground’, the figure being that which is looked at while the ground exists only to give the figure its outline and mass. But the figure cannot exist without its ground; subtract it and the figure become shapeless, non-existent.*

Schafer (1994:9)

The tuning of space “is created by its geography and climate: water, wind, forests, plants, birds, insects and animals” and in today’s urban areas perhaps we can call this ‘background noise’ caused by the non-stop movements of people and things, which all help us to understand that we are in the big city: traffic, the constant hums, and air conditioning.

From the same perspective, the ‘signals’ are foreground sounds which are unseen figures and are listened to consciously. These sounds carry an acoustic warning, such as bells, sirens and car horns. The term ‘soundmark’ is derived from ‘landmark’ and soundmarks are different from signals because they “stand out and hold a special meaning for a place and its inhabitants” (Radicchi, 2018:19).

This terminology has contributed to the structuring of soundscape studies, an interdisciplinary field which has gained importance in urban studies, not only as a physical concept but also in social terms. The city itself becomes a sonic tool in the urban context, with its volumes and materials which are characterized by varying levels of acoustic responsiveness (*ibid.*:23-24).

### 2.1.5 Acoustic Communication and Acoustic Communities

*... sounds exist in time, and to a large extent, they create and influence our sense of time. Therefore it is not surprising that our sense of the character or coherence of an environment is closely tied to the temporal relationships exhibited by sound.*

Truax (1984:69)

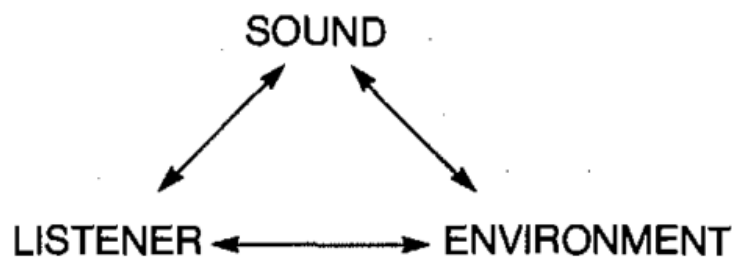
The composer and researcher Barry Truax was one of the leading scholars in the *World Soundscape Project* (1970-1975) at Simon Fraser University. In *Acoustic Communication* (1984), he introduced a new approach to the sound phenomenon. The term ‘acoustic communication’ “is the most general way to describe all of the phenomena involving sound from a human perspective” (p.xi). The human perspective or the human experience, as was explained in Chapter 2, occupied a central position in research into post-war society. In this current chapter, sound is associated with physical movement and the motions of everyday life. As a principal feature of the urban concept, temporality re-creates urban rhythms and the city’s soundscapes. Consciously or unconsciously shared sonic experience in everyday life establishes its own ‘acoustic community’. By that, Truax meant that

*... acoustic cues and signals constantly keep the community in touch with what is going on from day to day within it. Such a system is ‘information rich’ in terms of sound, and therefore sound plays a significant role in defining the community spatially, temporally in terms of daily and seasonal cycles, as well as socially and culturally in terms of shared activities, rituals and dominant institutions. The community is linked and defined by its sounds. (ibid.:58)*

Just like Schafer, Truax stressed the unique and historical importance of soundmarks, which are the most striking components of the acoustic community. These most powerful and loudest sound signals define the acoustic boundaries of the community;

*... since all within these profiles have the shared experience of hearing them, and nearly any definition of community will include some element of a shared commonality. (ibid.: 60)*

Hearing covers 360 degrees because we are surrounded by air and therefore by sound. This affective zone is described as a soundscape. Truax's minimal diagram of acoustic communication shows the continuous relation between its elements. Each of them is a reason for the other's situation.



**Figure 2.2:** Truax: “the mediating relationship of listener to environment through sound”.

The social anthropologist Edward T. Hall (1966) divided social distance into four spheres: the *intimate* sphere, which extends for about half a meter and is shared with intimate friends and relatives; the *personal* sphere, which extends for about one meter and is shared with acquaintances; the *conversational* sphere, which extends for about four meters and allows oral interchanges with strangers; and the *public* sphere, “which is determined by the acoustic horizon and is impersonal and anonymous” (Blessner & Salter, 2007:34). The acoustic horizon comprises “the most distant sounds which may be heard in a soundscape”(Truax, 1984:60).

On the macro scale, an acoustic horizon defines the boundaries of the community; on the human body scale, a sound environment does not define a personal space but individual perception can help to establish it. Continuous space is established by sound, listener and environment. For example, a sound signal is

*... reflected from buildings, hills, or mountains and comes to the listener 'colored' by such acoustic interactions. Moreover, atmospheric conditions subtly change the character of each signaling event and provide additional weather information to those who can detect the differences. In short, the sound signal contains information about its source, its context, and its environment.*

Truax (1984:61)

These acoustic interactions eventually color the everyday life urban rhythms. Soundscape research has similarities with Lefebvre's notion of rhythmanalysis:

*Sound brings with it strong psychological implications for the way it is understood. On a larger scale of time relations, the temporal sequencing and overlay of sounds in a soundscape is crucial for their comprehension. In a coherent environment, sounds obviously can't all 'talk at once', and therefore rhythm is a key factor in the balance or imbalance of a soundscape.*

(*ibid.*:67)

The everyday life of urban space is like a stage for observing the social transformation of public space. The biggest consumers of people and goods are today's metropolises. Each day, they produce new rhythms, new ways of life in the city. So listening to urban soundscapes could be a key way to analyse this dynamic structure.

## 2.2 Sound as a Catalyst for the Production of Social Space

How does a sound produce social space? To answer this question, ongoing border struggles in the same city and in the same country could provide good examples. First, the divided capital of Cyprus is an extreme instance: the United Nations controlled green-zone has separated the two sides, Nicosia and Lefkoşa, since partition in 1974. The local community is divided on the dual basis of ethnicity and religion. But every day, Greeks, Turks, Armenians and tourists from around the world hear and listen to both church bells and the call to prayer from mosques within the borders of the medieval city (Christidis, 2015). The everyday soundscape of Nicosia/Lefkoşa's centre dissolves the imposed boundaries and the divided communities are linked to each other by the air through which the sounds travel.

A different border issue had persisted for many decades in the Korean Peninsula. At the end of the Second World War, the northern part of the country was occupied by forces from the Soviet Union and the southern part was occupied by United States forces. Since 1948, two distinct sovereign states, North Korea and South Korea, have been located on the peninsula. In 1953, an agreement to create a border barrier 250 kilometers long, and four kilometers wide was signed jointly by the People's Republic of China and the United Nations, and since then, the Korean Demilitarized Zone has maintained the distance between the two countries. But an unconventional weapon was deployed by both sides to transgress this border; loudspeakers. Propaganda broadcasts are ideological: "Giant North Korean speakers broadcast martial music and praises to the country's rulers. The South responded with popular music [K-Pop] and lectures on freedom and democracy" (BBC News, 2004). In recent decades, turning the speakers off has been regarded as a critical part of negotiations between the two countries and turning them back on again has become a response to provocations by the other (BBC News, 2018b). In April 2018, the broadcasting of propaganda ceased and

the loudspeaker war was silenced both for soldiers and for those who lived within the acoustic horizon of the border zone.

Despite devastating events, the everyday sounds in such divided lands can establish traditional rhythms and somehow sustain the cultural heritage, or enforced listening can be a weapon of a cold war.

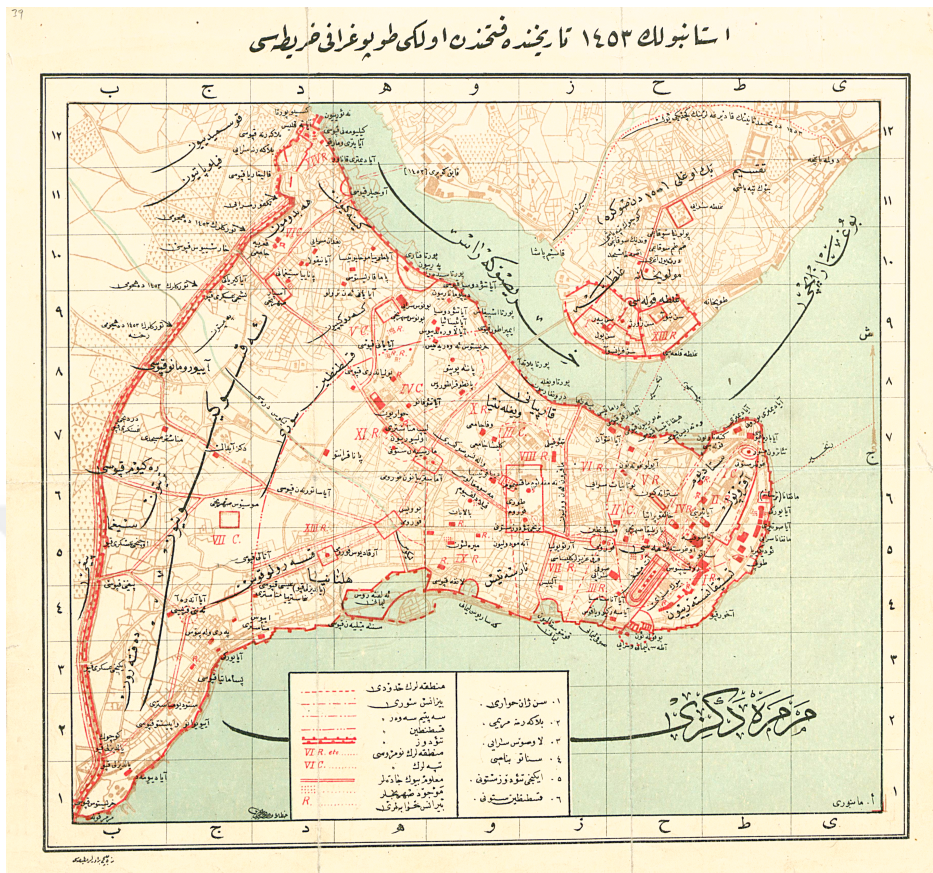
Let us turn from radical events to everyday ordinary situations; in Istanbul, a city which is divided by the Bosphorus, tunes accompany sound transportation while millions of inhabitants go about their everyday life. ‘B-E-A sharp; B-E-A sharp; B-E-A sharp’ is the melody of the ‘*akbil*’ the rechargeable public transport card, when it has insufficient funds for the price of a journey and it is frequently heard in the everyday life of Istanbul. It stays with you like an ‘earworm’, an annoying song, and the implications of the sound have a similar effect on individuals because it is the sound of an inappropriate and unwelcome circumstance. The distant but intimate relationship with the sound creates an unseen social dimension. The *akbil* sounds, the street cries, the calls to prayer, sirens and the noises of building construction establish a community on both the micro and the macro scales. Urban soundscapes are spaces, Benjamin’s porous spaces, Simmel’s doors and bridges, Stavrides’s thresholds, where the members of the community are both in and the source of the space. My purpose here is to discuss the social reproduction of space *in situ* (Thibaud, 2015) where there is interaction between things. When examining the relationship between urban sounds and spaces, it is necessary to understand that no sound event can be isolated from the spatial and temporal conditions of its physical signal propagation. Sound is shaped subjectively by the auditory capacity, attitude, psychology and culture of the listener. Soundscapes are therefore established as threshold spaces where the dynamic social reproduction of space occurs.

### **3 THE SOUNDSCAPES OF KARAKÖY AS THRESHOLD SPACES**

As was discussed throughout Chapter 2, the conceptual background of a soundscape was used in this study to evaluate how the everyday flow in Karaköy is dynamic as a soundscape.

Galata has long been an ancient port throughout the history of Istanbul and was a finance and business center of the new 'modern world'. The port has always been a gate through which things and people from all around the world pass and are encountered.

Karaköy lies on the coast of the European side of Istanbul, situated to the east of the Golden Horn facing the historical peninsula, and has constituted a transitional area between the old and the modern settlement of the city from the time of its capture by the Ottomans (Kafesçioğlu, 2013:23).



**Figure 3.1:** Topographic map of Istanbul before the conquest in 1453 by Ali Sami Ülgen (*SALT Research*)

Throughout the history of the region, which always had a vast cultural and ethnic mix, the international port for imports to and exports from the city also sustained a cosmopolitan environment (Akın, 1998:37). During the early Ottoman era in Istanbul, the demography of Galata was structured by Rums (Greeks), Muslims (Turks), Armenians, Jews and Genoese merchants, but the majority of the population of the peninsula were Muslim. In the eighteenth century, the industrial revolution and the gradual decline of the Ottoman Empire shifted its history. Newly established routes helped to settle British, French and Levantine (Mediterranean) merchants into the area. Later, with the Tanzimat reform in 1839 and the Islahat reform in 1856, non-Muslims obtained social equality (Akın, 1998). They built Galata to occupy an important place in world trade. The old city became a commercial and financial center; banks, exchanges, printing houses,



translation agencies and taverns reformed the area and Pera was established as a new residential area for newcomers. A census taken in 1885 showed that 47% of the inhabitants of Galata, Beyoğlu and Tophane were foreign, 21.8% were Muslim and 32% were non-Muslim locals (Eldem, 1992:61).

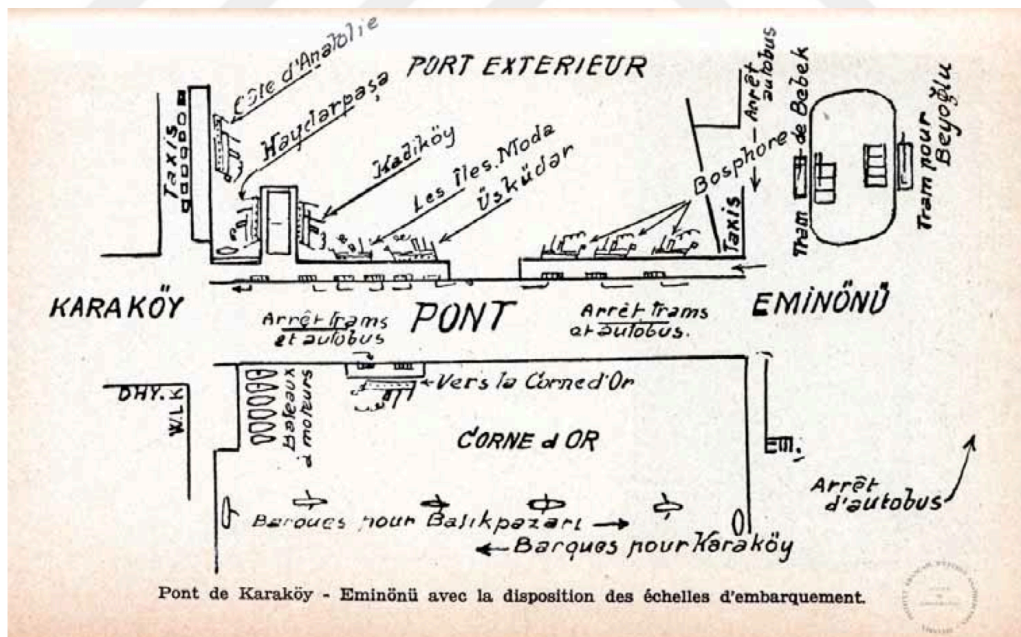


**Figure 3.2:** Constantinople. *Stamboul*. Engraved by B.R. Davies. Published by the Society for the Diffusion of Useful Knowledge in 1840. (Rumsey Collection)

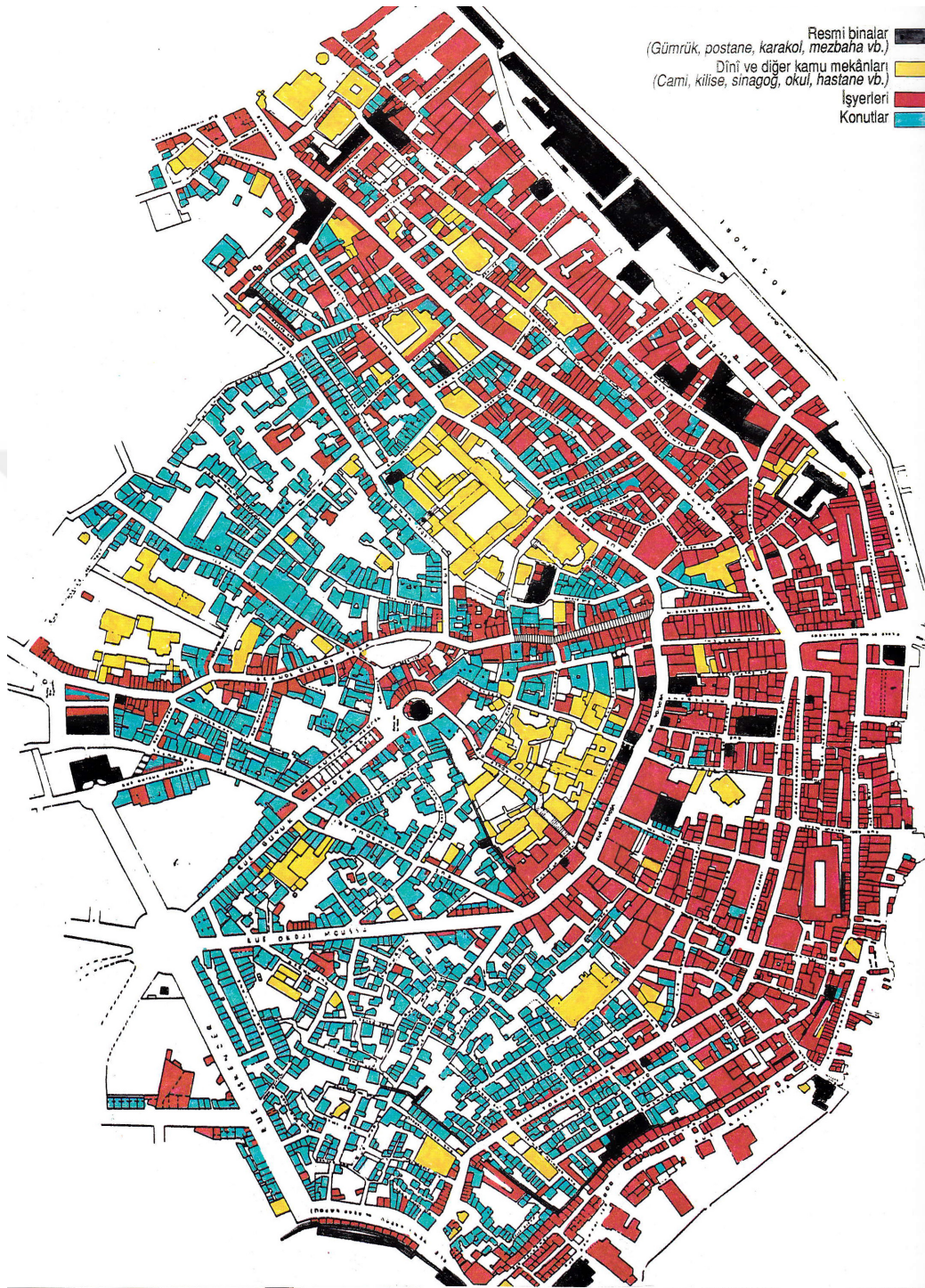
In the early nineteenth century, ships of the industrial revolution reached Istanbul's ports. On 20 May 1828, the first steam-ship, the 'Swift' entered Istanbul's waters. During the century, bridges were built (Azapkapı-Unkapanı in 1836; Galata-Eminönü in 1845), and new shipyards, ships and piers and railroads appeared (the first horse-drawn tram linking Aksaray with Galata, and the world's second subway 'Tünel' in 1874). By the end of 1895, 758 meters of quay and several new buildings had been erected between Tophane and Karaköy (see Figure 3.3) for customs offices (Kafescioğlu, 2013:31).



**Figure 3.3:** The Galata docks plan, by H. Huber 1895. The port was built in 1905. (Hastaoglu-Martinidis, 2011)



**Figure 3.4:** Mamboury, Karaköy Bridge Plan in Istanbul Guide, 1951 (Beyoğlu Haritaları, 2012)



**Figure 3.5:** An early twentieth-century Land Use map of Galata.

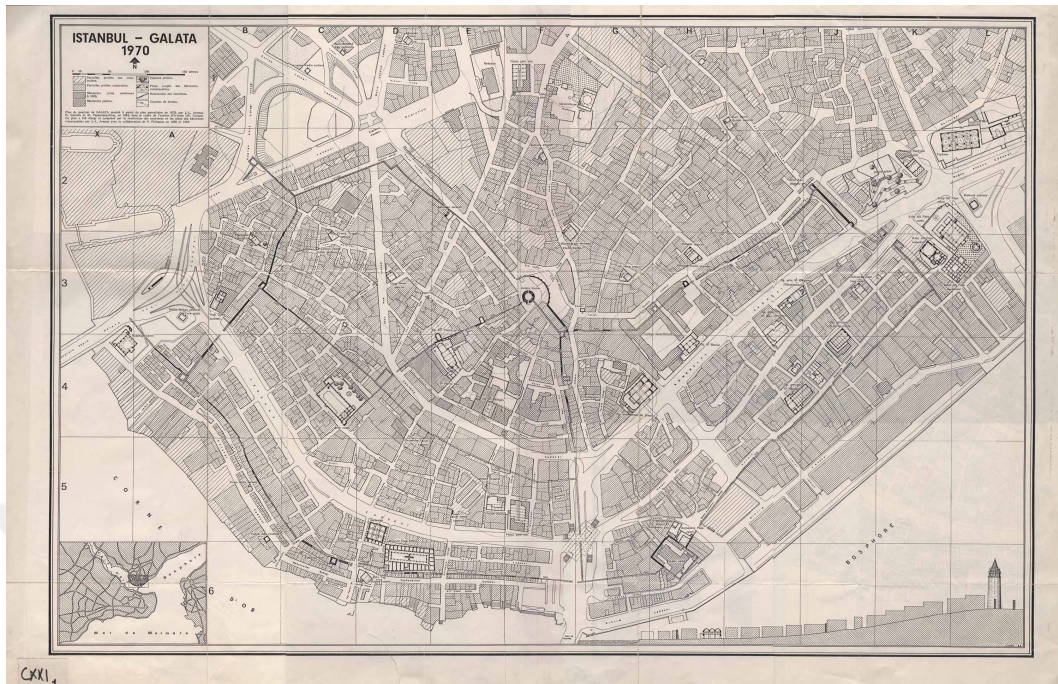
The map in Figure 3.5 was created by the historian Edhem Eldem. In the early years of the twentieth century, Galata was a center of business. On the map, the red-colored buildings are commercial, the black are governmental, the yellow are

public services (schools, churches, mosques, synagogues, hospitals), and the blue are residential areas. Before rapid urbanization started in Istanbul, residential housing in Galata had reached the walls of the old city. A fire in 1870 cleared the field for a new era in the historic port (Eldem, 1992), and within half a century, Galata was covered by commercial red.

On the other hand, one of the biggest transformations of Galata happened between 1956 and 1959 (*see* Figures 3.6 and 3.7). The new economy movement led by Menderes, the Prime Minister of the Republic of Turkey from 1950 to 1960, redesigned Istanbul. Menderes adopted the plans of the French urban planner Proust (1940) for the city almost twenty years after they had first appeared.

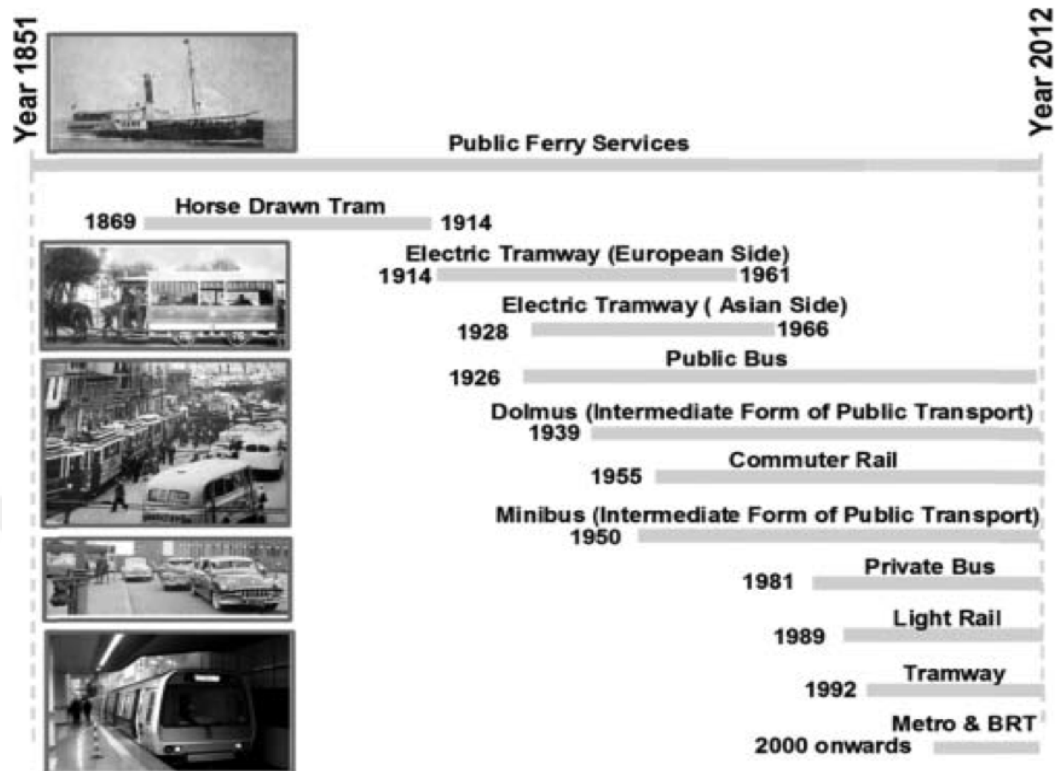


**Figure 3.6:** Topographic and Archeological plans of Galata in 1944, by A.M. Scheneider and M.Is. Nomidis (SALT Research).



**Figure 3.7:** The map shows the demolished walls of Galata and the layout of the area in 1970 (SALT Research).

Improvements occurred in road construction in the 1950s, and in the 1960s, Istanbul's tramway rails were lifted. Uncontrolled illegal settlements expanded the urban edges of the city and were later legalized by neo-liberal economic movements in 1980s (*see* Figure 3.8).



**Figure 3.8:** Historical timeline for the introduction of new technologies in Istanbul, 1851-2012 (Alpkokin *et al.*, 2016).

Political initiatives such as the Wealth Tax and Turkification Policies after the 1940s led to forced population exchanges between Turkey and Greece and caused the removal of the non-Muslim locals from Istanbul, and internal rural migration to the city dramatically changed the population ratio within a few decades. Unplanned urbanization spread after Asia and Europe were connected by two bridges in 1970 and in 1988. The urban transportation plan involved new highways and motorways. The financial center (the central business district, or CBD) moved from Galata to the Levent-Maslak district. Gradually, the old city of Galata lost its importance; Galata, along with the whole Republic, especially from the 1950s, probably experienced the most radical change: both shared the crisis in general in Istanbul and the metropolis also lost its plural identity for the first time since the Genoese era. As a result of the rapid urbanization, Galata lost its essential structures and texture. With the loss of the importance of the maritime

trade and traffic, and the shifting of the CBD to the Levent-Maslak area, it lost its functional identity. And finally, the essential element of Galata's identity, it lost its name and became Karaköy (Eldem, 1993:63).

Today Galata is facing a new wave of transformations for a series of reasons: the top-down mega-projects led by the government, despite the progressive principles of the metropolitan master plan prepared by the Greater Municipality of Istanbul; and ongoing discussions over the Salı Pazarı Cruiser Port Project: Galataport. This huge project covers an area of 400,000 square meters on the 1.2 kilometer coastline; it will change the urban fabric dramatically, just as other projects have done throughout the urbanization history of Istanbul.

The old port is still in use but with different functions. Each day, this transportation zone hosts an urban flow carried by ferries, trams, buses, the funicular and subway systems and taxis. Spatially, geographically, economically, historically and demographically Karaköy's critical position creates a kind of a movement culture. Karaköy has been the victim of political economy and the changing rhythms of the everyday reproduce the life in it. From this perspective, the flow of this dynamic space means that it can be considered as a threshold space, and because the movement of sound has created a connection between physical and social space, its soundscapes can reveal the thousands of years of urban strata.

### **3.1 Listening**

*When 'Ego' arrives in an unknown country or city, [it] first experiences it through every part of [its] body - through [its] senses of smell and taste, as (provided [it] does not limit this by remaining in [its] car) through [its] legs and feet. [Its] hearing picks up the noises and the quality of the voices; [its] eyes are assailed by new impressions. For it is by means of the body that space is perceived, lived- and produced.*

Jane Jacobs started her groundbreaking book *The Death and Life of Great American Cities* (1961) with the injunction "Please look closely at real cities. While you are looking, you might as well also listen, linger and think about what you see". This act of lingering, listening and thinking can reveal the strata of the moment which contains the whole effect. The way that sounds reach the body is multi-directional. The materiality of sound carries information about the experienced acoustic space whereas the immateriality of sound contains information about social space.

The French philosopher Jean-Luc Nancy (2007) said that "the ears don't have eyelids", meaning that we hear all around us but we listen less; another French philosopher Roland Barthes (1976:245) had earlier explained that "Hearing is a physiological phenomenon; listening is a psychological act". For the deepest understanding, this 'act' gains importance; Nancy (2007) pricked up a philosophical ear: "to tug the philosopher's ear in order to draw it toward what has always solicited or represented philosophical knowledge less than what presents itself to view – form, idea, painting, representation, aspect, phenomenon, composition – but arises instead in accent, tone, timbre, resonance, and sound". Sound carries temporal but relational information and creates shared space in a continuum because there is no such a thing as silence.

By listening, we can have intimate connections with ongoing situations in the environment. LaBelle (2012) suggested that experiences of listening can be appreciated as intensely relational, bringing us into contact with surrounding events, bodies and things. Sound shifts the borders of the private and the public (*ibid.*:5). From a similar perspective, Kate Lacey (2011) suggested "how listening might be rethought as foundational to theories of the public sphere". For her, listening is also a political act which "shifts our attention from the subjectivity of the individual to the intersubjectivity of the public, plural world" (*ibid.*:11). In a



crowd, in the silence which is kept by a community, or in response to any sound entering a space, bodies move unintentionally. Society, consciously or unconsciously recreates the social borders with sound in each moment.

In today's plural world, the most common space is there for anyone; urban streets vibrate with flow of people, the sounds of engines, with languages from all around the world. With the help of global and universal communication technologies, mass media and personal media, any space can penetrate anywhere and spaces are tuned more globally than locally.

The urban soundscapes of the twenty-first century are fluxed and intangible in everyday life. The politics of acoustic spatiality are dramatically informed by the restless, associative and linking processes of the ear (LaBelle, 2012:5). By listening, it becomes possible to perceive the urban experiential boundaries of this common space. The space for social intercourse requires a distance which is filled with air, even though we cannot see the air that fills the every moment of our lives. It is the medium for the sound which is always there and connects the whole, separately but continuously. As I explained in Chapter 2, two kinds of listening for analysing a soundscape are needed in the vast sonic sphere of the urban environment: background listening is for the lo-fi sonic environment which establishes the mostly unnoticed continuum, whereas foreground listening is for hi-fi sonic environments; it helps to define the common features of the acoustic community, such as soundmarks, and sound signals (Truax, 1984). Nonetheless, there is no such a thing as a universal approach to listening; every individual, every group and every culture listens in its own way (Augoyard & Torgue, 2008:4).

From this point of view, when I looked back over my research process between 2016 and 2018, I found that I had carried out considerable amounts of field records and undetermined soundwalks in the central zones of Istanbul. As an architect, while I was observing the public spaces, the sonic sphere which I heard

or became aware of gradually expanded over the two years. For crossing from one side of the city to the other, I have always preferred the ferries of the City Lines, particularly the Karaköy–Kadıköy line. The ferries formed the start and end points of my sound journeys and Karaköy was the junction area. My personal and professional interest in the district and its critical position helped me to determine Karaköy as a research area where the everyday flow has been passing for centuries. Therefore, when I discuss the conception of the relationship between sound, listener and environment in the field in Karaköy, I prefer to listen to the links between all the features of space, such as the rhythm, differentiation, repetition and transformation of everyday life.



**Figure 3.9.** The field research area where the soundwalks and public survey took place (Apple Maps).

### 3.2 Soundwalk

*‘Walking’ is a quite ancient condition of perception (and thinking). Under the perspective of applied aesthetics it relates to the ‘in situ’ aspect of space and place, as it appears from everyday movement. Walking has the capacity to relate to theoretical (placeless) and practical (in situ) environmental aspects.*

Winkler (2004:21)

Researchers exploring everyday life in urban sociology have been using walking practice as a research method for many years. It is a method which requires the researcher to be in the field in order to be the subject of the question. In the 1950s, Lynch conducted several *sensewalkings* and a decade later Southworth (1967) investigated “the perceptual form of the soundscape” by walking. In the 1970s, researchers on the World Soundscape Project started to use soundwalk as an established methodology (Schafer, 1977). One member, Hildegard Westerkamp (1974:18-19) defined a soundwalk as “any excursion whose main purpose is listening to the environment. It is exposing our ears to every sound around us no matter where we are”. In the urban context, several researchers used this method to analyse the experienced space (Adams *et al.*, 2008; Drever, 2009; Nilsson *et al.*, 2012; Radicchi, 2017; Uimonen, 2011; Winkler, 2004).

Walking as a tuned physical dialogue with the environment is a way of exploring the experience of listening which offers a stronger sense of community or belonging (Leus, 2011:359). In the case of my soundscape research in Karaköy, I used the two kinds of soundwalk described by Radicchi: ‘solo soundwalks’ which are the sonic exploration of an area by active listening and data collection; and ‘soundwalks with complex evaluation points’, which involve the collection of mixed data; quantitative data such as dB(A)<sup>3</sup> measurements and source definition, and qualitative data such as field recordings, psychoacoustics analyses, questionnaires and pictures.

The field records of my soundwalks were made on a ZoomH6 recorder and an X/Y microphone set to 120 degrees for a wider reception. The solo soundwalks were performed at different times of day (between 06:00 and 02:00), on weekdays, weekends and national and religious holidays. The walking distance

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<sup>3</sup> Decibels are more accurately designated by the addition of A, B or C to their abbreviation of dB. DBA indicates that the lower frequencies of the sounds are discriminated against by a weighting in the measuring instrument in a manner roughly equivalent to the human ear’s discrimination against low-frequency sounds (Schafer, 1994:39).

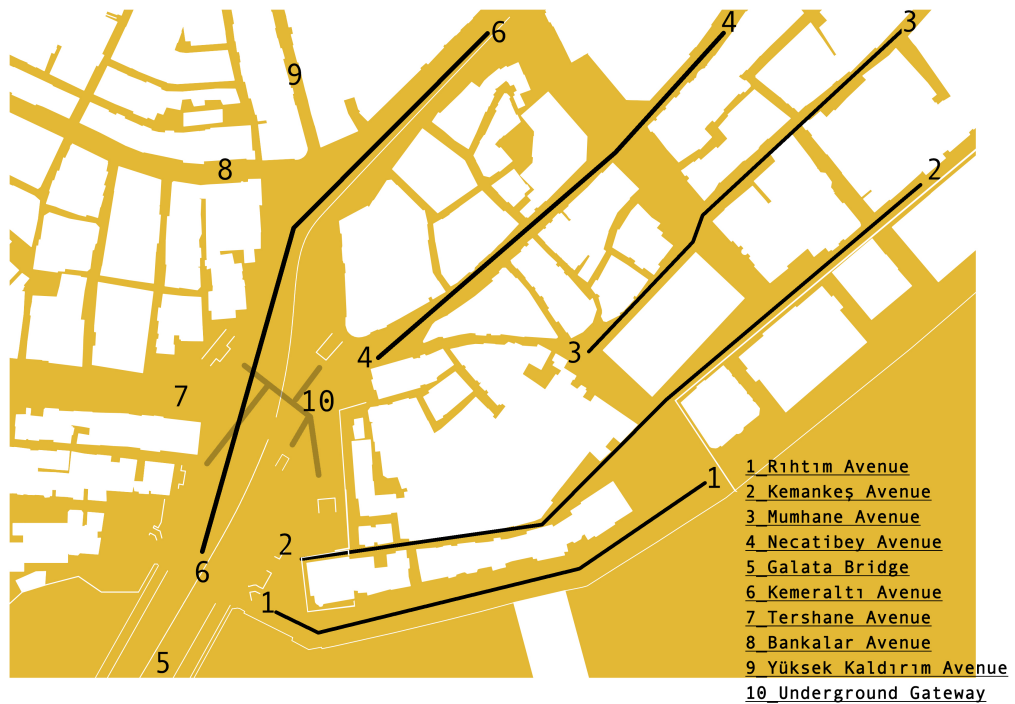
was not clearly limited (the longest walks were between ten and fifteen minutes), but were all centered on Karaköy Pier.

The everyday sonic experiences of Karaköy will be discussed by analysing the soundwalks and the analyses provided the basis for the survey questionnaire. In the first instance, the lo-fi and hi-fi sonic environments of the area changed distinctly in each street of the walk. The cut-out effect was one of the principle experiences in the street of Karaköy. Augoyard and Torgue (2005) explained how this effect refers to a sudden drop in sound intensity associated with an abrupt change in the envelope of a sound or a modification of reverberations. It is an important process of articulation between spaces and locations which punctuates movement from one ambience to another. This effect plays a crucial role in structuring the time and space perception of a listener and emphasizes the social markings of locations by sounds (Augoyard & Torgue, 2005:29-36).



**Figure 3.10** The neighborhoods of the research area.

The disastrous urban master plan implemented in four neighborhoods of Galata (see Figure 3.10) in the years between 1955 and 1959 was a critical attempt to cut the organic and historic formation of the city's streets and to demolish the buildings in the area. The radical differences in Galata's urban morphology can be clearly seen by comparing the two maps shown in Figure 3.14. The research area was confined to four neighborhoods and the Galata Bridge which connects Karaköy to Eminönü. On Kemeraltı Avenue, the continuous heavy traffic noise can be considered as a drone effect which "refers to the presence of a constant layer of stable pitch in a sound ensemble with no noticeable variation in intensity" (*ibid.*:40). Even though there are periodic stops in the flow of the traffic, they do not change the perception of the effect, and the results of the survey support this phenomenon in the affected area.



**Figure 3.11** The main roads of the research area on a sound Nollı map.

Another critical effect which changes the acoustic spatiality of Karaköy's streets is 'masking', which "refers to the presence of a sound that partially or completely

masks another sound because of intensity or the distribution of its frequencies” (*ibid.*:66). The noises of construction in the research field nullified attempts at conversation and blocked the establishment of personal space by an individual. Another everyday example of the mask effect is that stores, restaurants or a hawker’s radio play music which masks other sounds in the environment by determining their own conceptual space.

In the urban space, “repetition is one of the key expressions of any social life through the integrative role of habit forming” (*ibid.*:94). Karaköy is a transportation junction point containing different periodic sound signals such as the whistles of ferries, announcements in the stations, tramways, engine noises of buses, car horns, and the human flow through the transport axis. Augoyard and Torgue explained that the repetition effect works on two levels: it marks phenomena of automatism involving subjection; and on the other hand, it characterizes phenomena of return, reprise and enrichment by accumulation (*ibid.*:90). The dynamic movements in the field characterize the human behavior at a given moment and in a social pattern.

My soundwalks supported the approach to rhythm analysing the everyday life in Karaköy. First, walking in the streets of Karaköy is limited because cars and trams have right of way on Kemeraltı Avenue. As a pedestrian junction point, Karaköy Underground Bazaar and Gateway was planned and implemented. At the street level, the domination of traffic cuts the flow of a walker in the research area. The remaining historical pattern of the urban morphology is thus divided.

The everyday rhythms of these divided parts of Karaköy can be explained by a circular walking route. This imaginary walk starts from Karaköy Pier. The coastline serves the ferries, and cafes and restaurants mostly dominate the area, where fishermen, hawkers and street musicians seem to change their shifts according to the hours of the day. Late into the evening, the proximity to the sea keeps the movement going. Conversely, the streets located between Kemeraltı

Avenue, Kemankeş Avenue and Maliye Avenue dramatically lose their human activity late in the day because the area is generally based on commercial activities.

Following the coast along the Golden Horn, a tunnel under the Galata Bridge connects the two neighborhoods. The coast side of the Arap Camii neighborhood is named Perşembe Pazarı and has long been an old bazaar (a fish market) throughout the history of Galata. The fish market, several fish restaurants and another public ferry serving the Karaköy-Eminönü-Kadıköy and Karaköy-Eminönü-Üsküdar lines maintain the flow in the area during the day. On the other hand, there is interference from the metropolitan municipality appearing as unfinished building projects, and here there is no public use of the coastline. The majority of the flow therefore uses the area as a transfer point, rather than staying to while away time there. Local enterprises such as craft shops and hardware stores cover almost the whole area with their sprawling stands and chairs. Conversely, after being so lively during the daytime, in the evening and night hours, the streets of the area witness an absence of human activity.

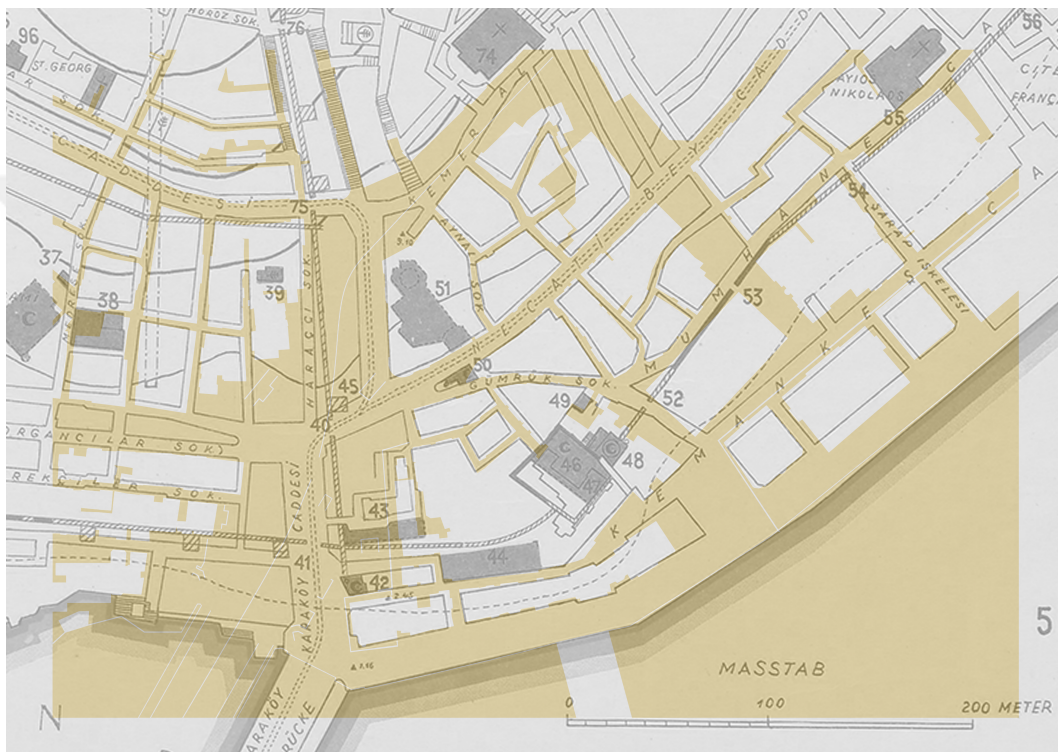


**Figure 3.12** A Google Map image showing tourist information.  
<https://goo.gl/maps/QJY97yv7wx32>

In order to go back to the Kemankeş neighborhood, the walker has to cross a road almost sixty meters wide where the tramway line passes along Galata Bridge and Kemeraltı Avenue. On this road, there are only two crossing places located at street level for pedestrians. This cuts the human flow in the area and isolates the parcels, creating a unique example of a city block, which is located between Kemeraltı Avenue and Necatibey Avenue, which has no more than its local businesses. One minute away, the walker reaches a completely different situation. The early gentrification process in the northeast of the Kemankeş neighborhood has reshaped the area, and hotels, cafes, craft shops and restaurants have replaced the local shops and businesses there in the last decade (*see* Figure 3.12). This dramatic change transformed the daily movement in the area, and increased both the day and night usages. Returning to the pier, there is a central structure, maybe not for pedestrians but for car users; a multi-storey car park is located on the junction of Maliye Avenue and Kemankeş Avenue. The function of the building is to provide 24-hour continuous car circulation in the area. The spot is also a tourist



attraction because of the traditional cake shops and fast-food chains located in the basement floor of the building. This multi-storey car park rises from the old city's demolished walls, just nearby the old Karaköy Gate (see Figures 3.13 and 3.2). Maybe the flow of the city is similar to that in former times, but the movement in it cannot find its way easily.



**Figure 3.13** The transposed maps; 1945 and today's sound Nolli map.

In Karaköy, if the walker does not arrive at the coast to hear the sounds of the Bosphorus, the route will probably end up on this wide and noisy road. The demands of the car have divided the everyday life of Galata (see Figure 3.13). The road has created new edges where people can see each other but can barely talk. On the other hand, each alley of the remaining morphology of Galata can whisper the intimacy of space.



**Figure 3.14** The continuous sound signal sources and periodic sound signal sources in the everyday life of Karaköy Pier and its surroundings (Google Earth, 2018).

Figure 3.14 shows the major sound sources which are repeated at different intervals or heard constantly during the daytime in Karaköy. At street level on Kemeraltı Avenue (2), it is difficult to talk about a reciprocal relationship between the two sides of the road. During the daytime, Kemeraltı Avenue, Tersane Avenue and Necatibey Avenue (1) carry heavy traffic (90-95 dB). For the residents, cars, vans and buses are their next-door neighbors. On the other hand, it is possible to say that their experienced noise, this background/foreground sonic environment, does somehow connect the separated neighborhoods. The communities of the area do not share what they have, but instead they share something which does not actually belong to there.

After almost two hundred years of history, the ferries of Istanbul still give you knowledge of where you are. Their steam whistles (1) vibrate around the historical peninsula and Galata within milliseconds. Yeraltı Camii (7), the

underground mosque and the old Genoese cellar maintain the chains of the Golden Horn (*see* Figure 3.1), but in today's urban space, even with loud speakers, the calls to prayer can hardly reach the coast. The reason is not just related to the higher buildings all around; the construction noise of Galataport (6) masks the voice of the muezzin, so as a solution the mosque put the volume up (in a culture in which, when the *ezan* is heard, music is silenced) and now the effect of the *ezan* is more physical than semantic.

Another dividing road, Maliye Avenue, carries the exits from the main roads to the multi-storey car park. Insistent car horns, taxis, the cry of the *değenekçi* (who keeps the pedestrian areas – illegally – or empty bays for car parking slots), and predominantly the sounds of tourists enjoying a meal outside fill the old Karaköy Gate.



Karaköy -  
Soundwalk

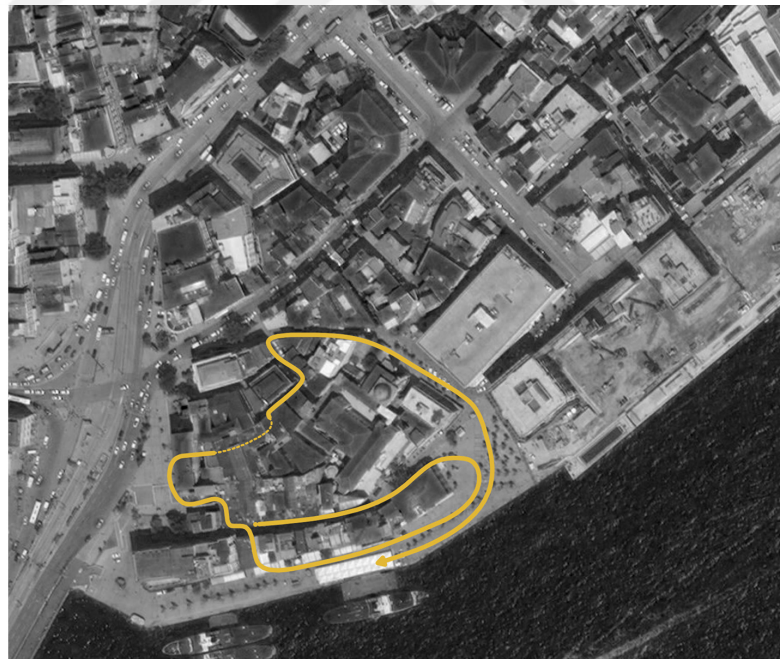
Date: 12/10/18

Time: 14:07

Duration:09:02

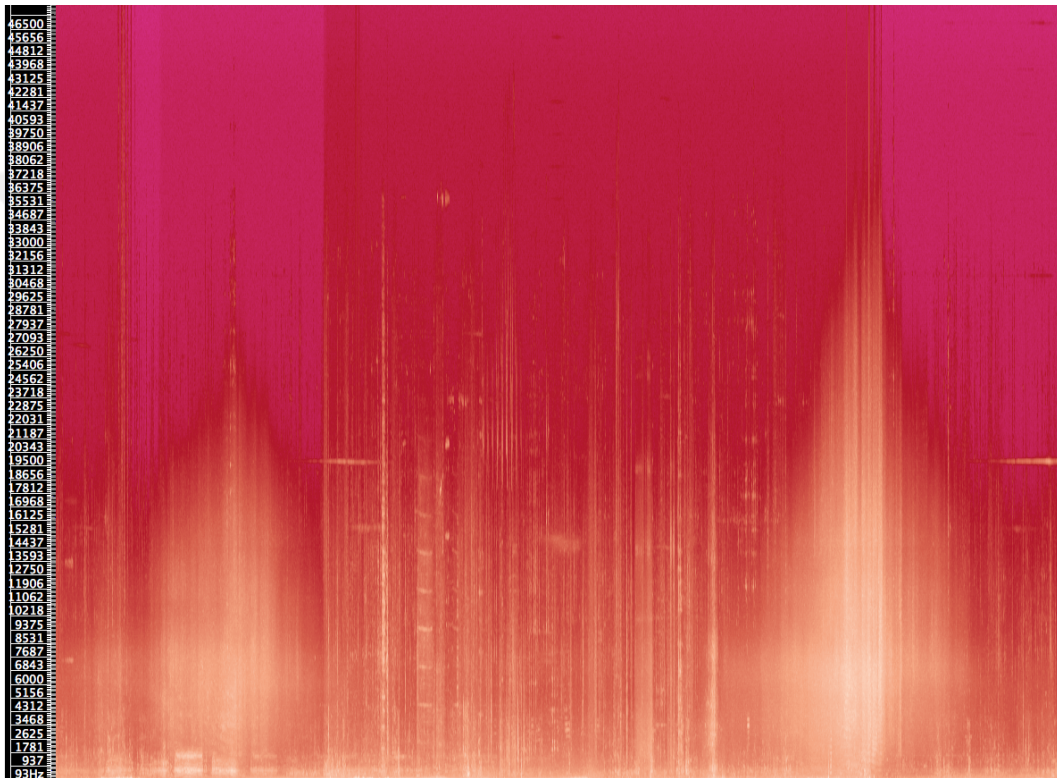
Weather: 20 C

**Figure 3.15** One of the undetermined soundwalk routes on 12 October 2018 (Google Earth, 2018).



To define the sound sources and analyse the connections between sound, listener and environment, I conducted and recorded several soundwalks. In Figure 3.15,

the soundwalk route shown (for listening, please use the qr code above or [the link](#)) traces the old street morphology. The field recording starts at the junction of Kemankeş Avenue and Rıhtım Arası Street. The construction noise from Galataport completely obscures the background sonic environment even 170 meters away from its location.



**Figure 3.16** The sound frequencies of the soundwalk field recording, the route of which is shown in Figure 3.15.

At this junction, the well-established street format makes acoustic communication easy. Conversations, music from stores and movements in the street can be clearly heard, whereas the mid-day *ezan* can barely be heard at all. The reason for this is that the historic underground mosque of Yeraltı Camii (1753) is enclosed by higher buildings and this spatial condition blocks the sound waves and creates an acoustic shadow. Getting close to Yeraltı Camii, however, the *ezan* and

continuing construction of Galatapor<sup>4</sup> dominate the other sounds in the environment. In a close position, an English conversation between two people was captured; a local and her tourist friend were talking about whether they liked the *ezan* or not. By turning right through the pier, the cut-out effect is clearly noticed; the *ezan* is silenced. On Rıhtım Avenue, the calls to prayer of the Eminönü mosques are heard from a greater distance, instead of the mosque which is in the next street. The specific sounds of the pier, conversations between locals and foreign tourists, music from restaurants, street cries, seagulls' cries, wave sounds, ferries' steam whistles and engine noises, are balanced in the late afternoon hours. The alleys on the route restrict the background noises and create a better sonic environment in contrast with unplanned or un-designed open areas. The heavy traffic on Kemeraltı Street and Necatibey Street forms the background noise of the west and northwest side of the area. Through and inside the passages, foreground sound signals are dominant, such as human activities and conversations. At the exits of the passages, the sounds of an ongoing restoration project were expanding into the alleys with the yelling of construction workers. The sound of a rollerboard comes from close by, which is a clue to the presence of a near-by hotel. On the surrounding street, (Gümrük Street), the noises of Galatapor construction and the two main roads' traffic noises combine in the background but have no important effect on acoustic communication. At the end of the street, machine noises invade the space; passers-by are trying hard to have their voices heard by one another, or their conversations stop. The noise of construction shifts from the foreground to the background on the way to the pier. Upon arriving at the pier deck, its unique soundscape determines the acoustic boundaries of the space.

The repetition of everyday movements and the repetition of soundwalks enabled me to rhythmally analyse the everyday life of Karaköy. The walks established the

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<sup>4</sup> During the research, on several days the sound pressure level was measured as 110 dB at 20 meters distance from the construction by Sound Analyzer App . For human ears, 120 dB is the pain threshold.

acoustic commons, separations, differences and connections. The findings from this everyday sonic experience were established and used as a base for the public survey in the research area.

### 3.3 Public Survey

Soundwalking and sound mapping in the way that I have described are principal and typical research methods in soundscape research. Soundscape research is about spatial experience and therefore it was necessary for the field to be experienced by researcher and also by the public. A survey questionnaire was prepared based on surveys used in previous studies described in the literature.<sup>5</sup>

The everyday experience-based research survey<sup>6</sup> targeted participants who were encountered on the street. Two different types of daily user were questioned, passers-by and locals, who might ultimately have different practices which could affect their perception of the space. The survey area centered the Karaköy Pier, both as a periodic source of everyday movement and as a soundmark of the area, and covered an area with a radius of approximately 250-280 meters. The survey area was determined by the soundwalks which were undertaken, which established the critical cultural and spatial differences.

The questionnaire (*see* Appendix A) comprised five sections: group D: Demographic parameters which could reveal cultural dynamics in general and give information about individual sound sources; group E: Everyday Practices of the subject, asking about the daily circulations and movements of participants in Karaköy; group SR: Sound Relation with the environment, to show the customs and intentions of an individual in the context of sound; group SS: Sound and

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<sup>5</sup> Engel *et al.* (2018); Hellström *et al.* (2014); Hellström (1999); Hiramatsu (2003); Kang (2006); Radicchi (2017); Zhang & Kang (2007).

<sup>6</sup> The data were collected from the experiences of the everyday users of the area and contained no personal information of the participants, such as name or identity number.

Space which asked about the personal perception of sound and the respondent's intention about sound in everyday life; and group SPS: Sound and Public Space which explored the affect and searched for answers to 'what is happening?', 'what is common?' and 'do you recognize it by sound?'. The questionnaire contained three different question types: open-ended questions were used to ask about respondents' experiences; multiple-choice questions and closed questions were used to determine the conditions for both the participant and researcher and the identification of sound sources. For a clear distinction of qualities, dichotomous answers were asked for.

The survey was completed by 66 people who were both passers-by and locals. I was exploring the everyday flow on the streets, so local participants who were invited to participating in the survey were in the street or in their shops. The passers-by were mostly approached on the transportation axes and on the shore where the pier and the densest everyday flow were located. In this study, bearing in mind the difference in usage between daytime and night-time, the survey period was limited to the afternoon hours between 13:30 and 17:30 on weekdays. Because these hours contain in part two different working shifts; one between 07:00 and 19:00 and the other between 13:00 and 01:00. The temperature levels each day were similar: 12°C to 13°C in the first week of December when the surveys were carried out.

Collecting demographic information made it possible to cross-tabulate and compare the responses of the sub-groups. From the cultural perspective, as already explained, the population of the old port dramatically changed over the last two centuries, and in the last forty years, the population of the city increased from 2,772,708 in 1980 to 13,995,000 in 2018. The 1980s were a decade in which neo-liberal political movements transformed the city. Technological investments changed people's daily practices, and habits of consumption and production were completely transformed. The urban soundscapes enabled the establishment of inevitable common spaces, but for whom, how, and what was held in common?

The survey was designed to trace the transition of personal and social rhythms from the distance of sound.

### 3.4 Sound Mapping

Traditional cartographic methods rely on static and two-dimensional reality, whereas a sound map is capable of describing a location through sound, space and time – the dimensions and the social and emotional factors related to everyday life (Radicchi, 2013:4). The morphology of Galata has been constantly changing since the nineteenth century. Comparison of the maps shown here makes it possible to discuss the dramatic transformation of the urban area and in order to question the experience of this historical part of the city, its sound layers have to be discussed for a full understanding of the current urban condition.



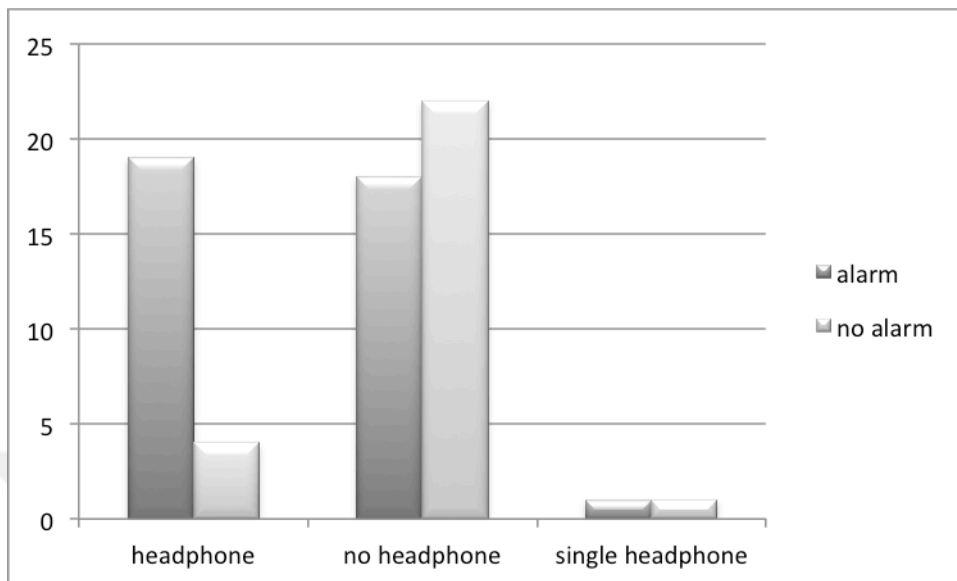
**Figure: 3.17:** An early twentieth-century Nolli map of Southeast Galata.





**Figure 3.18:** A sound Nolli map for a walker and the approximate survey points.

Here, the results of the soundwalks and the survey will be combined to enable an examination of the everyday experience of the urban condition. The aim of the sound Nolli map (*see* Figure 3.18) is to shift the ground representation to the space of sound where the flow of the city reverberates. The colored area shows the areas which any walker (white lines represent the present limitations) on the street level and by the sea can experience. Walking in the disastrously transformed built environment of Karaköy does not present a continuous relation. A walker has limited access points at the street level, which means that the public flow in the area is mandatory. The dominance of wide motorways and construction works create a common background sonic environment, but also causes the isolation of subjects even in close proximity. This situation can be clearly seen and understood from Figure 3.18. However, in experience-based research, there is a need for further investigation. Regardless of the research area, people's personal habits can reveal the behavioral attempts of the survey participants.

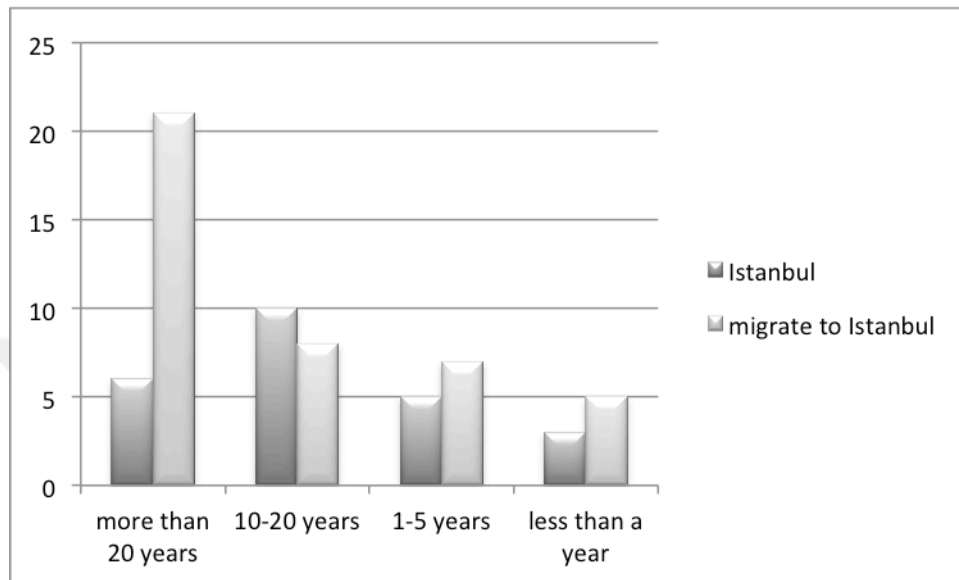


**Figure 3.19:** The participants' daily usage of alarms and headphones.

Hall (1966) defined the four communication spheres; intimate, personal, conversational and public. But sound does not behave ethically; it is always both intimate and public. The survey questions about daily usage of headphones and wake-up alarms were designed to explore the role of sound in the 'personal space' of individuals. The majority of the headphone users and non-headphone users' ages ranged between 20-40 years and 40-70 years respectively. Forty (out of the 66) non-headphone users also demonstrated a dramatic difference. Although the results show that more than half of the participants were open to the influences of the urban soundscape in their daily routine, twenty of the remaining 26 users stated that they used headphones in order to achieve isolation. As a variation in this finding, two of these 26 preferred to use a single headphone in order not to lose the connection with their environment and to control each moment.

From personal to public space, on the micro scale, individual experiences are affected by personal histories and conditions. In order to discuss the experienced space, it was necessary to question the significant movements in the city and the

everyday rhythms of the users. Galata has been affected by several major events, one of the most critical of which is migration.

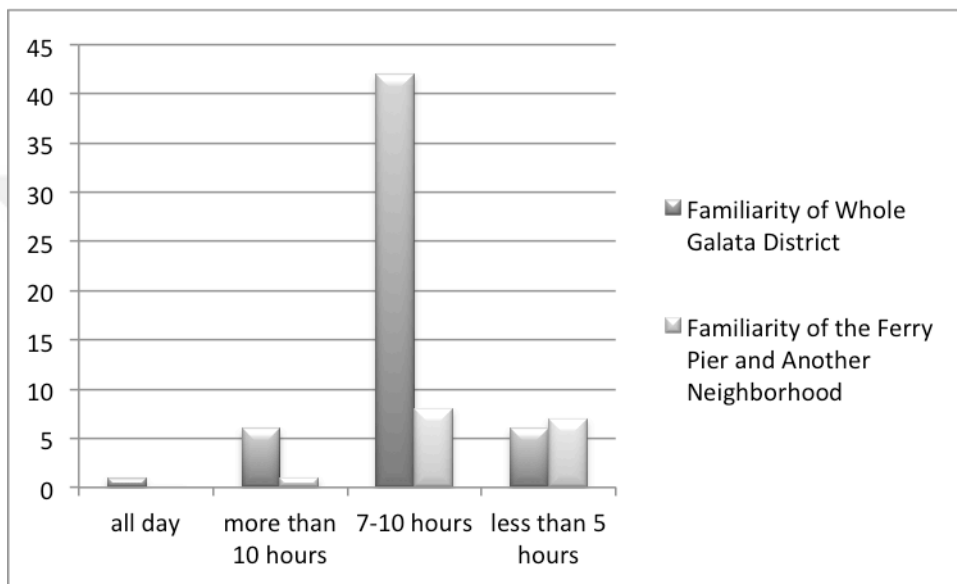


**Figure 3.20** The percentage of the participants' personal history with Istanbul.

As a dynamic sound source, the demography of the urban flow needs to be explained. Figure 3.20 traces the expanding metropolis: the 80% of the participants who had migrated to Istanbul between the 1980s and the 2000s came from nineteen different Anatolian cities, which shows a movement corresponding to the neo-liberal attempts to develop Turkey's economy. The movement of the growing population in the city also changed the demography of Galata, as the findings show. There were 9% of the participants who lived in Beyoğlu and 43.9% who travelled to Karaköy from the unplanned city growth settlements built in the 1990s (*see* Figure 1.4). Another interesting result is that only three of the 66 respondents lived within walking distance and one of them was already living on the street. This means that the locality of Karaköy was produced by distant movements.

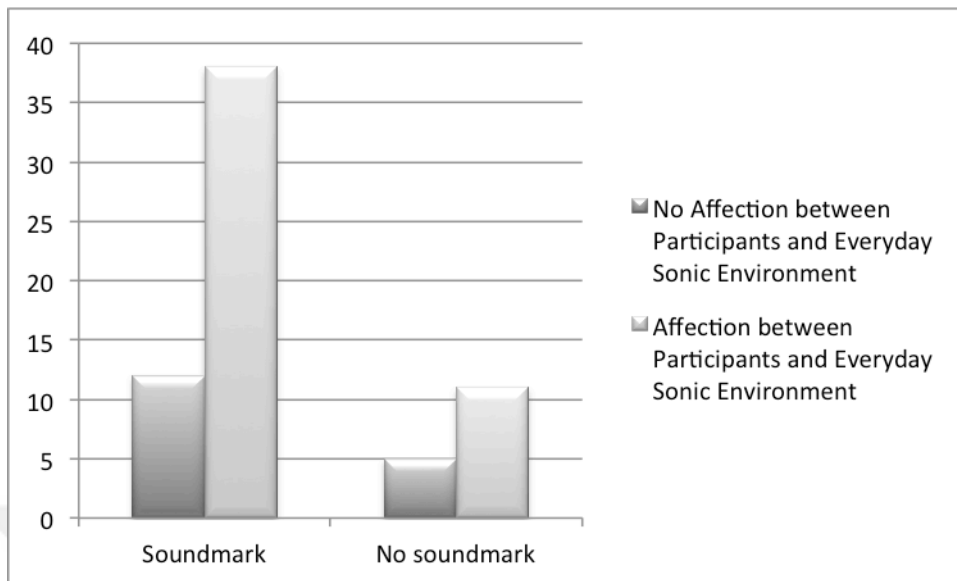
The majority of the participants worked locally in the commercial area as can be seen in Figure 3.21 and extrapolated from the numbers of hours spent in the

research area. The daily routine of the participants was directly correlated with their familiarity with Galata. The walking distance from the pier to the limits of the old Galata walls is not more than fifty minutes. The port still keeps business relations alive, but nowadays, where before the sound of gentrification obscured the field, the sound of building construction makes the streets busy.



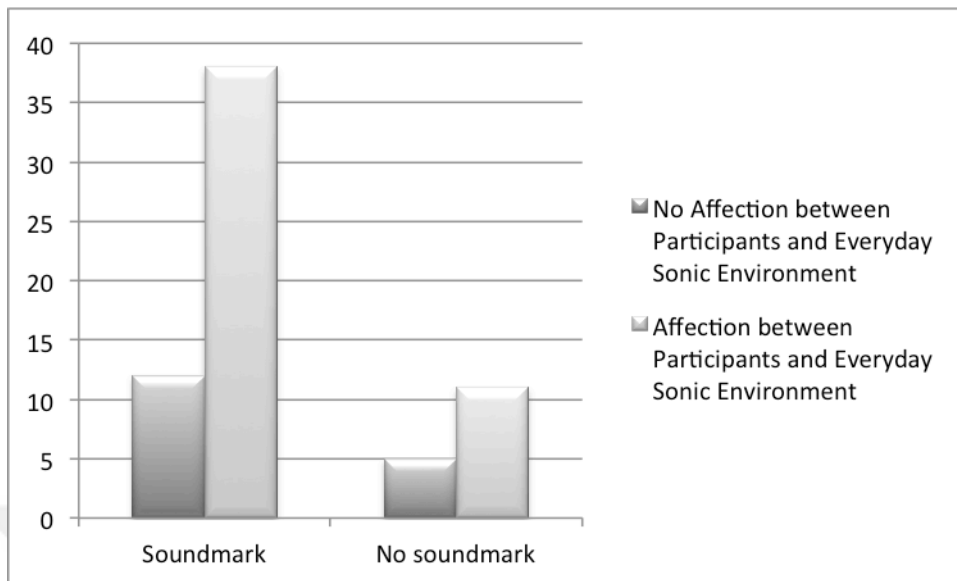
**Figure 3.21:** Numbers of hours spent on the street by participants on a weekday and how familiar they were with the area.

In the research area, 74.1% of the participants openly declared their affective relationship with the sonic environment. This proportion can support the claim that the soundscapes can be considered as physical and social threshold spaces where the commons can be created by sound. The soundmarks have a uniqueness and an historical importance for the community; they are the most influential factor for defining the space within the acoustic horizon.



**Figure 3.22:** Sound affection in the daily life of the participants.

On the macro scale, soundmarks (*see* Figure 3.23) were the principal responses of the participants in their survey locations. The dominance of the powerful sound wave of the ferries' steam whistles was a principal soundmark in the area. There were 46 of the 66 participants who stated that the whistles are a repetitive and daily sound which determines Karaköy, whereas the call to prayer was only mentioned by eight respondents and the tramway only by five. Interestingly, fifteen of the participants did not respond to any particular sound signal in the area. These results demonstrate the cut-out effect of the morphology of the built environment and the mask effect of the Galataport construction noises on the area between Kemeraltı Avenue and Mumhane Avenue. The participants who did refer to any specific repetitive sound signal as a soundmark were mostly drawing on their location knowledge and familiarity.



**Figure 3.23:** The survey responses to the soundmark questions.

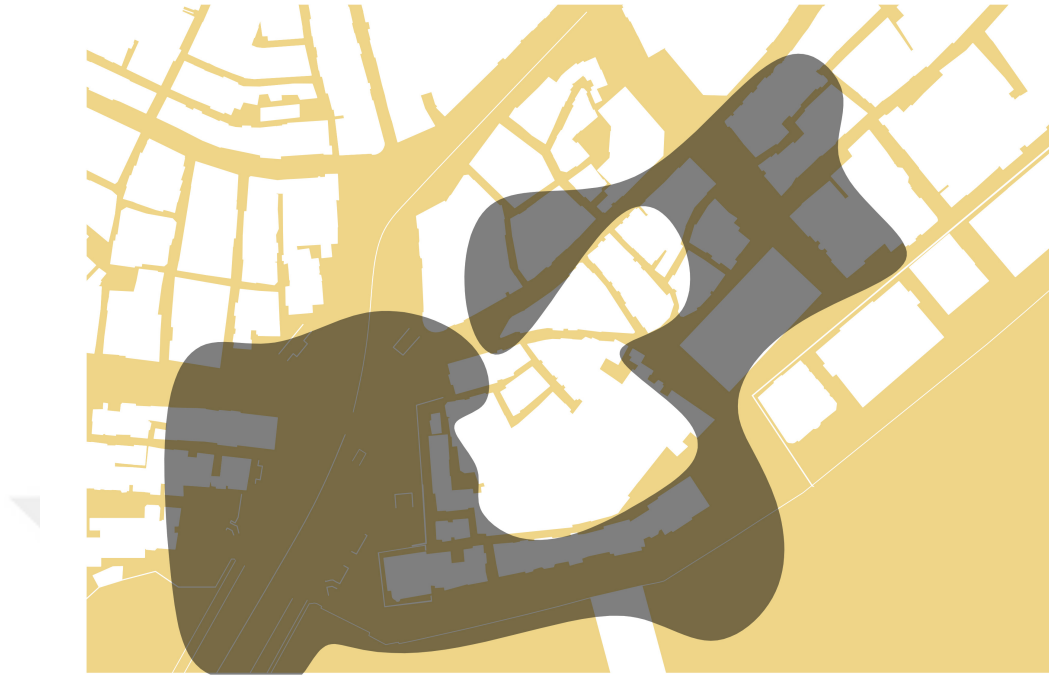
There were 51 respondents who gave examples of any particular sonic event, and 24 of them were events related to Karaköy, although only six people mentioned pleasant sounds, such as conversations, the ring of a fishing rod, and the whistles and engine noises of the ferries. Two of the 24 directly commented on their particular work space and the rest of them emphasised unpleasant sounds which are mostly everyday events, such as construction noises, muzak, high-volume ATM and café playlists, tow-trucks, dustcarts, motor horns and shouts. Two people brought up the radical event which occurred on 15 November 2003; the bombing of the Beth Israel and Neve Shalom synagogues in Galata.

Twenty-six of the 51 also gave examples of sonic events such as childhood memories, being in the country and enjoying nature, songs and their old loved ones, the atmosphere of a football stadium, thunder, factory noises, bombings, earthquakes, traffic, car accidents and sirens.

One particular question, ‘Do you think there is any place you have been that you can tell you are there even with your eyes closed?’, not surprisingly elicited positive answers; 52 participants said yes, of whom 35 mentioned particular

locations in Karaköy: the pier with the powerful sound signals; ferry whistles, announcements, the *akbil* melodies, waves, street cries, seagulls' cries and the calls to prayer all presented rich acoustic spatiality. On the other hand, for the participants who gave examples of their streets where the old urban morphology almost survived, daily conversations had a strong impact on their description of the acoustic space. Perşembe Pazarı also has various sound signals which could help to determine it for those who lived there; seagulls, fishermen's cries, traffic noises, horns, ferries, the calls to prayer, craftsmen's sounds and daily conversations. Interestingly, another soundmark of the area, the tramway, was not mentioned by any of the respondents who were questioned on the Galata Bridge. However, their feelings about the tramway were that it was accompanied by horns when the respondents were determining the spaces. At a different level, seagulls were not only heard on the shore; but on the pier, on Galata Bridge, and in Perşembe Pazarı. In the alleys where the movement is calmer than in the surrounding areas, seagulls have a particular place in the street soundscape. All these sound sources were specifically mentioned by the participants.

In reference to the survey points, the areas covered by the transparent black layer in Figure 3.24 show where the participants mentioned poor acoustic communication quality and negative feedback about their affection within a situated sonic environment. The reason for that is that foreground sound signals such as construction noises, cars, horns, traffic and high-volume calls to prayer, dominated the everyday soundscapes.

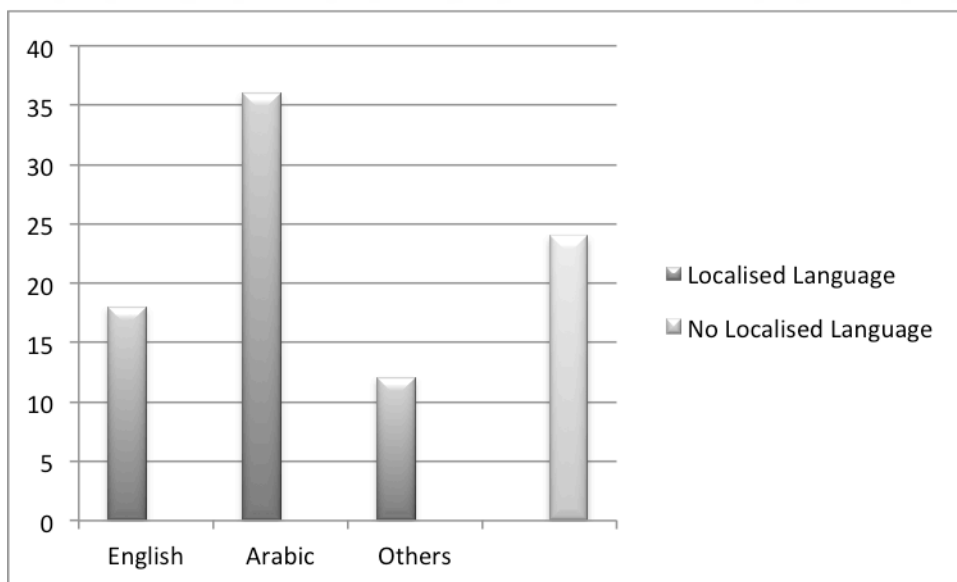


**Figure 3.24:** The area where the acoustic commination quality was declared to be poor by the survey participants.

A critical result regarding the repetition effect was in response to the question ‘In Karaköy/your street, are there any sounds which were disturbing at first but then you got used to them?’ Noises of construction were stated by eighteen respondents who were located within the acoustic horizon (approximately a 150 meter radius) of the Galataport Project. On the other hand, several participants who were mostly located in the alleys of the area answered the same question in a positive manner, citing different languages, sounds of the tramway, ferry whistles, calls to prayer, craftsmen’s sounds, street cries, fishermen, drunk people, substance addicts, seagull’s cries, and ‘*Buyrun, buyrun, buyrun*’, a repetitive street cry of invitation, generally to restaurants. In contrast, it was the sounds of street musicians which were unwelcome for local traders at the junction of Kemankeş Avenue and Kemeraltı Avenue. They did not complain about the drone effect of traffic, but about a musician’s trumpet, playing the same tune at the same time every day, which they found unbearable.



In their everyday life of Karaköy, 51 participants referred to the changing sonic environment where human and mechanical/technological sound sources dominated the acoustic space. Along Kemankeş Avenue, the participants referred to ‘silence’, meaning the smaller crowds of tourists because the international human flow had been cut out after the cruise-liner port renovation project. The same project (*see* Figure 3.23) was the reason for the masking effect which meant that people were not able to hear the ferry whistles any more. In the north-eastern part of the Kemankeş neighborhood, in the gentrified area, the sounds of craftsman working were replaced by the noises of construction, non-local languages, and the loud music played in cafes, but for some, the music had already become part of the neighborhood. In Perşembe Pazarı, the participants mentioned the absence of cries of hawkers, fishermen and rubbish collectors. There were only fifteen participants who did not declare any particular change in the field, six of whom were positioned around the junction of all axes and the rest had been participating in the everyday life of Karaköy for fewer than five years.



**Figure 3.25:** The majority of the daily-established non-local languages.

As an historical port, Karaköy was always a threshold for encountering many different cultures. The construction of the Galataport Project cut the flow of

international tourists who were arriving at the center of the city on cruise liners in an area where the small local economy mostly relied on that. The majority of the locals who had been working in the area for more than twenty years and even up to forty years said that there were many different languages, not just one or two any more. The findings of the field research showed that twenty different languages were being regularly heard by the participants; Arabic by 55 of them and English by 54, and then German by fifteen, Spanish, Russian and French by thirteen, Kurdish by twelve, Italian and Japanese by four, Chinese and Persian by three, Korean, Greek, Portuguese and Turkmen by two, and Armenian, Bulgarian and Georgian each by one. The survey results showed that 34.8% of the participants heard between one and three languages, 40.9% heard between three and five and 19.7% heard between five and eight different languages in their everyday life in Karaköy. Figure 3.24 shows the predominance of Arabic over other languages as the established language of everyday life. There are two explanations for the position of Arabic in the streets of Karaköy; the first is related to the consumption habits of Arabic speakers which can keep them in particular locations, and the second is related to forced migration from the war zone in Syria. Immigrants have also joined the everyday life of Karaköy as part of the workforce for building construction and as recyclers of the city's waste. These results highlight the routes of economic geography and the political borders which block movement between neighboring countries. Not surprisingly, the Kurdish language is not heard over a wide area; there is only one street where Kurdish can be heard regularly. In contrast, the tourist trade has already adapted to Arabic in every corner of Karaköy.

The survey participants were asked to state any generic sounds in their everyday life and the impacts which they had on them. Their responses primarily stressed unpleasant city sounds; traffic noises, horns, the sounds of building work, sirens, announcements, telephones, and people rushing. Some of them said that 'you get used to them' and they even commented on the familiarity of the space. On the

other hand, anxiety, tiredness, annoyance, numbness, tension, confusion and panic were all stated to be the effects of the everyday city soundscape.

The sound map which I developed was structured on the experience of urban spaces. Ultimately, the visualization of an experience was not the key point. In this study, I searched for the affection in everyday life and social reproduction of space. One of the final questions in the survey asked 'Did this survey influence your relationship with your environment?' Half of the participants mentioned their increased awareness of their environment after taking part in the survey, and that can be regarded as a successful part of the study.

## **CONCLUSION**

In this study, I have sought to present a critique of an urban space through its everyday sounds. By walking through the streets of modernity, as the pioneers of urban sociology did, my intention was to engage and experience the threshold between individual, public and physical space. Lefebvre (1991:130) said that space is the cradle, birthplace and medium of nature's communications and commerce with society; thus it is always fertile, always full of antagonisms and/or harmonies, so as dynamic spaces, soundscapes, which carry information from all directions, are the thresholds where the social reproduction of space is established. In this research, the interconnection between temporality and spatiality which has been created by sound is the fundamental understanding of experienced space.

In order to analyse an urban soundscape, rhythm analysis of everyday life is needed to understand the physical and cultural aspects of an unstable phenomenon: sound. Although the physical properties of space and sound establish the rhythms of daily movement, society interacts with their cultural meaning. The principal examples of everyday rhythms are soundmarks which establish a wider unseen commodity. On the other hand, as a psychogeographic

practice, the individually embodied experience of acoustic space reveals the complexity of urban situations.

As the center of the urbanization history of Istanbul, Galata and its port Karaköy are witnesses of constant change. In this physical and cultural threshold space, the results of the public survey showed that the daily movement in the area not only contains transport and tourist flows, but that the locals also move there from distant districts of Istanbul. However, the majority of the participants had migrated to the city in the last six decades, which explains the unsettled locality and the dynamic cultural migration.

A satellite image or a layout plan can demonstrate the divided morphology of the area, but on the other hand, exploring its sound layers by soundwalks showed that the distance can be heard or can be filled and created by traffic noises.

Evaluating the city as a sonic tool and mapping the urban field by sound and its effects unveiled the urban strata. The identification of sonic events and the determination of their characters in the research area, Karaköy, helped to trace the transformation of the field and its cultural heritage from today's urban condition. Experience-based research carries information about past, present and future. The sound phenomenon in the contemporary city is needed for an enhanced understanding of the urban condition and the molecular differentiation of everyday life. For this reason, urban soundscapes should be reconsidered for any theoretical and practical study in this research field.

Soundscapes separate and connect communities; the transformed morphology of Karaköy cut the sound boundaries of its community even in the same street. Heavy traffic flow during the day does not enable people to hear the same call to prayer and does not even let them keep their doors open. The remaining alleys of Karaköy carry information about everyday life in the past in the ongoing conversations between tradesmen. The construction of Galataport keeps the

shopkeepers in their stores, and they have to wait for their destiny behind closed doors.

It is not the silence of a church, but the sound of its bell which completes the sense of space, every day, at the same hour. Although the repetition of everyday background sounds provides an unnoticed adaptation, the foreground sounds with their semantic meaning (such as a street musician playing same tunes in the same location) cause a disturbance for those within its sonic sphere. Even the noise of night-time drunk fights in Karaköy become just part of the background after the first hearing, they are a complementary part of being there. As an intangible heritage, the whistles of the ferries have been resounding between Eminönü and Galata for almost two hundred years. The remaining urban morphology of Galata still sustains the long-established acoustic communication in its alleys where the community bonds are stronger. The noisy silence at the old gate will move the locals, and will put the customers with their music into the streets of Karaköy just as it has always done. Foreign newcomers will talk another language, and if they are rich enough to be everywhere in the city, the street traders will yell at them in their own language in an attempt to sell them the bottles of water in their baskets. In the background, radio broadcasts will continue to repeat what we should obey, announcements will repeat the public rules, and all of this cacophony will tell us about a city which is expanding and transforming in each moment.

Everyday sounds repeat, isolate, bound and establish new rhythms or transform the old ones; the temporality of sound reproduces the spaces which we occupy. In “the laboratory of a dynamic and stormy modernity”, soundscapes are establishing the social thresholds. If we listen to the everyday sounds, we can hear answers to how, where, when and what, or for relief from the noise we can ignore all of them and push them blissfully into the background. Maybe this is the reason why we survive in a modern metropolis, but consciously or unconsciously we adapt to the city and become a part of it. Soundscapes are, materially and socially, the spaces in which we live, and the investigation of the sonic environment by carrying out

multi-dimensional research such as this study is necessary for critical thinking about social space.

Rather than being passive receivers, we can be a sound of our own for reproducing social space in order to create new rhythms.



## Appendix A

KARAKÖY PIER and SURROUNDINGS

SURVEY NO: \_\_\_\_\_

1a

Location: \_\_\_\_\_

Date: / / \_\_\_\_\_

D1) What's your age?

Time: \_\_\_\_\_

D2) What's your occupation?

Weather: \_\_\_\_\_

dB: \_\_\_\_\_

D3) How long have you been living in İstanbul? D3a) In Karaköy?

D3a) Which city you came from to Istanbul?

D4) Where do you live?

D5) What do you do in Karaköy?

a) work b) education c) touristical d) transportation e) other

E1) Which means of transport you use to get to Karaköy?

a) ferry b) tram c) bus d) funicular e) taxi/car f) walking

E2) What times of day you spend in Karaköy?/or prefer to be in Karaköy?

E3) How much time do you spend outdoor/streets in Karaköy ?

E4) How well do you think you are familiar with Karaköy district? ?

a) Ferry pier and around b) kemankeş neighborhood c) perşembe pazarı

d) galata

2a

SR1) Do you use alarms to get up in the mornings?

a) yes b) no

SR2) Do you use headphones for any reasons?

a) yes b) no

If yes;

SR2.a) Why ?

---

SR2.a1) Do you think that using headphones affects your relationship with your environment?

---

SR3) Do you think that you are sensitive to the sounds around you?

a) yes b) no

SR4) Do you have any event that you can relate to sound? (memory, warning, panic, intimacy, togetherness)

a) yes b) no

If yes;

SR4.a)What was the event and and what were the effects of it?

---

SR4.a1) Where?

---

SR4.a2) When?

---



3a

SS1) Do you think that the sounds around you affects your relations with your environment?

a) yes b) no

If yes;

Example: \_\_\_\_\_

SS2) Do you think is there any place you've been that you can tell you are there even with your eyes closed?

aa) yes b) no

If yes;

SM2.a) Where?

SM2.b) How?

SS3) What are the everyday/familiar sounds in Karaköy for you?

SM3.a) Which sounds?

SM3.b) Where are they?

SS4) Do these sounds repeat during the day?

a) yes b) no

If yes;

SS4.a) How often?

SS4.b) What are the effects of that sound(s)?

a)info about location b)discomfort c)joy d)familiar/safe

e)other(\_\_\_\_\_)

SS5) In this street/your street, Are there any sounds that you think that is predominant?

a) yes b) no

If yes;

SM5.a)What kind of sounds are they?

a) human souce b) natural source c)mechanical - technological source

The source of the sound(s)

1:\_\_\_\_\_ 2:\_\_\_\_\_ 3:\_\_\_\_\_ 4:\_\_\_\_\_ 5:\_\_\_\_\_

distant:\_\_\_\_\_

close:\_\_\_\_\_

constant:\_\_\_\_\_

transient:\_\_\_\_\_

familiar:\_\_\_\_\_

unfamiliar:\_\_\_\_\_

3a

SS1) Do you think that the sounds around you affects your relations with your environment?

a) yes b) no

If yes;

Example: \_\_\_\_\_

SS2) Do you think is there any place you've been that you can tell you are there even with your eyes closed?

aa) yes b) no

If yes;

SM2.a) Where?

SM2.b) How?

SS3) What are the everyday/familiar sounds in Karaköy for you?

SM3.a) Which sounds?

SM3.b) Where are they?

SS4) Do these sounds repeat during the day?

a) yes b) no

If yes;

SS4.a) How often?

SS4.b) What are the effects of that sound(s)?

a)info about location b)discomfort c)joy d)familiar/safe

e)other(\_\_\_\_\_)

SS5) In this street/your street, Are there any sounds that you think that is predominant?

a) yes b) no

If yes;

SM5.a)What kind of sounds are they?

a) human souce b) natural source c)mechanical - technological source

The source of the sound(s)

1:\_\_\_\_\_ 2:\_\_\_\_\_ 3:\_\_\_\_\_ 4:\_\_\_\_\_ 5:\_\_\_\_\_

distant:\_\_\_\_\_

close:\_\_\_\_\_

constant:\_\_\_\_\_

transient:\_\_\_\_\_

familiar:\_\_\_\_\_

unfamiliar:\_\_\_\_\_

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