

THE DIRT OF ISTANBUL:
COPING WITH POLLUTION IN THE 19TH CENTURY

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF HISTORY

OCTOBER 2019

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ABSTRACT

THE DIRT OF ISTANBUL: COPING WITH POLLUTION IN THE 19TH CENTURY

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October 2019, 112 pages

This thesis analyzes the impact of political, economic, sanitary and environmental transformations in the Ottoman Empire in relation to urban pollution management in Istanbul in the 19th century. By examining this transformation in the local administration and municipal organization, it aims to underline the relationship between the Ottoman ideas of modernity and the changing perceptions of dirt and consequently cleanliness. The economic transformations and increasing commercial activities in the Tanzimat period had put a pressure on the municipal infrastructure of the imperial capital city where dirt became more visible in the urban life. Furthermore, changing sanitary discourses in the 19th century shifted the perceptions of urban pollution from something inconvenient to something formidable. Associating filth with contagious diseases like cholera opened up new channels of discussion in terms of disease prevention and waste management procedures. As such, the construction of various quarantine practices and sewer systems were the most prominent features of these prevention efforts. They were also the backbone of sanitary policies of the Ottoman government. This thesis also seeks to compare the Ottoman case with that of British and French examples of urban pollution management in London and Paris.

Keywords: urban pollution, sanitary reforms, municipal organization, modernity, Istanbul

ÖZ

İSTANBUL'UN KİRİ: 19. YÜZYILDA KİRLİLİKLE MÜCADELE

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Ekim 2019, 112 Sayfa

Bu tezde, 19. yüzyılda yaşanan siyasî, iktisadî, sıhhî ve çevresel dönüşümlerin, Osmanlı Devleti'nin İstanbul'un kirliliği ile mücadelesi üzerindeki etkileri incelenmektedir. İstanbul'un yerel idaresinde ve belediye örgütlenmesinde yaşanan değişimleri inceleyerek, Osmanlı'nın modernite nosyonu ile değişen kir ve dolayısıyla temizlik algıları arasındaki ilişkinin altını çizmeyi amaçlamaktadır. Tanzimat dönemindeki ekonomik dönüşümler ve artan ticarî faaliyetler, İmparatorluğun başkentinin belediye altyapısı üzerinde şehir hayatında kiri daha görünür kılan bir baskı yarattı. Ayrıca, 19. yüzyıldaki sıhhî söylemlerin değişmesi, şehirdeki kirliliği rahatsız edici bir olgudan korkulan bir nesneye dönüştürdü. Kirliliği kolera gibi bulaşıcı hastalıklarla ilişkilendirmek, hastalıkları önleme ve atık yönetimi uygulamaları açısından yeni tartışma kanalları açtı. Öyle ki, çeşitli karantina uygulamaları ve kanalizasyon sistemleri bu önleme çabalarının en belirginleriydi. Bunlar aynı zamanda Osmanlı hükümetinin sıhhî politikalarının da temelini oluşturuyordu. Bu tez, ayrıca Osmanlı pratiklerini İngilizlerin ve Fransızların Londra'da ve Paris'te kentsel kirlilikle mücadele uygulamalarıyla da kıyaslamaktadır.

Anahtar kelimeler: kentsel kirlilik, sıhhî reformlar, belediye teşkilatı, modernite, İstanbul

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to my supervisor Asst. Prof. Dr. Selçuk Dursun for his invaluable guidance and support in the process of writing this thesis. His meticulous critiques and unending curiosity helped me to formulate questions and problematize my ideas. Moreover, his teachings over the course of my undergraduate and graduate education for seven years assisted me to understand the environmental history perspective and shaped my approach to Ottoman history. Without his encouragement and much-treasured suggestions, I would not be able to complete this thesis. Special thanks are also due to Prof. Dr. Mehmet Seyitdanlıoğlu for his careful reading of my thesis and his constructive criticism. I am also very grateful to Prof. Dr. Ferdan Ergut for his incisive comments and suggestions which I appreciated immensely.

I owe a great deal to my aunt Prof. Dr. Dilek Ediger for her moral and material support which I benefitted considerably during my graduate education. I deeply valued her knowledge and experience in academia and her guidance helped me to overcome many difficulties in the process. Without her help, I would not be able to complete my study.

I wish to express my gratitude to my friends who shared this journey with me and whose presence motivated me to continue my research. My special thanks are due to Sefer Soydar for his valuable suggestions and comments without which I would not be able to narrow down the content of my thesis and organize my ideas. I am also very grateful to Eyüp Ensar Dal, Gülşen Yakar, Deniz Armağan Akto and Tunahan Durmaz for their friendship and the times we spent together sharing our experiences and thoughts. I benefitted greatly from our discussions on both history and life and their trust gave me the power to finalize my thesis. I am also thankful to Mertkan Karaca and Mert Cangönül for their company and our conversations which stimulated my thoughts and encouraged me to work harder.

I cherished deeply the love and support of my beloved partner and colleague Özgür Gündiken who trusted me in every step of the way and helped me to overcome numerous obstacles I came across in the process of writing my thesis. Without his endearing company, I would be a different person today.

Finally, I am indebted beyond measure to my family for their belief in me even when I questioned my abilities to finalize this thesis. Their unconditional love and support helped me to keep going even in my darkest moments. I will be grateful forever for their patience and trust in me.

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LIST OF ABBREVIATIONS

A.} AMD.	Sadaret Amedi Kalemi Evrakı
A. {DVNSAHK.İS.d	Bab-1 Asafi İstanbul Ahkam Defterleri
A.} MKT.	Sadaret Mektubi Kalemi Evrakı
A.}MKT.NZD.	Sadaret Nezaret ve Devair Evrakı
A.}MKT. UM.	Sadaret Umum Vilayat Evrakı
BOA	Başbakanlık Osmanlı Arşivleri
C..BLD.	Cevdet Belediye
DH.MKT.	Dahiliye Mektubi Kalemi
DH.UMVM.	Dahiliye Umur-ı Mahalliyye ve Vilayat Müdürlüğü
İ..MVL.	İrade Meclis-i Vala
MF.MKT.	Maarif Nezareti Mektubi Kalemi
ŞD.	Şura-yı Devlet
Y..MTV.	Yıldız Mütenevvi Maruzat
Y..PRK.SH	Yıldız Sıhhiye Nezareti Maruzat

CHAPTER 1

INTRODUCTION

Even though environmental history as a sub-discipline has been around for nearly fifty years, the Ottoman historians' interest in the subject can be considered as relatively new. This, however, does not mean that the themes of environmental history did not grasp the attention of the Ottoman historians. Topics like medical thought and epidemics, agriculture and mining, water use and natural disasters have been studied in Ottoman historiography, yet mostly with a military, political, socio-economic or cultural focus. The environmental history shifts the focus to the presence and agency of nature in historical processes¹ and it does not have rigid boundaries. Instead, it has thematic fluidity which necessitates an interdisciplinary approach that will add many tools to the toolbox of the historian. Thus, it can be said that the environmental history point of view has not been utilized within Ottoman history writing until very recently. The studies of scholars like Alan Mikhail, Sam White and Selçuk Dursun attracted scholarly attention towards seeing through the lens of environmental history.² The studies are still limited in number compared to the European and North American literature, but the increase in the number of master's theses and doctoral dissertations on the topic announces a growing field of inquiry. The emerging scholars who are interested in environmental history like Onur İnal, Aleksandar Shopov, Semih Çelik, K. Mehmet Kentel, and Mehmet Kuru and

¹ Donald Worster, "Doing Environmental History," in *The Ends of the Earth*, ed. Donald Worster (Cambridge: Cambridge University Press, 1988), 289.

² Alan Mikhail, *Nature and Empire in Ottoman Egypt, An Environmental History* (Cambridge: Cambridge University Press, 2011); Sam White, *The Climate of Rebellion in the Early Modern Ottoman Empire* (Cambridge: Cambridge University Press, 2011); Selçuk Dursun, "Forest and the State: History of Forestry and Forest Administration in the Ottoman Empire," (PhD diss., Sabancı University, 2007).

some renowned historians who take a renewed interest to the subject such as Suraiya Faroqhi, Cemal Kafadar, and Yavuz Köse create a lively field of study which further enriched with recent international conferences like the international workshops of the Network for the Study of Environmental History of Turkey (NEHT). The diversity of topics from municipal infrastructure to climate change presents a great variety of interest and contributes to the richness of the sub-discipline.

The place of the urban environment in the environmental historiography has been a subject of discussion since the duality of built and natural environments is a readily accepted phenomenon. The exclusion of the natural environment from the built environment creates several problems in the perception of nature and human. First of all, considering humans as outsiders of a natural world or parasites causing deterioration of its conditions is a problematic way of thinking since it creates a dichotomy and transforms human to something rather supernatural which we know is not the case due to the fact that the reciprocal relationship between humans and nature is one of the fundamental premises of the environmental historiography. Humans, like other living creatures on the face of the earth, can transform their environments and in return can be affected by them. Secondly, the built environment, or “artificial” structures that are created by humans instead of the forces of nature, are not considered as a part of the natural environment and thus, ignored by many scholars. Donald Worster’s arguments about the necessity of omitting the built environment from environmental history writing further elaborate these “agroecological perspectives”³:

... environmental history is about the role and place of nature in human life. By common understanding we mean by ‘nature’ the nonhuman world, the world we have not in any primary sense created. The ‘social environment’, the scene of humans interacting only with each other in the absence of nature, is therefore excluded. Likewise is the built or artefactual environment, the cluster of things that people have made and which can be so pervasive as to constitute a kind of ‘second nature’ around them. ... The built environment is wholly expressive of culture;

³ Martin V. Melosi, "The Place of the City in Environmental History," *Environmental History Review* 17, no. 1 (1993): 3.

its study is already well advanced in the history of architecture, technology, and the city. ... Thus, when we step beyond the self-reflecting world of humankind to encounter the nonhuman sphere, environmental history finds its main theme of study.⁴

It is also problematic to consider the built environment as a separate entity from the natural environment since the forces of nature are present in and have an impact on these artificial environments as well. Human beings utilize natural materials to transform their environments. Moreover, they consider geographical and climatic factors when constructing those “artificial” habitats. In return, the built environments affect the natural environments nearby or even the environments that are located thousands of kilometers away if we consider the developments in the 21st-century world. Thus, it will be unreasonable to advocate the removal of the urban environment from environmental history writing since the built environment cannot be thought separately from the “nonhuman” world:

... while the built environment is expressive of culture, it is not wholly expressive of culture, since upon its creation it is part of the physical world, and whether we like it or not, interacts and sometimes blends with the natural world.⁵

The urban environment is a useful medium to understand the reciprocal relationship between humans and their environment. Cities, where dense populations are concentrated in relatively small spaces, create certain problems in their own right. One of the biggest issues that cities have to deal with has been the problem of pollution. Urban pollution – air, water, soil, and more recent ones like noise and visual – can be defined as “the product of the interaction among technology, scientific edge, human culture and values, and the environment.”⁶ Filth has always been a nuisance in the everyday lives of city dwellers whether being aesthetically displeasing or as a health hazard. From the perspective of administrators, on the other hand, dirt had political and economic implications. As Martin V. Melosi argued, the

⁴ Worster, “Doing Environmental History,” 292-293.

⁵ Melosi, “The Place of the City,” 4.

⁶ Joel A. Tarr, “The Search for the Ultimate Sink: Urban Air, Land, and Water Pollution in Historical Perspective,” *Records of the Columbia Historical Society* 51 (1984): 1.

study of urban pollution with a focus on its political, economic and physical implications can help the researcher to understand “the changing nature of the cities themselves, including the impact of industrialism, the changing quality of life, and the resulting aesthetic milieu.”⁷

The Ottoman Empire had gone through a series of changes within its social, economic, political and military structures in the 19th century. The processes of the Ottoman modernization had roots in the previous centuries and evolved into a full-blown reformation period in the 1800s. Sending diplomatic envoys to European countries at the end of the 18th century indicates that the Ottoman government took action to gather information about the European methods and modes of thought. Moreover, the Ottoman government began to invest in foreign expertise in the 18th century with the help of officials like Comte de Bonneval, later known as Humbaracı Ahmed Paşa, and Baron de Tott. Reforming the military structure was the initial phase of the Ottoman modernization and an indicator of the Ottoman mindset which prioritized its military strength as a remedy for its loss of power in the international arena. This Ottoman interest to the military expertise of foreign officials, however, was expanded towards other areas such as education, diplomacy and administration within the course of the 19th century since the government realized the need for a political, economic and technical infrastructure to support its military reforms. While the Ottoman efforts to reform its internal structure intensified in the course of the 19th century, the Empire’s internal struggles and military distress prevailed. The Ottoman-Egypt conflict, the Crimean War and the Russo-Turkish War had particular importance in terms of the restructuring of Istanbul’s municipal organization. The scope of this thesis is limited to the analysis of the transformative processes that had somewhat affected the urban governance of Istanbul in general, and its fight against pollution in particular. Therefore, the center-periphery relations in the 19th century are not included in the analysis. In short, both internal and external factors played important parts in the process of the establishment of a modern municipal organization in Istanbul and it is beneficial to keep in mind those contributing causes

⁷ Martin V. Melosi, "Urban Pollution: Historical Perspective Needed," *Environmental Review: ER* 3, no. 3 (1979): 37.

and larger processes like modernization and centralization in order to understand more parochial alterations happened in the course of the given century.

At this point it is important to note that Istanbul had a different status than other Ottoman cities, more specifically other port cities in the Eastern Mediterranean. Thus, it had been subjected to different practices and had certain privileges from time to time such as tax exemption. Moreover, it is difficult to separate the local authority from the central government in the case of Istanbul's administration since the grand vizier and even the Sultan were involved in the decision-making mechanism for capital's municipal organization.⁸ Moreover, Istanbul's administrators were directly subjected to the grand vizier without an intermediary structure which was present in the provinces.⁹ It will be seen later in the chapter that Istanbul even had its own municipal law (*Dersaadet Belediye Kanunu*) which was codified in 1877. Therefore, it is important to keep in mind that the local administration of the capital city cannot be thought as a separate entity from the central government. Thus, it should be evaluated in conjunction with larger processes of centralization and westernization.

The 19th-century transformations within the political, economic and social structures of the Ottoman Empire have been analyzed in conjunction with the Empire's increasing interaction with the West. Approaches to the late Ottoman history have been gone through several phases where the interpretations of the Tanzimat reforms have tried to establish certain causal mechanisms in their analysis. Cem Emrence categorized those approaches under three headings: modernization perspectives, macro models and post-structuralist approaches. The modernization perspectives advocated a progress-based understanding of history which included the perception of "West as a civilizational resource of universal value".¹⁰ Thus, they emphasized a certain trajectory where Westernization has been considered as its final destination.

⁸ Robert Mantran, *17. Yüzyılın İkinci Yarısında İstanbul, Kurumsal, İktisadi, Toplumsal Tarih Denemesi* (Ankara: Türk Tarih Kurumu Basımevi, 1990), 117.

⁹ Mantran, 119.

¹⁰ Cem Emrence, "Three Waves of Late Ottoman Historiography, 1950-2007," *Middle East Studies Association Bulletin* 41, no. 2 (2007): 138.

The macro models have based their arguments on the process of capitalist expansion and the economic integration of the Ottoman Empire into the world economy. The post-structuralist approaches, on the other hand, underlined the negotiation processes between the Ottoman government and its subjects and utilized more multi-dimensional perspectives in terms of the “nature of state-building”.¹¹ In other words, by employing an understanding based on the bargaining relations between various interest groups within the Empire, they adopted a more balanced approach instead of top-down analyses. The objective of this thesis, however, is to analyze the impact of political, economic and sanitary transformations on the perceptions of urban pollution and to elaborate the measures taken by the Ottoman government to prevent it. While doing this, the main focus will be on the acts of state which leads us to a more state-centered approach, yet the requests and complaints of the city-dwellers and the criticisms of the printing press will be taken into account to have a wider perspective. Moreover, the self-imagination of the Ottoman government and their own views of modernity will constitute a guideline for the analysis of the pollution prevention efforts of the state elite. Thus, I find it necessary to point out that the concepts of “modernization”, “westernization” and “civilization” used in this thesis represented the Ottoman self-conceptions and their world views in the 19th century and are not related to the arguments of modernization approaches.

Michael Mann defines two forms of state power; despotic and infrastructural.¹² The despotic power is defined as the actions of state elite that do not require an “institutionalized negotiation with civil society groups.”¹³ However, the despotic power has not always been synonymous with the capacity of the state to enforce its decisions. Mann’s brilliant conceptualization of the state’s “infrastructural power” underlines the issues of early modern empires who tried to regulate their societies or extract resources. Infrastructural power is defined as the “the capacity of the state to

¹¹ Emrence, 144.

¹² Michael Mann, “The Autonomous Power of the State : Its Origins, Mechanisms and Results,” *European Journal of Sociology* 25, no. 2 (1984): 185.

¹³ Mann, “The Autonomous Power,” 188.

actually penetrate civil society, and to implement logistically political decisions throughout the realm.”¹⁴ Thus, the power of binding regulations has been bounded to the power to execute those rules. The Ottoman government’s efforts to combat with pollution in the 19th century can be analyzed within this conceptual framework. Even though the Ottoman state issued numerous regulations and tried to establish an administrative framework for Istanbul’s municipal organization, there were frequent problems in their implementation. Moreover, further examination of the solutions offered by the government to these executive difficulties will underline the dimensions of the Ottoman infrastructural power. Thus, I intend to apply the conceptual framework of Michael Mann’s theory of state’s autonomous power to the Ottoman context in terms of the Empire’s efforts to combat with urban pollution.

In this thesis, archival materials were utilized in order to draw a comprehensive picture of the 19th century and to have a firmer grasp on the mind-set of the Ottoman government officials. The usage of a couple of newspapers, on the other hand, enriched the narrative by including contemporary perceptions about the municipal transformation in general and urban pollution in particular. Moreover, several photographs and caricatures were added to the study in the interest of the visualization of the narrative. Finally, memoirs and travel accounts were used for the multiplication of contemporary points of view by including the ideas and experiences of foreigners who visited Istanbul in the 19th century.

This thesis is divided into three chapters that are touching upon different implications of pollution for the Ottoman government. In the first chapter, pollution is analyzed in terms of its political impact and the role of ideology on its management. The desire of the Ottoman government to create an image with the means of modernity had found its reflection in the reorganization of Istanbul’s municipal structure. Moreover, the perception of cleanliness as one of the pillars of civilization affected the attitudes of the Ottoman officials who strived to establish a modern capital city. Thus, it will be beneficial to analyze the politics of pollution first since it had an impact on both economic measures and sanitary discourses.

¹⁴ Mann, “The Autonomous Power,” 189.

The second chapter is reserved for the analysis of the economy of pollution. The processes of industrialization and expansion of the capitalist economy created particular urgent needs regarding the municipal infrastructure of the Eastern Mediterranean port cities. The pressure of the increasing volume of trade and population growth necessitated an intervention to the existing municipal organization. Moreover, the financial burden of the reorganization of the urban administrative structure pushed the Ottoman government to find new revenue sources and created a constant struggle to improve its finances in order to deal with the urban pollution.

In the final chapter, the sanitary aspect of the Ottoman fight against urban pollution will be examined. Changing sanitary discourses in the 19th century can also be traced through the transformation of the Ottoman perception of filth. The establishment of the quarantine at the beginning of the century was followed by the sanitary reform movement, especially after the 1850s. The miasmatic understanding of diseases affected the approach of the government to the filth and had an impact on the methods of cleaning and waste disposal in Istanbul. Moreover, with the “bacteriological revolution”¹⁵ in the 1880s, the scientific ways of cleaning and sanitary practices based on the germ theory of disease gained prominence in the Ottoman Empire. All these changes had formed the perceptions of urban pollution and affected the cleaning work of the capital city.

¹⁵ David S. Barnes, *The Great Stink of Paris and the Nineteenth-Century Struggle against Filth and Germs*, (Baltimore: The Johns Hopkins University Press, 2006), 4.

CHAPTER 2

POLITICS OF POLLUTION

Steven Rosenthal argued that the only concern of the central government was to ensure the continuity of provisions and the government's main emissary in the city, the kadi, was solely responsible for maintaining a constant supply of provisions, checking their prices and solving conflicts.¹⁶ Even though it is an undisputable fact that the Ottoman government attached a great importance to the provisioning of its capital city¹⁷, it would be an exaggerated statement to say that its only concern was directed towards the marketplace. The interest of the Ottoman government towards an organized and well-functioning city did not begin in the *Tanzimat* period. The Ottoman administration had always shown an effort to regulate the city and to establish a neat urban administrative system. Ottoman city authorities had strived to keep the city clean, to prevent fires and epidemics and to provide clean water. However, Ottoman cities did not always have an efficient administrative structure to regulate the municipal services. In the *Tanzimat* period, Ottoman officials began to realize the infrastructural deficiencies that became obstacles on the way to a modern urban administration. Thus, they adopt certain means from their Western counterparts to overcome their inabilities.¹⁸ Therefore, it would be inaccurate to argue that before the 19th century, the Ottoman government did not have an interest in the municipal organization of its capital. It would also be incorrect to interpret the traditional system of urban administration as being indifferent to the filth of the city.

¹⁶ Steven Rosenthal, "Foreigners and Municipal Reform in Istanbul: 1855-1865," *International Journal of Middle East Studies* 11, no. 2 (April 1980): 230.

¹⁷ Mehmet Genç, "economy and economic policy," in *Encyclopedia of the Ottoman Empire*, ed. Gábor Ágoston and Bruce Masters (New York: Facts On File, 2009), 192.

¹⁸ Stefan Yerasimos, "Tanzimat'ın Kent Reformları Üzerine," in *Modernleşme Sürecinde Osmanlı Kentleri*, ed. Paul Dumont and François Geogon (Istanbul: Tarih Vakfı Yurt Yayınları, 1996), 7-8.

The Ottoman central government with the assistance of its urban representatives had been battling with pollution from very early on. It can be seen in the sea of documents including imperial decrees that government took a close interest to the cleanliness of Istanbul and forbade any and everything that might cause pollution. For example, an order to kadi from 1822 forbade leaving or dumping excess parts of sacrificial animals like their feet, head, etc. on the streets during the feast of sacrifice.¹⁹ In another example from 1746, government orders the viceroy of Üsküdar to warn a certain dairy plant not to drain its foul water into the street in order to prevent discomfort of the passers-by.²⁰ Therefore, the issue was not about awareness but about inflexible character of the administrative structure, i.e. its inability to adapt new circumstances like sudden demographic changes. There are several turning points in the history of Ottoman municipal development that had an impact on the mind-set of the government officials and of the inhabitants of the city. The Crimean War of 1853-1856²¹ and the Russo-Turkish War of 1877-1878 were among those events that brought new arrangements in the administrative and legal structure of the Empire. The establishment of the *Şehremaneti* in 1854 and the codification of the Istanbul Municipal Law (*Dersaadet Belediye Kanunu*) in 1877 are great examples to emphasize the correlation between those external factors and government action to modernize its municipal organization in Istanbul. Both of those events had caused a demographic change for Istanbul. Population of the city was increased considerably due to the presence of foreign missions during the Crimean War and migrants escaping from the disturbance caused by the Russo-Turkish War. In addition to an increase, the constitution of its population was changing since the majority of the newcomers were Europeans. It has been interpreted by scholars that the pressure put on the central government by the demands from foreign embassies and entrepreneurs made a determinative impact on the reorganization process of Istanbul's urban

¹⁹ Mehmet Mazak, *Orijinal Belge ve Fotoğrafların Işığında Osmanlı'da Çevre ve Sokak Temizliği* (Istanbul: İSTAÇ A.Ş., 2003), 247

²⁰ Mazak, 241; BOA A. {DVNSAHK.İS.d 2/152.

²¹ Mehmet Seyitdanlıoğlu, *Tanzimat Döneminde Modern Belediyeciliğin Doğuşu, Yerel Yönetim Metinleri* (Istanbul: Türkiye İş Bankası Kültür Yayınları, 2010), 3. Seyitdanlıoğlu argues that the Crimean War was one of the main factors that led to the establishment of the *Şehremaneti* in 1854.

administration. Rosenthal argued that the abolition of the *İhtisab Nezareti* was the consequence of the “[c]onstant complaints by the Allies concerning food shortages and lack of municipal facilities”²². At the same time foreign capital was pouring to the Eastern Mediterranean port cities as a result of increasing commercial relations and consequently the need for improved municipal infrastructure was growing. Ortaylı stated that proper quarantine measures for merchant ships, better hygienic conditions, enough housing facilities and regular transportation within the city were necessary improvements that the government had to make due to the increase in the volume of trade.²³ On the other hand, Zeynep Çelik suggested that the 19th-century transformation of the capital city in the name of modernization had a political agenda behind.²⁴ She also argued that all these efforts to modernize Istanbul went hand in hand with the “general struggle to salvage the Ottoman Empire by reforming its traditional institutions”²⁵.

In this chapter, I will analyze the effects of the central government’s political concerns on its fight against pollution. Moreover, I will examine the overall administrative transformation of the capital’s municipal organization in detail. The reason for this retrospective analysis is twofold. Firstly, in the 19th century, the Ottoman capital city was welcoming new concepts related with urban governance and novel ideas about the meaning of municipal service. This transformation in the intellectual habitat of the Ottoman officials and political circles were reflected on its urban administrative structure and those new ideals were concretized through its newly found municipal body, *the Şehremaneti*. However, as Ebru Boyar and Kate Fleet emphasized, Ottomans incorporated those newly borrowed ideals from the

²² Rosenthal, “Foreigners”, 230.

²³ İlber Ortaylı, *Tanzimat Devrinde Osmanlı Mahalli İdareleri (1840-1880)* (Ankara: Türk Tarih Kurumu, 2018), 125.

²⁴ Zeynep Çelik, *The Remaking of Istanbul, Portrait of an Ottoman City in the Nineteenth Century* (Berkeley : University of California Press, 1993), xvii.

²⁵ Çelik, xv.

West into their traditional structure²⁶ and created an eclectic style of municipal administration where the old and the new could co-exist side by side. Thus, it is vital to have prior knowledge about the structure of the traditional urban administration of the Ottoman Istanbul in order to understand what continued and what was changed. Secondly, the transformation of the urban administrative structure paralleled the change in the political and intellectual structures of the Ottoman Empire. The political agenda of the central government began to actualize its vision in the administrative structure. Reformation efforts also included modernization of the capital city and its municipal organization. Thus, it will be reasonable to make an analysis of the transformation of Istanbul's administration in order to construct a connection between policy and administrative change. Therefore, in the first part of this chapter, the focus will be on the administrative structure of Istanbul and its transformation during the course of the 19th century. Moreover, I will examine the cleaning work under each administration, i.e. both in the traditional system and in the municipal organization that was established in the second half of the 19th century through primary material such as newspapers, travel accounts and archival documents. In the second part of the chapter, I will discuss the impact of the central government's modernization ideal with an emphasis on the connection between the idea of modern and the meaning of dirt, or the ideal of cleanliness.

2.1 Traditional Structure of the Ottoman City Administration and Cleaning Work before *Şehremaneti*

In order to understand what had changed in the 19th century and why a change was needed we need to have prior knowledge on the Ottoman traditional urban administrative structure. Thus, before getting into the process leading to the establishment of a modern municipal organization in Istanbul in the second half of the 19th century, it will be beneficial to analyze the traditional system of urban governance and duties of related officials who had prominent roles within this structure. However, a comprehensive analysis of the traditional urban administrative

²⁶ Ebru Boyar and Kate Fleet, *A Social History of Ottoman Istanbul* (New York: Cambridge University Press, 2010), 271.

structure of the Ottoman Istanbul is beyond the scope of this paper. Instead, the system's main components that had a role in the organization of the capital's cleaning work will be examined. Thus, the main focus will be on the municipal services and providers or inspectors of those services for the purpose of coherence.

Traditional Ottoman structure of local administration depended heavily on the role of the kadi. Istanbul was divided into four administrative sections under four kadis; Istanbul and *Bilad-ı Selase* ("three towns") which included Galata, Eyüp and Üsküdar. The kadi of Istanbul was the most prominent one and hierarchically placed above the others.²⁷ Moreover, there was no permanent place for kadi to conduct his work; therefore their private houses were used as the office for the institution.²⁸ As representatives of the central government, kadis were in charge of ensuring that municipal tasks were performed properly and responsible for inspecting economic activities, and carrying out judicial duties. This wide range of fiscal, civil, judiciary and municipal responsibilities necessitated a hierarchical organization in which officials provide assistance in accordance with their ranks and positions and an agency helped kadis to enforce laws and regulations. Janissary corps filled the latter role while neighborhood imams served as a link to connect smaller urban units with the city administration. Moreover, different congregation dignitaries, spiritual leaders, notable tradesmen, guilds and charitable foundations (*vakıfs*) were among the urban intermediaries between the people and the authority.²⁹ A document from 1696 indicates the importance of neighborhood imams in the inspection of the residential quarters' cleanliness. In the document addressing the kadi of Istanbul, it

²⁷ Osman Nuri Ergin, *Mecelle-i Umûr-ı Belediyeye*, Vol. 3 (Istanbul: Istanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı Yayınları, 1995) 1266; Halil İnalçık, "Istanbul: An Islamic City," *Journal of Islamic Studies* 1 (1990): 9; Mantran, *17. Yüzyıl*, 126.

²⁸ Mantran, 126; Ergin, *Mecelle*, 1267.

²⁹ Ortaylı, *Tanzimat Devrinde*, 12-13.

was ordered that he would punish the neighborhood imams if their quarters were not clean.³⁰

Most of the municipal work was a shared duty between state representatives and city dwellers before the establishment of modern municipalities. A document from 1760 underlines the reciprocal character of pollution management in the traditional system. It was sent to the Eyüp viceroy (Eyüp *naibi*) and advised him to warn the inhabitants not to pollute their streets and continue the “old way of doing things”. According to the document, the tradesmen resided in Eyüp cease to clean in front of their shops, collect their garbage in baskets and carry it to Taşlıburun for dumping. Instead of doing so, they began to leave their trash to floodwater which dragged the waste to certain piers that were not deemed for garbage collection. Thus, the trash was piled up in these piers which people were using to commute and it was causing inconvenience. Moreover, the garbage left outside the houses was obstructing passage of people, animals and vehicles and the waste water coming from these houses was splashing and staining the clothes of passers-by. Therefore, it was ordered to kadi to increase inspections and punish people who did not obey the rules.³¹ Thus, it was a collaborative effort to keep the city functioning. Furthermore, as Ortaylı emphasized, in the traditional Ottoman city administration the role of kadi and his subsidiaries can be interpreted as exercising the power of imposing sanctions to ensure the city dwellers do their parts in terms of their municipal duties. Thus, urban administrative authorities performed as mere law enforcement agents who inspected the state of affairs and imposed penalties.³²

There were auxiliary officials who assisted kadi in his fiscal, judiciary, civil and municipal duties. A large portion of those officials belonged to the Janissary corps and performed as a law enforcement mechanism. One of the prominent figures who

³⁰ Mazak, *Osmanlı'da Çevre*, 245; “Şöyle ki; bundan sonra eğer mahallatta ve eğer cavami’ u mesacid havlılarında ve esvak u pazarda her kimin hududunda mezbele ve laşe bulunur ise imam ve müteveli ve esnaf kethüdalarının haklarından gelinmek mukarrerdir.” Ergin, *Mecelle*, 908.

³¹ Mazak, 235; BOA A. {DVNSAHK.İS.d 5/253.

³² Ortaylı, *Tanzimat Devrinde*, 127.

assisted kadi in his municipal tasks and worked as the city police was the *Subaşı*.³³ He was chosen among the Janissary corps and his duties included walking around streets, bazaars and markets to inspect their cleanliness, working with *mimarbaşı* (chief architect) to make sidewalks and old houses repaired, and maintain the order and safety of the community by wandering at night with *asesbaşı*.³⁴ *Asesbaşı* was also belonged to the Janissary corps and worked as a night watchman. He and his men were responsible for ensuring the security of the city at night. *Mimarbaşı* was the chief official who was in charge of constructing and repairing public and private buildings like palaces, mosques, houses, fountains, schools, bathhouses, aqueducts, taverns and sewers in the city. In a similar fashion to abovementioned officials, *mimarbaşı* acted as a supervisor who inspected the status of old and new buildings and gave permits to builders. In addition to these chief officials, there were many other low ranking attendants within this hierarchical organization to keep the city functioning.

Çöplük subaşısı, çerçöp subaşısı, mezbele subaşısı or *tahir subaşı* were among the names that were given to the official from the Janissary corps who was responsible for the cleanliness of the city. There were also refuse collectors named *çöp çıkaran* or *arayıcı esnafı* who worked under the auspices of the *çöplük subaşısı* (Figure 1.1.). They were granted with the garbage collection task of the city in return for an annual payment, i.e. purchase by tender.³⁵ *Arayıcı esnafı* had a pivotal role in cleaning Istanbul's dirt. They were in charge of collecting garbage from houses and from streets, animal droppings and dirt, carried it in baskets on their backs and brought it to the designated piers. They then sorted out the waste inside basins searching for coins and other valuable items. After sorting out, remaining waste was loaded to boats or barges and brought offshore somewhere near the Princes Islands and

³³ Mehmet Mazak and Fatih Güldal, *Osmanlı'dan Günümüze Temizlik Tarihi, Tanzifat-ı İstanbul* (Istanbul: Yeditepe Yayınevi, 2011), 13-14.

³⁴ Mazak and Güldal, 22.

³⁵ Ergin, *Mecelle*, 906.

dumped into the sea³⁶. They were responsible for the cleanliness of residential quarters and alleys and their job was inspected by imams.



Figure 1.1. Abdullah Frères, garbage pier in Golden Horn, beginning of the 20th century

For more specific jobs, the *çöplük subaşı* took additional fees from the government to compensate his expenses. A series of documents from 1759, 1760 and 1771 shows that the cleaning work of Yerebatan cistern was done by the *çöplük subaşı* with the aid of three thousand and seven hundred horses and two thousand and six hundred donkeys which carried the waste. In the first document dated 1759, the *çöplük subaşı* demanded his expenses to be compensated from the treasury. The second document from a year later shows that his demand was accepted, yet the amount of payment was reduced from 170 *kuruş* to 110 *kuruş*. In the final document dated 1771, the fee was finally given to the *çöplük subaşı* ten years later from his cleaning work.³⁷ This is also a great example to emphasize the problem of authorization in the urban administrative system where even a small payment would be dragged for years in between the official correspondences.

The task of sweeping and watering main roads and squares was belonged to the *Acemioğlans* (newly conscripted Janissaries). *Çöplük Subaşı* and his entourage of

³⁶ Mazak and Güldal, *Tanzifat-ı İstanbul*, 22.

³⁷ Mazak, *Osmanlı'da Çevre*, 165; BOA. C..BLD. 110/5461.

Acemioğlans cleaned designated roads in special occasions like enthronement ceremony (*kılıç alayı*), military parades, parade for Friday prayer (*Cuma selamlığı*), etc. They walked in front of the parade to ensure the cleanliness of the roads and were followed by the *asesbaşı* whose duty was maintaining the order and safety before the event.³⁸ There were records mentioning the role of non-Muslim inhabitants in cleaning major squares like *Atmeydanı* in return for tax exemption.³⁹ For example, in a document addressed to the kadi of Istanbul, it was ordered that the *Atmeydanı* would be swept and cleaned once a year while Beyazıt Square would be cleaned twice a month by non-Muslim subjects.⁴⁰ The sewers, on the other hand, were constructed, repaired and cleaned under the supervision of *lağımçıbaşı* who also belonged to the Janissary corps.⁴¹ In addition, cleaning work of the palace was done by the guild of *mezbelekeşan* who were responsible for cleaning the palace and its environs, collecting its refuse and dumping it into the sea.⁴²

Tradesmen were responsible for cleaning the marketplace. They brought their garbage to the nearest pier, which was designated for dumping, and threw it into the sea. Garbage barges in those piers carried out the collected trash to offshore and dump it in bulks. This practice of dumping waste into the sea had not been changed for a long time even after the establishment of the *Şehremaneti*. Yet, the content of the waste was strikingly different than today. It is important to note that most of the waste material was organic and easily dissolved in the water. Ashes, animal bones, fruit skin and seeds, and rags and tatters constituted the bulk of the garbage

³⁸ Mazak and Güldal, *Tanzifat-ı İstanbul*, 16; Ergin, *Mecelle*, 905.

³⁹ Mazak and Güldal, 15.

⁴⁰ “İstanbul kadısına hüküm ki: Hala mahrose-i mezburede vaki olan At Meydanı yılda bir kere ve merhum ve mağfurun-leh Sultan Bayezid Han tabe serahü havalisini ayda iki kere süpürüp pak ü tathir edegelmekte iken hala zikrolunan mahaller hayli zamandan beri süpürülmediği ilam olunmağın buyurdum ki: Çöplükbaşısı vusul buldukta kadimden ne veçhile olagelmiş ise yine ol veçhile amel eyleyüp tayin olunan zimmilere zikrolunan mahalleri süpürtüp pak ü tathir edesin. Mezbele subaşına verildi. 26 Zilkade 1293” Ergin, *Mecelle*, 907.

⁴¹ Mazak and Güldal, *Tanzifat-ı İstanbul*, 131.

⁴² Ergin, 907.

produced.⁴³ Moreover, there were many occasions when the *arayıcı esnafı* or neighboring tradesmen did not obey the rules and dumped their garbage onto piers which were used by city dwellers to commute or by merchants to load and unload their cargo. Such a case can be found in a document from 1779 which ordered the commander of the Janissaries to warn the tradesmen of Unkapanı who were dumping their trash into the Unkapanı pier which was designated to be a dock for grain trade. Thus, since accumulating waste was preventing the trade activities, the tradesmen of Unkapanı were ordered to dump their refuse into the Ayazma pier which was a dumpsite.⁴⁴ In another example from 1764, this time it was addressed to both the kadi of Istanbul and the commander of the Janissaries and ordered them to prevent the garbage men (*süprüntücü milleti*) from dumping their waste into Kumkapı pier where boatmen tied their boats. A number of boatmen gave a complaint petition to restrain garbage men from dumping the refuse into Kumkapı, Samatya, Yenikapı and Davutpaşa piers and demanded that the waste would be dumped somewhere else that would not be a nuisance neither for them nor for the passers-by.⁴⁵

Another agent which contributed to the cleaning work and at the same time polluting the streets was the dogs of Istanbul. The capital city had a high population of stray dogs on its streets where they had been fed and taken care of by the city dwellers. Charles MacFarlane described his first encounter with the dogs of Istanbul as “... swarms of starving, mangy dogs, perambulated the silent streets, giving me an opportunity on my very first arrival, to make the acquaintance of this pest of the Ottoman capital.”⁴⁶ The dogs of Istanbul have been considered as a part of the cleaning process of the city by eating the garbage on the streets. Alphonse de Lamartine stated that the first thing that he encountered in Galata was packs of dogs

⁴³ Mazak, *Osmanlı'da Çevre*, 57.

⁴⁴ Mazak, 243; BOA A. {DVNSAHK.İS.d 9/349.

⁴⁵ Mazak, 239; BOA A. {DVNSAHK.İS.d 7/144.

⁴⁶ MacFarlane, Charles. *Constantinople in 1828 : A Residence of Sixteen Months in the Turkish Capital and Provinces : with an Account of the Present State of the Naval and Military Power, and of the Resources of the Ottoman Empire*, vol.1 (London: Saunders and Otley, 1829), 493.

fighting over to eat garbage that inhabitants put in front of their doors.⁴⁷ Another European traveler who came to Istanbul in 1870s noted that dogs were the living brooms of the streets where they ate everything some of which even pigs could not tolerate.⁴⁸ However, their carcasses, in addition to horses, cats, and other pack animals, had always constituted a problem for the government as it can be understood from the plethora of documents in which the word *lâşe* (animal carcasses) had always been written right next to the words *mezbele* or *süprüntü* (both can be translated as garbage).⁴⁹ Thus, it can be said that the dogs of Istanbul cleaned and constituted its garbage at the same time.

The notion of “Islamic city” can be considered as one of the main premises of the Orientalist thought and it has been widely discussed in the literature. The over-generalized Orientalist concept of Islamic city tends to ignore cultural diversity, geography and historical context. However, the counter argument against it tends to ignore another important factor; the role of Islam in ordering the urban space. As Halil İncalcık suggested that there should be a middle ground between these two poles which pays attention to both diversity in and the impact of Islam on the urban structure.⁵⁰ It is important to emphasize that Islamic law governs not only religious and social life but also the physical space. In other words, Islamic law has a say in the organization of urban space and its governance. Thus, it is not surprising that the primary executive official of the Ottoman city was the kadi who was considered as the representative of Sharia and Islam.⁵¹ Another figure of the urban administrative

⁴⁷ Alphonse de Lamartine, *Alphonse de Lamartine ve İstanbul Yazıları*. trans. Çelik Gülersoy and Nurullah Berk (İstanbul: Yenilik Basımevi, 1971), 74.

⁴⁸ Edmondo de Amicis, *İstanbul (1874)*, trans. Prof. Dr. Beynun Akyavaş (Ankara: Türk Tarih Kurumu, 2006), 119.

⁴⁹ “Esvâk u pazarda ve mahallat aralarında, dekakin pişgahlarında mezbele ve laşe misillü müteaffin şeylerin tathiri ...” (1813) Ergin, *Mecelle*, 910; “... her birerleri mahalleleri sokakların ve cevami u mesacid cevaniblerin ve esvak u pazarı laşe ve mezbeleden tathir edüp deryaya ilka eyleyeler.” (1695) Ergin, 908; “Mahruse-i İstanbul’da vaki çarşı ve sokakların tanzif ve tathiri ve cife ve laşe ve mezabilin taşraya nakl ü ilkası babında ...” (1719) Ergin, 908.

⁵⁰ İncalcık, “İstanbul”, 21.

⁵¹ İncalcık, 15.

structure, the *muhtesib* or *İhtisab Ağası*, was responsible for performing the *hisbe* duty of ordering the good and preventing the bad. Therefore, it has been considered as “an Islamic religious office”⁵² that had a precedent in previous Islamic societies like Abbasids⁵³, Umayyad Caliphate⁵⁴ and Seljuk Empire⁵⁵. In the Ottoman structure of city administration, *muhtesib* was in charge of controlling the general manners and morals of the society, inspecting scales and measuring devices of tradesmen, checking prices, examining general health in terms of cleanliness of food and drinks sold in the markets and medical practices, etc.⁵⁶ He was also responsible for keeping the population of Istanbul under tight control by checking newcomers at the gates of the city.⁵⁷ Moreover, he had limited judicial authority over minor cases and had a close relationship with the grand vizier who took the *Ihtisab Ağası* with him in his regular inspections of markets.⁵⁸ According to Robert Mantran, *muhtesib* was primarily in charge of economic activities and consequently inspecting tradesmen.⁵⁹

According to İlber Ortaylı, the traditional system of urban administration could not provide modern municipal services which were necessitated by the changing circumstances of the 19th century.⁶⁰ The Ottoman economic structure was changing with the impact of more liberal policies and leaving its protectionist practices behind which will be analyzed in length in the next chapter. It is suffice to say for now that new conditions of the capitalist economy that was penetrating into first the Ottoman port cities and later inland required an appropriate urban structure in which modern

⁵² İnalçık, 17; Ergin defined the work of *İhtisab Ağası* as “hizmet-i diniyye”. *Mecelle*, 302.

⁵³ *TDV İslam Ansiklopedisi Online*, s.v. “hisbe,” <https://islamansiklopedisi.org.tr/hisbe>.

⁵⁴ *TDV İslam Ansiklopedisi Online*, s.v. “hisbe”.

⁵⁵ Ergin, 303.

⁵⁶ Mazak, *Osmanlı'da Çevre*, 41.

⁵⁷ Mazak, 47.

⁵⁸ Mazak, 45.

⁵⁹ Mantran, *17. Yüzyıl*, 135-138.

⁶⁰ Ortaylı, *Tanzimat Devrinde*, 125.

municipal services and an adequate municipal infrastructure would be provided. The need for regular inner-city transportation, efficient quarantine facilities and housing and improved sanitary conditions were among the reasons which necessitated the transformation of the traditional system.⁶¹ Osman Nuri Ergin, on the other hand, argued that it would have been better to keep the traditional system and preserve the authority of the kadi instead of abolishing it all together. He stated that the traditional structure of urban administration is preferable to the system established after the Tanzimat Edict since kadi was the most efficient official within the municipal organization whose place could not be filled by the *Şehremini*. He suggested that it would have been more reasonable to enhance the traditional system according to the needs of the century.⁶² It is safe to say that the financial capacity of the Ottoman government was not enough to establish an administrative infrastructure from scratch. Thus, the reformation program of the central administration could be partially actualized due to its monetary problems. The situation where the *Altıncı Daire-i Belediye* was the only municipality that could be established among the 14 districts emphasizes the financial difficulties the Ottoman government experiencing. Therefore, while it is clear that the new system could not fill the gap left by the old system, it is also true that the changing needs of the time and the changing internal structure of the government necessitated a new urban layout where modern institutions performed modern municipal services.

As it is mentioned above, cleaning Istanbul was a collaborative effort of state officials and city dwellers. The system was carried out by Janissary corps, charitable foundations⁶³, tradesmen and guilds, congregation dignitaries, and the people of Istanbul. It was supervised by higher officials like kadi, *Ihtisab Ağası*, *mimarbaşı*, *asesbaşı*, *subaşı*, and several other lower ranking officials like *çöplük subaşı* and

⁶¹ Ortaylı, 125.

⁶² Ergin, *Mecelle*, 1267-1268.

⁶³ The role of the waqfs in cleaning work of Istanbul was so comprehensive that it exceeds the scope of this thesis and necessitates a more specific research. However, it is worth mentioning that until their transfer to the *Evkaf Nezareti* in 1836, they were responsible for cleaning buildings under their control.

lağımçıbaşı. When it came to the 19th century, however, several changes were made in the structure of the city administration. The backbone of the local government kadi was stripped from his municipal duties and reduced to the status of judiciary authority within the city. Moreover, the Janissary corps who performed as a law enforcement agency under the jurisdiction of the kadi was abolished. This transformation is interpreted as a part of the modernization efforts of the Ottoman government that had roots in the 18th century and accelerated in the 1800s. In the following section, these transformations in the urban structure of Istanbul will be examined chronologically without losing the focus on bigger processes like modernization and centralization of the Ottoman state apparatus.

2.2 Towards the Establishment of Modern Municipalities and Cleaning Work under the *Şehremaneti*

When it came to the second quarter of the 19th century, the traditional urban administrative structure had lost one of its chief components. The abolition of the Janissary corps in 1826 left a void in the city administration since this military body had a major part in carrying out certain municipal services and policing work. Thus, it created an immediate need to establish a new body to perform the tasks like policing, cleaning, inspecting economic activities and maintaining order in the city. Therefore, the abolition of Janissary corps was the first step towards the establishment of a modern municipality. However, there were other factors necessitated new institutions that would serve the needs of city dwellers in the changing circumstances of the 19th century.

The Eastern Mediterranean port cities were experiencing certain structural changes in the 19th century which were causing problems that could not be solved with the traditional means of urban governance.⁶⁴ The 19th century witnessed an increase in the volume of trade for these port cities due to the penetration of the capitalist economy into the Empire, introduction of steamships, new communication technologies and rapid population growth. In addition to the population increase, the

⁶⁴ Ortaylı, *Tanzimat Devrinde*, 125.

composition of inhabitants in the Eastern Mediterranean port cities had also changed in the course of the century. In short, especially in the second half of the 19th century the Eastern Mediterranean port cities including Istanbul had experienced certain economic and demographic changes which can be interpreted as creating a desire to invest more time, money and interest in enhancing the municipal infrastructure of these cities. All these economic aspects of the change and their impact on the urban fabric of Istanbul will be analyzed in length in the next chapter. This part is reserved for the analysis of political and administrative change which started the transformation process of the municipal organization of the city.

When it came to the second quarter of the 19th century, kadi lost one of his prominent assistant bodies, the Janissary corps. In 1826, the Janissary corps was abolished with the order of Mahmud II and therefore the urban administrative structure of Istanbul lost its most important office that was very much needed to perform certain municipal tasks and enforce laws and regulations. This hole in the administrative system was planned to be filled with the establishment of a new institution called *İhtisab Nezareti*. Already-existing office of *İhtisab Ağalığı* was expanded in terms of its authority and its mission and transformed into the *İhtisab Nezareti* in the capital and *İhtisab* directorates in the provinces. This new institution was planned to conduct policing work and supervision on trade and economic activities. Moreover, it had the duty of controlling Istanbul's population increase by inspecting newcomers at the gates of the city.⁶⁵ Osman Nuri Ergin argued that the *İhtisab Nezareti* had tried to perform the duties of many institutions such as the governorship of Istanbul, *Zabtiye Nezareti*, *Şehremaneti* and even the department of finance (*Maliye Nezareti*).⁶⁶ Moreover, it was anticipated that by establishing an organization that was placed inside the centralized administrative structure⁶⁷, the order of the capital would be secured and tightly controlled. It was a part of the larger process of centralization which was one of the objectives of the Tanzimat program. However, this new agency

⁶⁵ Ergin, *Mecelle*, 342.

⁶⁶ Ergin, 1265.

⁶⁷ Ergin, 327-342.

was fell short to the expectations of the central government and was not able to fill the void left from abolishing the old system. As Ortaylı argues, *İhtisab Nezareti* was a prohibitive institution rather than a constructive one.⁶⁸ Thus, it can be said that the idea of public service and actively carrying out municipal tasks instead of only performing inspections and supervisions were still lacking within the regulations of this new institution.

It is clear from the regulation of *İhtisab Ağalığı* (1826) that the duties of *muhtesib* were preserved to a certain extent and new responsibilities were added on.⁶⁹ The same regulation suggested that members of the newly found military unit called *Asakir-i Mansure-i Muhammediye* would assist the *ihtisab ağası* just like the Janissary corps assisted *muhtesib*.⁷⁰ Yet, it is not clear that who was responsible for keeping the city clean after the *Çöplük Subaşı*, a member of the Janissary corps, was removed from the office. Ortaylı claimed that the responsibility of cleaning the city was transferred to the *İhtisab Nezareti* after the abolition of the Janissary corps and later was given to the *Zabtiye Müşiriyeti* (1846) until the establishment of the *Şehremaneti*.⁷¹ Osman Nuri Ergin also stated that the cleaning work was transferred to the *İhtisab Nezareti* in 1826 based on a sentence written in the regulation.⁷² It was stated in the regulation that the then *Çöplük Subaşı* violated his charter by forcing some of the artisans to pay tribute to him under the name of subscription fee (“ava’id”). Thus, his charter was terminated and his name was crossed out from the book (“kaydı terkin”). It was decided that the *muhtesib* would take over the duties of abovementioned *subaşı* from then on.⁷³ However, there were no specifications on the nature of the job which *muhtesib* would be responsible for. It can be assumed that the

⁶⁸ Ortaylı, *Tanzimat Devrinde*, 131.

⁶⁹ Ergin, *Mecelle*, 328-341.

⁷⁰ Ergin, 329.

⁷¹ Ortaylı, *Tanzimat Devrinde*, 226.

⁷² “...subaşılık-ı mezkur bundan böyle muhtesib canibinden idare edile,” Ergin, *Mecelle*, 912.

⁷³ Ergin, 340.

duties of the *Çöplük Subaşı* would be transferred to the *muhtesib* and the traditional system of inspection of the cleaning work continued under the authority of the *İhtisab Nezareti*. However, there was no clear information on who was responsible for the cleaning of squares and main roads which was the duty of *Acemioğlans* before the abolition of the Janissary corps. It is known, on the other hand, that the *lağımçı* guild was transferred to the Imperial Armory (*Tophâne-i Âmire Müşirliği*) after 1826.⁷⁴ Some of the archival documents point out that the kadi continued to take part in the supervision of the cleanliness of Istanbul at least until the establishment of the *Zabtiye Müşiriyeti* in 1846. One document from 1836 supports the argument that the cleaning work of Istanbul, at least of Eyüp, since the order was on the cleanliness of Eyüp, was still inspected by the kadi. In the document, it was ordered to the kadi of Eyüp that he would supervise the neighborhood imams, as it was before, to ensure that the inhabitants' who lived under their jurisdiction were keeping their streets clean.⁷⁵

After the establishment of the *Zabtiye Müşiriyeti* in 1846, the cleaning work of Istanbul seems to be transferred to this newly found institution. Many documents from the period between 1846 and 1854 (establishment of the *Şehremaneti*) concerning the cleanliness of the capital city were addressed to the *Zabtiye Müşiriyeti*. For example, a document from the summer of 1850 ordered the *zabtiye müşiri* to print posters that warn people of Istanbul about the dangers of pollution in summer months and advise them to clean in front of their doors and not to pollute their streets.⁷⁶ Another document from 1846 ordered *Zabtiye Müşiri* to prevent the coal dealers and porters from dumping their refuse into the pier near Sandıkburnu at Langa Kapısı which was designated for the use of boatmen in the area.⁷⁷ Yet another

⁷⁴ TDV *İslam Ansiklopedisi Online*, s.v. "LAĞIMCI OCAĞI," <https://islamansiklopedisi.org.tr/lagimci-ocagi>.

⁷⁵ Mazak, *Osmanlı'da Çevre*, 249

⁷⁶ Mazak, 139-141; BOA İ..MVL. 180/5396.

⁷⁷ BOA. A. } MKT. 60/10

document from 1853 ordered *Zabtiye Müşiri* to prevent people dumping their garbage into vacant lands in the city.⁷⁸

When it came to the second half of the 19th century, it can be seen that the Eastern Mediterranean cities were rapidly changing and the need to establish an organized and rationalized urban administration was more explicit than ever. The Crimean War of 1853-1856 brought many people including ally troops and refugees into the city. A sudden increase in the population of Istanbul caused certain problems in its administration. Moreover, French and British army officials filled the streets of Istanbul and most of them demanded better living conditions such as housing that would not create a fire hazard, wider streets, cleaner roads and a solid infrastructure for a more sanitary environment.⁷⁹ Therefore, the Ottoman government took a step towards establishing a modern municipal organization by constituting the *Şehremaneti* in 1854.

Şehremaneti was established by taking the French model of *Prefecture de la Ville* as an example.⁸⁰ Osman Nuri Ergin argued that the mindset of the Tanzimat officials was influenced from the Western idea that the level of civilization is measured with the condition of a state's capital city.⁸¹ Moreover, he stated that every foreign visitor of Istanbul who came from "prosperous" cities of Europe complained about the city's abysmal state. Thus, the Ottoman officials felt obligated to reform the municipal organization of their capital city towards a more Western style administration.⁸² In the regulation of *Şehremaneti* it was stated that the institution will have a city council and will be directly subjected to the *Meclis-i Vâlâ-yı Ahkâm-ı Adliyye*, the assembly which was convened in 1838 for the first time and was responsible for preparing laws and regulations to carry out planned Tanzimat

⁷⁸ BOA. A.} AMD. 47/60

⁷⁹ Ortaylı, *Tanzimat Devrinde*, 135.

⁸⁰ Mazak, *Osmanlı'da Çevre*, 86; Rosenthal, "Foreigners," 230; Ergin, *Mecelle*, 1268.

⁸¹ Ergin, 1269.

⁸² Ergin, 1269.

reforms.⁸³ Thus, it can be seen that the central government still had a firm grip on the affairs of the capital city. Moreover, *Şehremaneti* had many senior institutions to which it was subjected to. For example, it was expected to appeal to the Ministry of Finance with respect to lay and collect taxes, to the Ministry of Public Works for construction and maintenance work, and to the Ministry of Trade about the inspection of tradesmen and price control.⁸⁴ In other words, *Şehremaneti* had little authority on its own for ordering the affairs of the city, yet had a wide range of responsibilities without the necessary resources.⁸⁵ When the city council prepared a draft for a regulation, it was sent to the Sublime Porte for approval and most of the time this process took a long time. In short, even the smallest work needed a decree from the sultan and the already heavy work load was increasing each and every day. For example, a document from 1867 underlines the authorization issue of the urban administration and its lack of autonomy in its decisions. The document was about the construction and reparation of sewers of two neighborhoods in Kasımpaşa. The Porte was asking for an imperial decree from the Sultan in order to refer to the Ministry of Finance for covering the expenses of construction of a new sewer and to the Ministry of Trade to get a permission to collect fees from the inhabitants of the neighborhood to compensate the costs of the repair work.⁸⁶ This example underlines the bureaucratic chaos which stripped the power of decision from the *Şehremaneti* and made it difficult for the institution to carry out even a single task like repairing sewers of a neighborhood.

After three years from the establishment of the *Şehremaneti*, a new commission was formed to regulate the institution and to find a solution for its problems. *İntizam-ı Şehir Komisyonu (commission municipale)*⁸⁷ consisted of twelve members who were

⁸³ *TDV İslam Ansiklopedisi Online*, s.v. “MECLİS-i VÂLÂ-yı AHKÂM-ı ADLİYYE,” <https://islamansiklopedisi.org.tr/meclis-i-vala-yi-ahkam-i-adliyye>

⁸⁴ Ortaylı, *Tanzimat Devrinde*, 136.

⁸⁵ Ortaylı, 136.

⁸⁶ Mazak, 227; BOA. İ..MVL. 568/25549

⁸⁷ Ergin, *Mecelle*, 1307.

chosen among the notables of the city including some well-known non-Muslims. They were responsible for ensuring that certain municipal services were carried out properly such as cleaning and maintenance of the streets and lightening.⁸⁸ Commission had worked for approximately two years and presented a report right before its dissolution in 1857. Commission's report of 1857 was evaluated as a turning point in the municipal history of Istanbul by Osman Nuri Ergin.⁸⁹ In the report, they suggested construction of a sewer system and side-walks, maintaining cleanliness of the streets and lightening and widening roads. Moreover, the commission proposed forming a well-functioning accounting office for the continuity of services.⁹⁰ After the report, Istanbul municipality was divided into fourteen districts in accordance with the suggestions of the commission. This was the first step towards the establishment of the *Altıncı Daire-i Belediye* (6th municipal district) which would be in charge of the Galata-Beyoğlu area.

Altıncı Daire-i Belediye was the only district among the fourteen that was able to be constituted due to the fact that the central administration did not have the financial ability to establish municipalities in all of the fourteen districts. Moreover, the decision to establish the first municipal district in Galata-Beyoğlu area can be considered as an indicator of the mentality of the Tanzimat elite who was trying to “westernize” the administrative system including the municipal structure. It is no coincidence that the first modern municipality was established in the business district of Istanbul where the foreign existence was the most visible. In other words, the sixth district hosted foreign embassies, foreign banks, churches and schools and considered as a miniature version of a European city.⁹¹ It was deemed to be the first example, a sample for others to come since it was the face of the Ottoman Empire to Europe. Foreign missions, embassies and Ottoman subjects who were under the

⁸⁸ Ortaylı, *Tanzimat Devrinde*, 142.

⁸⁹ Ergin, *Mecelle*, 1298.

⁹⁰ Ortaylı, *Tanzimat Devrinde*, 143.

⁹¹ Ortaylı, 145.

auspices of foreign states were demanding improved municipal services and reform in living conditions.⁹² This demand was acted upon by the central government and gave way to the formation of the first “modern” urban administration in the “Europeanized” district of Istanbul.

The number given to the Galata-Beyoğlu district is another indicator of the central government’s efforts to liken its capital to the European capitals, specifically to Paris. The sixth district of the Paris municipality (“sixième arrondissement”) was the most effectively equipped department of the city.⁹³ The first established municipal department should have been named as the first district yet due to the government’s vision of having a capital city similar to its European counterparts, the number six was preferred. Moreover, the Galata-Beyoğlu district preserved its name after the regulations of 1868 and 1880, and the law of 1877. Even though the sixth district should have been the Hasköy area according to the ordering of other district in the Municipal Law of 1877, Hasköy was given the number seven and Galata-Beyoğlu remained as the sixth district.⁹⁴ Similar situation happened after the regulation of 1880 which decreased the number of districts to ten. Bayezid district was chosen to be the first, Fatih district was designated as the second department, Cerrahpaşa was the third, and according to this arrangement Galata should have been the fourth one, yet Beşiktaş was determined to be the fourth and Galata-Beyoğlu preserved its number.⁹⁵

Another concern of the central government was the need of trained officials to run the municipal organization. The members of the newly found municipality would be chosen among the inhabitants of the area. Thus, it was important to have people who speak a foreign language, educated abroad and had an experience with a European

⁹² Ortaylı, 146.

⁹³ Zafer Toprak, “Altıncı Daire-i Belediye,” in *Dünden Bugüne İstanbul Ansiklopedisi*, (İstanbul: Kültür Bakanlığı and Tarih Vakfı, 1993), 220.

⁹⁴ Ergin, *Mecelle*, 1307n94.

⁹⁵ Ergin, 1308; Toprak, “Altıncı Daire-i Belediye,” 220.

municipal administration. That is why the Ottoman government was more inclined to choose the Beyoğlu-Galata district for establishing the sample municipality. Moreover, the welfare levels of the districts were taken into account. It is no coincidence that one of the conditions to become a member of the department council was to have property within the boundaries of the district and live in Istanbul for at least a decade.⁹⁶ Initially there were seven members in the council and the majority was chosen from the non-Muslim subjects of the Empire.⁹⁷ One of the best indicators of the cosmopolite structure of the municipality was that the correspondence was bilingual, both in Ottoman Turkish and in French.⁹⁸ Moreover, the members' occupational background varied from medicine to engineering. Therefore, government valued education, experience and wealth in the process of selecting the officials working within this municipal structure. The announcement of the establishment of *Altıncı Daire-i Belediye* in the official gazette of the Empire, *Takvim-i Vekayi* is a great example for showing the reasons behind the choice of Galata-Beyoğlu district:

The sixth municipal district of Galata-Beyoğlu area was chosen to be the first one among the fourteen districts to be established since it will be cumbersome to form all fourteen districts at once and since the wealthy inhabitants of the area have seen this kind of municipal organization in foreign countries and understand its essence ...⁹⁹

Altıncı Daire-i Belediye was responsible for providing basic municipal services such as cleaning the streets, collecting garbage, lightening, widening streets, constructing and repairing sidewalks, sewers, and waterways. It was also responsible for

⁹⁶ Toprak, 220.

⁹⁷ Toprak, "Altıncı Daire-i Belediye," 221; Ergin, *Mecelle*, 1313.

⁹⁸ Ortaylı, *Tanzimat Devrinde*, 149-150.

⁹⁹ "...nefs-i İstanbul ve Bilad-ı Selase –Boğaziçi'nin iki sahili ve Adalar ile beraber-on dört daire-i belediyeye taksim olunmak üzere evvel emirde tayin olunan hudud ile Beyoğlu ve Galata Altıncı Daire-i Belediye itibar olunup fakat işbu dairelerde yapılacak şeylerin kaffesine birden başlanmak mugalatan ve tekellüflü olacağından ve Altıncı Daire ittihaz olunan Galata ve Beyoğlu'nda akarat-ı kesire ve ebniye-i mu'tena bulunduğu misillü sahib ve mukim olanların ekserisi dahi böyle şeyleri memalik-i sairede görmüş ve muhasenatını anlamış adamlardan bulduklarından bu işe ibtida daire-i mezkureden başlanılıp..." Ergin, *Mecelle*, 1307-1308.

collecting fees to cover the expenses of the institution.¹⁰⁰ The revenues of the sixth district will be examined in length in the next chapter, yet it is important to point out that *Altıncı Daire-i Belediye* was also privileged in terms of its sources of revenue which were more extensive than any other districts could ever get. In its first years, the department was successful in organizing a cadastral map of the district, constructing a couple of parks and moving certain cemeteries out of the area to a designated place in Şişli.¹⁰¹ However, the most notable accomplishment of the bureau was the preparation of the regulation for streets (*Sokaklara Dair Nizamname*) which was issued for the Galata-Beyoğlu district in 1859.¹⁰² This comprehensive regulation aimed to reorganize and improve the conditions of the streets of the sixth district while at the same time it aspired to showcase the norms and values of its “Europeanized” inhabitants.¹⁰³ The streets of the district were divided into three categories in terms of their cleaning patterns.¹⁰⁴ In the first category there were streets which would be swept once a day in winter and twice a day in summer time while the streets in the second category would be swept once a day and the ones in the third category would be swept once a week.¹⁰⁵ The cleaning work would be given to contractors via auction by underbidding and the job would be done in the morning in summer and in the evening in winter times.¹⁰⁶ It is interesting to see that the shared obligation of cleaning the streets between the city officials and the city dwellers continued in the time of the *Altıncı Daire-i Belediye*. The ninth and eleventh articles of the regulation gave responsibility to the inhabitants of the district for cleaning in front of their houses and shops and forbade them to dump their waste into the

¹⁰⁰ Toprak, “Altıncı Daire-i Belediye,” 221.

¹⁰¹ Toprak, 221.

¹⁰² Seyitdanlıoğlu, *Tanzimat Döneminde*, 9.

¹⁰³ Toprak, “Altıncı Daire-i Belediye,” 222.

¹⁰⁴ “Süprüntü hakkında daire-i belediye dahilinde bulunan sokaklar tertib olunacak defter mucibince üç sınıfa taksim kılınacaktır,” Seyitdanlıoğlu, *Tanzimat Döneminde*, 123; BOA İ..MVL. 416/18210.

¹⁰⁵ Seyitdanlıoğlu, 123-124.

¹⁰⁶ Seyitdanlıoğlu, 124.

street.¹⁰⁷ Another interesting aspect of the regulation is its emphasis on the protection of public hygiene by for example not letting the waste water from toilets drain into the soil or not permitting factories to be built near residential areas.¹⁰⁸ Moreover, it is striking that the department let property owners to build their own sewers if they could get a permit from the bureau and if they would repair the damage caused by the construction work.¹⁰⁹ Even though the practice of sharing the cleaning work with the inhabitants continued, the sixth municipal department had also contracted out the duty of waste collection and disposal via dutch auction. Thus, the department had its own garbage men who collected refuse from houses and shops and disposed it in a designated area.¹¹⁰ The privileged position of the *Altıncı Daire-i Belediye* can be seen in an example taken from the *Basiret*¹¹¹ newspaper. In an article published in 1874, Ali Efendi stated that it was easy to wander in Beyoğlu day and night while it was nearly impossible to navigate one's way in the muddy and pitch-black streets of Istanbul district.¹¹² However, *Altıncı Daire-i Belediye* was not a miraculous institution in terms of its fight against pollution. It continued with practices inherited from the traditional administrative structure. Garbage was collected by contractors and carried out to designated piers, specifically Galata and Kasımpaşa garbage piers, loaded to barges and dumped into the open sea off Ahırkapı.¹¹³ Even though the waste was mostly made up of organic material that dissolves easily in the water, some of the garbage was ended up on the Golden Horn and washed up on shore. It

¹⁰⁷ Seyitdanlıoğlu, *Tanzimat Döneminde*, 124.

¹⁰⁸ Seyitdanlıoğlu, 129-135.

¹⁰⁹ Seyitdanlıoğlu, 128

¹¹⁰ Seyitdanlıoğlu, 124

¹¹¹ *Basiret* newspaper belonged to an Enderun-educated retired state official, Bairetçi Ali Efendi. One section of the newspaper was reserved to the city letters through which the journalists told stories and shared memories related with Istanbul. Most of the time, these letters were critical towards the deeds of the municipal administration and city dwellers' behaviors.

¹¹² Bairetçi Ali Efendi, *Istanbul Şehir Mektupları*, ed. Nuri Sağlam (Istanbul: Sedir Yayınları A.Ş., 2017), 323.

¹¹³ Mehmet Sait Türkhan, "19 ve 20. Yüzyılda Haliç'te Çevre Sorunları ve Deniz Kirliliği," *Toplumsal Tarih* 169 (January, 2008): 64.

was even more difficult for the *Altıncı Daire-i Belediye* to use its garbage piers since the Imperial Dockyards (*Tersane-i Amire*) was neighboring the Galata district in Kasımpaşa. Thus, the garbage of Galata-Beyoğlu area which was brought to the piers of sixth district and loaded to barges to be dumped at the open sea could potentially end up in the docks. Two documents from 1890 and 1899 further elaborate the situation. The document from 1890 was addressed to the Şehremaneti since, as it will be explained later in the chapter, after 20 years of autonomy the *Altıncı Daire-i Belediye* was placed under the authority of Şehremaneti in 1877. The document ordered Şehremaneti to instruct *Altıncı Daire-i Belediye* to clean the Kasımpaşa pier since the garbage that piled-up on the shore created a health hazard for both soldiers who worked in the Imperial Dockyards and the inhabitants of the area.¹¹⁴ The other document from 1899, on the other hand, stated that the garbage loading to barges from Kasımpaşa pier ending up in the imperial docs and filling them. Yet, it would be impractical to remove the garbage pier from the area since the Galata pier alone would not be enough for transferring the refuse of the Galata-Beyoğlu district. Thus, it was ordered to the sixth municipal district to be careful in loading the garbage and to warn inhabitants of the area and its garbage men not to dump their waste to the sea from the Kasımpaşa pier.¹¹⁵

Even though it seemed like the bureau had a certain kind of autonomy in its decisions, the problem of authorization that haunted the old urban administration and the newly-found *Şehremaneti* was also valid for the *Altıncı Daire-i Belediye*. Even the smallest purchases or decisions of the bureau needed an approval from the Sublime Porte.¹¹⁶ Without the proper authorization, the bureau could not function adequately. Moreover, the Ottoman government was constantly in need to convince the embassies within the area in terms of new taxes that would be used for the provision of municipal services by the *Altıncı Daire-i Belediye* since taxation was

¹¹⁴ BOA. DH.MKT. 1758/50.

¹¹⁵ BOA. DH.MKT. 2216/26.

¹¹⁶ Ortaylı, *Tanzimat Devrinde*, 150-151.

contradicting with the nature of capitulations which gave privileges to Ottoman subjects who were under the auspices of foreign states not to pay taxes.¹¹⁷ Another problem was the mentality of the members of the department council who prioritized certain streets, especially Grand Rue de Pera, and business areas within the district while did not pay attention to others which could not even get the basic services like garbage collection and street cleaning.¹¹⁸ However, despite of all its shortcomings, the establishment of the *Altıncı Daire-i Belediye* has been considered as a turning point in the history of municipal organization of the Ottoman Empire and set an example for other municipal districts which were established towards the end of the century.

The 1868 regulation (*Dersaadet İdare-i Belediyeye Nizamnamesi*) aimed to reorganize the *Şehremaneti* and expand the exemplary case of *Altıncı Daire-i Belediye* to other districts. After more than a decade, Istanbul's municipality was still in process of formation. The city was again divided into fourteen districts and a city council was reinstated with six members.¹¹⁹ Municipal districts within this new arrangement were placed under the authority of the *Şehremaneti* unlike the example of the *Altıncı Daire-i Belediye* which was subjected directly to the Sublime Porte.¹²⁰ However, this attempt was also failed to actualize its premises. Only a handful of districts were able to have a municipal organization and the ones that had a municipality could not establish their department councils. It is worth mentioning that Tarabya, Adalar (Princes Islands) and Kadıköy were among those districts that were able to be established and they were predominantly inhabited by non-Muslim subjects or foreign nationals.¹²¹ According to Osman Nuri Ergin, a note sent by the Sublime Porte in 1870 advised the *Şehremaneti* to consult and work with the chamberlains of artisans (*esnaf kethüdası*) and notable craftsman in regard to the cleaning and

¹¹⁷ Toprak, "Altıncı Daire-i Belediye", 223.

¹¹⁸ Toprak, 222-223.

¹¹⁹ Ergin, *Mecelle*, 1346.

¹²⁰ Ergin, *Mecelle*, 1349.

¹²¹ Ergin, 1346.

constructing works in their neighborhoods since the municipal departments were not able to be established at the time.¹²² This example indicates the fact that the collaboration between the urban administration and city dwellers continued throughout the 19th century due to financial and administrative deficiencies. The Ottoman government applied to its old methods of urban governance when its economic and administrative structure fell short to answer to the needs of the new municipal organization.

The municipal structure of Istanbul had remained in the process of formation until the end of the Empire. There were many regulations aimed to re-organize the structure of the *Şehremaneti* and most of them failed to achieve their objectives. After its establishment in 1854, *Şehremaneti* was reorganized and divided into fourteen districts in 1868, yet the designated municipal departments could not be established. In 1877, the Istanbul Municipal Law (*Dersaadet Belediye Kanunu*) was promulgated and the previous regulations including the regulation on streets and regulations of 1857, 1858 and 1868 were invalidated.¹²³ The city was again divided into twenty districts which is an absurd number since the government could not establish fourteen districts in its previous attempts let alone be able to organize twenty. It was claimed by the central administration that it would not be possible to have less than twenty districts since it would be difficult to commute for officials from their homes to their work place and there were sharp differences between the neighborhoods which could not be easily divided into groups.¹²⁴ During the discussions, the parliament speaker Ahmed Vefik Paşa underlined the income disparity between certain districts and argued that inhabitants of different districts wanted different services by saying “those want gas, these could not find even a goose”¹²⁵. Thus, he argued for the separation of dissimilar areas from each other

¹²² Ergin, 1369.

¹²³ Zafer Toprak, “Şehremaneti,” in *Dünden Bugüne İstanbul Ansiklopedisi*, (İstanbul: Kültür Bakanlığı and Tarih Vakfı, 1994), 149.

¹²⁴ Ortaylı, *Tanzimat Devrinde*, 168-169.

¹²⁵ “... onlar gaz ister, bunlar kaz bile bulamaz,” Ortaylı, 168.

without considering the financial burden of establishing twenty departments. According to Osman Nuri Ergin, since the French administrative organization and jurisprudence had been taken as an example for Istanbul's municipal structure since the Tanzimat Edict, the decision of dividing the capital into twenty districts was also derived from the French municipal organization where Paris also had twenty districts.¹²⁶ Furthermore, provincial deputies in the parliament resented and fiercely objected the privileged status of the capital city and having a special code to its name. The speaker answered those criticisms by emphasizing the special case of Istanbul and stated that Istanbul had no match and was unlike other cities in the provinces thus needed a separate codification.¹²⁷ It is also an interesting fact that the first law ever passed by the short-lived Ottoman parliament was the Istanbul Municipal Law of 1877.¹²⁸ Only the third article of the municipal law stated the duties of municipal departments and the description of cleaning work was not as detailed as in the regulation of streets. In fact, it only specified that the districts were responsible for cleaning the roads, piers, squares and neighborhoods and ensuring hygienic conditions in their areas.¹²⁹ A document from 1888 can shed a better light on the cleaning work after the municipal law. The document addressed the issue of collecting the garbage of madrasahs especially the ones in Fatih and Süleymaniye. Several madrasahs were accumulating their refuse and contracted out the waste collection work via auction by underbidding once every three years. However, several physicians were sent to inspect the hygienic conditions of madrasahs and they concluded that the piles of garbage should be removed immediately. The document sent by the Ministry of Pious Foundations (*Evkaf Nezareti*) emphasized the fact that madrasahs had garbage men whose salaries were paid by the ministry and the costs of collecting the refuse were covered jointly by the waste collectors and from the state treasury. Moreover, there were also garbage carts collecting waste

¹²⁶ Ergin, *Mecelle*, 1388.

¹²⁷ "İstanbul'un işi taşralara benzemez. Sizin de İstanbul gibi şehriniz olsun, siz de ayrı kanun yapın," Ortaylı, *Tanzimat Devrinde*, 168.

¹²⁸ Ergin, *Mecelle*, 1389.

¹²⁹ Seyitdanlıoğlu, *Tanzimat Döneminde*, 104-105.

from streets daily. Thus, the ministry stated that there was no need of accumulating garbage inside madrasahs and it should not be done so since it would create a health hazard.¹³⁰ Even though the document claimed that the waste of the city had been collected daily with garbage carts, there were no indicators stating that this situation was in fact applicable to the entire city.

In 1877, there were only five districts that were able to be established including *Altıncı Daire-i Belediye*, Tarabya, Kadıköy, Yeniköy and Beykoz.¹³¹ It would take three years for the government to realize the impossibility of dividing the capital's municipal organization into that many districts. The war-weary Ottoman Empire could not keep up with the costs of establishing twenty departments, thus issued a mandate to decrease the number of districts to ten in 1880.¹³² This last arrangement had lasted for nearly three decades until 1909.

The three years between 1909 and 1912 was a period of administrative chaos for Istanbul since the organization of its municipal districts could not be determined. Two prefects of this three-year period, Hüseyin Kazım Bey and Ahmet Tevfik Bey, did not perform very effectively since they were not able to maintain order among existing departments. Before leaving the office, Ahmet Tevfik Bey prepared a report which was rejected by the parliament but had an impact on the decisions of his successor. Cemil Topuzlu was able to make the parliament accept the report of Ahmet Tevfik and revolutionized the municipal structure of Istanbul. In 1912, right after he came to office, Cemil Topuzlu proposed a nine-article law which suggested that Istanbul should be one department as in the case of Paris municipality, and all its districts should be accepted as the branches of the *Şehremaneti*.¹³³ The proposed number of districts was nine including Makriköy (or Bakırköy), Adalar, Istanbul (Fatih and Beyazıt), Galata-Beyoğlu, Kadıköy, Üsküdar, Rumeli kavağı (Yeniköy)

¹³⁰ Mazak, *Osmanlı'da Çevre*, 145; BOA Y..MTV. 41/118.

¹³¹ Ortaylı, *Tanzimat Devrinde*, 171.

¹³² Ergin, *Mecelle*, 1416-1425.

¹³³ Ergin, *Mecelle*, 1469.

and Anadolu kavađı (Beykoz).¹³⁴ The new prefect was adamant about modernizing Istanbul by modeling some of its European counterparts. In his announcement to the inhabitants of Istanbul about the changes made in the municipal organization, he stated that he investigated the municipal laws of France, Germany, Belgium and Romania closely to learn how an urban administrative structure should be organized.¹³⁵ Moreover, he promised the people of Istanbul that he would bring experts from Belgium and Switzerland to improve the cleaning work of the city by purchasing European style garbage and watering carts.¹³⁶ After the annulment of the *Altuncı Daire-i Bellediye*'s regulation for streets (1859) the cleaning work of Istanbul had not been regulated in a detailed code of practice until the establishment of *Nezafet-i Fenniyye Mdriyeti* (The Directorate of Scientific Cleaning) in 1912. The directorate was subjected to the *Heyet-i Fenniye Mdriyeti*¹³⁷ which was responsible for the provision of nearly all municipal services including cleaning the streets, collecting garbage, disposing waste, lightening, repair work, etc.¹³⁸ Each municipal district had its own *Nezafet-i Fenniyye* branch and each branch had a hierarchical structure of workers in which laborers did the hard work, corporals supervised and intendants inspected it.¹³⁹ The new prefect attached a great deal of importance on cleanliness of Istanbul and modernization of its cleaning work. Under Cemil Topuzlu administration, the municipality of Istanbul was finally embraced an agenda for actively carrying out municipal services. He employed officials to sweep and wash streets, collect garbage and dispose waste. Moreover, new garbage carts were made modelling the closed galvanized carts used in Bucharest. He also purchased watering carts and cleaning supplies from Paris and ordered to place iron

¹³⁴ Ergin, 1460.

¹³⁵ Ergin, 1469.

¹³⁶ Ergin, 1473.

¹³⁷ Ergin, 913.

¹³⁸ Mazak and Gldal, *Tanzifat-ı Istanbul*, 115.

¹³⁹ Mazak and Gldal, 116-124.

garbage cans on sidewalks.¹⁴⁰ Streets of Istanbul were swept and washed every day in the morning and thoroughfares were cleaned consistently during the day. In addition, the workers were prohibited from foraging the waste, were in charge of washing the garbage carts after the job was done and were responsible for burying animal carcasses to designated areas.¹⁴¹ The tenure of Cemil Topuzlu indicates that the mindset of local administrators started to be changed from emphasizing supervision to valuing service provision.

2.3 The “Image” of Modern and Its Relation with the Notion of Cleanliness

The meaning of dirt and connotations it acquired in terms of its relation with civilization had been changed frequently through time. In the 19th century, however, it became a part of the means of modernity and “the mission to civilize”. The idea of “other” as backward, savage, and unholy also included the etiquette of being dirty both physically and morally. In other words, the non-European, and most of the time, non-Christian peoples of the East and Africa were considered not only barbaric but also as unhygienic. The situation had a certain irony in it since the European “civilized” men rediscovered the virtue of cleanliness quite late in the 19th century. However, it did not stop Europeans to assume the heavy load of “white man’s burden” to clean the savage men. Christianity also had a part in this “holy duty”, yet it is important not to forget that the same stigma attached to the peoples of “uncivilized world” was also applicable to the urban poor. In fact, the spread of diseases like typhus and cholera had been associated with the conditions of the destitute living in filthy neighborhoods. Therefore, the sanitary reform movement in Britain was put into operation by cleaning the slums and policing the poor.¹⁴²

¹⁴⁰ Cemil Topuzlu, *İstibdat - Meşrutiyet - Cumhuriyet Devirlerinde 80 Yıllık Hatıralarım*, (Istanbul: Nobel Matbaacılık, 2003), 127.

¹⁴¹ Mazak and Güldal, *Tanzifat-ı İstanbul*, 119-123.

¹⁴² Lee Jackson, *Dirty Old London: The Victorian Fight against Filth*, (New Haven: Yale University Press, 2014), 56; For the Ottoman case of policing the poor see Ferdan Ergut, “Policing the Poor in the Late Ottoman Empire,” *Middle Eastern Studies* 38, no. 2 (2002): 149-164.

This ideology, the Orientalist thought, can be analyzed through the history of two prized items of the European sanitary reform; the water-closet and the mass-produced soap. Both of these markers of sanitary movement will be discussed in length in the final chapter, yet a brief explanation here is necessary since these objects had immense political meanings attached to them. The words of George Jennings, a sanitary engineer and inventor of the public flushed toilet, emphasized further the argument equating cleanliness with being civilized: “the civilization of a people can be measured by their domestic and sanitary appliances.”¹⁴³ It also underlines the obsession of Victorian England with sanitary reform since they “considered cleanliness the hallmark of civilization.”¹⁴⁴ One of the focal points of the sanitary movement was improvement of the water closets since earlier examples were lack of basic hygienic measures like a valve to trap odors or running water.¹⁴⁵ Thus, before the 18th century, most of the people were suspicious towards the water closet and more importantly a wealthy few could afford it. This situation had changed significantly in the 19th century due to the improvements in the design of the toilet, the increasing interest in sanitation and more importantly improvements in the infrastructure to provide running water to houses and connecting them to the main sewer system. British prized their water closets and saw it as “a marker of their advanced level of civilization.”¹⁴⁶ Using the water closet instead of a bush or a lake was considered as the civilized thing to do. More importantly, it symbolized the technological and sanitary improvement of a society. Similarly, mass produced soap became the manifestation of modernization since it was considered as a symbol of “wealth, civilization, health and purity”.¹⁴⁷ The promotional posters of a soap company from the 19th century emphasize the connection between the idea of

¹⁴³ Julie L. Horan, *The Porcelain God: A Social History of the Toilet*, (Toronto: Carol Publishing Group, 1997), 88.

¹⁴⁴ Jackson, *Dirty Old London*, 1.

¹⁴⁵ Horan, *The Porcelain God*,

¹⁴⁶ Kees van Dijk, "Soap is the onset of civilization," in *Cleanliness and Culture: Indonesian Histories*, ed. Kees van Dijk and Jean Gelman Taylor, 1-39. (Brill, 2011), 3.

¹⁴⁷ Dijk, "Soap is the onset of civilization," 1.

modernity and cleanliness. As it can be seen from the poster that the stress put on the “virtues of cleanliness” and “white man’s burden” to enlighten populations who did not have soap to clean themselves further accentuates the correlation between the mission to civilize and being clean (Figure 1.2.).

It is interesting to see that the Ottoman statesmen and intelligentsia had their own version of Orientalist perspective almost like a “white man’s burden” approach to certain groups of people. The Chicago Columbian Exhibition of 1893 can be given as an example to this attitude of Ottoman officials. In the exhibition, the Ottoman Empire had a pavilion where certain items that would showcase the unique qualities of the country were chosen to be on display such as carpets from Hereke factory, some of the finest examples of Ottoman handicrafts and jewelry and lavish porcelains decorated with precious stones and scenes from history.¹⁴⁸ The selection process of the items displayed can be a great indicator of both the self-perception and the world view of the Ottoman officials.¹⁴⁹ One specific display in the exhibition is especially intriguing since it demonstrated the will of Ottoman statesmen to participate in the mission to civilize. In addition to a replica of the Fountain of Ahmed III, it was proposed to have an Ottoman Hippodrome where the famous Arab horses and several camels would be showcased by Arab riders. The title of the display was “the Bedouins in their encampment” and the official in charge of the preparations suggested that the Arabs should be trained by Ottoman cavalry officials who would teach them to act in an orderly fashion that would please the foreigners.¹⁵⁰ This statement emphasizes the fact that “the Ottomans had internalized much of the West’s perception of the ‘Orient’”¹⁵¹ and shows their attachment to the idea that they were the bearers of civilization just like Europeans. As Cem Emrence pointed out, the Ottoman intellectuals were “socially elitist, politically centralist, and

¹⁴⁸ Selim Deringil, *The Well-Protected Domains: Ideology and the Legitimation of Power in the Ottoman Empire 1876-1909*, (London: I.B.Tauris & Co Ltd, 2004), 159-160.

¹⁴⁹ Deringil, 157.

¹⁵⁰ Deringil, 157.

¹⁵¹ Deringil, 157.

culturally modernist” who had committed to the cause of modernization in the 19th century.¹⁵² The Ottoman officials’ embracement of the Western view of modernity manifested itself in their definition of urban governance and their perception of waste and pollution management.



The step towards lightening
The White Man's Burden
is through teaching the virtues of cleanliness
Pears' Soap
is a potent factor brightening the dark corners of then earth as
civilization advances while amongst the cultured of all nations
it holds the highest place -- it is the ideal toilet soap.

Figure 1.2. Pears' Soap advertisement from 1899.¹⁵³

The Ottoman government's efforts to create an image of “civilized” and modern Empire can also be traced in its struggle to organize its urban administrative structure in general and its fight against pollution in particular. In the minds of the Ottoman

¹⁵² Cem Emrence, "Imperial paths, big comparisons: the late Ottoman Empire." *Journal of Global History* 3 (2008): 296.

¹⁵³ Dijk, "Soap is the onset of civilization," 19.

statesmen, the capital of the Empire should be equal to its European counterparts in terms of the amenities it could provide to its inhabitants. Municipal services like cleaning, lightening, transportation and provision of clean water were necessities of modern living and prerequisite for commercial activities to thrive. All of which would serve the political agenda of the government to strengthen their claim that the Empire complied with the needs of the 19th century. This desire to constitute an image of adaptable polity manifested itself in the restructuring of Istanbul's urban administration as well. As it was explained above in detail, the central administration had labored to transform its urban governance in order to improve the living conditions and meet the needs of the commerce. However, these changes were not independent from the political aspirations of the government and definitely not the acts of magnanimity. It is no coincidence that the choice of place for the establishment of the first municipal department was the business district of Istanbul where the majority of foreign nationals resided. An efficient municipal organization in the district where every act would find a European audience was an urgent necessity for an Empire so desperately needs to prove its "right to exist"¹⁵⁴ in a modern world. Thus, the establishment of the *Altıncı Daire-i Belediye* in Galata-Beyoğlu district was in fact serving the political aspirations of the Ottoman government.

The conversation that happened between the then-grand vizier Gazi Ahmet Muhtar Paşa and prefect of Istanbul Cemil Topuzlu can shed a light on the mind-set of the central government that desired to build a modern city administration. When Cemil Topuzlu asked the grand vizier why he was chosen to be the next *Şehremani* of the capital city even though he was not experienced in the political sphere, the grand vizier stated that Cemil Paşa's house in Feneryolu had an impact on his decision to appoint him. The European-style architecture of the building and the landscaping impressed Muhtar Paşa. He told Cemil Topuzlu that he thought if a man was able to create a little Europe in his own house, he would be able to improve the city.¹⁵⁵ The

¹⁵⁴ Deringil, *The Well-Protected Domains*, 151.

¹⁵⁵ Topuzlu, *80 Yıllık Hatıralarım*, 110.

idea of improvement was inextricably bound with the values and ideals of the West. Moreover, the emphasis on European expertise in almost every chapter of the memoirs of Cemil Topuzlu supports the argument that the Ottoman intellectuals and state officials valued the European methods and knowledge to improve the administrative apparatus as well as the living conditions in Istanbul. For example, he brought approximately twenty Italian workers to build European style sidewalks and macadamized roads in a “scientific manner”.¹⁵⁶ In another example, he complained about the lack of marketplaces similar to the ones in large European cities and mentioned that he brought catalogues from Europe to prepare projects for new marketplaces.¹⁵⁷

The nineteenth century can be considered as the period of political, economic and administrative adaptation of the Ottoman Empire to the changing circumstances of the century. The process of modernization in a non-western context like the Ottoman Empire could easily turn into a struggle to prove oneself in the face of the “West”. In other words, the actions became reactions towards the Orientalist ideology which claimed the superiority of the West over the Orient.¹⁵⁸ Thus, the Ottoman Empire was in a constant struggle to prove its “right to exist” in a world where the old relations had been shifted significantly.¹⁵⁹ The Ottoman modernization, thus, can be summed up as a struggle for survival and a wrestle to have a place in the international arena by transforming itself to change its otherness. The Ottoman statesmen paid a close attention to the developments in the world around them and tried to keep up with the current trends in order not to become the odd-one-out among European powers. As Selim Deringil explained in detail, the obsession of the Ottoman government to participate in world fairs and various international congresses, especially in the second half of the 19th century, is a great indicator of the

¹⁵⁶ Topuzlu, 129.

¹⁵⁷ Topuzlu, 126.

¹⁵⁸ Deringil, *The Well-Protected Domains*, 150.

¹⁵⁹ “By emphasizing symbols which had come to denote modernity, the Ottoman state was staking its claim to the right to exist.” Deringil, 151.

state's desire to build up an image with the means of modernity.¹⁶⁰ This self-representation aimed to prove that the Empire also belonged to the modern world and not just a part of the *ancien regime*.

In short, concerns of the Ottoman central government towards creating a modern capital city were aligned with the government officials' interpretation of modernization. It can be argued that the Ottoman government's experience with modernity was almost entirely shaped around the Western ideals. Its endeavor to catch-up with Europe had an impact on the state ideology of what progress and development meant. In other words, for the majority of Ottoman state officials and intellectuals, modernity could be accomplished through the adoption of Western methods and Western ideas.¹⁶¹ The faith in European expertise and experience can be seen in the organization of the cleaning work of Istanbul as well.

¹⁶⁰ Deringil, 154-64 passim.

¹⁶¹ Elisabeth Özdalga, "Introduction," in *Late Ottoman Society: The Intellectual Legacy*, ed. Elisabeth Özdalga (New York: RoutledgeCurzon, 2005), 3.

CHAPTER 3

ECONOMY OF POLLUTION

The nineteenth century was a transformative period for both industrialized and agricultural economies. The commercial expansion of industrialized states, especially Britain, increased the contact between the two and led to the penetration of capitalist economy into the latter. This was significant in the sense that the agricultural economies experienced wide structural changes in order to keep up with the needs and necessities arising from this intensified commercial interaction. The Ottoman Empire was among those who experienced considerable changes within their internal structures. In the course of the 19th century, the port cities of the Eastern Mediterranean underwent significant transformations as centers for international trade either as ports of exportation and importation or as nodes of transit trade. Moreover, they had become fields of European entrepreneurship and investment markets for foreign capital. This would not have been possible without the advancements in transportation technology and increase in the production of European goods due to Industrialization. Several European countries, especially Britain, had already completed their industrialization processes when it came to the 19th century and were able to produce large amounts of goods in a short span of time and at low costs. Improvements in transportation technology had also lowered the costs of European manufactures in the world markets. Furthermore, commercial treaties signed with countries which deemed as periphery countries further lowered the prices of imported goods in those markets. Introduction of steamships into the Eastern Mediterranean raised the number of goods as well as people entering into the cities of the Empire. Moreover, by lowering the costs of transportation, it led to an overall increase in the volume of trade. Istanbul, in the middle of these changes,

stood as a maritime center where the transit trade was flourishing¹⁶². Another factor that raised the importance of the Mediterranean sea routes was the opening of the Suez Canal in 1869. Opening of the canal can be considered as a contributing factor to the increase of sea traffic and shipping activities in the region.¹⁶³ All these external factors had an impact on the state of Ottoman economy in the 19th century. However, it will be inaccurate to argue that the impact of capitalist relations was the sole reason of changes in the internal structure of the Ottoman Empire. As Şevket Pamuk states that in order to be able to understand the transformations happened in the 19th century, one must examine the reciprocal relationship between European capitalism and the Ottoman institutions.¹⁶⁴ In other words, the impact of capitalism on the Ottoman social, political and economic structures and the response of these internal systems in terms of how they transformed themselves to adapt to new circumstances should be analyzed in order to have a better grasp on the changes experienced by the Ottoman Empire in the course of the 19th century.

Another important event of the period was the signing of the Anglo-Ottoman Commercial Treaty of 1838 which opened the way to the integration of the Ottoman Empire into the European capitalist system and became a precedent in Ottoman commercial relations with other European states since similar agreements were signed in the following years.¹⁶⁵ The treaty brought a certain kind of dynamism to the Ottoman economy by liberalizing its trade and eliminating state monopolies. It also led to a rapid increase in the volume of trade especially in the Eastern Mediterranean port cities of the Empire.¹⁶⁶ According to Pamuk and Williamson, “[i]mports

¹⁶²Gelina Harlaftis and Vassilis Kardasis, "International shipping in the eastern Mediterranean and the Black Sea: Istanbul as a maritime centre, 1870–1910," In, *The Mediterranean Response to Globalization Before 1950*, ed. Şevket Pamuk and Jeffrey G. Williamson, (New York: Routledge, 2000), 241.

¹⁶³ Harlaftis and Kardasis, "Istanbul as a maritime centre," 247.

¹⁶⁴ Şevket Pamuk, *Osmanlı-Türkiye İktisadi Tarihi 1500-1914*, (Istanbul: İletişim Yayınları, 2005), 191.

¹⁶⁵ Şevket Pamuk and Jeffrey G. Williamson, "Ottoman de-industrialization, 1800–1913: assessing the magnitude, impact, and response," *The Economic History Review* 64 (February 2011): 161.

¹⁶⁶ Harlaftis and Kardasis, "Istanbul as a maritime centre," 233.

increased from £5.2 million in 1840 to £39.4 million in 1913".¹⁶⁷ Yet, there are also counter arguments advocating that the Anglo-Ottoman Commercial Treaty led to the collapse of the Ottoman industry and eventually prevented its capitalist industrialization.¹⁶⁸ Şevket Pamuk argues that it would be incorrect to claim that the Ottoman manufacturing was on the verge of transition to capitalist industry before the treaty.¹⁶⁹ Moreover, several Ottoman industries resisted to the tide of European imports especially in the area of cotton textiles.¹⁷⁰

Çağlar Keyder said that the port cities "emerged as specific urban forms mediating the expansion of the world economy into weak agrarian empires."¹⁷¹ They hosted a population who acted as agents of change and had an impact on the transformation of their environments by demanding modernization of the urban structure.¹⁷² Even though Çağlar Keyder emphasizes that Istanbul cannot be considered as a typical port city due to the fact that majority of its inhabitants earned their living by taking a share from imperial revenues¹⁷³, almost half of the city's population was consisted of non-Muslims and protectorates of various foreign governments.¹⁷⁴ This cosmopolitan character of the city manifested itself most in the business district of Galata-Beyoğlu where the demand for modern municipal services was the most prominent and where the first experiment with the modern municipal establishment took place in the form of the *Altıncı Daire-i Belediye*. Inhabitants of the port cities described by Keyder demanded modernization in a period when the governments were lacking sufficient

¹⁶⁷ Pamuk and Williamson, "Ottoman de-industrialization," 162.

¹⁶⁸ Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 208.

¹⁶⁹ Pamuk, 209.

¹⁷⁰ Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 208.

¹⁷¹ Çağlar Keyder, "Port-cities in the Belle Epoque." In *Cities of the Mediterranean: From the Ottomans to the Present Day*, edited by Biray Kolluoğlu and Meltem Toksöz, 14-22. (New York: I.B. Tauris, 2010), p.14.

¹⁷² Keyder, "Port-cities in the Belle Epoque." 14.

¹⁷³ Keyder, 15.

¹⁷⁴ Zeynep Çelik, *The Remaking of Istanbul, Portrait of an Ottoman City in the Nineteenth Century* (Berkeley: University of California Press, 1993), 38.

sources to modernize their institutions.¹⁷⁵ Thus, it will not be unreasonable to consider Istanbul among these port cities since even though the composition of its population was different than “typical port cities”, Istanbul’s inhabitants were not shy about demanding better living conditions and requesting adequate infrastructure for their mercantile activities.

Istanbul’s unique status among other port cities in the region was due to the fact that it was an imperial capital where the officials of the central government and the imperial family resided. This concentration of power in the city led to the establishment of a unique urban structure where the control of the central administration was the tightest. The presence of the state had a significant effect on the capital’s economy since the imperial family and state officials were the biggest consumers in this crowded city.¹⁷⁶ Edhem Eldem argues that the “political energy” of the capital city overrode its economic concerns and the economic developments had become the dependent variable within this system where political concerns prevailed.¹⁷⁷ According to Keyder, Özveren and Quataert, the “primary rationale” of the existence of port cities was its economic relations which were overlooked by the modernization paradigm that emphasized political, cultural and intellectual processes.¹⁷⁸ However, Istanbul had a different status among the others and can be analyzed neither through purely economic processes nor by only emphasizing political agendas. Thus, Istanbul cannot be considered as a generic peripheral port city, since the political agenda of the central government played an important role in shaping its urban fabric as much as the 19th-century transformations in its economic structure. Edhem Eldem playfully labeled it as the “Porte-city”¹⁷⁹ since Istanbul was

¹⁷⁵ Keyder, "Port-cities in the Belle Epoque." 15.

¹⁷⁶ Edhem Eldem, Daniel Goffmann, and Bruce Masters, *Doğu ile Batı Arasında Osmanlı Kenti: Halep, İzmir ve İstanbul*, (Istanbul: Türkiye İş Bankası Kültür Yayınları, 2017) 200.

¹⁷⁷ Eldem, Goffmann and Masters, *Doğu ile Batı*, 171.

¹⁷⁸ Çağlar Keyder, Eyüp Özveren, and Donald Quataert, "Port-Cities in the Ottoman Empire: Some Theoretical and Historical Perspectives," *Review (Fernand Braudel Center)* 16, no. 4 (1993): 522.

¹⁷⁹ Eldem, Goffmann and Masters, *Doğu ile Batı*, 276n6.

the area of “contact” between not only economic interests but also political ambitions, various cultures, different ideas and ideals.¹⁸⁰

Gelina Harlaftis and Vassilis Kardasis described the 19th-century Istanbul as a maritime center since the city became a stopping point for many ships carrying bulk cargoes.¹⁸¹ It was a center for transit trade which necessitated adequate housing for the seamen, sufficient port facilities where ships could be repaired and trade agencies for chartering and communication with other branch offices in major European cities. According to Zeynep Çelik, between the years 1840 and 1900, approximately 100.000 foreigners came to Istanbul due to the economic advantages it provided to tradesmen and investors.¹⁸² The Anglo-Ottoman Commercial Treaty of 1838 eased commercial activities of British merchants within the Empire by lowering the taxes on imports and abolishing the state-supported monopolies on international trade.¹⁸³ Soon after the signing of the commercial treaty with Britain, others followed for different European states. Thus, the Ottoman Empire became highly profitable for foreign merchants to do business with in the 19th century; consequently many chose to relocate in the port-cities of the Empire.

In short, both external and internal factors had an impact on the transformation of Istanbul from an imperial administrative capital to a global maritime center with increasing infrastructural problems that disturbed the government both as an idea and as a physical reality that needed an immediate solution. In the first chapter, the urban administrative transformation in the 19th century and the politics of pollution were analyzed. In this chapter, the role of economic relations and processes in shaping the urban fabric of 19th-century Istanbul will be the main focus. Ottoman fight against pollution cannot be considered without its financial burden on the treasury and the pressure put by changing economic relations. In other words, the struggle for keeping

¹⁸⁰ Eldem, Goffmann and Masters, *Doğu ile Batı*, 168.

¹⁸¹ Harlaftis and Kardasis, “Istanbul as a maritime centre,” 254.

¹⁸² Çelik, *The Remaking of Istanbul*, 38.

¹⁸³ Zafer Toprak, “Modernization and Commercialization in the Tanzimat Period: 1838-1875,” *New Perspectives on Turkey*, Spring 1992: 60.

the city clean and sanitary had its economic reasons as well as economic consequences. In the first part of this chapter, the Ottoman industrial development will be analyzed while the focus will be on the pollution it produced and the government's response to it. In the second part, the pressure of increasing population and commercial activities on the municipal infrastructure will be examined. In the final part of this chapter, both the financial shortcomings and the missed opportunities will be the focal point. In other words, the effects of budget constraints on the cleaning efforts will be analyzed with an emphasis on pollution as an economic resource which regenerated its costs by recycling in other businesses.

3.1 The Impact of Industrialization

Ottoman government showed an interest in the European industry and their production techniques long before the Tanzimat era. Selim III was interested in the industries related with the production of military goods from guns to uniforms. During his reign, a mill for woolen clothes used in military uniforms and a paper factory were built at Bosphorus.¹⁸⁴ Yet, the immense efforts to construct industrial sites in Istanbul began in the period of Mahmud II when the complexes like *Feshane*, a leather tannery and another paper factory were built and steam power began to be utilized in complexes like the *Tophane*.¹⁸⁵ When it came to the Tanzimat period, especially in its first decade, the Ottoman efforts for constructing industrial plants and adopting European production methods were amplified significantly. This first wave of industrialization efforts was initiated and subsidized by the Ottoman government.¹⁸⁶ Three major industrial complexes were constructed on the shores of the Marmara Sea, specifically in Zeytinburnu, Bakırköy and Yeşilköy. The Zeytinburnu complex was composed of several structures which produced variety of

¹⁸⁴ Edward C. Clark, "The Ottoman Industrial Revolution." *International Journal of Middle East Studies* 5, no. 1 (1974): 66.

¹⁸⁵ Clark, "The Ottoman Industrial Revolution," 66.

¹⁸⁶ Mehmet Seyitdanlıoğlu, "Tanzimat Dönemi Osmanlı Sanayii (1839-1876)," In *Tanzimat: Değişim Sürecinde Osmanlı İmparatorluğu*, ed, Halil İncelik and Mehmet Seyitdanlıoğlu. (Istanbul: Türkiye İş Bankası Kültür Yayınları, 2012) 59.

goods from forged items like pipes, locks, knives, etc. to cotton products like cloth and socks.¹⁸⁷ Industrial site in Bakırköy was a similar one to Zeytinburnu with additions like a powder mill and a boatyard for building steamships.¹⁸⁸ Yeşilköy, on the other hand, was a ranch project which was established for animal breeding, agriculture and seedling cultivation.¹⁸⁹ It is noteworthy that Yeşilköy and Zeytinburnu sites had also teaching facilities, or technical schools, for training personnel.¹⁹⁰ These complexes and other smaller units built in the first two decades after the Tanzimat Edict mostly aimed to answer to the needs of the army and the palace¹⁹¹. Zeytinburnu, for example, was constructed for supplying arms and equipment for the army¹⁹² while the Hereke textile factory near İzmit provided high quality silk for the use of the palace.¹⁹³ The second wave of industrialization had come in the 1880s and industrial complexes built within this phase were constructed with foreign and local investments.¹⁹⁴ These complexes were mainly focused on textile production and located in major commercial centers like Istanbul, İzmir and Adana.¹⁹⁵

If the Ottoman industry would be compared with its European counterparts in terms of mechanization and its production capacity, it can be said that it had been in abysmal state until the end of the Empire. However, as Donald Quataert emphasized, since the trajectory of the Ottoman industrial development was quite different than

¹⁸⁷ Clark, "The Ottoman Industrial Revolution," 67.

¹⁸⁸ Clark, 67.

¹⁸⁹ Clark, 67-68.

¹⁹⁰ Clark, 68.

¹⁹¹ Seyitdanlıoğlu, "Osmanlı Sanayii," 58.

¹⁹² Rıfat Önsoy, "Tanzimat Dönemi Sanayileşme Politikası 1839-1876," *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi*, (February 1984): 6.

¹⁹³ Clark, "The Ottoman Industrial Revolution," 68.

¹⁹⁴ Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 225.

¹⁹⁵ Pamuk, 225-226.

for example heavily industrialized England, it does not necessarily mean that the Ottoman industry was non-existent.¹⁹⁶ There were many small-scaled workshops and a vibrant cottage industry where the most of the Ottoman industrial output had been produced.¹⁹⁷ In other words, Ottoman industry was quite different than the British industry since the latter was “capital-intensive, large-scale, urban” and factory-based, while the former was “labor-intensive, small-scale, household-based, and rural.”¹⁹⁸ Thus, if the Ottoman industry is evaluated by only considering its large-scale urban factories, it would give an incomplete picture of the status of its industrial production. However, even though some of those smaller scale production facilities and efforts endured the pressure of European imports, Ottoman dependency on European expertise, machinery, industrialized goods and even raw materials cannot be refuted. Most of its industrial facilities were operated with imported technology, imported raw materials and in many cases with foreign labor.¹⁹⁹ As Donald Quataert pointed out, lack of capital, technological know-how and labor force were among the main issues because of which the Ottoman industry suffered.²⁰⁰

Considering the status of the Ottoman industry, it can be said that pollution caused by industrial plants in Istanbul was incomparable to London’s filth. Even though the northern cities of England like Leeds, Manchester and Birmingham were far more industrialized and consequently were dealing with higher levels of industrial pollution than the capital city²⁰¹, London had a considerable number of factories in addition to its ever-increasing volume of trade. Most of its industry was located on

¹⁹⁶ Donald Quataert, "The Introduction of Modern Technology in Ottoman Industry during the 18th and 19th Centuries," In *The Introduction of Modern Science and Technology to Turkey and Japan*, ed. F. Günergün and S. Kuriyama, (Kyoto: International Research Center for Japanese Studies, 1998): 73.

¹⁹⁷ Donald Quataert, "Ottoman Handicrafts and Industry in the Age of European Industrial Hegemony, 1800-1914," *Review (Fernand Braudel Center)* 11, no. 2 (1988): passim.

¹⁹⁸ Pamuk and Williamson, "Ottoman de-industrialization," 164.

¹⁹⁹ Clark, "The Ottoman Industrial Revolution," 75.

²⁰⁰ Quataert, "The Introduction of Modern Technology," 72.

²⁰¹ Michelle Allen, *Cleansing the City: Sanitary Geographies in Victorian London*, (Athens: Ohio University Press, 2008), 66.

the banks of Thames and all of them drained their pollutants into the river. Michelle Allen emphasized the detrimental effects of industrial pollution on Thames river which was used “as both water source and waste basin” by the plants on its shores.²⁰² It was crucial for factories which operated with steam power to be near a water source since water was an indispensable part of the process of boiling.²⁰³ Furthermore, it was a convenient medium for carrying the coal from mines to industrial sites, another vital component of the production process in steam-powered factories. According to Barrie Trinder, the most profound British industry of the century was the transport industry which also accelerated the growth of other industries from textile to metalwork.²⁰⁴ Major manufacturing towns in England were dependent to their immediate hinterlands for both resources and as markets before the 19th century. However, the advancements in the transport industry made it possible to expand their area of influence and loosen the ties with their hinterlands.²⁰⁵ Thus, heavy traffic of liners, freighters and other small ships caused an immense pollution in the waters of England, especially in Thames River. All these industrial pollutants were causing a visible deterioration in the situation of Thames which became intolerable to be around due to its offensive odor and the danger it caused to inhabitants’ health.²⁰⁶ Even though these changes in the chemical composition of the river were very noticeable, for example the fish lived in its waters had not been seen since the beginning of the 19th century²⁰⁷, the cleaning efforts remained inadequate. The reason of this inefficacy was partly due to the rapidity of urbanization, high rates of population growth, “administrative restructuring, lack of technological know-

²⁰² Allen, *Cleansing the City*, 66.

²⁰³ Barrie Trinder. “Industrializing Towns 1700-1840,” Vol. II, in *The Cambridge Urban History of Britain 1540-1840*, ed. Peter Clark, 805-829. (Cambridge: Cambridge University Press, 2008), 810.

²⁰⁴ Trinder. “Industrializing Towns,” 822.

²⁰⁵ Trinder, 827.

²⁰⁶ The domestic waste and sewage had also contributed to the deterioration and the smell of the river;

²⁰⁷ Bill Luckin, “Pollution in the City,” Vol. III, in *The Cambridge Urban History of Britain 1840-1950*, ed. Martin Daunt, 207-228. (Cambridge: Cambridge University Press, 2000), 218.

how” and the weakness of municipal bodies in relation to manufacturers.²⁰⁸ Another dimension of the unwillingness of local administrations to take action for cleaning the river and its shores can be explained with the idea of progress and prosperity. Having industrial sites and factories inside cities had not always been something undesirable. It was considered as a beacon of progress and a symbol of modernization. Bill Luckin stated that “[t]he widely held belief that foggy towns were prosperous” weakened the efforts of certain interest groups who demanded new regulations to inspect the vapors caused by manufacturing.²⁰⁹ Thus, environmental conditions of the British cities in the course of the 19th century remained significantly poor and legal action against industrial pollution came much later, at the end of the century.

Even though the Ottoman case had fundamental differences, Istanbul’s struggle against its filth had certain similarities with London’s situation in the 19th century. First of all, both shared an obvious factor: uncontrolled urbanization due to rapid population increase. Moreover, Istanbul’s municipal organization was also in the process of restructuring which caused long intervals when the efforts of the administration focused on itself to organize and re-organize its infrastructure. In other words, instability in the urban administrative structure interrupted the continuity of municipal services. Therefore, the efforts of the newly established municipality fell short to the needs of Istanbul. Another similarity was the lack of technological know-how which kept the municipal infrastructure in a primitive state. Existence of open sewers, open garbage carts, porters carrying refuse to piers and cesspits indicates the absence of the technological infrastructure necessary to provide services quickly, efficiently and with more sanitary methods. These problems had not been dealt with until the beginning of the 20th century when Cemil Topuzlu took office and bought closed and galvanized garbage carts, covered several open sewers, employed workers for garbage collection and invited foreign experts to build new

²⁰⁸ Luckin, "Pollution in the City," 226.

²⁰⁹ Luckin, 211.

sewers.²¹⁰ The level of industrial pollution in Istanbul, on the other hand, was quite low in comparison to London. As it was argued above, the industrial development of the Ottoman Empire was accelerated in the Tanzimat period and several industrial sites and smaller factories were built on the shores of the Golden Horn, Bosphorus and the Marmara Sea. However, while the industrialization rose the volume of garbage produced in London and changed the nature of filth from organic to industrial waste; the Ottoman industry was not dominant enough to surpass the share of municipal waste within Istanbul's pollution. However, even though the primary concern of the urban administration was mainly domestic waste and human excrement, there were some examples where the central administration took action to prevent industrial pollution in the Golden Horn and Bosphorus. For example, in a document dated 1861, it can be seen that the government was concerned about the possible harms of factory smokes. It was ordered to Ministry of Trade to take measures about the smokes caused by the flour plant in Istinye since the inhabitants of the area felt uncomfortable.²¹¹ In a similar document from 1857, it was ordered that the possible harms of the ferry factory which was planned to be built by the *Barutçubaşı* in the shore between Cibali and Fener kapısı would be investigated since the inhabitants of the area and the Fener Greek Patriarch wrote to the Porte about their concerns.²¹² The Ottoman government also tried to regulate the construction of industrial plants due to sanitary concerns. The administration restricted the areas where factories could be built to non-residential fields.²¹³

²¹⁰ Topuzlu, *80 Yıllık Hatıralarım*, 126-129.

²¹¹ BOA A.}MKT.NZD. 356/9

²¹² BOA A.}MKT.NZD. 215/9.

²¹³ Didem Boyacıoğlu, "Tanzimat'tan Cumhuriyete Osmanlı Fabrika Yapılarının İnşasına Dair Yapılan Düzenlemeler," *Uluslararası Sosyal Araştırmalar Dergisi* 8, no. 38 (2015): 472.

3.2 Pressure of Increasing Commercial activities and Population Growth

The integration of the Ottoman Empire into the capitalist world economy was facilitated through the means of trade.²¹⁴ In other words, commercial activities led to the penetration of capitalist interests into the trade centers of the Empire, mainly the port cities of the Eastern Mediterranean. The growth in the Ottoman-European trade began in the 18th century which defined as the “incorporation period” by Reşat Kasaba.²¹⁵ Elena Frangakis-Syrett, on the other hand, emphasized the role of the Eastern Mediterranean port cities of the Empire as agents of this growth in a period of capitalist expansion.²¹⁶ This commercial dynamism was accelerated in the 19th century with the improvements in transportation and communication technologies and several commercial treaties which led to the liberalization of trade activities.²¹⁷ The Anglo-Ottoman Commercial Treaty of 1838 has been considered as the reason of the Ottoman dependency to foreign markets and to hinder the development of capitalist industry in the Ottoman Empire.²¹⁸ However, as Zafer Toprak argued, another perspective can be utilized to understand the impact of the Commercial Treaty and the consequent transformations in the internal structure of the Empire, as well as in the urban fabric of its port cities. Toprak stated that the economic inertia caused by the traditional provisionist system which was incompatible with the European capitalist structure left its place to “a dynamic growth”²¹⁹. However, the Ottoman statesmen signed the commercial treaty due to mainly political reasons instead of considering long term economic advantages. The crises caused by Mehmet

²¹⁴ Reşat Kasaba. *The Ottoman Empire and the World Economy*. (New York: State University of New York Press, 1988), 6 ; Elena Frangakis-Syrett, "Market Networks and Ottoman-European Commerce, c.1700-1825," *Oriente Moderno*, 2006: 109.

²¹⁵ Kasaba, *The Ottoman Empire and the World Economy*, 4-5.

²¹⁶ Frangakis-Syrett, "Market Networks," 109.

²¹⁷ Şevket Pamuk states that the Ottoman foreign trade in the 18th century had experienced a one-fold increase whereas in the 19th century the rate of growth was more than ten-fold. *Osmanlı-Türkiye İktisadi Tarihi*, 210.

²¹⁸ Toprak, "Modernization and Commercialization," 57.

²¹⁹ Toprak, 58.

Ali Paşa in Egypt had been solved with the support of the British government in return for certain economic privileges. Later it would turn into a habit for the Ottoman administration to give economic concessions to several European states in exchange for military and financial support in the 19th century. Consequently, the European capital penetrated more and more into the Empire in the form of concessions for building railroads, operating ferry routes, etc. This economic dynamism and flux of European capital also affected the urban fabric of major port cities of the Empire including Istanbul.

The 19th century had witnessed major demographic changes and population movements especially for the port cities of the Ottoman Empire. The categorization of these migratory movements included displaced populations due to nationalist movements or wars, merchants and low ranking laborers attracted by the economic advantages of the “dynamic growth” of Ottoman commercial relations, and foreign officials whether military or consular who had given certain duties to perform in Istanbul. Moreover, the developments in transportation technology eased the process of movement from one place to another with the introduction of the steamships²²⁰. The steamship had twofold effect on the population increase in the Eastern Mediterranean port cities. The first one, as mentioned above, was the fact that it became easier and cheaper to go somewhere. Moreover, the travel process became more calculable and thus more secure since the liner companies established regular schedules for voyages.²²¹ Then, the immediate question coming to mind is what did create the attraction for people to prefer a life in these cities. This leads us to the second effect of the introduction of steamships into the Mediterranean; increase in the volume of trade. The rise in the commercial relations between Europe and the Ottoman Empire began within the expansion period of capitalist economy in the 18th

²²⁰ “Although the introduction of steam into the eastern Mediterranean took place in the late 1820s, the presence of steamers became evident from the 1840s and its massive penetration into the eastern Mediterranean and Black Sea routes after the 1880s.” Harlaftis and Kardasis, “Istanbul as a maritime centre,” 246.

²²¹ Harlaftis and Kardasis, “Istanbul as a maritime centre,” 246.

century²²² before the arrival of steamships into the Eastern Mediterranean. Moreover, the commercial treaties signed in the first half of the 19th century accelerated the process of Ottoman integration into the capitalist economy. In the second half of the 19th century, however, the steamships carrying bulk cargoes faster and cheaper than any other means surpassed all others in terms of its impact on the volume of trade.²²³ In parallel with decreasing costs of transportation, the freight rates were declining as well. Moreover, the opening of Suez Canal in 1869 further increased the shipping activities in the Mediterranean since the route to the eastern colonies shortened for relevant European states. The American Civil War between 1861 and 1865 had also affected the maritime activities in the region since the Northern American grain ceased to be shipped and consequently the grain from Russia gained more importance during the period.²²⁴ All these developments with the addition of new commercial regulations introduced by the above mentioned commercial treaties were reflected in the market prices and with the imported goods gained advantage over local products in the markets. It can be easily understood why merchants preferred to transfer their businesses to these Eastern Mediterranean port cities. The flourishing commercial environment brought profitable opportunities not only to tradesmen but also to other occupational groups that had a connection with commercial activities, such as charter companies, credit organizations, brokers, etc.²²⁵

Gelina Harlaftis and Vassilis Kardasis argued that Istanbul became a maritime center within the period when steamships reigned supreme:

the rise of Istanbul as the maritime center of the area depended very little on its exporting capacities and much more on the increasingly heavy

²²² Frangakis-Syrett, "Market Networks," 109.

²²³ The bulk of the cargo consisted of grain from Russia and cotton from Egypt shipped to Britain, "with return cargoes of coal from the British coalfields to the industrialized Mediterranean cities and coaling stations." Harlaftis and Kardasis, "Istanbul as a maritime centre," 234.

²²⁴ Harlaftis and Kardasis, 239.

²²⁵ Harlaftis and Kardasis, "Istanbul as a maritime centre," 240.

traffic from the Black Sea ports in conjunction with the passenger traffic within the eastern Mediterranean.²²⁶

Istanbul as a center of transit trade necessitated proper infrastructure for all these commercial activities. Municipal services and amenities were not only for improving the living conditions of the inhabitants, but also for answering the needs of international trade. The capacity of the docs in the Imperial Dockyards was insufficient for increasing volume of trade and causing regular delays in the loading and unloading processes.²²⁷ Moreover, the increasing population of the capital city put a pressure on the already-inadequate municipal infrastructure. The demands from merchants and others working in trade related businesses like charter companies, shipbrokers, ship repairmen, banking sector and even tavern owners who provided short term accommodation to seamen put another strain onto the central government and created a feeling of urgency in the modernization process of Istanbul's municipal organization. In addition to the emphasis on the need for commercial infrastructure, there were also a demand for modern municipal services and amenities.²²⁸ The state of the docs and piers was not only disturbing for the business owners and merchants, but also for the Ottoman press who did not hesitate to criticize both local administration and the central government. In a city letter from *Basiret* newspaper Ali Efendi criticized the condition of the docs and piers on the southern shores of the Golden Horn, namely in Bahçekapı. He stated that piers in the area became a garbage dump where even animals could not bear to pass by let alone people.²²⁹ The municipal needs of various businesses were taken seriously by the government and

²²⁶ Harlaftis and Kardasis, 244.

²²⁷ Harlaftis and Kardasis, 250.

²²⁸ Steven Rosenthal, "Urban Elites and the Foundation of Municipalities in Alexandria and Istanbul," *Middle Eastern Studies* 16, no. 2 (May 1980): 127.

²²⁹ "Bahçekapısı'nda Vezir İskelesi ittisalinde odun ve kömür vazettikleri yer olup, bu mahal tahminen yirmi otuz seneden beri bir mezbeleliğe girmiş ve insan değil hayvanın bile geçemeyeceği bir hal kesp eylemiştir. Artık bundan hasıl olacak taaffünat muhtaç-ı izah değildir. Şuraya taaccüp olunur ki, orada satılan odundan çeki parası ve kömürden alınan ondalık akçesi vesairesi bilmem nereye gidiyor? Ne olur bunlar ile oraya bir kaldırım yapılsa, hem o pislik oradan kalkmış ve hem de iyâb ü zihâb rahat etmiş olur. Mamafih şu iskele İstanbul'un birinci iskelesi olduğu halde, böyle olur ise artık sair iskeleler nasıl olur var kıyas eyle... Bu liman, Avrupa usulü üzere idare olunsa, hazine-i devlete senevi pek çok hasılat getireceği birey ü gümândır." Ali Efendi, *Istanbul Şehir Mektupları*, 44-45.

initiated the process that would end with the establishment of the *Altıncı Daire-i Belediye* in the Galata-Beyoğlu district of Istanbul. As it was discussed in detail in the previous chapter, in addition to political aspirations of the Ottoman administration, the financial motives had also an impact on the efforts to reorganize the municipal structure of this business district of Istanbul. The financial aspect of the Ottoman fight against pollution will be examined in the final section of this chapter.

The pressure of migration on the cities' municipal infrastructure has always constituted a problem for the urban administrations. As Nora Lafi states it:

With the arrival of migrants in town, not only can the historian read the city's functionality more clearly, but also the very urban system becomes the object of a dynamic interaction with a new element that might modify it, or, in the absence of any modification, reveal its inertia.²³⁰

Istanbul had received several waves of migrants in the course of the 19th century due to one of the reasons given above. Displaced populations constituted the bulk of the migrants since there were quite a few disturbances in the provinces of the Empire. Şevket Pamuk emphasizes three main areas where the most of the migrants came from; Crimea, Caucasus and the Balkan provinces.²³¹ The Crimean War of 1853-1856 increased the rate of migrants coming from the region and the presence of ally armies in the capital added to the already-high number of people. Migration of Circassians from the Caucasus was also increased in the middle of the 19th century. Finally, the Russo-Turkish War of 1877-1878 and the Balkan Wars of 1912-1913 caused mass migrations from the Balkans and Macedonia to Rumelia and Anatolia.²³² Pamuk gives an approximate number of migrants at nearly 1.5 million people the 19th century which constituted one third of the total population increase of

²³⁰ Nora Lafi. "The Ottoman Urban Governance of Migrations and the Stakes of Modernity," In *The City in the Ottoman Empire: Migration and the Making of Urban Modernity*, ed. Ulrike Freitag, Nora Lafi, Malte Fuhrmann and Florian Riedler, 8-25. (New York: Routledge, 2011.), 12.

²³¹ Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 217.

²³² Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 217.

Anatolia in the given century.²³³ The entirety of this 1.5 million people did not end up in Istanbul, yet even a fraction of it could be enough to force the municipal structure of the capital which was already under strain. Basiretçi Ali Efendi also wrote about the living conditions of migrants in Istanbul. He stated that they lived in squalor and were forced to stay in dilapidated taverns in Fatih district.²³⁴ In another article, Ali Efendi argued that it was a must to send refugees in Istanbul back to their homelands since if they stay longer, an epidemic might break out in the capital. The toilets in the city were insufficient for the use of that many people and this inadequacy forced refugees to defecate on the streets. He argued that the filth created by these actions could cause an outbreak.²³⁵

3.3 Financial Difficulties and Gaining Back from Trash

The monetary problems of the Ottoman government had begun long before the 19th century since it could not construct a centralized revenue system which would prevent or at least decrease the loss of revenues on the way to the imperial treasury. Intermediaries were responsible for the collection of taxes on behalf of the central administration in the absence of a bureaucratic system. As Karaman and Pamuk argued, the tax revenues of the government remained in low levels during the 17th and 18th centuries since nearly half of the collected taxes were seized by the intermediaries.²³⁶ In the 19th century, however, the state efforts to centralize its administrative apparatus and to increase its revenues for the reformation program led

²³³ Pamuk, 217.

²³⁴ “Vatanlarının istila görmesi üzerine Kırımlılardan bazılarıyla Çerkezlerden birtakımı memalik-i Osmaniyyeye gelerek birer mahalde iskan olundular. ... Şimdi peyderpey gelmeğe başladılar, ancak bunlar bazı meretebe sefalet çekiyorlar. Ez-ân cümle Fatih'te Nakip Han'ındakileri sefil kalarak han da hal-i harâbidedir.” Ali Efendi, *Istanbul Şehir Mektupları*, 216.

²³⁵ “... helalar nüfusun kesretine göre idareye kâfi olmadığından, muhacirler naçar avlulara, sokaklara ve oturdukları odaların önlerine def-i tekazâyâ başladılar. Sokaklar ve cevami avluları ve kesret üzere iskan edilen devair-i saire durulmaz, oturulmaz bir hale geldi. ... Eğer ki bu muhacirler bir müddet daha İstanbul'da kalmaları lazım gelip de böyle bir yerde izdiham ile oturacak ve bundan tabi hasıl olacak taaffün ve pislik devam edecek olursa bir hastalığın zuhuru mukarrer hükmündedir.” Ali Efendi, *Istanbul Şehir Mektupları* 665-666.

²³⁶ K. Kivanç Karaman, and Şevket Pamuk. "Ottoman State Finances in European Perspective, 1500-1914." *The Journal of Economic History* 70, no. 3 (September 2010): 597.

to an increase in the portion of taxes within the overall imperial production and revenues.²³⁷ Even though there was a significant increase in the tax revenues of the state in the 19th century, the costs of the reformation program and frequent wars drained the revenues faster than it came. Thus, the Ottoman government remained in search for more sources of income until the end of the Empire. In addition to debasements and expropriations from former officials, the extraordinary taxes, especially in wartimes, were among the solutions with which government tried to finance the army²³⁸. However, the terms of the Anglo-Ottoman Treaty of 1838 limited the autonomy of the Ottoman state to put extraordinary taxes at will.²³⁹ This restriction led the government to resort to foreign borrowing during the Crimean War in 1854 and until the establishment of the Public Debt Administration (*Duyun-ı Umumiye*) in 1881 the practice of borrowing from Europe increasingly continued.²⁴⁰

Even though the most of the expenditure were dedicated to the military and wars were the most costly spending items²⁴¹, the financial burden of transforming the administrative structure was excessive in its own right. It had not always been possible to locate new sources of income and direct them for the use of the local government. Thus, for most of the time, *Şehremaneti* was struggling with its financial shortcomings. The city suffered because of these issues and the condition of its streets was heavily criticized in the printed press and in the accounts of the travelers who visited Istanbul during the 19th century. One example from *Basiret* newspaper dated March 11, 1871 indicates that one of the main problems of the streets of Istanbul was the mud. Unpaved roads had become muddier with the rain and droppings of passing animals. Ali Efendi criticized the condition of streets in Köprübaşı where many high ranking officials lived. He stated that even though these

²³⁷ “[A]t the beginning of the century, the tax revenues were only three percent of the overall imperial production and revenues, yet it rose to more than eleven percent in the years before the World War I.” Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 200.

²³⁸ Karaman and Pamuk, "Ottoman State Finances," 625.

²³⁹ Pamuk, *Osmanlı-Türkiye İktisadi Tarihi*, 205.

²⁴⁰ The Ottoman government announced that it ceased its debt discharging in 1876.

²⁴¹ Karaman and Pamuk, "Ottoman State Finances," 619.

officials used horses or cars for travelling, the view of the streets must be disturbing for them. Thus, Köprübaşı should be prioritized for cleaning and waste collection.²⁴² Ali Efendi reminded Şehremaneti their duties of cleaning the streets and suggested that there should be two garbage carts for the cleaning work of three quarters and required quantity of men should be employed to handle those cars.²⁴³ It can be seen in most of the examples from *Basiret* newspaper that the problem of muddy streets could not be solved by the under-equipped *Şehremaneti* with its limited financial resources. In another example, Ali Efendi emphasized these shortcomings of the *Şehremaneti* and stated that it would be unfair to attribute the deficiencies in municipal services to the street sweepers and refuse collectors. He accounted that there were less than 100 garbage and watering carts for the cleaning of entire city and workers' wages were not paid for seven or eight months.²⁴⁴ These financial and administrative problems experienced by the *Şehremaneti* did not cease to exist until the end of the Empire, even though there were many regulations that released almost yearly to organize and re-organize the structure. Thus, the central government found alternative solutions to establish a sound municipal administration in Istanbul. *Altıncı Daire-i Belediye* was the first solution of a government in economic distress. The budget of the *Şehremaneti* was not sufficient to provide municipal services to entire city. The sixth district or the Beyoğlu-Galata district was one of the wealthiest districts in Istanbul so that the government decided to concentrate its resources in this part of the city to establish a well-organized municipal administration and to make a start.

Altıncı Daire-i Belediye enjoyed certain financial privileges that no other municipal department had. First of all, the choice of Galata-Beyoğlu district to establish first municipal department was legitimized in the official gazette (*Takvim-i Vekayi*) by emphasizing that since the property owners within the district had been familiar to

²⁴² Basiretçi Ali, *Istanbul Şehir Mektupları*, p.6.

²⁴³ Basiretçi Ali, p. 6.

²⁴⁴ Basiretçi Ali, p.670.

the municipal organization of certain European cities²⁴⁵, they could be more successful in operating the municipal department than other districts for now. Moreover, the district was constituted of mostly wealthy inhabitants whose occupational background varied from merchants and diplomats to state officials and businessmen.²⁴⁶ Thus, municipal taxes like cleaning fees were expected to be collected more smoothly within the area and the revenues of the department were expected to be higher than other districts. Moreover, the property tax collected from the area was the most important revenue item and due to the presence of high value estates within the district²⁴⁷ the total property tax revenue was consequently high as well. Therefore, *Altıncı Daire-i Belediye* had a better chance to function well due to its experienced administrative cadre and relatively strong financial outlook. The below-given table shows the revenues and expenditures of the sixth municipal department in 1868 (Table 1). As Osman Nuri Ergin emphasized, it can be seen from the table that the department was able to have a budgetary surplus worth eight hundred thousand to a million *kuruş*.²⁴⁸ The relative success of the sixth department can be attributed to its extensive budget.

²⁴⁵ Ergin, *Mecelle*, 1308.

²⁴⁶ In order to be a member of department council, one had to have property in the district worth more than 100.000 *kuruş* and had to reside in Istanbul for minimum ten years. The consultant members of the council, on the other hand, had to have property worth more than 500.000 *kuruş*. Toprak, “Altıncı Daire-i Belediye,” 220

²⁴⁷ Toprak, “Altıncı Daire-i Belediye,” 220

²⁴⁸ Ergin, *Mecelle*, 1335.

Table 1. The budget of the *Altıncı Daire-i Belediye* in 1868²⁴⁹

Revenues	<i>Kuruş</i>	Expenses	<i>Kuruş</i>
Property tax	1.500.000	Wages	960.000
Artisan licenses and taxes taken from shops, owners of pack horses and litter bearers	400.000	Lightening expenses (50.400) Cost of lanterns to be placed (36.000)	540.000
Construction licenses and discovery fees	130.000	Expenses of repairing sewers and sidewalks	280.000
Revenue from the contracts	170.000	Stationary costs(30.000) Other extraordinary costs (10.000)	40.000
Purchase and sale fees	30.000	Costs of the worker uniforms	10.000
Records of <i>evrak-ı maruza</i>	15.000	Rent of the hospital (9.000) Treatment costs (12.700)	100.000
Cash fines	15.000	Municipality building (37.200) Extraordinary rent (12.700)	50.000
Revenue from the displays	90.000	Reserved amount for the construction of the municipality building	20.000
Stamp tax	25.000	Excess revenues that are reserved for the next year's expenses	800.000
Revenues from weddings and gigs, from official days, etc.	235.000		
Migration licenses	6.000		
Court document fees	12.000		
<i>Çeki</i> tax	10.000		
<i>Kile</i> tax	12.000		
Weighing fees	25.000		
Extraordinary revenues	10.000		
	3.000.000		3.000.000

After 1868, Istanbul was divided into fourteen municipal departments yet none of them had shown the success of the *Altıncı Daire-i Belediye*.²⁵⁰ The Istanbul

²⁴⁹ Ergin, *Mecelle*, 1334.

²⁵⁰ "...nizamnamede lüzum gösterilen on dört daire-i belediye de hiçbir zaman tamamıyla küşâd olunamamıştır." Ergin, *Mecelle*, 1350.

Municipal Law of 1877 abolished all previous regulations including the 1870 regulation which left the revenue of the property tax to the use of the *Şehremaneti*.²⁵¹ Thus, the municipal departments, including the sixth department after 1877, had struggled with their financial shortcomings until the end of the Empire. Without the property tax, the *Şehremaneti* only had revenues from cleaning and repair fees, patent tax, town dues and annual allowance from the government.²⁵² As Osman Nuri Ergin emphasized, the revenues left for the use of the *Şehremaneti* were not enough for departments to function properly.²⁵³ The inability of the *Şehremaneti* to deliver even the basic municipal services was heavily criticized in the printed press. The idle street lamps, especially, became an object of derision in the humor magazines (Figure 2.2., Figure 2.3. and Figure 2.4.).

The financial burden of cleaning a crowded city was not troubling only for the Ottoman Empire. Large capital cities of the 19th century London and Paris had also struggled with the sumptuous costs of cleaning work and waste disposal. London spent millions of pounds for building its sewer system under the administration of Joseph Bazalgette²⁵⁴ whereas Baron Haussmann's public works costed 2.5 billion francs to Napoleon III²⁵⁵. However, gaining back from filth had been a regular practice for Londoners in the 19th century. Recycling the dust, the mud, the garbage and even human excrement and animal droppings brought the amount spent back to the municipal administration:

Human waste was stored in household cesspools, emptied occasionally by 'night soil men', who sold it to farmers as manure. Mud was swept up by parish contractors, and, likewise, sold as fertilizer. Ashes and cinders

²⁵¹ "... 1293 kanununun esbâb-ı mûcibe mazbatasında muharrer olduğu üzere emlak vergisi tarih-i mezkurdan sonra tekrar varidat-ı hükümet miyanına idhal edilmiştir." Ergin, 1367.

²⁵² Ergin, 1390-1391.

²⁵³ Ergin, 1406.

²⁵⁴ Jackson, *Dirty Old London*, 1

²⁵⁵ Matthew Gandy, "The Paris Sewers and the Rationalization of Urban Space." *Transactions of the Institute of British Geographers* 24, no. 1 (1999): 23-44.28.

were collected by dustmen and sold to brickmakers, who added the ash to their bricks, and used cinders as fuel.²⁵⁶



Figure 2.1. Caricature in *Çaylak* magazine, 9 April 1293, issue 140.²⁵⁷

The Ottoman government, on the other hand, did not show a significant interest towards recycling its waste. There were some attempts to gain back from trash yet they were not large-scale initiatives. A document from 1868, for example, shows that an Austrian national wanted permission from the government to collect animal bones from streets and slaughterhouses. In return for official permit, he promised to clean the vacant lands where these bones were dumped. Moreover, the government

²⁵⁶ Jackson, *Dirty Old London*, 2.

²⁵⁷ The writing under the caricature states: “How nice laundry poles” (*Ne ala çamaşır sırtıkları*)

demanded certain amount of payment for contracting out the job. Furthermore, there was another merchant who was a British national collecting animal bone from Drama and Gümülcine districts.²⁵⁸ This example can hardly be considered as an attempt to gain back from the trash since the Ottoman government only complied with the demands of two merchants who were, on the contrary to the government, interested in profiting from animal bones. Another document from 1913 indicates that the municipality became interested in benefitting from Istanbul's trash. The *Şehremini* Cemil Topuzlu wrote to the Ministry of Interior Affairs asking for contracting out the work of garbage collection to barrister Panayot and engineer Yorgiyadi. They demanded a 40-year concession to collect and transport garbage and incinerate it to acquire coal and fertilizer. The demanded period was found too long and suggested to be reduced to 15 years which was not accepted by those two entrepreneurs.

Cemil Topuzlu stated that animal bones and rags and tatters were considered as valuable and profitable in foreign countries. He suggested that Istanbul should also benefit from these materials in its trash.²⁵⁹ Similar suggestion was asserted by Cemil Topuzlu's predecessor Tevfik Bey in 1912, yet he stated that even though the tender was announced to the public, there was no response so that its conditions would be reorganized and it would be announced again for the second time.²⁶⁰ However, these efforts were not accepted due to the bureaucratic inefficacy and Istanbul continued to dump its waste into the Marmara Sea.

In short, financial difficulties and the demographic and commercial pressures had an impact on the Ottoman efforts to remove the filth from its capital city. The process of creating an image of a modern city was a costly procedure which put a strain on its finances. The priorities of the Ottoman government can be traced through its policies in the course of the 19th century and its emphasis on military strength led to urgent decisions without considering their long-term consequences. Even though it can be argued that the Ottoman officials tried to adapt to the needs of the century, they

²⁵⁸ Mazak, *Osmanlı'da Çevre*, 189; BOA C.BLD. 115/5729

²⁵⁹ BOA DH.UMVM. 85/48

²⁶⁰ Mazak and Güldal, *Tanzimat-ı İstanbul*, 109.

lacked long-reaching planning to find lasting solutions. The inability of the government to recycle its waste and to try to gain back from it is a great indicator of its insistence for fast and short-term solutions for its economic and administrative problems. The budgetary insufficiencies, lack of trained personnel, lack of proper authorization and absence of a flexible point of view led the *Şehramaneti* and its departments to a failure.



Figure 2.2. Caricature in *Kahkaha* magazine, 19 April 1291, issue 90.²⁶¹

²⁶¹ The writing under the caricature states: "Since the lamps are not working, then everyone should wear them onto their heads and be protected from the dust!" ("Mademki gazlar yanmıyor bari herkes başlarına giyse de tozdan muhafaza olsa!")



Figure 2.3. Caricature in *Çaylak* magazine, 25 *Sefer* 1293, issue 15.²⁶²

²⁶² The writing under the caricature states: “Guard – Where is your lantern? Boy – Here. Don’t you see? Bekçi – Well! It did not work! Boy – Certainly one day it will be lit up.” (*Bekçi – Hani fenerin? Çocuk – İşte. Görmüyor musun! Bekçi – Ayol o yanmıyor! Çocuk – Elbet bir gün olur yanar.*)

CHAPTER 4

POLLUTION AS A SANITARY ISSUE

I entered the most miserable streets of Balat which resembled the shores of Dante's hell and where moldy sheds lay together with their sludgy-walled dark rooms and windows covered with repugnant rags. I passed by intersections which one could not pass without covering his nose and without stepping up onto poles. I stood in front of rafty courtyards where the musty breath of the person. ... I managed to pass beyond the mangy dogs, slimy puddles on the road, dirty clothes hanging from filthy ropes and disgusting piles of garbage.²⁶³

The unsettling account of Edmondo de Amicis is one of the many examples which were written by various European visitors who were amazed by the condition of Istanbul's streets. The city presented a filthy panorama of muddy streets, hundreds of stray dogs, open sewers, dust and a great variety of effluvia. In addition to all of these nasty realities of inhabitants' everyday life, piles of garbage around piers and absence of regular inner-city transportation were causing distress to tradesmen who had to deal with it on a daily basis. However, the real scare was less visible and even sometimes ideological. Epidemics which came and went every few years remained vivid in people's memories. The sanitary movement can be considered as a reaction to these unseen dangers of filth which at the time was thought to be related with offensive odors. It was the miasmatic understanding of disease that led the authorities to galvanize cans, pour lime into the cesspits and seal everything that might release stenches. The fight against pollution was also the fight against infectious diseases. London, for example, initiated its sanitary reform program right after a major

²⁶³ Edmondo de Amicis, *Istanbul*, 153-154.

outbreak of cholera in the midst of the 19th century.²⁶⁴ As James Parsons stated in 1908: “At last successive visitations of cholera in 1849 and 1853 demonstrated the connection between dirt and disease, and proved themselves the ally of sanitary reform.”²⁶⁵ Similar to the British example, Paris had experienced series of epidemics in the first half of the century which were a part of the wave of cholera epidemic that ravaged Europe in 1848.²⁶⁶ The rebuilding of Paris began in 1853 with the appointment of Baron Georges-Eugène Haussmann as the Prefect of the Seine²⁶⁷, also known as the sixth municipal district of Paris. In short, the connection between filth and disease began to be established in the first half of the 19th century accompanied by the idea of its preventability which led to the initiation of certain sanitary measures aiming to eradicate the causes of disease.

The relation between filth and disease can seem as an intrinsic fact which the contemporary perceptions take for granted. However, the epidemiological knowledge in the 19th century only recently accepted certain premises of the nature of contamination. The “indictment of disgusting substances and behaviors as health hazards” was among those premises which became one of the main research topics of the French hygienists at the beginning of the century.²⁶⁸ However, the main emphasis was on the methods to identify which environmental conditions were hazardous and which were just inconvenient or unpleasant nuisances. The scientific inquiry accompanied by empirical research gave the authority to express an opinion rather than relying upon groundless beliefs on the nature of diseases.²⁶⁹ Thus, the rational organization of the urban environment became the main tool of sanitary efforts and the works of these early French hygienists inspired the sanitary reformers of 1850s.

²⁶⁴ Michelle Allen, *Cleansing the City*, 11-12.

²⁶⁵ James Parsons, "The Sanitary Evolution of London." *Charity Organisation Review* 24, no. 140 (August 1908): 88.

²⁶⁶ Barnes, *The Great Stink*, 58.

²⁶⁷ Brian Chapman, "Baron Haussmann and the Planning of Paris." *The Town Planning Review* 24, no. 3 (October 1953): 177.

²⁶⁸ Barnes, *The Great Stink*, 68.

²⁶⁹ Barnes, 69.

Sanitary reform meant different things in different contexts yet all of its adaptations shared a common enemy, urban pollution. Garbage on the streets, waste spilling over the cesspits, open sewers and animal droppings had always been undesirable parts of urban living. However, the 19th-century emphasis on the rational organization of the environment as a sanitary measure transformed the “undesirable” to “formidable”. Thus, sanitary engineers strived to eliminate the dirt from the urban landscape as fast as possible before letting it to decompose and became hazardous to everyone around. Sanitary reform was also an ideological apparatus which was used to police the marginal classes in the city and to ensure order by preventing immoral behavior. Disorder, immorality, criminal activity and being dirty or living in filth all posed a threat to the purity of the 19th-century modern man. The same modern man associated physical corruption with moral deterioration and considered both as urban nuisances that needed to be avoided. Most of the time the source of this “vitiating air” that could also contaminate the well-off areas of the city had been found in the areas where the urban poor resided. Policing the poor and marginal groups in the city had been a part of the sanitary efforts of the 19th century. An example to these marginal groups that considered as the source of menace was the single males resided in bedsitters (*bekar odaları*) in the city. They were associated with the spread of diseases and immoral behavior which was a threat to the “purity” of the society as much as the plague or cholera. During the 1812 outbreak of the plague, several bedsitters were demolished due to the suspicion that the plague was spread from these dwellings where singles were involved in prostitution.²⁷⁰ The belief that crowdedness and filth cause outbreaks in the city led to the regular surveillance of the bedsitters through the end of the century. During the cholera outbreak of 1893, sanitary inspectors carried out frequent inspections in these dwellings in order to ensure the cleanliness of the area and thus prevent further spread of the disease.²⁷¹

²⁷⁰ Onur Gezer, "Çizginin Dışındakiler: Osmanlı İstanbul'unun Aykırı Bekarları ve Bekar Girer "Melek Girmez" Odaları," In *Osmanlı İstanbulu II*, ed. Feridun M. Emecen, Ali Akyıldız and Emrah Safa Gürkan, (İstanbul: İstanbul 29 Mayıs Üniversitesi Yayınları, 2014), 544.

²⁷¹ Gezer, "Çizginin Dışındakiler," 549.

In this chapter, the impact of the sanitary reform on the perception of filth will be analyzed in three different contexts. London and Paris were the frontrunners of the sanitary movement. The British sanitary engineer Edwin Chadwick, the French hygienists, the famous Prefect of Seine Baron Haussmann and later the work of Louis Pasteur had an impact on the idea of sanitation and consequently the image of modern city. The wide-spread movement of sanitary reform had also found an audience in the Ottoman Empire approximately at the same time with its European counterparts. The municipal reform of 1850s and the establishment of *Altıncı Daire-i Belediye* were the physical representations of a change happening in the mind-set of state officials towards the provision of modern municipal services. Those services included ensuring the hygienic conditions in the capital and preventing the spread of infectious diseases as it will be discussed later in this chapter. The emphasis on public health in the archival materials is an indicator of an increasing interest towards the sanitary measures as in the above-mentioned cases of London and Paris. It is important, however, to keep in mind that the political agenda of the Ottoman government had always been present in the process of its municipal transformation and continued to be visible through the sanitation and disease prevention efforts. Moreover, changing views on the spread of diseases will be analyzed in relation with the developments in bacteriology and epidemiology in order to draw a complete picture of the perception of urban pollution as a sanitary issue. Transformation from miasmatic understanding to germ theory had a permanent impact on the attitudes of sanitary engineers and urban authorities in terms of the cleaning work of these cities. Finally, the quarantine practices in the 19th century will be the topic of the last section of this chapter. The quarantine had a certain political meaning attached to it in addition to its objective of preventing the spread of diseases.

4.1 Dichotomies of the Sanitary Movement

London disposed its refuse in a variety of ways from incineration to landfills. Moreover, the urban authorities were eager to make profit out of the garbage by selling it to different businesses. Ashes which constituted the largest portion of the refuse were sold to brickmakers while excrement and organic waste like bones and

food were sold to the farmers to be used as fertilizer.²⁷² However, this system of waste collection and disposal was not enough to prevent outbreaks of diseases like the much-feared cholera, typhus and typhoid fever. As it will be examined in the following section, the sanitary engineers with the help of scientific inquiry of public hygiene tried to take precautions against for example the drainage of human excrement into the Thames River. In short, British sanitary reformers showed a close interest in the prevention of urban pollution and spread of infectious diseases. They accepted the premises of the miasmatic understanding and tried to remove environmental factors that believed to be causing epidemics. Paris, on the other hand, was the birth place of the science of public health and as described by David S. Barnes “the world’s medical mecca” at the beginning of the 19th century.²⁷³ One of the pressing issues thought to be the reason of current epidemics was overcrowded living conditions in the capital city. Many people were living in run-down houses in dark, airless and narrow streets and this overcrowdedness was considered to deprive “human bodies [of] the minimal requirements for physical and moral survival.”²⁷⁴ Moreover, the methods of waste disposal were heavily criticized as belonging to the *ancien régime* and not being compatible with the virtues of the civilized man. The Montfaucon waste plant and the horse-rendering facility near Paris were the examples of those archaic practices that were heavily criticized by the hygienists for threatening the public health.²⁷⁵ Paris reformers were also under the influence of the miasmatic understanding of disease which emphasized the environmental conditions in transmission of diseases. Before moving on to the Ottoman case, it will be beneficial to distinguish miasmas from germs since the bacteriological revolution at the end of the 19th century had affected the approach of urban authorities to pollution.

²⁷² Jackson, *Dirty Old London*, 11

²⁷³ Barnes, *The Great Stink*, 71.

²⁷⁴ Barnes, 75.

²⁷⁵ Barnes, 68.

The dichotomies of sanitary movement such as contagion versus infection and miasma versus germ theory of disease are insufficient to explain the processes of sanitary reform in London, Paris and Istanbul since the boundaries of these concepts were blurred in the practices of the 19th century. Infectionists supported the idea that better living conditions would prevent the outbreaks and environmental factors were the primary reason for the occurrence of a disease. If the disease in question was contagious in nature, there would be still a need for proper environmental conditions for it to spread on a large area. That is why they thought certain epidemics were endemic to the region they were spotted. For example, the French physicians Clot-Bey (Antoine Barthelemy Clot) and Louis Aubert-Roche were sent to Egypt to study the causes of cholera and whether quarantine measures were necessary.²⁷⁶ They concluded after more than a decade of study that the disease was endemic to the region where the living conditions of its people were the most horrid and with proper sanitary measures it can be prevented. Their statements opened the way to the legitimization of outside intervention aimed to improve hygienic conditions and bring the “civilized” sanitary methods of Europe.²⁷⁷ Thus, they suggested the rehabilitation of the sanitary conditions since the nature of disease was making the wearing quarantine measures unnecessary. Contagionists, on the other hand, had been arguing that cholera was transmitted through contaminated bodies and materials like cotton and wool. For this reason, the application of quarantine was a must if the spread of the disease wanted to be prevented. However, as one can imagine, these discussions were not only about the prevention of cholera but also about the protection of economic and political interests which will be analyzed in the final section of this chapter.

The miasma, meaning “vaporous exhalation”²⁷⁸, had a pivotal role in the medical and sanitary history by being the main agent in the spread of infectious diseases. Most of

²⁷⁶ Birsen Bulmuş, *Plague, Quarantines and Geopolitics in the Ottoman Empire*, (Edinburgh: Edinburgh University Press, 2012), 132.

²⁷⁷ Bulmuş, 133.

²⁷⁸ *Merriam-Webster*, s.v. “miasma,” <https://www.merriam-webster.com/dictionary/miasma>

the time it had been related with the noxious smells coming out from sewers, piling garbage on the streets, dumping grounds, decomposing organic waste and animal carcasses and certain hazardous businesses like tanneries and slaughterhouses. The followers of the miasmatic understanding of disease emphasized the importance of ventilation in living quarters and removal of substances which produce offensive odors. They were the backbone of sanitary movement and firm believers of preventive medicine. Edward Chadwick, the British sanitary reformer, was one of the miasmists who stressed that “all smell is disease”²⁷⁹. His firm belief on the miasmatic causes led to the “out of sight, out of mind” solutions for the removal of municipal waste. These solutions included draining sewage to the Thames River which at the time was the primary water supply of London. His animosity towards the cesspools of London and advocacy of a quicker method of waste disposal via water-carriage through sewers ignored the possibility of contaminating the city’s water source.²⁸⁰ Even though the great majority supported the miasma theory of disease, there were also various different opinions about the origins of diseases which challenged the claimed dangers of vaporous smells. A British physician John Snow challenged the views of Chadwick and stated that the water pollution was the prime suspect in cholera cases not the polluted air.²⁸¹ He studied several water companies in terms of the quality of their drinking water and concluded that the ones that provided water from upstream of where sewer met the river had fewer cholera cases than the ones drawing from downstream.²⁸² At about the same time, Baron Eugene Haussmann was also opposing to the disposal of human excrement by water-carriage through the newly built sewers of Paris. However, his unwillingness was caused by economic concerns rather than an anxiety about the water quality of Seine. He worried that mixing excrement with water would decrease its value as fertilizer. Even though his

²⁷⁹ Stephen Halliday, "Death And Miasma In Victorian London: An Obstinate Belief." *BMJ: British Medical Journal* 323, no. 7327 (2001): 1469.

²⁸⁰ Halliday, “Death and Miasma,” 1469.

²⁸¹ Halliday, 1470.

²⁸² Halliday, 1470.

opposition, more and more residents had been connected to the sewer system of Paris which carried the storm waters and the waste to Seine River in the second half of the 19th century.²⁸³ An issue of the British satire magazine *Punch* from 1858, which included a caricature of the dangers posed by the River Thames, further supports the existence of opposing views on the causes of epidemics (Figure 3.1.). The British equivalent of Haussmann and the chief civil engineer of the Metropolitan Board of Works, Joseph Bazalgette was responsible for constructing the sewer system of London in 1860s and 70s which prevented a major cholera outbreak in the 1890s.²⁸⁴ A pamphlet from 1866 emphasizes further the coexistence of different opinions on the origin of disease and shows that the ideas of John Snow found an audience in the Metropolitan Board of Works as well (Figure 3.2.). Towards the end of the 19th century, the miasmatic understanding was slowly giving its place to empirical studies and new ideas about the causes of infectious diseases.

The below-given narrative of Parisian atmosphere at the end of the 19th century is an excellent account in order to understand the context where novel scientific ideas were arising and challenging the old miasmatic reservations:

... the memory of revolutionary upheaval and the threat of social conflict continued to haunt the wealthy, while intractable poverty and injustice nurtured bitter resentment among the poor; a rural exodus put a tremendous strain on urban housing and infrastructure, while in the capital a new standard of state-sponsored reshaping of the built environment was emerging; new imperatives of civilized behavior subverted old mores and lowered thresholds of tolerance for previously accepted practices and substances; and a radically new science identified tiny living organisms invisible to the unaided eye as the causes of everything from the fermentation of beer and wine to deadly diseases.²⁸⁵

²⁸³ Gandy, "The Paris Sewers," 30.

²⁸⁴ Halliday, "Death and Miasma," 1471.

²⁸⁵ Barnes, *The Great Stink*, 13-14.



Figure 3.1. Drawing in *Punch* magazine, 1858²⁸⁶

The Great Stink of Paris in 1880 crippled the city with the fear of disease. The unbearable stench led to a panic among the firm believers of miasmatic causes of disease and created a nearly apocalyptic atmosphere where newspapers constantly criticized the authorities and prophesized the end of Paris as a habitable city.²⁸⁷ The closure of the Nanterre waste treatment facility in late spring of the same year due to the unpleasant smells emanated from the plant led to the transfer of night soil collected from the cesspools to other areas or to practices like discharging the excess waste into the sewers.²⁸⁸ In the following summer months the stink spread to the entire city and continued until the early October.²⁸⁹ The government elected a

²⁸⁶ Rosie Cox et al., *The Filthy Reality of Everyday Life: Dirt* (London, Profile Books, 2011), 141.

²⁸⁷ Barnes, 13.

²⁸⁸ Barnes, 16.

²⁸⁹ Barnes, 18.

commission to investigate the reasons behind this odoriferous atmospheric event and evaluate the dangers it posed to public health. The commission, which included Louis Pasteur and Paul Brouardel, published a report in 1881. This report contained the famous sentence which was later used as a motto by the followers of the germ theory of disease: *tout ce qui pue ne tue pas, et tout ce qui tue ne pue pas.*²⁹⁰

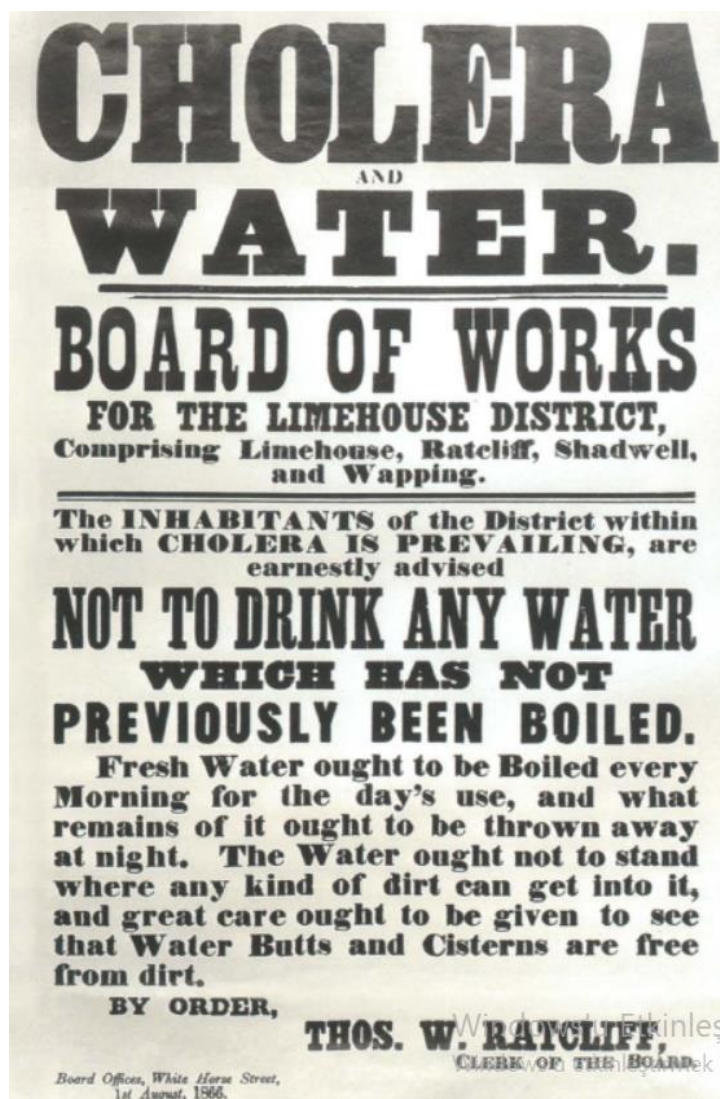


Figure 3.2. Metropolitan Board of Works Poster, 1866²⁹¹

²⁹⁰ “Not everything that stinks kills, and not everything that kills stinks.” Barnes, 37; Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination*, (New York: Berg Publishers, 1986), 223.

²⁹¹ Cox et al., *The Filthy Reality*, 139.

The germ theory argued that certain diseases are caused by the invasion of the body by microorganisms, organisms too small to be seen except through a microscope.²⁹² These pathogens were considered to be the primary cause of the spread of infectious diseases through “airborne droplets, fecal-oral transmission and water-borne infection”²⁹³. As one of the main advocates of the germ theory and founders of bacteriology, Louis Pasteur’s impact on the perception of epidemics can be emphasized with the terminology used in periodization of the science of public health as pre-Pasteur and post-Pasteur eras.²⁹⁴ As it will be explained later in the chapter, Pasteur’s work also made an impact on the Ottoman applications of sanitary measures and development of bacteriology within the Empire. The Ottoman government’s financial contribution to the establishment of the Pasteur Institute in Paris and its official invite of the famous bacteriologist to the Empire for opening a bacteriology laboratory were among the indicators of his influence over the Ottoman epidemiology.

4.2 Sanitary Reform in Istanbul

The Ottoman government as it can be understood from the plethora of archival material had always shown an interest towards the welfare of its subjects. The supply of clean drinking water to Istanbul and the state of cleanliness of the dams were among the concerns of the central administration. A document from 1815 indicates the importance given by the government to the water supply of Istanbul. The document shows that the expenses of repairing and cleaning dams, enlarging two of the existing ones and constructing a new dam in Kirazdere could not be covered from the treasury since it was the time of wage payment. It was ordered that the money saved for building castles would be transferred to the treasury to cover the

²⁹² *Encyclopaedia Britannica Online*, s.v. “germ theory” <https://www.britannica.com/science/germ-theory>

²⁹³ Barnes, *The Great Stink*, 41.

²⁹⁴ Corbin, *The Foul and the Fragrant*,

expenses.²⁹⁵ Another document from 1831 emphasized the urgency of cleaning Istanbul's dams before summer and ordered to expedite the procedure.²⁹⁶ However, the idea of water-borne diseases did not occur until the second half of the 19th century.²⁹⁷ Thus, all the government efforts to secure clean drinking water for the inhabitants of Istanbul can be interpreted as a part of the general provisionist understanding of the state rather than a proactive measure to prevent epidemics.

When it came to the 19th century, the Ottoman government began to take certain sanitary measures to prevent diseases with the impact of improvements in the science of public health and new discoveries in epidemiology which had changed the perception of filth. The state documents began to include phrases like “conformed to the principles of public hygiene”²⁹⁸ or “creating a health hazard”²⁹⁹. For example, in a document from 1852, it was stated that “according to the measures needed to be taken to prevent diseases, cleanliness is the essence of public health”.³⁰⁰ The association of filth with infectious diseases can be attributed to the changes in sanitary discourses of the 19th century. International sanitary conferences held in the second half of the century contributed to these discursive changes and aimed to create uniformity in terms of measures to be taken against infectious diseases. Thus, international cooperation in disease prevention contributed to the elimination of different practices of quarantine and aimed to standardize preventive measures. The first of these conferences was convened in Paris in 1851 with the participation of 12 states including the Ottoman Empire. The cholera epidemic that spread to entire Europe in 1848 was the main focus of the conference and many of the members

²⁹⁵ Mazak, *Osmanlı'da Çevre*, 125; BOA C.BLD. 133/6642

²⁹⁶ Mazak, 193; BOA C.BLD. 89/4407

²⁹⁷ John Snow first suggested that instead of air, cholera was transmitted through contaminated water in 1850s.

²⁹⁸ “Dersaadet ve bilad-ı selasede kain kariz ve helaların ekserisi ba-husus haliç tersaneyeye cereyan edenler hıfzısihha kaidesine muvafik surette yapılmamış olduklarından naşi hasil olan taaffünat ...” BOA ŞD 2394/31

²⁹⁹ “hasil olan taaffünat sıhhati ihlal edecek dereceye gelmiş olmasından ...” BOA MF.MKT. 15/23.

³⁰⁰ “Tedabir-i zahiriyye icabınca sıhhat-i umumiyye maddesinin mevku-f-ı aleyhi olan tanzifatın ...” BOA A}MKT.UM 86/59

pointing the Ottoman Empire as the reason for the cholera epidemic. The physician who represented the Empire Dr. Bartoletti objected to these arguments and stated that the application of quarantine measures since 1838 prevented the transmission of the disease through Ottoman lands. The members of the conference decided to reform quarantine practices in the Middle East and the Empire agreed to accept new quarantine regulations. This conference was the first of many which aimed to eliminate epidemics and tried to create an international community that shared a common understanding of infectious disease and a standardized methodology for disease prevention.

The Ottoman's support of miasmatic understanding of disease can be traced through the archival documents and the writings in the printing press. As it can be understood from the above given cases of Paris and London, the norm in the first half of the 19th century was the rational reorganization of the urban environment in order to ensure hygienic conditions to prevent the spread of diseases. Crowdedness, airlessness and filth on the streets were seen as the common enemies of the public health. Moreover, obnoxious smells were believed to be the primary carrier of disease. In a document from 1850, it was stated that the dust and the filth on the streets were causing malodors. Thus the streets should be cleaned in order to prevent the spread of diseases and notices should be hanged to order the inhabitants to comply the rules of cleanliness.³⁰¹ An article from *Basiret* newspaper further emphasizes the belief in miasmatic causes of disease. Ali Efendi stated that physicians warn people to be careful about what they eat and about the cleanliness of their environs since filth would defile the air.³⁰² Yet in another example from *Tasvir-i Efkar* newspaper, the importance of fresh air in the prevention of diseases was underlined and it was stated that:

³⁰¹ “Her halde taharet ve nezafete dikkat etmek şî’ar-ı insaniyetten olarak mevsim-i sayf münasebetiyle bir müddetten beri yağmurlar yağmadığından her tarafın sokaklarında ziyade toz ve süprüntü teraküm ederek bu cihetle hasıl olan ta’affünat bazı illet ve emraza sebep olmamak için ... “ BOA İ..MVL. 180/5396

³⁰² “Etıbbıa bunun zuhuruna başlıca iki sebep beyan ediyorlar. Biri yiyecek şeylere, ikincisi ciyâdet-i hevâyı ihlal eden pisliklerin def’ine adem-i dikkat.” Ali Efendi, *Istanbul Mektupları*, 176

“To avoid living in humid and foul-smelling dwellings and consuming fruits, vegetables and milk that might upset the stomach. ... Not to fray the nerves with fear while taking these precautions”³⁰³

In a rather long article published in *Tasvir-i Efkar* newspaper, the measures to avoid cholera and what should be done if one becomes ill were explained in great detail:

To keep the stomach warm, one must wrap a wool belt around their waste and wear an undershirt all the time. It is important to keep clothes, foods and homes always clean. In order to renew the air in the room, one must keep the windows open all day while avoiding air flow between two windows opposing each other. Avoid from living in humid environments. In order to eliminate malodors coming from toilets and garbage, one must use disinfectant which would be found in nearby pharmacies.³⁰⁴

All these examples emphasize the acceptance of miasma as the primary carrier of disease. The need to avoid contacting malodorous materials and air (*taaffünat*) had been stressed repeatedly in the documents and newspaper articles even after the establishment of the bacteriology laboratory where germs and microbes were the primary suspects of analysis instead of the miasma. However, the miasmatic understanding's emphasis on the importance of sanitary measures had not been abandoned after the bacteriological revolution. As it was argued above, the dichotomies of the disease prevention efforts were not rigid. Even though the contagionist understanding emphasized the fact that diseases were transmitted through contaminated bodies and materials, it also took some of the infectionists' premises into account. Thus, the attention to the maintenance of sanitary conditions

³⁰³ “Ufunetli ve ziyade rutubetli mahallerde ikametden ve mideyi bozacak ve belki meyve ve süt ve sebze gibi mülayemet verecek ma'kulattan sakınmak. Daima kızdırıcı şeyler isti'mal olunmak. Bu tedabir-i ihtiyatiyeyi icra ile beraber ziyade korku ile a'sâba za'f getirmemek.” *Tasvir-i Efkar*, issue 316, 6 July 1282, 1.

³⁰⁴ “Karnını daima sıcak tutmak üzere beline yünden mamul kuşak kuşanarak fanilasız olmamaklıktır. Üzerini ve etrafını ve giyecek melbusatı ve mahal-I iskan ve ikameti daima temiz tutmaklıktır. Havayı tecdid için ? geriye kadar yani bütün gün pencereler açık tutulacak ve fakat soğuk hasıl olacak derecede dahi pencereleri ve kapıları karşı karşıya açık tutup havayı şiddetlice cereyan ettirmemeye dikkat ve itina olunacaktır. Balada zikr olunduğu vechile mahal-I ikamet ve mesken temiz olmaklıkla beraber asla rutubetli olmayacaktır. Mezbeleliklerin ve hususiyle abdesthanelerin tathiri elzem olduğundan bunlardan hasıl olan taaffünü def için sıkıca sıkıca ? eczasından dökmek lazım gelecektir ve işbu ecza dahi (solüsyon dezenfektanet) yani (fena kokuları defile havayı tathir eden su) tabiriyle maruf olup her mahalde tayin olunacak eczahane ve ispençiyar dükkanlarında bulunacaktır.” *Tasvir-i Efkar*, issue 318, 1865.

had always been one of the primary objectives of the municipal administration. A document dated 1893 reveals that the fear of vitiated air continued to direct the actions of the local administration. It was ordered by the *Şehremini* Rıdvan Paşa that large barrels with sealed lids and lime plasters would be placed around the cantaloupe and watermelon stands in Istanbul since the rinds of those fruits were defiling the air and thus creating a health hazard especially in this summer season. Rıdvan Paşa suggested that these stands should not be permitted to provide seats for clients and only be allowed to sell their products.³⁰⁵

In the last quarter of the 19th century, however, the germ theory has begun to gain more ground. The discovery of the *Vibrio cholerae* (the comma-shaped bacterium causing cholera)³⁰⁶ by Robert Koch³⁰⁷, a German bacteriologist and a physician, in 1884 resonated in Istanbul and led to the establishment of the first bacteriology laboratory (*Bakteriyolojihane-i Şahane*) in 1893. Before the establishment of the bacteriology laboratory, several epidemiologists and bacteriologists were invited to the Empire to share expertise on disease prevention in 1880s.³⁰⁸ During this process, several physicians were also sent to Paris to study under Louis Pasteur and learn the details of the job. Zoeros Bey was one those committee members who worked in the Pasteur Institute in Paris for six months before returning to the Empire.³⁰⁹ He represented the Ottoman government in the 1885 Sanitary Conference in Rome and argued against British delegates by supporting contagionist views and suggesting the application of quarantine. French delegates joined Zoeros Bey in his arguments and

³⁰⁵ Mazak, *Osmanlı'da Çevre*, 137; BOA. Y.MTV. 81/49.

³⁰⁶ *Encyclopaedia Britannica Online*, s.v. "Robert Koch" <https://www.britannica.com/biography/Robert-Koch>

³⁰⁷ The actual discovery of the *Vibrio cholerae* was done by an Italian scientist in 1854, 30 years before Koch, yet it did not attract attention as much as Koch's study.

³⁰⁸ Anne Marie Moulin, "Kentte Koruyucu Hekimlik: Pasteur Çağında Osmanlı Tıbbı 1887-1908." In *Modernleşme Sürecinde Osmanlı Kentleri*, ed. Paul Dumont and François Georgeon, (Istanbul: Tarih Vakfı Yurt Yayınları, 1999) 169.

³⁰⁹ Moulin, "Kentte Koruyucu Hekimlik," 178; The committee included Physician Zoeros Bey, Physician Hüseyin Remzi Bey and Veterinarian Hüsnü Bey, BOA HR.TH.. 67/63.

insisted on the necessity of the quarantine.³¹⁰ In 1887, the first rabies institute was established in Istanbul and Zoeros Bey was appointed as its president.³¹¹ Anne Marie Moulin argued that the choice of forming a rabies institute is an indicator of the willingness of Abdülhamid II to showcase the “modernity” of the capital city since the rabies cases were not high in the Empire and it was not an urgent health issue.³¹² On the contrary to the Rabies Institute, the bacteriology laboratory was formed due to an urgent need to fight against cholera in 1893.

Right before the establishment of the *Bakteriyolojihane-i Şahane*, the government sent a telegraph to Pasteur inviting an expert to inspect the “mysterious disease” that began to be seen in Istanbul and to determine whether it was cholera. André Chantemesse³¹³ arrived at Istanbul on September, 1893.³¹⁴ During his three-month stay in the capital, he determined the reason of death of a soldier as cholera and prepared a report on the sanitary inadequacies of Istanbul including his suggestions for preventing infectious diseases.³¹⁵ He stated that the sewer system of the city was deficient while its water sources were contaminated. Moreover, he criticized the state of the sanitary infrastructure and emphasized the need to establish a laboratory, disinfection stations and health commissions under the auspices of the

³¹⁰ Moulin, 173-174.

³¹¹ Moulin, 178.

³¹² Moulin, 179.

³¹³ In a poem written by the Poet Eşref, it can be seen that the people were critical about the deeds of the *Şehremaneti*:
“Hastalıklar şübhelendi celb edildi Şantimes
Şhremini var iken mikrop aramak pek abes
...
İllet-I ma’hudeye çare bulmak mültemes
Mikrobu Rıdvan olunca ne halt ider Şantimes” Nuran Yıldırım, "1893'te
Istanbul'da Kolera Salgını," *Tarih ve Toplum*, no. 129 (September 1994): 150.

³¹⁴ Nuran Yıldırım and Hakan Ertin, "European Physicians/Specialists During the Cholera Epidemic in Istanbul 1893-1895 and Their Contributions to the Modernization of Healthcare in the Ottoman State," In *Health, Culture and the Human Body Epidemiology, Ethics and History of Medicine, Perspectives From Turkey and Central Europe*, ed. İlhan İlkılıç et al., (Istanbul: Betim Center Press, 2014), 196.

³¹⁵ Yıldırım and Ertin, “European Physicians,” 196-197.

Şehremaneti.³¹⁶ He also sent a letter to Pasteur and asked a bacteriologist to be sent to guide the efforts to establish a bacteriology laboratory and train students.³¹⁷ Doctor Maurice Nicolle arrived at Istanbul on November, 1893 and began to work immediately by analyzing the water samples taken all around Istanbul.³¹⁸ He discovered that certain intestinal diseases could provide a basis for cholera and the occurrence of the disease could be related with the diet of a person.³¹⁹ Thus, during the operation of the bacteriology laboratory, the germ theory gained more ground among the public and sanitary practices began to include procedures like disinfection and usage of chemicals to kill the microbes. The impact of French bacteriologists affected the works of future generations of physicians who were educated in *Mekteb-i Tibbiye-i Askeriyye* which hosted the Rabies Institution and the bacteriology laboratory.³²⁰ One of those physicians Cemil Topuzlu stated in his memoirs that as medical students they followed the studies of Louis Pasteur via French medical journals.³²¹ When Cemil Topuzlu was appointed as the prefect of Istanbul in 1912, he worked a great deal to ensure the hygienic conditions of the streets and attached a great importance to the application of sanitary measures in order to prevent diseases.

4.3 Quarantine Wars and Istanbul as the “Exporter of Disease”

The Ottoman Empire did not have any quarantine facilities until 1838 when Mahmud II decided to establish quarantine measures in order to prevent the spread of infectious diseases, especially cholera which recently took Istanbul by storm. However, the Ottoman officials seldom acted without having a political agenda in mind. The Anglo-Ottoman Commercial Treaty of 1838 led to the greater penetration

³¹⁶ Yıldırım and Ertin, 197.

³¹⁷ BOA Y..PRK.SH.. 4/56.

³¹⁸ Yıldırım and Ertin, “European Physicians,” 199.

³¹⁹ Moulin, “Kentte Koruyucu Hekimlik,” 184.

³²⁰ TDV *İslam Ansiklopedisi Online*, s.v. “MEKTEB-İ TIBBİYYE,” <https://islamansiklopedisi.org.tr/mekteb-i-tibbiyye>

³²¹ Topuzlu, *80 Yıllık Hatıralarım*, 40.

of capitalist world economy into Ottoman markets and disrupted the work of local manufacturers since imported goods were cheaper than local products. Quarantine measures had a relation with mercantilist policies since they tend to hinder international trade due to state control on imports in the name of preventing epidemics.³²² It is highly possible that the Ottoman statesmen had this thought in mind since the Empire abolished all state monopolies on trade with a line of treaties signed with several industrialized countries in the first half of the 19th century. It is striking that the British government opposed the implementation of quarantine measures in the Ottoman Empire due to the threat it posed to free trade.³²³ Even though the British had employed quarantine measures since the early 17th century, the industrial development and the expansion of capitalist economy in the 18th and 19th centuries motivated them to adopt an infectionist view of diseases.³²⁴ Infectionists or anti-contagionists, as it was discussed above, argued for the improvement of environmental conditions since diseases occurred in corrupted environments. Thus, the infectionist argument made quarantine redundant and advocated for the establishment of a sewer system and the provision of clean water.³²⁵ The tight control of the quarantine over commercial activities was creating an inconvenience for the merchants who needed to wait in quarantine for months to get a clear permit. This procedure was causing a significant decrease in their profits and creating an unequal competitive environment between the countries whose state's supported quarantine measures and whose did not.³²⁶ The Ottoman government, on the other hand, used the quarantine for its own benefit and tried to re-establish control over the international trade under the name of disease

³²² Bulmuş, *Plague*, 2.

³²³ Bulmuş, 4.

³²⁴ Bulmuş, 39.

³²⁵ Yıldırım and Ertin, "European Physicians," 192.

³²⁶ In the International Sanitary Conference of 1851, the French Minister of Foreign Affairs stated that "the imbalance created in the international system and trade by having separate sanitary regulations has to be eliminated." Nermin Ersoy, Yüksek Güngör, and Aslıhan Akpınar, "International Sanitary Conferences from the Ottoman perspective (1851–1938)," *Hygiea Internationalis: an Interdisciplinary Journal for the History of Public Health*, (2011): 57.

prevention.³²⁷ There was a subtle quarrel between the Empire and European states in terms of the application of quarantine measures. This conflict had both economic and political attributes and both sides were eager to have the upper hand.

The first quarantine applications in 1830s culminated in the establishment of the Quarantine Council (*Meclis-i Tehaffuz*) in 1838. Shortly after its establishment, the council gained an international quality with the participation of members from thirteen different countries.³²⁸ The decision of the Ottoman government to establish quarantine measures can be considered as a part of the modernization efforts of the 19th century, and can also be attributed to the Ottoman Empire's first encounter with cholera in 1831. Hamdan Bin El-Merhum Osman's writings on the nature of infectious diseases had an impact on the contagionist arguments of the Ottoman government. He argued that the "[p]lague comes from putrid, fetid air which poisons light materials like cotton and wool ... [and] then spreads to humans."³²⁹ He fervently supported the application of quarantine measures in order to prevent the spread of diseases. Even though Hamdan's support was based on his admiration of science and empirical knowledge³³⁰, the Ottoman government's decision of establishing the quarantine was partially related with protectionist aspirations and their desire to shatter the "anti-contagionist other"³³¹ image of the Europeans. Thus, the Ottoman government wanted to "resist British commercial expansion rather than pave the way for it."³³²

The British, on the other hand, began to support infectionist measures which can be seen clearly from their stance in the International Sanitary Council of 1851 where the

³²⁷ Bulmuş, *Plague*, 98.

³²⁸ Nuran Yıldırım, "Salgın Afetlerinde İstanbul," in *Afetlerin Gölgesinde İstanbul*, ed. Said Öztürk. (İstanbul: İstanbul Büyükşehir Belediyesi, 2009), 131.

³²⁹ Bulmuş, *Plague*, 105.

³³⁰ Bulmuş, 105.

³³¹ Bulmuş, 113.

³³² Bulmuş, 125.

Ottoman delegation's insistence of restrictive quarantine application caused protests from the British delegates.³³³ The infectionist understanding of the British and the French had shifted one more time in the 1890s after the cholera outbreak of 1891 which led to a parallel change in the Ottoman views. After the International Sanitary Conferences of 1894 and 1897, where the discussions were focused on the cholera outbreak in Hijaz, European delegates insisted on the establishment of firmer quarantine measures in the region and demanded stricter control especially during the month of Ramadan.³³⁴ British dominated quarantines in the Suez Canal motivated the Ottoman government to establish a sanitary administration in Hijaz in order to improve the hygienic conditions, to eliminate the need for quarantine and to consolidate their rule in the region.³³⁵ Thus, the Ottoman understanding of the spread of diseases had been shaped around their political and economic aspirations. When it was beneficial to support the contagionist views they chose to establish strict quarantine measures, yet when it was against their advantage they formed infectionist sanitary administrations to protect their sovereignty.

³³³ Bulmuş, 131.

³³⁴ Ersoy, Gögör and Akpınar, "International Sanitary Conferences," 67.

³³⁵ Bulmuş, *Plague*, 154.

CHAPTER 5

CONCLUSION

In this thesis, I have aimed to analyze the political, economic and sanitary aspects of the Ottoman struggle against urban pollution and to compare Istanbul's municipal transformation with its European counterparts, Paris and London. The story of the 19th-century Istanbul has not been told with a vocabulary of environmental history. The majority of the research has focused on the administrative, social, economic and cultural transformations of the city and most of the time did not include the environmental outcomes of these processes. Thus, I have aimed to contribute to the existing literature by emphasizing the effects and consequences of urban pollution on the reorganization process of Istanbul's municipal structure and tried to utilize an environmental history perspective while doing that.

I have used primary sources including archival documents, newspapers and magazines, memoirs and travel accounts to enrich the narrative and widen the analysis in order to include as many perspectives as possible. I have also tried to benefit from a rich secondary literature on the transformation of the 19th-century Istanbul. In this way, I have endeavored to approach the topic from different angles and not to ignore other areas of historical inquiry.

Filth can bear many meanings from moral impurity to a breeding ground for disease. Notions like progress, civilization, technological and economic superiority and means of modernity are among the entries in the 19th-century pollution dictionary. Contextual differences had an impact on the perceptions of filth, yet the economic and intellectual mediums that began to transform the existing connections between distant geographies had created a pot into which various polities dumped their opinions about urban pollution. International sanitary conferences were among those intellectual mediums that promoted standardization in disease prevention policies.

They were instruments for creating a common ground in terms of the meaning of waste and methods of disposal. International commerce can be considered as one of the economic mediums that led to the formation of certain ideas about the functions that needed to be provided by municipal organizations. World fairs and exhibitions, on the other hand, were the platforms where states came together to showcase their technological progress and superiority of their civilization. Each of these mediums had a certain contribution to the configuration of a common perception of filth and they were used for disseminating a Western vision of progress. This vision was not in any means monolithic yet some of the highlights of its premises were shared by the majority. Thus, the Ottoman efforts to transform its urban structure in general and its methods of cleaning and waste disposal in particular should be evaluated within the context of these connections and influences.

To do so, in the first chapter I have focused on the political aspects of waste management. I have tried to analyze the administrative transformation of Istanbul in the 19th century and tried to establish a connection between political aspirations of the Ottoman government and reorganization of its capital city's municipal structure. To do so, I have examined the Ottoman perceptions of modernity and tried to analyze the impact of these views on the administrative modernization efforts. In the final section of the chapter, I have aimed to conceptualize filth and cleanliness in relation with the ideas of modernity and civilization.

In the second chapter, I have tried to analyze the economics of pollution by examining the impact of industrialization, increasing commercial activities, population growth and financial difficulties experienced by the Ottoman government in the 19th century. I have aimed to underline the effects of these processes on the fight against pollution and tried to outline the similarities and differences between industrialized and industrializing economies.

In the final chapter, I have endeavored to examine the impact of changing sanitary discourses of the 19th century on the Ottoman perceptions of filth. To do so, I have focused on the dichotomies of the disease prevention discussions and tried to place the Ottoman views of disease within these discussions. Moreover, I have aimed to

emphasize the links between sanitation efforts and political and economic aspirations by analyzing the quarantine practices in the second half of the 19th century.

My analysis of the Ottoman fight against urban pollution can be expanded beyond the political, economic and scientific spheres. For example, creating a waste map of Istanbul will help us to understand the issues of environmental justice and to have a better understanding of the experiences of the urban poor with the urban authorities. Furthermore, mapping Istanbul's sewer system can shed a light on the Ottoman government's perception of the poor and marginal groups in Istanbul by analyzing the distribution of municipal services. Policing the poor and marginal groups has been a part of the "cleaning" or "purification" agenda of the administrations and processes like gentrification and dislocation have been used under the legitimization of beautification discourses. An analysis of the "right to the city" concept within the Ottoman context and with an emphasis on the rights of inhabitants to live in clean environments will broaden the scope of the research on Istanbul. Due to the time limitation of a master's thesis, I have confined myself to a more generic account of urban pollution. However, I hope to expand the scope of my study and question whether it is possible to approach the 19th-century Istanbul through the lens of environmental justice perspective.

BIBLIOGRAPHY

Primary Sources

a. Prime Ministry Ottoman Archives (BOA)

Cevdet Belediye Tasnifi

89/4407, 110/5461, 115/5729, 133/6642

Dahiliye Mektubi Kalemî

1758/50, 2216/26

Dahiliye Umur-ı Mahalliyye ve Vilayat Müdürlüğü

85/48

İrade, Meclis-i Vala

180/5396, 416/18210, 568/25549

İstanbul Ahkam Defterleri

2/152, 5/253, 7/144, 9/349

Maarif Nezareti Mektubi Kalemî

15/23

Sadaret Amedi Kalemî Evrakı

47/60

Sadaret Mektubi Kalemî Evrakı

60/10

Sadaret Nezaret ve Devair Evrakı

356/9, 215/9

Sadaret Umum Vilayat Evrakı

86/59

Şura-yı Devlet

2394/31

Yıldız Mütenevvi Maruzat

41/118, 81/49

Yıldız Sıhhiye Nezareti Maruzat

4/56

b. Newspapers and Magazines

Basiret

Çaylak

Kahkaha

Tasvir-i Efkâr

c. Published Sources

Ali Efendi, Basiretçi. *Istanbul Şehir Mektupları*. Edited by Nuri Sağlam. Istanbul: Sedir Yayınları A.Ş., 2017.

Amicis, Edmondo de. *Istanbul (1874)*. Translated by Prof. Dr. Beynun Akyavaş. Ankara: Türk Tarih Kurumu, 2006.

Lamartine, Alphonse de. *Alphonse de Lamartine ve Istanbul Yazıları*. Translated by Çelik Gülersoy and Nurullah Berk. Istanbul: Yenilik Basımevi, 1971.

MacFarlane, Chares. *Constantinople in 1828 : A Residence of Sixteen Months in the Turkish Capital and Provinces : with an Account of the Present State of the Naval and Military Power, and of the Resources of the Ottoman Empire*. London: Saunders and Otley, 1829.

Topuzlu, Cemil. *İstibdat - Meşrutiyet - Cumhuriyet Devirlerinde 80 Yıllık Hatıralarım*. Istanbul: Nobel Matbaacılık, 2003.

Secondary Sources

- Akyıldız, Ali. *Türk Diyanet Vakfı İslam Ansiklopedisi*, “Meclis-i Vâlâ-yı Ahkâm-ı Adliyye.” <https://islamansiklopedisi.org.tr/meclis-i-vala-yi-ahkam-i-adliyye>.
- Allen, Michelle. *Cleansing the City: Sanitary Geographies in Victorian London*. Athens: Ohio University Press, 2008.
- Barnes, David S. *The Great Stink of Paris and the Nineteenth-Century Struggle against Filth and Germs*. Baltimore: The Johns Hopkins University Press, 2006.
- Boyacıoğlu, Didem. “Tanzimat’tan Cumhuriyete Osmanlı Fabrika Yapılarının İnşasına Dair Yapılan Düzenlemeler.” *Uluslararası Sosyal Araştırmalar Dergisi* 8, no. 38 (2015): 471-486.
- Boyar, Ebru and Kate Fleet. *A Social History of Ottoman Istanbul*. New York: Cambridge University Press, 2010.
- Bulmuş, Birsen. *Plague, Quarantines and Geopolitics in the Ottoman Empire*. Edinburgh: Edinburgh University Press, 2012.
- Chapman, Brian. "Baron Haussmann and the Planning of Paris." *The Town Planning Review* 24, no. 3 (October 1953): 177-192.
- Clark, Edward C. "The Ottoman Industrial Revolution." *International Journal of Middle East Studies* 5, no. 1 (1974): 65-76.
- Corbin, Alain. *The Foul and the Fragrant: Odor and the French Social Imagination*. New York: Berg Publishers, 1986.
- Cox, Rosie, Rose George, R. H. Horne, Robin Nagle, Elizabeth Pisani, Brian Ralph, and Virginia Smith. *The Filthy Reality of Everyday Life: Dirt*. London: Profile Books, 2011.
- Çelik, Zeynep. *The Remaking of Istanbul, Portrait of an Ottoman City in the Nineteenth Century*. Berkeley : University of California Press, 1993.
- Deringil, Selim. *The Well-Protected Domains, Ideology and the Legitimation of Power in the Ottoman Empire 1876-1909*. London: I.B.Tauris & Co Ltd, 2004.

- Dijk, Kees van. "Soap is the onset of civilization." In *Cleanliness and Culture: Indonesian Histories*, edited by Kees van Dijk and Jean Gelman Taylor, 1-39. Brill, 2011.
- Eldem, Edhem, Daniel Goffmann, and Bruce Masters. *Doğu ile Batı Arasında Osmanlı Kenti: Halep, İzmir ve İstanbul*. İstanbul: Türkiye İş Bankası Kültür Yayınları, 2017.
- Emrence, Cem. "Imperial paths, big comparisons: the late Ottoman Empire." *Journal of Global History* 3 (2008).
- . "Three Waves of Late Ottoman Historiography, 1950-2007." *Middle East Studies Association Bulletin* 41, no. 2 (2007): 137-151
- Ergin, Osman Nuri. *Mecelle-i Umûr-ı Belediyye*. Vol. 3. İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı Yayınları, 1995.
- . *Mecelle-i Umûr-ı Belediyye*. Vol. 1. İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı Yayınları, 1995.
- . *Mecelle-i Umûr-ı Belediyye*. Vol. 1. İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı Yayınları, 1995.
- Ersoy, Nermin, Yüksek Güngör, and Aslıhan Akpınar . "International Sanitary Conferences from the Ottoman perspective (1851–1938)." *Hygiea Internationalis: an Interdisciplinary Journal for the History of Public Health*, 2011: 53-79.
- Frangakis-Syrett, Elena. "Market Networks and Ottoman-European Commerce, c.1700-1825." *Oriente Moderno*, 2006: 109-128.
- Gandy, Matthew. "The Paris Sewers and the Rationalization of Urban Space." *Transactions of the Institute of British Geographers* 24, no. 1 (1999): 23-44.
- Genç, Mehmet. "economy and economic policy." In *Encyclopedia of the Ottoman Empire*, edited by Gábor Ágoston and Bruce Masters, 192-195. New York: Facts On File, 2009.
- Gezer, Onur. "Çizginin Dışındakiler: Osmanlı İstanbul'unun Aykırı Bekarları ve Bekar Girer "Melek Girmez" Odaları." In *Osmanlı İstanbulu II*, edited by Feridun M. Emecen, Ali Akyıldız and Emrah Safa Gürkan, 523-552. İstanbul: İstanbul 29 Mayıs Üniversitesi Yayınları, 2014.
- Halliday, Stephen. "Death And Miasma In Victorian London: An Obstinate Belief." *BMJ: British Medical Journal* 323, no. 7327 (2001): 1469-1471.

- Harlaftis, Gelina, and Vassilis Kardasis . "International shipping in the eastern Mediterranean and the Black Sea: Istanbul as a maritime centre, 1870–1910." In *The Mediterranean Response to Globalization Before 1950*, edited by Şevket Pamuk and Jeffrey G. Williamson. New York: Routledge, 2000.
- Horan, Julie L. *The Porcelain God, A Social History of the Toilet*. Toronto: Carol Publishing Group, 1997.
- İnalçık, Halil. "Istanbul: An Islamic City." *Journal of Islamic Studies* 1 (1990): 1-23.
- Jackson, Lee. *Dirty Old London, The Victorian Fight Against Filth*. New Haven: Yale University Press, 2014.
- Kallek, Cengiz. *Türk Diyanet Vakfı İslam Ansiklopedisi*, "hisbe." <https://islamansiklopedisi.org.tr/hisbe>.
- Karaman, K. Kivanç, and Şevket Pamuk. "Ottoman State Finances in European Perspective, 1500-1914." *The Journal of Economic History* 70, no. 3 (September 2010): 593-629.
- Kasaba, Reşat. *The Ottoman Empire and the World Economy*. New York: State University of New York Press, 1988.
- Keyder, Çağlar. "Port-cities in the Belle Epoque." In *Cities of the Mediterranean: From the Ottomans to the Present Day*, edited by Biray Kolluoğlu and Meltem Toksöz, 14-22. New York: I.B. Tauris, 2010.
- Keyder, Çağlar, Eyüp Özveren, and Donald Quataert. "Port-Cities in the Ottoman Empire: Some Theoretical and Historical Perspectives." *Review (Fernand Braudel Center)* 16, no. 4 (1993): 519-558.
- Lafi, Nora. "The Ottoman Urban Governance of Migrations and the Stakes of Modernity." In *The City in the Ottoman Empire: Migration and the Making of Urban Modernity*, edited by Ulrike Freitag, Nora Lafi, Malte Fuhrmann and Florian Riedler, 8-25. New York: Routledge, 2011.
- Luckin, Bill. "Pollution in the City." In *The Cambridge Urban History of Britain 1840-1950*, edited by Martin Daunton, 207-228. Cambridge: Cambridge University Press, 2000.
- Mann, Michael. "The Autonomous Power of the State : Its Origins, Mechanisms and Results," *European Journal of Sociology* 25, no. 2 (1984): 185-213.
- Mantran, Robert. *17. Yüzyılın İkinci Yarısında İstanbul, Kurumsal, İktisadi, Toplumsal Tarih Denemesi*. Ankara: Türk Tarih Kurumu Basımevi, 1990.

- Mazak, Mehmet. *Orijinal Belge ve Fotoğrafların Işığında Osmanlı'da Çevre ve Sokak Temizliği*. İstanbul: İSTAC A.Ş., 2003.
- Mazak, Mehmet, and Fatih Güldal. *Osmanlı'dan Günümüze Temizlik Tarihi Tanzifat-ı İstanbul*. İstanbul: Yeditepe Yayınevi, 2011.
- Melosi, Martin V. "Urban Pollution: Historical Perspective Needed." *Environmental Review: ER* 3, no. 3 (1979): 37-45.
- . "The Place of the City in Environmental History." *Environmental History Review* 17, no. 1 (1993): 1-23.
- Moulin, Anne Marie. "Kentte Koruyucu Hekimlik: Pasteur Çağında Osmanlı Tıbbı 1887-1908." In *Modernleşme Sürecinde Osmanlı Kentleri*, edited by Paul Dumont and François Georgeon, 169-193. İstanbul: Tarih Vakfı Yurt Yayınları, 1999.
- Ortaylı, İlber. *Tanzimat Devrinde Osmanlı Mahalli İdareleri (1840-1880)*. Ankara: Türk Tarih Kurumu, 2018.
- Önsoy, Rıfat. "Tanzimat Dönemi Sanayileşme Politikası 1839-1876." *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi*, February 1984: 5-12.
- Özcan, Abdülkadir. *Türk Diyanet Vakfı İslam Ansiklopedisi*, "lağımıcı ocağı." <https://islamansiklopedisi.org.tr/lagimci-ocagi>.
- Özdalga, Elisabeth. "Introduction." In *Late Ottoman Society: The Intellectual Legacy*, edited by Elisabeth Özdalga. New York: Routledge Curzon, 2005.
- Pamuk, Şevket. *Osmanlı-Türkiye İktisadi Tarihi 1500-1914*. İstanbul: İletişim Yayınları, 2005.
- Pamuk, Şevket, and Jeffrey G. Williamson. "Ottoman de-industrialization, 1800–1913: assessing the magnitude, impact, and response." *The Economic History Review* 64 (February 2011): 159-184.
- Parsons, James. "The Sanitary Evolution of London." *Charity Organisation Review* 24, no. 140 (August 1908): 87-97.
- Quataert, Donald. "Ottoman Handicrafts and Industry in the Age of European Industrial Hegemony, 1800-1914." *Review (Fernand Braudel Center)* 11, no. 2 (1988): 169-178.

- Quataert, Donald. "The Introduction of Modern Technology in Ottoman Industry during the 18th and 19th Centuries." In *The Introduction of Modern Science and Technology to Turkey and Japan*, edited by F. Günergün and S. Kuriyama, 67-74. Kyoto: International Research Center for Japanese Studies, 1998.
- Rosenthal, Steven. "Foreigners and Municipal Reform in Istanbul: 1855-1865." *International Journal of Middle East Studies* 11, no. 2 (April 1980): 227-245.
- . "Urban Elites and the Foundation of Municipalities in Alexandria and Istanbul." *Middle Eastern Studies* 16, no. 2 (May 1980): 125-133.
- Sarı, Nil. *Türk Diyanet Vakfı İslam Ansiklopedisi*, "Mekteb-i Tıbbiyye." <https://islamansiklopedisi.org.tr/mekteb-i-tibbiyye>
- Seyitdanlıoğlu, Mehmet. *Tanzimat Döneminde Modern Belediyeciliğin Doğuşu, Yerel Yönetim Metinleri*. Istanbul: Türkiye İş Bankası Kültür Yayınları, 2010.
- . "Tanzimat Dönemi Osmanlı Sanayii (1839-1876)." In *Tanzimat: Değişim Sürecinde Osmanlı İmparatorluğu*, edited by Halil İncelik and Mehmet Seyitdanlıoğlu. Istanbul: Türkiye İş Bankası Kültür Yayınları, 2012.
- Tarr, Joel A. "The Search for the Ultimate Sink: Urban Air, Land, and Water Pollution in Historical Perspective." *Records of the Columbia Historical Society* 51 (1984): 1-29.
- Toprak, Zafer. "Altıncı Daire-i Belediye." In *Dünden Bugüne İstanbul Ansiklopedisi*. Istanbul: Kültür Bakanlığı and Tarih Vakfı, 1993.
- . "Modernization and Commercialization in the Tanzimat Period: 1838-1875." *New Perspectives on Turkey*, Spring 1992: 57-70.
- . "Şehremaneti." In *Dünden Bugüne İstanbul Ansiklopedisi*. Istanbul: Kültür Bakanlığı and Tarih Vakfı, 1994.
- Trinder, Barrie. "Industrializing Towns 1700-1840." Vol. II, in *The Cambridge Urban History of Britain 1540-1840*, edited by Peter Clark, 805-829. Cambridge: Cambridge University Press, 2008.
- Türkhan, Mehmet Sait. "19. ve 20. Yüzyılda Haliç'te Çevre Sorunları ve Deniz Kirliliği." *Toplumsal Tarih*, no. 169 (January 2008): 60-66.

- Yerasimos, Stefan. "Tanzimat'ın Kent Reformları Üzerine." In *Modernleşme Sürecinde Osmanlı Kentleri*, edited by Paul Dumont and François Georgeon . Istanbul: Tarih Vakfı Yurt Yayınları, 1996.
- Yıldırım, Nuran. "1893'te İstanbul'da Kolera Salgını." *Tarih ve Toplum*, no. 129 (September 1994): 142-153.
- . "Salgın Afetlerinde İstanbul." In *Afetlerin Gölgesinde İstanbul*, edited by Said Öztürk. Istanbul: İstanbul Büyükşehir Belediyesi, 2009.
- Yıldırım, Nuran, and Hakan Ertin. "European Physicians/Specialists During the Cholera Epidemic in İstanbul 1893-1895 and Their Contributions to the Modernization of Healthcare in the Ottoman State." In *Health, Culture and the Human Body Epidemiology, Ethics and History of Medicine, Perspectives From Turkey and Central Europe*, edited by İlhan İlkılıç, Hakan Ertin, Rainer Brömer and Hafo Zeeb, 189-215. Istanbul: Betim Center Press, 2014.

APPENDICES

A. TURKISH SUMMARY/TÜRKÇE ÖZET

Bu tezde, 19. yüzyılda Osmanlı Devleti'nin geçirdiği siyasi, iktisadi ve kamu sağlığı algısına dair dönüşümlerin, İstanbul'un kirliliği ile mücadele çabalarını nasıl etkilediği incelenmiştir. Aynı zamanda, değişen kirlilik algısının yaşanan genel süreçler üzerinde ne şekilde etkili olduğu analiz edilmiştir. Osmanlıların benlik algıları ve dünyaya bakış açıları bu dönüşümlerin incelenmesinde genel bir referans noktası olarak kullanılmış ve bahsi geçen dönemin modernleşme, medeniyet ve batılılaşma gibi nosyonları üzerinden bir analiz yapılmaya çalışılmıştır. Osmanlı yönetici elitinin ve 19. yüzyılın ikinci yarısından itibaren şekillenmeye başlayan efkâr-ı umumisinin modernite tanımları ve kendilerini bu modernite içerisinde nereye konumlandıkları temizlik ve medeniyet arasında kurulan ilişkinin de çerçevesini belirlemiştir. Böylece, kirlilik ile mücadele çabaları ve bu çabaların siyasi, iktisadi ve fikri sebepleri ve sonuçları incelenerek 19. yüzyılda başlayan İstanbul'un idari ve ekonomik dönüşümü farklı bir açıdan ele alınmaya çalışılmıştır.

Bu tezde kullanılan birinci el kaynaklar arşiv belgeleri, hatıratlar ve seyahatnameler ve gazete ve dergilerden oluşmaktadır. Arşiv belgelerine ağırlık verilmesinin temel sebebi yukarıda da bahsedildiği üzere daha devlet merkezli bir analize olanak sağlaması ve 19. yüzyılda Osmanlı Devleti'nin geçirdiği siyasi, iktisadi ve fikri dönüşümlerin kirlilik ile mücadele çabalarını nasıl etkilediğini ve bu çabalardan nasıl etkilendiğini anlamak konusunda daha detaylı bilgiler vermesidir. Öte yandan, bu tezde kullanılan seyahatnameler ise yabancı seyahatçıların bakış açısını incelemeye dâhil ederek çalışmanın perspektifini genişletmiştir. Hatıratlar, gazete yazıları ve mizah dergilerinden alınan karikatürler ise dönemin efkâr-ı umumisini anlamak ve Osmanlı aydın kesiminin ve yönetici elitinin bakış açılarını kavramak açısından faydalı olmuştur. Buna ek olarak, hem kirlilik ile mücadele çabalarının farklı boyutlarını analiz edebilmek hem de bağlamı genişletmek için çok çeşitli ikinci el

kaynaklara başvurulmuştur. Kullanılan kaynaklar aynı zamanda Londra ve Paris gibi iki büyük Avrupa başkentinde eş zamanlı olarak yaşanan dönüşümleri anlamlandırmada da büyük katkı sağlamıştır.

19. yüzyılda Osmanlı Devleti'nin geçirdiği siyasi dönüşümler, İstanbul'un belediye teşkilatının yapılanmasında ve şehrin idari yapısının yeniden düzenlenmesinde etkili olmuştur. Tanzimat ile kurumsallaşmaya başlayan idari yapının modernleştirilmesi ve rasyonelleştirilmesi amacı kendini temizlik işlerinde de göstermiş ve kirlilik algısının yeniden şekillenmesinde rol oynamıştır. Devletin yönetim algısındaki dönüşümlerin Tanzimat'la başlamadığı artık herkesçe kabul edilen bir olgudur. Bu tezin konusu olan kirlilik ile mücadele çabalarının kurumsallaşması ve rasyonelleşmesi ise en belirgin biçimde 1826 Yeniçeri teşkilatının kaldırılması ile başlamıştır. Bu değişimi anlayabilmek adına bu tezde “geleneksel kent yönetimi” olarak isimlendirilen 1826 öncesi belediye örgütlenmesinden bahsetmek faydalı olacaktır.

İstanbul'un geleneksel kent yönetiminde en belirleyici unsur devletin kent düzeyinde temsilcisi olan kadıdır. İstanbul ve Bilâd-ı Selase (Eyüp, Galata ve Üsküdar) olarak dörde ayrılan yönetim bölgesi dört kadı tarafından idare edilmekte ve neredeyse bütün belediye örgütlenme kadının kontrolü ve denetimi altında bulunmakta idi. Belediye hizmetlerinin yerine getirilmesi konusunda kadıya yardımcı olan bir hiyerarşik düzen de mevcuttu. Bu düzen içerisinde yer alan başlıca görevliler Subaşı, muhtesib ya da İhtisab Ağası, mimarbaşı, asesbaşı, çöplük subaşısı ve lağımcabaşısıdır. Temizlik işlerinden sorumlu olan en önemli görevli ise çöplük subaşısı, bir diğer ismi ile çerçöp subaşısı idi. Kendisine bağlı ve arayıcı esnafı ya da çöp çıkaran da denen işçiler ile şehrin temizliği, çöplerin toplanması ve nihayetine imhası gibi görevleri olan çöplük subaşısı Yeniçeri teşkilatına üyeydi. Arayıcı esnafı, çöp toplama görevini çöplük subaşısından yıllık bir ücret ödeyerek alır ve mahallelerden ve sokak aralarından topladığı çöpleri küfesinde taşıyarak belirlenen iskelelere getirirdi. Bu iskelelerde bulunan teknelerde çöpleri ayıklar, değerli gördüğü materyalleri alır ve geri kalanını çöp dubalarına yükleyerek mavnalarla açık denize taşır ve Prens adaları açıklarından denize dökerdi. Mahallelerin temizliğini ve arayıcı esnafının işlerini

kontrol etme görevi ise mahalle imamlarına aitti. Kent sakinleri ve devlet temsilcileri arasında köprü görevi gören imamların yanı sıra, vakıflar, esnaf kethüdaları ve loncalar da aracılık yapmaktaydı. Yine de, şehrin temizliği en temelde kent sakinlerinin sorumluluğu altındaydı. Mahalle sakinlerinin evlerinin önünü süpürmesi ve kirletmemesi beklenir ve çarşı esnafının dükkânlarının önünü temiz tutması istenirdi. Yukarıda sayılan görevlilerinin neredeyse tamamı ise kent sakinlerinin temizlik görevlerini yerine getirip getirmediğini denetlemek ve getirmeyenleri cezalandırmak üzerine kurulu bir düzenin parçasıydılar. Yalnızca büyük meydanların ve ana caddelerin temizliği Acemioglanlarınca yapılır, bazen ise vergi muafiyeti karşılığında gayrimüslimlere temizlettirilirdi. Bunun dışında kent idaresi aktif hizmet verme anlayışına sahip değildi. Bu anlayış farkı ile birlikte Osmanlı Devleti'nin altyapısal iktidarının zayıflığını gösteren unsurlardan biri olarak da kabul edilebilir. Devletin hem ekonomik yapısının bu denli geniş bir organizasyonu destekleyecek güçte olmayışı hem de kurumsal altyapısının beledi hizmetlerin tamamını aktif bir şekilde yerine getirecek ölçüde teşkilatlanmamış oluşu idareciler ile kent sakinleri arasındaki bu görev dağılımının Şehremaneti kurulduktan sonra bile devam etmesinin sebepleri arasındadır.

1826 yılına gelindiğinde Yeniçeri ocağının kaldırılması ile birlikte kent idaresinde büyük bir boşluk oluşmuş ve bu boşluğun doldurulması için aynı yıl İhtisab Nezareti adı ile yeni bir kurum oluşturulmuştur. Bu nedenle, kent idaresindeki ve dolayısıyla temizlik hizmetlerindeki dönüşümün temelde bu tarihte başladığı kabul edilebilir. Çöplük Subaşısının görevlerini de devralan İhtisab Nezareti Osmanlı yönetiminin beklediği sonucu verememiş ve belediye teşkilatındaki boşluğu dolduramamıştır. Bu sebeple, döneme ait birçok belgede kadının hala belediye işlerinde söz sahibi olduğunu ve temizlik ile ilgili denetimlerde görev aldığını görmekteyiz. Yeni teşkilat bütünüyle kurulmadığı için eski ile yeni uygulamalar bir arada sürdürülmeye çalışılmıştır. 1846'da Zabtiye Müşiriyeti kurulduğunda şehrin temizlik işleri de bu kuruma devrildi. Kırım Savaşı sürecinde kentin nüfusunda yaşanan artışlar daha önceden başlayan ticari ilişkilerin yarattığı baskıya eklenerek yeni bir kurumun kurulmasını gerekli kılmıştır. Savaş süresince kentte bulunan İngiliz ve Fransız ordu mensuplarının yangına dayanıklı evler, daha geniş caddeler, temiz sokaklar ve genel

olarak daha iyi hijyenik koşullar talep etmeleri bu baskının bir örneğidir. Bu sebeple 1854'te kurulan Şehremaneti, artan nüfusun ve ticari ilişkilerin taleplerini karşılamak için çalışmaya başlamıştır. Şehremaneti Fransız belediye teşkilatı örnek alınarak kurulmuş ve doğrudan Meclis-i Vâlâ-yı Ahkâm-ı Adliyyeye bağlı kılınmıştır. Kurumun ilk anda yaşadığı sorunlardan biri ise çok az yetki sahibi olduğu halde çok büyük sorumluluk yüklenmiş olmasıdır. Mesela, kente ait vergi koymak ve toplamak için Maliye Nezaretine, yapı ve tamir işleri için Nafia Nezaretine ve ticari aktiviteleri denetlemek ve fiyat kontrolü yapmak için Ticaret Nezaretine danışmak zorundaydı. Ayrıca, belediye meclisi her kararını Bab-ı Ali'ye yollamak ve gelecek cevaba göre hareket etmek durumundaydı. Bu yetki-görev dengesizliği işlerin aksamasına ve gecikmelere sebep oluyordu. Bu durumun farkında olan Osmanlı yönetimi, Şehremaneti'nin kurulmasının üç yıl ardından, yaşanan sorunlara çözüm bulunması amacıyla İntizam-ı Şehir Komisyonu adı altında bir komisyon kurulmasına karar vermiştir. Bu komisyonun iki yıllık çalışmasının ürünü olan raporda kanalizasyon altyapısının kurulması, sokakların genişletilip aydınlatılması, temizlik işlerine dikkat edilmesi, kaldırımlar inşa edilmesi ve bir muhasebe ofisinin kurulması gibi öneriler yer almaktaydı. Bu raporun ardından alınan bir kararla İstanbul'un idaresi 14 daireye ayrılmış ve Galata-Beyoğlu bölgesi Altıncı Daire-i Belediye olarak isimlendirilmiştir.

Altıncı Daire İstanbul'un beledi örgütlenmesinde çok önemli bir yere sahip olmakla beraber planlanan 14 daire arasında kurulabilen tek dairedir. Maddi yetersizlikler sebebiyle kurulamayan diğer dairelere örnek teşkil etmesi amacıyla kurulan Altıncı Daire-i Belediye uzunca bir süre Şehremaneti'ne bağlı olmadan hareket etmiştir. Finansal açıdan da oldukça geniş kaynaklara sahip olmuş ve bu sayede Galata-Beyoğlu bölgesinde icraatlarını gerçekleştirebilmiştir. Tüm bunlara rağmen Altıncı Daire temizlik işlerinde mucizevi bir kurum değildir. Geleneksel şehir idaresinde olduğu gibi çöplerin toplanma işi açık eksiltme ile kiralanıyor, çöpler belirlenmiş iskelelerde toplanıyor ve mavnalarla açık denize taşınıp oradan denize atılıyordu. Fakat 1859'da daire tarafından düzenlenen Sokaklara Dair Nizamname, kent temizliği açısından hazırlanmış en detaylı belge olma unvanını uzunca bir süre, 1912'de Cemil Topuzlu Şehremini olana değin, korumuştur. Bu nizamname ile

sokaklar büyüklüklerine ve önemlerine göre üç sınıfa ayrılarak temizlik işleri bir düzene bağlanmıştır. Geleneksel şehir idaresinde uygulanan temizlikte yönetim ve kent sakinleri arasında iş bölümü prensibi Altıncı Daire'nin yönetimi altında da devam etmiştir. Sokaklara Dair Nizamnamenin bazı maddeleri kent sakinlerinin evlerinin önünü düzenli süpürmeleri ve çöp atmamaları gibi düzenlemeleri içermektedir. Bu da yeniden gösteriyor ki Osmanlı hükümeti henüz tam manasıyla aktif hizmet verme prensibini benimseyememiştir ve bunu uygulamaya geçirecek kaynaklara sahip değildir.

19. yüzyılın son çeyreğinde uygulamaya konan çeşitli düzenlemeler ve 1877'de çıkarılan Dersaadet Belediye Kanunu ile Şehremaneti yeniden organize edilmeye çalışıldıysa da, İstanbul'un belediye teşkilatı Osmanlı Devleti'nin sonuna kadar, Cemil Topuzlu'nun iki yıllık Şehreminliği dönemi hariç olmak üzere, tam manasıyla kurulamamıştır. 1912'den 1914'e kadar Şehremini olan Cemil Topuzlu idari karışıklığa son vermek amacıyla dokuz maddelik bir yasa tasarısı hazırlamış ve İstanbul'un dokuz daireye ayrılmasını ve bu dairelerin Şehremaneti'nin birer şubesi olarak kabul edilmelerini önermiştir. Tasarısı ve önerileri kabul olan Cemil Topuzlu şehrin temizliğine çok büyük önem vermiş ve başta bahsedilen Osmanlı yönetici elitinin benlik algısını ve dünya görüşünü anlamak açısından oldukça önemli olan hatıratında bu görüşlerini sıklıkla dile getirmiştir. Her dairede birer Nezafet-i Fenniye şubesi açarak özellikle kentin temizlik işlerini düzenleyen bir sistem oluşturmuş ve aktif hizmet anlayışını benimsemiştir. Bu anlayış doğrultusunda temizlik görevlileri istihdam etmiş ve Avrupa'dan sokak yıkama araçları ve çöp arabaları getirtmiştir. Cemil Topuzlu'nun İstanbul'u Avrupa kentlerine benzetme gayesi Osmanlı yönetici elitinin Batıya bakışını da yansıtmaktadır.

19. yüzyılda yaşanan iktisadi dönüşümler İstanbul'un kent dokusunda belirli değişikliklere sebep olmuş ve kentin beledi altyapısı üzerinde baskı yaratarak kirlilikle mücadele çabalarını şekillendirmiştir. Şehrin işlerliğini sağlayabilmek adına yapılan idari düzenlemelerin siyasi sebeplerinin yanı sıra iktisadi sebepleri de vardı. 19. yüzyılda artan ticaret hacmi, özellikle yüzyılın ikinci yarısında belirgin hale gelen

endüstrileşme çabaları ve idari düzenlemelerin mali baskıları Osmanlı Devleti'nin başkentinin kirliliği ile mücadelesinde belirleyici etkenleridir.

Osmanlı Devleti'nin sanayi gelişimi başlarda ordunun ve sarayın ihtiyaçlarını karşılamaya yönelik üretime ağırlık vermiştir. Özellikle dokuma sanayiinin ürettiği ürünler üniforma yapımında kullanılırken Hereke fabrikasından çıkan yüksek kalite ipekli kumaşlar saray için üretilmekteydi. Sanayileşmenin ilk aşamasında kurulan endüstri komplekslerinden Zeytinburnu, Bakırköy ve Yeşilköy Marmara kıyılarında inşa edilmiş ve yatırımlar devlet eliyle gerçekleştirilmiştir. Yine de bu tesislerin ve daha başka küçük üretim atölyelerinin ürettiği kirlilik Londra'nın ürettiği endüstriyel atık miktarı ile karşılaştırılamayacak kadar azdı. Thames nehri kıyılarında kurulmuş olan çok sayıda sanayi tesisinin atıkları nehrin sularına karışarak çevreyi ve kamu sağlığını olumsuz etkiliyordu. Buhar gücü ile üretim yapan bu fabrikalar nehrin sularını hem bir güç kaynağı hem de atık alanı olarak kullanıyordu. Buna ek olarak, Thames nehri üzerinde yapılan ve 19. yüzyılda artan ticari faaliyetler ve taşımacılık sektöründeki gelişmeler sebebiyle daha da büyüyen taşıma sanayii de nehrin kirliliğine katkıda bulunuyordu. Osmanlı örneğinde ise bu ölçüde bir endüstriyel kirlilik mevcut değildi. 19. yüzyıl Londra'sında endüstriyel kirlilik organik atıklara baskın çıkarken Osmanlı İstanbul'unun sanayi gelişimi böyle bir değişimi getirecek kadar baskın değildir. Yani, İstanbul'un kirliliğinin büyük çoğunluğunu hala evsel atıklar ve organik materyaller oluşturmaktaydı. Yine de sanayi faaliyetlerinin ortaya çıkardığı hava ve su kirliliğinin önlenmesi adına Osmanlı yönetimi bazı düzenlemeler yapmıştır. Bu düzenlemelerden en belirgin olanı, fabrikaların yerleşim bölgelerine yapılmasını yasaklayan nizamnamelerdir.

Kirliliğin iktisadi unsurlarından bir diğeri ise artan ticaret hacminin neden olduğu altyapısal sorunlardır. 19. yüzyılda Osmanlı ekonomisinin kapitalist dünya ekonomisine eklenmesi süreci hızlanmış, ticari trafik yoğunlaşmış, Balta Limanı Anlaşması gibi ticari anlaşmalar ile beraber ticarete devlet tekelleri ortadan kalkmaya başlamış ve daha liberal bir iktisadi anlayış benimsenmiştir. Buhar gücü ile çalışan gemilerin Akdeniz'de işlemeye başlaması ve daha sonra demir yollarının inşasıyla birlikte bölgede mal ve insan hareketliliği de artmıştır. Akdeniz liman

kentleri yabancı yatırımcılar ve tüccarlar için kârlı merkezlere dönüşürken İstanbul imparatorluk başkentinden bir denizcilik ve transit ticaretin merkezi haline gelmişti. Bu gelişmeler kentin nüfusunu da arttırmış ve Kırım Savaşı ve 1877-78 Osmanlı Rus Savaşı (93 Harbi) ile de kente gelen müttefik ordu askerleri ve mülteciler altyapısal sorunların daha da görünür hale gelmesine neden olmuştur. Nüfus artışı, modern beledi hizmetlere olan talebi de arttırmıştır. Ticaretle uğraşan grupların yanı sıra Osmanlı basınından da gelen bu talepler arasında daha temiz sokaklar ve kamu sağlığını tehdit etmeyen koşullara sahip bir kent de yer almaktaydı.

Tüm bu talepleri yerine getirebilmek ve dönemin ekonomik ilişkilerinin ihtiyaç duyduğu altyapıyı sağlayabilmek ciddi mali kaynaklara sahip olmayı gerektiriyordu. Fakat Osmanlı'da belediye teşkilatı imparatorluğun sonuna kadar yeterli kaynağa sahip olamamış ve bu sebeple de örgütlenmesini bütünüyle tamamlayamamıştır. Bütçe yetersizlikleri beledi hizmetlerin de aksamasına yol açmış ve belediyeler özellikle mizah dergileri tarafından düzenli olarak eleştirilmiştir. Dönemin karikatürlerinden ve gazete yazılarından da anlaşıldığı üzere temizlik işleri düzenli hale getirilememiş, sokakların aydınlatması ve kaldırım inşası tamamlanamamış ve kanalizasyon altyapısı kentin az sayıda bölgesi hariç kurulamamıştır. Galata-Beyoğlu bölgesini kapsayan Altıncı Daire-i Belediye yukarıda bahsedilen duruma bir istisna teşkil eder. Bütçe açısından diğer belediye dairelerine kıyasla ayrıcalıklı bir konumda yer alan Altıncı Daire, emlak vergisi de dâhil olmak üzere geniş mali kaynaklara sahipti. Bu nedenle de İstanbul'un diğer bölgeleri ile kıyaslandığında belediye hizmetleri daha düzenli olarak yerine getirilmekteydi. Yine de, Altıncı Daire-i Belediyeyi temizlik işleri açısından mucizevi bir kurum olarak değerlendirmek yanlış olur. Sokaklara Dair Nizamnameden de anlaşıldığı üzere çöp toplama ve sokak temizliği işleri açık eksiltme ile ihale olunmakta, çöpler belirlenmiş iskelelerden mavnalara yüklenerak açıkta denize dökülmekteydi. Buna ek olarak, mahalle sakinlerinin temizlik işlerindeki sorumluluğu azalmamıştı. Hala ev sahipleri evlerinin, dükkân sahipleri ise dükkânlarının önünü süpürmekle ve sokaklarını kirletmemekle mükellefi.

Londra ve Paris’te düzenli olarak uygulanan çöplerin geri dönüştürülmesi belediyeye ek gelirler getirirken aynı zamanda atıkların yeniden kullanılması çevrenin korunmasına da katkı sağlamaktaydı. Örneğin, küller kiremit üretiminde, hayvan ve insan dışkıları ile sokaklardan süpürülen çamurlar gübre olarak yeniden kullanıma girmektedir. İstanbul’un çöpleri ise imparatorluğun sonuna kadar denize dökülmeye devam etmiştir. Tevfik Bey ve Cemil Topuzlu gibi bazı şehreminleri geri dönüşüm için düzenlemeler yapmak istemişlerse de teşkilatın yetersizliği ve bürokratik karışıklıklar sebebiyle başarılı olamamışlardır. Birkaç istisnai ve yerel örnek dışında, İstanbul belediyesi çöplerinden kazanç sağlayamamıştır.

19. yüzyılda oluşmaya başlayan kirlilik ve salgın hastalıklar arasındaki ilişkilendirme kirlilikle mücadele çabalarının önem kazanmasında etkili olan unsurlardan bir diğeridir. Avrupa’da özellikle yüzyılın ortalarında etkili olan kamu sağlığı reformları kentlerin temizlik ve atık yönetimi işlerinin düzenlenmesi ve hastalıkların önlenmesi çabalarını arttırmıştır. Yüzyılın başlarında Fransız hijyenistler tarafından benimsenen hastalıkları önlemede bilimsel yöntemlerin kullanılması yaklaşımı kamu sağlığı reformlarının da odak noktasını oluşturmuştur. Yüzyıl boyunca sıhhi mühendisler ve bakteriyologlar tarafından da desteklenen kirlilik-salgın hastalık ilişkilendirmesi Osmanlı’nın temizlik uygulamalarında da görülebilir.

19. yüzyılda sıhhi söylemlerin değişmesiyle beraber Osmanlı idarecilerinin kentsel kirliliğe olan yaklaşımları da değişmeye başlamıştır. Kirlilik, rahatsız edici ya da estetik olarak çirkin bir şeyden, korkulan ve hastalıkların kaynağı olan bir unsura dönüşmüştür. Bu değişimi arşiv belgelerinden takip etmek mümkündür. Özellikle yüzyılın ikinci yarısından itibaren belgelerde görülmeye başlanan “hıfzıssıhha kaidesine muvafık surette” ya da “sıhhati ihlal eden” gibi ifadeler, kamu sağlığına olan ilginin ve verilen önemin arttığını göstermektedir. Bununla beraber bazı belgelerde yer alan, örneğin, “sıhhat-i umumiyye maddesinin mevku-fı aleyhi olan tanzifat” gibi söylemler, kirlilik ve halk sağlığı arasındaki ilişkinin kabul edildiğini ifade eder. Sıhhi söylemlerin ve dolayısıyla kirlilik algısının değişiminde etkili olan unsurlardan bir tanesi de Uluslararası Hijyen Konferanslarıdır. Hastalıkları önlemede uygulanan pratikleri standardize etmek amacıyla toplanan bu konferanslar ülkeler

arasındaki bilgi paylaşımını arttırarak tarafların karşılıklı etkileşimleri ile kirlilik algısının şekillenmesinde rol oynamıştır.

Osmanlı'da ilk karantina uygulamaları 1830'larda, ilk kolera salgınlarının görülmeye başlandığı zamanda başlamıştır. Her ne kadar hastalıkların yayılmasını önlemek için kurulmuş olsa da karantinanın Osmanlı yöneticilerinin siyasi ve iktisadi gündemleri içinde önemli bir yeri vardı. Osmanlı yönetimi hastalıklara engel olma adı altında aynı zamanda ithalatı da kontrol altında tutmayı amaçlamıştır. Özellikle Balta Limanı Anlaşması ile vergilerin düşürülmesi ve devlet tekellerinin kaldırılmasının ardından İngiliz tüccarlar için çok kârlı bir pazar haline gelen Osmanlı Devleti, karantina uygulamalarıyla ticari faaliyetler üzerinde kontrol sahibi olmak istemiştir. Bununla beraber İngiltere'nin karantinaya karşı çıkmasının sebepleri arasında hastalıkların insandan insana ve mikroplu ürünler aracılığıyla bulaşması iddiasının aksine çevresel koşulların önemini vurgulamasının yanı sıra kendi ticari çıkarlarını muhafaza etmek istemesi de gösterilebilir. Uluslararası Hijyen Konferanslarından da takip edilebileceği üzere iki ayrı sıhhi argümana sahip devletler arasında bir karantina üzerinden bir mücadele sürmekteydi. İngilizlerin çevresel koşullar iyileştirilmeden hastalıkların önlenemeyeceği iddiaları ise halk sağlığı reformcularının da başlıca argümanlarından biridir. Kanalizasyon sistemlerinin kurulması, sokakların ve meydanların temizlenmesi, yolların genişletilip durgun havaya izin verilmemesi ve benzeri çevreyi dönüştürmeye ve hijyenik koşulları iyileştirmeye yönelik teklifler öne süren devletlerin temsilcileri karantinanın gereksizliğini savunmuşlardır.

Sonuç olarak, 19. yüzyılda yaşanan siyasi, iktisadi ve sıhhi dönüşümler, kirlilik algısını şekillendirerek kirlilikle mücadele çabaları üzerinde bir etki sahibi olmuştur. Osmanlı yönetici elitinin ve aydınının modernite üzerine görüşleri beledi hizmetlerin yeniden tanımlanması ve kent dokusunun “modernize” edilmesi süreçlerinde büyük rol oynamıştır. Bununlar beraber yüzyıl içerisinde gerçekleşen iktisadi değişimler yeni ihtiyaçlar yaratmış ve bu ihtiyaçlar doğrultusunda belediye teşkilatını şekillendirmiştir. Sıhhi söylemler ise kirlilik ve bulaşıcı hastalıklar arasındaki ilişkinin kurulmasına katkıda bulunarak kirlilikle mücadele uygulamalarının yeniden düzenlenmesinde etki sahibi olmuştur.

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