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#### **ABSTRACT**

**CRAFTING AN EMPIRE: THE HEREKE FACTORY CAMPUS (1842-1914)** 

#### by Didem Yavuz

One of the starkest examples of the Ottoman Empire's new modernity was the fabrics and carpet model factory founded at Hereke in 1842. This dissertation focuses on the evolving conditions and social developments that took place over seventy-two years of production at Hereke, and discuss that the factory represented a microcosm of the Empire's wider industrial labor history. Hereke was used as a lens through which to explore a range of themes that, taken together, highlight the lifestyles of the early Ottoman workforce and its industrial relations: labor management, industrial action, child labor, class, gender, housing, education, clothing fashion, the uses of industry, and multiculturalism. The original contribution to knowledge is to use a wide range of primary resources from the Ottoman archives to build a detailed picture of how labor relations within a trailblazing Ottoman factory campus both operated in practice and changed over time. Special emphasis is placed on three main aspects of this campus. First, the issue of housing, as Hereke represents one of the first factory campuses in Europe to adopt a model of providing custom-built housing for its workers. Second, child labor and education, since the plant not only took in orphans and provided employment to local children and the children of factory employees, but also included a school with a training and education program. Third, the plant's architectural history, which represents a crucial indicator of the overall working conditions at the factory and the degree of structural inequality that existed between different plant employees and functionaries.

### **CRAFTING AN EMPIRE: THE HEREKE FACTORY CAMPUS (1842-1914)**

by Didem Yavuz

A Dissertation
Submitted to the Faculty of
New Jersey Institute of Technology and
Rutgers, The State University of New Jersey – Newark
in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Urban Systems

**College of Architecture and Design** 

**August 2018** 

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Didem Yavuz, "Casa del Fascio: Tortular ve Maskeler", Betonart 21 (2009).

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To my grandfather, Tahir

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### LIST OF ABBREVIATIONS Abbreviations of Institutions

**BOA** Başbakanlık Osmanlı Arşivi (Prime Minister's Ottoman

Archives) / Istanbul

**CAM** Centre for Asia Minor Studies / Athens

**IETT** Istanbul Electricity, Tramway and Tunnel General

Management Archives / Istanbul

**IRCICA** Research Centre for Islamic History, Art and Culture / Istanbul

**ISAM** İslam Araştırmaları Merkezi (Centre for Islamic Studies) /

Istanbul

MSA National Palaces Archives / Istanbul

**AK** Atatürk Library / Istanbul

**WLICF** Women's Library and Information Center Foundation / Istanbul

**NEK** Istanbul Rare Works Library / Istanbul

**AAE** German Archeological Institution / Istanbul

**HFA** Hereke Factory Archives / Izmit

# LIST OF ABBREVIATIONS Abbreviations of Documents

**A.MKT.** Sadaret Mektubi Kalemi Evrakı

**A.MKT. MHM.** Sadaret Mektubi Mühimme Kalemi Evrakı

**A.MKT.NZD.** Sadaret Mektubi Kalemi Nezaret ve Deva'ir Evrakı

**A.MKT. UM.** Sadaret Mektubi Kalemi Umum Vilayat Evrakı

**BEO.** Babiali Evrak Odası Evrakı

**DH.KMS.** Dahiliye Nezareti Dahiliye Kalem-i Mahsus Evrakı

**DH.MKT.** Dahiliye Nezareti Mektubi Kalemi

**DH.TMIK.M.** Dahiliye Nezareti Tesri-i Muamelat ve Islahat Komisyonu

**HHd.** Hazine-i Hassa Defterleri

**HH.HRK.** Hazine-i Hassa Hereke Fabrikası İdaresi

HH.SAID.MEM. Hazine-i Hassa Sicill-i Ahval İdaresi Memurin

**HH.THR.** Hazine-i Hâssa Nezâreti Tahrirat Kalemi

**HR.MKT.** Hariciye Nezareti Mektubi Kalemi Evrakı

### LIST OF ABBREVIATIONS Abbreviations of Documents (Continued)

**İ.HUS.** İrade Hususi

**İ.TAL.** İrade Taltifat

**İ.TNF.** İrade Ticaret ve Nafia

**MF. MKT.** Maarif Nezareti Mektubi Kalemi

**ŞD.** Şura-yı Devlet Evrak

Y.MTV Yıldız Mütenevvi Maruzat Evrakı

Y.PRK.AZJ. Yıldız Perakende Evrakı Arzuhal Jurnal

Y.PRK.EŞA Yıldız Perakende Evrakı Elçilik Şehbenderlik ve Ateşemiliterlik

Y.PRK.HH. Yıldız Perakende Evrakı Hazine-i Hassa

**ZE.** Ziyad Ebüzziya Evrakı

### **Abbreviations of Hicrî and Rumî Months**

M Muharrem

S Safer

Ra Rebiyyü'l-evvel

R Rebiyyü'l-ahir

Ca Cumade'l-ula

C Cumade'l-ahir

B Receb

**Ş** Şa'ban

N Ramazan

L Şevval

**Za** Zi'l-kade

**Z** Zi'l-hicce

**Ka** Kanun-i evvel

K Kanun-i sani

**Ta** Teşrin-i evvel

T Teşrin-i sani

### LIST OF PRIVATE ARCHIVES

Personal Archives of Edhem Eldem

Personal Archives of Nazım Demirtaş

Han Carpet Archives

### LIST OF PERIODICALS

Servet-i Fünun
Malumat
Siyanet
Osmanlı Ressamlar Cemiyeti Gazetesi
Kadınlar Dünyası

#### **CHAPTER 1**

#### INTRODUCTION

### 1.1 Overview and Objectives

The nineteenth century witnessed the industrialization of the Ottoman Empire and the establishment of several state-run factories: the Fez Factory (1826), the Imperial Fabric Mill (1827), the İslimye Broadcloth Factory (1836), the Hereke Imperial Factory (1842), the Balıkesir Wool Factory (1842), the Izmit Broadcloth Factory (1844), the Bakırköy Print Works (1848), and the Bursa Silk Factory (1852). This dissertation focuses on the various adaptations of the Hereke Imperial Factory (Hereke Fabrika-i Hümâyûn), from its foundation in 1842 to the beginning of World War I. Situated to the east of Istanbul, on the waterfront of İzmit Bay on the Sea of Marmara, the Factory started out as a broadcloth plant founded by a local entrepreneur, Hovhannes Dadian, in 1842. It was transformed into an Imperial Factory in 1845 and then, producing textiles and carpets for both local and international markets, became a major hallmark of a series of modernization projects being implemented in the late Ottoman Empire. In 1925, the factory was transformed yet again, transferred to the Turkish Industry and Metal Bank (Sanavi ve Maadin Bankası). In 1933,

<sup>&</sup>lt;sup>1</sup> Abdülkadir Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," (PhD diss., Istanbul University, Istanbul, Turkey, 2000), 102.

<sup>&</sup>lt;sup>2</sup> Hovhannes Dadian played a significant role in the several state factories. During 1820-22, he was the director of the Paper Mill in Beykoz. He then acted as a director of the Weaving Factory in Eyüp between 1826 and 1829. He became chargeman (*barutçubaşı*) of the Azadlı Gunpowder Factory in 1842. He established a tannery in Beykoz, Izmit Broadcloth Factory, Hereke Cloth Factory, and Zeytinburnu Ironworks. He invented machines for the Spinning Factory in Eyüp and Armory. He also constructed and eighteenmeter-long iron bridge at Çırağan Palace in 1845. Kevork Pamukciyan, *Biyografilerle Ermeniler* (Istanbul, Turkey: Aras Yayıncılık, 2003), 195-198.

it was transferred to Sümerbank, a state economic enterprise of the Turkish Republic. The factory became subject to privatization in 1990s, but was mostly closed in the following years. Today, a museum sits on the site of one of the original buildings, the filature, while a smaller broadcloth factory operates as a private business.

The Hereke Imperial Factory campus did not consist only of industrial plants; it also included a design studio and a vocational school, which made it a modern leader among its peers across the empire. The design studio was dedicated to the maintenance and reconstruction of traditional crafts such as velvets, silk, and rugs. In this project, I examine the built environment of the Factory campus and its gardens, which were expanded many times between 1842 and 1914, along with shifts in the scope and designs of the factory's products. I situate these changes within the social, cultural, and economic conditions of the Empire itself and of the historical time period more broadly. Specifically, I show how the actions taken at the Hereke Imperial Factory led to the development of new forms of vocational education in the Ottoman Empire. Furthermore, I examine issues of gender, ethnicity, and labor as the original records of this institution reveal them.

This study spans seventy-two years, and includes three historically specific eras: the pre-Hamidian Tanzimat era (1842 to 1876), the Hamidian era (1876 to 1908), the Young Turk Revolution (1908 to 1914). It ends with the opening year of World War One. I explore the story of the Hereke Imperial Factory in terms of the connections and ruptures that are apparent between and across these three periods. Understanding shifts in the physicality of the factory complex, including the types of construction materials used and the size and orientation of the factory's different components, sheds light on the transformation of production spaces. Exploring accommodation patterns, the gradification

system, and charity elucidates the management of labor. Examining vocational education at the Hereke Factory Campus reveals the leadership role that the school assumed among other industrial schools. Finally, unpacking the factory's multiple and changing functions, such as production and product design, uncovers variety in and changes to the types of ornament produced at the factory over time.

### 1.2 Discussion on Ottoman History

Ussama Makdisi has argued that, the longstanding "decline" thesis of the Empire has been systematically deconstructed in drawing on different methodologies and exploring various facets of economic, social, and cultural history, by the scholars of the Ottoman Empire. Makdisi claims, in fact, that the late Ottoman Empire the broad yet static picture of the Empire was replaced with a portrait of an empire that was vastly more complicated, one that sought to modernize, indeed became modernized, in the face of uninterrupted European imperialism by the scholars.<sup>3</sup> For Taner Timur, by contrast, the Ottoman Empire never became Westernized through the reforms; rather, it became Orientalized since the segregation of modern science and scholastic thought that characterized seventeenth century Europe never happened in the Ottoman Empire.<sup>4</sup> For Selim Deringil, Ottoman reform reflected an imitation of Europe, as much as a reaction to superior European military and technology.<sup>5</sup> Makdisi disagrees, suggesting that Ottoman Orientalism was not

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<sup>&</sup>lt;sup>3</sup> Ussama Makdisi, "Rethinking Ottoman Imperialism: Modernity, Violence and the Cultural Logic of Ottoman Reform", in *The Empire in the City: Arab Provincial Cities in the Ottoman Empire*, ed. Jens Hanssen, Thomas Philipp and Stefan Weber (Würzburg: Ergon Verlag, 2002), 29-30.

<sup>&</sup>lt;sup>4</sup> Taner Timur, Osmanlı Kimliği (Istanbul, Turkey: Hil Yayın, 1986), 36.

<sup>&</sup>lt;sup>5</sup> Selim Deringil, *The Well Protected Domains: Ideology and the Legitimation of Power in the Ottoman Empire 1876-1909*, (London, UK: I.B. Tauris Publishers, 1998), 5; Ussama Makdisi, "Ottoman Orientalism," *The American Historical Review* 107, no. 3 (June 2002): 769.

inadvertent or imitative, but rather a pervasive and defining culmination of a unique modernization process that centered on the creation of an Ottoman Turkish identity. Islam acted as a point of commonality with the majority of the Empire's subjects, but this commonality was framed within a discourse that justified Ottoman Turkish rule over all other subjects, including Arabs, Kurds, Bulgarians, etc.<sup>6</sup> The nineteenth century reform was thus part of wider culture of modernity, in which the Ottoman Empire sought to define itself as an equal player on the world stage, especially after the 1856 Treaty of Paris that formally included the Ottoman Empire as a member of European state system. The official nationalism launched in the wake of the Tanzimat reform process was thus a project of modernization that aimed to bring together different ethnic groups, different religious communities, different regions, and different stages of progress under the umbrella of a unified modernity.<sup>7</sup>

According to Leslie Peirce, Ottoman historiography is now being revised thanks to new questions being posed across various scholarly fields since the 1980s: for example, how is the agency of ordinary people realized, how do marginal populations affect majority cultures, how are gender and sexuality constructed in different contexts, how do law and similar discourses reflect social and political contestation? Moreover, in the 1990s, advances in textual studies outside Ottoman studies have suggested that documentary materials should not be read as culturally unencumbered 'data.' This is particularly true when it comes to representing 'ordinary people' whose voices have tended to be heard only through "institutional translation." At the same time, the increased use of sources written

<sup>&</sup>lt;sup>6</sup> Makdisi, "Ottoman Orientalism," 769-670.

<sup>&</sup>lt;sup>7</sup> Makdisi, "Ottoman Orientalism," 778-779.

<sup>&</sup>lt;sup>8</sup> Leslie Peirce, "Changing Perceptions of the Ottoman Empire: The Early Centuries," *Mediterranean Historical Review* 19, no. 1 (June 2004): 10.

in Ottoman Turkish, Arabic, Persian, Greek, Armenian, Slavic languages, and Ladino allows for the recognition of multiple voices and perspectives.<sup>9</sup>

#### 1.3 Methodology

For Eric Hobsbawn, it was clear that social history since 1950 had been powerfully shaped and stimulated by other social sciences. Even so, social history is not specialized like economic or other hyphenated histories, because its subject matter cannot be isolated. Human activities may be defined as economic and then studied historically. In much the same way, the old kind of intellectual history that isolated written ideas from their human context and traced their movement from one writer to another is possible. But the social or societal aspects of human life cannot readily or reliably be separated from other aspects of life. They cannot, for example, be separated from the ways in which people earn their living and build their material environments.<sup>10</sup>

In a somewhat similar manner, architectural history is not merely about buildings' physical realities, but rather it encompasses a collection of social and urban influences that are operated by cultural and politico-economic dynamics. The exclusion from architectural history of insights from the human sciences leads to the fallacy of linear causality, which assumes that buildings are the ultimate output of one unique "origin." To tie buildings to some historical notion of "origin" orients the architectural historian to look merely at the final point of achievement. Manfredo Tafuri argues that such a genealogy only serves to

<sup>&</sup>lt;sup>9</sup> Kaya Şahin, "The Ottoman Empire in the Long Sixteenth Century," *Renaissance Quarterly* 70 (2017): 230.

<sup>&</sup>lt;sup>10</sup> E. J. Hobsbawm, "From Social History to the History of Society," *Daedalus* 100, no. 1 *Historical Studies Today* (Winter, 1971): 20-45.

cut off knowledge, rather than to generate it, and limits the possibility of rediscovery. <sup>11</sup> This "rediscovery" resides in the review and use of materials and "contextual evidence" that comes out of the architectural discipline. Meanwhile, conflation of social, economic, and political dynamics influencing an artifact calls for an interdisciplinary approach. For Tafuri, writing an architectural history is a work of creation that joins together the indissoluble links of fragments. For the fragments to cohere, historians must deal with heterogeneous materials. <sup>13</sup> The variety of materials that can be used to examine a building's structural features, its location, the individuals using the space or constructing the building, and the socio-political conditions of the time period bridge the buildings' physical reality to its wider social, cultural, and economic contexts. Dealing with such a wide range of materials and evidence forces architectural historians to emerge from their "intellectual cul de sac," <sup>14</sup> and encourages them to embrace other disciplines and wider audiences.

The expansion of traditional boundaries of architectural history through the application of poststructural theories and historiographical methods of cultural history that encompass issues of class, gender, ethnicity, colonialism, the body, and public versus private space brings to the forefront philosophical questions that situate architectural history in the field of cultural studies.<sup>15</sup> Poststructural methodological concerns affect the

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<sup>&</sup>lt;sup>11</sup> Manfredo Tafuri, "Introduction: The Historical Project," in *The Space and the Labyrinth: Avant-gardes and Architecture from Piranesi to the 1970s* (Boston, MA: MIT Press, 1987), 1-21.

<sup>&</sup>lt;sup>12</sup> For Andrew Leach, contextual evidence places historians in a broad setting to investigate the proof of timing, sequence, and location, as well as the other figures involved and their relation to other figures—when, where, who--in a wide web of the historical past. See Andrew Leach, "Evidence," in *What is Architectural History?* (Malden, MA: Polity Press, 2010), 76-97.

<sup>&</sup>lt;sup>13</sup> Manfredo Tafuri, "Introduction: The Historical Project."

<sup>&</sup>lt;sup>14</sup> The phrase "intellectual cul de sac" is used by Dianne Harris to describe some architectural historians who are not interested in the endeavors of scholars in other fields. Dianne Harris, "That's Not Architectural History! Or What's a Discipline For?" *Journal of the Society of Architectural Historians* 70, no. 2 (June 2011): 149-152.

<sup>&</sup>lt;sup>15</sup> Eva Blau, "Representing Architectural History," *Journal of the Society of Architectural Historians* 56, no. 2 (1997): 144-45.

core ideas of architecture; for instance, the study of gender brings attention to the role that power dynamics play in shaping architectural agendas and the social construction of space. Architecture is a sort of evidence itself that demonstrates how society and space are mutually constituted; therefore, investigating events, physical locale, and meaning will bring about a deeper analysis of interactive political structure, including both the ruling class and those at the bottom of society. The interdisciplinary field of place studies also enables scholars to look at cultural impositions and sensorial responses, and their connection to power. 17

In the light of this interdisciplinary methodology, my investigation aims to gather together the two sides of the Imperial project: I deal with imperial agendas on one hand, and with workers' everyday lives on the other. Since most of the archival records and chronicles related to the topic come from state archives, this study will inevitably have a top-down perspective; however, my work includes the bottom-up history of the Hereke Imperial Factory: it includes many excluded voices from the margins, such as the migrant families, orphans, and widows who served the Imperial project.

In writing history that is at once from the top down and the bottom up, and in excavating the visible and the invisible, I have been inspired by the work of architectural historians, in particular Hillary Ballon and Gülru Necipoğlu. The works of historians Donald Quataert and Nazan Maksudyan also provided useful methodological models for my project. In *Paris of Henri IV: Architecture and Urbanism*, Ballon explores the urban

<sup>&</sup>lt;sup>16</sup> Christy Anderson, "Writing the Architectural Survey: Collective Authorities and Competing Approaches," *Journal of the Society of Architectural Historians* 58, no. 3 (1999): 350-55.

<sup>&</sup>lt;sup>17</sup> Diane Favro, "Meaning and Experience: Urban History from Antiquity to the Early Modern Period," *Journal of the Society of Architectural Historians* 58, no. 3 (1999): 364-73.

and architectural programs of Paris in the late sixteenth and early seventeenth century that centralized the power of Henri de Bourbon and embodied it in his position of King Henri IV of France. To promote new visibilities as a representation of his power, Henri IV implemented new policies that not only centralized the power of the crown, but also brought about new urban culture with the emergence of Paris as a national capital, a transformation from a medieval city to a monumental city. Writing a history from the top of society that investigates Henry IV's accomplishment of the physical monumentality of Paris, Ballon uses national and state achieves (the Archive of the Palace Royale, the National Archives, the Achieves of Public Welfare and the National Library). However, notarial archives also play a key role in her readings of a city that was impacted by centralized monarchic constitutions: to explore the reflection of a king's bourgeoning power within the cityscape, Ballon traces notarial contracts, including building contracts, land sales, property sale agreements, loans, and leases that elucidate the regulations that promoted construction.

In her article "From International Timurid to Ottoman: A Change of Taste in 16<sup>th</sup> Century Ceramic Tiles," Gülru Necipoğlu researches the effect of immigrant craftsmen from Iran on İznik ceramic workshops in the sixteenth century, during the reign of Süleyman I.<sup>19</sup> She explores how international Timurid tastes were replaced under Ottoman patronage by Turcoman artists who migrated from Tabriz to work in the İznik ceramic workshops. These new tastes also altered the style of products coming out of İstanbul's royal ceramic workshops and influenced a new Ottoman identity. Using the National

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<sup>&</sup>lt;sup>18</sup> Hillary Ballon, *Paris of Henri IV: Architecture and Urbanism* (New York, NY: Architectural History Foundation, 1991).

<sup>&</sup>lt;sup>19</sup> Gülru Necipoğlu, "From International Timurid to Ottoman: A Change of Taste in Sixteenth-Century Ceramic Tiles," *Muqarnas* 7 (1990): 136-170.

Archives and the Topkapı Palace Archives—including protocol folders (*teşrifat defterleri*, *defter-i harcı hassa, maliyeden müdevver*), the wages of designers, and the expenses of royal ceramic workshops—she also looks at popular motifs that appeared in other crafts, such as textiles and carpets, and their effects in architecture.

In his article "Machine Breaking and Changing Carpet Industry of Western Anatolia, 1860-1908," Donald Quataert investigates the relationship between rioters at Uşak in the early twentieth century and series of changes that had been made in the carpet industry. The last quarter of the nineteenth century witnessed a growing demand by European and American merchants for oriental carpets. Foreign carpet agencies opened in Western Anatolia, and this dramatically restructured the Anatolian carpet industry, the styles of rugs being produced, the lifestyles of Ottoman workers, and labor patterns. From their own looms to factory and plant worksites, Uşak workers made difficult adjustments to factory life. Since foreign agencies removed the spinning and dyeing jobs from Uşak, choosing instead to import died yarn from trust companies, many people, including a vast number of women and children, lost their jobs. Unemployed people initiated the riots. The author looks at the Prime Minister's Ottoman Archives, consular reports, consular letters, telegrams, and industrial statistics of governmental surveys and demonstrates the intertwined relationship between social events and the acquisition of machinery.

In her dissertation "Hearing the Voiceless, Seeing the Invisible: Orphans and Destitute Children As Actors of Social, Economic, and Political History in the Late Ottoman Empire," Nazan Maksudyan explores orphans and destitute children in the late

<sup>&</sup>lt;sup>20</sup> Donald Quataert, "Machine Breaking and the Changing Carpet Industry of Western Anatolia, 1860-1908," *Journal of Social History* 19, no. 3 (1986): 473-489.

Ottoman Empire.<sup>21</sup> In the nineteenth century, state and provincial governments, municipalities, non-Muslim communities, and missionaries started to focus their attention on unprotected children, who it was believed could become laborious workers, ardent nationalists/citizens, or staunch converts/believers. The organizations sought to save the children from various dangers, such as losing their ethno-religious identity, being sold into slavery, or being targets of sexual abuse, exploitation, juvenile criminality, prostitution, health problems, death, conversion, and apostasy. To explore the invisible and voiceless children, Maksudyan looks at the Prime Minister's Ottoman Archives, American Board Archives, Archives of Papers of the American Board of Commissioners for Foreign Missions, French Foreign Ministry Archives, Capucin Archives, and Lazarist Archives. Containing original letters and reports of the missionaries, several missionary periodicals were also combed through, including the American Board of Commissioners for Foreign Missions, the monthly periodical *The Missionary Herald The Orient*, Annual Reports of the society, monthly periodical Bulletin des Oeuvres des Écoles d'Orient, the weekly periodical Les Missions Catholiques, together with a yearbooks (Sâlname), code of laws (Düstûr), and memoirs.

My research materials come from Prime Minister's Ottoman Archives (BOA), the National Palaces Archives (MSA), Centre for Asia Minor Studies (CAM), Atatürk Library (AK), Centre for Islamic Studies (ISAM), Research Centre for Islamic History, Art and Culture (IRCICA), Women's Library and Information Center Foundation (WLICF), Personal Archives of Edhem Eldem, and articles from *Servet-i Fünun, Malumat, Styanet*,

<sup>&</sup>lt;sup>21</sup> Nazan Maksudyan, "Hearing the Voiceless-Seeing the Invisible: Orphans and Destitute Children as Actors of Social, Economic and Political History in the Late Ottoman Empire," (PhD Thesis, Sabancı University, Istanbul, Turkey, 2008).

Osmanlı Ressamlar Cemiyeti Gazetesi and Kadınlar Dünyası. For visual resources, I looked at the Istanbul Rare Works Library (NEK), MSA, Hereke Factory Archives (HFA), IRCICA, German Archeological Institution (AAE), Istanbul Electricity, Tramway and Tunnel General Management Archives (IETT), Han Carpets Archives, and Nazım Demirtaş Personal Archives.

This dissertation is comprised of four thematic chapters and a conclusion. I explore the seventy-two years of the Hereke Imperial Factory's existence in chronological order. The first chapter examines the expansion of the factory from silk use between 1842 and 1878 to wool use between 1881 and 1914. This shift coincided with the introduction of new construction techniques at the plant site, such as the use of iron, and the introduction of new operating systems, such as the steam engine. The second chapter discusses housing provided for the workers, a profile of the workers, the maintenance of social order, rewards and other ceremonies, and the social security system. The characters in this chapter include child slaves, Africans, Europeans, and many excluded voices, such as migrant families, Orthodox Greek, Armenian and Muslim orphans and widows. This part of dissertation deals with different facets of the factory campus in relation to children and adult labor. The chapter ends with the factory strike of 1908. The third chapter focuses on the factory's educational institutions, which occupied a leading position among other industrial schools. The vocational school employed child labor, while the children of workers and officials were registered in the formal schools located on the factory campus. The fourth chapter provides an account of production and changing tastes. Influenced by the sultan, the changing ornamentation across time also overlaps with migration patterns. This chapter scrutinizes ornaments produced by the factory along with the books of the drawing office.

This study traces the Hereke Imperial Factory's transformation from a production site of luxury goods for the exclusive use of imperial households, to a production site of fine-woven carpets showcased in international exhibitions and of furnishings for significant buildings. The expansion of the factory is traced alongside the social, philanthropic, and economic conditions of the day. I explore the transformation of the built environment and interaction within spaces inhabited by workers, along with historical changes in taste and design. To scrutinize the transformation of the built environment, I created hypothetic site plans of the factory campus, mainly based on the Ottoman Military Academy (Erkan-1 Harbiye) map of 1915 (Figure 1.1) and current site maps (Figure 1.2) overlapped with my personal interpretations of the descriptions and explanations found in the archival materials. The folders of correspondence (tahrirat dosyaları) and construction folders were key archival materials to situate the no-longer existing buildings. To create site maps of the day, I also benefited from old photographs, traveler observations (such as Charles MacFarlane), oral history descriptions from the Centre for Asia Minor Studies, and a site visit. I identified the buildings existing on the maps and my own interventions and interpretations as in the legend (Figure 1.3).

I also looked at the range of idioms and styles found among the products of the Hereke Imperial Factory. Furthermore, my investigation blends multiple fields of study. While focusing on architectural history, I follow an interdisciplinary approach that brings together research into the design of products, changing labor formations, the relationship between gender and work, and the nature of charity. The study emphasizes the leading role of Hereke Imperial Factory among industrial schools in terms of its pilot work on weaving education. My dissertation also addresses shifts in gender roles and the organization of

labor that occurred through the application of new vocational education practices developed by the Hereke Imperial Factory and other industrial schools.



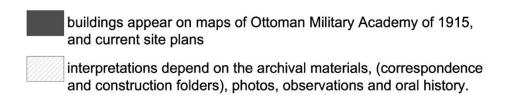
**Figure 1.1** Ottoman Military Academy Map of 1915.

Source: Ottoman Military Academy (Erkan-1 Harbiye) map of 1915, IRCICA Library (H772\_001)



**Figure 1.2** Current site plan of the Hereke Imperial Factory.

Source: Municipality of Izmit, 1986, the map includes the buildings from both the Ottoman Period under the name of Hereke Imperial Factory and the Republican Era under the name of Sümerbank Factory (the radial layout was added to the factory campus in 1940s).



**Figure 1.3** The Legend of the Hypothetical Maps.

Source: Image produced by the author

#### 1.4 Literature Review

The existing literature addresses various aspects of the Hereke Imperial Factory specifically, and topics related to it more generally. Abdülkadir Buluş's dissertation focuses on factory production and deals with state industrialization policies, specifically those developed after the Tanzimat Reforms, and how these policies affected administration at the Factory. <sup>22</sup> However, his reliance on archival materials from only one source, the Prime Minister's Ottoman Archives, means that he did not adequately address the everyday lives of the workforce. Candan Sezgin's work provides a longer discussion of the links between the education and training offered at the Hereke Imperial Factory and that offered by other schools across the Empire and in Europe. <sup>23</sup> She also deals with the labor force by examining the social lives of workers and outlines the current situation of the building stock.

<sup>&</sup>lt;sup>22</sup> Buluş "Osmanlı Tekstil Sanayi Hereke Fabrikası."

<sup>&</sup>lt;sup>23</sup> Candan Sezgin, "Atölyeden Fabrikaya Geçiş Modeli Olarak Hereke Fabrika-i Hümayunu ve Endüstri Mirasımız Olarak Taşıdığı Değer," in *Sultan Abdülmecid ve Dönemi* (Istanbul, Turkey: Istanbul Büyükşehir Belediyesi Kültür A.Ş Yayınları, 2015), 214-231.

Two books by Önder Küçükerman<sup>24</sup> and by Mehmet Kenan Kaya *et al.*,<sup>25</sup> respectively, discuss the high quality and variety of the objects produced in the Hereke Imperial Factory. Both books interpret the factory's products as examples of Turkish art, although neither provides any interpretation of the link between the products produced in the factory and the notion of identity. Küçükerman also writes about the industrial schools, but does not address the relationship between the industrial schools and the Hereke Imperial Factory.

Yusuf Utkaner and Özlem Aydın Oral offer an architectural analysis of the Hereke Imperial Factory buildings, the date of their construction, and their current physical state.<sup>26</sup> They also address technical recommendations for the restoration of the buildings, their later use as a museum, and the current architectural status of the some of the buildings.

Labor history in the Ottoman Empire has also been studied rather extensively, and provides an important backdrop for this dissertation. Donald Quataert has addressed both the workers themselves and their labor movements.<sup>27</sup> Kadir Yıldırım looks at the working class, not through their own organizations, such as trade unions and committees, but instead through the stories of parties and leaders.<sup>28</sup> Concentrating on the years 1870 to 1922, Yıldırım focuses on the actual practices of the "Ottoman proletariat" and paints a picture

<sup>&</sup>lt;sup>24</sup> Önder Küçükerman, *The Rugs and Textiles of Hereke: A Documentary Account of the History of Hereke Court Workshop to Model Factory,* trans. M.E. Quigley-Pınar (Istanbul, Turkey: Sümerbank Publications, 1987).

<sup>&</sup>lt;sup>25</sup> Mehmet Kenan Kaya *et al.*, *Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları* (Istanbul, Turkey: Milli Saraylar Daire Başkanlığı Yayınları, 1999).

<sup>&</sup>lt;sup>26</sup> Yusuf Utkaner and Özlem Aydın Oral, "Hereke Fabrika-i Hümayunu'nun Mimari Analizi ve Koruma Önerileri," *Mimarlık* (November-December 2009): 46-51

<sup>&</sup>lt;sup>27</sup> Donald Quataert, *Workers, Peasants and Economic Change in the Ottoman Empire, 1730-1914* (Istanbul, Turkey: Isis Press, 1993); Donald Quataert and Erik Jan Zürcher, eds., *Workers and the Working Class in the Ottoman Empire and the Turkish Republic, 1839-1950* (London, UK: Tauris Academic Studies in Association with the International Institute of Social History Amsterdam, 1995).

<sup>&</sup>lt;sup>28</sup> Kadir Yıldırım, *Osmanlı'da İşçiler: Çalışma Hayatı, Örgütler, Grevler (1870-1922)* (Istanbul, Turkey: İletişim Yayınları, 2013).

of the general structure of working life, involvement in workers' organizations and workers' movements, the sectors in which the workers worked, and the structure of the workforce. He also extensively examines the fight for legal regulations, including through boycotts, strikes, and job cuts. Y. Doğan Çetinkaya and Mehmet Ö. Alkan work offers a selection of new generational studies on different periods of modern Turkish history from the Tanzimat period onwards, including on the working class and labor movements. <sup>29</sup> Zafer Toprak looks at the strike patterns of 1908 and the relationship between workers and the Committee of Union and Progress administration. <sup>30</sup> He deals in particular with urbanization in and globalization of the Ottoman Empire in terms of their relationship to labor strikes.

During the nineteenth century, child labor was not well recorded, documented, or charted in the Ottoman Empire. The history of children is almost covert. In the case of the Hereke Imperial Factory, the use of child labor is hidden in the records (wage ledgers) of factory employees' earnings, as the total amount of money paid to pieceworkers, in the construction records of dormitories, and in the number of migrant families employed at the factory. Nevertheless, several studies point to the importance of applying models of child sociology to history, and to Ottoman history in particular. Three recent studies on child labor in the Ottoman Empire shed light on children's working and housing issues, and are

<sup>&</sup>lt;sup>29</sup> Y. Doğan Çetinkaya and Mehmet Ö. Alkan, *Tanzimat'tan Günümüze Türkiye İşçi Sınıfı Tarihi, Yeni Yaklaşımlar, Yeni Alanlar, Yeni Sorunlar* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2015).

<sup>&</sup>lt;sup>30</sup> Zafer Toprak, *Türkiye'de İşçi Sınıfı (1908-1946)* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2016).

<sup>&</sup>lt;sup>31</sup> Colin Heywood, *Baba Bana Top At: Batı'da Çocukluğun Tarihi* (Istanbul, Turkey: Kitap Yayınevi, 2003), 10-11 and Yahya Araz, *16. Yüzyıldan 19. Yüzyıl Başlarına Osmanlı Toplumunda Çocuk Olmak* (Istanbul, Turkey: Kitap Yayınevi, 2013) point in particular to Alan Prout and Allison James, "A New Paradigm for the Sociology of Childhood? Provenance, Province and Problems," in *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood* (London, UK: The Falmer Press, 1997), 7-10.

pertinent to this dissertation. Yahya Araz looks at child labor in the first half of the nineteenth century, focusing on child apprentices who were worthy of great cities. Mahmud II's edict of 1824 stated that children could be taken from school and given over to apprenticeship at the age of five. Araz talks about guild traditions, apprenticeship conventions, and contracts between masters and apprentices. He also refers to the charitable use of foster-daughters domestic service, at a cheaper rate than the *cariyes*. Araz also refers to legal arrangements, wages, and education affairs related to adopted children, who were employed as domestic servants.<sup>32</sup> Nazan Maksudyan looks at the labor and disciplining of foster-daughters under the gaze of the upper classes and the state in the nineteenth century Ottoman Empire, and focuses on foster-daughter labor across the blurred boundaries of charity and abuse.<sup>33</sup> According to Maksudyan, it is important to consider the declining use of household slaves in the second half of the eighteenth century in direct proportion to the increase in adopted children. Regarded as a form of charity, the employment of foster-daughters centered on the children of the poor. They were often nursed, reared, and "rented" for service in the households of others. Although the fosterdaughters were often exploited sexually as well, they found a way to take the initiative through resistive strategies, including escape, official complaint, or suicide. Finally, Erdem Kabadayı's dissertation on the Feshane Factory looks at the forced labor of children. In the nineteenth century, military conscription resulted in a new and hybrid form of forced labor at state factories. In the case of the Ottomans, forced labor practices illustrate the changing nature of the social contract between the ruled and the ruler and provide insight into other

<sup>&</sup>lt;sup>32</sup> Yahya Araz, "Yoksulluk ve Çocuk Emeği," in *16. Yüzyıldan 19. Yüzyıl Başlarına Osmanlı Toplumunda Çocuk Olmak*, (Istanbul, Turkey: Kitap Press, 2013), 142-176.

<sup>&</sup>lt;sup>33</sup> Nazan Maksudyan, "Foster-Daughter or Servant, Charity or Abuse: Beslemes in the Late Ottoman Empire," *Journal of Historical Sociology* 21, no. 4 (December 2008): 488-512.

forms of employment by the state or in the service of the state.<sup>34</sup>

This dissertation draws from this existing literature, blends it together, and offers a new, interdisciplinary perspective on the Hereke Imperial Factory.

<sup>34</sup> Erdem Kabadayı, "Working for the State in a Factory in Istanbul: The Role of Factory Workers' Ethno-Religious and Gender Characteristics in State-Subject Interaction in the Late Ottoman Empire," (PhD diss., Munih University, Munich, Germany, 2008).

#### **CHAPTER 2**

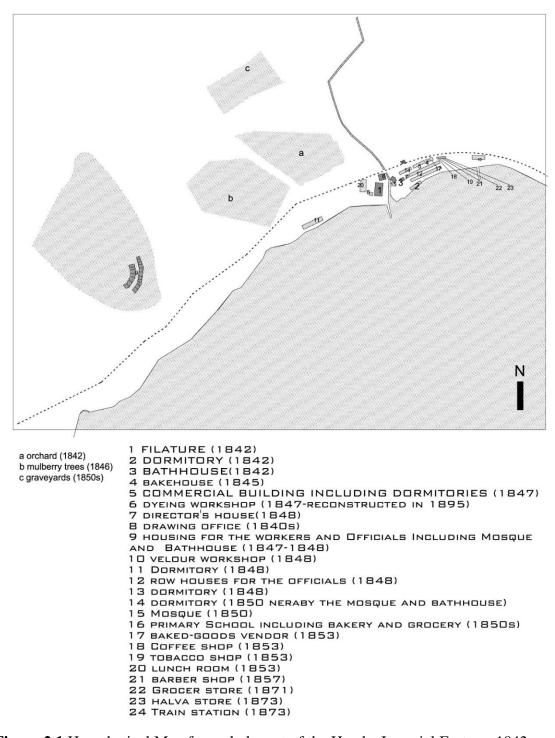
#### MANAGEMENT OF THE LAND

## 2.1 Silk Landscapes: (1842-1878)

The early years of the Hereke Imperial Factory were dedicated primarily to silk production. Not only the building stock, but also the landscape was planned according to the manufacturing needs of silk production. Raw and semi-processed materials, raw silk, and cocoons were provided from the factory, which also shaped the landscape and the buildings. Even the workers' houses contributed into the production of semi-processed materials.<sup>1</sup> The main factory and all other associated buildings formed a village that ran parallel with the gulf and stood on an irregular but rather narrow flat piece of land situated between the sea and the mountains.<sup>2</sup> The first phase of the factory campus's growth included the addition of new technical and service units using masonry and timber-construction techniques, including a filature, a velour workshop, and a dyeing workshop (Figure 2.1). Lacking a steam engine, though, the Factory was unable to really expand its production capacity for the first thirty-five years. In this section, I will explore the construction of the buildings, the installation of the machines, and the expansion of the site.

<sup>&</sup>lt;sup>1</sup> See the section on Housing for the Workers in Chapter 2.

<sup>&</sup>lt;sup>2</sup> Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country, Volume II* (Philadelphia, PA: Lea and Blanchard, 1850), 275-276.



**Figure 2.1** Hypothetical Map for early layout of the Hereke Imperial Factory, 1842–1873.

Source: Image produced by the author

#### 2.1.1 The Foundation

While engaged in the construction of the Imperial Broadcloth Factory in Izmit in 1842, Hovhannes and Boghos Dadian decided to found another factory, at their own cost, in Hereke.<sup>3</sup> Serkis was appointed as Director of the Hereke Factory in 1843.<sup>4</sup> The Dadians purchased the lands on which they built the factory from the inhabitants of the village of Hereke, specifically choosing an otherwise unoccupied site on the Sea of Marmara with a 600 meter long waterfront.<sup>5</sup> Locating the factory on the waterfront would be useful for the transportation of the goods, especially between Izmit and Istanbul. The plans for the Hereke project were prepared by Seraskerier Rıza Paşa; according to the Scottish travel writer Charles MacFarlane, Rıza Paşa selected a location that was far from the malarious region around Nicomedia (Izmit) and that had no stagnant waters in its vicinity. A local stream, the Ulupınar, descended through limestone rocks, with a rapidly declining bed and a free outlet to the gulf.<sup>6</sup> In selecting the factory's site, health conditions were very important: it

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<sup>&</sup>lt;sup>3</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895). Much of the existing literature states that the factory was founded in 1843: Candan Sezgin, "Atölyeden Fabrikaya Geçiş Modeli Olarak Hereke Fabrika-i Hümayunu ve Endüstri Mirasımız Olarak Taşıdığı Değer," in Sultan Abdülmecid ve Dönemi (1823-1861), ed. Kemal Kahraman and Ilona Baytar (Istanbul, Turkey: Milli Saraylar Yayın, 2015), 214-231; Önder Küçükerman, The Rugs and Textiles of Hereke: A Documentary Account of the History of Hereke Court Workshop to Model Factory, trans. M.E. Quigley-Pınar (Istanbul, Turkey: Sümerbank Publications, 1987); Mehmet Kenan Kaya, "Hereke Fabrika-vi Hümayun'u Tarihçesi," in Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları, ed. Mehmet Kenan Kaya et al. (İstanbul, Turkey: Milli Saraylar Daire Başkanlığı Yayınları, 1999), 10-21; Yusuf Utkaner and Özlem Aydın Oral, "Hereke Fabrika-i Hümayunu'nun Mimari Analizi ve Koruma Önerileri," Mimarlık (November-December 2009): 46-51. Abdülkadir Bulus has found evidence, though, that the Hereke Factory was constructed in 1842. The warrant copy (müzekkere sureti) provided by Hasan Efendi, the Minister of Imperial Factories, demonstrates that the Izmit and Hereke Factories were both constructed in three years as the Sultan's institutions (zat-1 şahane-i asar-1 celilesinden olmak üzere) and completed by December 13, 1845. Therefore, according to Buluş, it makes sense to consider that construction on the Hereke Factory began in 1842. Abdülkadir Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," (PhD diss., Istanbul University, Istanbul, Turkey, 2000).

<sup>&</sup>lt;sup>4</sup> BOA HHd 69.7a; Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası."

<sup>&</sup>lt;sup>5</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895). MacFarlane claims that before this construction was carried out, there was nothing there but a Turkish post-house, a stable, and two hovels. MacFarlane, *Turkey and Its Destiny*, 276.

<sup>&</sup>lt;sup>6</sup> MacFarlane, Turkey and Its Destiny, 276.

was crucial that the factory be located somewhere far from the outbreaks of diseases such as malaria and cholera, which had spread across the Empire in the nineteenth century, and have ready access to fresh water. Locating the factory near to a stream also enabled it to benefit from waterpower through the construction of water mills.

## 2.1.2 Machines and Workshops

Riza Paşa intended to establish a factory on the site with machines for spinning and weaving cotton, and the cotton factory appeared by 1842 (Figure 2.2). In 1843, it started to produce American cotton cloth on fifty looms and to manufacture adorned taffeta (*çiçekli canfes*) on twenty-five hand looms. There were also three British winding looms (*büküm destgahı*) at the workshop, purchased and fitted by Englishment at immense expense. However, the English machinery was then pulled down, and the parts that were not destroyed were sent to Makriköy. As Rıza Paşa fell out of favor with Sultan Abdülmecid, the sultan was informed about these buildings and wondered how Rıza Paşa had afforded them. Perhaps to smooth over their relationship, Rıza Paşa made a present of the entire factory to the sultan in 1844. When Abdülmecid arrived in Hereke by road in 1844, a commemorative stone adorned with the Sultan's calligraphic signature was placed at the factory entrance.

<sup>&</sup>lt;sup>7</sup> MacFarlane, Turkey and Its Destiny, 276-277.

<sup>&</sup>lt;sup>8</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895)

<sup>&</sup>lt;sup>9</sup> MacFarlane, *Turkey and Its Destiny*, 276-277.

<sup>&</sup>lt;sup>10</sup> MacFarlane, Turkey and Its Destiny, 276-277.

<sup>&</sup>lt;sup>11</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası," (Hayri Tokay Documents, Edhem Eldem Individual Collection, 1983).



**Figure 2.2** Hypothetical Map, showing the Filature, c.1842.

Source: Image produced by the author

Now under the Sultan's control, the factory added spinning machines and began to produce silk as well as cotton.<sup>12</sup> Not long afterwards, though, the decision was taken to convert the cotton mill into a silk factory, and additional expensive machines were purchased in Europe. To facilitate the transfer from cotton to silk production, Hovhannes Dadian purchased an entire German factory in Vienna: he brought out not only the machinery, materials, and designs, but also the master of the factory, his family, and his workmen. Additional English, French, German, and Italian machinery was placed in the

<sup>12</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

factory. When some improvements in the making of fancy silks were announced at Lyon, Hovhannes purchased and brought out, at great expense, a talented French mechanist to fit up the machinery. To MacFarlane, the Silk Factory (filature factory) was "a large, tall and rather stately building." This two-story building was twenty-five meters wide, fifty meters deep, and ten meters high. For driving power, it had a large water mill facility, similar to that at the Izmit Broadcloth Factory. 15

In 1846, the ground floor of the two-floor silk spinning workshop (*ipek fabrikası*) was taken up with chino and cotton weaving (*örme kirbas ve pamuklu dokuma*), while various kinds of silk weaving (*ipekli akmeşe-i mütenevvia*) was handled on the second floor. About 150 spinning machines and looms were set up, later increased to 300. Following the completion of construction work on the cloth printing workshop, the cotton weaving looms at Hereke Imperial Factory were moved to the Bakırköy Cloth Factory (*Bakırköy Bez Fabrikası*) in 1844 and the Zeytinburnu Printed Cloth Factory (*Zeytinburnu Basma Fabrikası*) in 1848

Already by 1846, though, the workers were no longer able to operate the spinning machines imported from Europe and the factory had to return to using handloom technology. A maximum of ten handlooms could be used at any given time.<sup>19</sup> There was

<sup>&</sup>lt;sup>13</sup> MacFarlane, Turkey and Its Destiny, 276-277.

<sup>&</sup>lt;sup>14</sup> MacFarlane, Turkey and Its Destiny, 275-276.

<sup>&</sup>lt;sup>15</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası," 1983. Hayri Tokay Documents, Edhem Eldem Individual Collection.

<sup>&</sup>lt;sup>16</sup> BOA HHd 65.20 1262 N 7 (August 29, 1846).

<sup>&</sup>lt;sup>17</sup> MacFarlane, Turkey and Its Destiny, 277-278.

<sup>&</sup>lt;sup>18</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 123. "*Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası*." The Zeytinburnu Printed Cloth Factory was founded with the cotton production machinery transferred from the Hereke Imperial Factory in 1848. The factory first produced printed cloth with English patterns, and later manufactured cloth in the Arabic style. Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 110.

<sup>&</sup>lt;sup>19</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895); MacFarlane, *Turkey and Its Destiny*, 277-278.

sufficient waterpower to drive fifty factories, but the English hydraulic wheel was dirty and neglected. One might speculate that the factory was forced to switch its silk production from spinning machines to hand looms because neither the water mill nor the hydraulic wheel were efficient enough to operate spinning mills and machines. For the use of these machines, the factory ought to have been steam-driven.



**Figure 2.3** Dyed Silk Yarn, 1861. *Source: BOA HH HRK 12.55 1278. N. 55* 

From the 1810s, European manufacturers had undermined the position of Bursa silk cloth makers by bidding up natural dye prices. During the late 1830 and 1840s, imports of dye increased and indigo and logwood became unavailable.<sup>20</sup> To overcome the dye shortage, a dyeing workshop was constructed, together with a yarn shop, at the Hereke

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<sup>&</sup>lt;sup>20</sup> Donald Quataert, "The Age of Reforms," in *An Economic and Social History of the Ottoman Empire: 1600-1914*, ed. Halil İnalcık with Donald Quataert. (Cambridge, UK: Cambridge University Press, 1994), 908.

Factory Campus in 1847.<sup>21</sup> The Ottoman Prime Minister's archives provides evidences for the silk yarns in various colors produced in the dyeing workshop (Figure 2.3). To ensure the supply of raw material for dyeing, new lands were acquired in 1849 for the Factory's indigo and walnut trees at the Izmit Imperial Factory's plant site. The district governor of Izmit demanded that the walnut trees not be cut down.<sup>22</sup>

By the 1840s and 1850s, the Empire's silk production had fallen drastically, and almost all of it was being made solely for domestic consumption. <sup>23</sup> The Factory's initial focus had been luxury silk production for a limited, but exclusive, customer base: the palace and the elites. In 1846, the Factory's products were stored at the Sepetçiler Mansion in Istanbul, and then used for the Imperial Palace, when required, or sold to elites. <sup>24</sup> MacFarlane directly considered the factory's relationship to the palace: They produced some commonly rich fancy and brocaded silks, of very brightest colors made for salwars for Sultan's harem, for pantaloons for his chamberlains, eunuchs, secretaries, and some of other rich figured silk for curtains, and sofa covers. All that is produced is sent to the palace, where everybody helps himself or herself according to their fancy or amount of favor; the little that remains is sent to the bazaars of Istanbul to be sold for the account of the Sultan. In the bazaars, there is a separate shop or warehouse for the sale of silks. It was rare that anything is sold since hardly anything was ever sold in the Sultan's cloth-shop in the bazaars. <sup>25</sup>

<sup>&</sup>lt;sup>21</sup> BOA HHd 65.9 1263.M.19 (January 7, 1847); HHd 256.5a 1263.M.19 (January 7, 1847); Bulus,

<sup>&</sup>quot;Osmanlı Tekstil Sanayi Hereke Fabrikası," 132.

<sup>&</sup>lt;sup>22</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 134.

<sup>&</sup>lt;sup>23</sup> Quataert, "Age of Reforms," 908.

<sup>&</sup>lt;sup>24</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>25</sup> MacFarlane, Turkey and Its Destiny, 278.

Imperial politicians aimed to expand the factory's output by adding a three-story velour workshop (*kemhahane*), housed in a timber building, in 1848 (Figure 2.4).<sup>26</sup> That same year, new workshops for velvet and brocaded silk (*brokotil*) were also added.<sup>27</sup> When the architect Karabet Kalfa took on responsibility for construction work at various state industrial institutions, new construction work at the Hereke Imperial Factory also began under his administration. The new factory building eighty *arşın* (60.6 meters) in length, twenty *arşın* (15.2 meters) in width, and three stories high was built next to the existing building. Fifty fabric looms were planned for each floor of this new building, bringing the combined number of looms in the two buildings to 200.<sup>28</sup> The new building in particular was of very superior quality, and the workrooms were, for the most part, vast, airy, and well lighted.<sup>29</sup> In 1849, a further improvement was made at the Factory: the procurement of Jacquard looms (Figure 2.5), named after their inventor, Joseph Marie Jacquard (1801).<sup>30</sup>

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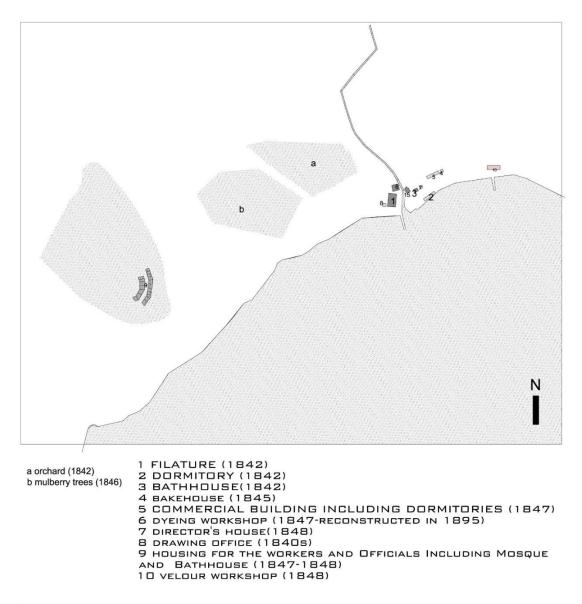
<sup>&</sup>lt;sup>26</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895); BOA HH.THR 283.6 1329.N.18 (September 12, 1911).

<sup>&</sup>lt;sup>27</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>28</sup> Mehmet Topal, Erkan Erdemir, and Engin Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri Hereke Fabrikası ve Nizamnamesi," *SDU Faculty of Arts and Sciences Journal of Social Sciences* 25 (May 2012): 37-64. According to Topal, Erdemir and Kırlı, this additional construction at Hereke factory began in 1846 and work continued until 1853.

<sup>&</sup>lt;sup>29</sup> MacFarlane, Turkey and Its Destiny, 278.

<sup>&</sup>lt;sup>30</sup> Kemalettin Apak, Cevdet Aydınelli, and Mehmet Akın, *Türkiye'de Sanayi ve Maadin İşletmeleri* (İzmit, Turkey: Selüloz Basım Evi, 1952), 177.



**Figure 2.4** Hypothetical Map, showing the Velour Workshop, c.1848.

Source: Image produced by the author



**Figure 2.5** Master Bayram's Jacquard Loom, 1890. *Source: Istanbul University Rare Works Collection (90453---0015)* 

During the early years when the state ran the factory, silk production was carried out on fifty looms. The low quality and quantity of production, however, meant that before 1850, the factory could not make a profit.<sup>31</sup> Other local manufacturers were also struggling to retain domestic markets in the face of low-priced European manufactured goods that

<sup>&</sup>lt;sup>31</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895); Topal, Erdemir, and Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri," 37-64.

arrived in bulk by sea and land to coastal and interior areas alike. 32 East Asian raw silk had also flooded into Europe to the detriment of Ottoman silk raisers.<sup>33</sup> However, the production of raw silk was not overlooked in the years when the factory was established: the factory landscape was littered with mulberry trees, whose leaves silkworms eat to spin their cocoons. In 1846, to meet the Factory's sericultural requirements, new lands were purchased and mulberry trees planted in fifty-seven decares (approximately fourteen acres) on the factory site by Koca Agop.<sup>34</sup> The factory also appointed a European gardener to plant 1,000 Chinese and 4,000 Bursa mulberry trees, all from Bursa. The total expense of the planting, including the warden's salary, was 19,900 kurus. The planting site was fenced off.35 In 1849, 1,030 decares (approximately 255 acres) of new lands were acquired for the Hereke Imperial Factory's mulberry trees for sericulture at the Izmit Imperial Factory's plant site. The land was purchased from El Hac Osman Ağa, whose property was damaged after flooding.<sup>36</sup> In addition, the raw materials used for production at the Hereke Imperial Factory, such as raw silk, were supplied in high volumes by the Imperial Treasury (Hazinei Hassa). As the Hereke Imperial Factory was heavily geared towards silk production, a decision was taken in 1850 to ensure a reliable supply of silk, and in 1852 a silk and mangonel factory opened in Bursa that was managed directly by the Hereke factory.<sup>37</sup> However, the factory in Bursa did not meet expectations.<sup>38</sup> Silkworm diseases had already arrived from Europe by 1850, and for decades thereafter, until the 1880s, this sharply

<sup>&</sup>lt;sup>32</sup> Quataert, "Age of Reforms," 798.

<sup>&</sup>lt;sup>33</sup> Quataert, "Age of Reforms," 798.

<sup>&</sup>lt;sup>34</sup> BOA HHd 255.5 1262.B.8 (July 2, 1846); BOA D.DRB.I.15.10 1262.B.03 (July 27, 1846).

<sup>&</sup>lt;sup>35</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 133.

<sup>&</sup>lt;sup>36</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası." 134.

<sup>&</sup>lt;sup>37</sup> Tevfik Güran, "Tanzimat Döneminde Devlet Fabrikaları," in *150. Yılında Tanzimat*, ed. Hakkı Dursun Yıldız (Ankara: Türk Tarih Kurumu, 1992), 257.

<sup>&</sup>lt;sup>38</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

reduced local supplies of cocoons and raw silk.<sup>39</sup> Over the following years, Factory managers made the decision to buy their raw silk from the international market.<sup>40</sup> For the supply of semi-processed materials, in 1853, according to production staff, a silk warping *(meşdud)* section was added.<sup>41</sup> As the number of looms increased together with their productivity and product quality, profitability also improved. From 1853 onwards, the Factory consistently became more profitable.<sup>42</sup> Silks, velvets, taffetas, and satins were woven at the Hereke Imperial Factory. In addition to silken furnishing fabrics with eastern designs, European-style embroidery reminiscent of fabrics found in Lyon, France, silken fabrics, and velvets, there were also products with unique designs adorned with floral imagery.<sup>43</sup>

Until 1866, there were no further advances made in the Factory's operations. To help turn a profit, Ahmed Ağa from Üsküdar and the Viennese artist Eiche, who was appointed to the factory in 1847, were sent to Vienna to purchase spinning jenny machines (büküm makinesi) for the factory; they found an empty factory in Vienna and sold off the machines that they considered unnecessary for the Imperial Factory and brought the required spinning jenny machines back to Hereke. Since they were not machinists themselves, however, the two men purchased unassembled machines without really knowing how to set them up; the equipment was thus installed in the filature building, but could not be operated properly.<sup>44</sup> Hereke Factory then faced a disastrous fire in 1878.<sup>45</sup>

<sup>&</sup>lt;sup>39</sup> Donald Quataert, *Ottoman Manufacturing in the Age of Industrial Revolution* (Cambridge, UK: Cambridge University Press, 1993), 114.

<sup>&</sup>lt;sup>40</sup> "Kurulusundan Cumhurivete Kadar Hereke Fabrikası."

<sup>&</sup>lt;sup>41</sup> BOA HHd 568 1269 (1852).

<sup>&</sup>lt;sup>42</sup> Güran, "Tanzimat Döneminde Devlet Fabrikaları," 257.

<sup>&</sup>lt;sup>43</sup> Nurettin Yatman, *Türk Kumasları*, (Ankara, Turkey: Maarif Press, 1945), 46.

<sup>&</sup>lt;sup>44</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>45</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 140-143.

During its first phase, then, the Hereke Imperial Factory faced a number of challenges. The machines could not properly function due to the lack of a steam engine. The imperial elites tried to establish a place for the Hereke Imperial Factory in the local market, but the Factory's products were unable to make any headway on the international market. The sale of the factory's products was thus limited to the palace and domestic elites. Problems with raw and semi-process materials also hindered production. Eventually, though, these challenges were overcome, at least to some extent, and the Factory became profitable.

## 2.1.3 The Train Arrives at Hereke Imperial Factory

In 1871, Sultan Abdülaziz issued a decree that reflected his thoughts about building a railroad line on Asian soil, connecting Istanbul to Baghdad.<sup>46</sup> Construction began on August 4, 1871, and within a year the line was already twenty-five kilometers long. Twelve stations were set at an average distance of every two kilometers.<sup>47</sup> By January 1873, the line reached Gebze, and in August it had reached its terminus at İzmit. Although the route mostly hugged the Marmara coast, it also made some strategic and direct connections, such as at Hereke.<sup>48</sup> The railroad line was particularly significant for the transportation of the raw materials to the factory. Railways were also important for promoting the Hereke Imperial Factory's products to Anatolians, who were now easily able to visit exhibitions held on the factory campus.<sup>49</sup> The train facilitated not only the importation of goods, but

<sup>&</sup>lt;sup>46</sup> Reinhard Hüber, *Die Bagdactbahn* (Berlin, Germany: Junker und Dünnhaupt, 1943), 10.; Murat Özyüksel, *Hicaz Demiryolu* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2000), 16.

<sup>&</sup>lt;sup>47</sup> Cemil Öztürk, "Tanzimat Devrinde bir Devletçilik Teşebbüsü: Haydarpaşa – İzmit Demiryolu," in *Çağını Yakalayan Osmanlı*, ed. Ekmeleddin İhsanoğlu (İstanbul, Turkey: IRCICA, 1995), 272-98.

<sup>&</sup>lt;sup>48</sup> Peter Hewitt Christensen, "Architecture, Expertise and the German Construction of the Ottoman Railway Network, 1868-1919," (Phd diss. Harvard University, MA, 2014), 46.

<sup>&</sup>lt;sup>49</sup> BOA İ.TNF 17.19 1325 B 24 (September 2, 1907).

also the commuting of workers and inspection tours by the Sultans. Sultans, emperors, and ambassadors undertook excursions to the factory campus by train. <sup>50</sup> As an imperial project, the train provided a link between the factory campus and the Empire's capital city. This imperial infrastructure thus enabled the Hereke Imperial Factory's products to circulate and be known throughout the Empire.

# **1.2 Woolen Landscapes (1878-1914)**

A fire at the Hereke Imperial Factory in 1878 damaged the boiler in the silk spinning room, the storeroom, and other surrounding buildings. After the fire, the factory stopped production for five years.<sup>51</sup> During this time, factory experts, led by factory director Musa Efendi, continued to work hard, twisting and weaving the silk with the old-style hand and foot looms that they manufactured. The factory continued in this semi-functional state until 1882.<sup>52</sup>

Shortly after the great fire, the question of Factory's expansion and its conversion to a European style operation became part of the imperial agenda. The factories of Lyon were taken as precedents, and Monsieur Martel was invited to Hereke to discuss European production standards and ways to enter the European market. However, as Mehmet Topal and others have asserted, these activities were also carried out simply to restore the factory to full production after the fire, and were related to the establishment of the Public Debt Administration in 1881 and the placing of the Hereke Imperial Factory under the

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<sup>&</sup>lt;sup>50</sup> The daily and weekly commute of the workers by train and the excursions to the factory by Sultans, emperors and ambassadors investigated in Chapter 2.

<sup>&</sup>lt;sup>51</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 140-143.

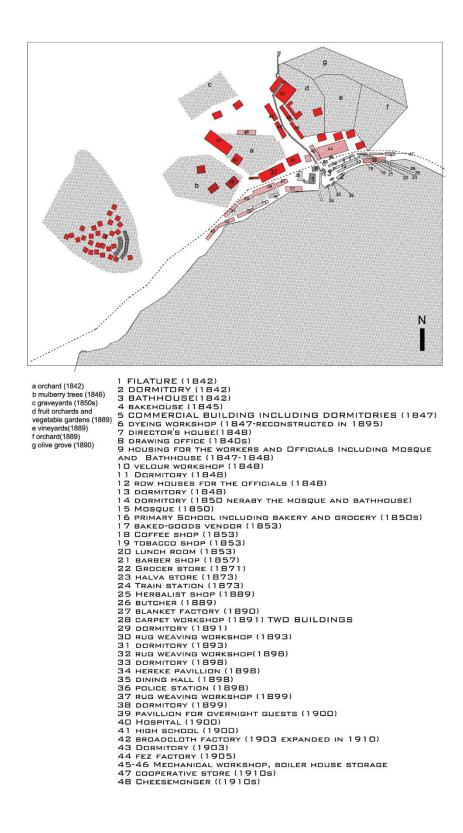
<sup>52 &</sup>quot;Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

# Administration's supervision.<sup>53</sup>

A steam engine and a turbine were added to the plant site, which initiated a great expansion of the factory's productive capacity and its products: it could now produce silk and woolen products such as rugs, carpets, and blankets. This latest phase of growth came with new stone-built workshop units for woolen fabrics (Figure 2.6). Iron was also introduced at the plant site for the construction of the workshops.

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<sup>&</sup>lt;sup>53</sup> Mehmet Topal, Erkan Erdemir, and Engin Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri, Hereke Fabrikası Nizamnamesi," *Journal of Social Science of SDU Faculty of Arts and Science* 25, no. 44 (May 2012). The Public Debt Administration was founded in 1881 by Europeans for the purpose of collecting taxes owed to them by the Ottoman Empire. Expenditures incurred during the Crimean War (October 1853-February 1856) meant that the Ottoman Empire had to borrow money from Britain and France. Lending money meant that the Western European countries succeeded in exerting power over the Ottoman Empire. By March 1876, the Ottoman government was no longer able to repay the debts and formally went bankrupt. The Public Debt Administration obtained the rights to collect taxes formerly acquitted to local creditors, including, for example, the silk tithe. Nicole A. N. M. van Os, *Feminism, Philanthropy and Patriotism: Female Associational Life in the Ottoman Empire* (Zutphen, Netherlands: CPI Koninklijke Wöhrmann, 2013), 164-165.



**Figure 2.6** Hypothetical Map for the Hereke Imperial Factory Expansion. *Source: Image produced by the author* 

### 2.2.1 The Great Fire, the Great Expansion, and Great Mechanization (1878-1914)

A scouting report about the Factory's renovation prepared in 1878 by Serkiz, the chief architect of Imperial Buildings (*Ebniye-i Hassa-i Hümâyûn*), Vasilaki, the director of Imperial Buildings, and Mr. Mountain reflected the Administrative Council's directive. The report demonstrated that the filature building and the silk and dyeing warehouses had been badly burnt, and suggested that the best option would be to protect the existing walls of the filature and to replace the beams with timber beams made from Izmit oak. The pillars would be made from cast iron and the retaining wall would be supported by sheet iron. The flooring, the doors, and the woodwork would also be renewed. In addition, the roof would be replaced with Marseille tile, and zinc rain gutters would be added. The foundation of silk storehouse would likewise be reconstructed. A showcase would be replaced in the silk warehouse, and timber cabinets would be constructed in the dyeing warehouse.<sup>54</sup>

In 1881, another scouting report was arranged by Adil Bey, a commander of the Imperial Ottoman Army (*Asakir-i Şahane*), in collaboration with the Marine Ministry (*Bahriye Nezareti*) and the municipality (*şehremenati*). Kirkor Kalfa from Imperial Lands was also appointed to the excursion. The 1881 report reveals that the factory had carried out little manufacturing since the fire, but that production would increase if the hand looms in the factory were replaced with new machinery. The capability of the steam engine in the filature building could be increased from seventeen horsepower to forty-eight horsepower if it used river (rather than stream) water. If the production system were connected to the river with a water-ditch, calico (*Amerikan bezi*) could be manufactured.

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<sup>&</sup>lt;sup>54</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 140–141.

<sup>&</sup>lt;sup>55</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 140.

If the river was improved using new technology (*akarsu cari fenne tatbikan cem ve uslah edildigi takdirde*), the waterpower would generate the required energy to operate not only the filature, but also a paper mill, which Adil Bey considered constructing. <sup>56</sup> An official memorandum (*tezkere*) from the Minister of the Imperial Treasury, Agop Efendi, demonstrates that new weaving machines for serge, broadcloth, and calico were investigated at some British factories and the Sultan's approval for the new projects was anticipated in 1881. <sup>57</sup> The filature building was reconstructed in 1882 and the factory was put back into operation. <sup>58</sup>

In 1881, Monsieur Martel wrote yet another report outlining the steps that he deemed necessary for the Factory's reopening. Following the factory's reopening, work to develop and diversify production at the factory continued. Indeed, the factory managers made the decision to produce rugs, carpets, blankets, and provisions for the military. <sup>59</sup> The factory targeted both international and domestic markets. The rugs and carpets were manufactured primarily for the international market, but also targeted the broader domestic market. The blankets were largely produced for the poorhouses, while military provisions supplied the demands for the army's Western-style uniforms.

### 2.2.2 Monsieur Martel

To aid the development of the factory, Monsieur Martel's project (*layiha*) suggested a management structure based on a European-style model and operation. His report

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<sup>&</sup>lt;sup>56</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 144-145.

<sup>&</sup>lt;sup>57</sup> BOA Y.MTV 7.74 1298. Z.4 (October 28, 1881)

<sup>58</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 140.

<sup>&</sup>lt;sup>59</sup> Topal, Erdemir, Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri," 37-64.

suggested that 150 handlooms could be operated in the factory after being checked and repaired. The shuttle-looms (mekik) should be replaced by new ones. The bobbin holders (masura tezgahi), warping machines (çözgü dolabi), and machines for punching holes in cardboard from Austria (mukavva delmek için mevcud Avusturya usuliinde makine) should be repaired. The two burnt buildings containing the looms and warping machines should be reconstructed. The dyeing workshop was inadequate for the factory. Another burnt building, the one containing the wheel looms (çarhli destgah), should be renovated with new machinery. The report noted that the water channel that operated the steam engine should be exchanged for a larger wheel. A pool should also be constructed to insure against the possibility of water shortages during the summer. Martel proposed that the dyeing workshop should be built in concrete. He also proposed a steam engine for the plant site. The report furthermore noted that, in order to compete with European counterparts, the factory should develop a manufacturing process like an assembly line. The machinery and the workforce should be added in sequence until the final product was ready.

In Martel's opinion, the burnt building should be reconstructed as a single-story building with new foundations that could provide space for eighty new spinning wheel looms (*çarhlı destgah*), in addition to the other 150 looms. The filature should be reorganized; the ground floor should employ silk stores (*ipek mağazaları*) and finishing (*perdaht*) workshops; the first floor should include warping machines, looms (*ipleme tezgahı*), a shearing machine (*makas makinası*) and bobbin holders (*masura tezgahı*). <sup>62</sup> The efforts of Osman Bey, the head of the private secretariat (*Başmabeynci*) who took on the

<sup>60</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

<sup>&</sup>lt;sup>61</sup> BOA. HH. HRK 1286. Ş. 12 (November 17, 1869).

<sup>62</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

roles of director, auditor, and overseer at the plant in 1882, led to the reconstruction of the filature workshop within the parts of the walls saved from the fire. The Imperial Dockyards (*Tersane-i Amire*) assisted with the iron construction techniques.<sup>63</sup>

Serkiz and Vasilaki's plan of 1878 was almost applied in 1882. In deciding to keep the walls of the filature building, the Administration chose to reconstruct the timber beams and the iron columns (Figure 2.8). The timber beams would be replaced with Izmit oak, <sup>64</sup> while the required iron for the columns would be supplied from Imperial Dockyards (*Tersane-i Amire*). <sup>65</sup> Different organizations of the Empire were gathered in this huge enterprise: preparing the site, for example, engaged both the Imperial Treasury and the Forest and Metal Directorship (*Orman ve Maadin Müdüriyeti*). <sup>66</sup> The ambition was to introduce new building techniques and advanced technology to this state factory. <sup>67</sup> The previous use of iron techniques in the construction of the Flour Mill in Istanbul (1842) and the Izmit Factory (1843) by William Fairbairn, a Scottish civil engineer, and the iron techniques used in the construction of Maçka Armory (1862-1973) by Sarkis Balyan were

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<sup>&</sup>lt;sup>63</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası;" BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>64</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 141-142.

<sup>65</sup> BOA HH.HRK.61.1 1297.Ca.5 (April 15, 1880).

<sup>66</sup> BOA Y.MTV 7.74 1298. Z. 4 (October 28, 1881) and Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 146.

<sup>67</sup> The use of iron in construction was introduced to Ottoman Empire in the first half of nineteenth century, as Ottoman cities witnessed the factory installations of Sir William Fairbairn (1789-1874), who was a British engineer working in Manchester and London factories and who was invited to work for the Empire. Fairbairn used iron not only in engine vehicles, but also in the construction of column, beam, roof, and exterior walls. The second volume of *Treatise on Mills and Millwork* provides information about two industrial buildings in which iron was used. Fairbairn designed the flour mill in 1842 in Istanbul under the name of the Seraskier Halil Paşa. In this design, the cast iron columns were tied with cast iron stringcourses and cast iron beams that supported the arched roof covered by corrugated iron sheets. The second volume of *Treatise on Mills and Millwork* also includes information about the design of the Izmit Factory, a woven wool factory constructed by Fairbairn in 1843, as the first example of the technological developments in industrial building. William Fairbairn, *Treatise on Mills and Millwork*, 3<sup>rd</sup> Edition (London, UK: Longmans, Green, and Co., 1871). See also Sevil Enginsoy Ekinci, "Fairbairn Istanbul'da: 19. Yüzyıl Osmanlı Endüstri Yapılarından İki Örnek Üzerine Notlar," *TMMOB Mimarlar Odası Ankara Şubesi Bülteni/Dosya 3: Endüstri Mirası* (2006): 6-8.

taken as precedents.<sup>68</sup> In its use of iron in the renovation of the filature, the Hereke Imperial Factory became a showcase of advanced structural systems in the Empire



**Figure 2.7** Filature Building. *Source: Abdülhamid Albums, 1890, IRCICA, (90453/007).* 

A later photograph taken of the filature building in 1890 demonstrates how the building was kept to two stories. Made with masonry, this lightly dressed neoclassical building had a rectangular plan (Figure 2.7). On the façades, there were arched windows. A road connected the building to the waterfront. Abdülmecid's commemorative stone

<sup>&</sup>lt;sup>68</sup> A. Sevil Enginsoy, "Use of Iron as a New Building Material in the Nineteenth Century Western and Ottoman Architecture," (Master Thesis, Middle East Technical University, Ankara, Turkey, 1990), 107-118.

could be seen on the east of the building. It is clear that this stone and this entrance were later additions to the building.



**Figure 2.8** Ground floor of the Filature Building, with iron pillars. *Source: IRCICA (90453/0235)*.



**Figure 2.9** Interior of the Filature Building. *Source: Istanbul University Rare Works Collection (90453---0024)* 

This photograph taken in 1890 shows that the second floor of the filature building was organized according to Monsieur Martel's report. The bobbin holders were situated on the first floor (Figure 2.9). The timber pillars bear the roof. Daylight penetrated into the factory from the arched windows. The working space was airy and light. The Lyon factories should be taken as a model for the Hereke Imperial Factory. To Monsieur Martel, the warping machines, bobbin holders, and spinning wheel looms should be operated by girls and women, similar to the female workforce found in the Bursa Silk

<sup>69</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

Factory. The factory could produce 537,000 meters of cloth in 300 days. <sup>70</sup>

Martel then prepared another report devoted to the Factory's progress, in which he noted the necessity of importing new machines for spinning and wrapping silk from Europe. However, the teachers and masters at the Factory decided to make their own machines at the plant site because cost of the new machines would not be covered by the Treasury. Martel prepared one more report with drawings to demonstrate the need to import the machines from France in order to be able to warp ten kilograms of silk per day. <sup>71</sup> This number was close to European standards, and in fact exceeded them. For instance, in the late nineteenth and early twentieth centuries, daily production per operative in silk reeling was four to five kilograms in Italy. <sup>72</sup> However, the Imperial Treasury decided that the machines would be supplied and constructed at the plant site, since domestic production would only produce one kilogram of silk per day, which was not sufficient for the factory's daily output. <sup>73</sup>

<sup>&</sup>lt;sup>70</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

<sup>&</sup>lt;sup>71</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>72</sup> Shinya Sugiyama, *Japan's Industrialization in the World Economy: 1859-1899, Export, Trade and Overseas Competition* (London, New York, Sydney, New Delhi: Bloomsbury Academic, 2013), 128.

<sup>&</sup>lt;sup>73</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).



**Figure 2.10** Machines constructed at the Hereke Imperial Factory plant site. *Source: IRCICA* (90453/028).

The photograph taken from of the carpet workshop in the 1890s demonstrates how the female workforce struck a pose with the warping machines produced at the plant site (Figure 2.10).

During his assignment, Martel also produced woaded cotton fabric named Istanbul cloth that was popular for use in everyday clothing.<sup>74</sup> He worked with the artists and prepared a sample folder to present to the Imperial Treasury. However, the factory made

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<sup>&</sup>lt;sup>74</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

no profit; instead, it suffered a loss between 100-500 lira even though the products were sold at expensive prices.<sup>75</sup>

## 2.2.3 Expansion of the Factory

Carpet weaving began to be set up at the Hereke Imperial Factory in 1883, with 100 looms in a workshop constructed under the Sultan's signature. In 1890, the Factory also began to produce blankets, and in 1891, two new buildings were constructed to house the carpet workshop (Figure 2.11). In addition to the buildings constructed for the carpet looms, funds were spent on new machine purchases: 1,319,035 kuruş in 1893, 29,503 kuruş in 1898, and 41,402 kuruş in 1900. Carpet production may have been initiated because that the looms required to produce carpets were much cheaper to bring from Europe than the spinning machines needed for silk. In addition, it may have been thought that young, unskilled workers could be brought in to work and to live the dormitories, rather than adult workers who required houses for their families.

In 1891, the Minister of the Imperial Treasury, Mikail Portakal Paşa, developed projects to expand the Factory's carpet section.<sup>78</sup> He decided that a new dyeing workshop was to be constructed, to a length of twenty-six meters and a width of twenty meters. Display windows were included on the building's four sides (*dört tarafi camekan*), which would also contain boilers (*kazan*) heated by steam, a finishing machine (*perdah makinesi*), water cleaning machines, and cauldrons for dyeing silk and wool yarn. Once the two

<sup>75</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>76</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 148, 151; HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

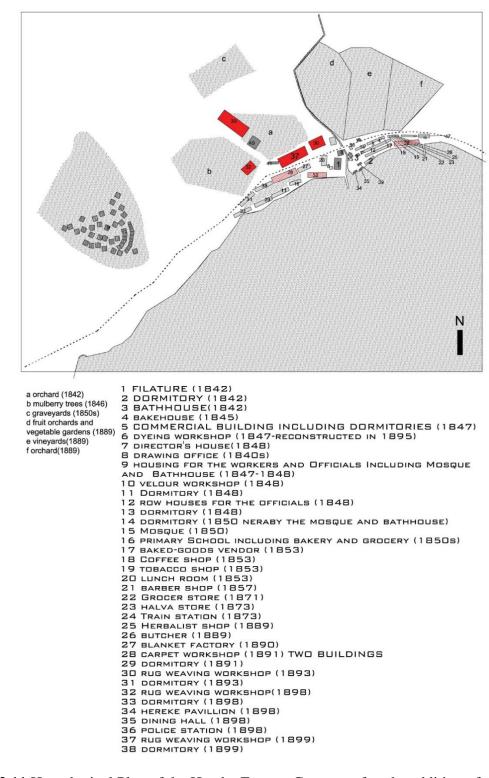
<sup>&</sup>lt;sup>77</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 239.

<sup>&</sup>lt;sup>78</sup> Yusuf Çark, *Türk Devleti Hizmetinde Ermeniler* (İstanbul, Turkey: Yeni Matbaa, 1953), 160-161.

buildings for the carpet workshop were constructed, rug-weaving teachers from Sivas and Uşak were invited to Hereke to help produce carpets and silk prayer rugs.<sup>79</sup> In 1893, the rug-weaving (*kaliçehane*) workshop was launched with two separate rooms. Timber beams came from Filyos, and the timber bracing was from Gideros. In 1898 and 1900, new rug lines were added to the production schedule.<sup>80</sup>

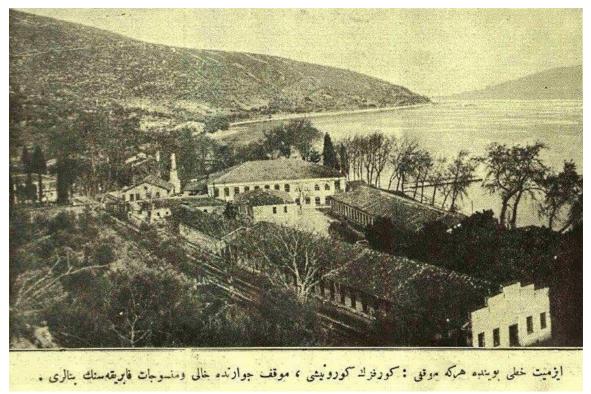
 $<sup>^{79}</sup>$  BOA Y.MTV 79.40 1310.Z.6 (June 21, 1893); BOA HH. HRK. 35.42 1313.Ca. 18 (November 6, 1895).  $^{80}$  BOA Y.MTV. 79.40 1310.Z.6 (June 21, 1893); BOA HH.THR.1241.71 1316.Ra.5 (June 24, 1898); BOA

HH d 31625 1316.N.28 (February 9, 1899).



**Figure 2.11** Hypothetical Plan of the Hereke Factory Campus, after the addition of carpet and rug workshops.

Source: Image produced by the author



**Figure 2.12** Textile Factory and one of the Carpet Workshops at Hereke Factory Campus, ca.1910.

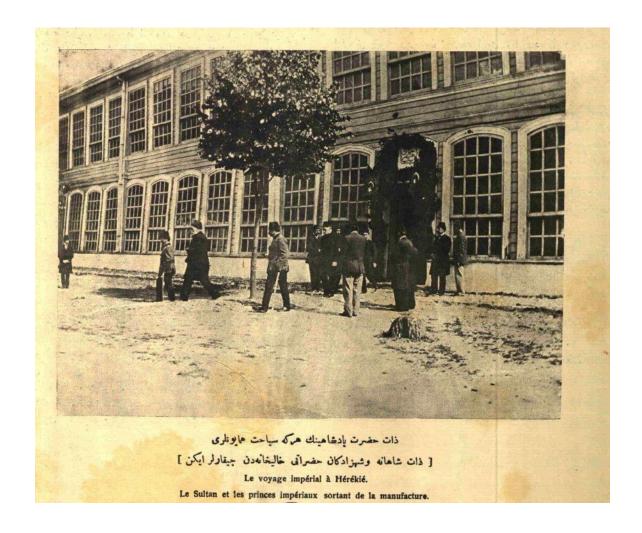
Source: Nazım Demirtaş Personal Archives

In the photograph, it is seen that one of the carpet workshops was constructed to the east side of the filature, connected to the drawing office, the filature, and the lunchroom (Figure 2.12). This created a triagonal courtyard. The hospital and the mosque can be seen further away.



**Figure 2.13** Hereke close to the pier, During the Sultan's Visit, 1910. *Source: Nazım Demirtaş Personal Archive* 

The photograph demonstrates that the second, larger carpet factory was constructed on the West side of the velour workshop on waterfront across from the pier (Figure 2.13). The proximity of the main carpet workshop to the pier was important for the importation of raw materials and the loading of carpets on to ships for export.



**Figure 2.14** Main Carpet Factory, during Sultan's Visit. *Source: Nazım Demirtaş Personal Archive, 1910.* 

This photograph demonstrates that the two-story carpet factory was made of timber. On the ground floor, there were arched windows (Figure 2.14). The windows are designed in a guillotine fashion, which provided an airy space inside the building. In order to allow in more light during work shifts, vast apertures were included in the building's design. In front of the carpet factory a macadam road was laid. This workshop lies directly in front of the waterfront and pier.

Machines brought from Europe were assembled and the number of Gördes carpet looms were increased to sixty-four. In 1892, the factory produced 515 meters of Europeanstyle rugs, 856 arşın (around 600 meters) of Gördes-style rugs, 1451 handkerchiefs and scarves, and 537 meters of fabric for furnishing and clothing. The Factory's production mostly targeted international markets, although the Administration also focused on producing Western Anatolian-style carpets that would be attractive in the domestic market. The Hereke Imperial Factory, according to the Imperial Treasury, should open shops capable of competing with European fabrics. The products were sold in shops in Istanbul, in Doğru Yol, Beyoğlu, and in the Grand Bazaar. 81 The carpets were also sold commercially after a shop was opened in Zabita Street in Istanbul. 82 The Imperial Treasury also noted that if the factory increased the numbers of machines run by waterwheels in lieu of the Jacquard machines (it currently had five machines run using waterwheels), it could produce two or three times as many products. The waterwheel that had existed for the past fifty years provided only fourteen horsepower. According to engineers, if a turbine were connected to the river, it would produce fifty to sixty horsepower. The Imperial Treasury would cover the expenses for this upgrade.<sup>83</sup>

In 1895, the existing dyeing workshop was demolished and reconstructed to meet the requirements of the new carpet line, with new machines added for dyeing wool and silk yarn that reflected equivalent European dyeing workshops. <sup>84</sup> Using chemicals during the dyeing process, and draining the chemicals to the Ulupinar stream, however, caused some health problems in the area. After the construction of the dyeing plant at the broadcloth

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<sup>81</sup> BOA Y.MTV 79.40 1310.Z.6 (June 21, 1893).

<sup>82</sup> BOA HH. HRK. 35.42 1313.Ca. 18 (November 6, 1895); HH THR 277.24 1312.L.25 (April 21, 1895).

<sup>83</sup> BOA Y.MTV. 79.40 1310.Z.6 (June 21, 1893).

<sup>84</sup> BOA HH. HRK. 35.42 1313.Ca. 18 (November 6, 1895); HH THR 277.24 1312.L.25 (April 21, 1895).

factory, cholera also became widespread on the factory campus: since the dyeing plant had an open drainage system and little in the way of adequate sanitation, cholera spread easily through the campus in 1911. In 1912, a new sewage system with a 150-meter span was constructed.<sup>85</sup>

In a short time, the carpets became popular in the international market. The reputation of the Hereke Imperial Factory's products exceeded the limits of the empire, and by 1906, a branch of Hereke Imperial Factory was established in Egypt to help meet the growing demand for the Factory's products. In 1908, two stores were opened in Washington and New York as American elites flocked to the products of the Hereke Imperial Factory.

By 1900, the Hereke Imperial Factory again expanded its work area. Targeting the domestic market, a new workshop fabricating socks and undervests opened.<sup>88</sup> In 1902, a broadcloth section with twenty weaving looms and support machines was planned, and in 1905 a fez manufactory was also added (Figure 2.15). <sup>89</sup>

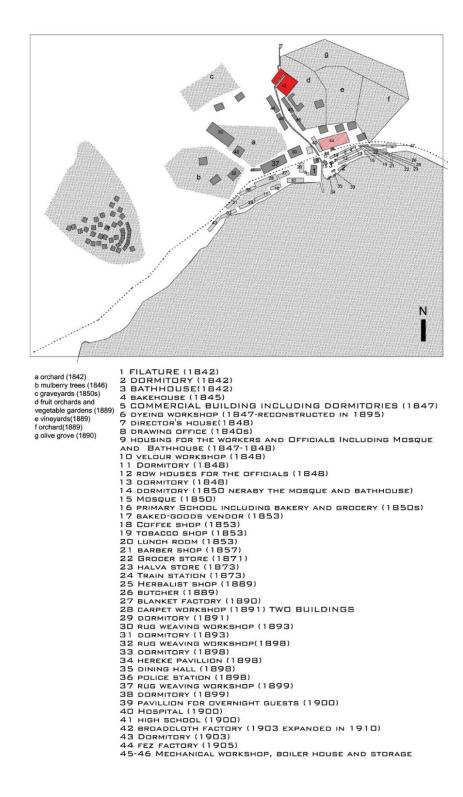
<sup>85</sup> BOA HH.THR.283.20 1330.Ca.27 (May 14, 1912).

<sup>86</sup> BOA İ.TAL.401.39 1324.C.5 (July 27, 1906)

<sup>&</sup>lt;sup>87</sup> BOA Y.MTV.311.192 1326.Ca.29 (June 29, 1908).

<sup>88 &</sup>quot;Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

<sup>89</sup> Kemalettin Apak, Türkiye'de Devlet Sanayi ve Maadin İşletmeleri (İzmit: Selüloz Basımevi 1952), 178.



**Figure 2.15** Hypothetical Plan of Hereke Imperial Factory, showing the additions of the broadcloth and fez factories.

Source: Image produced by the author

The replacement of janissaries with a European-style army necessitated the procurement of new supplies for the Ottoman military. In addition to the Islimye Broadcloth Factory and the Fez Workshop Factory, which had been set up before the Tazminat reforms to meet the broadcloth needs of the palace and the army, from the 1840s onwards large-scale industrial plants such as the Balıkesir Coarse Wool Factory, the İzmit Broadcloth Factory, the Bakırköy Cloth Factory, and the Bursa Silk Factory were established.<sup>90</sup> These factories produced provisions for the army after the modern military reforms of 1826. In 1902, the decision was taken to add a broadcloth factory to the Hereke Imperial Factory plant site. The Imperial Treasury carried out a survey of European factories to decide which machines it would purchase. 91 The European factories wishing to tender for the contract applied to the Imperial Treasury. In 1903, the Imperial Treasury decided to purchase machines from Jozefis, an Austrian factory that had an agent in Istanbul, since the Administration considered it to be the most cost-effective proposal. Jozefis would provide the masters for the broadcloth factory, while the fleece came from the Imperial Farmlands (Ciftlikat-1 Hümâyûn) and Europe, mainly from Belgium and Austria.92

The broadcloth factory was constructed on the site of the plant's fruit orchards and vegetable gardens in 1903. The building occupied ten decares (approximately 2.5 acres) with a road to the main factory. <sup>93</sup> The broadcloth plant consisted of three pavilions and a

<sup>&</sup>lt;sup>90</sup> Didem Boyacıoğlu, "Osmanlı Fabrika Yapılarının Kentsel ve Mimari Analizi," (PhD diss., Istanbul Technical University, Istanbul, Turkey, 2013), 114.

<sup>&</sup>lt;sup>91</sup> BOA HH.THR.315.26 1321.S.18 (May 16, 1903).

 <sup>&</sup>lt;sup>92</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 154; "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası;" "Hereke Fabrika-i Hümayunu Ziyaret," *Servet-i Fünun* (794-29 June 1322) (12 July 1906): 219.
 <sup>93</sup> BOA HH.HRK.53.71 1322.Z.28 (March 5, 1905).

wool fluffing building.<sup>94</sup> Jozefis sent the plans for the broadcloth factory. Its foundations were constructed in stone, hydraulic lime (*su kireci*), and mortar. Cast iron was used for the pillars. <sup>95</sup> The machines and stones used for the construction of the broadcloth factory were supplied by the nearby quarry in Hereke, which was a part of the area rented by the factory. Hovsep Kalfa controlled the work-site. <sup>96</sup>

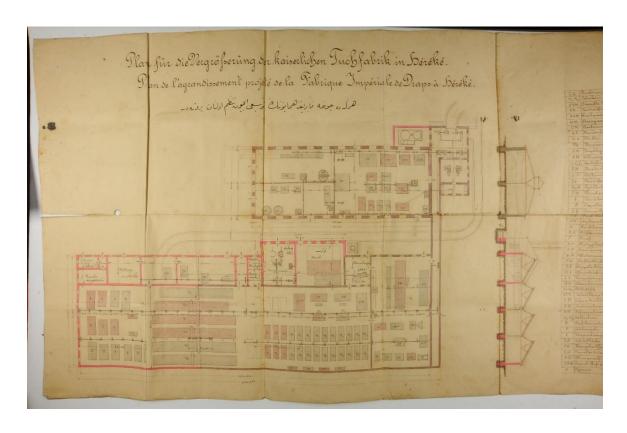


Figure 2.16 Plan and section of the Broadcloth Factory.

Source: BOA HH.HRK.59.21

The plan is composed of two main buildings, one larger than the other (Figure 2.16).

A water channel separates these two buildings. The thickness of the smaller building indicates that it was masonry and converted into the broadcloth factory after the addition

<sup>94 &</sup>quot;Hereke Fabrika-i Hümayunu Ziyaret," 218.

<sup>95</sup> BOA HH.THR.305.26 1320.Ca.19 (August 24, 1902).

<sup>96</sup> BOA HH.THR. 315.28 1321.Za.10 (January 28, 1904).

of the larger building, whose plan was provided by Jozefis. The larger building's floor employed weaving machines, a steam engine, and boiler room. In the masonry building, there are turbine machines directly connected to the water channel. There are also washing machines and press machines. This building had a shed roof and light entered from the north, which was efficient in terms of working space. The shed roof was supported by triangular iron trusses.

Gilbert Herbert considers that iron construction, by its very nature, led to the concept of prefabrication. The building's iron components—lintels, windows, balustrading, rainwater goods, columns, beams arches, trusses—are essentially foundry and workshop products, later incorporated into structures on the actual building site. In the first half of nineteenth century, such products were well known and widely used throughout Britain. This was prefabrication only in a partial sense, though. There were other earlynineteenth century precedents of a much more important kind, precedents for the prefabrication of entire systems, and not merely the incorporation of premade iron elements into otherwise traditional structures. 97 The Austrian broadcloth factories, for example, were taken as precedents of advance prefabrication building techniques. The smaller building, which was occupied by the turbine, had also triangular iron trusses; here, the premade iron elements were incorporated into the traditional masonry building. The larger building, which was occupied by weaving machines, was completely constructed with prefabricated cast-iron techniques; the requirements of this wide-spanning and top-lighting building, for example, was met by prefabricated cast-iron systems (Figure 2.17). The aim of using

<sup>&</sup>lt;sup>97</sup> Gilbert Herbert, *Pinoneers of Prefabrication: The British Contribution in the Nineteenth Century* (London, UK: The Johns Hopkins University Press, 1978), 30.

prefabricated systems in the broadcloth factory was to achieve European standards of a modern factory with structural lightness and the ability to admit natural light into the working space in this large-scale industrial building.



**Figure 2.17** Cast iron pillars in the Broadcloth Factory.

Source: "Hereke Fabrika-i Hümâyûnu Ziyaret," 217

The turbine building was constructed using cast iron and concrete, and a channel was also built to bring water to the turbine (Figure 2.18). The installation of the machines and the arrangement of the water channels were investigated based on similar European factories. 98

98 BOA HH.THR.305.26 1320.Ca.19 (August 24, 1902).

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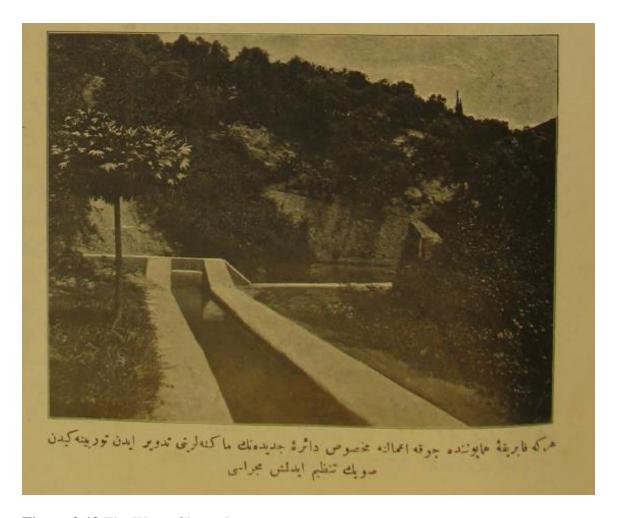


Figure 2.18 The Water Channel.

Source: "Hereke Fabrika-i Hümâyûnu Ziyaret," 217

In 1903, the broadcloth factory went into production with twenty looms. 99 In 1910, it was expanded with new machines from Jozefis, since the existing machines were unable to meet the coarse fabric needs of the military. 100 In 1918, the number of newly bought woolen looms increased to fifty-two, and from this time forward, the factory took on the character of a wool weaving plant, producing black and navy-blue broadcloth along with various colors of dress fabrics (Figure 2.19). 101

 <sup>&</sup>lt;sup>99</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 153.
 <sup>100</sup> BOA HH.THR.1239.2 1325.S.27 (April 11, 1907).

<sup>&</sup>lt;sup>101</sup> Kemalettin Apak, Türkiye'de Devlet Sanayi ve Maadin İşletmeleri (İzmit: Selüloz Basımevi, 1952), 178;

With this expansion, the broadcloth factory became a mass production system after 1903. It produced undervests for the Ottoman Army (*Asakir-i Şahane*) to replenish their stocks, for example: 2008 undervests were produced for the Ottoman Army and sent to the warehouse of the Imperial Treasury on 28 November 1908. In addition, archival materials demonstrate that the factory also produced public goods. For instance, 1000 meters of fabric were set aside for clothing the destitute and the janitors in the poorhouses (dâr'ülaceze) in 1908. 103



**Figure 2.19** Provisions for the Military. Source: "Elbise-i Askeriye Nizâmnâmesi" (Düstur, 2.Tertip, C 1: 276-296; Elbise-i Askeriye Nizâmnâmesi, 1325), 1909

A light railway was constructed to transport the Factory's products from the broadcloth factory to the station (Figure 2.20).<sup>104</sup> The light railway started at the broadcloth factory, stopped at the warehouses, and then proceeded to the main train station.

<sup>&</sup>quot;Hereke Fabrika-i Hümayunu Ziyaret," 218.

<sup>&</sup>lt;sup>102</sup>BOA Y.MTV.313.58 1326.Za.4 (November 28, 1908).

<sup>&</sup>lt;sup>103</sup> BOA DH.MKT.1261.64 1326.Ca.16 (June 16, 1908).

<sup>&</sup>lt;sup>104</sup> BOA HH.THR.305.26 1320.Ca.19 (August 24, 1902).



Figure 2.20 The Light Rail.

Source: "Hereke Fabrika-i Hümâyûnu Ziyaret," 216

Fez production began with the addition of a fez workshop in 1905. <sup>105</sup> The fez factory went on to produce 500 fezzes each day. <sup>106</sup> To Hovhannes, then the Minister of the Imperial Treasury, the production of 500 fezzes a day was insufficient, and he ordered production to increase to 1,000 fezzes a day. In order to meet this need, the factory received four new casting machines, 1,000 molds, two new cauldrons for dyeing, and one finishing machine. <sup>107</sup> The thread needed for fez making was imported from Spain and Japan. <sup>108</sup> The

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<sup>105</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 155.

<sup>106 &</sup>quot;Hereke Fabrika-i Hümayunu Ziyaret," 218.

<sup>107</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 155.

<sup>108 &</sup>quot;Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

factory's daily production soon increased to 1,000 per day, and Hereke fezzes were soon in high demand due to their quality. Hovhannes foresaw that the factory would make a profit from its fez production in the future. The fez factory targeted the domestic market, including both the military and civil society. In the early twentieth century, Hereke fezzes became the symbol of the Empire's home production and the gained currency during the 1908 boycott against Austrian products. <sup>109</sup> In 1909, the factory produced fezzes for students in Ottoman schools for orphans ( $d\hat{a}r'\ddot{u}s$  safaka). <sup>110</sup>

The Imperial Fabric Mill (*İplikhane-i Amire* or *Riştehane-i Amire*) had been working at full capacity in the 1830s. However, the establishment of new factories like the Fez Factory and the Hereke Imperial Factory, together with the obsolescence of sailing boats, reduced its importance over time. Over time, the Hereke Imperial Factory thus increased the variety and quantity of its products to meet the needs of the larger market, not only the palace. The goods sold in both the domestic market and abroad were handled by private companies. Over time, it became necessary to have a trade center that could handle the purchase of the raw materials and equipment necessary for the factory from the domestic market and from Europe. A sales shop was opened in Mermer Business Houses in today's Büyük Postane Street (formerly Zabtiye Street in Sirkeci in Istanbul). This became the general management center of the factory.

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<sup>&</sup>lt;sup>109</sup> Y. Doğan Çetinkaya, *1908 Osmanlı Boykotu, Bir Toplumsal Hareketin Analizi* (Istanbul, Turkey: Iletişim Yayınları, 2004), 146, 151, 155.

<sup>&</sup>lt;sup>110</sup> BOA MF. MKT. 1125. 70 1327.Ca.14 (June 3, 1909).

<sup>&</sup>lt;sup>111</sup> Boyacıoğlu, "Osmanlı Fabrika Yapılarının Kentsel ve Mimari Analizi," 114.

<sup>112 &</sup>quot;Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

### 2.3 Conclusion

The two phases of the factory correspond to the adding of new buildings or the transformation of existing ones along with application of new weaving lines. They consist of production, service, and social-gathering units. In the first phase, the buildings were planned to have a direct connection to the pier and the railway. The proximity of the filature and the dyeing workshop to the Ulupinar stream was to cultivate the water. While the filature harvested the energy of the watermill, the dyeing workshop drained its wastewater into the stream. The first factory buildings, the filature and the velour workshop, were water oriented. The railway ran along a border with the linear trajectory of the waterfront development. The factory campus was surrounded by gardens into which it could expand. New orchards were purchased, as reserve areas, to ensure that building could continuously expand.

Beginning with the second phase after the great fire in 1878, the factory buildings were increasingly spread out across the site. New carpet workshops were built on the waterfront close to the two piers, to facilitate export and import. Between the working spaces of the velour workshop and the filature building runs an avenue, today known as Tayyar Yıldırım Street. The avenue was aligned with the housing and the various commercial, and health, and religious facilities on the factory campus. The avenue between the working spaces ends at the dormitories and the garden, which today is called Çamlıbahçe, on the west side of the campus. The avenue runs roughly perpendicular to the waterfront and is intersected by the railway and the stream, Ulupınar. The avenue's north-south axis starts at the broadcloth factory with a narrow gauge railway that was constructed with a connection to larger railroads for carrying coal to storage houses. The avenue then

crosses to a west-east axis that starts at the velour workshop and ends at the dormitories and Çamlıbahçe. The connection between the train station and the broadcloth factory is visible in the connection between the filature, the velour workshop, the carpet factory, and the waterfront. The filature, velour shop, and carpet factory are directly linked to the piers. The proximity to the piers and the train station, in turn, enabled the easy transport of the Factory's products.

The scale of the new buildings became larger in comparison to the earlier buildings. Iron construction and prefabrication also became a part of the developments of the second phase. The new energy techniques used in production in this stage are remarkable: the use of a steam engine resulted in the great expansion of the factory. This phase's construction reveals an axial alignment behind the railway by the waterfront, and a pool.

The linear trajectory of the waterfront development of the earlier period was followed by construction development along a northwest-southeast axis, in which orientation to the daylight became more important for the working spaces. With the implementation of the new production spaces in each phase, we see lightly-dressed neoclassical buildings, but with the war years approaching in the early twentieth century this shifted to rational, functionalist structural solutions with machine aesthetic for production spaces. In the filature and the carpet workshop, light was admitted through arched windows. However, in the broadcloth factory, light penetrates into the working space from the shed roof. Light became more important with the mass production of material for the military staff.

The ways in which the land was managed over time at the plant reveals the ways in which the factory, despite being run and sometimes subsidized by the Imperial Treasury,

managed to adapt to the needs of the domestic and international capitalist markets. The factory managers first ceased making raw silk on the premises in line with the glut on the market from the far East, and later began maximizing labor efficiency through installing other types of machines and making carpets, which required considerably less worker training than silk production.

#### **CHAPTER 3**

### MANAGEMENT OF LABOR

## **3.1 Lodging the Workers (1843-1878)**

The establishment of the Hereke Imperial Factory brought with it one great challenge: how to house the workers. In its early years, two types of workers' lodgings were used on the Hereke Campus: dormitories for unmarried adults and children, and housing for workers and officials with families. Other workers from the region commuted daily to the factory by train.

#### 3.1.1 Dormitories

Wage-earning workers at the Hereke plant were primarily children and unmarried adults. They lived in two-story cellular dormitories called *koğuş*, which were inspired by the design of military barracks and represented high-density living. The dormitory for unmarried workers (*bekar amelelere mahsus koğuş*) was constructed on the waterfront after the foundation of the factory (Figure 3.1).<sup>113</sup> The *koğuş* is used here as a typology for understanding both the housing standards of the workers and the development of work standardization. This study aims to shed light on the different structural layers of the management of the needy through their lodging at the factory campus and the European models on which factory life was based. In other words, an investigation into barracksinspired dormitories such as the *koğuş* on the Hereke Imperial Factory site provides a way

<sup>&</sup>lt;sup>113</sup> BOA HH, HRK, 35,42 1313,Ca,18 (November 6, 1895).

to better understand the labor relations of the era. Those dwelling there, especially children, played a key role in the transition of the workforce, from forced labor to free labor.



**Figure 3.1** Dormitories for Unmarried Workers (on the waterfront) and Rowhouses for Technical Staff, 1890.

Source: IRCICA, (90453/004)

In 1847, sixteen dormitories were constructed inside the commercial building (han derunundaki 16 koğuş). 114 At that time, there were eight single-room residences for European masters and thirty rooms for unmarried Ottoman workers. 115 After the addition of the velour workshop kemhahane (building for the production of kemha, a form of silk

<sup>114</sup> Abdülkadir Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," (PhD diss., Istanbul University, Istanbul, Turkey, 2000), 132.

<sup>&</sup>lt;sup>115</sup> Mehmet Topal, Erkan Erdemir, and Engin Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri Hereke Fabrikası ve Nizamnamesi," *SDU Faculty of Arts and Sciences Journal of Social Sciences* 25 (May 2012): 37-64.

cloth) in 1848, new houses for workers and officials and a new dormitory for girls hired to spin silk yarn (harir sarıcı kızlara mahsus koğuş binası) were added to the campus. <sup>116</sup> In 1850, two new dormitories was constructed, one near the bathhouse and the mosque and the other above the coffeehouse. <sup>117</sup> By this time, those living in the dormitories were primarily child slaves (cariye and gulam), African slaves, conscripted destitute children, youth, and other unmarried workers.

In 1890s, after the construction of the carpet and rug weaving factories, more dormitories were added to the agenda, as there was still an acute worker housing shortage. The barrack-inspired dormitories provided a solution for accommodating the worker population. After the addition of a carpet section in 1891, women from Christian and Muslim neighborhoods close to the factory campus were offered work, and two new dormitories devoted to sheltering these new workers were constructed. Dormitories for female workers were strictly separated from the dormitories of the male workers. In 1893, the rug weaving workshop (*kaliçehane*) was expanded, with new forty looms added to the existing twenty-four, enabling the weaving of rugs in the Gördes style. The repairs records demonstrate that there was a dormitory for Greek Orthodox girls (*rum kızlarının ikamet ettikleri koğuş*) along with a dormitory for unmarried workers (*bekar koğuşu*) on the factory campus. There was also a dormitory above the coffeehouse. With the expansion of the workshop, the construction of more housing for increasing numbers of workers (*günden güne çoğalan amele için odalar inşası*) became more pressing.

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<sup>&</sup>lt;sup>116</sup> BOA HH.HRK.64.36 1316.Ca.24 (October 10, 1898); BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>117</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>118</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>119</sup> BOA Y.MTV. 79.40 1310.Z.6 (June 21, 1893).

housed several girls to a room. In 1898, a new dormitory was added after the foundation of the rug-weaving workshop. <sup>120</sup> In 1899, yet another dormitory was constructed in tandem with the construction of the new carpet-weaving workshop. <sup>121</sup> In 1903, another dormitory was built alongside the construction of the broadcloth factory. <sup>122</sup>

Records from 1902 show that the dormitories were occupied mostly by young girls.

123 Both the workshops and the dormitories were lit with petroleum gas until 1902. The buildings were mostly made of timber, which made the administration concerned about a possible fire. The director of the factory proposed the electrification of the workshops and the dormitories with the use of water pressure, which had a pressure of 25–30,000 kilograms per minute. With the electricity commission's approval, the director of the factory requested, on behalf of the machinists and the technicians, electrification from the "progressive" Sultan (*terakki-vaye-i hazreti padişahi*). The Sultan evaluated the demand and the Imperial Treasury agreed to the electrification of the factory. 124

By the 1910s, there were three carpet weaving workshops employing 2,400 girls. Two hundred were Turkish girls, while the rest were Orthodox Greeks. The girls stayed in barracks-inspired dormitories. Each dormitory consisted of forty girls and a foster-mother

<sup>&</sup>lt;sup>120</sup> BOA HH.THR.1241.71 1316.Ra.5 (July 24, 1898).

<sup>&</sup>lt;sup>121</sup> BOA HH d 31625 1316 N 28 (February 9, 1899).

<sup>&</sup>lt;sup>122</sup> BOA HH. THR. 315.28 1321.Za.10 (January 28, 1904).

<sup>&</sup>lt;sup>123</sup> BOA HH.THR.305.30 1320.L.19 (January 19, 1903).

<sup>&</sup>lt;sup>124</sup> BOA HH.THR.305.30 1320.L.19 (January 19, 1903).

responsible for cooking and doing cleaning. 125 The construction of a dormitory from 1903 included annexes and wet areas, such as kitchens and toilets. 126

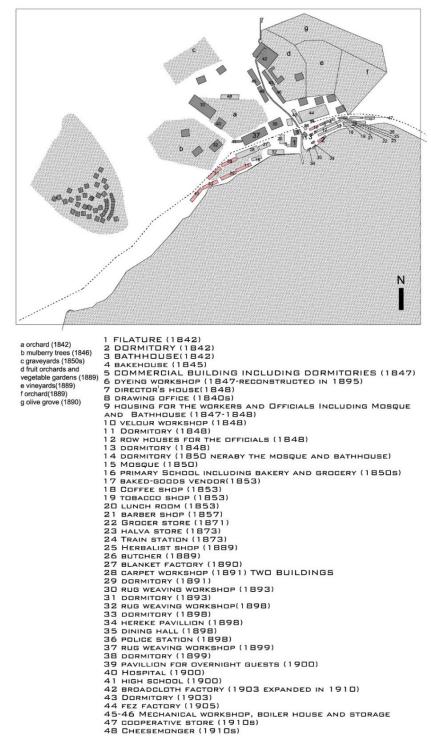
The multicultural and ethnically mixed population worked together in the same workshops at the Hereke Imperial Factory. However, the Muslim and non- Muslim population each had their own dormitories, and within those, the females and males were strictly separated from each other. There was also spatial polarization in terms of the arrangement of lodgings. The children working at the Hereke Factory Campus, whether Muslim or non-Muslim, woke up to the sounds of the call to prayer, had breakfast prepared by their foster-mother, and left the dormitory with their friends working at the same specialty. They then began to work with their friends from other religions in the major work areas. They had lunch nearby the filature workshop together, going shopping and to the coffeehouse during the one-hour lunch break if they had time, and then returned back to the workshops to work. At nights, they returned to their segregated dormitories. On some days of the week, they all went to the bathhouse and took baths together.

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<sup>&</sup>lt;sup>125</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12 (Oral history by Dimitrios Lokmanidis, the grocer of the Hereke Imperial Factory, who migrated from Hereke to Greece in 1921. This oral history was recorded by Babis Nikiforidis from CFAMS in 1964 in Volos.) The Orthodox Greeks left the factory after Greek commanders began operations in Eskişehir in 1922.

<sup>&</sup>lt;sup>126</sup> BOA HH.THR. 315.28 1321.Za.10 (January 28, 1904).

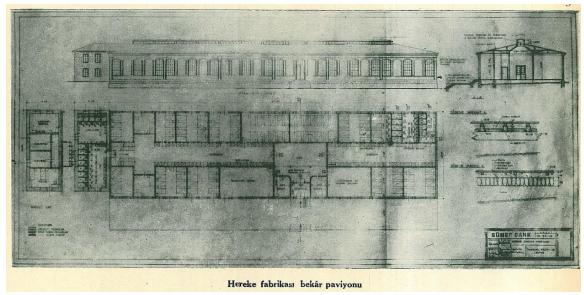
<sup>&</sup>lt;sup>127</sup> Donald Quataert, *Ottoman Manufacturing in the Age of Industrial Revolution* (Cambridge, UK: Cambridge University Press, 1993), 155-156.



**Figure 3.2** Hypothetical Map of Hereke Campus, showing the dormitories for unmarried people.

Source: Image produced by the author

As the image shows, the dormitories were mostly located on the waterfront (Figure 3.2). They were connected to the commercial buildings, bakehouse, shops, coffees, bathhouse and lunchroom.



**Figure 3.3** Dormitory accommodation on the Factory Campus. *Source: Sümerbank: 11.7.1933-11.7.1943 (Istanbul: Cumhuriyet Matbaası, 1943)* 

A document from the Sümerbank book of 1943 illustrates the accommodation plan for unmarried people whose typology was inherited from the dormitories at the Hereke Imperial Factory during the late nineteenth century (Figure 3.3). The building consists of two wings separated by a corridor. At the middle of the building, there is an entrance hall comprised of warden rooms. The entrance hall meets the dining and living rooms. The sleeping area is lined up along the two wings. Along the corridor, children and unmarried workers kept their belongings in cabinets. There were toilets at the end of the corridor. There was another small structure nearby, accessible from the outside, with two maid's rooms and a kitchen store. During the Ottoman period, it is known that the dormitories were built with masonry and timber. For instance, in 1897, the dormitory was made of

timber designed by Hovsep Kalfa,<sup>128</sup> while the dormitory built in 1903 alongside the construction of the broadcloth factory, was made of stone with hackings and woodworks of Bartin timber.<sup>129</sup>

During the second half of the eighteenth century, the typology of the barracksinspired structure spread to manufacturing workshops, factories, schools, prisons, and asylums in a series of concerted attempts to create "ideal citizens"/vassals. 130 Military barracks and factories became laboratories of standardization and for the creation of soldier-citizens and industrial proletarians. The monarchies of the Enlightenment era adopted practices of militarization while beginning to base citizenship on political and ethical concerns, whereas the nineteenth and twentieth centuries witnessed the creation of the bourgeois and proletarian classes, together with the ideologies of capitalism and socialism.<sup>131</sup> From the fifteenth to the seventeenth centuries, for the Ottoman case, oneroomed houses named hücerat, occupied by marginalized individuals such as unmarried people, madrassa students, and janissaries, made up more than twenty-five per cent of the total housing stock in Istanbul. The state allowed unmarried people to live near to their workhouses, while married workers were kept in the city's neighborhoods so that they could be more easily made to pay taxes. 132 The Ottoman agenda of one-roomed structures sheltering crowded workers nearby the workhouse continued in the nineteenth century's

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<sup>&</sup>lt;sup>128</sup> BOA HH. THR. 293.1 1315.M.14 (June 15, 1897).

<sup>&</sup>lt;sup>129</sup> BOA HH. THR. 315.28 1321.Za.10 (January 28, 1904).

<sup>&</sup>lt;sup>130</sup> Max Weber, *Wirtschaft und Gesellschaft* (Tübingen, Germany: Mohr Siebeck, 1980), 684; Gültekin Yıldız, "Ondokuzuncu Yüzyılın İki 'Standardizasyon Ütopyası': Kışla ve Hücre Tipi Hapishane," *Türkiye Günlüğü* 112 (2012): 118-135.

<sup>&</sup>lt;sup>131</sup> Yıldız, "Ondokuzuncu Yüzyılın İki 'Standardizasyon Ütopyası," 118-135.

<sup>&</sup>lt;sup>132</sup> Uğur Tanyeli, "Klasik Dönem Osmanlı Metropolünde Konutun 'Reel' Tarihi: Bir Standart Saptama Denemesi," in *Prof. Doğan Kuban'a Armağan*, comp. Zeynep Ahunbay *et al.* (Istanbul, Turkey: Eren Yayınları, 1996), 57-71.

factory campus. In fact, at the Hereke Imperial Factory, the "ideal worker" was created by the regulation of the crowd—the workforce composed of mostly children—through the standardization of the everyday life practices in the dormitories.

In East Prussia in the 1840s, the working class was mostly composed of unmarried immigrants who lodged in arrangements known as Schlafgänger, whereby a lodger rented not a room but a bed, or even a share of a bed. 133 For the Ottoman case, the Hereke Imperial Factory demonstrates that the management of daily life practices in the dormitories consisted of communal living and the sharing of rooms. Children and unmarried workers woke up at a certain hour in their rooms to a view of the sea. They collected their belongings from their individual cabinets, and changed their clothes in their bedrooms. They had breakfast in their dormitories, prepared by their foster-mother in the dining hall. They worked for a certain period; they knotted and weaved all day together on the looms, and gathered in the lunchroom for one hour and spent time in the coffee house during the lunch hour. After a collective dinner, they spent their nights together in their dormitories. Aside from the fact that, for example, the Orthodox Greek and Muslim girls lived apart from one another in completely separate furnished dormitories, <sup>134</sup> the workers generally slept in the same rooms, albeit in their individual beds, until the next morning when they started the same routine once again. Each week, they took baths all together in the bathhouse near the mosque. The gardens belonging to the Imperial Treasury were used for the workers' recreation. The regulation of the workforce both day and night happened

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<sup>&</sup>lt;sup>133</sup> Nicholas Bullock and James Read, *The Movement for Housing Reform in Germany and France, 1840-1914* (Cambridge, UK: Cambridge University Press, 2010), 23.

<sup>&</sup>lt;sup>134</sup> Donald Quataert, "The Age of Reforms, 1812-1914," in *An Economic and Social History of the Ottoman Empire: 1600-1914*, ed. Halil İnalcık with Donald Quatatert. (Cambridge, UK: Cambridge University Press, 1994), 918.

under the surveillance of the director, whose house was situated in the middle of the campus, near the mosque.

## 3.1.2 Housing for the Workers

In the early years of the Hereke Imperial Factory, the factory administration promoted the lodging of its workers in houses, which provides some evidence of a family-oriented vision for workers. This situation also reflects that the conception of a worker was family-oriented in the sense that the workers' wives and children could participate in production from their homes. Documents show that some workers were sheltered in houses with their families on the factory campus. In 1847, the workers demanded housing for themselves and their families near by the factory and the employment of their children in the factory. The factory administration foresaw the construction of sixty houses so that the workers' wives and children could participate in cloth production. The housing of Muslim and non-Muslim workers would be differentiated. Compare the rent to salaries, however, shows that housing for the workers was not economical. Rent was set at 300 kuruş per month, and the total expense was thus 18,000 kuruş per year. <sup>135</sup> In 1863, a steamer was paid 400 kuruş per month, while his assistant received 250 kurus per month. Less skilled workers received only 200-250 kurus per month. 136 Although they received free meals along with some pocket money, it is apparent that on-campus housing was not affordable for most workers. 137

<sup>&</sup>lt;sup>135</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 129.

<sup>&</sup>lt;sup>136</sup> Erdem Kabadayı, "Working for the State in a Factory in Istanbul: The Role of Factory Workers' Ethno-Religious and Gender Characteristics in State-Subject Interaction in the Late Ottoman Empire," (PhD diss., Munih University, Munih, Germany, 2008), 78.

<sup>&</sup>lt;sup>137</sup> Charlotte Lorenz, "Die Frauenfrage im Osmanischen Reiche mit besonderer Berücksichtigung der arbeitenden Klasse", *Die Welt des Islams*, Bd. 6, H. 3/4 (Dec. 31, 1918): 72-214, 161-162.

The number of houses to be constructed was later reduced to thirty-two due to delays. Walls intended to separate the campus from other settlements were not constructed. Sultan Abdülmecid verbally ordered a bathhouse during his visit to the site in 1848, and this was included in the construction manifest. A mosque was also to be added later. Master-builder Koca Karabet estimated a cost of 1291 *kise* for the entire construction project. 138

In 1846, foot-looms for home use were ordered, demonstrating that yarn making was taking place in the houses. <sup>139</sup> In 1847, the workers also worked with handlooms instead of the power machines in the factory. In 1853, the number of the houses for workers was increased again to sixty. There was one house in special condition (*hane-i mahsusa*) for the director with a rental cost of 100 kuruş per month, while the other fifty-nine houses were each leased out at 16 kuruş per month. <sup>140</sup> Clearly, the administration was not charging or receiving the higher rent (300 kuruş) that it had initially anticipated.

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<sup>&</sup>lt;sup>138</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 129.

<sup>&</sup>lt;sup>139</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 130.

<sup>&</sup>lt;sup>140</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası,"130.



**Figure 3.4** Housing at the Hereke Imperial Factory, 1890.

Source: IRCICA (90453/050)

This photograph depicts the row of houses at the Hereke Factory Campus, which were 500 meters away from the production site. Since the houses were located near the mosque, which was ordered to be constructed by Abdülmecid in 1848, these houses were very likely the first lodgings for the workers and thus constructed in 1847 (Figure 3.4). The houses had masonry walls and a timber structure on the first floor. The separation on the first floor indicates that the building contained at least two families.



**Figure 3.5** Housing at the Hereke Imperial Factory Campus. *Source: Istanbul University Rare Works Collection (90453---0006)* 

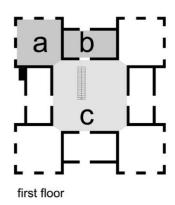
Housing for the workers expanded over time. The above image demonstrates that the housing area was separate from the plant site (Figure 3.5). The residential area was 500 meters away from the production area. There was zoning for production space and housing for the workers. The houses were located in the orchards. The residential area also included a mosque. The jettied type of housing recurs here.



**Figure 3.6** Housing at the Hereke Imperial Factory Campus. *Source: Istanbul University Rare Works Collection (90453---0008)* 

The image entitled 'A House in Hereke Village' (Hereke köyünde kain bir bab hane) from the Abdülhamid Albums and dated to 1890 demonstrates the housing situation for workers on the Hereke Campus (Figure 3.6). The house is an example of the civil architecture of the time. The factory administration envisioned that Muslims and the Christians would have different styles of houses, and this worker's house is made in the vernacular style of Muslim residents. The unit has its entrance at the street level. The main wall of the two-story dwelling is masonry, while the first floor is timber. The building is jettied. Four rooms project beyond the masonry ground floor, supported by angle braces (eliböğründe). Traditionally, this kind of typical Anatolian house was used by extended

families. The parents used one room while the other rooms were occupied by children and elderly people.



a+b one family unit a parent's room b children's room c communal space

Figure 3.7 Hypothetical Plan of a shared housing unit.

Source: Image produced by the author

The archival documents also demonstrate that there were also thirty rooms rented out at six *kuruş* per month, since a house was not affordable for an unmarried worker. <sup>141</sup> More than one family would have shared houses. One would question the concept of privacy in the house, after reading this archival document. Could assumptions and traditions around domestic privacy have changed according to the working conditions in the factory, where women and men worked together? For this scenario, a family unit occupies the parent's room and children's room (Figure 3.7). It did not have to be split into a parent's bedroom and a children's bedroom but, if it was, the children's room would have also been used by the elderly people (if there were any). The living room was used as a

<sup>&</sup>lt;sup>141</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 130.

communal space, where the women and children used the foot-looms. In this way, children and women participated in the production of the factory. On the ground floor, there was a fireplace for cooking and a cellar, where the residents shared their facilities in a communal way. There was also a barn on the ground floor, from which the animals' heat provided warmth for the first floor.



**Figure 3.8** Hypothetical Plan showing expansion of the housing for the workers and the plant site throughout the time.

Source: Image produced by the author

Zoning was also applied to the workers' housing. These houses were 500 meters distant from the plant site. The first housing for workers did not adhere to local sites of construction; they spread out over time (Figure 3.8).

# 3.1.3 Housing for the Officials

In 1844, the factory administration started to construct lodging for officials, and they were largely completed only in 1848.<sup>142</sup> This situation suggests that there were financial problems. As Charles MacFarlane described the situation, there was one street in good condition along with a narrower street between this street and the water. In the better street, there were long rows of houses for officials such as the director, doctor, draftsmen, engineers, and working people. There was the inestimable benefit of good air, far from malaria outbreaks, and the Europeans all looked healthy. Near the lodging houses of the workmen, there was a large ancient sarcophagus.<sup>143</sup> Unlike workers' housing, the officials' housing was situated directly on the plant site.

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<sup>&</sup>lt;sup>142</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası," 1983. Hayri Tokay Documents, Edhem Eldem Individual Collection.

<sup>&</sup>lt;sup>143</sup> Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country, Volume II* (Philadelphia: Lea and Blanchard, 1850), 275-276.

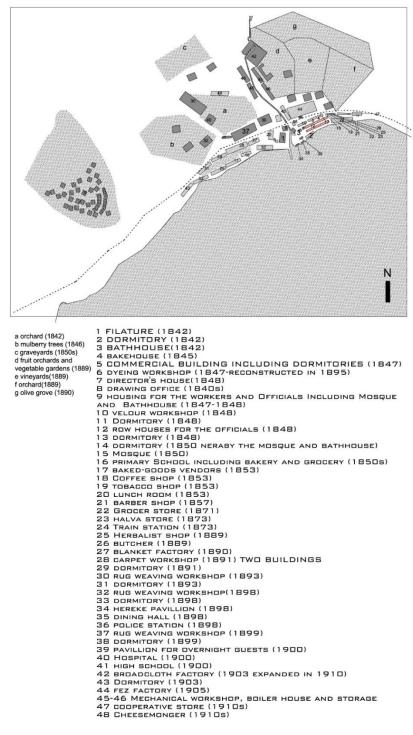


Figure 3.9 Hypothetical Plan of the Hereke Imperial Factory Campus.

Source: Image produced by the author

Six months after the addition of the velour workshop (*kemhahane*) in 1848, a house for the director was constructed. The document in which it is mentioned indicates that the house was adjacent to the bathhouse (*hamam*), meaning therefore that there was already a bathhouse on the factory campus in 1848 (Figure 3.9). In 1850, a new bathhouse was added along with a mosque.<sup>144</sup>

The repairs record also show that officials had their own houses (memurin haneleri). A fully-furnished house was given to Monsieur Martel at the plant site, including European-style furnishing (...iskan etmeğe mahsus fabrikada kendi re'yi üzerine mükemmel bir hane tefriş olunup ve derununa lüzumu olan alafranga takımı ile beraber ita olunmuş şartlar ile 5 sene kontoratoya rabıtı...). In 1893, a two-story house containing four rooms plus kitchen and bathing facilities (matbah ve abdesthane) was also constructed near the bakery. The house was constructed using five-meter oak pillars on a one-meter basement. The timber of the collar beams (kuşaklama) was from Gideros, while the timber of the girders was from Sinop. In 1894, houses for officials from the Ottoman Public Debt Administration (Düyun-u Umumiye) were constructed on the site of the telegraph office. Construction records demonstrate that there had been housing for officials in 1895, while their servants stayed in the dormitories. By 1897, there were more than 200 houses on the Hereke Campus. The police station was built in 1898 and it too contained lodgings for gendarmes.

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<sup>&</sup>lt;sup>144</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>145</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>146</sup> BOA Y.MTV. 79.40 1310.Z.6 (June 21, 1893).

<sup>&</sup>lt;sup>147</sup> BOA HH.THR 272.102 1312.Ş.27 (February 23, 1895); BOA HH.THR 272.103 1312.Ş.28 (February 24, 1895).

<sup>&</sup>lt;sup>148</sup> BOA HH.THR 272.100 1312.R.8 (October 9, 1894).

<sup>&</sup>lt;sup>149</sup> BOA HH.THR 293.15 1316.R.19(September 6, 1898).

<sup>&</sup>lt;sup>150</sup> BOA HH.THR.293.6 1315.N.28 (February 20, 1898).

In 1908, Mehmet of Ris, son of Pomak Hasan and his mother Şafiye, the daughter of Hasan, came to settle permanently on the Hereke Factory Campus. They also applied for identity papers (*tezkire-i Osmani*). <sup>151</sup> They were able to live in the houses vacated after the officials had left their jobs. (Officials had to vacate their houses when they lost their jobs, other officials had the right to settle into those homes. For instance, in 1887, the factory administration found it appropriate to house pay-office official Karabet in the house of Hamdi Efendi, who had previously been a clerk. Meanwhile, machinist Şevket Bey was lodged in the house which İsmek Efendi had vacated. <sup>152</sup> This shows us that the houses belonging to the state were in circulation.)

Hereke Imperial Factory management built separate houses for their officials in order to keep them at the factory for the long term. These houses are usually terraced and with their own baths and kitchens. Healthy living areas were deemed essential for the development of a diligent mindset. The officials' residences created a tie, or a tacit agreement, between those officials, who became attached to the houses, and the state. These residences on the factory campus at the periphery of Istanbul were also a way of keeping those officials' work linked to the factory. The families of the officials likewise benefited from facilities such as the school and hospital, making their place in the workforce even more stable. The two storied terraced houses were constructed of timber and were unified under one hipped-gable roof for the officials (Figure 3.10).

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<sup>&</sup>lt;sup>151</sup> BOA DH.MKT.2638.18 1326 N 28 (October 24, 1908). There was large-scale migration from the Balkans in the early 1900s. It is difficult to say, however, that there was a state project to manage migrant settlement at the Hereke Imperial Factory Campus.

<sup>&</sup>lt;sup>152</sup> BOA HH.THR.376.145 1306 Ca 26 (January 28, 1889).



**Figure 3.10** Terraced houses behind the dormitory, c.1900.

Source: Nazım Demirtaş Personal Archive

The factory management responded to workers' demand for onsite housing because it wanted to increase productivity by providing its own workers with better living areas. It is obvious that the aforementioned workers' housing was built to encourage local workers to join the workforce. Indeed, documents openly show that this housing was built for Muslim and Christian workers of Ottoman origin. For economic reasons, the total amount of planned housing for workers would not be completed and the housing for officials was prioritized. The factory management sought to overcome its problems with attracting workers by employing children who were poor, orphaned, or otherwise independent from their families and housing them in dormitories.

## 3.1.4 Profiling the Workers

The factory's employment of children merges with philanthropic approaches in its early years. In 1845, a major fire in the Samatya quarter of Istanbul destroyed several houses and businesses and left many dead. To ease their burden, Hovhannes Dadian employed orphans at the Hereke Imperial Factory and the Zeytinburnu Factory. 153 In 1846, there were thirtyfive workers employed on a salary basis and 113 employed on a daily wage basis. Non-Muslim workers, such as Orthodox Greeks, Armenians, and Europeans, dominated the workforce across all sections of the Factory in 1846-47. This situation did not, of course, coincide with the population profile of the region. Nor did it did not correspond to the profile of the workforce produced by Vital Cuinet, a French consul-general, in his description of the administrative geography and population statistics of the Ottoman Empire in the final years of the nineteenth century. According to Cuinet's 1893 statistics, in the town of Gegbuze (modern Gebze) there were 12,300 Muslims, 5,100 Orthodox Greeks, and 150 foreigners working at the time. 155 If we consider this population profile to have been more or less proportionate to that of 1840, the low the rate of Muslim participation in the industrial workforce at Hereke is evident. Muslims were known to have escaped the factory. As MacFarlane said, apart from four or five men who remained as doorkeepers or porters, and a few boys, all the Muslims escaped long ago. 156

In 1846-47, they were the majority among the artisans, among those who provided

<sup>&</sup>lt;sup>153</sup> Nuran Yıldırım, A History of Healthcare in Istanbul: Health Organizations, Epidemics, Infections and Disease Control, Preventive Health Institutions, Hospitals, Medical Education (Istanbul, Turkey: Istanbul University and Istanbul 2010 European Capital of Culture, 2010), 180.

<sup>&</sup>lt;sup>154</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 315.

<sup>&</sup>lt;sup>155</sup> F. Yavuz Ulugün, Seyahatnamelerde Kocaeli ve Çevresi, Izmit Rotary Club Cultural Publication (Izmit, Turkey: 2008, 240).

<sup>&</sup>lt;sup>156</sup> MacFarlane, Turkey and Its Destiny, 277-279.

communal services, and among all the watchmen apart from the official constabulary (zabita) force. According to the payroll sheets, there appears to have been a dormitory at that time protected by a warden (bekçi) and mulberry gardens protected by another warden. The factory constabulary branch consisted of four individuals; there was also an infantry imam (piyade imam). European artisans also worked in the factory. In the first year of the factory's operation a doctor, Hekim Niku, also appears on the payroll list. 157 In 1848, there were some Austrian workers in the factory. 158 The same year, the cashier, clerks, and shopmen were Armenian and descendants of the Dadians. 159

MacFarlane has suggested that in the early years of the factory, the workers had no working discipline, were uninterested in learning technical skills, and were unused to living together:

The Armenians jealously exclude the Greeks; the rough Armenian peasants were slow in learning, and do not willingly remain in Hereke, as they were miserably and irregularly paid; the Turks cannot and will not learn, they always want to knock off and smoke pipe! The females cannot be employed in a factory among men. 160

In 1848, the total number of Armenians, including men, women and children, was around 150, but MacFarlane reportedly scarcely saw any of them at work. The Europeans apparently also did relatively little work, producing uniform coats, as well as broad stiff ribbons for the Sultan's women. Among them were forty Germans (fifteen of them female), eleven Italians, and ten French. Though not suffering health problems, they were assessed to be generally in low spirits, "complaining of the solitude and barbarism of the place, of

<sup>&</sup>lt;sup>157</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 315.

<sup>&</sup>lt;sup>158</sup> BOA A.MKT.140.1 1264.S.13 (July 15, 1848).

<sup>&</sup>lt;sup>159</sup> MacFarlane, Turkey and Its Destiny, 278.

<sup>&</sup>lt;sup>160</sup> MacFarlane, *Turkey and Its Destiny*, 277-279.

the want of good food, of the total want of amusement, of the irregularity of their pay, and of the tricks and blunders they saw daily committed without being able to check them."<sup>161</sup> In 1849 there were eighty-five laborers who worked irregularly. At this time, twenty-seven Austrian artisans also joined the program to install new Jacquard looms and work at the mill for eight months. In 1849, besides the *imam*, there was also a priest who doubled as a spinner (*bükümcü ve papaz Kirkor*).<sup>162</sup>

In 1852, the payroll papers from the Prime Minister's Ottoman Archives demonstrate that aside from two officials, five European artisans, four Muslim artisans, three workers, seven broadcloth weavers (saramatçıyan), and seven Muslim journeymen, the plant was also protected by seven zaptiahs, or Ottoman police officers. An imam also served at the factory, while six jobbers were listed as responsible for the water wheel, the plant's power source. In the velour section, there were fifty-five workers. <sup>163</sup> The following year, in 1853, six Austrians, twenty-two Muslims, and seventy-four non-Muslim workers were recorded by the Imperial Treasury as being employed. <sup>164</sup> In 1865, three teachers (muallim, muallim-i sani and mekteb hocasi) were added to the payroll list. There was also a doctor, an imam, and a dyeing master. <sup>165</sup>

The Archives of the Imperial Treasury also provide stark evidence that slaves worked at the Hereke Imperial Factory in 1846 and 1847. The documents record the food, drink, and clothing expenses for twenty-four male and female child slaves, who were

<sup>&</sup>lt;sup>161</sup> MacFarlane, Turkey and Its Destiny, 278.

<sup>&</sup>lt;sup>162</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 315.

<sup>&</sup>lt;sup>163</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 318.

<sup>&</sup>lt;sup>164</sup> BOA HHd 568 1269 (1853); Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 319.

<sup>&</sup>lt;sup>165</sup> BOA HHd 86-8b 1282.S.26 (June 21, 1865); Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası,"321.

identified with the words *cariye* and *gulam*. <sup>166</sup> In 1849, the twenty-four child slaves (*cariye* and *gulam*) remain on the payroll sheets, working for four months. <sup>167</sup> The number of child slaves was reduced to nineteen in the records for 1852 and one month of 1853. <sup>168</sup> Documents from the *Mabeyn-i Hümâyûn* reveals that there were some African slaves from the Bornu Empire (*Bernuh*) who worked for monthly salaries in the Imperial Factories in 1859. These African individuals had been sent from the Bornu Empire to the Sultan as gifts. The African individuals are defined as *zenci köle* (black slaves) and also as *Arablar* (Arabs; a vernacular word mostly used for blacks in Ottoman times) <sup>169</sup> who had achieved their freedom from the sultan a few years previously (*bundan çend sene mukaddem*); however, their certificates of freedom (*ttkname*) were not received by the directors of the Imperial factories. Nevertheless, it appears that if the female slaves (*cariyeler*) who worked with other female children in the spinning workshop at Hereke Imperial Factory desired, they could be hired again in the Imperial Factories as salaried workers, or else they could work in their own hometowns under supervision. <sup>170</sup>

Although there is no direct indication of the ethnicity or race of the slaves working at the factory in earlier documents, the likelihood of their being African slaves should be acknowledged. There is little information about the fate of these slaves following the decision by Mabeyn-i Hümâyûn to free the slaves in 1859, but a document from 1859 demonstrates that there were still African workers in the Hereke Imperial Factory at that

<sup>&</sup>lt;sup>166</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası,"315.

<sup>&</sup>lt;sup>167</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 315.

<sup>&</sup>lt;sup>168</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 318.

<sup>&</sup>lt;sup>169</sup> The Ottomans never classified black slaves by their homeland or ethnicity. They usually identified them as "Zenci" ("black") or "Arab." Hakan Erdem, Osmanlı'da Köleliğin Sonu 1800-1909 (Istanbul, Turkey: Idefix. 2004): 81

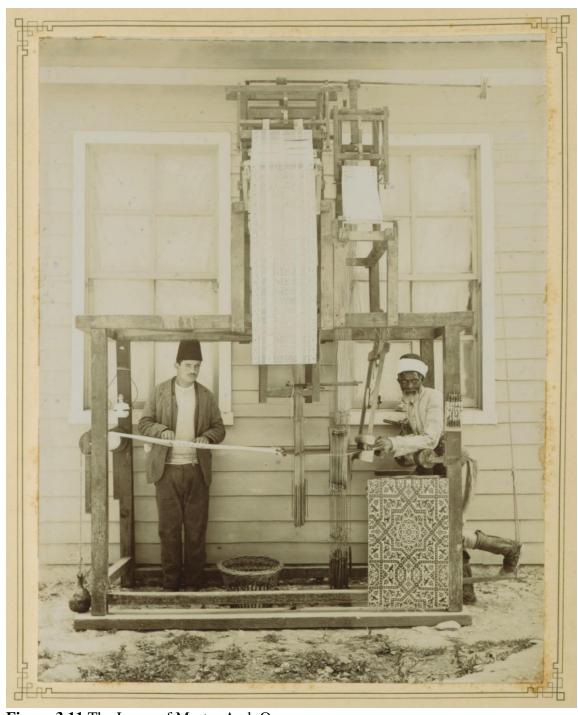
<sup>&</sup>lt;sup>170</sup> BOA MB. 79.75 1275.B.30 (March 5, 1859).

time.<sup>171</sup> It is believed that this situation continued into the 1860s, since the payroll sheets of 1865 reveals the existence of African freed slaves included in the list of factory staff under the word *Arabs*.<sup>172</sup> Indeed, we see still the employment of Africans in the 1890 Abdülhamid albums. It is not correct to think of these people were still being worked as slaves, though: by this time, they were individuals who had won their freedom and willingly worked at the factory for a monthly wage. As can be seen in the photograph, "Arab Osman" was even promoted to master (Figure 3.11) and, in 1896, the permanent teacher "Arab Fatma" was given an industrial medal by the sultan.<sup>173</sup>

<sup>&</sup>lt;sup>171</sup> To deal with bandits who might seek to loot the factory, the African workers named Mehmed and Abdullah were armed. BOA A.MKT. MHM 169.87 1276.R.11 (November 7, 1859).

<sup>&</sup>lt;sup>172</sup> BOA HHD 86-8b 1282.S.26 (June 21 1865); W. H. Wylde from Britain's Slave Trading Office, in his 1868 report to the Ministry of Foreign Affairs about escaped slaves asking the British Embassy for help, mentioned that with the abolition of slavery in 1857, Turkey had given hope that it would practically prevent slavery. However, this tacit promise was never kept and the British Embassy would, according to Wylde, "step in regarding the issue of slavery for the sake of humanity". Hakan Erdem, *Osmanlı'da Köleliğin Sonu*, 104.

<sup>&</sup>lt;sup>173</sup> BOA İ.TAL.58.50 1312.M.22 (July 26, 1894).



**Figure 3.11** The Loom of Master Arab Osman. *Source: Istanbul University Rare Works Collection (90453---0017), 1890.* 

A document from 1855 shows that the "use" of thirty Greek girls for weaving was requisitioned for Hereke Imperial Factory from among the inhabitants of Karasi (now

roughly equivalent to the province of Balıkesir). The girls were to be chosen on the basis of their skills and would take vocational training.<sup>174</sup> To Erdem Kabadayı, these forms of unfree labor, and especially their association with state-run enterprises, demonstrate "a specific and coercive social contract between the ruled and the ruler." In the case of the Ottomans, forced labor practices illustrate the changing nature labor during the nineteenth century and provide insight into other forms of employment by or in the service of the state. New reforms were introduced with the aim of abolishing corvee, a traditional and longstanding form of unfree labor in the Ottoman Empire. However, the conscription of children to work in the factory workshops demonstrates that some forms of forced labor continued, even if those forcibly conscripted earned a small wage. To Kabadayı, far from abolishing forced labor, military conscription resulted in a new and hybrid form of forced labor for some of the military recruits at state factories.<sup>175</sup>

Indeed, one of the fundamental principles of labor law in this period, which continued until the Tanzimat reforms, was forced labor. The banning of forced labor began with the enactment of the first Mining Regulations in 1861, but until then compulsory work and corvee labor was in widespread use throughout the Empire. The International Labour Organization (ILO) defines forced labor or corvee labor as "all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily". <sup>176</sup> It is clear from this definition that compulsory work

<sup>&</sup>lt;sup>174</sup> BOA A.MKT. UM 209.56 1272.M.10 (September 22, 1855).

<sup>&</sup>lt;sup>175</sup> Erdem Kabadayı, "Working for the State in a Factory in Istanbul: The Role of Factory Workers' Ethno-Religious and Gender Characteristics in State-Subject Interaction in the Late Ottoman Empire," (PhD diss., Munih University, Munih, Germany, 2008), 8-9.

<sup>&</sup>lt;sup>176</sup> ILO, "Forced Labour," *World Labour Report* (1993): 9; also in: Süleyman Özdemir, "Türkiye'de 'Zorunlu Çalışma' Uygulamaları," *Sosyal Siyaset Konferanslari Dergisi* 41-42 (1998): 181-213.

and forced labor carry many of the characteristics of slavery. A person is forced if made to work unwillingly, regardless of whether they receive a wage. Working or laboring is an activity that requires a person's consent; in other words, it is a burden that can only be placed on those who freely consent. The Corvee labor is "work that a person or society is forced to do without pay." Compulsory work is also work that someone is forced to do, but there is remuneration, however little that might be. The Corvee labor is thus traditionally understood as a form of unfree labor and is examined as part of the history of slavery. Studies of conscription, on the other hand, have been concerned primarily with the emergence of the modern state and control over the masses.

The announcement of the Edict of Gülhane (Tanzimat Edict) in 1839 began an era in which mining regulations, which had been enacted up until this time through the orders of the Sultan (*padişah fermanları*), came to embody the working conditions and rules for mines and factories. These regulations required that those employed be paid a fair wage and be employed with their own consent. By the same token, the most important rule in the 1869 Mining Regulations put a complete stop to the "forced labor" methods that had been in practice before the Tanzimat reforms and which the Dilaver Paşa Regulations of 1867 had only partially managed to prevent. In 1876, the 24th clause of the Ottoman Basic Law, which became the constitution of the Ottoman Empire, banned corvee labor.

<sup>&</sup>lt;sup>177</sup> Özdemir, "Türkiye'de 'Zorunlu Çalışma' Uygulamaları," 181-213.

<sup>&</sup>lt;sup>178</sup> Süleyman Özdemir, "Dünya'da ve Türkiye'de Zorunlu Çalışma," (PhD diss., Istanbul University, Istanbul, Turkey, 1994), 3-4.

<sup>&</sup>lt;sup>179</sup> Kabadayı, "Working for the State," 22.

<sup>&</sup>lt;sup>180</sup> "1861 Tarihli Mevadd-i Madeniyeye Dair Nizamname," *Düstur* 2 (İstanbul: Matbaa-i Amire, 1872); also in: Özdemir, "Türkiye'de 'Zorunlu Çalışma' Uygulamaları," 181-213.

<sup>&</sup>lt;sup>181</sup> "1861 Tarihli Mevadd-i Madeniyeye Dair Nizamname;" see also: Özdemir, "Türkiye'de 'Zorunlu Çalışma' Uygulamaları," 181-213.

<sup>&</sup>lt;sup>182</sup> Özdemir, "Türkiye'de 'Zorunlu Çalışma' Uygulamaları," 181-213.

In the particular case of the Hereke Imperial Factory, the existence of the terms *cariye* and *gulam* in the records of 1846-1847 demonstrate that, at least in the early years, there was a form of forced labor. Slave children worked not voluntarily, but to repay their living expenses, such as food, drink, and clothing. On the other hand, the African workers had a choice to make after forced labor was ended: to work in the imperial factories or to be sent back to their owners. The Africans chose to stay at the factory in return for a salary. At this point, consent became an issue, which one can consider to have emerged as a result of the acceptance of the regulations. The conscription of children also demonstrates a form of unfree labor, although a kind of contract between the factory and children's families was made about their education and wages. Their consent is questionable. This child labor reveals an intermediate form between wage labor and slavery. The form of forced labor experienced by the children recruited from Karasi continued. Even though they might have earned wages, their parents also received money. This could have been a solution to the difficulties encountered in retaining workers in the factory's early years.

The employment of children continued during the war years: despite the introduction of some regulations around child labor, no changes were put into practice. A proposal for the regulation of child and female labor by the public authorities in 1910, the Draft Law about the Work of Male and Female Children and Women in Industrial Institutions (Müessesat-ı Sınaiyyede Erkek ve Kız Çocukların ve Kadınların Çalışmaları Hakkında Kanun Layihası), attempted to forbid workplaces from employing children under the age of twelve, while requiring a sanction from physicians for children at and above

<sup>&</sup>lt;sup>183</sup> For further information, see: Marcel van der Linden, *Workers of the World Essays Toward a Global Labor History*, Studies in Global Social History 1 (Leiden, Boston: Brill, 2008), 23.

twelve years old. An authorization would also be given to sanitary controllers (sthhtye müfettişi) to forbid the employment of children under seventeen years old where deemed necessary. Meanwhile, it was suggested that the daily working hours for children under the age of seventeen should be limited to nine hours, including a one-hour lunch break. Children and female laborers would not work overnight and would have one day of vacation during the week along with vacation on their holy days. Children under the age of eleven who did not hold a certificate of primary education could not be made to do hands-on training for more than three hours a day. However, the state council decided that the proposal contained practices harmful to the freedom of production and labor (serbest-i ameli). <sup>184</sup> In addition, the governing Committee of Union and Progress did not impose essential regulations on the working hours and living conditions of the labor force. The workers went on working twelve to fourteen hours a day, and sometimes sixteen hours a day, as they had done previously. <sup>185</sup>

Also important consider is the gendered aspects of labor at the Hereke Imperial Factory. The manufacture of handicrafts in the workshops, along with domestic outwork, became typical features of the factory in its early years. Family units were composed not of a single breadwinner; rather, all family members contributed towards the family income. In the Ottoman context, women's workforce participation transitioned from household-level work to factory production in the emerging industrial fields in the mid-nineteenth century. In its early years, as MacFarlane illustrated in 1847, the Hereke Factory did not

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<sup>&</sup>lt;sup>184</sup> Kadir Yıldırım, *Osmanlı'da İşçiler (1870-1922) Çalışma Hayatı, Örgütler, Grevler* (Istanbul, Turkey: İletisim Publications), 347-348.

<sup>&</sup>lt;sup>185</sup> Erik Jan Zürcher and Mete Tunçay, *Osmanlı İmparatorluğunda Sosyalizm ve Milliyetçilik*, *1876-1923* (Istanbul, Turkey: İletişim Publications, 2004), 136.

allow females to be employed among men. <sup>186</sup> However, not only in the Hereke Factory, but also in the Fez Factory in Istanbul, women worked in their homes and delivered raw material for further processing to the factory, while men reworked the items into final products. <sup>187</sup> Female fez knitters in Istanbul performed this kind of work, which was later integrated into factory production. In the nineteenth century, Ottoman female workers, both Muslim and non-Muslim, were regularly engaged in such proto-industrial production, mainly in rural but also in some urban settings. <sup>188</sup> In late nineteenth century, nearly every home in many regions contained a loom. Many looms located in households also wove for sale, either at the independent initiative of the urban or rural weaver, or as part of merchant-organized production. <sup>189</sup> During industrialization, Ottoman women and children mostly contributed to household revenue from home.

After the great fire of 1878, Monsieur Martel from Lyon was appointed as the factory manager and initiated a project (*layiha*) after investigating the factory. His second report of 1885 remarks upon the requirements of the female workforce (*kadınlar ve genç kızlar*), including looms (*eblimiye? destgahı*), warping mills (*çözgü dolabı*), and bobbin holders (*masura destgahı*). Not only would the household work of numerous families help Monsieur Martel to in compete with foreign products, but the families would also be glad to be able to work at the factory. <sup>190</sup> In 1891, two buildings were constructed for the carpet workshop, and rug-weaving teachers from Sivas and Uşak were invited to Hereke to help

<sup>&</sup>lt;sup>186</sup> MacFarlane, Turkey and Its Destiny, 277-279.

<sup>&</sup>lt;sup>187</sup> M. Erdem Kabadayı, "Working From Home: Division of Labor Among Female Workers of Feshane in Late Nineteenth Century," in *A Social History of Late Ottoman Women*, eds. Duygu Köksal *et al.* (Leiden, Netherlands: Brill, 2013), 72.

<sup>&</sup>lt;sup>188</sup> Kabadayı, "Working From Home," 69.

<sup>&</sup>lt;sup>189</sup> Donald Quataert, *Ottoman Manufacturing in the Age of Industrial Revolution* (Cambridge, UK: Cambridge University Press), 84.

<sup>&</sup>lt;sup>190</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

with the production of carpets and silk prayer rugs. In addition, women and girls from both Christian and Muslim neighborhoods close to the factory campus were offered work in the carpet section. <sup>191</sup> In the last years of nineteenth century, Armenian female workers, including children, migrated from Anatolia (Sivas, Ladik, and Manisa) to the Hereke Imperial Factory and started to work in the carpet plant. <sup>192</sup> Most of the adult female workers became teachers and masters, according to the archival documents (Figure 3.12). <sup>193</sup>



**Figure 3.12** Master Hayganoş with her co-Workers producing a Sivas-Style Rug, 1890. *Source: IRCICA (90453-42)* 

<sup>&</sup>lt;sup>191</sup> BOA HH. HRK. 35.42 1313.Ca. 18 (November 6, 1895)..

<sup>&</sup>lt;sup>192</sup> Dominique Séréna-Allier, Raymond H. Kévorkian and David Vinson, *Trames d'Arménie: Tapis et broderies sur les chemins de l'exil (1900-1940)* (Marseille, France: Images en Manoeuvres Editions, 2007), 64-83.

<sup>&</sup>lt;sup>193</sup> See the section about "ceremonies".

When the factory administrators no longer allowed the recruitment of children, there was a labor shortage and they were once again employed poor children and orphans in the early 1900s. <sup>194</sup> In 1902, factory administrators actively searched out Ottoman girls who had a grasp of weaving techniques. The Interior Ministry (*Dahiliye Nezareti*) sought to find girls in Ankara province, and specifically those from Kırşehir and Isparta, but the governor was unable to find any weaving girls in Kırşehir. <sup>195</sup> One might consider that the employment of orphans happened in conjunction with the addition of a broadcloth factory in 1903. By the 1910s, Muslim girls were employed in the factory through the interventions of Women's Associations, <sup>196</sup> and both male and female Turkish workers mostly came from Tavsantziri (Tavṣancıl), which was six kilometers west of Hereke. The Orthodox Greek

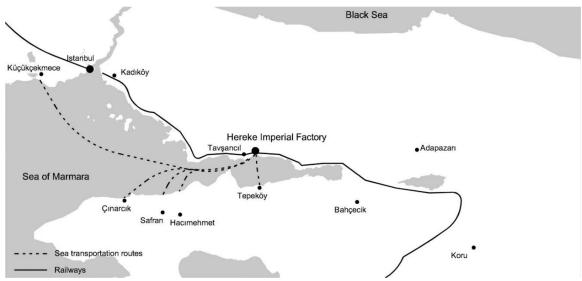
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<sup>&</sup>lt;sup>194</sup> "Hereke Fabrika-i Hümayunu Ziyaret," Servet-i Fünun 794-29 June 1322, (12 July 1906): 219.

<sup>&</sup>lt;sup>195</sup> BOA DH.MKT.621.12 1320 N 09 (December 10, 1902).

<sup>&</sup>lt;sup>196</sup> "Istanbul Postası," Siyanet 15, 19 Haziran 1330 (2 July 1914), 2.

girls were mostly from beyond the Izmit Gulf: Koru, Çınarcık, Kadıköy and the villages of Yalova: Agios Haralambos (Hacımehmet), and Safran. 197



**Figure 3.13** Map showing daily and weekly routes of dormitory-living workers. *Source: Map produced by the author* 

Coming from the villages around the Gulf of Izmit, the girls arrived at the factory by boat and train (Figure 3.13). On Sundays, they left the factory to go home. The workers also went shopping to Izmit and Istanbul by boat. <sup>198</sup> The sea route was an important means of transportation. For instance, in 1904, during Easter, thirty Greek Orthodox women who worked in the Hereke Imperial Factory were taken to their home villages in the district of Küçükçekmece in Istanbul province by ship. <sup>199</sup>

The one unique legislative regulation regarding the working conditions of factory workers was the Worker Regulations (*Amele Nizamnamesi*) prepared in 1893. However, this regulation only applied to those working in military factories. Through this regulation,

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<sup>&</sup>lt;sup>197</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

<sup>&</sup>lt;sup>198</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

<sup>&</sup>lt;sup>199</sup> BOA DH.MKT. 843.30 1322.S.3 (April 19, 1904).

Fridays and the Sacrifice and Ramadan Eid became holidays. Any workers who worked on those days would be charged. In addition, retirement was enacted as a worker right. <sup>200</sup> Although there is no documentation concerning Muslim market and religious holidays, the archival documents do demonstrate that Christians took vacation on their religious holidays. <sup>201</sup> Since the majority of the factory workers were Christians, Sundays were their day of vacation. <sup>202</sup> In addition, a retirement fund system (*tekaūd sandiği*) was founded in the Hereke Imperial Factory in 1895. <sup>203</sup> As has been shown, some of these regulations were applied in the factory; however, they were adapted to the needs of the profile of the workers. There is no record about the charge of the extra working hours.

## 2.2 Social Infrastructures, Shops, and Recreational Facilities

In 1906, a reporter for the *Servet-i Fünun* described the picturesque landscape around Hereke Imperial Factory in these words: "The landscape surrounding the factory consists of mulberry gardens, orchards, vegetable gardens...In the woods, a farmer is working. The son of the fisherman is playing in the sea. A country girl is singing."<sup>204</sup>

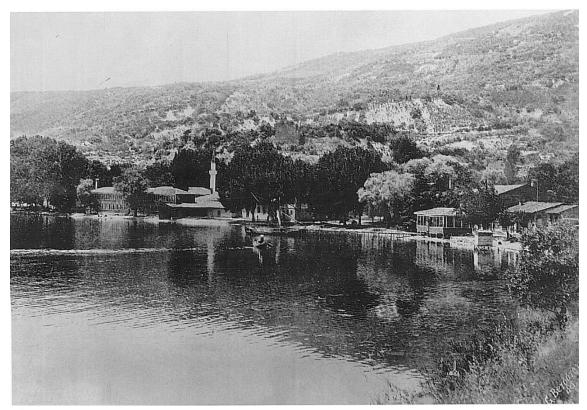
<sup>&</sup>lt;sup>200</sup> Yıldırım. *Osmanlı'da İşçiler*, 306.

<sup>&</sup>lt;sup>201</sup> BOA DH.MKT. 843.30 1322.S.3 (April 19, 1904).

<sup>&</sup>lt;sup>202</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

<sup>&</sup>lt;sup>203</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası." See the section about the "Social Security System."

<sup>&</sup>lt;sup>204</sup> "Hereke Fabrika-i Hümayunu Ziyaret," Servet-i Fünun 794-29 June 1322, (12 July 1906): 218.



**Figure 3.14** Hereke Imperial Factory, ca. 1880. *Source: Guillaume Berggren, Institute of German Archeology (465 R 29 493)* 

A photograph of the Factory taken around 1880 by Guillaume Berggren, a Swedish photographer, also shows that the factory campus was surrounded with gardens and a graveyard (Figure 3.14). The waterfront was lined with dormitories and shops. A self-sustained habitat, the Hereke Factory Campus had its own mulberry gardens, communal vegetable gardens, vineyards, olive grove, and shops. There was also a full social infrastructure, including a school, mosque, bathhouse, and a lunchroom at the factory campus. The entire campus was thus planned to meet the needs of the workers and officials. Yet behind the picturesque landscape of the self-sustained habitat lay nationalization of the land and a rental system developed by the Imperial Treasury. In the earliest documentation, dated between 1842 and 1845 when the Izmit Broadcloth Factory was under construction, the Hereke Factory was not classified as an imperial investment with a subsidy; rather,

Seraskerier Rıza Paşa and Hovhannes Dadian had constructed the factory themselves. The factory was later put under the administration of the Izmit Broadcloth Factory after Seraskerier Rıza Paşa transferred the reconstructed factory together with the virgin land surrounding to the factory to the Imperial Estates (*Emlak-i Hümâyûn*) in 1845.<sup>205</sup>

Ottoman lands were primarily state-owned (miri lands). Other lands were owned by individuals or juridical persons in the Ottoman land system, held either as freehold (mülk) or as religious endowments (waqf). 206 In the Factory's early years, the plant site was freehold land owned by individuals, although later it was nationalized to become stateowned land. A journal of correspondence demonstrates that the gristmill was purchased directly by Seraskerier Rıza Paşa. However, the owners could not be paid for it at the time, since they were absent. One of the owners of the orchards and the windmill, Hafiz Musa Efendi, was in Tripoli and his share was waived by his mother, while the waqf did not contest the case.<sup>207</sup> During Sultan Abdülmecid's visit in 1844, the former owners of the windmill complained that the mill had been compulsorily sold for less than its estimated value; they wanted to be paid extra money or for another solution to be found. The lands of the mill and orchard were transferred to the Imperial Estates (*Emlak-ı Hümâyûn*) when Hafiz Musa Efendi, the owner of the mill and orchard garden, waived his share in 1845. 208 That same year, the privately owned factory was also transferred into imperial hands, after a denunciation of its operations to the imperial administration.<sup>209</sup> After this date, virgin

<sup>&</sup>lt;sup>205</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 118-120.

<sup>&</sup>lt;sup>206</sup> Oya Gözel, "The Implementation of the Ottoman Land Code of 1858 n the Eastern Anatolia," (Master's Thesis, Middle Eastern Technical University, Ankara, Turkey, 2007) 36, 11.

<sup>&</sup>lt;sup>207</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 120.

<sup>&</sup>lt;sup>208</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 120.

<sup>&</sup>lt;sup>209</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

lands were purchased from the inhabitants along with the existing buildings, which became tax resources (*mukatta*) for the Imperial Treasury (*Hazine-i Hassa*).<sup>210</sup>

During the nineteenth century, the Ottoman state centralized land management within the bureacracy both to maximize its revenues and to facilitate the settlement of ownership claims.<sup>211</sup> There was by this time a serious deficit in the imperial budget, and the Empire needed to find new resources, either loans or revenues. The needs of the central army and central bureaucracy also required new regulations for property and taxation.<sup>212</sup> As nation-states developed in Europe, land acquired legal status while people, especially laborers, lost some of theirs.<sup>213</sup> In the nineteenth century, the Ottoman Empire was also subject to interstate competition.<sup>214</sup> As part of its modernization process, taxation of the land was centralized in the Ottoman State. At the Hereke Factory Campus, the land was a part of a rental agreement (*akaret-i seniyye*) that included its gardens and shops, giving the central state total control over all of its revenues.

<sup>210</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 118-120. "The administration of the Imperial Factories was carried out by the Ottoman Imperial Mint (*Darphane-i Amire*) until 1850". Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 156. "In 1850, during the reign of Abdülmecid, the government reorganized the imperial treasury as the Ministry of the Imperial Treasury, which was responsible for controlling all palace revenues." Nadir Özbek, "Imperial Gifts and Sultanic Legitimation During the Reign of Sultan Abdulhamid II, 1876-1908", in *Poverty and Charity in Middle Eastern Context*, ed. Michael Bonner *et al.* (Albany, NY: State University of New York Press), 210. "The work on industrialization during the Tanzimat era was financed by the interior treasury of the Imperial Treasury (*Hazine-i Hassa*)." Güran, "Tanzimat Döneminde Devlet Fabrikaları," 235; Topal, Erdemir, Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri," 37-64. "After 1850, the administration of the factory was transferred to the Imperial Treasury (*Hazine-i Hassa*). The Imperial Estates (*Emlak-ı Hümayun or Emlak-ı Şahane*), which were managed by the Ottoman Finance Treasury (*Maliye Hazinesi*) from the Tanzimat reforms onwards, were transferred to the Imperial Treasury during the Hamidian Era. In this period, Hereke Imperial Factory also played a part as a subsidiary of the Imperial Treasury." Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası." 161.

<sup>&</sup>lt;sup>211</sup> Huricihan İslamoğlu, "Property as a Contested Domain: A Re-evaluation of the Ottoman Land Code of 1858," in *New Perspectives on Property and Land in the Middle East*, ed. Roger Owen (Cambridge, Mass.: Harvard University Press, 2001): 20.

<sup>&</sup>lt;sup>212</sup> Gözel, "Implementation of the Ottoman Land Code," 35

<sup>&</sup>lt;sup>213</sup> Huricihan İslamoğlu, "Property as a Contested Domain," 20.

<sup>&</sup>lt;sup>214</sup> Gözel, "Implementation of the Ottoman Land Code," 34.

What is remarkable, after the Factory's transfer to the Imperial Treasury, is how far the gardens and construction expanded. By 1845, there was a bakehouse. 215 1846, a sixtyeight decare (approximately 17 acre) orchard was purchased and added to the factory lands. 216 In 1851, a baked-goods vendor, a coffeehouse, a shop, a dock and a one decare (0.25 acre) orchard, as well as other surrounding lands, were added to the factory. By 1853, there were sixty houses, thirty rooms, a bakery, a baked-goods vendor, a coffee shop, a tobacco shop (duhanci), a lunchroom, a windmill, and a bathhouse as revenue-generating enterprises in the factory. The lunchroom was discarded in the revenue records after September 1853. Later that year, another windmill was constructed. The new windmill was operated by the factory, while the old one was rented out for 1,400 kuruş and operated by someone else. In 1857, the revenue list included a windmill, houses, a barbershop, a bakedgoods vendor, a bathhouse, a store, and a tobacco shop. Another store and a barbershop were added shortly afterwards.<sup>217</sup> In 1871-72, there was a windmill, a bakery, a coffee shop, a grocer's store, and an orchard on the revenue list. In 1873, a halva store was added to the list.<sup>218</sup> In 1873, new lands and orchards were added to the property of the Imperial Estates (*Emlak-ı Hümâyûn*) between the walls of the factory and the railway route was purchased from its existing owners, Mehmed son of Ahmed, Hüseyin son of Ahmed and Ahmed son of Ahmed.<sup>219</sup>

In 1874, there was an increase in rental incomes, since the factory had begun taking in new revenues, such as taxes from jetties, the rental income of orchards, gardens, and

<sup>&</sup>lt;sup>215</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>216</sup> BOA HHd 155/1a 1262.Za.13 (November 2, 1846) from Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası."

<sup>&</sup>lt;sup>217</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 126-127, 137, 138.

<sup>&</sup>lt;sup>218</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 138.

<sup>&</sup>lt;sup>219</sup> BOA HHd 65.26 1290.Ca.24 (July 20, 1873) from Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası."

shops, along with the outputs of the olive and walnut trees and the leaves of the mulberry trees that were sold. <sup>220</sup> The revenue list also included a tobacco shop, baked-goods vendor, windmill, bakery, and other shops. The factory's revenue list also included furnishings that were sold *(füruht olunan eşya esmanı)*. <sup>221</sup> From 1889, the lands generating revenue expanded once more. <sup>222</sup> By 1891, the Factory's vegetable gardens, vineyards, olive groves, a butcher shop, a workers' shop, a bathhouse, three gristmills, a bakery, a tobacco shop, coffee shop, a grocery, and an herbalist all generated revenue for the Imperial Treasury. <sup>223</sup> In the 1910s, the factory campus included a bakery, a grocery store, and a cheesemonger's shop, which was outside the plant. All of the independent shops were rented by Orthodox Greeks. In addition, there was one cooperative store on the plant site with ten shareholders who were Turkish nobles from the factory's administration. The cooperative store was composed of a bakery, grocery store and other shops. <sup>224</sup>

<sup>&</sup>lt;sup>220</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 138. "The Imperial Estates, which were transferred to the Finance Treasury after the Tanzimat reforms, would be directed by the Imperial Treasuries by 1875; the boundaries of the estates would then be reviewed and registered." Arzu Terzi *Hazine-i Hassa Nezareti* (Ankara, Turkey: Türk Tarih Kurumu, 2000), 38. "In Sultan Abdülhamid's time, particular care was taken by the Imperial Treasury to separate out income and spending. A separate organization was formed for the administration of the imperial estates." Terzi, *Hazine-i Hassa Nezareti*, 175. "From 1882 onwards, Abdülhamid II began to impose these taxes in the name of the Imperial Treasury. The Sultan was transferring state revenues directly into his own budget. Outside of real estate, the imperial treasury had many other sources of income: it had income from collecting taxes from the Tigris and Euphrates river trade, from oil and bitumen in Mosul region, and the coal mines in Ereğli, while it also ran the Taşoz mines. Separately, he ran the ports of Thessaloniki and Dedeağaç and owned many warehouses in Thessaloniki, İzmir, Baghdad and Basra. He owned many imperial factories; Hereke Imperial Factory was one of them." François Georgeon, *Sultan Abdülhamid*, trans. Ali Berktay (Istanbul, Turkey: İletişim Publication, 2006), 231.

<sup>&</sup>lt;sup>221</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 138.

<sup>&</sup>lt;sup>222</sup> For example, the records show that in 1889, the vegetable gardens were rented by Ali Efendi and Niko, the halva shop by Mustafa Ağa, the butcher by İbrahim Ağa, the herbalist shop by Hacı Mikir, the bakery by Apostol, the grocery by Apostol, the gristmills by Ablahan oğlu, the coffee shop by Andon, the vineyards by Dimitri from Manastır, the olive groves by Niko, and the bathhouse by Tevfik. BOA HH.HRK 27.19 1307.B.25 (March 17, 1890).

<sup>&</sup>lt;sup>223</sup> BOA HH.HRK 28.37 1308.Ş.13 (March 24, 1891).

<sup>&</sup>lt;sup>224</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12. "After Sultan Abdülhamid II was forced to abdicate, all the imperial property he had was transferred into the treasury. The ancient estates (*emlak-ı kadime*) belonging to the office was left to the administration of the Imperial Treasury

The Imperial Treasury was responsible paying the wages and salaries of the factory workers, officials, and technical staff.<sup>225</sup> The system was managed in a similar way to the system of vocational orphanages (*islahhanes*), where current administrative expenses were covered by donations, along with the revenues of the landed estates of the orphanages.<sup>226</sup> At the time, for example, revenues for the Ruse *islahhane* came from a hotel, a commercial building (han), some dwellings (hane) and shops, while a mill, commercial building, tannery, shops, vineyard, and vegetable gardens generated income for the Niš *ıslahhane*. In accord to the law, the money coming from fees and expenses related to judicial actions also provided income for the orphanages. 227 Similar to the vocational orphanages, the commercial buildings, shops, the vegetable gardens, orchards, vineyards, olive groves, and even the housing for the workers were subject to rental systems. The factory system was operated with the taxes collected by the Imperial Treasury. At Hereke Imperial Factory, the revenues of the landed estates were used to cover administrative expenses. However, the wheat for making bread was sent from Izmit by the Imperial Treasury for the use of workers and officials.<sup>228</sup> The lunch was also covered by the Treasury.<sup>229</sup> The profits from the handicrafts made by children and adult workers were used as income.<sup>230</sup>

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under the name of sultan's estates (*emlak-ı hakani*). The Hereke Imperial Factory also continued as *emlak-ı hakani* under the management of the Imperial Treasury." Terzi, *Hazine-i Hassa Nezareti*, 158-160.

<sup>&</sup>lt;sup>225</sup> Terzi, *Hazine-i Hassa Nezareti*, 38.

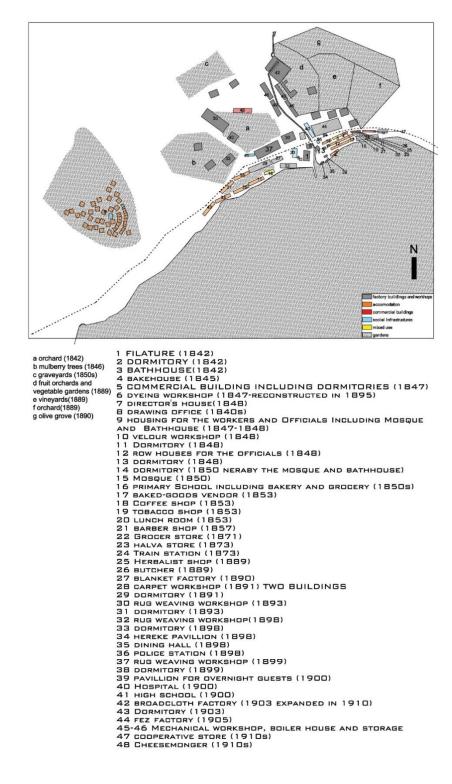
<sup>&</sup>lt;sup>226</sup> Maksudyan's article discusses the connection between these rental agreements and the vocational orphanages. Nazan Maksudyan, "Orphans, Cities and the State: Vocational Orphanages (*Islahhanes*) and Reform in the Late Ottoman Urban Space," *International Journal of Middle East Studies* 43 (2011): 493–511. For further information see Chapter 3.

<sup>&</sup>lt;sup>227</sup> "Islahhanelere Dair Nizamname," in *Vilayetlerin İdare-i Mahsusa ve Nizamatının Suver-i Icraiyesi Hakkında Talimat* (Istanbul: n.p., 1284 [1867]): 193-224.

<sup>&</sup>lt;sup>228</sup> BOA A.MKT.NZD.123.93 1271.R.03 (December 24, 1854).

<sup>&</sup>lt;sup>229</sup> Charlotte Lorenz, "Die Frauenfrage im Osmanischen Reiche mit besonderer Berücksichtigung der arbeitenden Klasse," *Die Welt des Islams*, Bd. 6, H. 3/4 (Dec. 31, 1918): 72-214, 161-162. <sup>230</sup> See Section "Lodging the Workers".

Once dormitories were added to the agenda, the social gathering units expanded. The commercial buildings, such as halva shop, butcher, herbalist shop, bakery, grocery, and coffeehouse, were located near the workers' dormitories and the officials' row houses. They were also close to the waterfront and the factory buildings, such as the main carpet workshop, where the most of the workers spent their days. At the center of the factory campus there were social infrastructures, such as a hospital, mosque, bathhouse, and lunchroom (Figure 3.15). The planning principle of the factory campus was to situate the social infrastructures at the core of the factory campus, allowing easy access from both the factories and the dormitories. In everyday life practices, the multi-ethnic and multi-religious workers and officials of every age met in these spaces, chatted, had lunch, had a bath, drank coffee, and shopped together. They worked and spent time together. At nights they slept in their respective dormitories and houses, which were separated strictly according to their religion.



**Figure 3.15** Hypothetical Plan showing the functions of the buildings. *Source: Image by the author* 



**Figure 3.16** Young Girls having lunch in the gardens of the Factory Campus, ca.1900. *Source: Nazım Demirtaş Personal Archive* 

The gardens served not only as source of revenue for Imperial Treasury, nor just as reserved areas for meeting the needs of the factory workers; they were also areas of recreation for the workers and officials. Workers dedicated their free time to pastimes, and these pastimes were generally enjoyed as communal activities. The photograph above, taken in around 1900, shows that the young Muslim and non-Muslim girls who worked at the factory had lunch together in the gardens with their overseer (Figure 3.16). The roadside of the garden is decorated with flowers. According to a reporter for the *Servet-i Fünun* in 1906, some parts of the gardens were separated by curtains for the recreation of women. The waterfront was decorated with flowers and fountains. <sup>231</sup> The gardens were social gathering units and public spaces for the multi-ethnic workers and officials of every age.

<sup>&</sup>lt;sup>231</sup> "Hereke Fabrika-i Hümayunu Ziyaret," Servet-i Fünun 794-29 June 1322, (12 July 1906): 218.

For instance, some concerts were held in the gardens: in 1910, a music society group, consisting of 250 railway men from Austria, gave a concert in the gardens of the Hereke Factory Campus on behalf of the Red Crescent.<sup>232</sup>

## 3.2.1 Religion, Health and Education

3.2.1.1 Religious Buildings. There were two mosques on the Hereke Factory Campus. One was built in 1848 in the housing area; the other was built in 1850 at the plant site. <sup>233</sup> In 1902, the mosque in the plant site, which had not been repaired for between more than fifty years, was restored after it collapsed in a snowstorm. The factory workers and the inhabitants of the neighborhood, which consisted of 200 households, worked to restore the mosque reusing its existing timbers. A plan drawn up by the School of Civil Engineering (*Hendese-i Mülkiye*) shows that the mosque's door openings were not through the mihrab wall, but on the sides of the building. To enlarge the mosque, lands were purchased from an adjacent household. <sup>234</sup> The image below depicts a mosque made of masonry with a slanted roof (Figure 3.17). It had a fountain at the entrance. The windows had moldings and all were rectangular.

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<sup>&</sup>lt;sup>232</sup> BOA BEO. 3743.280656 1328 R 22 (May 3, 1910).

<sup>&</sup>lt;sup>233</sup> BOA HHd 69.91a 1263.R.23 (April 10, 1847); BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>234</sup> BOA HH.THR.362.47 1320.Ra.25 (July 2, 1902).



**Figure 3.17** Mosque at the Hereke Imperial Factory. *Source: Nazım Demirtaş Personal Archive* 

Although there was no church at the plant site, Christians could leave the factory to go to church whenever they wanted, and specifically during Easter and Christmas time. The Orthodox Greek girls left the factory with their families by boat to go to church. During Easter, ships from Istanbul carried gifts to the Orthodox Greeks, such as Easter eggs and desserts, and the girls were paid a premium in *mecidiye* gold. There was a cemetery for the Orthodox Greeks; when a worker died, a priest was summoned.<sup>235</sup> In the early years, there also was a cemetery for the Armenian workers; however, in 1857, the director of the factory, Hacı Bey, denied the right of worship to Armenian workers (*millet-i merkume* 

<sup>&</sup>lt;sup>235</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

ayinlerini edadan men ve umur-ı mezhebiyelerine müdahale), and built water closets on the Armenian cemetery. These water closets, in turn, were later implicated in an outbreak of cholera among the workers.<sup>236</sup> Hacı Bey apparently had a personal grudge against the new priest, which turned into discrimination against the Armenian workers.

By 1900, the number of workers who commuted from the villages near Hereke or the villages on the Izmit Bay area had increased. Religious and educational institutions became a powerful tool in the hands of the Sultan to manage the labor. Official mosques and schools began to be constructed in the villages and towns in which the workers lived and from which they commuted daily or weekly to the factory. In 1903, for example, correspondence between Akif, the director of the factory, and the Imperial Treasury shows that the Imperial Treasury had constructed a mosque in Tavşancıl, from which many of the factory workers commuted, and furnished it with the factory's products. <sup>237</sup> The same year, Akif also participated in the construction of another mosque in Adapazarı. <sup>238</sup> In 1905, the Imperial Treasury constructed a mosque and a school for the workers commuting from the neighborhood of Belen. <sup>239</sup> Similarly, in 1907, mosques were constructed in the neighborhoods of Tepeköy and Yeniköy. <sup>240</sup> The factory administration constructed a tarmac road for the 200 workers who commuted from uptown and from Bağçeci (Bahcecik). <sup>241</sup>

<sup>&</sup>lt;sup>236</sup> BOA HR.MKT.253.14 1274.M.16 (September 6, 1857).

<sup>&</sup>lt;sup>237</sup> BOA HH.THR.362.52 1320.C.21 (September 25, 1902); BOA HH.THR.362.53 1321.S.28 (May 26, 1903).

<sup>&</sup>lt;sup>238</sup> BOA HH.THR.362.59 1321.Za.6 (January 24, 1904).

<sup>&</sup>lt;sup>239</sup> BOA HH.THR.371.12 1323.M.30 (April 6, 1905).

<sup>&</sup>lt;sup>240</sup> BOA HH.THR.371.16 1325.M.18 (March 3, 1907); BOA HH.THR.371.15 1325.M.5 (February 18, 1907).

<sup>&</sup>lt;sup>241</sup> BOA HH.THR.293.15 1316.R.19 (September 6, 1898).

3.2.1.2 Hospital. As correspondence between the administration and the Imperial Treasury demonstrates, once new workshops were constructed, the number of workers also increased, with male workers approaching 600 and female workers increasing to around 1,000. The workers dwelt in multi-story high-density cellular dormitories. The existing dormitories were inadequate to shelter all the workers, so twenty workers now occupied each room. Inevitably, this situation enabled contagious disease to spread among the workers. In 1898, the administration of the factory requested that the Imperial Treasury construct a hospital on the plant site, similar to charitable institutions (*hayrat*) at other Imperial Factories such as the Izmit Broadcloth Factory and Fez Factory in Istanbul. The estimated cost to construct the hospital was calculated by Hovsep Kalfa of the Department for Imperial Buildings (*Ebniye-i Seniyye Anbarı*).<sup>242</sup> The hospital would be made up of twenty beds; later, this number increased to fifty.<sup>243</sup>

In fact, the hospital was reconstructed. The statement in the documents "müceddeden" (afresh) indicates that there had been already a hospital on the factory campus, probably a small version of one, perhaps an infirmary. <sup>244</sup> By the same token, the appointment of doctors before the launch of the hospital verifies that there had been already some sort of healthcare institution there. For instance, Lieutenant Ali Bey was appointed to the factory hospital in 1892. <sup>245</sup>

<sup>&</sup>lt;sup>242</sup> BOA HH.THR. 293.14 1316.Ra.26 (August 14, 1898); HH. THR. 293.16 1316.R.26 (September 13, 1898)

<sup>&</sup>lt;sup>243</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

<sup>&</sup>lt;sup>244</sup> BOA HH.HRK.64.38 1316.Z. 8 (April 19, 1899).

<sup>&</sup>lt;sup>245</sup> BOA Y.MTV.84.128 1311.Ra.29 (October 10, 1893).



Figure 3.18 Hereke Factory Campus Hospital.

Source: Hereke Factory Archive

The new hospital had a rectangular plan and three floors on the entrance axis (Figure 3.18). The wing sections were two-stories. The raised basement floor of the structure is constructed of stone, while the other floors were constructed using a wooden carcass system. <sup>246</sup> French cement, iron, machine brick, lathing briquette *(bağdadi briket)*, and timber were used for the construction of the hospital. <sup>247</sup> The building, built on a sloping plot, had stairs on the entrance axis. Guillotine windows appeared on the second and third floors, while banded windows were used on the basement floor (Figure 3.19).

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<sup>247</sup> BOA HHd. 27084 1316.Ş.10 (February 21, 1899).

<sup>&</sup>lt;sup>246</sup> Elif Özlem Aydın and Yusuf Utkaner, "Hereke Fabrika-i Hümayun'un Mimari Analizi ve Koruma Önerileri," Gebze Institute of Technology Scientific Research Project Report (2006), 17.



Figure 3.19 Hereke Factory Campus Hospital.

Source: Hereke Factory Archive

The hospital was opened on February 13, 1899. During the opening ceremony, sheep were sacrificed and the factory workers performed prayers.<sup>248</sup> The opening of hospitals for the working poor was a part of the modern social welfare program of the Hamidian regime, and institutions of public health and social relief became widespread during the Hamidian period. The factory's hospital was opened just after the launch of the Hamidiye Children's Hospital (*Hamidiye Etfal Hastane-i Alisi*) in 1899. Additionally, many provincial hospitals for the poor (*gureba hastaneleri*) opened during the nineteenth century; this trend accelerated during the reign of Abdülhamid. The hospitals were in Thessaloniki, Damascus, Izmir, Erzincan, Manastir, Yanya, Malatya, Taşlıca,

<sup>&</sup>lt;sup>248</sup> BOA HH.THR. 293.19. 1316.Z.4 (April 15, 1899).

Alexandropolis, Edirne, Kastamonu, Trabzon, Skopje, Metreviçe, Tripoli, Beirut, Baghdad, Sana'a, Mecca, Medina, and Konya.<sup>249</sup>

Cholera became a major problem during the nineteenth century. For instance, in Istanbul, the first epidemic occurred in 1831, followed by outbreaks in 1847, 1865, and 1893-5. Cholera outbreaks brought along with them quarantines in the provinces. This situation had also a negative effect on commercial life. The Ottomans did not only build hospitals in this era: they also instituted other public health-related regulations, including for the sale of certain types of fruits and vegetables and the filtering of drinking water. <sup>250</sup> Malaria was likewise problematic, specifically in the regions where rice was grown such as Iraq, Eastern Anatolia, Maras, some regions along the coast of Karadeniz, and Thessaloniki. 251 Some cities became the focal point of disease outbreaks because of the swamps (and thus mosquitoes) and from being central travel points. For instance, Baghdad's population regularly suffered from epidemics such as cholera, plague, thyroid, dysentery, variola, and pox.<sup>252</sup> Officials from the Ottoman Empire who had become concerned about societal health participated in various International Health Congresses. <sup>253</sup> More locally, the factory administration became concerned about transmittable diseases that rapidly spread among the factory children staying in the dormitories. A hospital on the factory campus was thus necessary to improve the efficiency of the workforce, to create a

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<sup>&</sup>lt;sup>249</sup> Özbek, Osmanlı İmparatorluğunda Sosyal Devlet, 195-196.

<sup>&</sup>lt;sup>250</sup> For further information, see Nurdan Yıldırım, *14. Yüzyıldan Cumhuriyet'e Hastalıklar Hastaneler Kurumlar* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2014).

<sup>&</sup>lt;sup>251</sup> Chris Gratien, "Pilavdan Dönen İmparatorluk: Meclis-i Mebusan'da Sıtma ve Çeltik Tartışmaları," in *Osmanlı'dan Cumhuriyet'e Salgın Hastalıklar ve Kamu Sağlığı*, eds Burcu Kurt *et al.* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2017), 99.

<sup>&</sup>lt;sup>252</sup> Burcu Kurt, "Osmanlı Doğu Sınırında Kamu Sağlığı ve Siyaset: 19. Yüzyıl Bağdad'ında Hastaneler," in *Osmanlı'dan Cumhuriyet'e Salgın Hastalıklar ve Kamu Sağlığı*, eds Burcu Kurt *et al.* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları, 2017), 151-152.

<sup>&</sup>lt;sup>253</sup> For further information, see: Yıldırım, 14. Yüzyıldan Cumhuriyet'e Hastalıklar Hastaneler Kurumlar.

healthy workforce through health facilities, to improve public hygiene, and to meet the expectations of parents who had entrusted their children to the factory. The factory hospital also offered services to the neighbor villages, while the doctors decided disability retirements.<sup>254</sup>

The factory hospital was located at the campus's core, near to the Ulupinar and next to the production site, dormitories, official's houses, and shops. The central location of the hospital enabled everyone to access to it easily, regardless of whether an accident occurred during or outside of working hours. The doctors lived on the factory campus; they stayed in rooms decorated with factory products, which were provided by the factory administration.<sup>255</sup> The doctors were military doctors; in 1900, for instance, the chief physician was Squadron Leader Diran Bey.<sup>256</sup> Off-campus, the major local hospitals were located in Istanbul, while there was a dispensary in Izmit.<sup>257</sup>

## 3.3 The Rewards System (taltif) and Ceremonies

Gift distribution had already been used for political means by Ottoman sultans and other members of the imperial family for centuries. For instance, the dynasty distributed coins to the poor in ceremonial fashion. However, the Hamidian period was radically different from the other periods in this regard. The Hamidian regime's system of benevolence did not only

<sup>&</sup>lt;sup>254</sup> BOA HH.THR.293.21 1317.s.28; BOA HH.THR 283.19 1330.CA.25.

<sup>&</sup>lt;sup>255</sup> BOA Y.MTV 312.104 1326 C 14.

<sup>&</sup>lt;sup>256</sup> BOA İ. TAL. 00220\_00074\_001 1318 R 22.

<sup>&</sup>lt;sup>257</sup> Nuran Yıldırım, *A History of Healthcare in Istanbul: Health Organizations, Epidemics, Infections and Disease Control, Preventive Health Institutions, Hospitals, Medical Education* (Istanbul, Turkey: Istanbul University and Istanbul 2010 European Capital of Culture, 2010), 231.

include gifts and charity: imperial gifts were meant to deliver particular political messages to the wider public.<sup>258</sup> They had a political role in the manifestation and popular legitimation of the regime, by establishing an intimacy between the sultan and his poor subjects. Imperial philanthropy became a symbolic representation of power, used as a tool to centralize state power in the sultan's hand. Abdülhamid II carried out his system of benevolence through the financial power of the Ministry of Imperial Treasury and Ministry of Imperial Farms.<sup>259</sup>

To reinforce the state's legitimacy, the Sultan applied a set of practices that included the creation or invention of traditions, sometimes enforced by law, that sought to consolidate a new basis for state solidarity within Ottoman society while simultaneously maintaining the public presence of the Ottoman state as a Great Power. <sup>260</sup> Whether new or old, these dramatically transformed social groups, environments, and social contexts through which new devices to ensure or express social cohesion and identity and to structure social relations could be expressed. <sup>261</sup> The invention of tradition, such as reward systems and ceremonies, was meant to reinforce loyalty.

Giving gifts to poor workers, as one of the invented tradition, was not merely a form of endowment but was also intended to secure the worker's fidelity to the Sultan and to his or her job. During the directorship of Hacı Akif Bey, who was appointed in 1884, a

<sup>&</sup>lt;sup>258</sup> Nadir Özbek, "Imperial Gifts and Sultanic Legitimation During the Reign of Sultan Abdulhamid II, 1876-1908," in *Poverty and Charity in Middle Eastern Context*, ed. Michael Bonner *et al.* (Albany, NY: State University of New York Press), 203-202; Nadir Özbek, *Osmanlı İmparatorluğunda Sosyal Devlet: Siyaset, İktidar, Meşruiyet* (İstanbul, Turkey: İletişim Yayınları, 2002), 26.

<sup>&</sup>lt;sup>259</sup> Özbek, "Imperial Gifts," 204-209.

<sup>&</sup>lt;sup>260</sup> Selim Deringil, "The Invention of Tradition as Public Image in the Late Ottoman Empire, 1808 to 1908," *Comparative Studies in Society and History* 35, no. 1 (1993): 26.

<sup>&</sup>lt;sup>261</sup> Eric Hobsbawm and Terrance Ranger, eds., *The Invention of Tradition* (Cambridge, UK: Cambridge University Press, 2012), 263.

rewards system was developed to show appreciation for those working at the Hereke Imperial Factory. 262 Various masters, workers, and officials were awarded medals for their service. In 1895, for example, Elmas, the daughter of the worker Mafrudic, was awarded the medal of industry. 263 In 1896, the Yıldız Palace awarded the masters and teachers at the vocational school—Eftalya, Astasyo, Izmarada and Izaura—with the medal of Fine Arts and Industry (Sanayi-i Nefîse Madalyası). 264 The same year, teachers at the rugweaving workshop—Melek, Sabiha, Arab Fatma, Fahriye and Ümmü Ayşe—were awarded the medal of industry.<sup>265</sup> In 1905, the teachers of the rug-weaving workshop receiving the medal of industry were Eftimya, Despino Yorgaki, Kaliro Hiristo, İstorini Kostanti, Kordili Atmisiye, Hıristo, Rudiye Yani, Vasiliki Yorgaki, Hıris Yanagaki, Panayota Istavraki, Emilya Yorgaki, Anastasya Dimitri, Runi Panayot, Atina Yordanaki, Sarı Astasyo, Zahriya Tanas, Katina Yegor, Polalaili Mevcuoğlu, Anastasya Zaralambo, Anastasya Yani, Anitopi Topoz, Amilya Aleksandro Kalife, and Anastasya Limonci. 266 In 1907, Ferid, an official in the carpet-weaving workshop, and chief artist Tovmas Efendi were awarded the third class Order of Mecidi. 267 In 1907, Şakir, Ali, and Mahmud, who taught at the formal school, were awarded the medal of industry and the fourth class Order of Osmanieh.<sup>268</sup>

The teachers and artists at the workshops were mostly Orthodox Greeks and Armenians. Gifting by the Islamic Sultan stratified the social hierarchy. Gifting the

<sup>&</sup>lt;sup>262</sup> BOA HH. HRK. 35.42 1313.Ca. 18 (November 6, 1895)..

<sup>&</sup>lt;sup>263</sup> BOA İ.TAL.86.90 1313.Ca.1 (October 20, 1895).

<sup>&</sup>lt;sup>264</sup> BOA İ.TAL.94.21 1313.L.22 (April 6, 1896).

<sup>&</sup>lt;sup>265</sup> BOA İ.TAL.58.50 1312.M.22 (July 26, 1894).

<sup>&</sup>lt;sup>266</sup> BOA İ.TAL.365.46 1323.Ra.4 (May 9, 1905).

BOA I.TAL.303.40 1323.Ra.4 (May 9, 1903).

267 BOA İ.TAL.427.23 1325.C.29 (August 9, 1907).

<sup>&</sup>lt;sup>268</sup> BOA HH.THR.374.34 1325.B.4 (August 13, 1907).

masters, officials, and workers was implemented to maintain social order. The appraisal of employees according to their work strengthened social subordination and restored the social bonds of order. In this way, the employees were connected to their work, their loom, their students, and, as such, developed a sense of belonging to the job.

Ceremonies were held during the launch of the buildings. The Ottoman Junior High School on the plant site was opened on August 31, 1900, the same day as the 25<sup>th</sup> anniversary of Abdülhamid taking the throne. During the opening ceremony, sheep were sacrificed, candies and sherbets were distributed to the public, and more than 150 destitute male children, who were workers at the factory and who lived in a nearby neighborhood, were circumcised. The ceremony was then publicized in the newspapers. The imperial paternalism enacted through charitable activities that characterized Abdülhamid's reign thus also included circumcision ceremonies, which had a symbolic meaning for the male child and the father who was responsible for organizing the event. The paternalistic Hamidian autocracy used circumcision ceremonies as displays of royal power. The ceremonies may thus have served to reinforce social identity, to gloss over disharmonies, and/or to buttress the hierarchical position of the authority figures vis-à-vis the general public.

The second constitutional regime changed Abdülhamid's system of benevolence, gift distribution, and charitable institutions.<sup>272</sup> Patriotic activities largely ended after the

<sup>&</sup>lt;sup>269</sup> BOA HH.THR.362.37 1318.Ca.13 (September 8, 1900).

<sup>&</sup>lt;sup>270</sup> Özbek, "Imperial Gifts," 213; Hakan Karateke and Maurus Reinkowski, *Legitimizing the Order: The Ottoman Rhetoric of State Power* (Leiden: Brill Academic Pub, 2005), 49.

<sup>&</sup>lt;sup>271</sup> Karateke and Reinkowski, *Legitimizing the Order*, 49.

<sup>&</sup>lt;sup>272</sup> Özbek, "Imperial Gifts," 204.

dethroning of Abdülhamid II, but philanthropic activities continued with the creation of charitable organizations with the Law on Associations (Cemiyetler Kanunu) in 1909, through which associations could be founded legally during the CUP administration.<sup>273</sup> The Hereke Imperial Factory became the center of attention of Turkish women's associations, prompting public interest in modern trends of national consumption. Employing young Muslim girls in the factory was seen to be important for the factory's transformation process, in terms of the change in labor demographics during the war years. To increase the demand for domestic goods, the Mamulat'ı Dahiliye İstihlak-i Kadınlar Cemiyeti (The Women's Association of Consumers of Domestic Products) was founded in March 1913,<sup>274</sup> opening tailoring workshops in Istanbul where young girls and women were trained in dressmaking and worked for a fee. They obtained their basic materials from the Hereke Imperial Factory. 275 The organization arranged excursions from Istanbul to the Hereke Factory.<sup>276</sup> Muslim girls and women at the factory were the focal point of the organization, which found employment for them at the Hereke Imperial Factory. The members of the organization were then welcomed by the Muslim female workers during the arranged public excursions.<sup>277</sup> The excursions included the participation of the ladies of Istanbul's high society families (sehrimizin kibar ailelerinden kibar misvanından bir çok

<sup>&</sup>lt;sup>273</sup> Before 1909, there were a limited number of women's associations, most of which were founded by Christian and Jewish populations. Nicole A.N.M. van Os, *Feminism, Philanthropy and Patriotism, Female Associational Life in the Ottoman Empire* (Zutphen, Netherlands: CPI Koninklijke Wöhrmann, 2013), 51-68.

<sup>&</sup>lt;sup>274</sup> Serpil Çakır, *Osmanlı Kadın Hareketi* (Istanbul, Turkey: Metis Yayınları, 2011), 100.

<sup>&</sup>lt;sup>275</sup> Serpil Çakır, "XX. Yüzyılın Başında Kadın ve Aile Dernekleri ve Nizamnameleri," in *Sosyo-Kültürel Değişme Sürecinde Türk Ailesi*, Volume III, (Istanbul, Turkey: Ülke Yayınları, 1993). See also: Çakır, *Osmanlı Kadın Hareketi*, 100.

<sup>&</sup>quot;Istanbul Postası: Hereke Fabrika-i Hümayunla cemiyet-i hayriyye arasında bir irtibat var ki bu da cemiyetin fabrikaya mamulatının sürümüne revacına hidmet etmesidir," *Sıyanet* (2 July 1914), 2.

<sup>&</sup>lt;sup>276</sup> Mükerrem Belkıs, "İstihlak-i Milli Kadınlar Cemiyeti Hayriyesinin Herekeye Ziyareti," *Kadınlar Dünyası* (27 September 1913): 6-7.

<sup>&</sup>lt;sup>277</sup> "Istanbul Postası," Siyanet 15, 19 Haziran 1330 (2 July 1914), 2.

hanimlar), as well as members of the organization itself.<sup>278</sup> One might argue that the philanthropic intentions of the women's association in favor of Muslim girls blended with capitalist consumption trends during the war years.<sup>279</sup> One primary goal of the excursions was to introduce the factory's industrially-produced domestic fabrics to female visitors. The visual charm of the industrially-produced local manufactures was not only attributed to a new aesthetic sensibility in the modern world; it also was related to a patriotic sense of the homeland. A sisterhood was constructed around the individual Muslim girls at the factory, the association, and consumers, united around Hereke products as insignia of the national spirit with its new decorum and domestic market.

One dateless document containing a speech made by the organization in the Hereke Imperial Factory, likely during Balkan Wars (1912-1913), crystalizes the multi-pronged facets of the various relationships involved and the process in which Hereke products became cultural signifiers:<sup>280</sup>

When the Turkish Army attacks for victory over the universe, Turkish women, whose children are at their bosoms and daggers at their waists, fight behind the Turkish army and become the comrades of Turkish men; therefore, they hold a share of the supreme glory. Today, Turkish men are faced with a war that overshadows the most dreadful fights begun by the West and the whole Christian world. In this combat, sharp wits and a sense of patriotism will be the bullets that are going to be fired. Thank God, Turkish women today are not condoning this economic war. They rather act as leaders in defending the innocents and the sacred life of the Turks against the World of Christianity, revealing the Christians' lies to the entire world

<sup>&</sup>lt;sup>278</sup> "Istanbul Postası," *Sıyanet* 16, 26 Haziran 1330 (9 July 1914), 2-3; Belkıs, "İstihlak-i Milli Kadınlar Cemiyeti Hayriyesinin Herekeye Ziyareti," 6-7.

<sup>&</sup>lt;sup>279</sup> For the change of the forms of philanthropy see: Amy Singer, "A Mixed Economy of Charity," in *Charity in Islamic Societies* (Cambridge, UK: Cambridge University Press, 2008), 176-216.
<sup>280</sup> This document, in the Center for Islamic Studies Archive (ISAM) archives, is entitled "'Mahsulat-1 Dahiliye İstihlak-i Kadınlar Cemiyeti Hayriyesi Hereke Fabrika-I Hümayunu Ziyareti' başlıklı Türk kadınının Savaş yıllarında aldığı rolü anlatan metin." The same title appears on the original document in Ottoman handwriting. The excursions of the women's association happened more often during the war years. The documents in the journal *Sıyanet* inform us that some excursions concluded with a speech, although they are not included in the texts of *Sıyanet*. This speech must be one of them. The context of the text demonstrates that this was most likely presented during the war years.

when they claim that the West does not discriminate according to religious differences. The organization is a zealous populace, which will animate the women of the Turkish Army to heroic deeds, which will not allow the extinction of the descendants of Ho'elun (*Alangoya*, the mother of Genghis Khan, who was emperor of the Mongol Empire); ...., Tomyris (*Tomrus*, ancient Iranian Massagetae queen from central Asia), the shah of the world..., or Bala Hanim ('the wife of Osman I, the founder of the Ottoman Empire); who comprise the female individuals in this population, who aim at continuing the glory and honor of the Turks. They will prove, if God allows them, in the near future, that there is no difference between the male and the female individuals of this population in terms of valor and honor. Therefore, this supreme organization, ....[will support?] the Turkish hands that are capable of crafting the most marvelous works of the most masterly arts, ...<sup>281</sup>

The ceremonies were turned into didactic speeches over time. The masculine rhetoric, with its rigid dichotomy between the Muslim world and the Christian world, was addressed to the Muslim female workers at the factory. However, this language also characterized the speeches of the women's association to all the workers in the factory, regardless of their religion. Visitors imbued with the "patriotic spirit" (hiss-i vatanperveri) should be aware, according to the article in Kadınlar Dünyası, that the affluence of the country was dependent upon the consumption of local manufactures. The rhetoric of the association also encouraged the factory to find employment for Muslim girls in particular, reflecting the increasingly ethno-religious character of Ottoman ideology during wartime.

## 3.3.1 Imperial Visits and Influences

Since its establishment, the Hereke Imperial Factory was the target of visits by the Sultans, emperors, and ambassadors. Sultan Abdülmecid's first visit to the Hereke Factory was before 1846, on the ship named *Eser-i Cedid*. At the time, the factory was not yet state-

<sup>&</sup>lt;sup>281</sup> "'Mahsulat-ı Dahiliye İstihlak-i Kadınlar Cemiyeti Hayriyesi Hereke Fabrika-I Hümayunu Ziyareti' başlıklı Türk kadınının Savaş yıllarında aldığı rolü anlatan metin." ISAM ZE 86.2413.

<sup>&</sup>lt;sup>282</sup> Mükerrem Belkıs, "İstihlak-ı Milli Kadınlar Cemiyeti Hayriyesinin Herekeye Ziyareti," *Kadınlar Dünyası* (27 September 1913): 6-7.

owned. His second visit was on October 13, 1846. According to the *Takvim-i Vekayi*, Sultan Abdülmecid visited the factory with Hovhannes Dadian, Boghos Dadian, and Karabet, the chief architect of the Imperial Palaces, and examined fabrics weaved from Bursa silk. The Sultan was pleased to see the quality of the products and ordered that the deficiencies of the factory be remedied.<sup>283</sup> During this visit, Sultan Abdülmecid gave silk fabrics and ribbons to military men and state administrators.<sup>284</sup> Records from the time demonstrate that the road and bridge to the factory were built in advance of the royal visit. Abdülmecid visited the factory again in 1848, for a full five days.<sup>285</sup>

In 1863, Sultan Abdülaziz visited the factory, and a new director named Kerim was appointed to run it. <sup>286</sup> During his visit to Sultan Abdülhamid II in Istanbul in 1894, Kaiser Wilhelm II expressed his wish to go to the Hereke Imperial Factory, after seeing the silk cloths and manufactured carpets in the palaces and asking where they were made. <sup>287</sup> The mother of Egypt Khedive Emine Valide Paşa visited the factory in 1894, arriving by train from Haydarpaşa. <sup>288</sup> In October 1898, Kaiser Wilhelm II and his wife, Augusta Victoria, visited the Imperial Factory once again. They also arrived at the factory via train from Haydarpaşa Train Station. A crowd of female workers singing "long live" welcomed them. After they took a rest in the kiosk, which was furnished with the factory's products, they examined the products of the factory. Augusta Victoria stroked the cheeks of the 5-years-old girls. The emperor and the empress were gifted with carpets and prayer rugs, weaved

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<sup>&</sup>lt;sup>283</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 192-193; *Takvim-i Vekayi* (308-24 Za 1262) (11 October 1846).

<sup>&</sup>lt;sup>284</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 193; HHd 556.93a 1262.Za.24

<sup>&</sup>lt;sup>285</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 193-4.

<sup>&</sup>lt;sup>286</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>287</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 137; Apak, Aydınelli, and Akın, *Türkiye'de Sanayi ve Maadin İşletmeleri*, 178.

<sup>&</sup>lt;sup>288</sup> BOA BEO.424.31778 1311.Z.18 (June 22, 1894).

for their palace. The empress collected the names of the twelve female workers who had woven the huge carpet for the palace in order to give them a dowry. The empress also gifted 3 girls named Münevver, Binnaz, and Emine. The royals left the factory by ferry, the empress waving a greeting to the factory workers with a bouquet of flowers given to her by a girl. During their excursion, the landscaping from the station to the filature building was adorned with laurelled arches and the trees were decorated with flags (Figure 3.20).

<sup>&</sup>lt;sup>289</sup> BOA Y.PRK.HH. 30.70 1316.C.5 (October 21, 1898).

<sup>&</sup>lt;sup>290</sup> Türkiye Milli Saraylar Daire Başkanlığı, İki Dost Hükümdar: Sultan İkinci Abdülhamid, Kaiser II. Wilhelm (Istanbul, Turkey: TBMM Milli Saraylar Yayınları, 2009), 132-133.

<sup>&</sup>lt;sup>291</sup> BOA Y.PRK.HH. 30.70 1316.C.5 (October 21, 1898).



**Figure 3.20** Kaiser Wilhelm II and Empress Augusta Victoria's Visit to the Hereke Factory Campus Gardens, 1898.

Source: Istanbul Rare Works Library (90483---0006)

In 1900, the Iranian Shah visited the factory after a new rug-weaving workshop was constructed.<sup>292</sup> In 1901, the emperor of Germany and a princess visited the factory once more.<sup>293</sup> In 1902, the Iranian Shah also visited the Imperial Factory once more.<sup>294</sup> In 1905, the counselor of the German Embassy, Von Borman, and the counsellor of Italian Embassy,

<sup>&</sup>lt;sup>292</sup> BOA HH.HRK.45.28 1318.C.24 (October 19, 1900).

<sup>&</sup>lt;sup>293</sup> BOA HH.THR.305.31 1320.Za.24 (February 22, 1903).

<sup>&</sup>lt;sup>294</sup> BOA HH.THR.293.27 1318.L.27 (February 17, 1901).

Marchino, visited Hereke Factory.<sup>295</sup> In 1907, an Iranian ambassador visited the factory, bringing some books to the drawing office as a gift.<sup>296</sup> Archduchess Gisela of Austria visited the factory in 1908 and was gifted with carpets, rugs, and cloths.<sup>297</sup> Sultan Reşat visited in 1910, arriving on his yacht, *Ertuğrul*.<sup>298</sup> After lunch, he visited the workshops and examined the new machines placed in the factory. The Sultan gifted the grand vizier and the palace officials with prayer rugs and carpets, and distributed gifts to the factory workers.<sup>299</sup> In the photograph taken in 1910, during the visit of Sultan Reşat, the female and male factory workers, the little girls and boys, stood in homage (*istade-i mevki-i ihtiram*) of Sultan. There is a separation between the Muslim girls, the non-Muslim girls, and the boys. The Muslim girls are unified with white scarfs, while the boys are unified with fezzes. Non-Muslim girls are placed on the right corner of the photograph (Figure 3.21). All children clapped their hands awaiting the Sultan's approach on his yacht. In 1910, the kings of Bulgaria and Serbia visited the Hereke Imperial Factory,<sup>300</sup> and in 1914, the Russian ambassador also visited by ship.<sup>301</sup>

<sup>&</sup>lt;sup>295</sup> BOA DH.MKT.1012.24 1323.B.29 (September 29, 1905).

<sup>&</sup>lt;sup>296</sup> BOA Y.PRK.EŞA. 51.57 1325.L.28 (December 4, 1907).

<sup>&</sup>lt;sup>297</sup> BOA Yıldız Mtv. 310.23 1326.R.23 (May 25, 1908).

<sup>&</sup>lt;sup>298</sup> Bulus, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 196.

<sup>&</sup>lt;sup>299</sup> (Simavi) Başmabeynci Lütfi Bey, *Osmanlı Sarayının Son Günleri* (Istanbul, Turkey: Hürriyet Yayınları Tarih Dizisi, 2006), 2.

<sup>&</sup>lt;sup>300</sup> BOA HH.THR.283.1 1328.R.6 (April 17, 1910).

<sup>&</sup>lt;sup>301</sup> BOA HH.THR.1238.1 1332.R.9 (March 7, 1914).



**Figure 3.21** Children Factory workers standing in homage of Sultan Reşat, 1910. *Source: Nazum Demirtaş Personal Archives* 

Over the years, then, the factory campus was the site of many Sultans', emperors', and ambassadors' visits. For these visits, imperial mansions, pavilions, and dining halls were constructed. In 1845, for example, an imperial mansion (kasr-1 Hümâyûn) was built at Hereke.<sup>302</sup> This mansion was destroyed during the Greek occupation of 1922.<sup>303</sup> Hovhannes Efendi from the Imperial Treasury wrote to Sultan that a permanent kiosk should be constructed on the factory's waterfront to honor visitors, since the quickly constructed sheds that appeared for each visit were inappropriate.<sup>304</sup> Finally in 1898, a

<sup>302</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>303</sup> BOA DH.KMS.62.50 1341 M 28. (September 20, 1922)

<sup>&</sup>lt;sup>304</sup> Türkiye Milli Saraylar Daire Başkanlığı, 135.

picturesque pavilion on Izmit Gulf was built for the visit of the Kaiser Wilhelm II and empress Augusta Victoria (Figure 3.22). It was installed in forty-eight hours according to popular accounts and in three weeks according to *Servet-i Fünun* magazine. In the end, the prefabricated mansion was produced in Istanbul over three weeks and shortly after was installed at Hereke. The building was designed and constructed under the control of Hovsep Kalfa (*Oseb Kalfa tarafından tanzim olunan keşif ve resim mucebince*) the consisted of two square plans adjacent to a main rectangular plan, containing an entrance, a hall, and a room. Both sides of the main part of the hipped roof are domed spaces. The timber structure's roof is covered with lead sheath. Carpets, rugs, silk upholstery, and curtains woven at the Hereke Imperial Factory were used for furnishings. The prefabrication is verified by the grooved joinery evident on-site. The pavilion comprises a main central unit housing a greeting area with doors leading axially from the small dock to the factory, flanked by two units topped with parabolic metal sheaths (Figure 3.23).

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<sup>&</sup>lt;sup>305</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 137.

<sup>&</sup>lt;sup>306</sup> BOA HH.THR.293.9 1315.Za.15 (April 7, 1898).

<sup>&</sup>lt;sup>307</sup> Türkiye Milli Saraylar Daire Başkanlığı, 137.

<sup>&</sup>lt;sup>308</sup> Aydın and Utkaner, "Hereke Fabrika-i Hümayun'un Mimari Analizi ve Koruma Önerileri," *Gebze Institute of Technology Scientific Research Project Report* (2006), 17.

<sup>309</sup> Aydın and Utkaner, "Hereke Fabrika-i Hümayun'un Mimari Analizi ve Koruma Önerileri," 17.

<sup>&</sup>lt;sup>310</sup> Peter Hewitt Christensen, "Architecture, Expertise and the German Construction of the Ottoman Railway Network, 1868-1919," (PhD Dissertation, Harvard University, MA, 2014), 474-475.



**Figure 3.22** Kaiser Wilhelm II and Empress Augusta Victoria at the Entrance of the Hereke Pavillon.

Source: Istanbul University Rare Works Collection (90483---0005)



**Figure 3.23** Hereke Pavilion (left) and Dining Hall (right).

Source: "Hereke Fabrika-i Hümâyûnu Ziyaret." ("Visit to the Hereke Imperial Factory") Servet-i Fünun 29 June 1322 (12 July 1906), 216.

According to Peter Hewitt Christensen, the Hereke Pavilion had a symbolic connection to Yıldız. The construction and use of the Yıldız Şale and Hereke Pavilion are both directly related to Wilhelm's visits to Istanbul in 1889 and 1898, and clearly demonstrate Abdulhamid's desire to impress Wilhelm and to generate his approval through architecture. The Yıldız grounds had developed originally as private imperial hunting grounds until 1880, when the decision was taken to move the imperial seat to the higher Yıldız grounds where the Sultan could greatly expand the campus, employing the esteemed Balyan family of architects and later D'Aronco. The architectural centerpiece was the

Sultan's residence, known as the *Şale Köşk*. The word "Şale" derived from the Turkish transliteration of the German word "Chalet," which is reflected in the pavilion's extensive use of wood and bargeboard and its steeply pitched roof (Figure 3.24). The directive to build in this style seems to have been independent of the Sultan's desire to appeal to anyone in particular, and to simply have been a matter of personal taste. However, the choice was vindicated when the residence was used to host Wilhelm II on his visits. <sup>311</sup>

Even though it had no pitched roof, the Hereke Pavilion also reflected chalet architecture through its extensive use of wood. The parabolic metal sheets on the domes, according to Christiensen, create an oriental effect. However, one might also argue that the form of the domes is far from an imitation of oriental structures: rather, they directly reflect sixteenth century Ottoman garden kiosks.

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<sup>311</sup> Christensen, "Architecture, Expertise and the German Construction of the Ottoman Railway Network," 474-475

<sup>&</sup>lt;sup>312</sup> Christensen, "Architecture, Expertise and the German Construction of the Ottoman Railway Network," 474-475.



**Figure 3.24** Kiosk at the Yıldız Palace. *Source: Yıldız Albums, Abdülmecid Efendi Library, (02-20)* 

A dining hall was constructed in 1898 and repaired in 1900.<sup>313</sup> The dining hall is just nearby the Hereke pavilion and has a picturesque façade on the Izmit Gulf.

<sup>&</sup>lt;sup>313</sup> Malumat, Teşrinisani 1314, no: 159, 777 (November, 1898); BOA HH.THR.293.21 1317.Ş.28 (January 1, 1900).

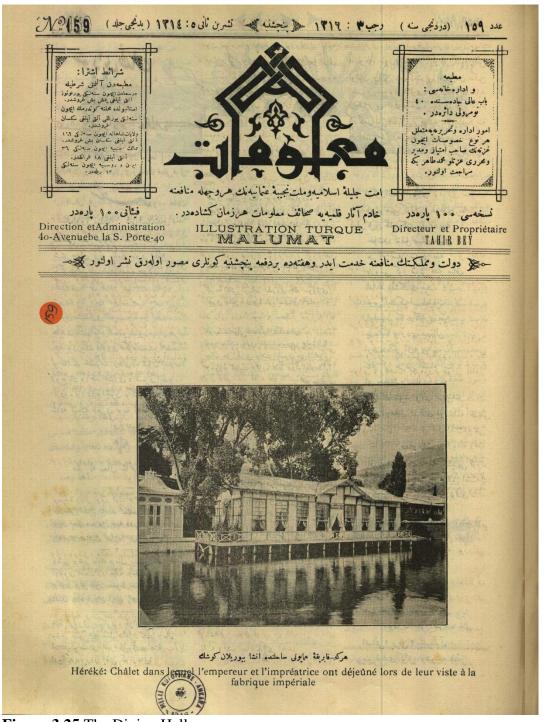


Figure 3.25 The Dining Hall.

Source: Malumat, Teşrinisani 1314, no: 159, 777 (November, 1898)

The south façade of the building has a symmetrical design (Figure 3.25). The building has a pitched roof. The timber building was constructed on the water raised up on timber columns. The structure has a terrace surrounded by three façades. It is apparent that this structure was also inspired by chalets in Yıldız. The pool, the cascades, and the grottos on the northern façade also show an emulation of the landscape at the Yıldız Palace (Figure 3.26, 3.27).



Figure 3.26 The Pool, Cascade, and Grotto of Hereke Pavilion.

Source: Han Halı Archive

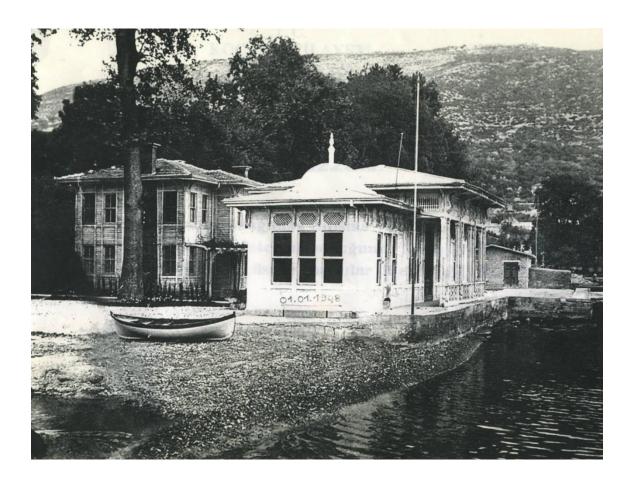


**Figure 3.27** The Cascades and Grottos in the Gardens of Yıldız Palace. *Source: Yıldız Albums, Abdulmecid Efendi Library (02-24)* 

Finally, in 1900 a pavilion for overnight imperial guests was constructed on the waterfront.<sup>314</sup> This pavilion has a rectangular plan and two floors (Figure 3.28). The structure in the wooden carcass system ends in a curbed roof. There are guillotine windows on the ground floor. The façade is designed symmetrical. On the north-west and south-east façades, there are bays.<sup>315</sup>

314 BOA HH.THR.293.21 1317.Ş.28 (January 1, 1900).

<sup>&</sup>lt;sup>315</sup> Aydın and Utkaner, "Hereke Fabrika-i Hümayun'un Mimari Analizi ve Koruma Önerileri," 23-27.



**Figure 3.28** Hereke Pavilion (right) and Pavilion for Overnight Guests (left). *Source: Nazum Demirtaş Personal Archive* 

# 2.3.2 Social Security and Charity for Pensioners

The Tanzimat Reforms introduced a modern social security system for civil servants and the military. It became possible for workers to benefit from this system in the 1870s. Workers in state enterprises began to benefit from institutionalized retirement funds: first the workers of the Imperial Dockyards in 1874, then by 1893, the workers of the Ottoman Sea Line Company (*Şirket-i Hayriye*) in 1893, and finally by 1904, the workers of the Hijaz

Railway Company. In 1913, a worker's fund *(amele sandığı)* opened in Istanbul covering more than 2,000 workers.<sup>316</sup>

The category of poverty is expressed through many different concepts in Ottoman documents. For example, just as poverty could be characterized as those without property, it could also be applied to those women and children who were unable to get by as the result of the loss of income following a breadwinner man's death. Just as these people could be "of the trade of almswomen", they could also be the wife of a civil servant or general. The families of men killed, wounded, or disabled in war, as well as veterans, were also considered to be living in poverty, as they were seen to be deserving of help from the state. Outside these categories, orphans, widows, and pensioners were protected by orphan and widow benefits (eytam ve eramil maaşları) and protection from the community chest (tekaüd sandığı). In the early nineteenth century, a system of retirement was developed for the military, commercial, and intellectual classes as well as benefits for widows and orphans. 317

At the Hereke Imperial Factory, a retirement fund was founded in 1895 to provide income when workers retired and to help orphans and widows left behind when male workers died. The fund was not only for the benefit of the elderly, widows, and orphans, but also to repay the cumulative payments made by female workers, who retired when they got married. <sup>318</sup> For instance, the retirement fund put the widow and the orphans of Yorgaki Efendi, the factory's artist, on a stipend in 1900. <sup>319</sup> In addition, girls who worked for fifteen

<sup>&</sup>lt;sup>316</sup> Yıldırım. *Osmanlı'da İşçiler (1870-1922)*, 309.

<sup>&</sup>lt;sup>317</sup> Özbek, Osmanlı İmparatorluğunda Sosval Devlet, 49-51.

<sup>318 &</sup>quot;Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

<sup>&</sup>lt;sup>319</sup> BOA ŞD. 983.88 1318.Ra.22 (July 20, 1900)

years at the factory retired when they got married.<sup>320</sup> In 1915, the retirement fund helped the impoverished widow and orphan of Mustafa Ağa, the master of the bobbin workshop, after his death.<sup>321</sup> The workers could also borrow money from the fund, which was financed by the deduction of four percent from the workers' salaries.<sup>322</sup>

During Abdülhamid II's reign, it became illegal for officials to accept gifts or to collect fees in return for the provision of services. A pension system was founded at the Hereke Imperial Factory, with the intention of ensuring the loyalty of workers to their work and increasing their trust in the regime. The introduction of schemes to protect family members after the death of a worker also increased their loyalty to their work. The families of workers benefited from schools and hospitals, they were included in social security schemes, and when necessary they could take a loan from these schemes. The workers were thus sheltered by the factory, which increased their sense of belonging to their own work. The factory, which had initially found it difficult to keep its workforce, thus presented its workers with a welfare system. The transition from traditional forms of help to a social security system led to the longer and more sustainable welfare for the workers.

## 2.4 Outburst Management Policy: the Strike

On October 6, 1908, while carpenter Karnik and Hacı Hasan were working on the rugweaving looms, Köse Hacı Ahmed from Demirci, with the encouragement of carpenter Lazari, threatened the workers near the railway, yelling: "leave this work, otherwise you

<sup>322</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası."

<sup>&</sup>lt;sup>320</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

<sup>&</sup>lt;sup>321</sup> BOA HH.THR.1238.60 1334.C.26 (April 30, 1916).

<sup>&</sup>lt;sup>323</sup> Karateke and Reinkowski, *Legitimizing the Order*, 215.

will get in trouble!" (işi terk ediniz yoksa başınıza bela gelir!). The aforementioned workers, along with the workers in the drawing office, stopped working. The eleven strikers prevented other workers from doing their jobs and eventually convinced them to leave their duties. During the day, the strikers spent their time in the coffee shop. Workers who commuted from Tavşancıl received three loaves of bread, even though they were allowed to consume only one each day. Then, the administration made the decision that they would not distribute bread to the striking workers. On the evening of October 6, 1908, the workers of Hereke Imperial Factory mobilized. According to the records, the workers said that if they did not receive their wages within two days, they would not let officials and female workers enter the factory. The administration of the factory was concerned that this situation would create trouble amongst the young working Greek Orthodox girls. <sup>324</sup> Since the number of police was inadequate, military forces from Istanbul were sent to Hereke Imperial Factory to mitigate the mobilization.<sup>325</sup> On October 22, the workers returned to their work after Ali son of Hasan and Hüsnü son of Mesud were sent to Istanbul as representatives to convey the workers' demands. 326

What was the reason for this strike? Actually, this situation was a part of a large wave of strikes. On July 24, 1908, Abdülhamid II had announced that the Empire would be administered once again according to the 1876 Constitution after 30 years of absolutist monarchy. The "Declaration of Freedom" (*İlan-ı Hürriyet*) gave rise to a wave of demonstrations and strikes all across the Ottoman Empire.<sup>327</sup> The 1908 constitutional

<sup>&</sup>lt;sup>324</sup> BOA DH.MKT.2625.34 1326.N.11 (October 7, 1908).

<sup>&</sup>lt;sup>325</sup> BOA DH.MKT.2625.34 1326.N.11 (October 7, 1908); BOA ZB.622.171 1324.Te.8 (October 21, 1908); BOA ZB.622.178. 1324. Te.11 (October 24, 1908).

<sup>&</sup>lt;sup>326</sup> BOA DH.MKT.2637.75 1326.N.26 (September 23, 1908).

<sup>&</sup>lt;sup>327</sup> Yavuz Selim Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," in *Osmanlı'dan Cumhuriyet Türkiye'sine İşçiler, 1839-1950*, ed. Donald Quataert *et al.*, trans. Cahide Ekiz (Istanbul,

announcement opened the way for a relative atmosphere of freedom to emerge in the country. 328

The estimated number of workers across the Ottoman Empire was 250,000 in 1908.<sup>329</sup> The wave of strikes in 1908 was an outburst in response to pre-1908 atmosphere of repressions and capitulations.<sup>330</sup> First, they were a reaction to the oppressive working conditions of the Hamidian period. Secondly, the focus of the strikes was wage issues. A fifteen percent increase was gained by the workers during the 1908 strike wave. The first reaction of the state to the strikes was to intensify security in the factories with soldiers, police, and gendarmes.<sup>331</sup> (For the some of the plants and companies, whose workers went on strike in 1908, see Appendix A.)

There had been strikes in the nineteenth century as well, but the 1908 strike was the largest to date. The first strike in the Ottoman Empire had been held by the mineworkers in the Zonguldak Coal Mine in 1863.<sup>332</sup> The number of registered strikes between 1872 and the Declaration of Freedom on July 24, 1908 was fifty.<sup>333</sup> Before 1908, there had been

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Turkey: İletişim Yayınları, 1998), 27-55. Just after the Declaration of Freedom, the Committee of Union and Progress (CUP) published an announcement that people should stop their demonstrations and return to work; however, the demonstrations and strikes continued until 1909. With the Declaration of Freedom, workers became more visible in the atmosphere of relative freedom in which the principles of "freedom, equality, brotherhood, justice" were pronounced. In the short period of two and a half months, tens of thousands of workers from almost all professions began their resistance and trade union organizing began taking place on a nationwide scale. The CUP, which hoped at first that the rebellion against Abdülhamid's time of repression would strengthen and win over the masses, welcomed the strikes. Zafer Toprak, *Türkiye'de İşçi Sınıfı: 1908-1946* (Istanbul, Turkey: Tarih Vakfı Yurt Yayınları), 44. However, the Ottoman Strike Law passed by the CUP in 1909 effectively banned strikes in workplaces serving the public sector, arguing that these workplaces had to keep working for the public good. Zafer Toprak, "1909 Tatil-Eşgâl Kanunu Üzerine," *Toplum ve Bilim*, sayı 13, Bahar 1981, s. 141-156.

<sup>&</sup>lt;sup>328</sup> Yıldırım, *Osmanlı'da İşçiler*, 1870-1922, 359-230.

<sup>&</sup>lt;sup>329</sup> Karakışla, "The 1908 Strike Wave in the Ottoman Empire," *Turkish Studies Association Bulletin* 16, no. 2 (1992): 153-177.

<sup>&</sup>lt;sup>330</sup> Karakışla, "The 1908 Strike Wave in the Ottoman Empire," 153-177; Toprak, *Türkiye'de İşçi Sınıfı:* 1908-1946, 44.

<sup>331</sup> Karakısla, "The 1908 Strike Wave in the Ottoman Empire," 153-177.

<sup>332</sup> Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," 27-55.

<sup>333</sup> Karakışla, "The 1908 Strike Wave in the Ottoman Empire," 153-177.

little if any unionism.<sup>334</sup> Trade unions and strikes were outlawed by the Police Regulation of 1845, which was a direct translation of the French Police Law of 1800. 335 The first workers' organizations were charitable or cultural associations rather than being a sort of trade union.<sup>336</sup> Among these organizations were the Italian Operaja Association founded in 1866, the Friends of Labor (Emek Dostları) founded in 1866, and the Pro-Workers Association (Ameleperver Cemiyeti) founded in 1871. These associations were established by foreigners and non-Muslim bourgeois society living in Istanbul to help the needy and poor workers.<sup>337</sup> The first workers' organization, which had true sense of classconsciousness, was secretly established by the Armory Factory workers in 1894 under the name Ottoman Labor Association (Osmanlı Amele Cemiyeti). The founders of the committee were exiled when the authorities learned of the committee's activities, which had already gotten in contact with the Young Turks in Europe. The second attempt of the committee members to revive the association in 1902 also failed. In 1908, the Ottoman Labor Association was reorganized under the name of the Union of Ottoman Industrial Development (Osmanlı Terakki-i Sanayi Cemiyeti). 338

The workers mostly demanded higher wages during the 1908 Strike Wave. Other demands included reduced working hours, paid annual vacation, paid weekends, and extra pay for extra work.<sup>339</sup> In addition, the workers demanded sanitary conditions in working spaces. For instance, better air circulation in their workplaces, clean drinking water, repair

<sup>&</sup>lt;sup>334</sup> Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," 27-55.

<sup>335</sup> Karakışla, "The 1908 Strike Wave in the Ottoman Empire," 153-177.

<sup>336</sup> Karakısla, "Osmanlı Sanayi İsci Sınıfının Doğusu, 1839-1923," 27-55.

<sup>337</sup> Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," 27-55.

<sup>&</sup>lt;sup>338</sup> The union was abolished in 1909 after the establishment of the Strike Law (*Tatil'i Eşgal Kanunu*) and founded again in 1910 under the name Ottoman Artisans Association (*Osmanlı Sanatkaran Cemiyeti*). Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," 27-55.

<sup>339</sup> Karakışla, "The 1908 Strike Wave in the Ottoman Empire," 161.

and cleanup of the water-closets, and defined maximum number of personnel in workshops were demanded by the workers at the Kavala Tobacco Monopoly. They also demanded a reduction in their working hours; the Kavala Tobacco Monopoly workers offered to work eight hours per day during the winter and nine hours per day during the summer. In the Hereke Imperial Factory case, it was clear that the workers were not receiving their wages regularly. In fact, this had been the case since the factory had been established. Even in 1861, the workers at the Hereke Imperial Factory were petitioning for their wages. Not only the Zeytinburnu and Hereke plants were in miserable financial condition; most workers in the state factories had not been paid for nine months and they were complaining loudly. In 1867, the wages were still only being paid in part. The workers stated that if the planned cuts took place, they would leave their jobs immediately.

### 2.5 Conclusion

The Hereke Imperial Factory began as a relatively simple operation but ended up as an extensive campus that offered many social security features. The main reason underlying this shift was the persistent difficulty in attracting and maintaining the workforce. Consent was an issue for maintenance of the workforce. Without consent, the factory, in its early years when there was only the filature and velour workshop, employed orphans and enslaved children, which was followed by the conscription of children from Anatolia. With the foundation of the carpet factory, migrant families and commuting workers were invited

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<sup>&</sup>lt;sup>340</sup> Karakışla, "Osmanlı Sanayi İşçi Sınıfının Doğuşu, 1839-1923," 35.

<sup>&</sup>lt;sup>341</sup> Kabadayı, "Working for the State in a Factory in Istanbul," 83.

<sup>&</sup>lt;sup>342</sup> Kabadayı, "Working for the State in a Factory in Istanbul," 78.

to work at the factory, and they joined the factory with a willingness to work. The creation of an effective social security net, together with education and health facilities, even if stratified in their provision, and the reward system led workers to identify with the factory. In this point, the children played a key role in transforming from forced labor to free labor. However, the shortage of worker housing resulted in much of the workforce, and especially the children, living in barrack-inspired dormitories. These dormitories enabled the standardization of the workforce and the creation of the "ideal worker" whose life became entirely regulated. The ideal workers were repaid with ceremonies, recreational facilities, and social institutions. However, the paternalist system eventually burst, causing a strike at the factory because of the poor living standards and low wages.

#### **CHAPTER 4**

### MANAGEMENT OF SCHOOL

#### **4.1 Vocational Education**

The Ottoman Empire's first industrial schools, which focused on arts and crafts education for poor and destitute children and were based on European models, appeared as part of the Empire's modernization efforts of the later nineteenth century. Empire officials created an industrial network with these schools and workshops, and Hereke Imperial Factory played a key role in this network with its teaching methods. The shift to industrial schools caused an upheaval in existing artisanship and craftsmanship practices, as new relationships developed the factory and small workshops and schools.

# **4.1.1 Emergence of Industrial Schools**

The first prototypes of industrial schools in the Ottoman Empire emerged during the Tanzimat reform period as part of the broader modernization process; they then evolved into full time schools under a special decree regulating technical education. In the late nineteenth century, as the number of industrial school students, who were mostly orphans and poor children, increased, the schools gained their own buildings and other technical facilities. The vocational education movement first appeared in Great Britain as part of a larger concern for aesthetical production. While local arts and crafts schools were

<sup>&</sup>lt;sup>1</sup> Mehmet Ali Yıldırım, "Tanzimat Döneminde Sanayi Mektebi (1868-1876)," in *Dersaadet Sanayi Mektebi: Istanbul Sanayi Mektebi (1868-1926)* (Istanbul, Turkey: Kitabevi Yayın, 2013), 9-64; Yaşar Semiz and Recai Kuş, "Osmanlıda Mesleki Teknik Eğitim: İstanbul Sanayi Mektebi (1869–1930)," *Selçuk Üniversitesi Türkiyat Araştırmaları Dergisi* 15 (2004): 275–95.

<sup>&</sup>lt;sup>2</sup> Rosalind Blakesley, *The Arts and Crafts Movement* (London, UK: Phaidon Press, 2006), 12-13.

becoming popular, Mechanics' Institutes began to expand beyond just science and mechanical education to also offer lectures about ornamentation, figures, landscapes, fine arts, and antiques.<sup>3</sup> As it spread into Europe and the Ottoman Empire, though, the movement did not share the anti-industrial sentiment that had motivated British artists and craftsmen. Instead, artists, craftsmen, and designers saw modernity as an extension of industrial developments, so that industrial design became a major concern in their work.<sup>4</sup> Meanwhile, industrial schools in the Ottoman Empire covered arts and crafts education in their curriculum alongside the development of modern industrial skills. The arts and craft schools in the Ottoman Empire reflected more the German style, and focused on weaving, textiles, carpentry, photography, cabinetwork, shoemaking, bookbinding, and agriculture<sup>5</sup> (Figure 4.1). They were also centered in particular on developing the skills of poor children in urban and rural areas.

<sup>&</sup>lt;sup>3</sup> Stuart MacDonald, *The History and Philosophy of Art Education* (Cambridge, UK: Lutterworth Press, 2004), 38.

<sup>&</sup>lt;sup>4</sup> Katalin Keseru, "The Workshops of Gödöllő: Transformations of a Morrisian," *Journal of Design History* 1, no. 1 (1988): 1-23; Rosalind Blakesley, "Escaping the Inexhaustible Mines of Bad Taste," in *The Arts and Crafts Movement* (London, UK: Phaidon Press, 2006), 11-26.

<sup>&</sup>lt;sup>5</sup> Semiz and Kuş, "Osmanlıda Mesleki Teknik Eğitim," 272-95.



**Figure 4.1** Sivas Vocational Orphanage. *Source: Servet-i Fünun, 6 Temmuz 1322 (19 July 1906) no. 795, 229* 

The story of Ottoman vocational schools began with a proposal from an ambassador, Sadık Rıfat Paşa, after his trip into Vienna in the 1830s.<sup>6</sup> One could argue that he was attracted by the schooling system of the Gewerbeschule (the School of Trade and Industry), which was first opened in 1821 to provide instruction in mechanics and chemical-technical subjects to handworkers and manufacturers.<sup>7</sup> The school system—actually rooted in the Swiss Pestalozzian industrial education—was originally planned to meet industrial conditions which existed in places where factory systems had not yet developed; in other words it was based on the conditions of domestic industries and

<sup>&</sup>lt;sup>6</sup> Semiz and Kuş, "Osmanlıda Mesleki Teknik Eğitim," 272-95.

<sup>&</sup>lt;sup>7</sup> Timothy Lenoir, "Revolution from Above: The Role of the State in Creating the German Research System, 1810-1910," *The American Economic Review* 88, no. 2 (1998): 22-27.

handicrafts that prevailed until the beginning of the nineteenth century.<sup>8</sup> At this time, industrialized nations began to compete for a share of the global trade in industrial products that were often created through the labor of the poor; this competition included efforts to discover information about each other's industrial development, including their social, cultural, and educational systems. Like its European counterparts, the Ottoman Empire actively took part in this competitive process.

Sadık Rıfat Paşa (1807-1857) reported on his observations of European practices while he was working as an ambassador in Vienna between 1836-1838. He noted that both male and female children about 5-6 years old were registered in neighborhood schools to learn reading and writing. At the age of 12 years old, they were enrolled into state academies to specialize in whichever artistic or industrial fields they showed talent. Students were trained in science and industrial knowledge in boarding-style "regulation schools" (terbiyehane). After graduation, the students were educated in colleges devoted to politics, medicine, music, and military/navy. Sadık Rıfat Paşa believed that the Ottoman Empire should pay attention to scholars and open schools to increase the merit of its children. He thought that a centralized system of public schooling and schools specialized in handicrafts and industry should be founded. Every kind of charitable activity should be focused on discipline and the regulation and prosperity of the public (terbiye-i millet ve ma'muriyet-i memleket). To Sadık Rıfat Paşa, this change in approach was

<sup>&</sup>lt;sup>8</sup> S. Chester Parker, "Pestalozzian Industrial Education for Juvenile Reform," *The Elementary School Teacher* 12, no. 1 (1911): 8-20.

<sup>&</sup>lt;sup>9</sup> "Mehmed Sadık Rıfat Paşa, "Merhumun Viyana'da İbtidaki Sefaretinde Avrupa Ahvaline Dair Yazdığı Risale," in *Müntebat-ı Asar-ı Rıfat Paşa* (Istanbul: Tatyos Divitciyan Matbaası 1290 H/1873): 1-12. Sadık Rıfat Paşa was appointed as Viennese ambassador in 1836 for 2 years. See Yaşar Semiz, "Sadık Rıfat Paşa (1807-1857) Hayatı ve Görüşleri," *Türkiyat Araştırmaları Dergisi* 1 (1994): 135-144.

Mehmed Sadık Rıfat Paşa, "Merhumun Viyana'da İbtidaki Sefaretinde Avrupa Ahvaline Dair Yazdığı Risale," 1-12.

necessary to ensure that the revenues of handicraft and industry could be increased.<sup>11</sup> The booklet he wrote, in which he introduced an ethical framework for children, claimed that children could become morally superior by making good use of their time through ingenuity and art, rather that wasting their time with idleness and games with no purpose (faidesiz oyunlar). A child, according to Sadık Rıfat Paşa, should go to school everyday and should engage with ingenuity, art, trade, and crafts for the public welfare.<sup>12</sup>

The first vocational school, named a vocational orphanage (*ıslahhane*), was launched in 1863 for orphans and destitute children in Niš. <sup>13</sup> A common statute for prospective vocational orphanages (*Vilâyât Islahhâneleri Nizâmnâmesi*) was based on the one prepared by Governor Midhat Paşa for *ıslahhane*s in the province of Danube. This regulation, which was sent to other provinces on 21 June 1867, ordered the establishment of an *ıslahhane* for vagrant orphans and destitute children in each province. <sup>14</sup> Education in these schools consisted of both theoretical and practical components. A child learned to read and write, and was educated in moral knowledge and customary practices in a few months. Theoretical courses focused on Islamic knowledge, literature, writing, and accounting. <sup>15</sup> Positive sciences were also in the curriculum. <sup>16</sup> Later, Arabic and Persian languages were also included in the curriculum. The Muslim and non-Muslim students received same courses in Turkish (if the non-Muslims knew Turkish. If not, they were

<sup>&</sup>lt;sup>11</sup> "İdare-i Hükümetin Bazı Kavaid-i Esasiyesini Mutazammın Rıfat Paşa Merhumun Kaleme Aldığı Risale," in *Müntehabat-ı Asâr-ı Rıfat Paşa* (Istanbul: Ali Bey Matbaası, 1293 H/1877): 39-64.

<sup>&</sup>lt;sup>12</sup> Mehmed Sadık Rıfat Paşa, *Risale-i ahlak* (Istanbul: m.y., 1288 H/1871), Sf: 2-23.

<sup>&</sup>lt;sup>13</sup> Semiz and Kuş, "Osmanlıda Mesleki Teknik Eğitim," 272-95.

<sup>&</sup>lt;sup>14</sup> Nazan Maksudyan, "Orphans, Cities and the State: Vocational Orphanages (Islahhanes) and Reform in the Late Ottoman Urban Space," *International Journal Middle East Studies* 43 (2011): 493–511.

<sup>&</sup>lt;sup>15</sup> Mehmet Ali Yıldırım, *Dersaadet Sanayi Mektebi: Istanbul Sanayi Mektebi 1868-1926* (Istanbul: Kitabeyi 2013) 33

<sup>&</sup>lt;sup>16</sup> Elif Ekin Akşit, *Kızların Sessizliği: Kız Enstitülerinin Uzun Tarihi* (Istanbul, Turkey: Iletişim Yayınları, 2005), 95.

educated in their own languages.) After formal training in mornings, the students received practical training in workshops in the afternoon.

Vocational orphanage training lasted for five years. If the vocational orphanage did not have a workshop, the trainees received their practical training from local artisans, especially for tailoring and shoemaking. In addition, according to the raw materials and the consumption potential of the region, children were educated in blacksmithing, carpentry, weaving, printing, sewing machine repair, rope making, saddle making, carriage making, dyeing, wickerwork, and leather making. The orphan girls were mostly taught in tailoring. The weaving training was consisted of tapis (muytab), cloth (culha), shawls, and coarse woolen cloth. For the lithograph, students attended bookbinding and typesetting courses. 17 In addition to their theoretical courses and vocational training, children also attended some artistic courses such as music, handicrafts, and drawing. 18 For instance, in the Ruse industrial orphanage, girls took piano lessons. 19 Art lessons were at the core of the curriculum. For instance, many of the courses held a few hours in a week; however, handicraft courses took up to twelve hours per week. The pupils were taught health subjects during their final two years.<sup>20</sup> Some vocational orphanages, such as the Bursa Hamidiye Industrial School, Thessaloniki orphanage, and Izmir vocational orphanage, also had brass bands, an indication of the level of music training that the students received. For Nazan Maksudyan, the establishment of brass bands within these institutions shows that the orphanages (and the orphans themselves) were showcased as part of the Empire's

<sup>&</sup>lt;sup>17</sup> Yıldırım, Dersaadet Sanayi Mektebi, 33-38.

<sup>&</sup>lt;sup>18</sup> Aksit, *Kızların Sessizliği*, 95.

<sup>&</sup>lt;sup>19</sup> Yıldırım, Dersaadet Sanayi Mektebi, 35-36.

<sup>&</sup>lt;sup>20</sup> Akşit, Kızların Sessizliği, 95.

modernization processes.<sup>21</sup> For instance, on 17 January 1875, the opening ceremony of the underground train tunnel between Galata and Beyoğlu in Istanbul included a performance by the industrial school brass brand (Figure 4.2). The photograph taken on that day also shows that the Empire's crafts, the rugs that one might rightly assume were weaved in the industrial orphanages, were also exhibited.



**Figure 4.2** Vocational Orphanage Brass Band during Opening Ceremony of Istanbul's Underground Train on 17 January 1875.

Source: IETT Archive

Meanwhile, military factories such as Tophane and Zeytinburnu took orphans and destitute children and sent them to high school after they had completed three years of primary school education. Those who finished this then worked in industrial classes for five years. The primary school children attended classes for three days a week, and they worked in the factory for three days a week. An industrial class student worked entirely in

<sup>21</sup> Nazan Maksudyan, "Hearing the Voiceless, Seeing the Invisible: Orphans and Destitute Children As Actors of Social, Economic, and Political History in the Late Ottoman Empire," (PhD Thesis, Sabancı University, Istanbul, Turkey, 2008), 244-249.

the factory. A child worked for a total of thirteen years in the military factory and was discharged afterwards.<sup>22</sup>

Thing worked differently at the Hereke Imperial Factory, which was not a military factory, although it did become a subsidiary factory under the directorship of the Military Regime during the war years like other Imperial Factories such as Feshane and Izmit Factory. <sup>23</sup> Girls worked for a total of fifteen years at the Hereke Imperial Factory. When they married, they retired.<sup>24</sup> They children were conscripted on the promise of receiving a vocational education. For instance, a document from 1855 demonstrates that, similar to the employment of Orthodox Greek girls in the Bursa Silk Factory—which was another Imperial Factory founded in the second half of the nineteenth century—there was a requirement for the "use" of thirty Orthodox Greek girls in weaving work at Hereke Imperial Factory (...akmeşe-i nefîsenin nesci hidmetinde dahi otuz nefer rum kızlarının kullanılması lazım gelmiş...). With the approval of their parents, these thirty girls were chosen from among the inhabitants of Karasi (karasi ahalisi), selected according to their chastity and skills. The factory guaranteed the families that they would receive some of their daughters' wages and that the girls' honor and religion would be saved by the factory. The girls received vocational training, according to the document, which also emphasizes that the factory foundation should not be perceived as a scary place.<sup>25</sup> Monsieur Martel's 1885 report also demonstrates that vocational education was a significant factor in

<sup>&</sup>lt;sup>22</sup> Askeri Fabrikalar ve Tarihçesi: Osmanlı İmparatorluğu ve Cumhuriyet Devirlerinde Safahat ve Tekamül (Ankara, Turkey: As. Fb. Press: Ankara, 1940), 59.

<sup>&</sup>lt;sup>23</sup> Önder Küçükerman, *The Rugs and Textiles of Hereke: A Documentary Account of the History of Hereke Court Workshop to Model Factory*, trans. M.E. Quigley-Pınar (Istanbul, Turkey: Sümerbank Publications, 1987), 55-56. Also in Gündüz Ökçün, *Osmanlı Sanayii: 1913-1915 İstatistikleri* (Istanbul, Turkey: Hil Press, 1984), 131-132.

<sup>&</sup>lt;sup>24</sup> Centre for Asia Minor Studies (CAM), Bithynia-Izmit-Hereke B110, 12.

<sup>&</sup>lt;sup>25</sup> BOA MKT.UM.209.56 1272 M 10 (September 22, 1855).

attracting workers to the factory: local workers would be trained since the factory needed workers who had a good command of their vocation (sanatlarına layıkıyla vakıf adamlar).<sup>26</sup> The factory was thus an educational institution, where the pupils were turned into trained craftsmen and craftswomen.

The archival documents show evidence that a technical weaving school was founded in the early years of the factory. In 1843, an Italian teacher named Nikri and an artist named Kandiryani were appointed to the factory. In 1846, a painter from Vienna, Kostemiyani, started to work as the chief-artist at the factory, replacing Kandiryani along with twenty-five to thirty other workers from Vienna. When the teacher Nikri's contract ended in 1847, Kostemiyani was appointed as the teacher, while two workers from Vienna named Eiche and Pilan were assigned as artists. In 1848, the teachers and an artist from Europe were nominated in the new velvet and brocaded workshops.<sup>27</sup> In 1852, Klaiser from Austria took up an appointment as teacher and artist for five years. In 1858, Yorgaki was sent to the factory as artist while Eşref Efendi was appointed as the head teacher (muallimievvel) and Ahmed Ağa was employed as secondary teacher (muallimis sani).<sup>28</sup> These appointments provide evidence of the foundation of a vocational training school at the plant site in the factory's early years.

One might rightly assume that each day at the Hereke Imperial Factory Campus began with a ringing bell: similar to *ıslahhanes*, the Muslim children were called to prayer

<sup>&</sup>lt;sup>26</sup> BOA Y.MTV. 15.7 1301.N.21 (July 15, 1884).

<sup>&</sup>lt;sup>27</sup> The archival materials unfortunately do not provide further information about the artists, not even their full names.

<sup>&</sup>lt;sup>28</sup> HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

while the Christian children went to practice their own religious ceremony. <sup>29</sup> Afterwards, they had their breakfast of soup, then worked until late in the evening. According to Charlotte Lorenz, except for a one-hour lunch break, the factory employees worked from 11am to 11pm. <sup>30</sup> The knotters worked eleven hours per day, except the youngest girls. <sup>31</sup> The commencement of work at 11 am suggests that, as in the *tslahhanes*, the children might have first received education in reading and writing for two hours each day before they started to work. Considering that the capacity of the formal school was limited to 200 students and the fact that there were over 2,000 child laborers, most of the time the reading and writing classes were held right in the workshops.

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<sup>&</sup>lt;sup>29</sup> Each day in a *ıslahhane* also began with a ringing bell: the Muslim children went to perform ablution and pray while the Christian children attended their respective religious ceremony. After their breakfast of soup, the students were educated in reading and writing for 2 hours. Following their courses, they were trained in craftsmanship, such as tailoring, shoe making, printing, and tanning. They worked until the bell rang again at night, around 10:30-11:00 pm. The actual hour depended upon the seasons: it was 10:30 pm during summer, 11:00 or 11:30 pm during the winter. "Islahhanelere Dair Nizamname," in *Vilayetlerin İdare-i Mahsusa ve Nizamatının Suver-i Icraiyesi Hakkında Talimat* (Istanbul: n.p., 1284 [1867]): 193-224. <sup>30</sup> Charlotte Lorenz, "Die Frauenfrage im Osmanischen Reiche mit besonderer Berücksichtigung der arbeitenden Klasse," in *Die Welt des Islams*, Bd. 6, H. 3/4 (Dec. 31, 1918): 72-214, 161-162. <sup>31</sup> Donald Quataert, "The Age of Reforms, 1812-1914," in *An Economic and Social History of the Ottoman Empire: 1600-1914*, ed. Halil İnalcık with Donald Quataert. (Cambridge, UK: Cambridge University Press, 1994), 918.



**Figure 4.3** Akif Bey, Director of the Hereke Imperial Factory, teaching antique carpet production, 1890.

*Source: IRCICA (90453-9)* 

As the photograph titled "Akif Bey, the director of the Hereke Imperial Factory, teaching the features of antique carpets to the artists" (*Hereke Fabrika-i Hümâyûnu müdürü Akif Bey'in antika halıyı ressamlara tarifi*) demonstrates, some training courses were held sometimes in the open air (Figure 4.3). In the photograph, Akif Bey, with the other teachers and pupils, were exploring the antique carpets in front of the carpet workshop. Here, the artists were teachers as well as children. Children examined the old carpets and drew patterns and jigs from the antique carpets. The children learned by examining and by doing.

Male and female laborers worked separately: female workers occupied one knotting room whereas two rooms were allocated to the male workers. Working under the

supervision of old women and dressed in uniform smock frocks, the female worker's ages ranged from four to fifteen.<sup>32</sup> For six days each week, they worked in two shifts: all-day or all-night (the youngest ones could leave the work when they got too tired). <sup>33</sup> On Sundays, they did not work, so some played the barrel organ (laterna) and danced. <sup>34</sup> The workers could take a vacation with one month's pay during the spring. This payment was calculated as the monthly average of their wages over the previous year. 35 The little knotters worked for little pay: their wages ranged from 3 to 10 kuruş (plus free meals), while the salaried masters had earned 400-600 kuruş monthly.<sup>36</sup> Their families also sent meals to their working daughters by boat and the girls sent money back to their families; other times they converted their money into pieces of gold and wore them as a necklace.<sup>37</sup> The students were allowed to go on an outing on the waterfront and in the orchard gardens with their overseers. However, it is also a fact that the girls were occasionally subject to sexual abuse by members of the local police force.<sup>38</sup> The girls worked in the factory for 15 years. When one of them was to be engaged, the father-in-law and mother-in-law come to the plant site and they were given in marriage. When they got married, the factory administration gifted the girls silk fabrics and retired them from work.<sup>39</sup>

The children educated in the factory workshops were also laborers. Yahya Araz has asserted that, throughout the Empire, poor male children worked mostly in the mining

<sup>&</sup>lt;sup>32</sup> Lorenz, "Die Frauenfrage im Osmanischen Reiche," 72-214; BOA HH.THR.293.27 1318.L.27.

<sup>&</sup>lt;sup>33</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmid-Hereke B110*, 12.

<sup>&</sup>lt;sup>34</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmid-Hereke B110*, 12.

<sup>&</sup>lt;sup>35</sup> Lorenz, "Die Frauenfrage im Osmanischen Reiche," 72-214.

<sup>&</sup>lt;sup>36</sup> Quataert, "Age of Reforms, 1812-1914," 918; Lorenz, "Die Frauenfrage im Osmanischen Reiche," 72-214.

<sup>&</sup>lt;sup>37</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmid-Hereke B110*, 12.

<sup>&</sup>lt;sup>38</sup> BOA HR.MKT 88.81 1271 M 16 (October 9, 1854); BOA HR.MKT 85.24 1270 Z 19 (September 12, 1854).

<sup>&</sup>lt;sup>39</sup> Centre for Asia Minor Studies (CAM), *Bithynia-Izmit-Hereke B110*, 12.

industry, while female children were employed in the textile industry. The mechanization programs undertaken in the textile industry facilitated the employment of a low-cost workforce comprised of children and women. <sup>40</sup> An examination of the factory's schooling system records makes it possible to identify some of the children who worked in the factory. On the Hereke Factory Campus, then, there were thus two types of education: formal training provided in the school that was located on the plant site, and vocational training held in the workshops.

### 4.1.2 The Vocational Training in Hereke Factory and Crafting an Empire

The vocational education offered in the Hereke Factory workshops was distinct from the formal training given in the Primary and the Junior High School. <sup>41</sup> The workshops were divided into two sections: the spinning mill (*iplikhane*) and the broadcloth weaving/fullery (*çuhahane*). The spinning mill was composed of a velour workshop (*kemhahane*), a bobbin workshop (*masurahane*), a carpet workshop (*halıhane*), a flannel workshop (*fanilahane*), a dyeing plant (*boyahane*), engine rooms (*makinist dairesi*), and a drawing office (*resimhane*). The fullery was devoted to fez making and broadcloth making. <sup>42</sup> The trainees were taught weaving, knotting, and dyeing. A broadcloth factory was added to the factory

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<sup>&</sup>lt;sup>40</sup> Yahya Araz, "Yoksulluk ve Çocuk Emeği," in *16. Yüzyıldan 19. Yüzyıl Başlarına: Osmanlı Toplumunda Çocuk Olmak* (Istanbul, Turkey: Kitap Yayınevi 284, 2013), 143-144.

<sup>&</sup>lt;sup>41</sup> Charitable endeavors in Europe responded to labor needs while sheltering the needy through industrialization. In the Ottoman context, sheltering the needy coupled with vocational training for industrial production was included on the imperial agenda following excursions to similar European programs. The creation of Ottoman trade schools was first proposed by an ambassador, Sadık Rıfat Paşa, after a visit to Vienna in the 1830s. Beginning in 1863, though mostly during the last quarter of the nineteenth century, trade schools were opened in Niš, Ruse, Sofia, Thessaloniki, Damascus, Diyarbakır, Bursa, Kastamonu, Baghdad, and Konya. Semiz and Kuş, "Osmanlıda Mesleki Teknik Eğitim," 272-95. For further information about vocational training in the management of orphans see Maksudyan, "Hearing the Voiceless-Seeing the Invisible."

<sup>&</sup>lt;sup>42</sup> "Hereke Fabrika-i Hümayun'un Tarz-ı İdaresi," 1918. Hayri Tokay Documents, Edhem Eldem Individual Collection.

in 1903.<sup>43</sup> While this new section was employed in broadcloth, serge, yarn making, and later fez making, the factory continued to produce carpet and textile fabrics.<sup>44</sup>

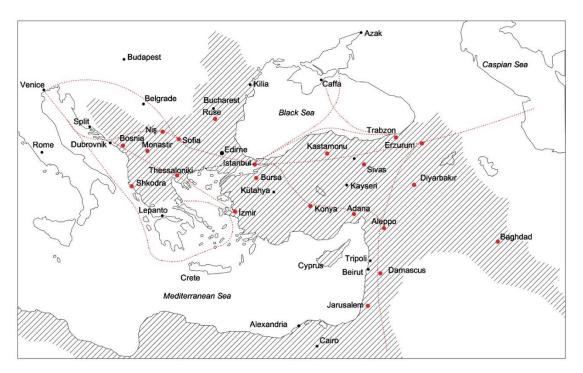
Imperial policy of the second half of the nineteenth century was oriented towards the creation of an industrial network that would demonstrate the Empire's independence in industrial power and that would shape modern Ottoman civilization. The first prototypes of trade and industrial schools in the Ottoman Empire emerged during the Tanzimat reform period as part of an imperial modernization process and later evolved into full time schools after a special decree was issued to regulate technical education. In the late nineteenth century, the students of these schools, mostly orphans and poor children, increased in number, and so were assigned their own buildings and other technical facilities. After the circulation of the Imperial order, many industrial orphanages were opened simultaneously for destitute and orphan children in the provinces. These included Bursa (province of Hüdavendigâr), Sivas (Sivas), Aleppo (Aleppo), Kastamonu (Kastamonu), Izmir (Aydın), Kandiye (Crete), Salonika (Salonika), and Diyarbekir (Diyarbekir). By 1899, there were thirty-four vocational orphanages operating, including in the provinces of Mamuretülaziz, Adana. Konva, Jerusalem, Kosova, Monastir and Janina (Figure 4.4).

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<sup>&</sup>lt;sup>43</sup> BOA HH.THR. 315.28 1321.Za.10 (January 28, 1904).

<sup>&</sup>lt;sup>44</sup> BOA Y.MTV. 313.58 1326.Za.4 (November 28, 1908).

<sup>&</sup>lt;sup>45</sup> Maksudyan, "Hearing the Voiceless-Seeing the Invisible," 200-281. To Maksudyan, the local elite, merchants, large-scale producers, and industrialists could also profit from the training provided in industrial orphanages. The opening of factories and the resulting need for unskilled and cheap labor tied the orphans and orphanages to the industrial production in a very curious way.



**Figure 4.4** Industrial School locations mapped onto Ottoman Trade Routes. *Source: Image produced by the author* 

Across this industrial network, the trade (industrial) schools encouraged modernization and the establishment of factories, and thus provided many qualified staff for the workshops at the Hereke Imperial Factory. It was not just a one-way process: some well-trained masters at the Hereke Imperial Factory were sent to serve in the trade schools. The Hereke Imperial Factory's position of leadership allowed it to promote new techniques of weaving and teaching among other schools and workhouses across the Empire. The industrial schools offered theoretical education and provided some practical knowledge, but generally lacked a factory. The Ottoman education reformists envisioned that each art and industrial school (*Mekteb-i Hiref ve Sanayi*) would have its own small-scale workshop with its own 15-20 horsepower steam engine. Since this was not possible in most places,

<sup>&</sup>lt;sup>46</sup> Sezgin, "Atölyeden Fabrikaya," 214-231.

students trained in industrial schools were sent to Tophane, Tersane, and Zeytinburnu factories for technical knowledge and hands-on training.<sup>47</sup>

Although the state never labelled the school at Hereke Factory Campus as an industrial school or trade school (*sanayi mektebi*), the Factory for all intents and purposed acted as one. Instead, the term "home for manufacturing and art" (*dar-üs sanâ'a*) was used to differentiate its status within the comprehensive organizational context of teaching. The Hereke Imperial Factory provided hands-on training to the trainees. At the factory, the trainees could also practice their art and received scientific technical training in the campus workshops. The education at the Hereke Imperial Factory relied on master-apprentice relationship: the students learned by doing.

To be trained to use the Singer sewing machines, which were introduced to the factory in the 1890s, Behram Efendi of the poorhouse (*dar-ülaceze*) in Istanbul was sent to the Hereke Imperial Factory in 1905. The poorhouse administration wanted to send ten students for vocational training in the use of Singer machines the same year. <sup>49</sup> Karelkeyan Mıdırgıç Efendi came from Sivas with his family a few years before 1896 to receive weaving training. <sup>50</sup> To learn dyeing techniques to improve the silk and wool prayer rugs of Kayseri, Mehmed Efendi and Simon Anastas were sent to the factory for scientific technical training (*fenn-i taallüm*) in 1899. <sup>51</sup> A graduate of Hereke Imperial Factory, Mehmet Galip Efendi, was appointed to Kastamonu Trade School as a teacher of weaving

<sup>&</sup>lt;sup>47</sup> Ethem Paşa, Halil Paşa, Derviş Paşa, Ağaton Efendi, Sarkis Kalfa, and Monsieur Riter Major Gordon, *Report on Art and Industrial Schools of 1863* (Istanbul, 1863); Mehmet Ali Yıldırım, *Dersaadet Sanayi Mektebi: Istanbul Sanayi Mektebi 1868-1926* (Istanbul, Turkey: Kitabevi, 2013), 13-15.

<sup>&</sup>lt;sup>48</sup> BOA DH.MKT.931.42 1322.Z.4 (February 9, 1905).

<sup>&</sup>lt;sup>49</sup> BOA DH.MKT.931.42 1322.Z.4 (February 9, 1905).

<sup>&</sup>lt;sup>50</sup> BOA DH.TMIK.M. 11.57 1314.S.23 (August 3, 1896).

<sup>&</sup>lt;sup>51</sup> DH.MKT.2169.80 1316.L.12 (February 23, 1899), also in Sezgin, "Atölyeden Fabrikaya," 214-231.

in 1899<sup>52</sup> and the director of the poorhouses (*dârü'l-aceze*) visited the Hereke Factory in 1905 to research weaving techniques so that he could apply them in poorhouses. The director of the poorhouses investigated Arabic design techniques to apply them in the poorhouse workshops, which were still producing in the European style.<sup>53</sup> The factory's fame would later lead people from across the Empire and abroad to visit with the intention of learning trade techniques. The director of the Tabriz Carpet Factory, Mehmed Ali Bey, requested to work in the Hereke Imperial Factory in 1906,<sup>54</sup> while students from Tripoli Industrial School were appointed to Hereke Imperial Factory in 1909.<sup>55</sup>

The leading position of the Hereke Imperial Factory among the other industrial schools did not stop there. From the 1890s and throughout the early 1900s, during every month of Ramadan, the Hereke Imperial Factory opened exhibitions in the courtyard of Istanbul Beyazıt Mosque with other Imperial factories, the Tile Works Imperial Factory (*Çini Fabrika-i Hümâyun*), the Imperial Maintenence Factory (*Tamirhâne-i Hümâyun*), the Istanbul Fez Factory, Imperial Maintenance Shop poorhouses (*Dârülaceze*), and industrial schools (*Mekteb-i Sanayi*). The products of the industrial foundations were offered for sale in the sheds and window walls. <sup>56</sup> In the 1900s, every year from May to the end of July, similar incorporated exhibitions were organized, including on the Hereke Factory Campus in 1907 and 1909. <sup>57</sup> The visitors arrived at the exhibition area by

<sup>&</sup>lt;sup>52</sup> BOA DK.MKT.2297.85 1317.N.16 (January 18, 1900).

<sup>&</sup>lt;sup>53</sup> BOA DH.MKT.931.42 1322.Z.04 (February 9, 1905).

<sup>&</sup>lt;sup>54</sup> BOA Y.PRK.AZJ. 50.78 1322.Z.29 (March 6, 1905).

<sup>&</sup>lt;sup>55</sup> BOA DH.MKT. 2868.96 1327.C.18 (July 7, 1909).

<sup>&</sup>lt;sup>56</sup> BOA DH.MKT.571.57 1320 Ca 29 (September 3, 1902); HH.THR.293.7 1315.L.11 (March 5, 1898).

<sup>&</sup>lt;sup>57</sup> İ.HUS.154.105 1325 R.29 (June 11, 1907); DH.MKT.1175.53 1325 Ca 6 (June 17, 1907).

Anatolian Railways, for which the factory was compensated 5 kuruş from the first class ticket and 3 kuruş from the second-class ticket to defray the exhibition costs.<sup>58</sup>

The trainees of the Hereke Imperial Factory were also its laborers. According to Quataert, between 1895 and 1905 over 1000 female knotters produced custom-ordered carpets in the state factory. Muslim and Orthodox Greek girls from the ages of four to fifteen worked in the three great knotting halls, on 150-180 knotting frames of varying sizes.<sup>59</sup> In an article published in *Servet-i Fünun* on 12 July 1906 (29 Haziran 1322), the author stated that there were 2,000 workers at the Factory, by which he meant trainees composed of both adults and children. However, due to the increasing market demand for Hereke products and the desire to strengthen the textile industry in the Ottoman Empire, the decision was made to increase the number of the workforce to 4000, including through the addition of many poor children and orphans (*nice etfal-i fukara ve yetime*); they would be put on the payroll and taught a vocation.<sup>60</sup> The number of female workers at the Factory reached 1800 in 1906.<sup>61</sup>

### **4.2 Formal Training**

Even though there were primary and secondary schools on the factory campus, the archival materials show evidence that the formal schools were for the education of the children of the officials, technical staff and workers.<sup>62</sup> Almost no information exists about the exact

<sup>60</sup> "Hereke Fabrika-i Hümayunu Ziyaret," 216-219.

<sup>&</sup>lt;sup>58</sup> BOA İ.TNF 17.19 1325 B 24 (September 2, 1907).

<sup>&</sup>lt;sup>59</sup> Quataert, "The Age of Reforms," 918.

<sup>&</sup>lt;sup>61</sup> Lorenz, "Die Frauenfrage im Osmanischen Reiche," 72-214. Lorenz does not provide any reference for the figure 1800 in 1906, and argues that the number of female workers declined to 1200 in 1918.

<sup>&</sup>lt;sup>62</sup> BOA HH.THR. 362.36 1318 R 27 (August 24, 1900).

date on which the Primary School (*İbtida-i Mektebi*) was founded at the Hereke Factory Campus, but a *varak* (folio) from the folders of correspondence (*tahrirat dosyaları*) in the Prime Minister's Ottoman Archive shows that there was already a primary school by 1887.<sup>63</sup> It was then reconstructed in 1900. The two story building was mixed-use; it had four class rooms, a dough room (*hamur odası*) on the first floor, and a bakery, a grocery store, and a storage room on the ground floor.<sup>64</sup>



**Figure 4.5** Junior High School at the Hereke Imperial Factory Campus. *Source: Nazım Demirtaş Personal Archive* 

A Junior High School (*Rüşdiye Mektebi*) was launched at the Factory as an addition to the existing program of formal training on 5 September 1900.<sup>65</sup> Thanks to the Sultan's charity, as stated in the official documentation, the main goal of the school was to provide education for both male and female children of officials, technical staff, and workers from the factory, along with the children of the surrounding villages.<sup>66</sup> The school was built

<sup>&</sup>lt;sup>63</sup> BOA HH.THR.334.22 1304.N.10 (June 2, 1887).

<sup>&</sup>lt;sup>64</sup> BOA HH.THR.305.28 1320.B.18 (October 21, 1902)

<sup>65</sup> BOA HH.THR 362.37 1318 Ca 13 (September 8, 1900).

<sup>&</sup>lt;sup>66</sup> BOA HH.THR. 362.36 1318 R 27 (August 24, 1900).

adjacent to the road near the Izmit Gulf. The two-storey masonry building had a rectangular plan and was symmetrical (Fig.4.5). The entrance was at the southern façade, while the windows on the southern façade were all arched and had moldings. The school's garden was fenced. There was a separate area on the third floor was made of timber; it is said that this part was added to the main building by British Powers during the truce period as an observation tower.<sup>67</sup> During construction, the necessary stones for the masonry building came from Hereke quarry.<sup>68</sup>

Consulting the folders of correspondence of the Imperial Treasury (*Hazine-i Hassa*) allows for a closer study of the educational infrastructure. In addition to information about several construction projects at the plant site, and about appointments, rankings, and funds for the workers' services, the folders also shed light on the structure and curriculum of the formal school, along with profiles of the students taught there, through its charts of examination.

Considering the student agency as cohorts, rather than thinking of them as individuals, B.C. Fortna suggests that education was thought of as an implement of "mechanical engineering". Privileging the group over the individual and collecting data expressing quantity, however, leans too far towards erasing the broad range of potential human reactions.<sup>69</sup> Therefore, I shall attempt to describe the children in the formal schools (Primary and Junior High Schools) in the context of the programs taught to the student body as they are represented in the documents. The examination charts from the Primary

<sup>&</sup>lt;sup>67</sup> Personal conversation with Nazım Demirtaş, 2014.

<sup>&</sup>lt;sup>68</sup> BOA HH.THR.362.39 1318.B.27 (November 20, 1900).

<sup>&</sup>lt;sup>69</sup> B. C. Fortna, *Imperial Classroom: Islam, the State, and Education in the Late Ottoman Empire* (Oxford, UK: Oxford University Press, 2002), 6-7.

School and Junior High School show not only the curriculum taught in the schools, but also the demographics of the students in 1912-13 (see Appendix B for a full chart). A parallel reading of these sources helps us to shift our focus from the educational campaign as a part of a ubiquitous educational pattern applied across the Empire to one focused on the experiences of individual students. Since these were the children of the Factory's staff and workers, this reading not only helps us to look at family patterns, but also unearths the process of cultural and social reproduction found in the intertwined relationship between state power and students.

The examination results for the school year 1912-1913 illustrate the multi-ethnic composition of the student body and the emergence of a standardized education system. The students registered for courses the year before the outbreak of World War I were a mixture of Muslims and non-Muslims, with most of the latter being Greek Orthodox. Even though Muslim and non-Muslim students were taught jointly in these classes, non-Muslims were exempted from religious courses such as the Quran, Religious Studies, Memorization of Sections of the Quran, and Islamic Catechism. From the Hamidian era onwards, Muslim children who were educated by the state learned a distinct ideology through these religious classes, one designed to turn into imperial staff. As in other imperial states, the aim of mass education was to produce a population that was both obedient and unindoctrinated by rival educational systems, such as those of Christian minorities and

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<sup>&</sup>lt;sup>70</sup> BOA HH. THR 1237.48 1331 L 21 (September 23, 1913).

<sup>&</sup>lt;sup>71</sup> BOA HH. THR 1237.48 1331 L 21 (September 23, 1913).

missionary schools. Mixed schooling with Muslims and non-Muslims taught side by side therefore became the norm in the state primary schools. <sup>72</sup>

According to the examination chart, the factory school was also co-educational in 1912-1913, with boys and girls attending the same courses. However, the existence of an *ihtiyat* (girls' junior high) school<sup>73</sup> in 1907 and a list of female students enrolled into lectures separate from the program for male students<sup>74</sup> is evidence that male and female students were not taught together in the school's early years. The Girl's Junior High School's main aim was to prepare the girls to be teachers. This situation must have changed and the school must have been restructured in later years, as girls and boys attended classes together by 1912-1913. The widespread education of Ottoman girls began in the midnineteenth century. Earlier, from the sixteenth century onwards, there had been only an infant's school (subyan mektebi) for girls, which was limited with Quran and Arabic language in its curriculum at elementary school level. Twenty years after the Junior High Schools were established for the male students in 1838, the Girl's Junior High School was founded. The main goal of these schools was to prepare children for industrial employment.<sup>75</sup> The girls also attended scientific knowledge and positive science courses.

The number of students, especially non-Muslim students, enrolled in courses in the third year of Junior High School suddenly dropped in 1912-1913—representing the switch from education alongside employment to full-time employment at the factory. Few

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<sup>&</sup>lt;sup>72</sup> Selim Deringil, "Education: The Answer to All Evil?" in *The Well-Protected Domains: Ideology and the Legitimation of Power in the Ottoman Empire 1876-1909* (London, UK: I. B. Tauris, 1999), 94.

<sup>&</sup>lt;sup>73</sup> Corresponding to *rüşdiyes*, which were High Schools for male students, the *İhtiyat* schools were created in 1893 as female teacher training programs. Şefika Kurnaz, "Osmanlı'dan Cumhuriyet'e Kadınların Eğitimi," *Milli Eğitim*, (July-August-September 1999): 143.

<sup>&</sup>lt;sup>74</sup> BOA HH.THR 374.33 1325.B.3 (August 12, 1907).

<sup>&</sup>lt;sup>75</sup> Akşit, Kızların Sessizliği: Kız Enstitülerinin Uzun Tarihi, 89.

students completed and graduated from school. The reduction in the number of non-Muslim students may have been particularly drastic because the secondary schooling system supported Muslim students in an attempt to position them as the Empire's emerging elites. <sup>76</sup> The graduates of the Junior High School were a part of a mass formal training; the documents of earlier periods also show that the graduates of the Junior High School were sent to colleges such as the Imperial School of Medicine (Mekteb-i Tıbbiye-i Şahane *İdadiyyesi*) and the Ottoman University for Orphans (*Dar'ü's Şafaka Mekteb-i 'Aliyyesi*).<sup>77</sup> Correspondence between the director of the factory and the Ministry of Education in 1913 imparts a sense of the key role that the director of the factory played in the placement of the graduates of the factory school into these colleges (Mekâtib-i 'Aliyye). 78 Similarly, by 1918 five ethnic Turkish students had been selected to be sent for technical training to Jozefis, a factory in Austria that produced the broadcloth factory parts and machinery for Hereke. The factory directors preferred to send their own staff to Europe to be educated, according to the report, rather than invite European technicians to the factory. For this role, Turkish students (evlad-ı vatandan hususiyle Türk olmak üzere) were selected, as was noted in the Hayri Tokay set of documents, and their travel expenses were covered by factory funds while their living expenses were met by Jozefis Machine Factory. As there is no indication of the exact date for the students' departure from the factory to Austria, all we know from the report is that they took two years to finish their education.<sup>79</sup>

<sup>&</sup>lt;sup>76</sup> For the *rüşdiye* as a school for the emerging elites and bureaucrats of the Ottoman Empire, see Fortna, *Imperial Classroom*.

<sup>&</sup>lt;sup>77</sup> BOA HH.HRK. 61.16 1310 (1892)

<sup>&</sup>lt;sup>78</sup> BOA HH.THR.1237.47 1331.L.21 (September 23, 1913).

<sup>&</sup>lt;sup>79</sup> "Hereke Fabrika-i Hümayun'un Tarz-ı İdaresi," 1918. Hayri Tokay Documents, Edhem Eldem Individual Collection.

The curriculum aimed to impart a child with knowledge of practical and positive sciences, a child who master the Ottoman, Arabic, Persian, and French languages, and a child who was religious, patriotic, and polite. The curriculum was designed to create future citizens who were modern but bonded to the Empire at heart. Within the school's modern curriculum, which was ranged from social sciences to positive science, the civics course (Ma'lûmât-1 Medeniyye)<sup>80</sup> becomes particularly notable. Added to the curriculum after 1908, this course reflected the premise of the Second Constitution, by which a child became a public subject. The child no longer belonged only to his family as a potential public actor; rather, the child was seen as the nation's future. The child was foreseen as the producer, the military, and the citizen of the future, and as such citizenship became the main pedagogical aim of primary and secondary education. The Constitutional pedagogues perceived the civics course as a compulsory lesson to develop political affiliation and loyalty to the Empire some fifty years later than similar views emerged in Switzerland, Belgium, Germany, the Austro-Hungarian Empire, and the United States of America.<sup>81</sup> With all these courses, a child became part of the imperial modernization project and the building block of social economic development.

The school's teachers came from the Factory's team. For instance, Squadron Leader Vahid Bey, the doctor of the Hereke Factory Hospital, lectured on health (*Hufz-ı Sıhha*), useful information (*Ma'lûmât-ı Nafia*), and moral issues (*Ahlak Dersi*). Fuad Bey, an official of the factory, lectured on arithmetic; Senior Grade Ali Efendi, the pharmacist of

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<sup>&</sup>lt;sup>80</sup> Ma'lûmât-ı Medeniyye could be translated as Knowledge of Civilization. However, the content of the course shows that this course was about civics. For further information, see Füsun Üstel, "Makbul Vatandaş," in *Peşinde II. Meşrutiyetten Bugüne Vatandaşlık Eğitimi* (Istanbul, Turkey: İletişim Yayınları, 2005).

<sup>81</sup> Üstel, "Makbul Vatandaş" 32, 35.

the Hereke Factory Hospital, lectured on Ottoman letters (*rika and sülüs*). Art classes were taught by Tovmas Efendi, the chief designer of the factory.<sup>82</sup> There was a job rotation which enabled the children be trained by specialists.

The curriculum, and thus the social structure of the school during and after World War I, is not documented in the files of correspondence at the Imperial Treasury, yet one document from the Prime Minister's Ottoman Archives concerning the Treasury's supply of books and paraphernalia to the school provides evidence that it was still operational in November 1914, just after the war began. In addition, the books cited in the school's curriculum in 1913 expand the scope of the discussion about formal education at the factory (see Appendix C for a full list). It has books were mostly supplied by the press of the *Kitabhane-i İslam ve Askeriye* (Library of Islam and the Military) in 191385, and while they had a materialist outlook they also emphasized religious values. Besides Islamic tenets and history of the empire, the books that make up the curriculum of the formal school also show us a philosophy that supported science, the humanities, and linguistics.

The Shorter General History (Küçük Tarih-i Umumî)<sup>86</sup> starts with Egypt civilization, then looks at Anatolian civilizations. The Roman Empire was covered in the

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<sup>82</sup> BOA HH. THR. 362.36 1318 R 27 (August 24, 1900).

<sup>&</sup>lt;sup>83</sup> BOA HH.THR 1238.36 1333.Ra.16 (February 1, 1915). In the last year of the war, 1918, reports written from the factory to Refik Bey in the Directorate of the Imperial Treasury reveals that there were then 120 students enrolled in these courses. "*Hereke Fabrika-i Hümayun'un Tarz-ı İdaresi*,"1918. Hayri Tokay Documents, Edhem Eldem Personal Collection.

Indeed, the number of students increased during the war years from eighty-four to 120. There were twenty students enrolled in the first year of the primary school, nineteen in the second year of the primary school, twenty-three in the third year of the primary school, eleven students in the first year of the Junior High School, eight students in the second year of the Junior High School, and three in the third year of Junior High School. BOA HH. THR 1237.48 1331 L 21 (September 23, 1913).

<sup>84</sup> BOA HH.THR. 1237.46 1331.L.13 (September 15, 1913).

<sup>85</sup> BOA HH.THR. 1237.46 1331.L.13 (September 15, 1913).

<sup>&</sup>lt;sup>86</sup> Ahmed Refik, *Muhtasar tarih-i umumî*, *küçüklere tarih dersleri* (Istanbul, Turkey: Kitabhane-i Islam ve Askeri (Matbaa-i Hayriye ve Şürekası) 1330 (1914)).

book, followed by the Ottoman Empire. The Ottoman Empire was articulated with its artifacts, specifically architectural monuments. The book also looked at Arab civilizations, the exploration of America, and European civilizations. The *Illustrated Ottoman History* (*Muhtasar Resimli Osmanlı Tarihi*)<sup>87</sup> was prepared for primary school children. It starts with the migration of the Turks from Central Asia to Eastern Anatolia because of the attacks of Genghis Khan, the founder of the Mongol Empire. The book looks at the period of principalities, then focuses on the reigns of the various sultans of the empire. The conquest of Istanbul during the reign of Sultan Mehmed II, and the reign of Sultan Suleyman the Magnificient are highlighted. The recent history of the Ottoman was also covered in detail. For instance, the Ottoman Basic Law (*Kanun-i Esasi*) of 1876, the Treaty of San Stefano of 1878, the independence of Bulgaria, the New Ottoman Party (*Yeni Osmanlılar Cemiyeti*) and the dethronement of Abdülhamid II were highlighted. Maps and illustrations accompanied the historiography.

When the curriculum and books are examined together, it is clear that religious knowledge weighed heavily in the curriculum. Beginners learned the Arabic alphabet, then read the Prayers and Surah books (*Amme cuzi, Surah of Tebareke*), before moving on to read the entire Quran (*hatim indirmek*). Reading the texts of the Quran was done with certain techniques called *tecvid*, which is reminiscent of musical research. The hymnody, for example, was a type of music lesson. <sup>88</sup> By the same token, the Islamic Catechism for

<sup>&</sup>lt;sup>87</sup> Ahmed Refik, *Küçük Tarih-i Osmanî* (Istanbul: Kitabhane-i Islam ve Askeri (Matbaa-i Hayriye ve Sürekası) 1327 (1911).

<sup>&</sup>lt;sup>88</sup> Selçuk Akşin Somel, *Osmanlı'da Eğitimin Modernleşmesi (1839-1908): İslamlaşma, Otokrasi ve Disiplin* (Istanbul, Turkey: İletişim Yayınları, 2010), 314. When examined, it is understood that there are similarities between the curriculum of the neighborhood school (*mahalle mektebi*) and the elementary school at the Hereke Imperial Factory.

Muslim Child (Müslüman Çocuk Yeni İlm-i Hal)89 was also for beginners, the primary school children. The work informs the Muslim children about religion, Islamic society, sharia laws, faith, and the religious duties of Islam. It starts with the notes of Tüccarzade İbrahim Hilmi, who signs the book as the owner of the Library of Islam. He condemns other writers of textbooks for writing the same information. His aim, he claimed, was to raise awareness of the Islamic world and to save children from ignorance. For that, he tried to simplify the book on Islamic Catechism to the level that primary school students could understand. By this way, he said, he intended served to nation and religion.

These books appear to have been meant for primary school children. The most recent dates and the latest technologies were presented to them, while they also offered a closer look at the history of the world, in which the Ottoman Empire plays a leading role as a successor of the Eastern Roman Empire and as the protector of Arab civilizations. The orbits of the Ottoman Empire are visualized with maps that introduce the Ottoman lands to children. The books aimed to create intelligent, pious, nationalist, and patriot citizens who had a good command of technology and natural science. All these history books were written to improve Ottoman identity, both nationalist and religious, and world citizenship among the children.

The Kitabhane-i İslam (Islamic Library), the books of which were taught in Hereke Primary and Junior High School, was founded in 1896 by İbrahim Hilmi, a famous publisher, thinker, and author during the transitional period from the Second Constitutional Era (which began in 1908) to Early Republican Turkey. Later the name of the press was

<sup>&</sup>lt;sup>89</sup> Tüccarzade İbrahim Hilmi, Müslüman Çocuk Yeni İlmihal (Istanbul:Mahmud Bey Matbaası, 1326 (1910).

changed to *Kitabhane-i İslam ve Askeri* and, after the foundation of the Turkish Republic it was called *Kitabhane-i Hilmi* (Library of Hilmi). 90 In addition to more than 1,000 books about history, literature, politics, religion, and social theory, the press also published educational books, 91 most of which were ordered for the Factory's school. The book *Maarifimiz ve Servet-i İlmiyyemiz: Felaketlerimizin Esbabı* (Our System of Education and Science: The Reasons for Our Disaster)—which was published as a part of the oeuvre of the *Kitabhane-i İntibah* by the founder of the press, İbrahim Hilmi, in 1913—yields an explicit description of his inclinations regarding schooling in the Empire. The book begins with an expression by Satı Bey, an Ottoman educator:

the Ottoman of tomorrow will be prepared in the schools of today... if there is one more thing that is more devastating than the most brutal wars, the most destructive earthquakes and devastating hurricanes, it is our and the Islamic worlds' ignorance and lack of education.<sup>92</sup>

The content of the curriculum of the education system was clearly reflected in the textbooks made compulsory by the central educational administration. It is generally accepted that political regimes interfere in the content of textbooks in order to legitimize themselves and their political systems through "their perceived duty of transmitting culture, reflecting values, and as a springboard for the intellectual development of the individual and the nation." From the middle of the Tanzimat era, state institutions began to state which textbooks were part of the curriculum in state schools, including those at the Hereke Imperial Factory. <sup>93</sup>

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<sup>90</sup> İsmail Erşahin, "Cumhuriyetin ilk Yıllarında Kur'an Meali Yayıncılığı: İbrahim Hilmi Örneği," *Toplum Bilimleri* (January 2011): 149-160.

<sup>&</sup>lt;sup>91</sup> Tüccarzade İbrahim Hilmi, *Maarifimiz ve Servet-i İlmiyyemiz*, transcripted/transliterated Melek Dosay Gökdoğan, (Ankara, Turkey: TC Kültür Bakanlığı-HAS-SOY, 2000), xiii.

<sup>&</sup>lt;sup>92</sup> Tüccarzade İbrahim Hilmi, *Maarifimiz ve Servet-i İlmiyyemiz* 1.

<sup>93</sup> Selçuk Akşin Somel, Osmanlı'da Eğitimin Modernleşmesi, 236.

#### 4.3 Conclusion

The nineteenth century saw Ottoman children leave home education and become socialized in state schools. Industrial schools played a great role in the schooling process, which itself was part of the modernizing Empire. During the late nineteenth century, the Empire's leaders envisioned the creation of a web of industrial schools. The imperial factories became the magnet schools, where the trainees of vocational education received hands-on practice and experience. In textiles, the Hereke Imperial Factory became the pioneer of vocational training among the industrial schools and poorhouses. Not only did the Hereke Imperial Factory provide vocational education to children, it also displayed the products to the public with exhibitions opened with poorhouses and vocational orphanages in public spaces. Thus, the quality output of vocational education became visualized.

The segregation of formal schooling was carried out along class and religion lines. While the orphans and the poor received a vocational education, the children of the factory's officials and workers went to the formal school. That school's curriculum offered to create pious, nationalist citizens of tomorrow with knowledge of positive science and scientific knowledge. Muslims from the formal school were then supported to continue on to university, where they would develop the skills needed to lead the Empire.

#### CHAPTER 5

#### ARTISTIC PRODUCTION

### 5.1 Hereke's Drawing Office: An Artistic Niche

From its early stages, the Hereke Imperial Factory (*Hereke Fabrika-i Hümâyûn*) proved to be a favorable environment for the development of artistic workshops, in addition to being an industrial plant; however, it was never able achieve autonomy from its dynastic management. In selecting the qualities that would define their artistic workshop, the designers sought to revive the *past*. I intend to examine this feature by exploring *which phase of the past was revived*, in particular by looking at the carpet designs produced in different periods in the light of contemporary developments. The products of the late nineteenth and early twentieth centuries—not only the textile products but also the building designs and their decorative art—were designed to be definitive interpretations of earlier styles and traditions found in Europe and the United States. These styles were then reviewed, arranged, or blended to achieve new styles, such as Gothic Revival, Renaissance Revival, Baroque Revival, Italiante, Colonial Revival, etc. The recreation of past forms was also a central component of the Ottoman Empire's attempts to create an imperial identity.

Hereke was a living factory, and despite being partially sheltered from commercial profit motivations by its imperial ownership, its designs were altered over time to cater to the domestic and international markets in which its products were sold. Other important influences on designs, styles, and trends at the factory plant included the long tradition of carpet-making (plus the development of industrial forms of carpet and drapery making),

changing social conditions across the Ottoman Empire (and among the factory workers themselves), and various Western and Eastern design inspirations that can be determined from the library in the factory's drawing office. The changing aesthetic of the factory products depended upon two factors: the artistic researches and the multi-cultural profile of the workers.

The drawing office at the Hereke Factory Campus was home to many artists over the years. Archival materials demonstrate that with the foundation of the factory, in 1843, artist Kandiryani was appointed to the factory. In 1846, a painter from Vienna, Kostemiyani, started to work as the chief-artist. In 1847, two workers from Vienna, named in the archives only as Eiche and Pilan, were assigned as painters. In 1848, teachers and an artist from Europe were nominated in the new velvet and brocaded silk workshops. In 1852, Klaiser from Austria took up an appointment as teacher and artist for five years. In 1858, Yorgaki was sent to the factory as artist. Another artist named Yorgaki was appointed chief draftsman in 1895. In 1895, Osfan Efendi was one of the factory's painters. In the following years, the Hereke Imperial Factory became a niche for the young graduates of the Academy of Fine Arts (*Sanayi-i Nefîse Mektebi*) who faced economic problems after graduation. Tovmas Efendi was one of these painters. In 1897, he became chief draftsman of the factory and in 1907 he was awarded the Order of Mediidie.

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<sup>&</sup>lt;sup>1</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

<sup>&</sup>lt;sup>2</sup> BOA HH.HRK.34.66 1312.N.16 (March 13, 1895).

<sup>&</sup>lt;sup>3</sup> BOA İ.TAL 88.28 1313.B.07 (December 24, 1895).

<sup>&</sup>lt;sup>4</sup> Gizem Tongo, "Painting, Artistic Patronage and Criticism in the Public Sphere: A Study of the Ottoman Society of Painters, 1909-1918," (Master's Thesis, Boğaziçi University, Istanbul, Turkey, 2012), 37.

<sup>&</sup>lt;sup>5</sup> Records show that Tovmas Efendi was born in 1868 in Istanbul as the son of Paskal Efendi. BOA HH.SAID.MEM 54.10 1285.Z.29 (April 12, 1869).

<sup>&</sup>lt;sup>6</sup> BOA İ.TAL 127.24 1315 B 29; İ.TAL.427.23 1325.C.29 (August 9, 1907).

The drawing office had always been the scene of debates about the creation of styles. Here, its occupants observed new styles, reviewed past styles, and effectively engaged in the creation of Imperial identity. The office was filled with various styles of rugs, draperies, and embroideries collected from around the world (Figure 5.1). The richness of the books found in the drawing office's library demonstrates how designing ornament became a scientific concern (see Appendix D). The books, which are currently held in the Ihtisas Library in Dolmabahçe Palace, reveal the richness of the patterns that became the source of inspiration. Hereke's famous design workshops functioned as educational institutes for the industrial artisans of several Ottoman generations, and much of what they taught was influenced by the collected knowledge of both Eastern and Western designers available through the factory drawing office library. As Donald Quataert notes, the factory did not develop or produce its own unique style of rugs because its designs replicated pictures collected from European magazines and photo albums.<sup>7</sup> However, the vivid environment of this artistic home, with its multi-cultural workers and artists, provided the artists with a place in which they could debates about the merits of various styles. I follow the sequence of styles with a series of design transformation while examining the ornament produced by different production lines.

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<sup>&</sup>lt;sup>7</sup> Donald Quataert, "Manufacturing for the International Market," in *Ottoman Manufacturing in the Age of the Industrial Revolution* (Cambridge, UK: Cambridge University Press, 1993), 105-167.



**Figure 5.1** Hereke Imperial Factory's Drawing Office, showing its collection of Rugs, Embroidery, and Carpets.

Source: Hereke Factory Album

### **5.1.1 Reproducing European Styles**

As Tanzimat reforms were launched, the Ottoman Empire set out to modernize the military and education. After the Treaty of Paris in 1856 formally gave the Ottoman Empire membership in the European state system, the Empire situated itself as an equal player on the world stage. Not only was the structure of the imperial institutions to be modernized, but the Empire's entire aesthetic repertoire was to be replaced by the European tastes. Dolmabahçe Palace, built between 1843 and 1856 and designed by Garabet Balyan and Nikogos Balyan, is the exemplar for this taste with its eclectic style, an amalgamation of Baroque, Rococo, and Neoclassic styles. Since the most of the early products coming out

<sup>&</sup>lt;sup>8</sup> Ussama Makdisi, "Ottoman Orientalism," *The American Historical Review* 107, no. 3 (2002): 778-779.

of Hereke Imperial Factory were designed for the palaces, they echoed this eclectic architectural decorum and decoration (even though Arabic draperies, and Iranian and Western Anatolian style carpets were made for the palace later on).

In its early stages of the Factory, most designs were imported. However, the factory also had three of its own designers, one Italian and two Germans, who supervised the work of the Armenian boys who copied ornamental art and designs. The factory's product pattern designs ranged from Renaissance to Baroque, Rococo, and Neoclassical. A universal visual language was coded in the patterns of the draperies, rugs, and carpets as the Empire was integrated with Europe in the late nineteenth and early twentieth centuries. The mimetic decorum furnished imperial palaces, mansions, kiosks, and embassies.

It was anticipated that the Ottoman palaces would compete with Europe in their visual decorum. Stylistic patterns were scrutinized from the books in the library. With Industriel Le Mobilier: De La Couronne et Des Collections Publiques & Particulères by Rodolphe Pfnor (1876), the factory's artists could examine the ornaments and the furniture of the Palace of Versailles in the eighteenth and nineteenth centuries. With The Furniture of Windsor Castle (1905) by Guy Francis Laking<sup>10</sup> the innumerable changes of style and fashion at Windsor Castle between the seventeenth and twentieth centuries could likewise be explored. For example, the figurative patterns of the drapery of Dolmabahçe Palace were styled on the Renaissance characteristics seen in the L'ornement Polychrome (1888) by Albert Racinet, which investigates the designs used across the seventeenth and

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<sup>&</sup>lt;sup>9</sup> Charles MacFarlane, Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country, Volume II (Philadelphia, PA: Lea and Blanchard, 1850), 279.

<sup>&</sup>lt;sup>10</sup> Guy Francis Laking, *The Furniture of Windsor Castle* (1905) published by decree of King Edward VII, reflects the innumerable changes of style and fashion across this period, including influences from France.

eighteenth centuries (Figure 5.2). The flute-playing angels set in a medallion, surrounded by birds and floral patterns, directly echoed the eighteenth century vocabulary of Europe, and such the historicist forms were seen essential resources to ensure the Empire's universalization.



**Figure 5.2** Angels in 18th Century French Plate (left) and Hereke Imperial Factory Drapery Pattern no. 952 (right).

Source: Albert Racinet, L'ornement Polychrome (Paris: Imprimeurs de L'Institute, 1888); Yaşar Yılmaz and Sara Boynak, "Hereke Fabrika-i Hümâyûnu ve İpekli Jakar Dokumaları," in Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, and Vahide Gezgör (Istanbul, Milli Saraylar Daire Başkanlığı Press, 1999), 158.

By the end of the 1840s, the factory began to brand its manufactured products with a calligraphic logo to prevent imitation. Calligraphy was chosen for the logo of the factory because it was thought that Europeans would be unable to reproduce the writing. <sup>11</sup> In 1850,

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<sup>&</sup>lt;sup>11</sup> Mehmet Topal, Erkan Erdemir, and Engin Kırlı, "Tanzimat Dönemi Sanayileşme Hareketinin Türkiye'de İşletmecilik Anlayışının Oluşumuna Etkileri Hereke Fabrikası ve Nizamnamesi," *SDU Faculty of Arts and Sciences Journal of Social Sciences* 25 (May 2012): 37-64.

Ali Efendi was sent to Europe to learn how to print the Sultan's signature and adorned patterns surrounding the signature on fabric with the aim of further obstructing imitations of the Factory's products.<sup>12</sup>

The basic principles of stylized natural elements were inspired by European examples, and Classical European designs for rugs and carpets were employed to decorate the interiors of Imperial institutions as a demonstration of the Ottoman Empire's integration with Europe at the end of the nineteenth century. In the watercolor silk carpet design, the vegetal and floral design of the silk carpet engages with the intense light and dark colors (Figure 5.3). The tile red and yellow curved patterns of rose leaves and petals on a light turquoise background merges with the black medallion at the middle. Natural forms became a source of inspiration in Baroque carpet design at Hereke Imperial Factory. The pictorial patterns of the realistic flowers are shadowy. This extremely elaborate pattern was designed to be made by hand.

<sup>&</sup>lt;sup>12</sup> BOA HH.HRK. 1.6 1266.Z.17 (October 24, 1850).



**Figure 5.3** A Watercolor Baroque Silk Carpet Design, ca. 1900.

Source: İhtisas Library, Dolmabahçe Palace

### 5.1.2 Looking at the Modern

Mechanized production was partially introduced to the factory until the broadcloth factory was constructed to facilitate the mass production of military goods in 1903. Until then, classical motives produced by hand using Jacquard looms, and vilification of mass production, was embraced as a sign of craftsmanship at the Hereke Imperial Factory. Mechanization changed habits, tastes, behavior, perceptions, and perspective during the nineteenth century. The machine logic of the nineteenth-century also transformed the aesthetic of ornamentation. The aesthetic quality of overloaded Rococo patterns made by machinery, for example, was questioned by the critics in Europe. A.W.N. Pugin (1812-1852), John Ruskin (1819-1900), and William Morris (1834-1896) all developed "honest" craftsmanship design principles based on simplicity, which led to new aesthetic approaches that emphasized unadorned and unshadowed designs characterized by equally distributed

lines and natural tints.<sup>13</sup> Believing that mechanization degraded design, these men advocated for a return to traditional, utilitarian crafts and art.<sup>14</sup> These developments were closely explored by the artists at the Hereke Imperial Factory. Indeed, the Jacquard looms for drapery production were believed to enfranchise the human operator and to enable "honest craftsmanship."

Two motifs in the palaces demonstrate the evolution of contemporary trends in craftsmanship (Figure 5.4). In these examples, realistic patterns were replaced by unshadowed, stylistic patterns with neutral tints. A stylized vegetal vocabulary was created in tune with the new trends. On the left, the pattern consists of bunch of grapes on the vine leaves that appear to move on the ground and intermittent spider motifs. Simple forms of the natural elements from the countryside with flat colors and bold outlines characterize the Arts and Crafts Movement. The drapery was used in Dolmabahçe Palace and Ihlamur Summer Palace. On the right on the yellow background, there are beige bouquets, whose pedicels were generated in whip form featuring the characteristics of Art Nouveau. The drapery was used in Dolmabahçe Palace, Yıldız Sale Pavilion, and Beylerbeyi Palace. 15

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<sup>&</sup>lt;sup>13</sup> Nikolaus Pevsner, *Pioneers of Modern Design from William Morris to Walter Gropius* (London, UK: Faber & Faber, 1936), 40-45.

<sup>&</sup>lt;sup>14</sup> William J. R. Curtis, *Modern Architecture Since 1900* (London, UK: Phaidon, 2016), 22.

<sup>&</sup>lt;sup>15</sup> Yaşar Yılmaz and Sara Boynak, "Hereke Fabrika-i Hümayunu ve İpekli Jakar Dokumaları," in *Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları*, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, and Vahide Gezgör (İstanbul, Turkey: Milli Saraylar Daire Başkanlığı Press, 1999), 122, 120.



**Figure 5.4** Hereke Imperial Factory Pattern no. 937 (Arts and Craft Drapery, left); Pattern no. 924 (Art Nouveau Drapery, right).

Source: Yılmaz and Boynak, "Hereke Fabrika-i Hümâyûnu ve İpekli Jakar Dokumaları," 119-123

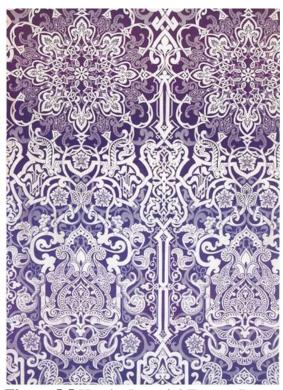
# **5.1.3** Looking at the Orient

By the mid-nineteenth century, European consumers demanded Oriental-style products. Hereke Imperial Factory followed this shift in consumer taste, producing drapery designs beginning in the 1860s that reflected Oriental styles. In 1867, the Imperial Treasury became controlled by Şirvanizade Mehmed Rüşdi Paşa and during his time in office, all existing patterns produced with the brocaded silk machines were transformed into Arabic patterns. The artist Yorgaki altered existing patterns into Arabic designs together with a former artist named Eiche who was working at the factory. <sup>16</sup> It did not take long for the Factory to become a pioneer in the production of these Arabic designs. In 1906, the minister of the

<sup>&</sup>lt;sup>16</sup> BOA HH. HRK. 35.42 1313.Ca.18 (November 6, 1895).

poorhouse (Dârülaceze) industrial section wanted to visit the Hereke Imperial Factory specifically to research the Arabic style weaving techniques so that he could apply them in the poorhouse, which was still weaving in the European style. 17

Below, we see an intricate composition produced at the Hereke Imperial Factory that opens up to infinity by repeating large medallions with twigs decorated with rumi, and palmette on a purple background (Figure 5.5). The drapery was used in the women's quarters at Dolmabahçe Palace. 18 The composition features Orientalist characteristics with pointed figures. This design is from the artist Yorgaki's time, when he altered the drapery machines to Arabic patterns.



**Figure 5.5** Hereke Imperial Factory Pattern no. 1157, Drapery. Source: Yılmaz and Boynak, "Hereke Fabrika-i Hümâyûnu ve İpekli Jakar Dokumaları," 141

<sup>&</sup>lt;sup>17</sup> BOA DH.MKT.931.42 1322.Z.4 (February 9, 1905).

<sup>&</sup>lt;sup>18</sup> Yılmaz and Boynak, "Hereke Fabrika-i Hümayunu ve İpekli Jakar Dokumaları," 140.

## 4.1.4 In Search of an Imperial Identity

4.1.4.1 In Search of the Indigenous. Meanwhile, vernacular carpeting achieved a new status in the Hereke Imperial Factory. In the earlier stages of the carpet factory's foundation, the state's ideology was multicultural, and workers were encouraged to use their knowledge of local weaving practices in their designs for rugs and textiles that were produced in the factory. These were then used as symbols of the greatness and diversity of the Empire at international expositions, as gifts for foreign notables, as furnishings for imperial buildings, and in other prestigious buildings and embassies.

In 1891, Mehmet Ağa from Manisa, who had been the Master of the Carpets of the Palaces in Akaretler, was assigned to the factory and began to work on the Uşak and Gördes carpet styles. These styles were attractive to the dynasty, and so Muslim and Christian girls living around Hereke were invited to work at the factory under the supervision of the masters from Sivas and Uşak. In 1892, Memduh Bey, the former governor of Sivas, presented two prayer rugs to the palace that had been made by a local master producer and his family in Sivas. The Sultan appreciated these two prayer rugs, which are some of the most beautiful examples of Iranian and Anatolian carpet designs. The master and his family from Sivas then went to Hereke together with their carpet designs and stayed at the Hereke Factory Campus for two years. The master also showed that silk prayer rugs could be manufactured with silk crumbs. He taught the formulas and methods applied in Sivas to

make the dyes used in carpet production. After 1893, fine silk carpets and prayer rugs were added to Hereke's production line.<sup>19</sup>

In the following years, additional masters were invited from western Anatolia to staff the Factory's carpet division. Others came from Gördes and Demirci, Manisa and Sivas to serve elsewhere in the Hereke Carpet Factory. <sup>20</sup> Hereke rugs thus came to echo the tradition of western Anatolian craftsmanship through their geometrical motives and patterns. <sup>21</sup> When Mehmet Çavuş from Manisa was appointed as manager, the carpet factory also ordered twenty-two new carpet looms to complement the four existing carpet looms for weaving Gördeskari, a style of western Anatolian carpet. <sup>22</sup>

At the time, carpet production relied on traditional patterns and principally aimed to fulfill traditional demand, namely uniform handmade carpets and rugs. However, the industrialization of the carpet-making process meant that artisanal crafting methods were being lost, since they could not be scaled up. At the same time, many Anatolian dye recipes (tarifname) that were based on vegetable dyes were lost—in part because of secrecy among those who produced them and in part to widespread changes in dying practices—and this reduced the range of available colors. This happened, according to Quataert, not in response to customer demand but because European mill operators in Anatolia were

<sup>&</sup>lt;sup>19</sup> "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası," 1983. Hayri Tokay Documents, Edhem Eldem Individual Collection.

<sup>&</sup>lt;sup>20</sup> Quataert, "Manufacturing for the International Market," 154.

<sup>&</sup>lt;sup>21</sup> Önder Küçükerman, "Rug Weaving at Hereke," in *The Rugs and Textiles of Hereke: A Documentary Account of the History of Hereke Court Workshop to Model Factory* (Istanbul: Sumerbank Publication, 1987), 75.

<sup>&</sup>lt;sup>22</sup> Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, and Vahide Gezgör, "Hereke Fabrika-yı Hümayun'da Halı Üretimi," in *Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları*, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, and Vahide Gezgör (Istanbul, Turkey: Milli Saraylar Daire Başkanlığı Publication), 172-287.

importing chemically-colored yarns that were more convenient and less expensive to use.<sup>23</sup> There were around eight extremely important dyeing houses at the time, the most important in İzmir, Uşak, Kula, Gördes, Akhisar, and Demirci.<sup>24</sup> Therefore, the dyeing formulas brought by the master from Sivas to the Hereke Imperial Factory in 1892 were so special that the Factory protected this vernacular knowledge.

The establishment of European-style carpet workshops that were designed specifically for export to Western Europe also brought change to weaving traditions in Anatolia. In the 1860s, the merchant house of Schiffmann at Uşak introduced "modern" designs to local Turkish markets while his local competitor Hacı Ali Efendi, who was another of the major merchants in the town, continued to focus on making antique designs. His designs became popular at the Istanbul Exhibition of 1863.<sup>25</sup> The older so-called "Turkish patterns" were largely being replaced with new Uşak patterns that had been created to satisfy the demands of American consumers. For example, the Zarif Ali style of carpet had very deep colors like bordeaux red and blue. The identity of western Anatolia carpets was thus changing according to the demands of international markets. Quataert considers that some of these were "frighteningly ugly", based on outdated and "terrible" European taste. To counter-act this tendency, a government official at Nevşehir took old carpets from the mosques and distributed them among the knotters so they could continue to imitate the old designs. <sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Quataert, "Manufacturing for the International Market," 148-148.

<sup>&</sup>lt;sup>24</sup> M.J.M. Stoeckel, *Tapis d'Orient* (Vienna: Edhem Eldem Individual Collection, 1892).

<sup>&</sup>lt;sup>25</sup> Quataert, "Manufacturing for the International Market," 144.

<sup>&</sup>lt;sup>26</sup> Quataert, "Manufacturing for the International Market," 144.

European merchants demanded increased production of oriental-style carpets, and by inviting Anatolian masters to work at its workshops, Hereke Imperial Factory became a niche for protecting the vernacular styles. It became a living museum, with the invited masters ensuring the survival of the authentic carpet styles. This, one might speculate, inaugurated a new era not only for carpet and textile design, but also for the craftsmanship tradition of Anatolia. In this process, the "past" was reviewed once again by artists and masters in their attempts to discover origins for craftsmanship traditions and their visual unity throughout the Ottoman Empire. This process also became part of the search for the origins of Imperial identity.

**4.1.4.2 In Search of the Apex Point.** In the Factory's final years, a strong countertendency against the European styles can be witnessed. The factory products embraced Orientalist ornamentation, revealing softer, less rigid contours and curved patterns, with influences from Iranian art.<sup>27</sup>

There are several reasons for this. First, by the late nineteenth century, there was increasing demand for oriental rugs in Europe and America where the growing independence of the nuclear family and a boom in single-family housing boosted sales. Until the latter half of the nineteenth century, domestic space had been the common property of extended families; a house transformed into an individual family unit altered the balance of supply and demand through an increased need for furniture, commodities, paraphernalia, etc. Once the living room became separated from the bedrooms, the furnishing of this space became important in terms of displaying the family's status. Before

<sup>27</sup> Küçükerman, "Rug Weaving at Hereke," 75.

this transformation occurred, prayer rugs and carpets for mosques had dominated Ottoman carpet markets; however, these developments in housing norms changed the size of factory-produced carpets as they were now being purchased for domestic use. Along with this change in sizes, a decisive stylistic change was witnessed in carpet design due to the orders for oriental-style carpets coming from European merchants. Pete Davies, for instance, points out that flatwoven pieces became popular in Western Victorian homes.<sup>28</sup>

Another reason for the changing tastes of Europeans was mechanization and new fashion trends that emerged as a reaction against the machine. More geometrical and more abstract forms based on Islamic design principles were admired by some groups of artists. Neo-gothic design, for example, is correlated with Islamic architecture, and was promoted by A.W.N. Pugin and John Ruskin. One can, in fact, trace Gothic design from Moorish architecture and its impacts in eleventh century Europe. According to Cailah Jackson, some studies of Middle Eastern carpet history have questioned why, and even if, there was a 'boom' in the production of Persian carpets in the late nineteenth century. In any event, this growth, which appears to have been due to increasing western demand, was supported by both European and Persian commercial interests.<sup>29</sup>

New markets opened up for Hereke Imperial Factory carpets as European collectors began to laud the quality and design of oriental carpets in the mid-nineteenth century. To Jackson, Owen Jones was a particularly passionate and influential advocate of 'Moresque'

<sup>&</sup>lt;sup>28</sup> Pete Davies, *The Tribal Eye*, *Antique Kilims of Anatolia* (New York, NY: Rizzolli, 1993).

<sup>&</sup>lt;sup>29</sup> Cailah Jackson, "Persian Carpets and the South Kensington Museum: Design, Scholarship and Collecting in Late Nineteenth-Century Britain," *Journal of Design History* (Advance Access published September 30, 2016): 1-17. See also Susan M. Pearce, *On Collecting: An Investigation into Collecting in the European Tradition* (London, UK: Routledge, 1995), 136 and Thomas Richards, *The Commodity Culture of Victorian England: Advertising and Spectacle, 1851–1914* (Palo Alto, CA: Stanford University Press, 1990), 130.

design and Islamic patterns, and he influenced European and American views of and desire for Middle Eastern and Asian designs. Jones's 1856 publication, *The Grammar of Ornament*, was the first significant western art history both to highlight the relationship between geographical provenance and artistic achievement and to "[reify oriental artistries] as ageless symbols of their respective cultures." Charles Locke Eastlake, meanwhile, remarked in 1868 that oriental carpets would "afford you more lasting eye-pleasure than any English imitation".31

Another reason for the increased demand of Oriental carpets was economic. By the nineteenth century, Nicole A.N.M. van Os argues, the Ottoman Empire had become well-integrated into the international trade system, although in a disadvantageous position: the Empire produced raw materials for industrializing European countries and purchased their manufactured goods in return. Nevertheless, the Empire did profit from the production of inputs such as silk thread and especially from high quality and labor-intensive end products made for European market, such as lace and tapestries.<sup>32</sup>

In addition to the demands coming from European markets, Ottomans embraced Persian designs for another reason: Turco-Iranian styles appealed to the nostalgic recollection of the Empire's so-called golden age. As Gülru Necipoğlu has pointed out, the Ottoman classical era resulted from the cosmopolitan nature of Istanbul's centralized court workshops between the fifteenth and later sixteenth centuries. The large group of imported artists came from Iran and the Mamluk Sultanate of Syria and Egypt, and instigated a cross-

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<sup>&</sup>lt;sup>30</sup> Jackson, "Persian Carpets and the South Kensington Museum," 1-17.

<sup>&</sup>lt;sup>31</sup> Jackson, "Persian Carpets and the South Kensington Museum," 1-17.

<sup>&</sup>lt;sup>32</sup> Nicole A.N.M. van Os, *Feminism, Philanthropy and Patriotism, Female Associational Life in the Ottoman Empire* (Zutphen, Netherlands: CPI Koninklijke Wöhrmann, 2013), 162-163.

fertilization of influences between royal workshops in the capital and their semi-commercial and commercial counterparts in other Ottoman cities. By about 1520 to 1530, for example, Sultan Süleyman's court scriptorium (naqqaşhane) included tent makers, tile makers, and carpet weavers in addition to the more traditional manuscript producers. By the mid-sixteenth century, the imperial workshop for luxury silk textiles in Istanbul began to regularly employ eight specialized textile designers (naqşbend). Shah Quli Naqqaş, who refurbished and illuminated a Yusuf and Züleyha manuscript, was one of the masters who designed ornamented carpets. This multi-talented Safavid artist was a specialist of design/drawing (tarrah, ressam) and began to work in the corps of royal painter-decorators in 1520. The court scriptorium's staff was divided into two groups—"Ottoman" (rumiyan) and "foreign" (aceman) masters, the latter mostly but not entirely originating from Iran.<sup>33</sup>

The *acemi* influence that brought about a new Ottoman aesthetic in the second half of the sixteenth century was then accepted as the apex of Ottoman art during the last years of the nineteenth and early twentieth centuries. When Tovmas Efendi (Baldasar) became chief draftsman of the factory in 1897, after his three years as assistant artist in the factory, a great interest in Iranian carpets had already begun. Tovmas Efendi designed Kırman-and Esfahan-style carpets. He was a graduate of the Academy of Fine Arts (*Sanayi-i Nefise Mektebi*) by the year 1890 and took art education for two years at the Italian Scuole di Arte. He also traveled to France to observe artistic developments there. When he was

<sup>&</sup>lt;sup>33</sup> Gülru Necipoğlu, "Early Modern Floral: The Agency of Ornament In Ottoman and Safavid Visual Cultures," in *Histories of Ornament, From Global to Local*, eds. Gülru Necipoğlu and Alina Payne (Princeton, NJ: Princeton University Press, 2016), 142-143.

<sup>&</sup>lt;sup>34</sup> BOA İ.TAL 127.24 1315 B 29 (December 24, 1897); İ.TAL.427.23 1325.C.29 (August 9, 1907); BOA HH. SAID. MEM 54.10 1285.Z.2 (March 1869); In 1894, Tovmas Efendi was made an assistant artist at the Hereke Imperial Factory.

<sup>&</sup>lt;sup>35</sup> Tongo, "Painting, Artistic Patronage and Criticism in the Public Sphere," 37.

appointed to the factory, a German and a Greek Orthodox chief draftsmen already worked there, but his talents were quickly recognized and he became the Factory's chief draftsman.<sup>36</sup> His designs were depicted as national artifacts by the Ottoman Society of Painters. Tovmas Efendi was then introduced by the newspaper writer H.H. as one who worked in the "orphan" art of carpet and textile decoration at the Hereke Imperial Factory, itself the most distinguished home of art of the Empire. He was the one, according to the article, who replaced the unusual lines and colors drawn by foreigners with national lines and harmonious colors, who produced designs full of wisdom and creativity.<sup>37</sup>

Tovmas Efendi also designed the vast carpets that were placed in the Fatih and Bayezid Mosques. 38 Soon he became a member of the Ottoman Society of Painters. 39 The Society, active between 1909 and 1919, was an independent organization founded by the graduates and students of the Academy of Fine Arts (*Sanayi-i Nefise Mektebi*) for the purpose of carrying the "fatherland's arts" one step further and of overcoming the imitation of Western art. In the article "Our Goal" (*Maksadımız*), the Society defined itself as one link in the chain of advancement of Ottoman science and art that would demonstrate to the world the virtue of being an Ottoman (*a'liye-i osmanlılık aleminin envar-ı kemalini enzar-ı cihaniyaya göstermek*). 40 In Tovmas Efendi's designs, inspirations from sixteenth century Ottoman art become conspicuous as do the influences of Iranian art. Like other members of the Society, Tovmas Efendi believed that the cradle of art lay in the East, and so he

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<sup>&</sup>lt;sup>36</sup> H.H., "Tomas Efendi," Osmanlı Ressamlar Cemiyeti Gazetesi no. 17 (1 Haziran 1330).

<sup>&</sup>lt;sup>37</sup> H.H., "Tomas Efendi."

<sup>38</sup> H.H., "Tomas Efendi."

<sup>&</sup>lt;sup>39</sup> Gizem Tongo, "Painting, Artistic Patronage and Criticism in the Public Sphere: A Study of the Ottoman Society of Painters, 1909-1918," (Master's Thesis, Boğaziçi University, Istanbul, Turkey, 2012), 37. <sup>40</sup> Anonymous, "Maksadımız," *Osmanlı Ressamlar Cemiyeti Gazetesi*, 7 no. 1 (KanuniSani 1326), 1-2; Abdullah Sinan Güler, "İkinci Meşrutiyet Ortamında Osmanlı Ressamlar Cemiyeti ve Osmanlı Ressamlar Cemiyeti Gazetesi," (PhD diss., Mimar Sinan University, Istanbul, Turkey, 1994), 64.

designed his carpets to reflect Iranian influences.<sup>41</sup> Realism was criticized by the Ottoman Society of Painters, nationalistic feelings were embraced, and an internal feud with Western-originated trends began.<sup>42</sup> The counter-tendency against the classical education offered by the Academy of Fine Arts merged with a struggle against Western-originated trends. Visioning the "east" as the genesis of art, Tovmas Efendi sighted Iranian ornaments as the generative components of his designs.

For Tovmas Efendi, design was something that was separated from material and commercial culture. He also designed carpets that reflected nationalist sentiment. For instance, he dedicated his works to martyred air force pilots Fethi, Sadık and Nuri Bey,<sup>43</sup> who had passed away during their flight from Istanbul to Cairo on 8 February 1914. The imagery of the fatherland was merged with the spirit of mourning for the air force pilots (Fig.5.6). The "historic" thus merged with the sentimentality of "nationalist" feelings for the fatherland and became a direct expression of mourning designed by Tovmas Efendi and knotted at the Hereke Factory.

Imperial imagery based on Iranian art continued. In 1916, the Director of the Factory, Akif Bey, was to make reproductions of the Persian rugs at Topkapı Palace. 44 One

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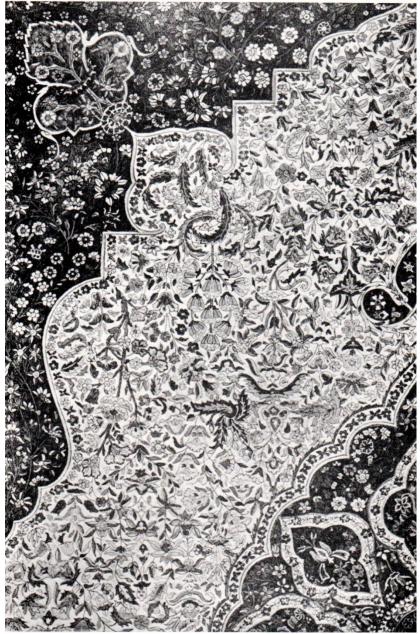
<sup>&</sup>lt;sup>41</sup> To the Ottoman Society of Painters, Turkish and Arabic craftsmenship had been imitated, practiced, and taught in Europe; however, it was not well protected in the Ottoman lands. The new generation, according to Aziz Hidayi, should work hard to "preserve the sun that rises from our lands from going to the West." (Ey genç... Çalış. Bizden doğan güneş garbe gitmesin.) Aziz Hidayi, "Bizde Resim," Osmanlı Ressamlar Cemiyeti Gazetesi no. 17 (1 Haziran 1330).

<sup>&</sup>lt;sup>42</sup> Güler, "İkinci Meşrutiyet Ortamında Osmanlı Ressamlar Cemiyeti ve Osmanlı Ressamlar Cemiyeti Gazetesi," 129-130.

<sup>&</sup>lt;sup>43</sup> H.H. "Tomas Efendi."

<sup>&</sup>lt;sup>44</sup> BOA HH.THR.1238.58 1334.C.8 (April 12, 1916). One might argue that Hereke Imperial Factory as a leading workshop not only in the production of designs for its own products, but also in the designs that emerged from the industrial school, poorhouses, and local workshops. Hence, what is remarkable is that not only did a stylistic, artistic, or aesthetic upheaval occur in artisan and craftsmanship practices, but also the structure of the labor system changed thanks to imperial policies.

might argue that the reproduction of the sixteenth century aesthetics at Topkapı Palace overlaps with a political harkening back to the Ottoman Empire's golden age.



**Figure 5.6** A Kirman-style Carpet, designed by Tovmas Efendi and dedicated to Martyred Air Force Pilots; produced at the Hereke Imperial Factory, 1914. *Source: H.H. "Tomas Efendi," Osmanlı Ressamlar Cemiyeti Gazetesi no.17 (1 Haziran 1330)* 

During Tovmas Efendi's draftsmanship, it is known that masters from Kirman (in Persia)<sup>45</sup> and, between 1894–97, female Armenian workers including children and widows fled from Sivas, Ladik, and Manisa to the Hereke Imperial Factory and started to work in the carpet section. With them they brought their knowledge of Tabriz carpet making.<sup>46</sup> Their material products were exhibited at the 1900 Paris Exposition, revealing the most characteristic of Oriental carpets. The Eastern carpet style had such a profound effect on visitors to the Exposition that Hereke products were soon depicted as the insignia of the Oriental art industry.<sup>47</sup> *L'Illustration* of 11 August 1900 carried attractive images of silk drapes and raw-colored carpets in the Ottoman pavilion that were reminiscent of Armenian tastes.<sup>48</sup> The image of the "East" and the "exotic" were thus associated with Armenian material

<sup>&</sup>lt;sup>45</sup> Quataert, "Manufacturing for the International Market."

<sup>&</sup>lt;sup>46</sup> Dominique Séréna-Allier, Raymond H. Kévorkian and David Vinson, Trames d'Arménie: Tapis et broderies sur les chemins de l'exil (1900-1940) (Marseille, France: Images en Manoeuvres Editions, 2007), 64-83. The actual work of Armenian orphans and widows after the Hamidian massacres is also questioned in the text because they do not appear in the images taken during public ceremonies except in the Abdülhamid Albums. One must consider that these albums were created to recover the bad reputation of the Sultan after the massacres. Since the names of the wage-earning laborers in the documents of the Ottoman Prime Minister's Archives are not well recorded and the actual participation of Armenian orphans and widows in weaving were not represented, this discussion should be taken into consideration; however, several records in the Ottoman Prime Minister's Archives regarding the workforce, and especially employees' earnings in the wage ledgers, demonstrates that many male and female Armenians held master's positions. In addition, the crucial period records also shows the existence of an Armenian population in 1920. National Palaces Archive Private Treasury of Sultan Archive (MSHHA). E. II. nr 2216. 001. (received in 2012, this folder was later transferred to Ottoman Prime Minister's Archive). Different regions of Western Anatolia produced different styles of carpets in the late nineteenth and early twentieth centuries. Quataert reveals that a 1904 rug book speaks of "Turkish Kirmans, fine Uşak rugs of Persian design, a practice already at least three decades old in the town. At Sivas, in the early twentieth century, the Alliotti merchant house, working with the Spartali firm, directed the making of large, high-quality Persian rug style rugs. Konya producers also imitated Uşak rugs; Akhisar knotters made rugs similar to Gördes rug; and Kırşehir workers produced a mix of Arabian and Persian forms."

Donald Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution* (Cambridge, UK: Cambridge University Press, 1993), 144.

<sup>&</sup>lt;sup>47</sup> According to an issue of *L'Illustration* published on 11 August 1900, Hereke products became the insignia of the oriental art industry during the Paris Exposition of 1900. See "1900 Paris Sergisindeki Resmi Osmanlı Pavyonu," trans. Zeynep Menemencioğlu. *Tarih ve Toplum* no .8 (August 1984): 5. <sup>48</sup> "1900 Paris Sergisindeki Resmi Osmanlı Pavyonu," 5.

products. The conception of the Orient was created through the authenticity of the ethnic groups in the Ottoman Empire. According to Ussama Makdisi, the Orient, Islam, and the East thus became interconnected parts of the modern Ottoman self-definition, contrasted against modern Western Orientalism that classified the Orient as inherently different from the West. In the age of Western-dominated modernity, every nation created its own Orient.<sup>49</sup>

Zeynep Çelik considers the second half of the nineteenth century as the time of universal expositions in the Western world. Beginning in 1851 in London, the exhibitions were held in many cities of Europe and North America as a way to showcase and build markets for new industrial products. At the same time that the Western world exported its industrial know-how through these exhibitions, it also used them as a means to import information about other cultures. Imperialism and colonialism contributed to these processes by redefining the global power structure and stimulating interest in the non-Western world. Universal expositions brought this "single expanded world" into a single place, as aspects of other cultures were exhibited, albeit in Western-designed fashion, to European and American cities as artifacts of regional and indigenous societies. <sup>50</sup> Exoticism became crucial in these representations of non-Western countries.

Hereke products won prizes at every Exhibition that it attended. The crafts won mention at the Paris Exhibition of 1855, in which the state entered ribbons to be judged in the competition, and a medallion at the 1862 London Exhibition with velvet and silk

<sup>&</sup>lt;sup>49</sup> Ussama Makdisi, "Ottoman Orientalism," *The American Historical Review* 107, no. 3 (2002), 768-770.

<sup>&</sup>lt;sup>50</sup> Zeynep Çelik, *Displaying the Orient: Architecture of Islam at Nineteenth-century World's Fairs* (Berkeley, CA: University of California Press, 1992), 1.

draperies.<sup>51</sup> The Hereke Imperial Factory's products also won bronze medallions at the 1892 Vienna Exhibition, the 1893 Chicago Exhibition, the 1894 Lyon Exhibition, the 1910 Brussels Exhibition, and the 1911 Turin Exhibition.<sup>52</sup> Factory products also appeared in some national exhibitions, such as the 1911 Bursa Exhibition and the 1911 İzmir Exhibition.<sup>53</sup>

5.1.4.3 Creating the Ottoman Identity and the Book *Usul-i Mimari-i Osmani* at the

Factory Library. In this section, I will investigate the importance of the book entitled Ottoman Architectural Methods (*Usul-i Mimari-i Osmani*) among the books held in the drawing office library and the impact of its principles and norms on the design of carpets. *Usul-i Mimari-i Osmani*, prepared by a delegation headed by İbrahim Edhem Paşa, Minister of Public Works, was published in 1873 in Ottoman Turkish, German, and French to introduce the Ottoman architectural style to the world at the Vienna Exhibition. As Ahmet Ersoy asserts, the quality of *Usul-i Mimari-i Osmani* is comparable to its acclaimed European counterparts, such as Owen Jones' *Grammar of Ornament* (1856), Auguste Racinet's *L'Ornament Polychrome* (1869), and Jules Bourgoin's *Les Arts Arabes* (1873). In the eyes of Ottoman readers, the book was clear testimony to the

<sup>&</sup>lt;sup>51</sup> Abdülkadir Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," (PhD diss., Istanbul University, Istanbul, Turkey, 2000), 308-309.

<sup>&</sup>lt;sup>52</sup> Buluş, "Osmanlı Tekstil Sanayi Hereke Fabrikası," 308-309; "Kuruluşundan Cumhuriyete Kadar Hereke Fabrikası,"1983. Hayri Tokay Documents, Edhem Eldem Individual Collection.

<sup>&</sup>lt;sup>53</sup> For details about the awards won by the Factory, see Kaya, Yılmaz, Boynak, and Gezgör, "Hereke Fabrika-yi Hümayun'u Tarihçesi;" Zafer Toprak, *Sümerbank* (Istanbul, Turkey: Creative Yayıncılık. 1988); and Önder Küçükerman, "A Chronological Table of Events Related to the Hereke Factory," in *The Rugs and Textiles of Hereke: A Documentary Account of History of Hereke Court Workshop to Model Factory* (Istanbul, Turkey: Sümerbank, 1987), 50-54.

cultural merits of their dynastic/national past and the superiority of their modern products.<sup>54</sup>

The technical documents included in the chapter of Ottoman Architectural Methods (Usul-i Mimari-i Osmani) entitled "The Theory of Ottoman Architecture" were provided by Pietro Montani, who sought to understand the structural laws that underlay the characteristics and fundamental features of Ottoman architecture. Uncovering these principles, he argued, would provide the necessary guidelines for revitalizing modern Ottoman architecture. Montani's sources of inspiration ranged from the well-established classical standards to the revisionist postclassical norms of nineteenth century European architecture. His work drew equally from Owen Jones's theories of color and decoration and from French arch-rationalist Viollett-le-Duc (as well as the latter's disciples Jules Bourgoin and Léon Parvillée who focused on Islamic building traditions), but he adapted these Western theories to the Ottoman context because he sought to make Ottoman traditions intelligible (and appealing) to both Ottoman and Western audiences. The book's discussion about ornamentation, which echoed the European debate about crafts and ornament, also reflected increased Ottoman consideration of hosting its own crafts revival based on the realities of low-technology Ottoman industries, dovetailed into a broader program of reform of artisanal guilds.<sup>55</sup>

Western and indigenous components were blended together in most of the designs used for Hereke fabrics in order for them to fit them in with the style of the Dolmabahce

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<sup>&</sup>lt;sup>54</sup> Ahmet A. Ersoy, *Architecture and the Late Ottoman Historical Imaginary: Reconfiguring the Architectural Past in a Modernizing Empire* (Burlington, VT: Ashgate, 2015), 17.

<sup>&</sup>lt;sup>55</sup> Ersoy, Architecture and the Late Ottoman Historical Imaginary, 17.

Palace<sup>56</sup> and the Yıldız Palace. The style of the carpet in the Ceremonial Hall of Yıldız Şale Pavilion, for example, was inspired by the ornaments of the Yeşil Cami (Green Mosque) in Bursa, as they were depicted in Ottoman Architectural Methods (Figure 5.7). These ornaments were illuminated on the vast carpet, which is still said to be the world's largest carpet.



**Figure 5.7** Ornaments of the Yeşil Cami (Green Mosque) (left); The Vast Carpet in the Ceremonial Hall of the Şale Pavilion (right).

Source: Usul-i Mimari-i Osmani (Ottoman Architectural Methods); Vahide Gezgör, "Hereke Fabrika-i Hümâyûnu'nda Halı Üretimi," in Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, Vahide Gezgör (Istanbul, Milli Saraylar Daire Başkanlığı Press, 1999), 180.

<sup>56</sup> Fatma Yaşar Yılmaz, "Hereke Jakarlı Dokumaları ve Milli Saraylar Mobilyasında Kullanımı," (Master's Thesis, Mimar Sinan University, 1998) 10.

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**Figure 5.8** Ottoman Ornamental Flora (left); Carpet in the Pink Saloon at the Dolmabahçe Palace (right).

Source: Usul-i Mimari-i Osmani (Ottoman Architectural Methods); Gezgör, "Hereke Fabrika-i Hümâyûnu'nda Halı Üretimi," 212.

By the same token, the Ottoman floral decoration presented in the Ottoman Architectural Methods was repeated in carpet designs. The borders of the carpet in the Pink Saloon at the Dolmabahçe Palace, for example, are adorned with the floral imagery described in *Usul* (Figure 5.8). The apex point of Ottoman architecture was woven and knotted to be part of the space as decoration.

### 4.1.5 Imitating Nature and a Paradisiacal Garden for the Empire

The artists' work in the drawing office assumed a scientific character. They studied and designed their decorations according to the research that they did with the illustrated books. Even though Sultan Abdülhamid II had already organized some models of carpets that he wished to have prepared,<sup>57</sup> working in the drawing office allowed the artists to conceptualize their own ornamentation and merge it with aesthetic pleasure and artistic

<sup>&</sup>lt;sup>57</sup> Tahsin Paşa, *Sultan Abdülhamid: Tahsin Paşa'nın Yıldız Hatıraları* (Istanbul, Turkey: Boğaziçi Yayınları, 1990), 213.

imagination. Nature was explored through botanical and ornithological illustrations and then reflected in the designs.

The emergence of a naturalistic floral aesthetic in draperies and carpets could be read parallel with the burgeoning interest in botany in the nineteenth century Ottoman Empire. Modern botany education began in 1839 at the Imperial Medical School (Mektebi Tibbiye-i Adliye-i Şahane) in Istanbul. Here, botany courses were offered not with engravings, but with hands-on demonstrations of herbs in the botanical garden that had been created by the hands of Skalak, a botanist from Vienna.<sup>58</sup> This development was followed by the launch of a series of arboretums in Istanbul as the school buildings changed places: in 1839 the Galatasaray Botanical Garden, in 1874 the Demirkapı Botanical Garden, in 1894 the Kadırga Botanical Garden, and in 1903 the Haydarpaşa Botanical Garden. In these gardens, herbs brought from France were planted. Abdülhamid II had a great interest in botany, so that during his reign new winter gardens and greenhouses were opened in the gardens of Yıldız Palace, which themselves were partially turned into a huge botanical garden (Figure 5.9). In addition to indigenous species, plants were collected from Europe, the United States of America, Japan, and Indonesia. The Sultan also envisioned opening a public Botanical Garden and Zoo in Küçük Çiftlik in Nişantaşı.<sup>59</sup>

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<sup>&</sup>lt;sup>58</sup> Asuman Baytop, *Türkiye'de Botanik Tarihi Araştırmaları* (Ankara, Turkey: Tübitak Yayınları, 2003), 180

<sup>&</sup>lt;sup>59</sup> Emine Atalay Seçen and Neşe Yıldırım, "Sultan II. Abdülhamid Döneminde Saray Bahçeleri ve Seralarındaki Bitki Çeşitliliği ile Yurt Dışından Getirilen Bitki Türleri," *Milli Saraylar Sanat, Tarih, Mimarlık Dergisi* no: 9 (2012), 63-94.



**Figure 5.9** Greenhouse in Şale Pavilion in Yıldız Palace. *Source: Yıldız Albums (01-001), Dolmabahçe Palace, Abdülmecid Efendi Library* 

Positive science, first developed in sixteenth century Europe, observed, examined and investigated nature by diagnosing, rendering, and analyzing the properties of each species. Interest in positive science in the Ottoman Empire emerged during its period of modernization in the nineteenth century. Starting with the medical school, interest in botany moved to the gardens of the palaces. Floriculturists gathered the indigenous and the exotic to create a paradisiacal garden with species coming from all over the world, available for observation during leisure.

At the Hereke Imperial Factory, floral patterns on silk furnishings and drapery were designed based on the botanic books (Figure 5.10). The anatomy of a flower was investigated using the scientific naturalist atlas. With the interventions, interpretations, and

imaginations of the artists, original floral patterns were created. Imitating nature became essential with the systematical investigation of species.



**Figure 5.10** Two Botanical Illustrations (left and center); Hereke Imperial Factory Drapery Pattern no. 906 (right).

Source: Dr. Henrich Ritter Wawra v. Fernsee, Itinera Principum S. Coburgi die Botanische Ausbeute, Vol. 1 (Wien: Gerold, 1883) (left and center); Yaşar Yılmaz and Sara Boynak, "Hereke Fabrika-i Hümâyûnu ve İpekli Jakar Dokumaları," in Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, Vahide Gezgör (İstanbul, Milli Saraylar Daire Başkanlığı Press, 1999), 156.



**Figure 5.11** Two Animal Plates (left and center) and Detail from a Prayer Rug at Dolmabahçe Palace.

Source: Edouard Travies, Les Oiseaux: Scenes Variees, Etudes a l'Aquarelle (Paris: Ledot aine (or Berrieux) and London: E. Gambert & Co. (or Victor Delarue), 1857) (left); Variete de Pigeons (Meşu Gögercin) (center); Vahide Gezgör, "Hereke Fabrika-i Hümâyûnu'nda Halı Üretimi," in Milli Saraylar Koleksiyonunda Hereke Dokumaları ve Halıları, eds. Mehmet Kenan Kaya, Yaşar Yılmaz, Sara Boynak, Vahide Gezgör (Istanbul, Milli Saraylar Daire Başkanlığı Press, 1999), 246

Similar to the floral patterns, Hereke Imperial Factory artists also created ornithological illustrations. Books with ornithological illustration in hand-colored lithographic plates inspired the artists while they were decorating the carpets with natural elements (Figure 5.11). Among these books, one of the most interesting is the Variete de Pigeons (Mesu Gögercin), a four album set that illustrates a collection of pigeons and doves living in Anatolia. The birds are depicted in their natural habitats and the plates are drawn by palace artists such as Luigi Acquarone (1800-1896), Hüseyin Zekai Paşa (1860-1919), and Seker Ahmed Paşa (1841-1907). This interest also overlaps with interest about the birds of the Sultans. Both Dolmabahçe Palace and Yıldız Palace contained birdhouses and bird gardens with a variety of indigenous and exotic birds. With the special interest of Abdülhamid II, there was also a pigeon kiosk in Yıldız Palace, as well as other birdhouses in the greenhouses and winter gardens in Malta, Çadır, Şale, Küçük Mabeyn Pavilions. 60 One might rightly consider that the book *Variete de Pigeons (Meşu Gögercin)* was prepared by Abdülhamid II to send the Hereke Imperial Factory so that its artists could examine the indigenous species as the equivalent of the exotic species.

<sup>&</sup>lt;sup>60</sup> Deniz Esemenli, *Osmanlı Sarayında Kuş Sevgisi ve Kuşluklar* (Istanbul: Milli Saraylar, 1993), 104-105.



**Figure 5.12** A Point-Paper for a woven textile from the Hereke Imperial Factory Drawing Office.

Source: Hereke Factory Archive

The point-paper of a carpet demonstrates how the artists studied nature from the books and then transferred what they saw onto a rational plane (Figure 5.12). The grid layout on the colorful flowers was used to determine the weaving loops. Fashionable furnishings were thus produced by the exploration of the nature from scientific books merged with technical knowledge.

Empire became a concept in Ottoman politics in the nineteenth century. The Ottomans themselves referred to their state and realm using a variety of concepts that had partially overlapping meanings. "The Exalted State" (*Devlet-i Âliyye*) and "the Well-Protected Domains" (*Memâlik-i Mahrûse*) were the most frequently used terms, while the French term *l'Empire Ottoman* (the Ottoman Empire) was used as an external self-representation. The phrases empire (*imparatorluk*) and Ottoman Empire (*Osmanlı İmparatorluğu*) more specifically emerged in the Ottoman and Turkish languages as "entangled concepts" that spoke to both domestic and international audiences. <sup>61</sup> As part of

<sup>&</sup>lt;sup>61</sup> Einar Wigen, "Ottoman Concepts of Empire," *Contributions to the History of Concepts* 8, no. 1 (2013): 44–66.

this new concept of empire, the Hereke Imperial Factory appropriated the properties of East and the West, gathering together modern, exotic, and authentic forms of ornamentation.

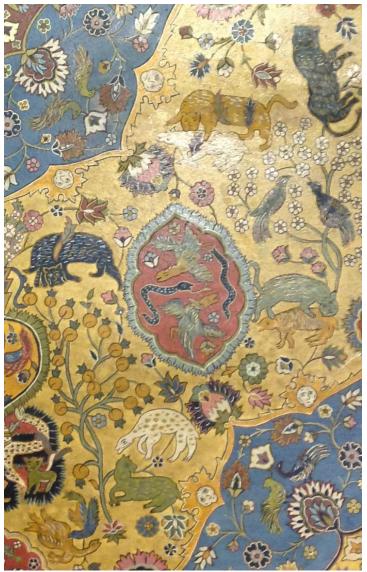


Figure 5.13 Water Color Silk Carpet Design, ca 1900.

Source: İhtisas Library, Dolmabahçe Palace

A watercolor design on a silk carpet found in the İhtisas Library at the Dolmabahçe Palace reveals the outcome of the scientific research of nature (Figure 5.13). The design contains various kinds of animals, birds, and flowers that come from multiple locations

across the world as well as some mythological creatures. As an empire, the Ottoman appropriated imagery of flora and fauna from the world over and created a paradisiacal garden in designs containing both exotic and indigenous species. The design also carries the remnants of sixteenth century design through the *şemse* and *rumi* patterns. The "tradition" here refers to the sixteenth century, which was the climax of Ottoman victories. According to Hakan Karateke and Maurus Reinkowski, the ruler's link to tradition becomes one of his sources of prestige. The origins of traditional authority are enveloped in the sacred and the mythological, and this leads people to conclude that it is rational to obey the traditional ruler.<sup>62</sup>

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<sup>&</sup>lt;sup>62</sup> Hakan Karateke and Maurus Reinkowski eds., *Legitimizing the Order: The Ottoman Rhetoric of State Power* (Leiden, Netherlands: Brill Academic Pub, 2005), 41.

# 4.2 Weaving the "Monumental" 63

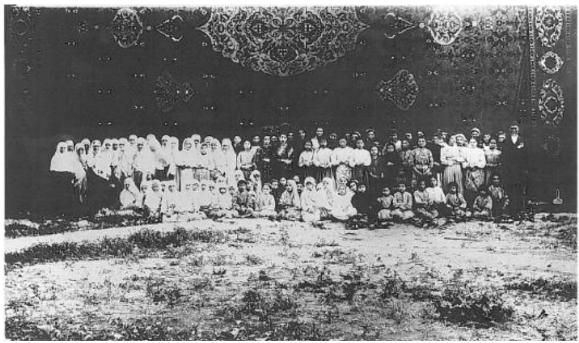


Figure 5.14 The Workers of Gördes Style Carpet.

Source: Hereke Factory Album, 1892

The factory began to produce carpets in "monumental" proportions (Figure 5.14).<sup>64</sup> The photograph above depicts a Gördes style carpet hung between the trees and the female workers posing in front of it. The carpets were industrially produced on huge carpet looms. The most famous of these monumental carpets is the one in the Ceremonial Hall of the Şale Pavilion at Yıldız Palace. The seven-toned carpet <sup>65</sup> occupies 406 m². Designed by Emille Meinz, the artist of the palace, the carpet's composition consists of an elliptical medallion at the middle plus two other medallions. The ornaments were also aligned with the furniture and the ceiling plan in the Ceremonial Hall; the medallions are in the projection of the

<sup>&</sup>lt;sup>63</sup> Önder Küçükerman, *The Rugs and Textiles of Hereke: A Documentary Account of the History of Hereke Court Workshop to Model Factory* (Istanbul, Turkey: Sümerbank Publication), 1987, 74.

<sup>&</sup>lt;sup>64</sup> Küçükerman, Rugs and Textiles of Hereke, 74.

<sup>&</sup>lt;sup>65</sup> François Georgeon, Sultan Abdülhamid, trans. Ali Berktay (Istanbul, Turkey: İletişim Yayınları, 2006), 474.

chandeliers. The carpet was designed with the decorations of the walls and ceiling in mind (Figure 5.15).<sup>66</sup> Not only was the architectural ornamentation placed in the design of a carpet, but the environmental inputs also affected the placing of the ornamentation on the carpet, making the carpet design techtonic on volatile materials.



**Figure 5.15** Ceremonial Hall in Şale Pavilion in Yıldız Palace. *Source: Dolmabahçe Palace, Abdülmecid Efendi Library (11-1267\_0005)* 

Another large-scale carpet was produced for the Internal Court of the Justice in Peace Palace in Hague that was constructed in 1911 (Figure 5.16). To weave this vast carpet, which occupied an area  $16.85 \text{ m} \times 10.22 \text{ m}$ , the hall's plan was sent to the factory

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<sup>&</sup>lt;sup>66</sup> Ayşe Fazlıoğlu and Ali Gözeller, "Yıldız Şale Tören Salonu'nun Sultan II. Abdülhamid Dönemindeki Orijinal Eser Çözümlemesi ve Yeniden Tefrişi," *Milli Saraylar Sanat Tarih Mimarlık Dergisi*, no. 10 (2012), 106.

by Monsieur Karnbu, from the Hague Embassy, two years before the opening of the building. <sup>67</sup> For the carpet design, a geometric shape was preferred. The *rumi*, which was irrevocable to Hereke carpets, was replaced by the 8-edged star motifs.



**Figure 5.16** A Hereke Carpet in the Internal Court of Justice in Peace Palace in the Hague.

Source: Han Halı Archive

Another monumental product was the tent given to Kaiser Wilhelm II during his second trip to Ottoman lands. The geometric composition consists of eight edged stars (Figure 5.17). The same composition was also used in the Şale Kiosk in Yıldız, where the Kaiser stayed during his trips. It was a special choice to use the same patterns for the honor of Kaiser Wilhelm II.<sup>68</sup>

<sup>67</sup> BOA BEO 3651.273751 1327 L 05 (October 20, 1909).

<sup>&</sup>lt;sup>68</sup> Türkiye Milli Saraylar Daire Başkanlığı, İki Dost Hükümdar: Sultan İkinci Abdülhamid, Kaiser II. Wilhelm, (Istanbul, Turkey: TBMM Milli Saraylar Yayınları, 2009), 134.



**Figure 5.17** The Tent used By Kaiser Wilhelm II and his wife during their trip to Jerusalem.

Source: Istanbul Rare Works Collection (90483---0014)

Yet another monumental-sized product of the Hereke Imperial Factory is the Kaaba fabric (*sitare-i Şerife*) woven in 1908<sup>69</sup>, which is currently in the General Directorship of Waqfs in Istanbul (Figure 5.18). The fabric is 75 cm wide and 26 m to 27.10 m long. The fabric was woven on the Jacquard looms. The pattern consists of the repetition of two bands of zigzags. The design is merged with calligraphy; at intervals of 31 cm, there is written "There is no god other than Allah, Muhammad is his son and messenger" (*La ilahe illallah Muhammedün resulallah*), and "the glory of Allah is supreme, hail the salutation of Allah

<sup>&</sup>lt;sup>69</sup> BOA Y.MTV.313.55 1326.L.28 (November 23, 1908).

on Muhammed" (*Allah celle celaluhu*, *Muhammed Aleyisselam*) in Arabic letters. The fabric was shipped in pieces and then sewn in place. Since the pieces were to be sewed with sailcloth underneath for reinforcement, <sup>70</sup> a saddler and a quilt maker were appointed and traveled to Medina by ship and Hijaz Railway. <sup>71</sup>



**Figure 5.18** Kaabe Fabric (*Sitare-i Şerife*). Source: Sadi Bayram, "Vakıflar Genel Müdürlüğü Arşivinde Bulunan Kendinden Desenli Üzeri Yazılı İki Kumaş," Vakıflar Dergisi, no. 15 (1982), 143

The monumental carpets and draperies were meant to cover public spaces and sacred spaces, or to honor the emperors. The carpets echoed the plans of the architectural spaces and become architectonical inputs of those spaces. The draperies became the insignia of the sanctity of religious journeys.

Nadi Bayram, "Vakıflar Genel Müdürlüğü Arşivinde Bulunan Kendinden Desenli Üzeri Yazılı İki Kumaş," Vakıflar Dergisi no. 15 (1982), 141.

<sup>&</sup>lt;sup>71</sup> BOA Y.MTV.313.55 1326.L.28 (November 23, 1908).

#### 5.3 Conclusion

As an artist's niche, the Hereke Imperial Factory produced various styles of draperies, upholstery fabrics, rugs, and carpets. An alteration in styles happened throughout time, from European styles to Eastern styles. Among the various styles used were Baroque, Rococo, Neoclassic, and Western Anatolian. The imperial agency sought to create an idiosyncratic style that could reflect a unique Ottoman identity; it did so, in part, by looking back to the Empire's apex in the sixteenth century and drawing from that era's artistic production and architectural methods. While designing draperies and carpets, the Hereke Imperial Factory artists followed scientific research from the botanic and ornithological illustrations of nineteenth century publications. The weaving and knotting changed their meanings overtime with the production of vast carpets and cloths in "monumental" sizes the evolved from simple furnishing to become an inseparable part of the architecture. Moreover, the artifacts became loaded with a sense of holiness.

#### **CHAPTER 6**

#### **CONCLUSION**

This dissertation explores the social history of the industrialization of the Ottoman Empire through a specific focus on a single factory. I explore this factory—the Hereke Imperial Factory—from the perspectives of the lives of its workers, both adults and children, the social, religious, and educational services provided on the factory campus, and the evolution of the multitude of products produced at the factory. Using a social, historical and design perspective, this dissertation's ultimate aim is to make a concrete contribution to the labor history of the Ottoman Empire by demonstrating how welfare politics and philanthropy were tools used to manage a society of labor around clothmaking. Since the majority of the workforce at the Hereke Imperial Factory were children, orphans, and widows, this dissertation puts particular emphasis on placing children and the female workforce firmly into the picture.

In this study, I also explore the physical expansion of the campus and the ways in which factory workers used the social spaces provided to them or created by them. I look at how historical changes in tastes and designs led to changes in the designs of the artisanal products created at the Factory, and how these designs benefitted significantly from the migration of laborers trained in regional handicrafts from various parts of the Ottoman Empire. This study traces the Factory's transformation. It began as a site for the production of luxury products for the exclusive use of imperial households. It then became to a profitable production center of high-quality fabrics for export to Europe, meeting a market niche for "oriental" designs that had opened up as part of a wider increase in interest in the

Empire and the east. Eventually, the Factory became a wartime factory dedicated to the provision of military uniforms. My investigation follows an interdisciplinary approach, bringing together research into product design, changing labor formations, the relationship between gender and work, and the nature of charity under the wider aegis of architectural history. I trace the war alongside the social, philanthropic, and economic conditions of the day. I also discuss here the complex relationship between the Ottoman Empire's place in the world, and the effects of militarization and state power.

I have examined how the Hereke Imperial Factory became a forerunner of a new generation of Ottoman vocational schools, leading to changes in the craft of weaving across the Empire. In particular, the trade schools that developed through the employment of Ottoman and European masters at the factory led to a new perception of the forms of vocation which could lend themselves to wider artisanal study in the empire. However, another impact of the differentiation of vocations within the factory educational environment was an increase in distinctions in other senses, with some vocations seen as "women's work" and others seen as particularly fitting for either Muslims or non-Muslims.

Children became a means of not only the reproduction but also the manufacturing of the new industrial order as a result of the interactions between the children, their families, the state, and the management of the factory. Children on the production lines became part of the modern national workforce, and the insistent reproduction of the gender and Muslim/non-Muslim divides not only ensured that the patriarchal "protection" of young girls was institutionalized, but also set the country up for a nation-building process that would be focused on sectarian and national identity.

The labor force was restructured in an industrial fashion in order to serve the changing needs of successive generations of machines. Another factor in this dialectic was the changing nature of the needs of the outside world: carpets and curtains first for the Sultans and later for the discerning European consumer, national dresses for women, provisions for the military, and clothing for the destitute. In addition, the facilities and needs of the industrial workforce within an industrial set of social relations would fast come to the fore.

From the inefficient, slow start to the factory's existence, it gradually came to compete first domestically and then in some sectors internationally with the European factories it was set up to imitate. Among the chief reasons why Hereke was able to compete with European fabric production was the careful attention paid to institutional knowledge, the education of children, and the importance of design elements that incorporated both European and Anatolian elements: in fact, designs reflecting elements of the Armenian and Orthodox Greek origins of many of the factory workers became among those that became most strongly associated with "Oriental Carpets" in Europe.

A second reason was the gradual realization among the top brass at the factory of the necessity for sales outlets for their products. While initially the factory had been an unprofitable private enterprise—and it took a long time to grow beyond supplying the needs of the Sultan's palaces after nationalization—the factory eventually set up retail outlets in Istanbul and devised ways of attracting the attention of foreign buyers at exhibitions throughout Europe.

As the factory began to produce surpluses, it also began to find ways to reinvest them to improve the quality and range of manufactured goods. This also influenced the degree to which the factory campus was self-sufficient and offered a good quality of life to its employees—and therefore improved their productivity.

It noteworthy that the Hereke Imperial Factory campus developed along the same lines in terms of the provision of housing, social services and support for workers' lifestyles as comparable industrial plants in Europe, despite both employees and employers coming from a very different society with very different cultural and labor relations norms. As the campus grew and the number of workers increased, facilities associated with the conceptions of "model" factory campuses in the United States and Europe were added over time: housing along workers' cottage and dormitory models, religious facilities, educational facilities, hygiene facilities, vegetable gardens, orchards, and shops. Although there was very little industrial action undertaken at the Hereke site, workers were gradually granted perks, holidays, and benefits in line with the increasing production at the plant. Exactly which came first—whether these incentives increased production or clear increases in production and therefore profit led to pressure building up for greater worker's rights and benefits—is left as the subject for another study.

This effective social contract that emerged through a web of regularly repeating and self-reproducing labor relations—with children and adults, men and women, Muslims and non-Muslims, the free and slaves—appears to have been one of the chief aspects that allowed for the factory to achieve the quality and productivity to compete effectively with European manufactured goods. It is worth adding to this how the external relations of the factory were based on a series of social norms and reciprocal and non-reciprocal sets of expectations: in the early twentieth century, the very marketing of the factory's products came to be carried out on the back of a network of clothing manufacture workshops created

as part of a project of Young Turk nationalism. As sect and *millet* ("nation") came to be the dominant feature of nation-building in this period, the importance of training Muslims in particular also became seen as an imperative after almost a century of a majority non-Muslim workforce. Simultaneously, this workforce came to be drilled with a national consciousness as the Empire began to fall apart under the strain of a string of military losses and the emergence of national separatist movements.

In terms of the social lives of child industrial workers, there is likely little else to be gleaned from the literature on the Hereke Imperial Factory, but other studies on other factories at the time, especially imperial Ottoman factories, would allow us a fuller picture of the everyday lives, interests, and social statuses of these children and the broader workforce.

#### APPENDIX A

### 1908 STRIKES IN THE OTTOMAN EMPIRE

In this appendix, you will find the list of strikes happened in the Ottoman Empire in 1908.

**Table A.1** 1908 Strikes in the Ottoman Empire (Continued)

Source: Kadir Yıldırım, Osmanlı'da İşçiler, 1870-1922: Çalışma Hayatı Örgütler,

Grevler (Istanbul: İletişim Publication, 2013), 359-363.

The Ottoman Sea Line Company (Şirket-i Hariyye) / Hasköy Istanbul

The Imperial Arsenal (*Tersane-i Amire*) / Istanbul

The Imperial Ferry Company (İdare-i Mahsusa) / Istanbul

Balya Karaaydın Mines / Balıkesir

Karesi Boracite Mines / Balıkesir

Ereğli Mines / Zonguldak

Taşoz Mines / Thessaloniki

Ergani Copper Mine / Ergani

The Régie Company / Istanbul

Samsun Tobacco House /Samsun

Samsun Régie Factory / Samsun

Thessaloniki Régie Factory / Thessaloniki

İskeçe Tobacco Shop / Thessaloniki

Drama Tobacco Shop / Thessaloniki

### Table A.1 (Continued) 1908 Strikes in the Ottoman Empire

Source: Kadir Yıldırım, *Osmanlı'da İşçiler*, 1870-1922: Çalışma Hayatı Örgütler, Grevler (Istanbul: İletişim Publication, 2013), 359-363.

Kavala Tobacco Shop / Thessaloniki

The Ottoman Oriental Railway Company / Manastir

The Ottoman Oriental Railway Company / Skopje

Hejaz Railways / Aleppo Damascus

Beirut Coal and Gas Company / Beirut

A Press in Jerusalem / Jerusalem

The Singer Company / Skopje

Aydın Railway Company / Aydın

The Silk Factory / Izmit

Carmadon Carpet Factory / Izmir

The Carpet Factory / Sivas

Foça Saltworks / Aydın

Olympos Beer and Ice Plant / Thessaloniki

The Oriental Rug Company / Izmir

## APPENDIX B

## CURRICULUM AND THE STUDENTS OF THE FACTORY SCHOOL

In this appendix, the charts provide information about the courses at the curriculum of the Factory School and the students enrolled to the school.

**Table B.1** The First Year of Primary School at Hereke Factory in 1912-13 (Continued)

Good Behavior (Hüsn-ü Hareket)	Calligraphy (Hüsn-ü Hat)	Arithmetic (Hesab)	Orthographics (İmla)	Reading (Kıraat)	Islamic Catechism (İlm-i hal)	Memorization of Sections of the Quran (Sure Ezberi)	Quran (Kur'an-ı Kerim)	
10	9	10	10	10	10	10	10	İhya? İhsan
10	7	10	10	10	7	8	10	Sırrı Hüseyin
10	10	10	10	10	10	9	10	Mehmed Eşref
10	9	10	10	10				Vasil Tanaş
10	7	10	10	10	10	10	10	Hüseyin Remzi

**Table B.1** (Continued) The First Year of Primary School at Hereke Factory in 1912-13

Good Behavior (Hüsn-ü Hareket)	Calligraphy (Hüsn-ü Hat)	Arithmetic (Hesab)	Orthographics (İmla)	Reading (Kıraat)	Islamic Catechism (İlm-i hal)	Memorization of Sections of the Quran (Sure Ezberi)	Quran (Kur'an-ı Kerim)	
10	6	10	10	10	10	10	10	Ahmed Mustafa
10	6	10	9	10				Andreya? Goço?
								Akif İsmail
10	6	9	7	10	10	10	10	Mustafa Mehmed
10	6	6	6	9	8	10	9	Raşid Ali
10	7	10	10	10	10	10	10	Mehmed Ahmed
10	5	3	8	7	4	6	6	Fehmi Mustafa
10	9	10	10	10	10	10	10	Şahin
10	8	6	6	8	6	10	9	Mustafa Arif

**Table B.1** (Continued) The First Year of Primary School at Hereke Factory in 1912-13

Good Behavior (Hüsn-ü Hareket)	Calligraphy (Hüsn-ü Hat)	Arithmetic (Hesab)	Orthographics (İmla)	Reading (Kıraat)	Islamic Catechism (İlm-i hal)	Memorization of Sections of the Quran (Sure Ezberi)	Quran (Kur'an-ı Kerim)	
10	6	8	8	8	6	7	9	Hüseyin Esad
10	8	8	10	10				Anaștaș
10	8	7	6	9				Hristo Lazri?
10	8	8	6	10				Tiyano? Koço?
10	8	3	4	4				Anesti Nikola
10	7	10	8	7	6	6	10	Mehmed Ali
10	10	10	9	10				Nikola Yani

Table B.2 The Second Year of Primary School at Hereke Factory in 1912-13 (Continued)

Good Behavior	Calligraphy	Mathematics	Orthographics	Readings	Islamic Catechism	Memorization of Sections of the Quran	Quran	
10	10	10	10	10	10	10	10	Hüseyin Ali Osman Efendi
10	10	10	10	10	10	10	10	Eyüb Hasan Efendi
10	10	6	10	10	10	10	10	Yaşar Mustafa Efendi
10	10	10	10	10	10	10	10	Ali Selim Efendi
10	9	10	10	10	10	10	10	Halil İbrahim Efendi
10	8	10	10	10	10	10	10	Nevber Hanım
10	10	10	10	10	10	10	10	İrfan Efendi
10	7	5	10	10	8	10	10	İsmet Hanım
10	8	10	10	10	10	10	10	Celaleddin Efendi
10	4	5	5	6	8	10	10	Zehra Hanım

 $\textbf{Table B.2} \ (\textbf{Continued}) \ \textbf{The Second Year of Primary School at Hereke Factory in 1912-13}$ 

Good Behavior	Calligraphy	Mathematics	Orthographics	Readings	Islamic Catechism	Memorization of Sections of the Quran	Quran	
10	8	8	10	10	8	10	10	Sadi Cemil Efendi
10	7	8	8	9	10	10	10	Sıdkı Efendi
10	9	10	10	10				Yorgi Dimitri Efendi
10	8	10	10	10				Yorgi Andon Efendi
10	10	10	10	10				Elsas? Efendi
10	7	6	10	10	10	10	10	Rabia Hanım
10	7	6	10	10	8	10	10	Şükriye Hanım
10	6	7	10	10	10	10	10	Cemil Mustafa Efendi
10	5	8	10	8	7	9	10	Fehime Hanım

 Table B.3 The Third Year of Primary School at Hereke Factory in 1912-13 (Continued)

Go od Be ha vio r	Callig raphy	Civics(Ma'lûmâ t-ı Medeniyye)	Science (Maʻlû mât-ı Fenniyy e)	Mathemat ics	Ottom an Histor y (Tarih -i Osma ni)	Geograp hy	Ortho graph ics	French	Ottoman Letters (Muhtasar Hurûf-ı Osmaniyy e)	Islamic Catechism	Memoriza tion of Sections of the Quran	Recita tion of the Quran (Tecvi d)	Quran	
	10	10	10	9	10	10	10	10	8	10	10	10	10	Hasan Muharrem
	10	10	10	8	10	10	10	10	10	10	10	10	10	Mehmed Besim
	10	10	10	9	10	10	10	9	10	10	10	10	10	Ahmed Efendi
	10	10	9	10	10	10	10	10	10	10	10	10	10	Mehmed Müfid
	10	9	9	10	10	10	10	10	10	10	10	10	10	Abdürrah man Efendi
	10	9	10	9	9	10	10	10	10	9	10	10	10	Kemaleddi n Efendi
	10	10	10	9	10	10	10	10	9	9	9	9	9	Mehmed Raif Efendi

Table B.3 (Continued) The Third Year of Primary School at Hereke Factory in 1912-13

Go od Be ha vio r	Callig raphy	Civics(Maʻlûmâ t-ı Medeniyye)	Science (Ma'lû mât-ı Fenniyy e)	Mathemat ics	Ottom an Histor y (Tarih -i Osma ni)	Geograp hy	Ortho graph ics	French	Ottoman Letters (Muhtasar Hurûf-i Osmaniyy e)	Islamic Catechism	Memoriza tion of Sections of the Quran	Recita tion of the Quran (Tecvi d)	Quran	
	7	7	7	6	7	8	10	10	7	10	10	10	10	Musa Necib Efendi
	10	8	6	8	8	8	9	9	8	10	10	10	10	Mustafa Efendi
	10	7	7	9	8	9	8	9	8	10	10	10	10	Mehmed İhsan Efendi
	9	9	8	8	8	7	8	9	6	9	9	9	9	Mustafa Efendi
	10	9	9	9	9	8	9	9	9	9	10	10	10	Mahmud Sıdkı Efendi
	9	6	7	7	7	7	9	9	8	9	10	10	10	Nazif Efendi
	8	8	6	6	8	7	8	8	8	9	9	9	9	Ahmed Efendi
		7	6	4	8	7	8	8	6	9	9	9	9	Mehmed Cemal Efendi

Table B.3 (Continued) The Third Year of Primary School at Hereke Factory in 1912-13

Go od Be ha vio r	Callig raphy	Civics(Maʻlûmâ t-ı Medeniyye)	Science (Maʻlû mât-ı Fenniyy e)	Mathemat ics	Ottom an Histor y (Tarih -i Osma ni)	Geograp hy	Ortho graph ics	French	Ottoman Letters (Muhtasar Hurûf-1 Osmaniyy e)	Islamic Catechism	Memoriza tion of Sections of the Quran	Recita tion of the Quran (Tecvi d)	Quran	
	10	9	9	8	8	8	9	8	6	10	10	10	10	Ahmed Efendi
	10	8	8	6	8	8	8	8	7	10	10	10	10	Halid Efendi
	10	8	8	9	8	7	10	10	9	10	10	10	10	Latife Hanim
	7	7	8	6	8	7	8	8	8	10	10	10	10	Hadice Semihe Hanım
	10	8	8	8	9	8	10	10	8	10	10	10	10	Necmiye Hanım
														Mustafa Efendi
	9	8	8	7	9	9	9	9	5	10	10	10	10	Mustafa Sırrı Efendi

**Table B.4** The First Year of Junior High School at Hereke Factory in 1912-13 (Continued)

Goo d Beha vior	Ottoman Letters (Harf- i Osmaniye)	Calligraphy	Science	Mathematics	History of Islam (Tarih- i Islam)	Geography	Orthographics	Reading	Persian (Farsi)	Ara bic (Ara bi)	Religious Studies (Ulum-1 Diniyye)	Applied Study of the Quran (Kur'an-1 Kerim maa tatbikat)	
10	10	10	10	10	10	10	10	10	10	10	10	10	Mehmed Hamdi
10	10	10	10	10	10	10	10	10	10	10	10	10	İsmail Hamid
10	10	10	10	10	10	10	10	10	10	10	10	10	Mehmed Kemal
10	10	10	10	10	10	10	10	10	8	9	10	10	Ali Müfid
10	9	10	10	10	10	10	10	10	7	10			Anesti Nikola
10	10	10	8	9	8	10	10	9	7	7	8	10	Rıdvan Ahmed
10	8	10	8	9	8	10	10	9	6	9	9	10	Hulusi
10	9	10	10	8	10	10	10	10	10	10	10	10	Fahriyye Hanim

**Table B.4** (Continued) The First Year of Junior High School at Hereke Factory in 1912-13

Go od	Ottoman Letters ( <i>Harf</i> -	Calligraphy	Science	Mathematics	History of	Geography	Orthographics	Reading	Persian (Farsi)	Ara bic	Religious Science	Applied Study of	
Beh avi	i Osmaniye)				Islam ( <i>Tarih-</i>					(Ara bi)	(Ulum-ı Diniyye)	the Quran (Kur'an-ı	
or					i Islam)					01)	Diniyye	Kerim maa tatbikat)	
10	6	10	7	8	7	7	10	9	6	8	8	10	Mehmed Mustafa
													Mehmed Refik
													Mustafa Mehmed

**Table B.5** The Second Year of Junior High School at Hereke Factory in 1912-13 (Continued)

Good Behav ior	Art (Resi m)	Calligra phy	Fren ch	Civics (Ma'lû mât-ı Medeni yye)	Scie nce	Geome try (Hend ese)	Mathem atics	Histo ry of the Otto man Empi re	Geogra phy	Orthogra phics	Readi ng	Otto man Letter s	Persi an	Ara bic	Religi ous Scienc e	the Appl ied Stud y of the Qura n	
10	9	10	7	10	10	10	10	10	10	10	10	10	10	10	10	10	Burhan Mustaf a Efendi
10	9	10	6	9	9	10	10	10	10	10	10	10	9	10	10	10	Şaban Mahir Efendi
10	10	10	9	10	10	10	10	10	10	10	10	9	10	10	10	10	Halid İshak Efendi
10	8	10	7	10	9	10	9	10	10	10	10	9	9	10	10	10	Rıfkı Salih Efendi
10	9	10	9	8	8	10	9	6	6	10	10	10	10	9	9	10	Akif Mustaf a Efendi
10	10	10	8	10	10	6	6	10	8	10	10	8	10	10	10	9	Celale ddin Efendi

 Table B.5 (Continued)
 The Second Year of Junior High School at Hereke Factory in 1912-13

Good Behav ior	Art (Resi m)	Calligra phy	Fren ch	Civics (Maʻlû mât-ı Medeni yye)	Scien ce	Geome try (Hende se)	Mathem atics	Histor y of the Otto man Empir e	Geogra phy	Orthograp hics	Readi ng	Otto man Letter s	Persi an	Ara bic	Religi ous Scienc e	the Appli ed Stud y of the Qura n	
9	5	10	4	7	6	4	4	9	8	10	9	7	3	4	9	10	Hüse yin Must afa Efend i
8	8	10	4	8	6	4	4	8	7	10	9	7	6	7	8	9	İbrahi m Must afa Efend i

**Table B.6** The Third Year of Junior High School at Hereke Factory in 1912-1913

Good		Calligra	Fren	Knowle	Scien	Geome	Mathem	Gene	Geogra	Orthograp	Readi	Ottom	Persi	Ara bic	Religi	the	
Beha ior	v rt	phy	ch	dge of Civiliza	ce	try	atics	ral Histo	phy	hics and Clerkship	ng	an (Osma	an	bic	ous Scienc	Appli ed	
101				tion				ry		(İmla ve		ni)			e	Study	
								(Tari		Kitabet)						of the	
								h-i								Qura	
								Umu								n	
								mi)									
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#### APPENDIX C

## BOOKS ON THE CURRICULUM AT THE FACTORY SCHOOL

In this appendix, you will find the books on the curriculum af the Hereke Factory School.

**Table C.1** Books on the Curriculum At the Factory School (Continued)

Source: BOA HH.THR. 1237.46 1331.L.13 (September 15, 1913)

The Quran (*Kur'an-ı Kerim*)

Prayers and Surah books [Amme cuzi, Surah of Tebareke (Tebareke cuzi), Fursi?.... cuzu]

The Great Ottoman Alphabet (Mükemmel Elifba-i Osmani)

Selected texts from Sadi (Müntahabat-ı Gülistan)

Mathematics (*Hesab-ı Ameli*)

Mathematics part two (*Hesab-i Ameli İkinci Kısım*)

Mathematics part three (Hesab-i Ameli Üçüncü Kısım)

Special Geometry (Muhtasar Hendese)

The Shorter General History (Küçük Tarih-i Umumi)

Science Knowledge (*Malumat-i Fenniye*)

French (Fransızca)

Introduction to Geometry (*Mebadi-i Hendese*)

Geography (Coğrafya)

New Knowledge of Science (Yeni Malumat-i Fenniye)

# **Table C.1** Books on the Curriculum At the Factory School (Continued)

Source: BOA HH.THR. 1237.46 1331.L.13 (September 15, 1913)

French the Easy Way (Fransızca Teshil-ül Lisan)

Knowledge of Islamic Tenets (*Akaid-i İslamiyeden İmal-i Ulum-u Diniyye*) Ottoman Letters (*Harf-i Osmani*)

History of Islam (*Tarih-i Islam*)

Science (Malumat-i Fenniye)

Reading the Quran (*Tecvid*)

Teaching Mathematics (Muhtasar Muallim-i Hesab)

Illustrated Ottoman History (Muhtasar Resimli Osmanlı Tarihi)

The Golden Book (Altun Kitab)

New Islamic Catechism for Muslim Children (Müslüman Çocuk Yeni İlm-i Hal)

The Golden Key (Altun Anahtar)

Introduction to the Golden Book (Altun Kitaba Medhal)

The Book of Minerology, Botany and Animal Science (Mücelled Mevalid-i Selase

Hakkında İlm-i Eşya Kitabı)

Readings in Arabic (*Arab-i Kıraat Kitabı*)

#### APPENDIX D

## BOOKS AT THE DRAWING OFFICE OF HEREKE IMPERIAL FACTORY

In this appendix, you will find the books at the the drawing office of Hereke Imperial Factory.

**Table D.1** Books at the Drawing Office of Hereke Imperial Factory

Source: İhtisas Library, Dolmabahçe Palace

Les Oiseaux: Scenes Variees, Erudes a l'Aquarelle (1857) by Edouard Travies

Industriel Le Mobilier: De La Couronne et Des Collections Publiques & Particulères by Rodolphe Pfnor (1876)

Variete de Pigeons (Meşu Gögercin)

The *Usul-i Mimari-i Osmani* (*Ottoman Architectural Methods*) by İbrâhim Edhem Paşa (1873)

Itinera Principum S. Coburgi die Botanische Ausbeute (1883) by Dr. Henrich Ritter Wawra v. Fernsee

The Furniture of Windsor Castle (1905) by Guy Francis Laking

Art Industriel: L'Ornament des Tissus, Recueil Historique et Pratique (1877) by M. Dupont-Auberville

La Décoration Arabe (1885) by Émile Prisse d'Avennes

L'ornement Polychrome (1888) by Albert Racinet

Eastern Carpets: Twelve Early Examples (1882) by Vincent Julia Robinson

L'Art de Decorer Les Tissus: D'Apres Les Collections Du Musee Historique de la Chamber de Commerce de Lyon, France (1900) by Raymond Cox

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