

The Economic and Population Geography of the Bursa Region, 1820-1870

by

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The Economic and Population Geography of the Bursa Region, 1820-1870

Koç University

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ABSTRACT

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This thesis acknowledges that the Ottoman economy was the sum of its regions and quantitatively and qualitatively examines the economic and population geography of the Bursa district (*sancak*) in northwestern Turkey between 1820-1870.

The causes and extent of regional divergence in economic development is a key concern of historical economic geography. Due to the long unavailability and underutilization of Ottoman economic and population microdata and heavy reliance on consular reports concerned with imports and exports, the Empire's economic and population history has not been examined from a spatially distinct regional development perspective. The thesis marks a significant contribution as the first study focusing on the spatiotemporal aspects of economic development and population characteristics of a region in the Ottoman Empire. It focuses the Bursa district, corresponding to present-day Bursa province, which had a large multi-ethnic, multi-religious population with close to 90% rural inhabitants and rich and varied biodiversity and geophysical properties that gave rise to a great diversity of livelihood systems. Its urban center was one of the largest and most occupationally diverse towns in the Ottoman Empire.

As a commercially and administratively important and cosmopolitan district commonly identified with its urban center, Bursa stands out as a silk manufacturing stronghold in the existing literature. The domestic silk industries' rapid deindustrialization and incorporation into the capitalist economy after 1820 resulted in Bursa's portrayal as just another periphery of capitalism. Surely, sericulture was essential to the well-being of most households, especially due to the increasing cocoon needs of the rapidly mushrooming silk factories in the city, and the region did not practically directly participate in international trade except for silk. On the other hand, sericulture was a short-term, seasonal endeavor that complemented a wide range of other economic activities.

Instead of singling out a sector or a locality, the present thesis adopts a holistic view and offers a comprehensive survey of continuity and change, stability and dynamism, and

unity and diversity in Bursa's economic and population trajectory at the regional, subdistrict, urban, and rural levels between 1820-1870, or during the years when the shocks of incorporation into the world economy and deindustrialization were felt most intensely. It utilizes mid-nineteenth-century Ottoman microdata – namely, Ottoman population (*nüfus*) registers, tax (*temettuat*) surveys, inheritance inventories (*tereke*), and tombstones - in conjunction with hitherto unused archival documents, British Parliamentary Papers, and English, German, French, Greek, and Bulgarian travelogues. Besides a comprehensive quantitative and qualitative documentation of the regional economy and its infrastructural, environmental, and socioeconomic determinants, ranging from agricultural technology to the impact of epidemics, natural disasters, and military conscription, the thesis also covers population characteristics (especially ethnoreligious identity, population density, and household size) and migration over the 50 years.

To complement and complicate the macro findings, which occupy the first half of the present study, the thesis introduces the "Historical Life Course" (HLC) perspective that has been used in western historical demography for over half a century and can tremendously benefit Ottoman historiography by quantitatively and qualitatively portraying regional trajectories. HLC requires the creation of longitudinal databases created from linked individual microdata to observe phenomenon throughout the life courses of individuals and households. For the first time in Ottoman studies, this thesis creates individual and household biographies by linking population registers, tax surveys, inheritance inventories, tombstones, and available supplementary archival material. Not only does this method allow for writing life course biographies of previously unknown people, but it also enables the cross-verification of the various microdata sources and checking their compatibility. Macro level analyses, be it at the regional, district, or quarter/village level, supply the material, environmental, social, cultural, symbolic, and political contexts.

To spatialize and visualize the findings, the study employs ArcGIS and QGIS software for analyses of economic and population geography at macro and micro-level. Geographic data, such as overland road transport network (extracted from a georeferenced 1943 map produced by the German military staff), soil quality, and SRTM elevation data, not only supplements the spatial analyses but also enhances the explanatory power of the microdata. This way, the thesis allows for the reconceptualization of history as a geospatial science.

ÖZETÇE

Bursa Bölgesinin İktisadi ve Nüfus Coğrafyası, 1820-1870

Efe Erüenal

Tarih, Doktora

15 Ağustos 2023

Bu tez, Osmanlı ekonomisinin farklı bölgelerin toplamı olduğunu kabul eder ve Kuzeybatı Türkiye'deki Bursa bölgesinin (sancağının) ekonomik ve nüfus coğrafyasını 1820-1870 yılları arasında nicel ve nitel olarak inceler.

İktisadi kalkınmanın bölgesel dinamiklerinin sebepleri ve boyutları tarihsel iktisadi coğrafya disiplininin önemli çalışma alanlarından biri haline gelmiştir. Ancak Osmanlı İmparatorluğunun ekonomik ve nüfus tarihini mekânsal olarak ve bölgesel gelişim perspektifinden inceleyen çalışmalar azdır. Osmanlı iktisadi ve nüfus mikro verilerinin uzun süre araştırmacılara açılmaması veya yetersiz kullanılmasının yanı sıra, mevcut iktisat tarihi literatürünün konsolosluk raporlarına dayanan ve dış ticarete odaklanan anlatısı da bölgesel dinamiklerin incelenmesine engel teşkil etmiştir.

Bu tez, Osmanlı İmparatorluğu'ndaki ekonomik gelişmenin ve nüfus özelliklerinin mekânsal ve zamansal yönlerine odaklanan bölgesel boyuttaki ilk çalışmadır. Günümüz Bursa iline karşılık gelen Bursa bölgesine odaklanır; bu bölge, yaklaşık %90'ı köylerde yaşayan, çeşitli etnik-dini cemaatleri bünyesinde barındıran farklı coğrafi yapılara ve zengin biyoçeşitliliğe sahip bir bölgeydi ve bu, çok çeşitli geçim sistemlerinin ortaya çıkmasına yol açtı. Bölgeye başkentlik eden Bursa şehri, Osmanlı İmparatorluğu'ndaki en büyük ve mesleki yapısı en çeşitli olan şehirlerden birisiydi ve önemli bir ticari ve idari merkez olarak günümüze kadar ulaştı.

Bursa bölgesi, mevcut literatürde genellikle kent merkeziyle neredeyse eşanlamlı olarak temsil edilmiş ve özellikle de ham ipek ve ipekli kumaşların üretim merkezi olarak öne çıkmıştır. Özellikle 1820 sonrasında yerli ipek endüstrilerinin hızla sanayisizleşmesi ve küresel kapitalist ekonomi ağlarına eklemlenmesi Bursa'yı kapitalizmin diğer bir taşıması olarak betimlenmesine sebep olmuştur. Elbette, özellikle de şehirde sayıları hızla çoğalan ipek filatürlerinin gittikçe artan koza ihtiyacı çoğu hanenin refahı için önemliydi ve Bursa bölgesi görünürde ipek dışında uluslararası ticarete doğrudan katılmıyordu. Öte yandan, kozacılık ve ham ipek üretimi kısa vadeli, mevsimsel bir uğraştı ve hanelerin halihazırda uğraştığı geniş bir ekonomik faaliyet yelpazesine sadece iyi bir nakdi katkı sağlıyordu.

Bu tez, bir sektörü veya bir yeri izole etmek yerine, Bursa'nın ekonomik ve nüfus dinamiklerinin seyrinin 1820-1870 yılları arasındaki, yani dünya ekonomisine entegrasyonun ve sanayisizleşmenin en yoğun hissedildiği zamanlardaki, bölgesel, alt-bölgesel, kentsel ve

kırsal düzeydeki panoramasını çizer. Orta-ondokuzuncu yüzyıl mikroverilerini- yani, Osmanlı nüfus, temettuat, ve tereke defterlerini ve mezar taşlarını – kullanır ve bu verileri şimdiye kadar elden geçmemiş arşiv belgeleri, *British Parliamentary Papers* içinde bulunan İngiliz konsolosluk raporlarını, ve İngilizce, Almanca, Fransızca, Yunanca ve Bulgarca seyahatnamelerle birlikte harmanlar. Bölgesel ekonominin ve onu etkileyen altyapısal, çevresel, ve sosyoekonomik faktörlerin (tarım teknolojilerinden salgın hastalıklara, doğal afetlerden ve zorunlu askerliğin etkisine kadar) kapsamlı nicel ve nitel belgelenmesinin dışında, tez ayrıca nüfus özelliklerini (özellikle etnik-dini kimlik, nüfus yoğunluğu ve hane halkı büyüklüğü) ve bölgeye yapılan göçlerin etkilerini detaylıca analiz ederek 50 yıl boyunca izler.

Makro bulguları tamamlamak ve daha da karmaşıktırmak amacıyla, bu tez Batıda tarihsel demografi alanında yarım yüzyıldan fazla bir süredir kullanılan "Tarihi Yaşam Seyri" (TYS) perspektifini Osmanlı tarihçiliğine uygular ve bölgesel dinamiklerin incelenmesini nicelik ve nitelik açısından kıymetlendireceğini savunur. YYS, yöntem olarak bireyleri ve hane halkını çeşitli kaynaklardan ve zamanlardan gelen mikroverilerde tespit edip uç uca ekleyerek yaşam seyirlerini oluşturur. Elde edilen yaşam seyirlerinden oluşan veritabanları pek çok farklı fenomenin gözlemlenmesi ve hipotezlerin oluşturulması veya test edilmesi için paha biçilmez bir kaynak sağlar.

Bu tez, Osmanlı çalışmalarında ilk defa, nüfus, temettuat, ve tereke defterlerini, mezar taşlarını ve mümkünse ek malzemeyi bağlayarak bireysel ve hane halkı biyografileri oluşturur. Bu yöntem, sadece daha önce bilinmeyen kişilerin YYS biyografilerini yazmaya olanak tanımakla kalmaz, aynı zamanda çeşitli mikro veri kaynaklarını kendi içlerinde çapraz doğrulamayı ve uyumluluklarını kontrol etmeyi de mümkün kılar. Diğer yandan da tezin ilk yarısını oluşturan makro düzeydeki (bölgesel, kaza veya köy/mahalle/şehir/kasaba bazındaki) bulgular mikro düzeydeki YYS biyografilerine maddi, çevresel, sosyal, kültürel, sembolik ve politik bağlamları sağlar.

Bulguları mekânsallaştırmak ve görselleştirmek için çalışma, ekonomik ve nüfus coğrafyasının makro ve mikro düzeylerindeki analizler için ArcGIS ve QGIS yazılımlarını kullanır. (1943 Alman ordusunun ürettiği detaylı haritalara dayanan) kara yolu taşıma ağı, toprak kalitesi, ve SRTM uydu yükseklik haritası gibi çeşitli coğrafi veriler sadece mekânsal analizlere katkıda bulunmaz, aynı zamanda mikro verilerin açıklama gücünü de artırır. Böylelikle tez, tarihi geo-mekansal bir bilim olarak düşünmenin de önünü açar.

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Introduction

The research presented in this thesis contributes to Ottoman economic and population history by improving its methodological, empirical, and qualitative basis and, through this, further hopes to advance Ottoman and global comparative economic and demographic history, particularly in the politically, economically, and socially tumultuous nineteenth century.

Methodologically, it spatiotemporally refines, defines, and takes as its unit of analysis the concept of “region” – for this thesis’ purposes, a geographic-cum-administrative one, the district, also known as the *sancak*, with all its constituent components. Empirically, it employs hitherto unused or underutilized Ottoman micro-data, mainly Ottoman population and tax registers and many more archival and secondary sources, and studies spatial configurations and distributions of economic activity and populations, which have elicited a large body of literature regarding the economic and demographic development of European regions yet are largely neglected in Ottoman studies due to source limitations and unavailability of data.

The thesis contextualizes the regions in the world and domestic economic context while synchronically analyzing developments in subregions. It also continually acknowledges and investigates the socioeconomic, infrastructural, and environmental determinants that played essential roles in the internal diversification and overall performance of regions. Another methodological novelty of the following work is that it bases its macro-findings on micro-foundations via a special perspective called the Historical Life Course, which links a variety of microdata together to create life course trajectories of individuals and households to exemplify and complicate the regional account of change and continuity.

Let us elaborate on these novelties and specify this study's spatial and temporal scope, limitations, and strengths. This thesis will examine the economic and population geography of the Bursa district or *sancak* in northwestern Anatolia in the mid-nineteenth century. The period from 1820 to 1870 constitutes the core timeframe of analysis. The end of the Napoleonic Wars and the Continental Blockade ushered in a new phase of inter-continental market integration for bulk goods aided by revolutions in transport and communications.

Exchange relations between the Ottoman Empire and the world economy intensified unprecedentedly.

As long as the imports to and exports from the Empire are considered, 1820-1870 was the harshest period of deindustrialization and the most intense yet most profitable episode of incorporation into the world economy. It saw a dramatic shift of the Ottoman economy from processed goods to raw materials exporter and buyer of cheap, factory-produced goods, facilitated by favorable trade agreements granting low tariffs to foreign traders and worsening the financial situation of the Empire after the 1830s, culminating in the declaration of bankruptcy in 1875.

This boom in commodity production and exports was realized by mobilizing existing structures and networks given the relative non-development and uneven outcomes of agriculture, manufacturing, and transport sectors and the reliance on intermediaries in trade. It was also contingent on the oscillations in the world economy and persistent environmental, infrastructural, financial, and socioeconomic determinants¹ that limited agricultural, industrial, and mining output and made the ratio of exports to any measure of total production very low in the Ottoman territory during the period under study.

The prevalence of existing structures, networks, and determinants shaping the course of the incorporation of the heavily agrarian Ottoman Empire into the global sphere of expanding capitalism pronounced the fact that the Ottoman economy was the sum of its regional economies. This fact was more relevant than ever in the long nineteenth century, especially for the Empire's longevity. Coastal areas experienced the initial and most intense impact of the trade expansion. Western Anatolia, which had already been integrating with the world markets in the preceding centuries, primarily via Izmir port, took the lead in many respects with its variegated rich agricultural landscape.

¹ This thesis takes specify the determinants as the following: Topographical and climatic features, agricultural suitability, transport network, the focus of agricultural production, agrarian and industrial technology, patterns of land use, the state of taxation, money availability, and credit relations, population and migration, and environmental contingencies like diseases and disasters.

As in the case of Western Anatolia, regions have been practical concepts to help explain change and stability in economic history while stressing the importance of spatial heterogeneity as the driver of growth. The themes of incorporation into the world economy and deindustrialization were instrumental in constructing Ottoman economic regions in most socio-economically oriented works on the Empire. Economic regions have usually been conceptualized as the vast and nebulous hinterlands of major ports instead of properly delimiting their borders and therefore remained as loose confederations of economic zones integrated with world markets and sharing supposedly common production characteristics.

The disproportionate attention given to the export-oriented agricultural production and destructive effects of cheap (mainly textile) imports lent coherence to Western Anatolia but neglected the domestic production, consumption, and exchange practices, which largely limited exports and did not undergo a capitalist transformation. Moreover, the varied agricultural profile and the spatiotemporal impact of said determinants led to considerable differentiation and relative isolation within this region.

Greatly responsible for the emphasis on the most "incorporated" and "deindustrialized" aspects of the economy have been the overreliance on consular reports, which offer imports and exports data and valuable insights into the economic situation, and the unavailability of Ottoman microdata on demography and economic activities, which are key in making regional/sub-regional analyses and comparisons, until relatively recent times. Furthermore, keeping the size of research units as large as Western Anatolia also diminishes the possibility of using travelogues, Ottoman archival material, and other relevant data (e.g., transport and soil suitability) that will introduce valuable additions and heterogeneity to the grand narratives.

Bursa district is an important constituent in the economic core zone of Western Anatolia. Its city center served as the Empire's first capital and remained an important administrative and judicial center with a large cosmopolitan population. Its economic importance in the imperial and world economy as a silk manufacturing and weaving stronghold from the early Ottoman times has been the subject of many inquiries. It represented an ideal case for the nineteenth-century economic transformation, as its native silk spinning and weaving industries rapidly declined due to the opening of European-owned

steam-powered silk factories in the city from the late 1830s onwards. As a result, Bursa inhabitants switched to raising cocoons bought mainly by the factories and turned into silk threads to be exported primarily to Lyons, the world's silk capital.

The rapid deindustrialization and incorporation into the capitalist economy of Bursa's silk industries resulted in Bursa's portrayal as just another periphery of capitalism. In the Western Anatolian economic landscape, "Bursa" stands out as a region identified with silk and as synonymous with the city of Bursa in the literature. Surely, sericulture was widely practiced in the city's hinterland for the needs of the factories. However, because of the concentration on raw silk production and trade, the borders of the hinterland of Bursa remained too vague. Similarly, sericulture was a short-term, seasonal endeavor in which families were engaged to allow for their survival. In other words, it was complementary to other economic activities.

The present thesis acknowledges that the Western Anatolian economy was the sum of its regions and takes the Bursa region as its research unit. The "region" is practically taken as the Bursa *sancak* or district, the administrative unit which preserved its shape throughout Ottoman history and remains more or less the same today (corresponding roughly to the Bursa province today), enabling comparisons across time and space. Using the literature on the region and city in this period, Ottoman archival records, consular reports, travelogues, and spatial data, it studies the region's economic and population geography, i.e., the spatio-temporal characteristics, distribution and concentration of economic activities and population, and the socioeconomic, infrastructural, and environmental determinants that shaped them. Instead of singling out a sector or a locality (e.g., subdistrict or the city), it adopts a holistic perspective and offers a broad survey of change and stability as well as unity and diversity in Bursa's economic and population trajectory in 1820-1870.

Microdata is essential to account for similarities and dissimilarities in economic and population geographies. Ottoman tax (*temettuat*) surveys and population (*nüfus*) registers from the mid-nineteenth century are indispensable sources to achieve this, as they contain individual and household-level data. Most studies have used these valuable sources by transcribing their information; the rest used them in different contexts at local levels. For the first time, this thesis uses them to define the district's outer and internal borders, detail

economic and population characteristics at subdistrict and city levels, and create maps that visualize the findings. It also uses these sources anecdotally and in creative ways to enrich the narrative.

The thesis is organized into five parts and moves from the macro- to the micro-scale. Part 1 is a general overview of the incorporation of the Ottoman into the world economy, subsequent deindustrialization, and the state of Ottoman finances in 1820-1870. It studies the emergence of regions, particularly western Anatolia, and how socioeconomic, infrastructural, and environmental determinants resulted in divergent trajectories that limited exports and brought to the fore the importance of domestic agrarian economies for the longevity of the Empire. Finally, it draws attention to the importance of regions as conceptual tools for studying Ottoman economic history, and the reasoning behind the selection of the Bursa region as the research unit.

Part 2 examines the regional economy of the Bursa region. It first introduces the legacy of the Byzantine Bithynian region's agrarian, manufacturing, and trade sectors on the development of Bursa's structures and networks. Then, it explores the economic and demographic impact of Ottoman rule, the transformation of the city into an administrative, manufacturing, and trade center, and historical processes from 1300 to 1800. The evolution of silk industries and sericulture are separately discussed to understand the weight of silk production in the regional economy, Bursa's early incorporation into the world economy, and the effect of deindustrialization.

After delimiting the region's borders, the rest of Part 2 is devoted to studying the major determinants of Bursa's production, consumption, and exchange dynamics in 1820-1870. They are subdivided into seven sections – topographical and climatic features, agricultural suitability and natural resources, transport network and modalities, the focus of agricultural production (tree, garden, and field crops, their quality, the state of agricultural technology, and livestock husbandry), state of taxation, cash availability, and moneylending, patterns of landholding, and factors that brought changes to the population – namely, migration, conscription, diseases, and natural disasters.

Part 3 introduces the population registers and tax surveys in detail and fleshes out the region's economic and population profile that said determinants impacted. It provides, for the first time, a detailed assessment of the population (i.e., permanent, temporary, and semi-nomadic) and economic activities at the subdistrict and city levels circa 1840 or in the first years of the Tanzimat period and the factory production. The permanent population is studied with reference to population densities, household size, and ethnoreligious affiliation. Then comes the temporary population. Migration and migration networks formed along ethnoreligious and birthplace lines are the main focus, while foreign citizens and banished officials that highlight the region's importance in the world economy and administrative structure are separately treated. Semi-nomads, who had always been a vital part of the population and economy and were forcibly or coercively settling in the region due to the state's modernization agenda, find their place in the analysis.

Regarding the analysis of economic activities, Part 3 studies occupational diversity in the city and towns to properly contextualize the weight of the city of Bursa among the officially recognized urban areas and employment and working conditions to balance the deindustrialization accounts. The issue of slavery, a subject understudied in the literature, and the impact of factories on work and urban life are given special attention. Then, a panorama of agricultural production all around the region is portrayed to demonstrate the divergent and shared features of production, consumption, and exchange – especially the influence of geophysical attributes on them. A distinctive feature of Part 3 is that it qualitatively and quantitatively shows that the polyculture-based agrarian economy united the Bursa region. Agricultural employment and property ownership in the city, as well as frequent migrations and exchanges between the urban area and its hinterland, help us transgress the conventional urban-rural dichotomy and offer a view not blinded by textile manufacturing.

In general, subsistence-prioritizing small-household economies laboring under a variety of determinants and changing global and imperial economic conditions shaped the trajectory of the Bursa region in 1820-1870. Unpropitious environmental conditions occasionally impacted inhabitants' lives subregionally, as in the case of the frequent

inundations of rivers, and throughout the district, like the case of the 1855 earthquake and the silkworm disease of the 1860s.

Part 4 asks for a way to overcome teleology and write a narrative that shows history in its unfolding while at the same time stressing the interdependent nature of economic relationships. It introduces the "Historical Life Course" perspective used in western historical demography for over half a century and evaluates the impact of exogenous forces on populations' economic, social, and demographic trends over long periods. Databases created from linked individual microdata, such as population and tax records, are crucial to achieving such aims. After providing a brief overview of the evolution of this perspective, this part argues that it can tremendously benefit Ottoman historiography by quantitatively portraying regional trajectories. The compatibility between the sources are discussed to use them cautiously and creatively.

Part 4 highlights the biographical aspect of the HLC inquiries that is hitherto repressed and underexplored due to dominant quantitative focus. It advocates that through biographies, we can stress human agency and contingency and test the harmony and compatibility of the sources at hand to create data linkage rules for Ottoman HLC databases in the future. In addition, to extend the Ottoman HLC period before and after the population registers and tax surveys, it presents the two unique and widely available materials, which are the post-mortem inheritance inventories and tombstones that supplement biographies in a multitude of novel ways and add unique details to the life courses of the Bursa inhabitants.

Part 5 is where these four HLC materials (and supplementary archival material whenever possible) are used to create the life courses of four households in the city of Bursa in 1820-1870. The city is particularly selected as the research unit to go beyond the fixation on manufacturing in the urban area and the urban/rural dichotomy and to stress the wide-scale domestic consumption, production, and exchange relations that unite the region and are mostly neglected in the incorporation and deindustrialization narratives. Our findings in the first three parts constantly inform us in connecting the bits of information, describing the landscape quantitatively and qualitatively, and making educated speculations. Finally, the last part sums up the results of the thesis and concludes it.

Part 1: An Introduction to Ottoman Regional Economies, 1820-1870

1.1: Introduction

This thesis proceeds from the premise that the Ottoman Empire was the sum of its regional economies. The causes and extent of regional divergence have increasingly been recognized as key factors behind long-term economic development in historical economic and population geography, thanks especially to the recent explosion in the growing pool of available economic and population microdata and the software-rich data processing environment of Geographic Information Systems (GIS), which have facilitated diverse conceptualizations of economic actions and actors in specific spatial and geographic terms.²

The strongest argument encouraging regional analyses of spatial economic structure in Ottoman studies is that the Empire remained a colossal peasant empire throughout its history. Around 90 percent of its population lived on the land and earned their income from agricultural activities in both 1800 and 1900.³ Agriculture was its primary source of fiscal strength, and the health of its agrarian economy was inextricably linked to the state's longevity.⁴ Besides provisioning the population and the army, agriculture was central to manufacturing and building activities and specific service sectors. The highly agrarian economy with a highly rural workforce across the varying geographies of the Empire meant that the producers struggled, almost daily, with the vicissitudes of the unpropitious natural

² Regional approaches to economic development have proliferated a new strain of research that discern patterns from particularities. Especially the emergence and progressive refinement of the “Little Divergence” paradigm that analyzes long-term structural differences and developmental inequalities within Eurasia in years leading to and after the Industrial Revolution is one of the most remarkable achievements and reinforced collaborations between economists, geographers, and historians. For some recent overviews of the methodological and theoretical developments towards regionalization in the field of economic geography, see Alexandra M. de Pleijt and Jan Luiten van Zanden, “Accounting for the ‘Little Divergence’: What Drove Economic Growth in Pre-Industrial Europe, 1300–1800?,” *European Review of Economic History* 20, no. 4 (2016): 387–409; Joan Ramón Rosés and Nikolaus Wolf, “Regional Economic Development in Europe, 1900–2010: A Description of the Patterns,” in *The Economic Development of Europe’s Regions* (New York: Routledge, 2018), 3–41; Martin Henning, “Time Should Tell (More): Evolutionary Economic Geography and the Challenge of History,” *Regional Studies* 53, no. 4 (2019): 602–13; Victor Court, “A Reassessment of the Great Divergence Debate: Towards a Reconciliation of Apparently Distinct Determinants,” *European Review of Economic History* 24, no. 4 (2020): 633–74; José M. Gaspar, “New Economic Geography: History and Debate,” *The European Journal of the History of Economic Thought* 28, no. 1 (2021): 46–82; Ron Martin and Peter Sunley, “Making History Matter More in Evolutionary Economic Geography,” *ZFW – Advances in Economic Geography* 66, no. 2 (2022): 65–80.

³ Donald Quataert, “The Age of Reforms, 1812–1914,” in *An Economic and Social History of the Ottoman Empire*, ed. Halil İnalcık and Donald Quataert, vol. 2 (Cambridge University Press, 1996), 843.

⁴ Şevket Pamuk, “Institutional Change and the Longevity of the Ottoman Empire, 1500–1800,” *The Journal of Interdisciplinary History* 35, no. 2 (2004): 232.

environment to primarily secure subsistence. Regional climate, geography, flora, and fauna were influential in expanding or constricting their opportunities.

The allied grand narratives of the Ottoman Empire's incorporation into the world economy and its subsequent deindustrialization in the long nineteenth century have highlighted the importance of regions. Influential to the hegemony and adoption of these narratives as research agendas has been Immanuel Wallerstein's world systems theory, a socioeconomic approach that explores the expansion of Europe-centered capitalist relations of production into peripheral areas (Asia, Latin America, Africa). Ottoman historians' multiple recastings of this approach have generated a more sophisticated understanding of Ottoman incorporation as a sporadic process occurring in different temporalities and socio-spatial contexts and dependent on certain products. Also, instead of framing the peripheral zones as passive receivers, it has been argued that the exigencies of the world economy had been resisted and mediated through unique structures entangled in the historicity of regions and extra-economic structures, prominently the state and regional physical and social peculiarities.

The vast expansion of the commercial, military, and political encounters between the Ottoman Empire and Europe developed substantially at the end of the eighteenth century, resulting in many Ottoman cultivators, manufacturers, and traders competing under conditions increasingly framed by global circumstances. The nineteenth century was distinctively different from the earlier era in that it was characterized by vigorous reforms launched in administration, law, justice, and education, as well as economic, fiscal, and monetary realms. Due to the spread of economic growth in Western Europe induced by the Industrial Revolution and the influx of cheap textile imports, primary products increasingly occupied a stronger position vis-à-vis manufactures in the export basket of the Ottoman Empire.⁵ This phenomenon boosted the peripheral regions' integration into the world

⁵ Terence K. Hopkins et al., "Incorporation into the World-Economy: How the World-System Expands," *Review (Fernand Braudel Center)* 10, no. 5/6 (1987): 840; Suraiya Faroqhi, "Declines and Revivals in Textile Production," in *The Cambridge History of Turkey: Volume 3: The Later Ottoman Empire, 1603–1839*, ed. Suraiya N. Faroqhi, vol. 3, Cambridge History of Turkey (Cambridge: Cambridge University Press, 2006), 356; Şevket Pamuk, *Uneven Centuries: Economic Development of Turkey since 1820*, The Princeton Economic History of the Western World (Princeton: Princeton University Press, 2018), 115.

economy through the faster commercialization of agriculture and the import of manufactured products and some foodstuffs.

The half-century from 1820 to 1870 represents the first rapid wave of world market orientation and deindustrialization because of the full blast of European demand for raw materials and the deluge of cheap industrial goods. Alongside the Tanzimat (reorganization) reforms, this period opened the economy to unprecedented foreign trade and investment and paved the way for European financial domination in the late nineteenth century. Depending on their proximity to international and interregional trade and the ability to produce marketable agricultural surplus and adapt their manufacturing towards external and domestic markets, certain large regions stood out in terms of the magnitude of their gains and losses, such as Western Anatolia, Thrace, Macedonia, Morea, Danubian, and coastal Bulgaria, the Romanian Principalities, Syria, and the Egyptian delta. However, the gains and losses were realized in the context of a lack of technological and productivity improvements, prohibitively high costs of and underdevelopment of overland transportation, the prevalence of smallholdings, and scarcity of cash and labor.

The overarching financial instability added another dimension. The mounting insolvency of the Empire due to free trade agreements, external borrowing for administrative and military modernization, costly wars, and rising inflation overburdened the peasantry and low-wage earners through taxation and duties. The state increased its revenues at the expense of agriculturalists and manufacturers. On the other hand, these revenues were used mainly for military and administrative spending, and the capital accumulated in the hands of the wealthy was primarily utilized in moneylending instead of stimulating agricultural and industrial production. With productivity levels remaining unchanged, indebtedness became commonplace.

Overall, Ottoman regions' emergence, prominence, and economic performance were highly contingent on various environmental, infrastructural, and socioeconomic determinants and, especially in the 1820-1870 period, significantly volatile to international demands. This part provides an overview of the developments in the Ottoman economy that brought certain regions to the forefront of integration into the world markets and deindustrialization. Then, it considers the determinants that inhibited, slowed down, and accelerated these processes. I

have identified them as such: Topographical and climatic features, agricultural suitability, transport network, the focus of agricultural production, agrarian and industrial technology, patterns of land use, the state of taxation, money availability, and credit relations, population and migration, and environmental contingencies like diseases and disasters.

1.2: Responses to and Outcomes of Import and Export Expansion

Despite its susceptibility to foreign competition, the Empire could relatively maintain control over foreign trade until the 1820s.⁶ The lifting of the Continental Blockade in the aftermath of the Napoleonic Wars (1793-1815) ushered in a new phase in the expansion of Western European military power, industries, and financial markets reinforced by accelerating productivity, income per capita growth, and advancements in transport and communications. The European economy's rapid industrialization, alongside its consumers' increasing purchasing power and the lowering costs of industrial goods, demanded the specialization of peripheral regions in raw materials and foodstuff and targeted peripheral markets as the primary destination for cheap goods produced in or traded by the west. With Britain becoming the world's dominant colonial, commercial, and naval power after the wars, inter-continental market integration for bulk goods continued to develop at unprecedented speed.

With this speeding up of commercial relations, the number of direct participants in them grew. Ongoing from the eighteenth century, western traders' activities started to regularly penetrate the hinterland of their trading posts in port cities through economic and diplomatic means.⁷ In the early nineteenth century, due to the relative lack of an efficient land transportation network in the interior and contacts for business in general, the need for local intermediaries besides Levantine merchants and notables had emerged to organize and conduct trade on a large scale. The British counterblockade and the difficulty of policing the seas by the Ottoman state in war conditions created a lucrative venture for Ottoman (mainly Greek) merchants who carried British contraband goods, Balkan grains, and other industrial and raw commodities to central Europe. Hence, the number of locally recruited non-Muslim proteges under foreign embassy protection increased. Having been granted capitulatory,

⁶ Bruce McGowan, *Economic Life in Ottoman Europe: Taxation, Trade and the Struggle for Land, 1600-1800* (Cambridge: Cambridge University Press, 1981), 10; Pamuk, *Uneven Centuries*, 90.

⁷ Edhem Eldem, "Capitulations and Western Trade," in *The Cambridge History of Turkey: Volume 3: The Later Ottoman Empire, 1603-1839*, ed. Suraiya N. Faroqhi, Cambridge History of Turkey (Cambridge: Cambridge University Press, 2006), 311.

hereditary, and legal privileges enjoyed by foreign polities, also known as the *berat*, these proteges functioned as merchants.⁸

The state devised a parallel protection system to counter the rising power of embassies. Some wealthy non-Muslim Ottoman merchants were granted the status of "Europe merchant" (*Avrupa tüccarı*) in 1806, and Muslim merchants were given the title of *Hayriye tüccarı* in 1810. These privileged merchant classes enjoyed similar rights as those offered protection from embassies and consulates.⁹ In the face of increasing integration into the world economy, however, the Ottoman efforts to suppress the economic and legal authority of European *berats* failed, and the number of Ottoman subjects adopting foreign nationality increased over the years.¹⁰

The 1820s also marked significant shifts in Ottoman economic management. Increased monetization of the economy caused by the cash needs of the Empire due to wars and internal conflicts from the 1770s onwards faced a chronic cash shortage.¹¹ The forced abolition of the Janissary corps in 1826 opened the path for expensive reforms and required the formation and maintenance of a costly modern army. The costs of the destruction of a

⁸ A berat is the license of appointment recognized one's status as an embassy employee or functionary. It gave its bearer the same, including exemptions from various taxes such as poll-tax (*jizya* or *haraç*) and lower customs commands (3 rather than 5 percent that applied to all Ottoman merchants). The berat documents by default include lower tariffs as privileges. Whereas only Swedish and Dutch berat holders had them after 1777, the British and French could not secure lower tariffs effectively and had to apply to Ottoman administration on an individual basis. In addition, the actual volume of trade performed by the protégé merchants is not known due to insufficient data. Cihan Artunç, "The Price of Legal Institutions: The Beratlı Merchants in the Eighteenth-Century Ottoman Empire," *The Journal of Economic History* 75, no. 3 (2015): 732.

⁹ Maurits van den Boogert, *The Capitulations and the Ottoman Legal System: Qadis, Consuls and Beratlıs in the 18th Century*, *The Capitulations and the Ottoman Legal System* (Leiden: Brill, 2005), 63–115; Erdoğan Keleş, "Hayriye Tüccarı Elhac Mehmet Ağa'nın Terekesi," *Belgeler* 32, no. 36 (2011): 72–80; Both Europe and Hayriye merchants had to apply in writing to the imperial council (Divan-ı Hümayun), make an advance payment, find two Istanbul merchants as substitutes. They could hire their own servants, preferably from Istanbul and Izmir to maintain contact with European trade networks intact, along with their two Istanbulite merchant substitutes. Bruce Masters, "The Sultan's Entrepreneurs: The Avrupa Tuccaris and the Hayriye Tuccaris in Syria," *International Journal of Middle East Studies* 24, no. 4 (1992): 585–86.

¹⁰ Frank Castiglione, "'Levantine' Dragomans In Nineteenth Century Istanbul: The Pisanis, The British, and Issues of Subjecthood," *The Journal of Ottoman Studies*, no. 44 (2014), 169–195: 175.

¹¹ Yavuz Cezar, "From Financial Crisis to the Structural Change: The Case of the Ottoman Empire in the Eighteenth Century," *Oriente Moderno* 18, no. 1 (1999): 90. That said, capital scarcity always existed in the Ottoman Empire, and more intensely so since the late sixteenth century. In addition to the state's control over the economy, lack of silver specie due to international movements, recurring monetary crises and debasements, low productivity of peasantry plus bad harvests, and frequent wars and rebellions accounted for the long-term causes of this problem. For concise overviews, see ; Halil İnalcık, "Capital Formation in the Ottoman Empire," *The Journal of Economic History* 29, no. 1 (1969): 97–140; Şevket Pamuk, *A Monetary History of the Ottoman Empire* (Cambridge: Cambridge University Press, 2004), 20, 112–72.

combined Ottoman-Egyptian fleet in 1827, the 1828-1829 Ottoman-Russo War (including reparations), Greek independence, the 1820-1823 war with Iran, and Mehmed Ali Pasha's (de facto ruler of Egypt in the first half of the nineteenth century) open conflict with the Empire during the 1830s pushed the central administration to seek extreme fiscal solutions to finance the budget deficits that reached their peak on the eve of the Tanzimat period.¹²

Several new extraordinary/wartime taxes, such as Assistance to Holy War (*İane-i Cihadiyye*) in 1833, were introduced and quickly regularized. As an additional measure of raising revenue, wealthy state officials and provincial notables were confiscated more frequently in the eighteenth century than before, and most heavily from 1770 to 1839.¹³ Debasements were extensively used to deal with treasury shortages in the short term. The silver purity of the silver coinage (*guruş*) declined from 5,9 grams to below one during Mahmud II's reign (1808-1839), causing an overall 1200 percent depreciation against the pound sterling.¹⁴ While the exchange rate of the *guruş* to the pound sterling spiked from 18 in 1808 to 110 in 1844, consumer prices rose fivefold during this period.¹⁵

Challenging circumstances and concentrated war efforts constricted the central administration's ability to control the volume of exports to maintain a steady supply of goods and services to satiate the needs of internal markets, the palace, and the army.¹⁶ Forced

¹² Şevket Pamuk, "The Evolution of Fiscal Institutions in the Ottoman Empire, 1500–1914," in *The Rise of Fiscal States: A Global History, 1500–1914*, ed. Bartolomé Yun-Casalilla and Patrick K. O'Brien (Cambridge: Cambridge University Press, 2012), 325.

¹³ Yasin Arslantaş, "Confiscation by the Ruler: A Study of the Ottoman Practice of *Müsadere*, 1700s-1839" (PhD Thesis, London, London School of Economics and Political Science, 2017).

¹⁴ 60 percent decline in the silver content between 1808 and 1827 (reduced to 2,32 grams). The coinage lost its remaining silver content by 79 percent (to 0,53 grams) in only four years between 1828 and 1832. With budgetary reforms and economic improvements, it was raised to 0,94 grams until 1839. Pamuk, *A Monetary History*, 195–96.

¹⁵ K. Kivanç Karaman and Şevket Pamuk, "Ottoman State Finances in European Perspective, 1500-1914," *The Journal of Economic History* 70, no. 3 (2010): 620.

¹⁶ That said, the nature of Ottoman state interventionism was neither a comprehensive nor permanent institution: "Ottoman policy towards trade and the markets, is best ... as selective interventionism. In the later periods, interventions were used primarily for the provisioning of selected goods for the capital city and the army and during extraordinary periods when shortages reached crisis conditions." Pamuk, "The Evolution of Fiscal Institutions in the Ottoman Empire, 1500–1914," 317; The nature and legal conceptualization of market interventionism were already undergoing a paradigm shift. The classical institutions of market inspection (*ihtisab*) and setting ceiling prices (*narh*) were gradually disappearing in the late eighteenth and early nineteenth centuries, where, eventually, in 1849, provincial councils (*eyalet meclisleri*) would be delegated the task of overseeing market activities and maintaining a quasi-liberal market order. M. Safa Saraçoğlu, "Economic Interventionism, Islamic Law and Provincial Government in the Ottoman Empire," *Journal of the Ottoman and Turkish Studies Association* 2, no. 1 (2015): 59–84.

wholesale purchases of goods and services at fixed and below-market prices (known as the *miri mübayaa* system), which used to be implemented during times of war, became standard practice, especially for provisioning the capital and major towns.¹⁷

At the beginning of an era of economic uncertainty, old methods of export enforcement would not necessarily work either. By the second quarter of the nineteenth century, certain agroindustries, particularly those in western Anatolia and the Balkans, that had been export-oriented for centuries, earned unpredictable and uncontrollable profit margins by selling raw materials in large quantities to developing manufacturing industries of the west. Other than wool and raw silk, the chief exported industrial intermediates, the booming agroindustries included the cultivation of valonia oaks (for tanning), madder (as dyestuff), and opium in Izmir's hinterland, and mohair production in Ankara.¹⁸ As early as June 1827, starting with these high-profit-margin products, then including silk, grains, olive oil, cotton, and fleece, the state granted private monopoly, known as the *yed-i vahid*, to an individual for the trade of a given region. Doing so would curb high profits made on such products and secure the state good revenue from their trade with increasing export orientation. On the other hand, exporting these products could be prohibited in raw material or food supply shortages through the monopoly system. Thus, the state actively participated in trade for the first time.¹⁹

Ottoman trade protectionism, however, did not, and could not, last long. European commercial penetration into the Empire had already picked up new momentum after the 1820s.²⁰ Ottoman territories, where the needed raw materials were cheap and abundant, and the state had an increasing need for cash, became an even more attractive export and investment destination. As Edhem Eldem puts it, during the eighteenth century, "Western

¹⁷ Salih Aynural, *İstanbul Değirmenleri ve Fırınları: Zahire Ticareti 1740 - 1840* (İstanbul: Tarih Vakfı Yurt Yayınları, 2001), 28–84; Seven Ağır, "The Evolution of Grain Policy: The Ottoman Experience," *The Journal of Interdisciplinary History* 43, no. 4 (2013): 571–98.

¹⁸ Orhan Kurmuş, "The Role of British Capital in the Economic Development of Western Anatolia 1850-1913." PhD Thesis, London, School of Oriental and African Studies (University of London), 1974), 25–26.

¹⁹ Mehmet Genç, "Yed-i Vâhid," in *TDV İslam Ansiklopedisi* (İstanbul, 2013), 379, <https://islamansiklopedisi.org.tr/yed-i-vahid>.

²⁰ Şevket Pamuk, "Anatolia and Egypt during the Nineteenth Century: A Comparison of Foreign Trade and Foreign Investment," *New Perspectives on Turkey* 7 (1992): 37; Donald Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, Cambridge Middle East Library 30 (Cambridge ; New York: Cambridge University Press, 1993), 15; Pamuk, *Uneven Centuries*, 130.

trade had matured enough in its format, if not in its impact, to prefigure the turn it would take in the following century. All it would take ... is the final comeback of an industrialized power, Britain, whose massive irruption on the Ottoman market would soon be followed by others.”²¹ The Anglo-Ottoman convention of 1838, whose terms were extended to other European powers until 1846, landed a great blow to institutionalized efforts to control exports from and imports to the Empire. Under British pressures, it outlawed the monopoly system²², including the monopolies (*inhisar*) closely associated with guild-based craft production, the principal urban industrial organization throughout the Empire for centuries.²³ It proposed that while imports were subject to customs duties of a maximum of eight percent (which usually stood at five), Ottoman goods sold to British merchants were to be taxed at a maximum of twelve percent. Also, foreign merchants could engage in retail sales in the same status as Ottoman merchants. Ottomans were not an exception to such unfair treatment. The leading powers imposed similar unequal treaties on many peripheral polities, catalyzing their incorporation process and further consolidating their peripheralization.²⁴

The 1838 convention tremendously increased the speed and breadth of economic integration. From 1839 to 1840, the demand for British imports rose by about 40 percent and a further 20 percent for the following year, despite the Egyptian crisis, compared with the demand before 1838.²⁵ Pamuk and Williamson argued that as cheap and foreign industrial commodities flowed into the Empire, employment shifted away from (primarily textiles) manufacturing to mainly agricultural foodstuff and raw material sectors, increasing the

²¹ Eldem, “Capitulations and Western Trade,” 325.

²² See, as a case study, the fate of opium, one of the most profitable exports of Asia Minor: Ibrahim Ihsan Poroy, “Expansion of Opium Production in Turkey and the State Monopoly of 1828-1839,” *International Journal of Middle East Studies* 13, no. 2 (1981): 191–211.

²³ Şevket Pamuk, *Osmanlı-Türkiye İktisadî Tarihi 1500-1914* (İstanbul: İletişim, 2015), 205–12; It has also been argued that the abolition of Janissary corps was a turning point in the opening of Ottoman economy to European capitalism, since they were closely affiliated with guilds in major towns since the late eighteenth century. Mehmet Mert Sunar, “‘When Grocers, Porters and Other Riff-Raff Become Soldiers:’ Janissary Artisans and Laborers in the Nineteenth Century Istanbul and Edirne,” *Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, no. 17 (2009): 183.

²⁴ Ha-Joon Chang, *Kicking Away the Ladder: Development Strategy in Historical Perspective* (London: Anthem Press, 2002), 51–68.

²⁵ Elena Frangakis-Syrett, “Implementation of the 1838 Anglo-Turkish Convention on Izmir’s Trade: European and Minority Merchants,” *New Perspectives on Turkey* 7 (1992): 92.

commercialization and export-orientedness of agriculture.²⁶ Accelerating imports of factory-produced cheaper British goods, primarily cotton and wool fabric, and the substitution of synthetics for madder root and valonia after the 1860s, accompanied by low tariffs and failures in technology and know-how transfers to meet the requirements of modern looms, had a corrosive impact on Ottoman manufacturing by impeding domestic spinning and weaving activities.²⁷ Cotton, wool, and silk handicrafts of the Balkans, Anatolia, and Arab lands witnessed the harshest episode of deindustrialization in the half-century before 1870, with more than a hundred thousand spinners and weavers losing jobs or shifting employment to other sectors such as sericulture.²⁸

Ottoman exports to Western Europe grew relatively high compared to other countries in the periphery between the 1820s and 1870s, with the prices of traded commodities being much higher before 1870 than in 1914.²⁹ The collapse of Europe's New World empires and the disintegration of traditional mercantilist restrictions on trade between Europe and Asia during and after the Napoleonic Wars were partially responsible for this trend.³⁰ The Ottoman Empire's annual exports increased from less than 4 million British pounds in 1820 to about 20 million pounds in 1870 at a compound annual growth rate of 5,5 percent.³¹ Still, as Şevket

²⁶ Şevket Pamuk and Jeffrey G. Williamson, "Ottoman De-Industrialization, 1800–1913: Assessing the Magnitude, Impact, and Response," *The Economic History Review* 64, no. S1 (2011): 172; The growing commercialization of Ottoman economy was the main driver of annual growth rate of Ottoman foreign trade averaging close to 5 percent in real terms during the nineteenth century. Şevket Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913: Trade, Investment and Production* (Cambridge University Press, 1987), 130–47.

²⁷ British exports to the Ottoman Empire doubled in value in 1820 and doubled again before 1837. They increased from £5,2 million in 1840 to £39,4 million in 1913, with an annual increase of 3,3 percent. However, between 1840 and 1873, the volume of imports doubled every 11 to 13 years. Besides textiles, tin, iron, steel, sugar, and coffee were the other leading imports. Pamuk and Williamson, "Ottoman De-Industrialization, 1800–1913," 161–62.

²⁸ Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 108–29; Murat Çizakça, "A Short History of the Bursa Silk Industry (1500-1900)," *Journal of the Economic and Social History of the Orient* 23, no. 1–2 (1980): 142–52; Kais Firro, "Silk and Agrarian Changes in Lebanon, 1860-1914," *International Journal of Middle East Studies* 22, no. 2 (1990): 151–69.

²⁹ Quataert, "The Age of Reforms," 776; Şevket Pamuk and Jeffrey G. Williamson calculated that between 1815 and 1860, the Ottoman terms of trade (the ratio of average export prices to average import prices) rose 2,6 times, with an annual rate of 2,4 percent. Even in the 1800-1860 period that included the Napoleonic wars and the Continental Blockade, the rate was still high with 1,6 percent. Pamuk and Williamson, "Ottoman De-Industrialization, 1800–1913," 171.

³⁰ Kevin O'Rourke, "The Worldwide Economic Impact of the French Revolutionary and Napoleonic Wars, 1793-1815," *Journal of Global History* 1 (2006): 148.

³¹ Quataert, "The Age of Reforms," 828; Şevket Pamuk, "The Ottoman Empire, 1700–1870," in *The Cambridge Economic History of the Modern World: Volume 1: 1700 to 1870*, ed. Stephen Broadberry and Kyoji Fukao,

Pamuk argued, based on the trade statistics of Britain and France, a direct link between foreign trade and Ottoman economic growth seems unlikely for the 1820-1870 period because exports or foreign trade ratio to any measure of total production remained low. The proportion of exports and imports in GDP increased from 2-3 percent in 1820 and 3-4 in 1840 to about 7 percent in 1870 and 11 percent in 1914. Less than 8 percent of the agricultural output was exported in 1840 and 12-15 percent in the mid-1870s.³²

Nevertheless, great variations between regional experiences in this century made certain regions feel this half-a-century incorporation process more intensely than others. Coastal areas felt the impact of imports first, experiencing massive declines in handicrafts, as well as enjoyed increased foodstuff and raw material export volumes and prices more than the interior regions in this period.³³ The growth of exports was more pronounced between Western Anatolia and world markets than in the rest of the Empire. According to Reşat Kasaba's calculation based on trade data of the Izmir port, exports and agricultural production grew by over five times in Western Anatolia from 1845 to 1876, during which the exports of the Ottoman Empire as a whole increased by about 3,5 times.³⁴ Agricultural raw materials and foodstuffs produced and exported by the peripheral areas also experienced a surge in the nominal value of these products³⁵, amounting to a sixfold increase in Western Anatolia between the 1840s and 1870s.³⁶ Demands of European industries aside, the Crimean and American Civil Wars' needs temporarily drove up the need for Ottoman raw materials.

Western Anatolia also witnessed expanded land reclamation and cultivation of crops desired in foreign markets, further stimulating agricultural production levels after the 1840s.³⁷ Many laborers migrated from various corners of the Empire to cultivate cash crops, which

vol. 1, *The Cambridge Economic History of the Modern World* (Cambridge: Cambridge University Press, 2021), 181.

³² Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 39–40; Pamuk, “The Ottoman Empire, 1700–1870,” 181.

³³ Charles Issawi, “De-Industrialization and Re-Industrialization in the Middle East since 1800,” *International Journal of Middle East Studies* 12, no. 4 (1980): 469–79; Pamuk, *Uneven Centuries*, 130.

³⁴ Reşat Kasaba, *The Ottoman Empire and the World Economy: The Nineteenth Century* (Albany: State University of New York Press, 1988), 94.

³⁵ Roger Owen, *The Middle East in the World Economy, 1800-1914* (Bloomsbury Academic, 1993), 92.

³⁶ Kasaba, *The Ottoman Empire and the World Economy*, 94.

³⁷ Onur İnal, “Fruits of Empire: Figs, Raisins, and Transformation of Western Anatolia in the Late Nineteenth Century,” *Environment and History* 25, no. 4 (2019): 549–74.

increased agricultural output exported and fed the immigrants.³⁸ Port towns that played an integral role as foreign and domestic trade hubs were marked by a constant influx of migrants.³⁹ Around the mid-nineteenth century, about 75% of British imports to the Middle East had passed through western Anatolia, notably İzmir, which led to the boom of this city. Owing to improving terms of trade, the boost of steamers, and the relative underdevelopment of Ottoman inland and sea navigation, European-owned ships conducted some 90 percent of commerce during this period.⁴⁰

1.3: State of Ottoman Finances

The early onset of the rapid expansion of commercial ties with world markets brought temporary relief to the Ottoman economy, creating sufficient room for dealing with financial challenges in the short run. A few years after initiating commercial reforms, debasements were abandoned in 1844. Following the Monetary Reform Act (*Tashih-i Sikke*) in the same year, the Ottomans shifted to the bimetallic standard, where gold and silver coins were accepted legal tender with a fixed gold/silver ratio of 15,09. Wide circulation of old coins required the assignment of an official gold/silver standard to each coinage and compromised the full embodiment of the bimetallic system.⁴¹ One hundred silver *guruş* or piasters equaled one gold lira (or gold Medjidie / Ottoman pound) and remained as such until 1922. An official exchange rate of 110 piastres equaling one pound-sterling was established.

To further ameliorate the fiscal deficits resulting from broad administrative, commercial, and military reorganization since Mahmud II's death, interest-bearing paper money, known as *kaime*, was issued in 1840. The *kaime* issuance helped the central administration quickly raise funds to ease state debts and tame the rampant inflation of the

³⁸ Reşat Kasaba, "Migrant Labor in Western Anatolia, 1750–1850," in *Landholding and Commercial Agriculture in the Middle East: Globalization, Revolution, and Popular Culture*, ed. Faruk Tabak and Çağlar Keyder (SUNY Press, 1991), 113–21; İrfan Kokdaş, "Manisa'da Çiftlik, Ağıl ve Mandıralardaki Tarımsal İşgücü Profili: Emek Hareketliliği ve Sosyo-Hukuki Dönüşümler, 1690-1870," *Meltem - Journal of the Izmir Mediterranean Academy*, no. 3 (Summer 2018): 42–55; Akın Sefer, Aysel Yıldız, and Mustafa Erdem Kabadayı, "Labor Migration from Kruševo: Mobility, Ottoman Transformation, and the Balkan Highlands in the 19th Century," *International Journal of Middle East Studies* 53, no. 1 (2021): 73–87.

³⁹ Malte Fuhrmann and Vangelis Kechriotis, "The Late Ottoman Port-Cities and Their Inhabitants: Subjectivity, Urbanity, and Conflicting Orders," *Mediterranean Historical Review* 24, no. 2 (2009): 74–75.

⁴⁰ Çağlar Keyder, Y. Eyüp Özveren, and Donald Quataert, "Port-Cities in the Ottoman Empire: Some Theoretical and Historical Perspectives," *Review (Fernand Braudel Center)* 16, no. 4 (1993): 529–30.

⁴¹ Şevket Pamuk, "Prices in the Ottoman Empire, 1469–1914," *International Journal of Middle East Studies* 36, no. 3 (2004): 208–9.

prior decades, despite the high interest rates paid on them. It effectively brought relative price stability and controlled the budget deficit until the Crimean War.⁴²

State budget management capacity had been positively but temporarily influenced by incoming foreign capital. Budget deficits accounted for only 0,7 percent of state expenditure in the 1842 fiscal year and increased moderately in the following years, with 1,3 in 1847 and 3,7 in 1848. Recurring fiscal strains at the end of the 1840s and the discovery of gold in California that appreciated the value of silver skyrocketed these ratios to unmanageable levels of 11,7 in 1848 and 12,3 in 1850, respectively.⁴³ Where the state revenues could not help, domestic borrowing opportunities were aggressively sought. Until the 1850s, the central administration remained outside European capital markets, which enhanced its reliance on the *sarrafs*, a small minority of native moneylenders of Armenian, Greek, Jewish, and Levantine origin who mobilized credit domestically and from European financial circles to accommodate the relatively limited fiscal needs of the Empire. These highly beneficial conditions quickly grew them into prominent financiers known as the Galata bankers, named after the financial district in Istanbul where they led their operations.

Responding to the immediate cash needs of the treasury, fueled particularly by military and administrative modernization programs in the 1840s, the Galata bankers' ability and connections to organize short-term loans in Europe had grown substantially. They profited favorably by charging high effective interest rates of 12 to 18 percent. These rates not only show the high risks involved in lending to and ensuring repayment from the state, which included the menace of confiscation, but also demonstrate the scarcity of capital. To systematize the state's access to foreign capital and keep the *kaimes*' value against foreign currencies from faltering, the Banque of Constantinople was founded in 1847 with the support of the Ottoman administration by the prominent banker Baltazzi and Alleon families with the latent function of lending 130 million *guruş* to the state.⁴⁴

⁴² The interest rate on the *kaimes* reduced from 12.5 percent in 1840 to 6 percent in 1844 to primarily deal with counterfeiting. Richard C. K. Burdekin and Meriç Keskinel, "Liquidity Preference and Interest-Bearing Money: The Ottoman Empire, 1840–1851," *Financial History Review* 20, no. 1 (2013): 99.

⁴³ *Ibid.*, 94.

⁴⁴ Fatma Müge Göçek, *Rise of the Bourgeoisie, Demise of Empire: Ottoman Westernization and Social Change* (New York: Oxford University Press, 1996), 178.

When the Crimean War hit, the borrowing needs expanded faster. Alerted, the central administration issued non-interest-bearing *kaimes*, which escalated inflationary pressures on the outbreak of the Crimean War of 1853-1856. The paper notes were relatively successful before the war due to their limited amount and predominance of high-denomination notes. But the pumping of large amounts of *kaimes* in small denominations into the economy after 1853 ended in a decade-long major inflation episode.⁴⁵ On top of that, the government's habit of removing notes first from the provinces while they were being used in Istanbul culminated in cash scarcity and overvaluation of coins in the former, leading to debt payment crises among the local populace and opening new profit ventures for the moneylenders to exploit.⁴⁶

Once the state had exhausted all short-term domestic borrowing alternatives, it turned directly to European financial markets. The first foreign loan was taken in 1854, another one in 1855, the latter being guaranteed by the British and French governments, with considerably lower nominal interest rates than the *sarrafs* (7,9 and 3,9 for the 1854 and 1855 loans, respectively.)⁴⁷ The regions that showed the most prospective economic incorporation came to help: These two loans were secured on the Egyptian tribute and customs revenues of Izmir and Syria. With their monopoly being challenged, the Galata bankers came under strict competition as the powerful European banks established branches in Istanbul and significant port cities such as Salonica, Izmir, and Beirut.

Maximizing tax revenues in the quickest way possible was prioritized to ameliorate the actual and potential losses caused by unfair trade treaties and devaluations. The *sarrafs* might have lost their priority in the eyes of the state, but their know-how and networks in tax matters were indefatigable. Their growing political and economic muscle in an environment of chronic deficits and cash scarcity placed them in a more prominent position to finance tax-farming operations, which were also a form of internal borrowing and the most profitable undertaking among redistributive processes in the public domain for all rent-seekers (prominently, notables, *çiftlik* owners, moneylenders, and merchants). As an agrarian

⁴⁵ One gold lira was exchanged at rates of 200-220 guruş in *kaimes* in the 1850s. Record volume of *kaimes* worth 1.250 million kuruş flooded the markets in 1861, ballooning the market exchange rate of gold lira:*kaime* to 400 guruş. Pamuk, *A Monetary History*, 211.

⁴⁶ Kasaba, *The Ottoman Empire and the World Economy*, 69; Ali Akyıldız, *Para Pul Oldu: Osmanlı'da Kağıt Para, Maliye ve Toplum* (İstanbul: İletişim, 2018), 44–45.

⁴⁷ Murat Birdal, *The Political Economy of Ottoman Public Debt: Insolvency and European Financial Control in the Late Nineteenth Century* (London: I.B.Tauris, 2010), 26–27.

Empire, the tithe (*öşür*) levied on the agricultural produce, and the livestock-tax (*ağnam*) (including the taxes on fishing, hunting, milling operations, and salt pans) were the most important state revenue source for the Ottomans in the nineteenth century as before.⁴⁸

Until the promulgation of the Tanzimat decree in 1839, the tithe and other revenues were farmed with ascending-price auctions to powerful provincial magnates. These tax-farmers (*mültezim*) were in partnership with the Istanbul- and other urban-center-based moneylenders and network of cliques at the sub-provincial level to pay for the auction prices and make a fraction of these payments in advance to the state. Whereas over-taxation caused discontent and increased indebtedness among the Ottoman population, the tithe-farmers could profit between 20 to 30 percent, significantly decreasing returns to the treasury, let alone extortions in tax collection and profits garnered from other farmed revenue sources.⁴⁹

After the Tanzimat, the government tried to take matters into its own hands by collecting the tithes directly through seasonally- or regularly-employed government officials cooperating with the newly-established local assemblies (*muhasıllık* [tax collection] *meclisleri*) where local notables who dominated revenue sources were granted positions. But the centralized wage-contract method of tax appropriation could only be applied in selected districts in 1839-1842 and 1853-1854 and largely failed for three reasons. First, traditionally collected in kind, the tithe revenues could not be adequately collected and marketed at the right time due to the lack of appropriate storage and transportation facilities. Second, misappropriations committed by many government officials did not significantly differ from the mistreatment of the producers and frauds in assessing and selling the produce by tax-farmers. Third, the geographical extent of the Empire, social and political differences between its provinces, and its limited infrastructural capacity made the privatized collection of tithes a must and hence the backbone of its modern finance system. Therefore, instead of shouldering the costly responsibility of directly extracting, transferring, and marketing the

⁴⁸ Ahmet Tabakoğlu, “Öşür (Osmanlılar),” in *TDV İslam Ansiklopedisi* (İstanbul, 2007), 101, <https://islamansiklopedisi.org.tr/osur>.

⁴⁹ Nadir Özbek, *İmparatorluğun Bedeli: Osmanlı’da Vergi, Siyaset ve Toplumsal Adalet 1839-1908* (İstanbul: Boğaziçi Üniversitesi Yayınevi, 2015), 45.

surplus, the state continued to farm tithe revenues to local entrepreneurs until the last years of the Empire.⁵⁰

Nevertheless, the centralizing aspirations of the Ottoman bureaucracy implemented two important functional changes in tax-farming. First was the reduction of the tax farms' size to the district (*sancak*), subdistrict (*kaza*), and even village level, and the delegation of tithes on different products in a locality to different individuals. This way, tithes started to be farmed to a new class of local petty entrepreneurial contractors, and their assessment and collection were supposedly monitored by local government officials, administrative councils, treasury offices, and quarter- and village-headsmen. Second, the central administration experimented with the size, variety, and auctioning method (fixed versus ascending price) of tithe-farms depending on the region and domestic and international political circumstances to limit the maneuvering capacity of the intermediaries and moneylenders.⁵¹

As a result, the state revenues more than tripled in nominal terms from the fiscal year 1850 (710 million *guruş* – rose from 593 million in 1844) to 1876 (2,388 billion *guruş*), and the tithe's share in it rose from about between 21-30 to 45 percent, respectively.⁵² If only exports were considered, major positive and negative macroeconomic trends existed. Following the export boom of the 1840s, the impact of the Crimean War in the mid-1850s and the American cotton famine of the 1860s brought short-term cash relief by raising production and exports. The transport revolution led by steamships and railroads also increased demand for specific products. The construction of the Izmir-Aydın railroad in the 1860s considerably expanded the market for opium, valonia, grapes, and raisins in that region, for instance.⁵³ However, the emergence of the United States and Russia as major foodstuff and raw materials exporters, the incorporation of Asian markets into the world economy in the mid-nineteenth century, and the inauguration of a world tariff liberalization after 1860 (via Anglo-French [Cobden-Chevalier] bilateralism) consequently brought down

⁵⁰ Nadir Özbek, "Tax Farming in the Nineteenth-Century Ottoman Empire: Institutional Backwardness or the Emergence of Modern Public Finance?," *The Journal of Interdisciplinary History* 49, no. 2 (2018): 244.

⁵¹ *Ibid.*, 229–30.

⁵² Özbek, *İmparatorluğun Bedeli*, 24.

⁵³ Owen, *The Middle East in the World Economy, 1800-1914*, 113.

the prices of goods the Ottoman Empire was exporting and significantly diminished the export volume of specific commodities.⁵⁴

Provided that the share of revenues from customs and excise taxes (on tobacco, salt, spirits, markets, etc.) that government agents collected in the mid-nineteenth century had remained nearly unchanged, taxation of agriculture was the central driver of the increase in treasury yields.⁵⁵ In other words, regional networks and modalities of production, sale, and consumption of foodstuff and raw materials determined the state's fiscal strength. When the treasury's needs increased, so did the attention paid to taxation and, hence, the pressure on the producers. In the context of privatized tax collection, the central administration's efforts in ratcheting up tax revenue meant misappropriations of taxpayers by the tax-farmers to obtain economic rent (e.g., by lending at high interest amidst cash scarcity or imposing surtaxes). Increasing revenues also enabled large tax-farmers, especially those with connections in bureaucratic and moneylender circles, to consolidate small tax-farms into larger ones and sublease these contracts to smaller intermediaries at the district, subdistrict, and village levels for profit.⁵⁶

Another important source of revenue since the promulgation of the Tanzimat decree was the "special tax" (*vergi-yi mahsusa*), which merged various customary and (regular) extraordinary taxes into one. In addition, corvee and tax-in-labor duties, which were abolished on paper in 1839, were monetized and integrated into it. Lacking the capacity to impose taxation based on the ability to pay as per the Tanzimat's ambitions, wealth and income remained almost completely untaxed until the last quarter of the nineteenth century. The modest apparatus of salaried tax-collectors, a body of about 1500 personnel in the second half of the nineteenth century, required the distribution of the special tax in a lump-sum fashion per province by the central administration as before and redistribution of the tax burden at district and community level (i.e., village, quarter, households) through local negotiation. Enumeration of all males in population registers (*nüfus defterleri*) in the 1830s and 1840s and household-based surveys of income-generating activities (*temettuat defterleri*)

⁵⁴ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 16–17.

⁵⁵ Özbek, *İmparatorluğun Bedeli*, 25.

⁵⁶ Engin Deniz Akarlı, "Economic Policy and Budgets in Ottoman Turkey, 1876-1909," *Middle Eastern Studies* 28, no. 3 (1992): 446–47.

in 1840 and 1845 in the “core territories” (Asia Minor and the majority of Rumelia) aimed at a more rational allocation of the special tax burden at provincial and district level but failed to shift the burden to wealthier and urbanite sections.

Therefore, agricultural and petty industrial production, crushed under tithe and multiple trade fees and excise taxes plus costly transport fees, were overburdened by the special tax, which became the second most important revenue source after the tithe, constituting about 34% of the budget in the fiscal year 1850 (242 million *guruş*), 23% in 1862 (289 million), and 14% in 1876 (332 million).⁵⁷ Furthermore, the resultant accumulation of overdue taxes due to cash shortage and inflation made the local gendarmerie and reserve troops a necessary component of tax assessment and collection in the nineteenth century.⁵⁸ Overtaxation and related extortions led to widespread peasant revolts in Rumelia and Anatolia from the early years of the Tanzimat until the Empire’s last years.⁵⁹

Growing insolvency and intensifying European control of Ottoman finances and economic sources prepared the macroeconomic basis for underinvestment in agricultural and industrial sectors. Despite rising tax revenues, the treasury’s expenditures were concentrated on military modernization and debt payments, which increased nominally and proportionally in the budget. Their combined share rose from 57% in the 1847 fiscal year to 61% in 1862 and 70% in 1876.⁶⁰ Successive foreign loans after 1854 shifted Ottoman indebtedness to a self-defeating pattern as they were directed at closing budget deficits and paying the coupons on previous loans. Moreover, the Ottoman state was obliged to pledge its most productive revenue sources with each borrowing case. The surplus of the Egyptian tribute, customs and tobacco revenues, sheep tax, copper mines, and other sources were all hypothecated to secure future issuances of Ottoman state bonds.⁶¹

⁵⁷ Özbek, *İmparatorluğun Bedeli*, 24.

⁵⁸ Nadir Özbek, “İkinci Meşrutiyeti Hazırlayan Koşullar: Rumeli’de Vergi Tahsilatı ve Jandarma,” *Toplumsal Tarih*, no. 183 (2009): 46–50.

⁵⁹ Halil İnalcık, “Application of the Tanzimat and Its Social Effects,” *Archivum Ottomanicum*, no. V (1973): 99–127; Nadir Özbek, “The Politics of Taxation and the ‘Armenian Question’ during the Late Ottoman Empire, 1876–1908,” *Comparative Studies in Society and History* 54, no. 4 (2012): 770–97; E. Attila Aytekin, “Peasant Protest in the Late Ottoman Empire: Moral Economy, Revolt, and the Tanzimat Reforms,” *International Review of Social History* 57, no. 2 (2012): 191–227.

⁶⁰ Özbek, *İmparatorluğun Bedeli*, 36.

⁶¹ Birdal, *The Political Economy of Ottoman Public Debt*, 29.

Yet, the costliness of external borrowing became evident and an insupportable burden, as the credibility of the Empire in the internal and international markets had been steadily eroding. After support from the British and French governments on Ottoman foreign loans ended, risk premiums on new bonds issued by the Empire rose significantly in the 1860s. Due to the unproductive use of loans for the purchasing of military goods and paying bureaucratic expenditures and the treasure accounts' unreliability and unmonitorability, investors in European markets, no matter how willing they were to take risks in search of higher returns abroad, remained generally uninformed and grew doubtful about the state of Ottoman finances. Foreign bankers too became more suspicious about the Empire's repayment abilities, as evidenced by the effective interest rate on each loan progressively climbing, 8,1 in 1858, 9,6 in 1860, and 11,2 in 1870. As a result, except for the 1855 loan, Ottoman bonds were issued at extremely lower rates than their nominal value, often as low as 60 to 70 percent, without subtracting the large commissions paid to contractors, which, in some cases, dropped these rates to almost 50 percent. In other words, in reality, the Ottoman state had to pay back twice the amount it acquired.⁶²

In a tempting yet futile response to economic distress, the state injected more *kaimes* into the market, reaching a record level in 1861 and contributing to fiscal deficits, internal debt, and increasing inflation.⁶³ Those receiving fixed payments, namely the bureaucracy, legal scholars (*ulama*), and soldiers, stood out as the groups to lose the most from this debasement, while cash scarcity, lack of cheap credit, and volatile market forces kept troubling peasants and artisans.⁶⁴ The *kaimes* were withdrawn from the market in 1863 to resume foreign borrowing. The following year, the Anglo-French concessionaires signed a contract to establish the *Banque Imperial Ottomane*, which carried out the functions of a central bank with the most important privilege of issuing *kaimes*, providing the government with credit, acting as the financial agent-cum-underwriter to service domestic and foreign debts and raise additional loans abroad.⁶⁵

⁶² Ibid., 29–30.

⁶³ The exchange rate against the gold lira plunged to 400 paper piastres in 1862. *Kaimes* were printed during the 1877-1878 Russo-Ottoman War (withdrawn from circulation in 1883) and in five waves during the First World War (withdrawn in 1927). For a detailed account of the printing and withdrawal of the *kaimes*, see Akyıldız, *Para Pul Oldu*, 41–58, 108–31.

⁶⁴ Pamuk, "The Evolution of Fiscal Institutions in the Ottoman Empire, 1500–1914," 326.

⁶⁵ Birdal, *The Political Economy of Ottoman Public Debt*, 33.

Soon, the wasteful spending of external resources for military and bureaucratic expenditures caused severe debt payment difficulties. Heavier foreign loans followed from the 1860s, reaching 103 million pound-sterling between 1863 and 1870. The same amount was borrowed between 1870 and 1875. Now deprived of the liberty to print money and hypothecate the most valuable revenue sources, the state once again turned to the Galata Bankers but was denied a loan request even at an interest rate of as high as 25 percent.⁶⁶ Mounting political problems, loss of power in Europe, and unexpectedly low annual tithe revenues for some provinces due to failed harvests and diseases prevented the Empire from preparing a reliable budget. As the Panic of 1873 triggered the first Great Depression, agricultural prices declined, and export markets shrank, severing access to foreign capital. Once its external debts became impossible to service, the central administration had to declare bankruptcy in 1875, and the Ottoman finances started to be administered quasi-colonially.

In the grand scheme, the long-term reorientation of the Empire's output towards agrarian exports, primarily in Western Anatolia, did not substantially transform Ottoman agriculture and local structures and relations. Even though the revenues from agriculture were larger in the nineteenth century than in previous centuries, they were collected at the expense of producers and spent largely on bureaucracy, military expenditure, and debt repayments. Underinvested, regional export-oriented economies in the meantime lent more towards reducing or expanding the production of specific crops, most of which were grown for centuries, as per fluctuations in the boom-bust trajectory of the world market and in spite of the host of persistent environmental, infrastructural, financial, and socioeconomic factors limiting productivity. Put differently, the initial boom in commodity production and exports was realized by mobilizing existing structures and networks, given the lack of large-scale investment in and uneven outcomes of agriculture, manufacturing, and trade sectors. Let us examine them.

1.4: Major Determinants of Agricultural and Industrial Production

Agricultural productivity was stagnant and varied due to the lack of improvements in the factors of production (land, labor, capital, entrepreneurship, and transportation), indigenous

⁶⁶ Ibid., 35.

power configurations, and economic conditions. On paper, the territorial extent of the Empire stretched from Albania to Caucasia, Algeria to Yemen, and Eritrea to Basra. Climatic conditions, average precipitation levels, soil quality, and agricultural suitability differed considerably across and within regions because of large variations in surface morphology.⁶⁷ Therefore, contingent dynamics of production, transportation, and surplus appropriation continued to play an even more integral role in the nineteenth century.

Ottoman agriculture until the late 1800s was non-mechanized, dependent on handcrafted tools, and used animal and human excrements as fertilizers (whereas rarely available artificial fertilizers were highly costly). Lack of irrigation placed rain-, river-, and lake-fed areas in a highly advantageous position in terms of vegetative cover density, diversity, agricultural productivity, self-sustenance, and lumber and charcoal supply.⁶⁸ Despite their differences, on the macro scale, the Mediterranean regions were united around the viticultural, arboreal, and vegetable economy that was balanced by widespread grain cultivation and small livestock raising.⁶⁹ On the other hand, grains, prominently wheat, are estimated to have formed about 90 percent of all cultivated land in the Empire.⁷⁰ Vast differences in rainfall regime and access to water made dry-farming and fallow the essential components of production. Archaic agricultural implements and inconsistent crop rotation further damaged productivity.⁷¹ However, the risk of a bad harvest was on par with having none because ecological and climatic variability posed a constant threat. Annual or prolonged episodes of severe winters, periodic droughts, inundations, famines, locust attacks, crop

⁶⁷ Semih Çelik and M. Erdem Kabadayı, “Agricultural Productivity in Western and Central Anatolia: A Regional Perspective 1840-1950,” in *European Social Science History Conference* (Belfast, 2018); M. Erdem Kabadayı, Piet Gerrits, and Grigor Boykov, “Bridging the Gap between Pre-Census and Census-Era Historical Data: Devising a Geo-Sampling Model to Analyse Agricultural Production in the Long Run for Southeast Europe, 1840–1897,” *International Journal of Humanities and Arts Computing* 14, no. 1–2 (2020): 46–63; Eda Ustaoglu, M. Erdem Kabadayı, and Petrus Johannes Gerrits, “The Estimation of Non-Irrigated Crop Area and Production Using the Regression Analysis Approach: A Case Study of Bursa Region (Turkey) in the Mid-Nineteenth Century,” *PLOS ONE* 16, no. 4 (2021): e0251091, <https://doi.org/10.1371/journal.pone.0251091>.

⁶⁸ For general overviews stressing regional differences in agricultural productivity, see Sırrı Erinç and Necdet Tunçdilek, “The Agricultural Regions of Turkey,” *Geographical Review* 42, no. 2 (1952): 179–203; Tevfik Güran, *19. yüzyıl Osmanlı Tarımı Üzerine Araştırmalar* (İstanbul: Eren, 1998); Şevket Pamuk, “Agriculture and Economic Development in Turkey, 1870–2000,” in *Agriculture and Economic Development in Europe Since 1870*, ed. Pedro Lains and Vicente Pinilla (London: Routledge, 2009), 375–96.

⁶⁹ Faruk Tabak, *The Waning of the Mediterranean, 1550–1870: A Geohistorical Approach* (Baltimore, Maryland: The Johns Hopkins University Press, 2008).

⁷⁰ Quataert, “The Age of Reforms,” 844.

⁷¹ Güran, *19. yüzyıl Osmanlı Tarımı*, 88–89; Quataert, “The Age of Reforms,” 853.

failures, and murrains among cattle and sheep caused significant fluctuations in crop yield and animal production.⁷²

In the case of animal husbandry, lack of veterinary care, well-looked-after pasture lands, improved fodder varieties, and fodder preservation techniques made livestock and transport animals highly susceptible to animal diseases.⁷³ The smaller size of sheep and cattle compared to those of the same species in Western Europe limited their output, given that wool and hair industries and the state-supervised provisioning of cities and the army depended heavily on the quality of animals.⁷⁴

Poor transport infrastructure was another reason the Ottoman Empire suffered from lower production and trade levels. The volume of domestic overland trade of foodstuff and goods remained extremely limited until the construction of railroads in the late 1860s (four lines in total, two in Anatolia and connecting İzmir to its hinterland) but expanded in the post-1870s. Horses, donkeys, mules, oxen, and camels remained the popular means of overland transport and kept the cost of transferring goods from and to inner regions prohibitively high, shipment volume limited, and journeys long.⁷⁵ Poorly maintained roads also limited mobility and intensified isolation between and within regions, especially during winter. Cases of highway robbery by marauding bandits relatively subsided after improvements in security organization and the formation of military reserves and

⁷² Mehmet Yavuz Erler, *Osmanlı Devleti'nde Kuraklık ve Kıtık Olayları (1800-1880)* (İstanbul: Libra, 2010).

⁷³ These factors placed a greater risk on animal trade. For instance, in 1866, the majority of the 24.500 sheep of Hacı Ali Agha of Damascus fell ill and died while being transported from Erzurum (eastern Turkey) to Egypt. The court case it generated due to large debts involved in the business shows how risky such long-distance animal trade was. Yonca Köksal and Can Nacar, "Ali Ağa'nın Koyunları ve Borçları: Erzurum-Şam-Mısır Hattında Hayvan Ticareti," *Toplumsal Tarih*, no. 323 (2020): 60–65.

⁷⁴ Güran, *19. yüzyıl Osmanlı Tarımı*, 100–112; M. Erdem Kabadayı, "Introduction of Merino Sheep Breeding in the Ottoman Empire: Successes and Failures," in *Animals and People in the Ottoman Empire*, ed. Suraiya Faroqhi (Istanbul: Eren, 2010), 153–69.

⁷⁵ The typical camel could carry a cargo weight of 550 pounds, a horse could carry 420 pounds, donkeys and mules could carry 170 pounds. The camel's strength and carrying capacity long eliminated the need for wagons and other animals for long distance travel. Under their burden, the camels could eat, walk, and sleep for weeks. The camel could make 50 kilometers per day and a horse 60 kilometers per day. An araba, a two wheeled vehicle drawn by horses or oxen could carry up to 3000 kilograms. Philip Ernest Schoenberg, "The Evolution of Transport in Turkey (Eastern Thrace and Asia Minor) under Ottoman Rule, 1856-1918," *Middle Eastern Studies* 13, no. 3 (1977): 362–63; Quataert, "The Age of Reforms," 817; On the transformative effect of camels in Western Anatolian trade for centuries, how they facilitated and hampered the incorporation into the world economy, various meanings attributed to camels, and how railroads wiped these agents out of history, see Onur İnal, "One-Humped History: The Camel as Historical Actor in the Late Ottoman Empire," *International Journal of Middle East Studies* 53, no. 1 (2021): 57–72.

gendarmerie in the provinces.⁷⁶ After the 1850s, the Ottoman Empire slowly started building macadamized roads in short distances leading to commercial centers (mainly in Western Anatolia)⁷⁷, but these projects gathered pace only after the 1880s.⁷⁸

Transport by water was the only realistic way of transferring goods in bulk quantity. Relatively small sailing vessels staffed by half a dozen (almost all Orthodox Christian) crew dominated Ottoman seas and rivers until the mid-nineteenth century. Although such ships (averaging around 50-100 tons) could carry about 200 times the most efficient land transport method, water transport was unpredictable because of adverse weather, currents, and winds.⁷⁹ The introduction of steamships after the 1840s ended this unpredictability, dramatically reduced voyage time, increased tonnage capacity, and improved ports' prosperity. The number of steamships rose remarkably, and they captured most goods transported internationally and from prominent domestic ports to others. The Empire neglected the development of shipping due to its financial incapacity, and, by the late 1850s, "did not even rank among the top five in handling its own internal shipping ... All flags [were] admitted to the coasting trade of Turkey, simply because her own marine [was] not strong enough to supply the demand of conveyance."⁸⁰ But despite that, steamers did not outpace their sail competitors quickly: Sailing vessels serving Istanbul carried four times as much aggregate cargo by tonnage as steamships, also favored by their leading role in the interregional and coasting trade.⁸¹

A high land-to-labor ratio persisted throughout the Empire and heavily impacted labor availability, wages, and land tenure. Despite the swift population rise and urbanization in the 1500s, the Empire's population changed from 26 million in 1700 to 28 million in 1820

⁷⁶ Ali Sönmez, "Zaptiye Teşkilatının Düzenlenmesi (1840-1869)," *Tarih Araştırmaları Dergisi* 25, no. 39 (2006): 199–219.

⁷⁷ Nevin Coşar and Sevtap Demirci, "Incorporation into the World Economy: From Railways to Highways (1850-1950)," *Middle Eastern Studies* 45, no. 1 (2009): 29.

⁷⁸ In 1888, total length of the macadamized roads in the whole Empire was 10.400 kilometers, a significant increase from 900 kilometers in 1879. İlhan Tekeli and Selim İlkin, *Cumhuriyetin Harcı 3 - Modernitenin Altyapısı Oluşurken* (İstanbul: İstanbul Bilgi Üniversitesi Yayınları, 2010), 116. Despite the existence of various plans for building 7.635 kms of roads between 1908 and 1918, little was achieved. By the 1920s Turkey only had 18.335 kms of macadamized roads. 13.885 kms of these roads were deteriorated, 4.450 were "improved earth roads." ; *ibid.*, 118.

⁷⁹ Donald Quataert, *The Ottoman Empire, 1700-1922* (Cambridge: Cambridge University Press, 2005), 119.

⁸⁰ Schoenberg, "The Evolution of Transport," 360.

⁸¹ Quataert, "The Age of Reforms," 800.

to 30.5 million in 1870 (European provinces accounted for 7 million, Asia Minor, Syria, Iraq, and Arabia about 17 million, and Egypt 6.5 million.) In contrast, the population of Europe increased from 170 million in 1700 to 200 million in 1820 and 315 million in 1870.⁸² Territorial constriction aside, frequent epidemics, notably plague and cholera, endemics such as tuberculosis, dysentery, smallpox, malaria, poor health infrastructure and behavior, and natural disasters acted as checks on population growth. High infant mortality caused low life expectancies at birth.⁸³ A reconstruction of the Ottoman population in the current borders of Turkey found that annual natural population growth was very close to zero until 1870.⁸⁴ Long-term conscription of non-disabled Muslims of 15 to 30 years of age, introduced in 1826, disturbed the lives of the settled Muslim males and productivity. Because the Empire was fighting a war with at least one state during the 53 years from 1800 to 1918, more males of reproductive ages were drafted for extended periods to meet the military's mounting manpower requirements.⁸⁵ Aside from wars with other polities, political, ethnic, and religious strife in regions such as Albania, Macedonia, Kurdistan, and Mount Lebanon caused deaths and displacement.

Territorial losses resulted in the relocation of millions of Muslims from their heartland into inner regions. Although the Ottoman policy of settlements was directed at relieving the labor shortage in Anatolia, its consequences were not exactly as planned. Population movements placed stress on the continuity of land tenure and rural stability. In some instances, the resettlement of millions of immigrants to Anatolia as a result of mainly Russian invasions in the second half of the nineteenth century turned land disputes into ethnic struggles.⁸⁶ Problems arising from the movement of people were not unique to the forcibly displaced, though. The passing of semi-nomadic tribes with their flocks over fields and their

⁸² Pamuk, "The Ottoman Empire, 1700–1870," 170.

⁸³ Efe Erünel, "Examining Age Structure and Estimating Mortality Rates in Ottoman Bursa Using Mid-Nineteenth-Century Population Registers," *Middle Eastern Studies* 57, no. 2 (2021): 179–96.

⁸⁴ Seda Başışoş, "Ottoman Population Within the Current Borders of Turkey: A New Construction," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, August 6, 2018), 3.

⁸⁵ Erik Jan Zürcher, "The Ottoman Conscription System, 1844–1914," *International Review of Social History* 43, no. 3 (1998): 437–49; Veysel Şimşek, "The First 'Little Mehmeds': Conscripits for the Ottoman Army, 1826–53," *Osmanlı Araştırmaları* 44 (2014): 265–311.

⁸⁶ Yücel Terzibaşoğlu, "Landlords, Refugees, and Nomads: Struggles for Land around Late-Nineteenth-Century Ayvalık," *New Perspectives on Turkey* 24 (2001): 51–82; Yücel Terzibaşoğlu, "Land- Disputes and Ethno-Politics: Northwestern Anatolia, 1877–1912," in *Land Rights, Ethno-Nationality and Sovereignty in History*, ed. Stanley Engerman and Jacob Metzer (London: Routledge, 2004), 153–80.

use of the commons for grazing caused disturbance between them and sedentary populations. On the other hand, the state's attempts at sedentarizing tribes through coercion or negotiation for various reasons around the mid-nineteenth century resulted in different regional outcomes ranging from peaceful coexistence with rural communities to deserting lands for banditry or disputes with central authorities.⁸⁷

Its scanty population made the Ottoman agrarian structure overwhelmingly characterized by small peasant households working small land plots for subsistence or little more. By one estimation, smallholdings below 8 hectares constituted all cultivable land in 1859, with the same proportion applying in 1900.⁸⁸ Relatedly, domestic and field labor division along gender and age lines varied by cultural norms. The dispersion of production and marketable surplus, the time and money costs of transport increasing further from the coastal areas, and the primitive nature of agricultural and industrial technology required a complex, extensive, and traditional organization based on merchants' and moneylending intermediaries' direct relationship with producers. Inducing producers to produce for the market at the expense of food cultivation and continually purchasing commodities in the market was impossible on a large scale. Given locally-specific agricultural suitability and domestic consumption levels, the looming threat of crop failures and food shortages, and uneven rewards of commercialization, Ottoman integration into world markets was time, region, and product-bound, and overall gradual and reversible.

As suggested in the literature, commercial farming in the Ottoman lands was largely carried out by middle peasants and small producers. As long as a peasant household possessed enough farmland and means of production, its members would focus on making a living off their land and offer their labor only when production means and output were insufficient to support the family.⁸⁹ Seasonal migratory workers and some peasant household members could temporarily work as wage laborers on large and small lands (usually for sowing and harvest in the latter case). However, their number would not suffice for extensive cultivation for the market in an environment where sharecropping (*murabalık*) was the

⁸⁷ Yonca Köksal, "Coercion and Mediation: Centralization and Sedentarization of Tribes in the Ottoman Empire," *Middle Eastern Studies* 42, no. 3 (2006): 469–91.

⁸⁸ Quataert, "The Age of Reforms," 863.

⁸⁹ Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 196.

dominant and often a hereditary form of tenancy on relatively large estates (between 2 to 20 hectares, averaging around 6-8 hectares).⁹⁰ For instance, British and German entrepreneurs who purchased large tracts of land in the vicinity of İzmir from the mid-nineteenth century onwards had to rely mostly on sharecropping agreements like other notables but had to depart soon after realizing the resulting exorbitant costs of production that could not be made up by agricultural machinery.⁹¹

Standing in the way of the penetration of direct foreign investment in agriculture were the intermediaries and provincial officials, who were unwilling to cede power to the Western capitalists by leaguings together and preventing the peasants from entering contractual relations with foreign merchants.⁹² Before the 1870s, most direct foreign investment came from the British and French. It was heavily weighted towards infrastructure, mainly railroads and port facilities, rather than agricultural or industrial sectors, aiming at a market integration facilitated primarily by transportation⁹³, which still did not achieve a comfortable level of profitability to channel wealth out of the region before the 1870s.⁹⁴

The persistence of small-scale and subsistence farming and heavy reliance on local networks and structures for producing and marketing the surplus underline the importance of the centuries-old agricultural production modalities. Ottoman agriculture was characterized more by polyculture than monoculture. Exports were quite diversified mechanisms, especially in regions with higher agricultural suitability⁹⁵, in contrast to Egypt, which experienced spectacular growth noticeably after 1865 thanks to its large-scale commercial cotton output. They were quite fragile to different market conditions too. For example,

⁹⁰ Ibid., 93; For a comprehensive analysis of sharecropping in the nineteenth century, see Canay Şahin, “A Comparative Study of Sharecropping System throughout the Ages in the Ottoman Empire” (MA Thesis, Ankara, Bilkent University, 1996), 28–62; For the size of small estates that constituted almost half of all cultivable land in Asiatic provinces, see Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 188–90.

⁹¹ Kurmuş, “The Role of British Capital,” 141–46.

⁹² Reşat Kasaba, “Was There a Compradore Bourgeoisie in Mid-Nineteenth-Century Western Anatolia?,” *Review (Fernand Braudel Center)* 11, no. 2 (1988): 221–22.

⁹³ Kurmuş, “The Role of British Capital”; Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 55–81; V. Necla Geyikdağı and M. Yaşar Geyikdağı, “A Comparative Study of Foreign Direct Investment: Ottoman and Russian Empires,” *Contemporary Research in Economics and Social Sciences* 2, no. 1 (2018): 71–110.

⁹⁴ Kasaba, *The Ottoman Empire and the World Economy*, 95.

⁹⁵ A mix of grains, fruits, industrial crops, and livestock were raised, and no single commodity accounted for more than 12% of the total exports from 1820 to 1914, the leading exports being raw silk, mohair, sheep’s wool, cotton, tobacco, opium, wheat, barley, currants, figs, and olive oil. Pamuk, *Uneven Centuries*, 115.

Balkan and Western Anatolian cotton, though cultivated at a large scale, was inferior to the American, Indian, and Egyptian crops, and the export demand for them was more subject to market fluctuations.⁹⁶

Furthermore, because of limited transport means, the growing domestic demand and subsistence needs of the producers, cereal growers, and specific sectors producing nondurable goods, such as horticulture and dairy, continued to cater to internal markets. Combined with the decaying domestic textile industries, whose production geared more and more towards the home market, Quataert estimated that domestic consumers formed at least three-quarters of all Ottoman agriculture even in 1913, when exports peaked.⁹⁷

Existing alongside smallholdings were large estates, also known as the *çiftlik*s, "a unit of an indeterminate size whereby the essential thing implied was ownership (or at least entitlement) by one party [usually middle- and small-scale notables] and actual production by others [peasants and seasonal laborers]."⁹⁸ They proliferated in various parts of the Empire since the early seventeenth century. Although the most intense period of *çiftlik* formation was in the late Balkans and Western Anatolia of the eighteenth and early nineteenth centuries⁹⁹, their existence and formation in the nineteenth century were only tangentially related to the Ottoman Empire's incorporation into world markets. In other words, the concentration of land in the hands of a few did not automatically end up in market-oriented production. Large commercial estates producing exclusively for the market "were unusual and economically unimportant except in Moldavia, Wallachia, the Çukurova plain [in southern Turkey], much of the Iraqi regions, and in the Hama area [in Syria]."¹⁰⁰ Instead, the majority of the *çiftlik*s

⁹⁶ Laura Panza, "De-Industrialization and Re-Industrialization in the Middle East: Reflections on the Cotton Industry in Egypt and in the Izmir Region," *The Economic History Review* 67, no. 1 (2014): 146–69.

⁹⁷ Quataert, "The Age of Reforms," 848.

⁹⁸ Bruce McGowan, "The Age of the Ayans, 1699-1812," in *An Economic and Social History of the Ottoman Empire*, ed. Halil İnalcık and Donald Quataert (Cambridge: Cambridge University Press, 1996), 681, for ownership issues, see 642-644, 658-679.

⁹⁹ Kasaba, *The Ottoman Empire and the World Economy*, 25–27.

¹⁰⁰ Ibid.; On the large commercial grain estates in Iraq and Syria, see Charles Issawi, *The Fertile Crescent, 1800-1914: A Documentary Economic History* (Oxford University Press, 1988), 290–95, 302–9, 348–49, 363–66; On the prevalence of large commercial farms in the hinterland of Salonica, see Costas Lapavitsas and Pinar Çakıroğlu, *Capitalism in the Ottoman Balkans: Industrialisation and Modernity in Macedonia* (Bloomsbury Publishing, 2019), 90–96.

were relatively small; labor scarcity and cost delimited their extent in most cases.¹⁰¹ Cash and subsistence crops were grown together, and stock raising was mostly preferred due to low labor requirements.¹⁰² Large landholders generally divided them into small plots and had them cultivated by sharecropper households, who were provided with buildings, implements, seeds, tract animals, and medium-sized land in return for a portion (usually no less than half) of the crop.¹⁰³

The emergence and expansion of *çiftlik*s in the 1820-1870 period mainly occurred through the purchase or de facto appropriation of abandoned lands (*metruke*) or wastelands (*mevat*) by notables, Istanbul-based elites, and imperial/local waqfs.¹⁰⁴ This trend had been in the making since the late eighteenth century when an entrepreneurial class of military-administrative and provincial bourgeoisie classes invested in land to create local bases of power and sought profits in provisioning the capital and Ottoman towns as well as supplying European markets.¹⁰⁵

The flow of immigrants to Anatolia and northern Mesopotamia from the 1870s onwards due to territorial losses and outmigration from the mountains in the Balkans did not substantially change land tenure and extensive use of marginal lands.¹⁰⁶ There was not a radical change in productivity. Nor did the *çiftlik* agriculture generate large-scale investments in Ottoman agriculture. *Çiftlik*-owners functioned mainly as town-dwelling absentee notables

¹⁰¹ Large holdings in the Asiatic provinces greater than 20 hectares comprised 17,5 percent of all cultivable land with an average of 120 hectares in 1869. Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 188–90.

¹⁰² Güran, *19. yüzyıl Osmanlı Tarımı*, 54–55, 101; Özgür Teoman and Muammer Kaymak, “Commercial Agriculture and Economic Change in the Ottoman Empire during the Nineteenth Century: A Comparison of Raw Cotton Production in Western Anatolia and Egypt,” *The Journal of Peasant Studies* 35, no. 2 (2008): 317.

¹⁰³ Suraiya Faroqhi, “Agriculture and Rural Life in the Ottoman Empire (ca 1500-1878),” *New Perspectives on Turkey* 1 (1987): 22–23; Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 196–97; Teoman and Kaymak, “Commercial Agriculture and Economic Change in the Ottoman Empire during the Nineteenth Century,” 317.

¹⁰⁴ Haim Gerber, *The Social Origins of the Modern Middle East* (London: Lyne Rienner, 1987), 88–89; Tabak, *The Waning of the Mediterranean, 1550–1870*, 290–92.

¹⁰⁵ Elena Frangakis-Syrett, *The Commerce of Smyrna in the Eighteenth Century (1700-1820)* (Athens: Center for Asia Minor Studies, 1992), 7; Alp Yücel Kaya, “Were Peasants Bound to the Soil in the Nineteenth-Century Balkans? A Reappraisal of the Question of the New/Second Serfdom in Ottoman Historiography,” in *Working in Greece and Turkey: A Comparative Labour History from Empires to Nation-States, 1840–1940*, ed. Leda Papastefanaki and M. Erdem Kabadayı (New York: Berghahn Books, 2020), 79–81.

¹⁰⁶ Wolf-Dieter Hütteroth, “The Influence of Social Structure on Land Division and Settlement in Inner Anatolia,” in *Turkey: Geographic and Social Perspectives* (Leiden: Brill, 1974), 33–43; Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 183–84.

who were interested in improving their financial standing by binding the sharecroppers and dispossessed peasantry to soil and cultivation rather than committing to long-term farming, although the *çiftlik*s in Western Anatolia and the Balkans were to some extent producing for external markets depending on their location and marketability of their produce.¹⁰⁷

That said, land, labor, and capital were societal relations with many regional variations beyond mere factors of production. Production relations and patterns of sharecropping, the principal mode of a labor organization of cultivation on relatively large estates, took different paths depending on the power and desire of the state, local potentates, and producers in influencing outcomes. A particular change brought about by the nineteenth century was that the scarcity of cash increasingly undermined the protection afforded to the producers by the labor scarcity. Various surtaxes imposed on the peasantry on the regional level further compounded the over-taxation of agricultural production amidst the chronic lack of liquid capital. The peasants, who were unable to meet their annual taxes and required loans of seed, animals, or equipment, especially during unfortunate years, needed to borrow from moneylenders, tax-farmers, artisans, merchants, and officials at exorbitant rates or sell their crops to traders before harvest at prices lower than their actual market worth.¹⁰⁸

Even though moneylending had been an essential part of urban-rural relations and regional economies, it reached unprecedented levels and occupied a quickly expanding space from the late-eighteenth century onwards. Throughout the eighteenth century, the wealthy sections of Ottoman society became more affluent than the rest.¹⁰⁹ True, as abovementioned,

¹⁰⁷ McGowan, “The Age of the Ayans,” 658–79; For a few exemplary regional case studies for the absentee-landlordism, see Beshara B. Doumani, *Rediscovering Palestine: Merchants and Peasants in Jabal Nablus, 1700-1900* (Berkeley: University of California Press, 1995), 54–181; Michael R. Fischbach, *State, Society, and Land in Jordan* (Leiden: Brill, 2000), 147–95; Canay Şahin, “The Rise and Fall of an Ayân Family in Eighteenth Century Anatolia: The Caniklizâdes (1737-1808)” (PhD Thesis, Ankara, Bilkent University, 2003), 83–207; Oya Gözel, “The Implementation of the Ottoman Land Code of 1858 in Eastern Anatolia” (PhD Thesis, Ankara, Middle East Technical University, 2007); Fatma Öncel Yusufoglu, “Agrarian Relations and Estate (Çiftlik) Agriculture in Ottoman Thessaly (c. 1780 – 1880)” (PhD Thesis, Istanbul, Boğaziçi University, 2018); Fatma Melek Arıkan, “A History of a Western Anatolian Region: Yenişehir and İznik during the Late Ottoman Empire, 1855-1909” (PhD Thesis, Istanbul, Sabancı University, 2018); Kaya, “Were Peasants Bound.”

¹⁰⁸ For an overview of borrowing types, see Güran, *19. yüzyıl Osmanlı Tarımı*, 131–46; Advanced sale of crops was known as the salam contracts in Islamic commercial parlance. For a detailed treatment of this topic in the context of Jabal Nablus in the long nineteenth century, see Doumani, *Rediscovering Palestine: Merchants and Peasants in Jabal Nablus, 1700-1900*, 134–48.

¹⁰⁹ Hülya Canbakal and Alpay Filiztekin, “Wealth and Inequality in Ottoman Lands in the Early Modern Period” (Draft Paper, AALIMS - Rice University Conference on the Political Economy of the Muslim World, April 4,

confiscations impeded capital accumulation in private hands to a certain extent. On the other hand, the continually increased financial strains exacerbated by low levels of savings, investment, and relative lack of cash made moneylending a profitable venture in an increasingly monetized economy. Thus, wealthy individuals, who became richer through patronage networks, tax farming, and their estates, concentrated their efforts more and more on dispensing credit to the enlarging segment of needy borrowers as an essential means of garnering wealth.¹¹⁰ With this in mind, the supply of capital available for credit was not the monopoly of a small clique. The increasing circulation of coinage in the late eighteenth century made different social sections more active in lending.¹¹¹ Moneylending also spearheaded the spread of merchant capital into the interior in the regions that experienced the first wave of foreign market expansion and heightened agricultural commercialization.

Borrowing in the nineteenth-century Ottoman Empire, where no banking or other reputable institutions extending credit at low-interest rates existed, meant getting trapped in a vicious debt cycle due to high annual compound interests of 20 to 60 percent charged by the lender.¹¹² Many peasant households unable to repay the principal borrowed on monetary

2013); Hülya Canbakal and Alpay Filiztekin, “Wealth and Demography in Ottoman Probate Inventories: A Database in Very Long-Term Perspective,” *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 54, no. 2 (2021): 94–127.

¹¹⁰ Kasaba, *The Ottoman Empire and the World Economy*, 27; Frangakis-Syrett, *The Commerce of Smyrna in the Eighteenth Century (1700-1820)*, 75–247; Yuzo Nagata, “Karaosmanoğlu Hacı Hüseyin Ağa’ya Ait Bir Tereke Defteri,” in *Studies on the social and economic history of the Ottoman Empire*. (İzmir: Akademi Kitabevi, 1995), 23–29; Suraiya Faroqi, “Indebtedness in the Bursa Area, 1730-1740,” in *Sociétés Rurales Ottomanes*, ed. Mohammad Afifi (Cairo: Institut Français d’Archéologie Orientale, 2005), 197–213; Murat Dağlı, “Kütahya in the Eighteenth Century: Transformation or the Persistence of the Old Order?” (PhD Thesis, California, UC Berkeley, 2012), 161–80; Mehmet Akif Berber, “From Interest to Usury: The Transformation of Murabaha in the Late Ottoman Empire” (MA Thesis, İstanbul, İstanbul Şehir University, 2014), 40–84; Mehtap Özdeğer and Emine Zeytinli, “Ottoman Credit System and Usurers in Agriculture in the Nineteenth Century: Practices of Usury Contracts (Selem),” *Journal of Balkan and Near Eastern Studies* 21, no. 5 (2019): 594–612.

¹¹¹ İrfan Kokdaş, “Land Ownership, Tax Farming and the Social Structure of Local Credit Markets in the Ottoman Balkans, 1685–1855,” *Financial History Review* 24, no. 1 (2017): 53–81.

¹¹² Based on the British consul Palgrave’s observation on Anatolia in 1870 by Şahin, “A Comparative Study of Sharecropping System throughout the Ages in the Ottoman Empire,” 49; The cash waqfs, charitable institutions holding cash as capital and investing it to generate revenue, had been lending small credits to small-scale consumers since the sixteenth century. Their fixed interest rates were way lower than the market rates (maximum 15%). Their power substantially weakened during the 1820s with the foundation of the Ministry of Pious Endowments (*Evkaf-ı Hümayun Nezareti*) that required money not assigned for a specific social service must be returned to the treasury. To escape this situation and enjoy the market interest rates, the trustees of the cash waqfs used increasing amounts of the waqf money to their advantage by lending it at a higher rate to the public or, more likely, transferring them to the sarrafs. For a detailed study of the operations of these waqfs, see Murat Çizakça, “Cash Waqfs of Bursa, 1555-1823,” *Journal of the Economic and Social History of the Orient* 38, no. 3 (1995): 313–54.

loans were dependent on usurers to pay eternal interests, which made them practically dispossessed and reduced their status to sharecroppers on their land or a *çiftlik*-holders-cum-moneylenders' estate.¹¹³ Thus, such peasants were immobilized through permanent indebtedness, securing tenants needed for *çiftlik*-scale production.¹¹⁴ Çağlar Keyder examined this phenomenon in the context of the high land-to-labor ratio argument and said that sharecropping resulted "from a difficulty in continuing with independent farming, rather than from land unavailability."¹¹⁵

Further exacerbating the stranglehold of usury and indebtedness over the agrarian sector were regionally-varied conditions like the systematic exclusion of peasants from cultivation, imposition of undue obligations, double-taxation, land usurpation, and harsh treatment by powerful regional notables.¹¹⁶ The central administration's non-involvement in usury-related complaints and restrictions imposed for a long time on cultivators' mobility were not solely motivated by the desire to increase agricultural revenues and minimize land abandonment and accumulation of tax arrears. For example, soil-bondage in the mid-nineteenth century Trikala in central Greece, where Mustafa Reşid Pasha -the chief architect of the Tanzimat reforms- owned a dozen *çiftliks*, was perpetuated by means of special bylaws issued in the 1850s.¹¹⁷ As in this case, the legal reforms of the early Tanzimat period concerning civil rights and commercial transactions could not penetrate the agrarian sphere. The much-debated 1858 Land Code, in most instances, codified the existing land tenure arrangements without substantially altering them. Still, its implementation and impact were nonetheless susceptible to regional power balances, paving the way for a real estate market

¹¹³ E. Attila Aytekin, "Cultivators, Creditors and the State: Rural Indebtedness in the Nineteenth Century Ottoman Empire," *The Journal of Peasant Studies* 35, no. 2 (2008): 292–313; Özdeğer and Zeytinli, "Ottoman Credit System and Usurers."

¹¹⁴ Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 187.

¹¹⁵ Çağlar Keyder, "The Cycle of Sharecropping and the Consolidation of Small Peasant Ownership in Turkey," *The Journal of Peasant Studies* 10, no. 2–3 (1983): 132.

¹¹⁶ Aytekin, "Peasant Protest in the Late Ottoman Empire"; Zafer Gölen, "1857-59 Bosna Hersek İsyanı," *Belleten* 73, no. 267 (2009): 465–522; Cengiz Kırılı, "Tyranny Illustrated: From Petition to Rebellion in Ottoman Vranje," *New Perspectives on Turkey* 53 (2015): 3–36; E. Attila Aytekin, "Neither 'Monarchism' nor 'Weapons of the Weak': Peasant Protest in the Late Ottoman Empire," in *Perspectives on Ottoman Studies: Papers from the 18th Symposium of the International Committee of Pre-Ottoman and Ottoman Studies (CIEPO)*, ed. Vjeran Kursar, Ekrem Causevic, and Nenad Moacanin (Berlin: LIT Verlag Münster, 2010), 105–20.

¹¹⁷ Kaya, "Were Peasants Bound."

to emerge and the evolution of a strong landed elite in some cases.¹¹⁸ Cries from the countryside were heard more attentively through interventions in the composition of local councils and closer inspections of exactions, abuses, and usury by local power groups in the mid-1860s during the application of new provincial reforms in the core territories.¹¹⁹

The success of Ottoman manufacturers amid growing political and economic pressures was tied to the destiny of intra- and inter-regional economic geographies. Early textile factories (silk and cotton yarn spinneries) were not capital-intensive. They were opened primarily by foreign firms and labored by workers from the agricultural areas and took the lead in certain regions with highly demanded raw material resources, such as Macedonia and Bursa.¹²⁰ Ottoman industry, whose share in the total gross domestic product had been steadily declining, was assisted by several state-supported infant industrial enterprises in Istanbul and around the Marmara basin to supply the needs of the military and construct a platform for an Ottoman industrial leap. Mehmed Ali Pasha of Egypt also founded prototype cotton industries in the country, which the British deliberately dismantled for monopolistic aspirations later. Besides foreign competition and high transaction costs, these state-run factories frequently suffered from inefficiencies such as dilapidated machinery and insufficient power sources.¹²¹ Therefore, their efficiency, output quality, and profitability fell drastically below the demanded outcomes.¹²²

While cheap European manufactures were driving local products out of the market, the scarcity of labor and capital and a weak property framework for free and autonomous accumulation could not transform the existing urban and rural industries or crafts into

¹¹⁸ Gerber, *The Social Origins of the Modern Middle East*, 70–73; Çağlar Keyder, “Introduction: Large-Scale Commercial Agriculture in the Ottoman Empire?,” in *Landholding and Commercial Agriculture in the Middle East*, ed. Çağlar Keyder and Faruk Tabak (Albany: State University of New York Press, 1991), 1–13; Quataert, “The Age of Reforms,” 860; E. Attila Aytekin, “Agrarian Relations, Property and Law: An Analysis of the Land Code of 1858 in the Ottoman Empire,” *Middle Eastern Studies* 45, no. 6 (2009): 935–51.

¹¹⁹ Milen V. Petrov, “Everyday Forms of Compliance: Subaltern Commentaries on Ottoman Reform, 1864–1868,” *Comparative Studies in Society and History* 46, no. 4 (2004): 730–59; Yonca Köksal, “Sessiz Toprak Reformu,” *Toplumsal Tarih*, no. 170 (February 2008): 24–30; Arıkan, “A History,” 115–70.

¹²⁰ Leila Thayer Erder, “The Making of Industrial Bursa: Economic Activity and Population in a Turkish City, 1835–1975” (PhD Thesis, Princeton, N.J., Princeton University, 1976); Lapavitsas and Çakıroğlu, *Capitalism in the Ottoman Balkans*.

¹²¹ Pamuk and Williamson, “Ottoman De-Industrialization, 1800–1913,” 170.

¹²² The state-owned factories included paper, iron, fine felt (*çuka*), leather, cotton yarn, printed cloth, fez, and silk factories founded from 1805 to the early 1850s. Tevfik Güran, “Tanzimat Döneminde Devlet Fabrikaları,” in *150. Yılında Tanzimat* (Ankara: Türk Tarih Kurumu, 1992), 235–36.

capitalist organizations, leaving Ottoman textile-manufacturing as low-wage, labor-intensive, and low-capital sector.¹²³ Ottoman manufacturing, urban and rural, was primarily home-based, non-mechanized, labor-intensive, and small-scale in the pre-1870s. Nevertheless, the manufacturers were not passive recipients of the pressures of expanding European-dominated world markets in the nineteenth century. In the absence of extensive and uniform export orientation, regional attributes, adaptations, and improvisations added to the defensiveness of domestic market sectors, as in the case of agriculture. Household- and small-workshop-based putting-out systems where males, females, and children were commissioned and paid poorly per piecework by networking merchants-cum-moneylenders were integral in this process.¹²⁴

Certain export manufacturers in better-integrated areas moved to the growing non-competing export-oriented rural cottage industries, the foremost being carpetmaking, lacemaking, and silk reeling (though the reeling of silk ceased to be a household activity after the 1860s) that rose impressively after the 1830s.¹²⁵ On the other hand, some sectors could flourish with minimal resistance as there had not been as many innovations forcing the prices downwards as in the case of cotton cloth making. Ottoman Bulgaria was such a case. Since the late eighteenth century, due to landlessness and cash shortages, many peasants moved to highlands to pursue lesser tax burdens and shift their income sources to sheep raising and woolen manufacturing, specifically coarse cloth known as *aba*. Bulgaria's geography and cold climate secured it a large domestic clientele. *Aba*'s cheapness, durability, and popularity at the lower end of the domestic market, amongst shepherds and nomads in especial, further expanded its consumer base.¹²⁶

Due to several factors, domestic handicrafts heavily affected by machine-made imports and low prices could survive foreign competition. Sure, most textiles-related

¹²³ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 176.

¹²⁴ Boğaç A. Ergene, "Wages in Nineteenth-Century Anatolia: A Comparison of Urban and Agricultural Trends," *New Perspectives on Turkey* 19 (1998): 133.

¹²⁵ Donald Quataert, "Ottoman Manufacturing in the Nineteenth Century," in *Manufacturing in the Ottoman Empire and Turkey, 1500-1950*, ed. Donald Quataert (Albany, N.Y: SUNY Press, 1996), 109.

¹²⁶ M. R. Palairot, *The Balkan Economies c. 1800-1914: Evolution without Development*, Cambridge Studies in Modern Economic History 6 (Cambridge: Cambridge University Press, 1997), 66–82; Fatma Öncel, "Proto-Industrialization in the Mid-Nineteenth-Century Balkan Countryside: Textile Manufacturing in Villages of Plovdiv" (PhD Thesis, Istanbul, Boğaziçi University, 2012), 110–52.

industries and crafts became primarily a means of subsistence rather than profit for sale. But, the availability of European goods did not mean Ottoman consumers automatically purchased them. The preference for Ottoman-style domestic goods on the interior provided a ready market for most manufacturers. Domestic weavers, especially those in the better-integrated regions, lowered their costs by using imported yarn, cloth, and synthetic dyestuff (particularly after the 1860s), increasing per capita productivity. The consistency of demand for coarse and heavy cloths used by the peasantry and poor and middle classes as garments and towels kept home-based operations going.

In addition, the requirements of proto-industries, such as lacemaking, also provided an impetus for local spinners.¹²⁷ Boosted by better transport means and the spread of industrial textile capitalism, the destructive impact of imports and the associated capacity loss was ameliorated after the 1870s, albeit varying according to individual sectors.¹²⁸ Even in the heyday of domestic factory production, the internal market kept most manufacturers alive:

In 1914, Aleppo still shipped major quantities of its textiles everywhere in what remained of the Empire and to Egypt. Newly independent Bulgaria continued to sell important quantities of its wool cloth to Anatolian customers. The few Ottoman factories that were established sometimes fit into older networks or established new ones of domestic exchange. Adana machine-spun cotton in the new mills of the late nineteenth century was sold to the grandchildren of those who had been handspINNERS of cotton in northern and central Anatolia and to new consumers on the Mediterranean shores of Anatolia. The Bursa silk cloth industry, long believed to have declined, in fact ended the century with record-high production levels, for sale to Ottoman consumers.¹²⁹

1.5: In Lieu of Conclusion: Regions as Research Units in Ottoman History

All in all, between 1820 and 1870, Ottoman peasants, workers, manufacturers, retailers, transporters, and merchants labored in the context of costs, benefits, risks, and uncertainties of the first phase of trade expansion and deindustrialization. Vastly underdeveloped and underinvested, agrarian and industrial sectors were the motors of the longevity of the Ottoman economy in this period. Besides global trade oscillations, the advantages and disadvantages of this period were realized in the framework of existing structures and

¹²⁷ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 1–21.

¹²⁸ Palaiet, *The Balkan Economies c. 1800-1914*, 243–97, 342–55; Quataert, “Ottoman Manufacturing in the Nineteenth Century,” 21–104.

¹²⁹ Keyder, Özveren, and Quataert, “Port-Cities in the Ottoman Empire,” 529; Michael Palaiet similarly argued that the loss of the urban markets for the independent Balkan states in the pre-1880 period was more harmful to local manufacturing than price shocks and the influx of European goods. Palaiet, *The Balkan Economies c. 1800-1914*, 175–97.

networks and environmental, infrastructural, and socioeconomic determinants. Demand growth for specific raw materials, technological developments in transport, and the impact of the influx of cheap import goods brought specific Ottoman regions to the fore in this grand narrative of economic change, adaption, and continuity, where Western Anatolia took the lead in many respects.

The literature on the Ottoman experience of changing global economic circumstances has produced regional analyses. Essential in the construction of these regions has been their most commercialized export crops (e.g., cotton, silk, valonia oaks) and hampered or revitalized industries (e.g., cotton, silk, wool), and the key ports of the nineteenth century (e.g., Izmir, Salonica, Trabzon, Beirut, Mersin, Alexandria). The availability of consular reports of Britain and France, which were the dominant powers until the 1870s, has allowed for making quantitative and qualitative assessments of the export orientation and import intensity of regions, plus the miscellanea that concerned these states. Thanks almost exclusively to these sources, regions have been conceptualized as the vast and vague hinterlands of certain ports with common economic characteristics based on the volume and type of goods entered and cleared from these ports.

Even though the incorporation and deindustrialization literature has admitted that internal dynamics and networks have enhanced and hampered these processes, various aspects of domestic commercial and non-commercialized agricultural, industrial, and trade dynamics have been largely neglected. Overreliance on consular reports, the absence of local microdata until recent decades for the 1820-1870 period, and the immense scope of regions (e.g., Western Anatolia, Syria, and Egypt) have remained major drawbacks to portraying a holistic picture of domestic economic relations, socioeconomic and geographic peculiarities, contingencies, and individual agency, which guided Ottoman economic and population geographies yet are omitted in macroeconomic trends.

Relatedly, the disproportionate importance given to the commodification of land, agricultural commercialization, and de/industrialization has disqualified the study of modes of production that were not subject to drastic capitalist transformation. Therefore, agricultural activities such as work in vineyards before making molasses and wine, olive groves before salting olives and oil pressing, and mulberry orchards before cocoon rearing and the labor

regimes involved in them have not been adequately scrutinized. In a similar vein, insufficient attention has been paid to the quality of the foodstuff and industrial crops that varied regionally and significantly impacted their marketability. In industrial production and services, the rich, varied, and interdependent economic activities in rural areas, towns, and urban centers, ensuring the self-sufficiency of these settlements for centuries, have been overshadowed by a fixation on the most incorporated/deindustrialized sectors. For the same reason, two other themes often left out of Ottoman economic history were within- and trans-regional domestic trade networks that involved migrants bringing goods and their tribal, family, religious, and imperial connections and proto-industrial putting out systems linking urban areas to villages.

All in all, by reason of its massive internal diversity, the Western Anatolian economy was the sum of its regional economies. Instead of letting changing external circumstances define its constituent components, we must emphasize what we mean by regions to dissect Western Anatolia's internal economic, demographic, and spatial heterogeneity as granularly and realistically as possible.¹³⁰ Here, the "regional turn" in history and cultural studies offers extremely fertile ground for all branches of Ottoman history.¹³¹ Once a manageable research unit is identified, it then becomes possible to bring a great deal of nuance to the metanarrative at hand and, in terms of Ottoman economic and population history, to add granular details and enhance the vocabulary of our understanding of determinants, inputs, and outputs of production.

Regions are a useful heuristic tool and may refer to entities of different forms and sizes. They may be spatially delimited in a top-down (through administrative and

¹³⁰ Among the notable contributions that balanced the foreign trade-oriented narratives was Cihan Özgün's Ph.D. thesis on the regional economy of Izmir's hinterland. It complemented the Western Anatolia studies (pioneered by Reşat Kasaba, Orhan Kurmuş, and Elena Frangakis-Syrett) by highlighting the determinants of agrarian production and diverse economic trajectories within the Aydın province (that included Izmir), showing a more complicated picture of domestic economic relations. Özgün's use of tax survey microdata with local production modalities shifted the attention from the endpoint (i.e., the port) to the starting point (i.e., localities). Cihan Özgün, "İzmir ve Artalanında Tarımsal Üretim ve Ticareti (1844-1914)" (PhD Thesis, İzmir, Ege Üniversitesi, 2011).

¹³¹ For a close inspection and conceptualization of the regional focus in social sciences, see Stefan Troebst, "Introduction: What's in a Historical Region? A Teutonic Perspective," *European Review of History: Revue Européenne d'histoire* 10, no. 2 (2003): 173–88; Maria Todorova, "Spacing Europe: What Is a Historical Region?," *East Central Europe* 32, no. 1–2 (2005): 59–78; John Harrison, "The Region in Political Economy," *Geography Compass* 2, no. 3 (2008): 814–30.

organizational means and conceptualizations, such as trade zones, provinces, or tax regions) or a bottom-up manner (through geographical, social, economic, or political differentiation, e.g., industrial, coastal, resource-rich, or tribal regions).¹³² Temporality is involved in regions' emergence, evolution, and disappearance. In other words, regional boundaries have been steadily in flux. Thus, the timeframe in which a region was born, acquired its distinctive characteristics, and was transforming must be emphasized to remember the history and symbolic dimension of the respective terminology. An environmental historian's selection of a region and periodization of time will not necessarily overlap with a political historian's.

The present thesis takes the Ottoman *sancak*, or district, of Bursa as its regional focus and examines its economic and population geography and the impact of the major determinants of agricultural and industrial production in 1820-1870. By "population geography," I mean the characteristics, spatial distribution, and density of people; by "economic geography," the location, distribution, and spatial organization of economic activities.

Then, a justification of why such "formal" regions as *sancaks* can be selected as research units for these purposes shall follow. After provinces (*eyalet*), *sancaks*, comprising several subdistricts (*kaza*), were the most important territorial subdivisions in the military-administrative system. The foundations of the *sancaks* were determined by spatial organizational models concerned mainly with surplus appropriation and ensuring the transfer of agricultural surplus and revenues to areas with large population densities.¹³³ Agricultural production technology, transportation, and communication opportunities largely delimited the *sancaks*' size.

Sancaks were also historically-contingent entities. The spatial organization of the pre-Ottoman polities and regions, such as Western Anatolian principalities and the Byzantine Bithynia region, were incorporated into the imperial administration. Changing administrative concerns and production relations transformed these units' outer limits and internal

¹³² For an overview of methodological approaches to the concept of region, see Peter Schmitt-Egner, "The Concept of 'Region': Theoretical and Methodological Notes on Its Reconstruction," *Journal of European Integration* 24, no. 3 (2002): 179–200.

¹³³ İlhan Tekeli, "On Institutionalized External Relations of Cities in the Ottoman Empire: A Settlement Model Approach," *Études Balkaniques* 8 (1972): 49–72.

organization and led to the emergence of new ones. Unlike provinces with multiple *sancaks*, hence varied trajectories, individual *sancaks* are small enough to study their population and economic geography and large enough to discern heterogeneity within them. On the plus side, most *sancaks* remarkably preserved their nineteenth-century borders in the modern-day Turkish Republic and successor Balkan states, making comparisons across centuries possible and assessing their legacies in different spheres of social life more in a spatially bound way. *Sancaks* thus offer a ready and spatially demarcated cluster of characteristics and historical social, economic, and cultural structures that had a long-lasting impact on the history of the respective region.

Spatial and administrative concerns embedded in the existence and deformation of the *sancaks* and their subunits have already created a large corpus of "*sancak studies*" whose focus is demographic, economic, and political histories of these units from the mid-fourteenth to mid-seventeenth centuries based on the tax (known as *tahrir*, *avarız*, and *jizya*) registers of the time.¹³⁴ Novel approaches have given rise to new strands of *sancak* and provincial historiographies in recent years. Recent literature sought to overcome the outcome-oriented and historical-determinist world-system and modernization theory by focusing on cultural, economic, environmental, and political dynamism and demystified big narratives of change by emphasizing detours, contingencies, unintended consequences, and trials and errors by both the state and society.¹³⁵ Demographic and economic *sancak* literature (usually theses) using the content-rich Ottoman population registers and tax surveys, on the other hand, have primarily offered transliterations of these valuable records, thereby isolating production relations from other dependent factors and failing to examine their data in conjunction with global, imperial, and regional developments or lack thereof.

¹³⁴ Erhan Afyoncu, "Türkiye'de Tahrir Defterlerine Dayalı Olarak Hazırlanmış Çalışmalar Hakkında Bazı Görüşler," *Türkiye Araştırmaları Literatür Dergisi*, no. 1 (2003): 267–86.

¹³⁵ Among the most prominent examples are Aytekin, "Cultivators, Creditors and the State"; Meltem Toksöz, *Nomads, Migrants and Cotton in the Eastern Mediterranean: The Making of the Adana-Mersin Region 1850-1908* (Leiden: Brill, 2010); Sibel Zandi-Sayek, *Ottoman İzmir: The Rise of a Cosmopolitan Port, 1840-1880* (Minneapolis, MN: University of Minnesota Press, 2012); Arıkan, "A History"; Zeynep Küçükceran, "Agriculture and Agricultural Knowledge in Bursa and Mihaliç (Karacabey) in the Nineteenth Century" (PhD Thesis, İstanbul, Boğaziçi University, 2019); Yonca Köksal, *The Ottoman Empire in the Tanzimat Era: Provincial Perspectives from Ankara to Edirne* (New York: Routledge, 2019).

Usually, the *sancak* borders are treated vaguely, and the central city and a few subdistricts are taken as representatives of economic relations. With the help of the Ottoman population and tax microdata, this study also aims to define internal and outer administrative borders properly and conduct a study sensitive to internal differences. Bursa designates the city and the *sancak* (with twelve subdistricts). The city was the first capital of the Ottoman Empire, an important administrative center, and a silk manufacturing stronghold with a cosmopolitan population and a highly diverse occupational structure.

The Bursa *sancak*'s well-documented versatile agrarian economy and institutional history have prompted a profusion of research based on various primary sources. Its golden age from the fourteenth through the sixteenth century received considerable attention thanks to the abundance of cadastral land surveys. The trajectory of the silk industry throughout the Empire's existence remained a vital study area to assess the integrity and connectedness of the Ottoman economy. While the great number of intact Bursa court records have allowed for extensive social, economic, and legal-administrative histories, the popular topic of modernization of Ottoman state-society relations in the long nineteenth century has been studied at urban and subdistrict levels.¹³⁶

Taking the Bursa district as the study unit pronounces the heterogeneity within the Western Anatolia region in terms of focus, factors, and relations of production, export-orientedness, and impact of imports. It also shifts the attention away from Izmir and its hinterland, whose data is taken to proxy the Empire's incorporation into the world economy and terms of trade until 1870. Bursa's importance in the hierarchy of other Ottoman cities and *sancaks* in the nineteenth century was a far cry from its glory days of being one of the top manufacturing and trade centers until the early 1600s. That said, the region had the first factory-based industrialized economy by the early 1840s, fueled by the proliferation of filatures operating on regionally-produced cocoons, which happened at the expense of local

¹³⁶ “Bursa studies” is a large and rich body of books, theses, articles, and journalistic work. Among the most prominent works with a *sancak* or larger-than-city approach from different periods, see Özer Ergenç, *XVI. Yüzyılın Sonlarında Bursa : Yerleşimi, Yönetimi, Ekonomik ve Sosyal Durumu Üzerine Bir Araştırma* (Ankara: Türk Tarih Kurumu, 2006); Haim Gerber, *Economy and Society in an Ottoman City: Bursa, 1600-1700* (Jerusalem: Hebrew University, 1988); Erder, “The Making of Industrial Bursa”; Murat Çizakça, “Price History and the Bursa Silk Industry: A Study in Ottoman Industrial Decline, 1550-1650,” *The Journal of Economic History* 40, no. 3 (1980): 533–50; Emre Satıcı, “19. Yüzyılda Hüdavendigâr Eyaleti” (PhD Thesis, Ankara, Ankara Üniversitesi, 2008); Arkan, “A History”; Küçükceran, “Agriculture.”

manufacturers. But, besides silk, it did not have a significant export-oriented sector, and its ports did not directly participate in export trade. Furthermore, a silkworm disease and the entry of East Asian silk to Western markets in the 1860s took away a large part of the gains made in the meantime.

These facts encourage us to focus on regional production, consumption, and exchange modalities that go beyond the overemphasis put on silk production and weaving in the city.¹³⁷ With the help of Ottoman archival records, notably population and tax microdata, consular reports, travelogues, and geographic data, we can thus explore spatial variations in the determinants of output and repercussions of large-scale socioeconomic changes in local settings. Focusing on a relatively small unit also casts light on the relatively understudied themes, such as the tacit dichotomies of urban and rural areas and sedentary-settled employed in most research.

The next part of the thesis stresses the complex, fragile, and spatiotemporally bound nature of the above socioeconomic developments and circumstances. It delimits the Bursa region and studies the major determinants of economic relations from the Byzantine times to the last quarter of the Ottoman Empire.

Part 2: Regional Economy of the Bursa Region, 1820-1870

2.1: Introduction

The Ottoman economy saw great changes and challenges in the first three-quarters of the nineteenth century. In production relations, most environmental, infrastructural, and socioeconomic determinants had been persistent since pre- and early Ottoman times. With the capture of the Bursa region in the early fourteenth century, the Ottomans created and lent a powerful dynamism to the existing economic networks and structures that linked the Marmara basin to other regional economies, where the historical Bithynia region was the most important.

This part introduces the Bursa region from the Late Byzantine Era onwards and provides an account of the determinants of production, consumption, and exchange in the

¹³⁷ For two works that looked at silk manufacturing in the city to proxy the economic activities in the region, see Erder, “The Making of Industrial Bursa”; Sevilay Kaygalak, *Kapitalizmin Taşrası: 16. Yüzyıldan 19. Yüzyıla Bursa’da Toplumsal Süreçler ve Mekânsal Değişim* (İstanbul: İletişim Yayınları, 2008).

1820-1870 period. The first section examines the agricultural and industrial legacy of the “Greater” Bithynia region in the formation of the larger Ottoman Bursa region and how the establishment of the capital city and varied trade activities catapulted it into an important administrative, commercial, and cultural center. It then surveys the trajectory of the silk industries from the city as a re-exporter and manufacturer of silk textiles, to the appearance of mulberry plantations all around the region to produce its own silk, and finally to the deindustrializing effects of filature operations started in the mid-nineteenth century. It finally delineates Bursa’s administrative boundaries by emphasizing their political and economic underpinnings.

The second section studies the major environmental, infrastructural, and socioeconomic determinants. It goes into the peculiarities of how the physical environment, transport network and modalities, agricultural technology, financial difficulties, political and population dynamics, diseases, and disasters collectively shaped the course of Bursa’s regional economy and position in the world and domestic economy in 1820-1870.

2.2: Agrarian and Manufacturing Sectors, 1200-1800

2.2.1. Late Byzantine Era

The importance of regional agricultural economies of the late Byzantine Empire became more pronounced in the aftermath of the Latin Siege and the sack of Constantinople in 1204 and the subsequent transfer of the Empire's capital to Nicaea (Iznik) to the east. Following this event, the relatively unified economic and trade system under the Byzantine framework was dissolved into smaller Greek and Latin polities, highlighting the strength of certain regional economies like those of Macedonia, Thessaly, Thrace, Bithynia, and Mysia. The “Greater” Bithynia region, which included the northern half of today's Bursa region and a portion of the eastern Mysia region on the west banks of the Rhyndacus¹³⁸, thrived with a diversified economy. It had alluvial and fertile soil, towns such as Nicaea, Prusa (Bursa),

¹³⁸ The Eastern Marmara coast until the Rhyndacus River and western banks of Lake Apollonia (Ulubat) in the west to Mount Olympus or Uludağ in the south, through the hinterlands of Nicaea in the east to the lower Sangarios (Lake Sakarya) basin (Nicomedia or İzmit) up to the Black Sea in the north. Practically, for the Bursa *sancak*, Bithynia ended where the hilly parts comprising the massive of the Uludağ Mountains started. Eastern borders of the ancient Mysia comprised the western half of the Mihaliç and Kirmasti subdistricts around Lake Apollonia and west of the Rhyndacus River. I will refer to this region as the “Greater Bithynia” as this is the most historically accurate description. For a detailed account of the borders, see Barbora Weissová, “Regional Economy, Settlement Patterns and the Road System in Bithynia (4th Century BC - 6th Century AD): Spatial and Quantitative Analysis” (PhD Thesis, Berlin, Freie Universität Berlin, 2019), 83.

Lopadion (Apolyond, later Uluabat), as well as port towns of Apameia (Mudanya) and Kios (Gemlik) that are half-a-day walk away from each other, and continued to become home to large population densities and economic prosperity.¹³⁹

Polyculture and multiactivity, features of Mediterranean agriculture, characterized the agrarian economy of Greater Bithynia. As early as late antiquity, it depended mainly on cultivating cash crops of vineyards, olive trees, and other fruit and vegetable gardens on a well-irrigated horticultural landscape.¹⁴⁰ The rise in agricultural production and productivity since the tenth century manifested itself in the realm of grain production, most notably in the plain of Bursa and the region's hinterland, as evidenced by the expansion of cultivation area and the frequent appearance of water mills in the documents from thence onwards.¹⁴¹

Animal husbandry, mainly sheep and goats, was important to the economy. Cattle raising involved larger estates, and the animals were valued for their meat, dairy, and hides. Goats, sheep, and other flock animals were raised on smallholdings and appreciated for their meat, dairy, and wool. The Greater Bithynia was at a critical point for the meat provisioning of Constantinople and the standing army. When needed, horses, donkeys, oxen, and other plow animals were sent by overland or sea via Nicomedia to Constantinople.¹⁴² Beekeeping was also an important activity, for honey was one of the most popular sources of sugar with fruits, and wax was essential in making candles that illuminated residences and public buildings.¹⁴³ Fishing was an important secondary activity along the coast, apparent by many salt pans used for salting fish, olives, vegetables, and dairy products.¹⁴⁴

We must not fixate on the economy's more "settled" aspect. With the region's abundant pasturage, the pastoral sector was a vast but hidden economy because it was not

¹³⁹ Angeliki E. Laiou, "The Agrarian Economy, Thirteenth–Fifteenth Centuries," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, vol. 1 (Washington, DC: Dumbarton Oaks, 2002), 321.

¹⁴⁰ Adam Izdebski, "The Economic Expansion of the Anatolian Countryside in Late Antiquity: The Coast versus Inland Regions," *Late Antique Archaeology* 10, no. 1 (n. d.): 354.

¹⁴¹ Angeliki E. Laiou, "The Byzantine Economy: An Overview," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 3 (Washington, DC: Dumbarton Oaks, 2002), 1151.

¹⁴² Jacques Lefort, "The Rural Economy, Seventh–Twelfth Centuries," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 1 (Washington, DC: Dumbarton Oaks, 2002), 264.

¹⁴³ *Ibid.*, 246.

¹⁴⁴ Laiou, "The Agrarian Economy," 321.

integrated into agricultural life. Movements of flocks to mountains during winter pastures (*cheimadia*) and lowlands during summer (*parcharia*) by transhumanists left their stamp on the toponymy long before their Turkish equivalents (*yaylak* and *kışlak*, respectively).¹⁴⁵

Thanks to the Greater Bithynia's agricultural suitability, accessibility, and population, these items could be produced beyond self-sufficiency to be exported to extra-regional (mainly Istanbul) and international markets (via Venetian, Genoese, and Florentine merchants) as well as bartered within the region. Town-rural countryside exchange occurred through high-frequency markets where rural producers brought their goods to be transported to cities, where a system of special shops and permanent markets existed, or to other designated areas like smaller town centers.¹⁴⁶ Just as agricultural production was a significant part of urban economies, artisanal activity was diversified in but not necessarily limited to towns. Instead, a preponderance of evidence from the thirteenth and fourteenth centuries points to the peasantry's involvement in manufacturing woolen textiles and by-employment in such sectors as pottery, shoemaking, and tailoring.¹⁴⁷ Well-off urban-dwelling magnates were interested in this exchange economy by owning agricultural and commercial real estate and investing in trade.¹⁴⁸

A special mention must be made regarding silk production, weaving, and trading, which constituted one of the most important industrial and commercial activities. Since the eleventh century, the internal demand and expansion of Italian trading networks created substantial manufacturing of silk fabrics in the western Byzantine Empire and their exportation to Western polities and the Muslim East, both activities increasingly liberated from imperial regulations.¹⁴⁹ Byzantine silk manufacturing industries, notably Constantinople, largely depended on Chinese raw silk imported via Persia. Mulberry trees,

¹⁴⁵ Anthony Bryer, "The Means of Agricultural Production: Muscle and Tools," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 1 (Washington, DC: Dumbarton Oaks, 2002), 104.

¹⁴⁶ Klaus-Peter Matschke, "Commerce, Trade, Markets, and Money, Thirteenth–Fifteenth Centuries," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 2 (Washington, DC: Dumbarton Oaks, 2002), 776–82.

¹⁴⁷ Laiou, "The Agrarian Economy," 348.

¹⁴⁸ Angeliki E. Laiou, "Economic Thought and Ideology," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 3 (Washington, DC: Dumbarton Oaks, 2002), 1129.

¹⁴⁹ David Jacoby, "Silk in western Byzantium before the Fourth Crusade," *Byzantinische Zeitschrift* 84–85, no. 2 (1992): 499–500.

whose leaves were fed to silkworms and constituted an essential component of Bursa's agrarian economy, were almost non-existent by then (except in the Morea region through the encouragement of Italian merchants since the eleventh century). On the other hand, Nicaea, and, on a smaller scale, Prousa, acted as important manufacturing centers of Bithynia until the 1290s.¹⁵⁰

In the late thirteenth century, several sudden changes in the Byzantine economy halted the prosperity of Bithynia and other regional economy clusters in northwestern Anatolia. The removal of the capital back to Constantinople in 1261 and abrupt increases in taxation and shortage of cash disfavored agricultural production. Further exacerbating the economic situation in the imperial economy were civil strife, plagues, the end of Pax Mongolica that diverted Asian trade routes from Constantinople to safer Egyptian outlets, a series of wars between the Venetians and Genoese, and, finally, the expansion of Turcoman raids in Western Anatolia, notably that of the Ottomans.¹⁵¹ The prosperity of Byzantine Asia Minor declined in the late thirteenth century when the level of agricultural production substantially fell off. Turkish-occupied Asia Minor, in contrast, showed relative prosperity.¹⁵² The fusion of the energies of Western Anatolia's new and old worlds would open a new page for both the region and the world economy.

2.2.2. Ottoman Rule and the Trajectory of Bursa's Silk Industries

The Greater Bithynia region's conquest by the Ottomans was completed in 1337 with the capture of Nicomedia (Iznikmid in Ottoman – Kocaeli today). Agricultural, industrial, infrastructural, and demographic resources and customs duties potential of the region incentivized and intensified the settlement of Ottomans. Perhaps the most prominent political repercussion of Ottoman expansion in northwestern Anatolia was the city of Bursa's becoming the capital in 1326. The city became the administrative seat of the Bursa (or Hüdavendigâr as it was formally known) *sancak* (district), which was created by adding the southern periphery of the Greater Bithynia and some other small towns to ensure the provisioning of the city with tax-in-cash and in-kind.¹⁵³

¹⁵⁰ Laiou, "The Agrarian Economy," 322–23.

¹⁵¹ Laiou, "The Byzantine Economy: An Overview," 1161.

¹⁵² Laiou, "The Agrarian Economy," 321.

¹⁵³ Ergenç, *XVI. Yüzyılın*, 122–23.

The Bursa region created a safe and dynamic economic base that interlinked inner and coastal routes around the Marmara Basin. Specifically, "the rise of [the city of] Bursa as a world market in the second half of the fourteenth century became the economic foundation of Ottoman power."¹⁵⁴ The main motor of this foundation was silk manufacturing, operating on imported silk from Iran. The Ottomans' economic mindset focused on controlling and keeping open the silk road from Tabriz to Bursa through Erzurum, Erzincan, Tokat, Amasya, and Ankara until 1401. In the west, one primary reason behind Ottoman expansion along the Aegean coast was the capture of alum mines (a commodity used in dyeing textiles), mainly in Genoese hands. The road from Bursa through Mihaliç (today Karacabey) to Gallipoli to Edirne was the primary Ottoman military route between Anatolia and the Balkans, the main commercial land route between Europe and Bursa.¹⁵⁵ A regular network of inns and caravanserais punctuating these roads rerouted the silk trade from Tabriz to be terminated in Bursa and reexported to Europe, Constantinople, Egypt, and Arab lands from there.¹⁵⁶ Bursa also became the main entrepot for Western Anatolian cotton and grain, central Anatolian and European wool, sugar from Cyprus and Egypt, and Indian pepper.¹⁵⁷

The region's capture by the Ottomans facilitated the formation of economic and political institutions distinct from the traditions and norms of the tribal retinue at the beginning. In actuality, the region was an ethnic, infrastructural, and institutional melting pot where Muslims settled with non-Muslims, agricultural and industrial know-how met the semi-nomadic pastoral elements, and Greco-Roman administrative practices intermingled with Turco-Persian Islamic military and statecraft. The migration of Osman's tribe to the Bithynian ecological zone that favored sedentary agricultural production over pastoral semi-nomadism triggered a transition from tribal-warrior chieftaincy to a bureaucratic empire.¹⁵⁸

¹⁵⁴ Halil İnalçık, "The Ottoman State: Economy and Society, 1300-1600," in *An Economic and Social History of the Ottoman Empire*, ed. Halil İnalçık and Donald Quataert (Cambridge: Cambridge University Press, 1996), 223.

¹⁵⁵ Halil İnalçık, "Bursa XV. Asır Sanayi ve Ticaret Tarihine Dair Vesikalar," *Belleten* XXIV, no. 93 (1960): 55–56.

¹⁵⁶ Halil İnalçık, "Bursa and the Commerce of the Levant," *Journal of the Economic and Social History of the Orient* 3, no. 2 (1960): 131–47.

¹⁵⁷ Kate Fleet, *European and Islamic Trade in the Early Ottoman State, the Merchants of Genoa and Turkey* (Cambridge: Cambridge University Press, 1999), 22–37.

¹⁵⁸ For a nuanced examination, see Suna Çağaptay, *The First Capital of the Ottoman Empire: The Religious, Architectural, and Social History of Bursa* (London: I.B. Tauris, 2020), 79–110; In the early 1950s, Mustafa Akdağ explained the rise and expansion of the Ottomans as determined by the "Marmara economic unit"

Demographic, environmental, and infrastructural knowledge disseminated through the fluid frontier culture dictated the course of Ottoman expansion into the Balkans and Anatolia. It can be argued that the defeat of the Ottomans by Timur in 1402 that destroyed the city of Bursa and the ensuing interregnum until 1413 was survived thanks to Ottoman capabilities of regimenting and harnessing the economic resources of the Balkans, experienced first in the Bursa region.¹⁵⁹

It would, however, be wrong to draw an entirely sedentary picture and not consider the semi-nomadic groups known as the *yörüks* concentrated primarily on mountain and steppe pastures and marshy plains. They were estimated to form up to fifteen percent of the total population of western Anatolia by the early decades of the sixteenth century and contributed significantly to the economy.¹⁶⁰ It is argued that the semi-nomad population in the late sixteenth-century Bursa (then comprising twenty-four subdistricts) was around 2000 souls, between 2,5 to 3,5 percent of the total population, way smaller than other regions of Western Anatolia, possibly due to Bursa's economic and geographic attributes favoring longer periods of sedentarism.¹⁶¹ In addition to animal husbandry, the semi-nomads were involved in long-distance transportation (especially with their camels), mining, and trading animal products in return for rugs and carpets, which helped keep domestic woolen-carpet-

emerging in northwestern Anatolia between the pastoral Turks and the settled Greek population. Facing a critical backlash from Halil İnalçık for its primacy of economic causes and omittance of political developments as well as most primary sources, Akdağ's thesis has remained one of the cornerstones of Ottoman economic history, and its main tenets received support from Byzantinists and Ottomanists in the coming decades. Halil İnalçık, "Notes on a Study of the Turkish Economy during the Establishment and Rise of the Ottoman Empire," in *The Middle East and the Balkans under the Ottoman Empire: Essays on Economy and Society* (Bloomington: Indiana University Turkish Studies, 1993), 205–63; For a literature review on this issue, see Bedi Gümüşlü, "Türk Tarihçiliğinde İlk Ekonomik Tarih Denemesi ve Tepkiler," *Kebikeç İnsan Bilimleri İçin Kaynak Araştırmaları Dergisi*, no. 29 (2010): 7–20.

¹⁵⁹ İnalçık, "The Ottoman State: Economy and Society," 13; Carter V. Findley, *The Turks in World History* (New York: Oxford University Press, 2005), 111.

¹⁶⁰ Halil İnalçık, "The Yörüks: Their Origins, Expansion and Economic Role," *Cedrus: Akdeniz Uygarlıkları Araştırma Dergisi* 2 (2014): 474.

¹⁶¹ According to Ömer Lütfi Barkan's calculations based on the tax (tahrir) registers (about whose numbers the debate is still continuing), there were about 17000 semi-nomad in Menteşe, 24000 in Kütahya, 11000 in Hamid, and 24000 in Ankara regions by 1580. Bursa was apparently home to one of the smallest semi-nomad populations when the Empire reached its political climax. Ömer Lütfi Barkan, "Essai Sur Les Données Statistiques Des Registres de Recensement Dans l'Empire Ottoman Aux XVe et XVIe Siècles," *Journal of the Economic and Social History of the Orient* 1, no. 1 (1957): 30.

making industries alive. Some semi-nomad leaders acquired a significant level of wealth so that they hired shepherds for their flocks or even became tax farmers themselves.¹⁶²

The city of Bursa, with its Muslim-majority cosmopolitan population, constituted the industrious core of this economic network. Soon after its conquest, Orhan Bey had coins minted in his name, concluded a trade agreement with the Genoese, started the city's planned expansion beyond its walls by constructing a mosque complex (*külliye*), including public structures such as baths, soup kitchens, marketplaces, and lodgings for travelers to encourage trade, and his first great *bedestan*. Following the line of Orhan, new religious and commercial buildings were found in the form of religious endowments known as waqfs during the reigns of the subsequent sultans, further fueling urban growth. Nestled against Mount Olympus (Uludağ) and home to numerous socioreligious buildings, imperial mosque complexes with chiefly commercial, residential, and utilitarian functions, and a large bazaar and inns region frequented by European, Ottoman, and foreign Muslim merchants, Bursa has long enjoyed a vibrant commercial life. Unlike other principalities of Western Anatolia, the Ottomans effectively controlled and manipulated the markets to enhance their economic leverage and geopolitical clout vis-à-vis with western states – as understood by the commercial privileges granted to and high activity of Venetians and Genoese, and later Florentines in the city, that made the Ottomans an integral element of the Mediterranean economy.¹⁶³ This economic impetus showed itself in the swiftly increasing number of public buildings. By 1530, there were eight *imarets* (public soup kitchens), 22 madrasas, 18 large or Friday mosques, 130 masjids or small mosques, ten zawiyas or dervish lodges, and ten large inns.¹⁶⁴

As the increase in public buildings indicates, steady and fast population growth came with commercial prosperity. In 1485, the city had 6457 tax-paying households¹⁶⁵, approximately 33.500 people.¹⁶⁶ This is a great increase from around 10.000 people at the end of the fourteenth century. The transfer of the capital and people to Istanbul did not stop

¹⁶² İncalcık, “The Yörüks,” 484.

¹⁶³ Fleet, *European and Islamic Trade*, 68.

¹⁶⁴ Halil İncalcık, “Bursa,” in *TDV İslam Ansiklopedisi* (İstanbul, 1992), 447, <https://islamansiklopedisi.org.tr/hudavendigar--bursa>.

¹⁶⁵ Heath Lowry, *Ottoman Bursa in Travel Accounts* (Bloomington: Indiana University Ottoman and Modern Turkish Studies Publications, 2003), 37.

¹⁶⁶ Using the conventional coefficient of an average of 5 persons per household plus 10 percent to account for the tax-exempt individuals.

Bursa's expansion. By 1530 the number of households grew to 7768, or around 42.700 inhabitants, with 186 non-Muslims where 585 Jews and 435 Christians (Armenians and Orthodox Christians) lived. The wealth generated mainly by the textile production and trade attracted many migrants to the city and skyrocketed the number of Bursa's dwellings to 17.754, which rounds up to a population of 87.800 residents by 1573. However, the Jews and Christians, overshadowed by Muslims, experienced a significant population increase, having 573 households occupied by 1540 Jews and 2710 Christians.¹⁶⁷ Guessing the number of temporary residents is a daunting task. But we know that Italian and Iranian merchant colonies and many individual traders of different origins resided (and sometimes died) in the city in the fifteenth and sixteenth centuries.¹⁶⁸

Regarding Bursa's occupational structure and commercial life, the comprehensive law code of market regulation (*İhtisab Kanunnamesi*) of 1502, which standardized the production, selling, and transporting of commodities and set ceiling prices of goods and services, indicates a diversified trading activity within the city.¹⁶⁹ Those engaged in securing raw materials included gardeners, timber makers, and poulterers. Service providers ranged from food establishments (e.g., bakeries, butcheries, and kebab and halwa shops), grocers, itinerant food sellers, jewelers, herbalists, blacksmiths, builders, water conduit servicemen, and transporters. Detailed documentation of the conditions under which certain fruits, vegetables, grains, and salted fishes could be sold in the grocery shops (*bakkal*) suggests a considerable portion of the agricultural surplus of the Bursa district and its environs was destined to be marketed within the city.

Since this regulation was concerned only with organized artisanal work at the start of the sixteenth century, other service sector employees are omitted from the picture, most prominently administrative, judicial, military, and religious cadres, to say nothing of the employees of close to forty bathhouses. About seventy-five coffeehouses to be opened a century later, plus the hundreds of *boza* (fermented grains) houses and taverns, already

¹⁶⁷ Lowry, *Ottoman Bursa in Travel Accounts*, 37–38.

¹⁶⁸ *Ibid.*, 24–26.

¹⁶⁹ Ahmet Akgündüz, *Osmanlı Kânûnnâmeleri ve Hukûkî Tahlilleri*, vol. 2 (İstanbul: FEY Vakfı Yayınları, 1990), 188–229.

existing since the fifteenth century, employed and attracted many¹⁷⁰ but also led to Ottoman authorities' waging a futile moralist war against them.¹⁷¹ Bursa's identity as a significant judicial/administrative and religious education center remained intact until the Empire's demise. Due to the increasing bureaucratization of the Empire, the Sunnification of the imperial ideology, and migrations into the city, civil servants constituted fifteen percent of the total population at the turn of the sixteenth century and twenty-five percent in the seventeenth century.¹⁷²

The city of Bursa and, to a way lesser extent, the neighboring towns (Iznik, Yenişehir, Kirmasti, and Inegöl) contained high-prestige madrasas supported by revenues from waqfs (mainly comprising those of shops and industrial, agricultural, and customs taxes) dedicated to them. Madrasas, whose number increased from around 50 in the sixteenth century to about 100 by the nineteenth century¹⁷³, not to mention the primary schools (*sıbyan mektebi*) numbered 134 by the end of the sixteenth century¹⁷⁴, were home to many scholars and students. If those who worked in the service of hundreds of mosques, dervish convents¹⁷⁵, and non-Muslim religious buildings are reckoned, it can be assumed that religious service constituted an important activity within the city and its environs. As Heath Lowry states, "16th century Bursa had two industries – mosques and silk – although not necessarily in that order of importance."¹⁷⁶

The production, dyeing, and trading of silk and cotton textiles remained the most significant industrial activities within the city. Distinguished by their quality and combination of European and Asian cultural elements, Bursa's fabrics earned the nickname "Bursa

¹⁷⁰ Yücel Dağlı and Seyit Ali Kahraman, eds., *Günümüz Türkçesiyle Evliyâ Çelebi Seyahatnâmesi*, vol. 2 (İstanbul: Yapı Kredi Yayınları, 2008), 28.

¹⁷¹ Rıza Ruşen Yücer, "Sicillere Göre Eski Bursa: Bozahane, Meyhane ve Kahvehane Yasakları," *Uludağ Bursa Halkevi Dergisi*, 1940, 38–43; İklil Oya Selçuk, "State Meets Society: A Study of Bozahane Affairs in Bursa," in *Starting With Food: Culinary Approaches to Ottoman History*, ed. Amy Singer (Princeton: Markus Wiener Publishers, 2011), 23–48.

¹⁷² Karin Hofmeester and Jan Lucassen, "Ottoman Tax Registers as a Source for Labor Relations in Ottoman Bursa," *International Labor and Working-Class History* 97 (2020): 34.

¹⁷³ Mefail Hızlı, "Osmanlı Eğitim-Öğretim Tarihi Konusunda Önemli Bir Kaynak: 'Müderresin Vezaifi,'" *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 8, no. 8 (1999): 102.

¹⁷⁴ Mefail Hızlı, *Mahkeme Sicillerine Göre Osmanlı Klasik Döneminde İlköğretim ve Bursa Sıbyan Mektepleri* (Bursa: Uludağ Üniversitesi Basımevi, 1999), 175. The sıbyan schools were Quran schools that were attended generally by small boys of 5-6 years old. They were inferior to madrasa education.

¹⁷⁵ Mustafa Kara, *Bursa'da Tarikatlar ve Tekkeler* (Bursa: Osmangazi Belediyesi Yayınları, 2017), 68.

¹⁷⁶ Lowry, *Ottoman Bursa in Travel Accounts*, 6.

merchandise/stuff" in foreign customs accounts. The light weight of silk merchandise compared to its high price was a significant advantage in that this trade could flourish easily and be carried out over long distances without improving road quality. Trade of raw silk, high-quality silk textiles, and carpets with Europe and within the Empire peaked in the sixteenth century. European demand for raw silk rapidly increased by the 1550s, as the demand of England and the Low Countries caught up with that of the traditional Italian city-states.¹⁷⁷

In 1501, Bursa city had over a thousand looms processing 300 kilograms of raw silk daily.¹⁷⁸ Most of these looms were likely owned by merchants who provided the raw materials and organized the labor force composed of urban and rural wage workers (as journeymen, apprentices, and low-skilled laborers) paid per piece.¹⁷⁹ On the other hand, a sizeable amount of silk textiles was woven for an upscale clientele, including European buyers and the dynasty, enabling the sector (most notably those producing luxurious garments) to employ and profit from slave labor. Canbakal and Filiztekin's study found high rates of urban slave ownership of 15 percent in 1500-1520.¹⁸⁰ One estimate demonstrates that 20 to 25 percent of Bursa inhabitants were slaves in the late fifteenth and early sixteenth century (we should also add that the agricultural sector in the city's hinterland was employing slaves).¹⁸¹ Textile production at this point was not under strict guild control, as various branches of textile guilds became more powerful in the economy in the latter half of the sixteenth century.

An important factor in the empowerment of the guilds after 1550 was the English's entrance into Mediterranean trade and marketing of Iranian raw silk all over Europe, which confronted the Ottoman weavers with higher silk prices.¹⁸² Eminegül Karababa's research shows that the state's ability to negotiate with guilds, along with the overall

¹⁷⁷ Murat Çizakça, "Incorporation of the Middle East into the European World-Economy," *Review (Fernand Braudel Center)* 8, no. 3 (1985): 356.

¹⁷⁸ İnalçık, "Bursa XV. Asır Sanayi ve Ticaret Tarihine Dair Vesikalar," 53.

¹⁷⁹ İnalçık, "Capital Formation in the Ottoman Empire," 153.

¹⁸⁰ Hülya Canbakal and Alpay Filiztekin, "Slavery and Decline of Slave-Ownership in Ottoman Bursa 1460–1880," *International Labor and Working-Class History* 97 (2020): 63.

¹⁸¹ Suraiya Faroqhi, "Labor Recruitment and Control in the Ottoman Empire (Sixteenth to Seventeenth Centuries)," in *Manufacturing in the Ottoman Empire and Turkey, 1500-1950*, ed. Donald Quataert (Albany: SUNY Press, 1996), 21.

¹⁸² İklil Oya Selçuk, "Tracing Esnaf in Late Fifteenth-Century Bursa Court Records," in *Bread from the Lion's Mouth: Artisans Struggling for a Livelihood in Ottoman Cities*, ed. Suraiya Faroqhi (New York: Berghahn Books, 2015), 65.

commercialization, international trade, and urbanization, all of which created a fluid social structure, democratized the city's consumer culture by this time and led to increased consumption of luxuries and specific items by the non-administrative/military classes.¹⁸³

Like pricy textile fabric weaving, other sectors continued to serve conspicuous consumption. Another flourishing manufacturing center within the region was the town of Iznik, where the art of pottery and faience manufacture and tilemaking for the luxury market rose to ascendancy in the late fifteenth century. Commissioned mainly by the palace, the artisans of this particular town, which once temporarily served as administrative capital and an important Christian religious site, catapulted it into an artistic hotspot.

The cultivation of subsistence and market crops and widespread cattle and sheep husbandry fed not only the villages, towns, and the city, but also Istanbul. Through its ports, Bursa was a great entrepot of agricultural goods and conduit of the agrarian surplus of central and western Anatolia to Istanbul.¹⁸⁴ In this vivid trade and consumptive environment in Anatolia's most important trade center, "the merchant, shopkeeper, and peasant could not survive without credit."¹⁸⁵ Cash shortages enabled the *sarrafs*, government-accredited professional money dealers in the city, to make great fortunes on usury, with interest rates sometimes exceeding 25 percent.¹⁸⁶ The prolific credit market led to the flourishing of cash waqfs formed by the wealthy and state elite from the sixteenth century onwards, extending capital to those in need.¹⁸⁷ Wealthy capital holders' (traders, administrative members, and moneylenders alike) persistent interest in moneylending, either personally or via waqfs, therefore, deepened the dependency of the countryside on the city of Bursa and the region's towns.¹⁸⁸

¹⁸³ Eminegöl Karababa, "Investigating Early Modern Ottoman Consumer Culture in the Light of Bursa Probate Inventories," *The Economic History Review* 65, no. 1 (2008): 129–44.

¹⁸⁴ Cafer Çiftçi, "Osmanlı Döneminde İstanbul'un İfaşesinde Bursa'nın Rolü," *Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi*, no. 16 (2004): 151–71.

¹⁸⁵ İnalçık, "Capital Formation in the Ottoman Empire," 138.

¹⁸⁶ *Ibid.*, 139.

¹⁸⁷ Çizakça, "Cash Waqfs of Bursa, 1555-1823."

¹⁸⁸ Karababa, "Investigating Early Modern Ottoman Consumer Culture in the Light of Bursa Probate Inventories."

2.2.2.1. *The Silk Industry, 1600-1800*

Silk embargos placed on Iranian silk following multiple Ottoman-Iranian hostilities (between 1520 to 1611), aggravated in the second half of the sixteenth century, disrupted the flow of raw silk to Ottoman dominions. Additionally, increased demand for raw silk in European weaving industries led to a price surge. Combined with the regular price inflations of the seventeenth century due to European overseas expansion and the inflow of American bullion into world markets, Bursa producers eventually turned to cultivating mulberries for sericulture purposes, which presumably started in the 1580s.¹⁸⁹ The city, particularly the eastern sections, faced severe destruction during the two-month siege of the Jelali rebels under the leadership of Kalenderoğlu Mehmed Bey in 1607.¹⁹⁰ Bursa region became one of the most popular destinations for the central Anatolian refugees escaping the Jelali brigands in the first half of the seventeenth century.¹⁹¹

The short-term grave consequences of the destruction struck by the Jelalis did not substantially impact the city and its environs' economic performance in the long run. However, the insecurity in Anatolia caused by brigands and wars with Iran caused a triplication of silk prices, a considerable decline in silk cloth production from 1577 to 1618, and stagnation until the end of the seventeenth century.¹⁹² Inflation, disruptions to trade, most notably by the Thirty Years' War, significant plague episodes of 1647 and 1674, and extreme weather fluctuations throughout the seventeenth century harmed the city's attractiveness.

A population decline in the city and the countryside is observed, particularly after 1670. An official tax survey from 1696 gives the city population around 27.200 (5441 households), which declined from about 39.200 (7587 households) in 1670.¹⁹³ This fall can be viewed within the "demographic crisis" in Anatolia in the seventeenth century, affected by the shrinking economic and military resources and frequent famines, droughts,

¹⁸⁹ Fahri Dalsar, *Türk Sanayi ve Ticaret Tarihinde Bursa'da İpekçilik* (İstanbul: Sermet Matbaası, 1960), 361.

¹⁹⁰ Especially the inns region at the center and many religious buildings to the east of the city were destroyed. On this topic and the social consequences of the Jelalis in Bursa, see Tahsin Şahin, "Celali Kuşatması Altında Bursa" (MA Thesis, Bursa, Uludağ University, 2017), 95–127.

¹⁹¹ Haim Gerber notes that some of these people migrated to agricultural farms in the vicinity of Bursa. Gerber, *Economy and Society in an Ottoman City*, 19.

¹⁹² Çizakça, "A Short History Of," 148.

¹⁹³ Gerber, *Economy and Society in an Ottoman City*, 12.

inundations, increasing rainfall, unseasonable freezing, heavy snow, and epidemics.¹⁹⁴ Regarding the city's demographics, populations of between 30.000 to 40.000 remained standard until the 1870s. Iznik paralleled this trend too. While its population steadily declined after the sixteenth century, and a large-sized epidemic related to the town's contaminated groundwater in the seventeenth century hit the final stroke to pottery manufacture, which came to a complete halt after the late seventeenth century.¹⁹⁵ Further evidence from the Mudanya subdistrict in the north of the region shows a remarkable decline of the population by sixty percent (from about 10.000 to 4000), which continued steadily into the nineteenth century.¹⁹⁶

Helping the region regain its economic power was the resumption of silk production in the second half of the seventeenth century due to increased European demand for raw materials.¹⁹⁷ Several factors facilitated this process. First, regionally produced silk was used along with Iranian imports. As indigenous silkworms yielded high-quality fibers, the weavers were contented with the silk reeled in peasant and urbanite households. The boom of sericulture in the mid-seventeenth century culminated in the dissemination of mulberry trees, whose leaves were fed to silkworms to produce silk, throughout Bursa. As one more important commercial crop joined the region's flora, worms were quickly domesticated and adapted to the fauna. Rural spinning promptly developed, adding one extra dimension to multivarious labor relations. Locally spun Bursa yarn was exported to large cloth-production centers of Istanbul, Aleppo, and Beirut.¹⁹⁸

As the inputs of the weaving industries were changing, so were the outputs due to dynamic domestic and international economic circumstances. Once an ardent consumer of silk, the palace was becoming more disinterested in purchasing "Bursa stuffs." Also, the draining of resources during the war years of 1683-1699 caused significant setbacks for most

¹⁹⁴ Oktay Özel, "Population Changes in Ottoman Anatolia during the 16th and 17th Centuries: The 'Demographic Crisis' Reconsidered," *International Journal of Middle East Studies* 36, no. 2 (2004): 192.

¹⁹⁵ For a comparative analysis with Kütahya pottery manufacture sector, see Dağlı, "Kütahya in the Eighteenth Century," 111–14.

¹⁹⁶ Yunus Uğur, "The Ottoman Court Records and the Making of 'Urban History', with Special Reference to Mudanya Sicils (1645-1800)" (MA Thesis, Istanbul, Boğaziçi University, 2001), 41–51.

¹⁹⁷ Çizakça, "Price History and the Bursa Silk Industry," 550.

¹⁹⁸ Donald Quataert, "The Age of Reforms, 1812-1914," in *An Economic and Social History of the Ottoman Empire*, ed. Halil İnalcık and Donald Quataert, vol. 2 (Cambridge: Cambridge University Press, 1996), 851.

industries. The weavers had to adjust to market conditions by expanding their customer base. Materials fabricated from lower-quality silks and cotton-silk mixes were sold alongside expensive fabrics. The expensive "stuffs" started to be exported to a more varied clientele, including those from the Ottoman Empire's neighbors, such as Polish nobles.¹⁹⁹

Amidst all these changes, guild-based artisans single-handedly regulated the manufacturing of silk products, but they were not the only producers. As mentioned, journeymen, apprentices, and slaves, who formed a substantial part of the labor force in the workshops, lacked looms and decision-making power. Guild artisans were by no means the only employers either. Merchant capital continued to play an essential role in organizing both silk production and weaving in putting-out systems.²⁰⁰

Due to the economic impact of the 1600s, the most critical shifts in labor relations in the Bursa's silk industry in this century were the sharp decline of slave labor (paralleled in agriculture) and the increase in the small producers who owned a few (mostly one or two) looms in their workshops.²⁰¹ Thus, reliance on wage workers rose to reduce the costs, and females, children, the urban poor, and the rural populace began to constitute a significant share of them.²⁰² Moreover, increased dependence on the silk produced in the Bursa region highlighted the females' role as silkworm rearers, cocoon producers, and silk reelers and twistors. Apparently, they owned or operated around half of the three-hundred pieces of silk reeling and twisting equipment (*mancınık*) in 1678.²⁰³

The role of Bursa's women cannot be viewed solely from the angle of their work in this sector or as domestic workers, though. Multiple studies on females of the Bursa region from the fifteenth through the seventeenth century very powerfully demonstrate that they were actively involved in the economy as members of different artisan guilds, agricultural and commercial property buyers and sellers, and most prominently, moneylenders giving credit to a vastly heterogeneous class of borrowers. The degree of women's involvement in

¹⁹⁹ Suraiya Faruqi, *Travel and Artisans in the Ottoman Empire: Employment and Mobility in the Early Modern Era* (London: I.B. Tauris, 2014), 110.

²⁰⁰ Gerber, *Economy and Society in an Ottoman City*, 53.

²⁰¹ Hofmeester and Lucassen, "Ottoman Tax Registers," 41.

²⁰² Suraiya Faruqi, "At the Ottoman Empire's Industrious Core: The Story of Bursa," in *The City in the Islamic World*, ed. Salma Khadra Jayyusi et al. (Leiden: Brill, 2008), 360.

²⁰³ Faruqi, *Travel and Artisans*, 108.

the urban economy of Bursa contributed significantly to its relatively more robust position than other urban centers of Anatolia, such as Kayseri and Ankara.²⁰⁴

Mulberry trees unified the divergent agricultural economies of the subdistricts and sealed the fate of the region's industrial production. From a different perspective, like other commercial crops of the region, such as olives and grapes, they can be viewed as a triangulation point for approaching spatiotemporally and gendered property relations in Bursa. Beshara Doumani's comparative study of the regions of Tripoli (river-fed and privately-owned tree economy, powerhouse of silk production on the Mediterranean coast) and Nablus (where dry-farming on state-owned lands and rent-seeking dominated) in Mount Lebanon from the seventeenth to the nineteenth century demonstrates that the political economy of highly commercialized and well-irrigated agriculture increased females' access to property both as owners and inheritors.²⁰⁵ Although an argument parallel to Doumani's has not yet been made for other Ottoman regions, based on the evidence regarding Bursa females' patterns of consumption, ownership, and business engagements, it can be argued that the persistence of tree-crop economy, especially in the northern parts of the Bursa region, was most likely positively correlated with female empowerment in this part of Asia Minor.²⁰⁶

The propagation of mulberry trees also enhanced the economic influence of the urban center of Bursa over the rest of the region. According to Gerber's calculations, there were around 14.000 *dönüm*²⁰⁷ of privately-owned mulberries in the city and its neighboring area by the end of the seventeenth century.²⁰⁸ He points to widespread credit relationships between the urban investors and inhabitants of the nearby villages and townships in the seventeenth

²⁰⁴ Haim Gerber, "Social and Economic Position of Women in an Ottoman City, Bursa, 1600-1700," *International Journal of Middle East Studies* 12, no. 3 (1980): 231-44; Salih Pay, "1069-1070/1659-1660 Tarihli Bursa Şer'iyeye Sicili (Analiz ve Değerlendirme)" (MA Thesis, Bursa, Uludağ Üniversitesi, 1987); Hüseyin Özdeğer, *1463-1640 Yılları Bursa Şehri Tereke Defterleri* (İstanbul: İstanbul Üniversitesi Rektörlüğü Yayınları, 1988); Miyase Koyuncu Kaya, "Osmanlı Kadını ve Para Vakıfları: 18. Yüzyıl İkinci Yarısı Bursa Örneği," in *21. Yüzyılın Eşiğinde Kadınlar*, vol. 5 (İzmir: Dokuz Eylül Üniversitesi Fen Edebiyat Fakültesi Yayınları, 2010), 122-29.

²⁰⁵ Beshara B. Doumani, *Family Life in the Ottoman Mediterranean: A Social History* (Cambridge: Cambridge University Press, 2017).

²⁰⁶ In the seventeenth century Bursa city, the law of inheritance was fully effective concerning females. Family property was not held in common or belonged to the father. Polygamy was rare and families were small. Gerber, "Social and Economic Position of Women in an Ottoman City, Bursa, 1600-1700," 240.

²⁰⁷ A traditional Ottoman dönüm was about 920 square meters and subject to regional variances and measurement techniques. İlber Ortaylı, "Galata," in *TDV İslam Ansiklopedisi* (İstanbul, 1996), <https://islamansiklopedisi.org.tr/galata#1>.

²⁰⁸ Gerber, *Economy and Society in an Ottoman City*, 73.

and previous centuries.²⁰⁹ The mid-seventeenth century also shifted affluent urbanites' (mostly city-resident men of military and religion) investment portfolios from focusing on large estates or *çiftliks*, where grain cultivation and stock raising exclusively for the city market dominated, to a more orchard-based agriculture, boosted due to the expansion of sericulture.²¹⁰

Returning to silk industries, inheritance inventory evidence from Bursa Islamic courts suggests that local and extra-regional consumption of Bursa silk manufactures increased in the eighteenth century.²¹¹ The end of the Safavid rule in Iran in 1722 and the ensuing political turmoil in the region stopped the supply of Iranian silk, increasing raw silk production and exportation capacity of the Bursa region's sericulture industries. When the crisis of the Ottoman-Habsburg war initiated a long-term buoyant economic conjecture until 1770, Bursa silk, in this new century, replaced Iranian silk and was readily available to the Levantine trade. Raw silk exports to Europe were minuscule compared to the demand of local producers and the domestic market. But, the gradual withdrawal of Europeans from the Levant, as well as the competition from Bengali and Chinese silk as a complement to much-preferred Italian silk, pushed Bursa cocoon growers to focus on supplying the domestic market even more, which placed the city as one of the most prominent textile manufacturing corners of the Empire.²¹² In the second half of the 1700s, widespread production all around the region was enough to supply the local and European weaving industries. Although most raw silk was consumed domestically in producing goods, Bursa textiles were still being imported to English, French, and Dutch markets.²¹³

The history of silk production underwent radical changes in the nineteenth century. European technological advancements and cheap exports rapidly transformed the Bursa's role from finished-goods to a raw-material provider. The blossoming of the silk factories in the city and its environs considerably changed production relations and resulted in the first industrialization episodes in the Ottoman Empire at the expense of local manufacturers. Cocoon rearing earned fortunes for the producers, and the duties on silk provided a significant

²⁰⁹ Ibid., 146.

²¹⁰ Hofmeester and Lucassen, "Ottoman Tax Registers," 43.

²¹¹ Faroqhi, "At the Ottoman Empire's Industrious Core," 113.

²¹² Çizakça, "A Short History Of," 149–50.

²¹³ Lowry, *Ottoman Bursa in Travel Accounts*, 69.

wealth source to the central treasury. However, the fate of raw silk production was delicately tied to environmental conditions and global trade circumstances.

2.2.2.2. *The Silk Industry, 1800-1870*

The Bursa silk weaving industry was well-connected and responsive to European demands at the end of the sixteenth century. When the 1800s hit, it was torn to threads by capitalism. From the first decades of the nineteenth century onwards, the trade in raw silk "served as the most important trade linkage between the then still largely closed economies of East Asia and the industrialized West."²¹⁴ A significant station right in the middle, Bursa underwent substantial changes. After the Napoleonic wars, machine-produced British cotton yarn and cheap American cloths came to Bursa markets and gradually replaced silk with cotton in many textiles. Further aggravated by free-trade agreements and rising production costs, this influx switched Bursa's manufacturing focus from finished goods- to raw silk production.²¹⁵ Local demand for silk cloth decreased, and Bursa's silk cloth output fell by 80% between 1800 and 1840. As a result, most silk weavers started to turn to reeling to earn their livelihood.²¹⁶ This occupational shift occurred fast, thanks to the already existing, experienced workforce.²¹⁷

Meanwhile, the affordability of silk dresses among even the petty bourgeoisie of Europe expanded the demand for silk and fueled the need for mass-scale reeling and weaving. Advancements in maritime transportation technology and increasing British domination in East Asia supplied European producers with raw silk.²¹⁸ The emergence of a new type of silk-weaving loom in France in the 1830s required standardized threads that not even the most skilled handlooms could not regularly manufacture. Low wages and inexhaustible waterpower abundance gave Bursa large manufacturing establishments advantages, attracting large capital investment. By the end of the 1830s, the traditional hand-driven silk-reeling process was slowly yet firmly moving towards steam-powered filatures opened by

²¹⁴ Debin Ma, "The Modern Silk Road: The Global Raw-Silk Market, 1850-1930," *The Journal of Economic History* 56, no. 2 (1996): 330.

²¹⁵ Donald Quataert, "Manufacturing," in *An Economic and Social History of the Ottoman Empire, 1300-1914*, ed. Halil İnalcık and Donald Quataert (Cambridge: Cambridge University Press, 1996), 908; Faroqhi, "At the Ottoman Empire's Industrious Core," 380.

²¹⁶ Faroqhi, *Travel and Artisans*, 114.

²¹⁷ Mustafa Fuat Çakıcı, "Osmanlı Sanayileşme Çabalarında Bursa İpek Fabrikası Örneği (1851-1873)" (MA Thesis, İstanbul, İstanbul Üniversitesi, 2010), 40.

²¹⁸ Ma, "The Modern Silk Road," 332.

foreign (mainly French and Italian) capital, in partnership with local and Istanbulite entrepreneurs, usually Orthodox Christians and Armenians.²¹⁹

The French Glaizal family, who came to Bursa in 1834, established a spinning mill in the city. However, this proto-factory attempt proved unsuccessful, and the family left Bursa due to the death of the household head in Tbilisi.²²⁰ Emanuel Falkeisen (1807-1869), a Swiss capitalist who operated as the Austrian and Russian consul in Bursa and pursued multiple economic activities, took over Glaizal's mill establishment as a representative of the Zürich company "Heinrich de Daniel von Muralt und Söhne," signed a contract to a Lyons firm, and initiated the modern epoch of silk production by opening the first successful mechanized filature. Upon the burning of their first factory in 1839, they resumed their operations in 1844 or 1845 in a bigger filature on the eastern slopes of the city citadel.²²¹

Between 1815 and 1845, raw silk output quadrupled thanks to the ready labor force producing high-quality Bursa silks in Europe, the high international price of silk, and premium wages paid in the initial stages (about ten *guruş* daily in the early 1850s).²²² Until the early 1840s, salaries of the silk reelers of Bursa rose tenfold, as they were offered 25% bonuses to encourage them to switch from the "long-reel" to "short-reel" method the new technology required, while using native hand-reeling methods.²²³ At the same time, filatures operating on imported machinery proliferated in the city. As factory production rose due to fresh inducements from foreign markets and cocoon prices inflated correspondingly, the urban and rural families' abandonment of hand reeling gained momentum in the decade after 1845. Many fields were turned into mulberry groves in the early 1850s "as merchants convinced villagers to drop everything for silkworm raising."²²⁴

²¹⁹ According to a yearbook of the province of Hüdavendigar published in 1878, the appearance of first factories in Bursa is dated to 1838. Dalsar, *Türk Sanayi ve Ticaret Tarihinde*, 410.

²²⁰ İsmail Yaşayanlar, "Bir Anadolu Şehrinde Frenk Kolonizasyonu: Bursa'da Fransız Varlığı (1834-1926)," *Journal of Turkish Studies* 43 (December 2015): 132; Erder, "The Making of Industrial Bursa," 100.

²²¹ Gabriela Kuster Vettiger, "Emanuel Falkeisen. Ein Basler im Bursa," in *Von Basel nach Bursa und zurück: die Geschichte eines Fotoalbums von Sébah & Joaillier*, ed. Martina Baleva (Basel: Universitätsbibliothek Basel, 2017), 82–83.

²²² Quataert, "The Age of Reforms," 909.

²²³ Ibid.

²²⁴ Erder, "The Making of Industrial Bursa," 115.

As we will see in section 2.3.4.3., strong and fast-growing mulberry trees were grown by almost every household. Silkworm rearing lasted little more than a month, and its good returns for such a short-term exercise made it even more appealing in an economy short of cash. In 1844, the city of Bursa had an average of 1,31 *dönüm* of mulberry grove per household, and the villages in the plain had 3,20.²²⁵ Certain corners of the region, such as the villages of Demirtaş and Filedar, were renowned for their unique quality of silks. Bursa silk's elasticity, fine gloss, and pure white color amplified its demand. Raw silk production doubled between 1845 and 1855.²²⁶ Easy cash convertibility of the region's highly esteemed cocoons and, for some time, hand-reeled silk not only injected cash into the economy but also turned them into a medium of tax and debt repayment in the cash-starved financial environment.²²⁷ This economic value also made sharecropping (*yarıcılık*) a more profitable endeavor than ever before. Silk cloth manufacturers and merchants of the city gave out their eggs to villagers to turn them into cocoons in return for payment or keeping a share of the cocoons.²²⁸

In response to the intensity of raw silk production, the number of factories in the city and adjacent towns went from five in the mid-1840s to fifteen to twenty-nine in 1855. In the last condition, the number of reels they employed varied from 10 to 132.²²⁹ By 1850, they used more than half of the region's silk cocoons.²³⁰ The filatures cannot be classified under the rubric of craft shops. They altered the primary mode of manufacturing raw silk by using power-driven machinery, employing wage earners under one roof, and implementing strict labor division based on the special tasks performed.²³¹ In 1854, about four-fifths of the raw

²²⁵ Cafer Çiftçi, *Bursa'da İpekçilik (1837-1990)* (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2017), 175, 178.

²²⁶ Quataert, "The Age of Reforms," 909.

²²⁷ For example, in early 1850s, a Europe merchant extended cash to a laborer from the village of Susıgırlık in the plain. They later disagreed over the latter's failure to repay the loan using the cocoon and silk he promised in lieu of cash. Ottoman Archives Administration (hereafter OA), A} DVN. 86 / 90 (Age Hijri [hereafter AH.] 13-06-1269 / 24-03-1853). Vasil Kinchev told many occasions of cocoons being used as collateral and a method of debt payoff in the 1880s. Hüseyin Mevsim, *Bulgar Gözüyle Bursa* (İstanbul: Kitap Yayınevi, 2009), 35, 44.

²²⁸ Cumali Bozpınar, "Osmanlı Devleti'nde İktisadi Zihniyet ve Sanayileşme Sorunsalı: Bursa İpek Sektörü Örneği" (PhD Thesis, Ankara, Hacettepe Üniversitesi, 2018), 118.

²²⁹ British Parliamentary Papers, Command Papers (hereafter BPP, CP,) No. 2131, LVII (57), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls*, 1856, 187.

²³⁰ Erder, "The Making of Industrial Bursa," 115.

²³¹ Within the factories, the following occupations existed: Reelers, sorters, carders, twistors, forewomen, beaters, apprentices, foremen engine divers, packers, etc. BPP, CP, No. C.734 & C.826, LXVIII (68), *Reports*

silk of Bursa was exported mainly to the factories of Lyon, the capital of the European silk trade, for they accept each grade of quality, and the other one-fifth comprising of the best quality was expedited to England. Practically all the silk was transshipped from Istanbul.²³² The number of filatures was augmented to 36 within the city with 1645 reels by 1857, four in the neighboring villages with 264, and three at Mudanya with 167 reels.²³³ After several unsuccessful attempts by Ottoman entrepreneurs-cum-officials to set up their establishments, the state built an Imperial Silk Factory (*Fabrika-i Humayun*) in 1851. It operated on French machinery and ran with foreign technical know-how to produce reeled silk for other imperial textile establishments such as the fez (in Istanbul) and cloth (in Izmit) factories and sold its silk also to European and American buyers as well as Bursan silk merchants (*kazzaz*) and cloth-merchants (*bezzaz*). However, after 1854, it ran into liquidity difficulties and, by the late 1850s, seriously reduced its operations due to its inability to compete with foreign-owned filatures.²³⁴

Bursa's quick shift to factory production in the mid-nineteenth century tells of industrialization through deindustrialization. Cash shortages and heavy taxation prevented native Bursa raw silk manufacturers from buying cocoons in the desired quality and quantities.²³⁵ The centralization of silk-reeling operations in the filatures caused economically-depressed rural and urban families to lose their manufacturing base and abandon hand-reeling in favor of cocoon and egg raising.²³⁶ Production levels attained by the filatures nearly ended all native silk operations. The share of filature-manufactured silk in the region's total raw silk production was 9 percent in 1850. Parallel to the opening of new factories, this share quickly reached 28 percent in 1856, 50% in the next year, 75% in 1858, and almost 100% between 1865 and 1870.²³⁷ Raw reeled silk, cocoons, eggs, and silk waste

of H.M. Secretaries of Embassy and Legation respecting Factories for Spinning and Weaving of Textile Fabrics Abroad, 1873, 187.

²³² BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls, 1854, 1854-1855*, 81.

²³³ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls, 1858-59, 1859*, 466.

²³⁴ For a detailed study on the operations of this factory from its inception in 1851 to its end in 1873, see Çakıcı, "Osmanlı Sanayileşme Çabalarında."

²³⁵ Edhem Eldem, *French Trade in Istanbul in the Eighteenth Century* (Leiden: Brill, 1999), 45–46.

²³⁶ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 121.

²³⁷ Quataert, "Ottoman Manufacturing in the Nineteenth Century," 105.

(*kamçıbaşı*) nearly accounted for all exports from the province of Bursa in 1859.²³⁸ Regional production peaked at 4 million kilograms of cocoons in the mid-1850s, the raw silk at 600.000 kilograms.²³⁹ Although the filatures required nearly all the cocoons raised in 1857, the visitation of the pebrine to Europe favored the cocoon exports, which headed mainly to Marseilles, save one-twelfth for Italy.²⁴⁰

The filatures had been so profitable to generate 1,5 million pound-sterling worth of silk in 1857, from which the foreign (mainly French) subjects and their Ottoman partners highly benefited.²⁴¹ Widespread application of the filature system required more workers to accept lower wages. Thousands of young, unmarried Orthodox Christian and Armenian women from the city and environs, save a few Jewish, were employed and lived in the filatures until marriage.²⁴² Muslim women, long prohibited from working in the factories, joined their non-Muslim counterparts in the 1860s.²⁴³ Fueled by cheap labor, silk-reeling factories rose to 88 in 1861 and 90 in 1862.²⁴⁴ In 1869, around 6000 reels in the Bursa district gave employment to about 9000 people, while the most prominent silk masters employed about 300 people in the filatures.²⁴⁵

The spread of pebrine to Bursa reduced the cocoon output, and many factory operators went bankrupt or suspended operations. Despite imports of healthy cocoons from the adjacent subdistricts and the state's encouragement of cocoon rearing²⁴⁶, raw silk output fell by two-thirds to 192.400 kg in 1867.²⁴⁷ Louis Pasteur's solution to the disease in 1865

²³⁸ Erder, "The Making of Industrial Bursa," 129–30.

²³⁹ Donald Quataert, "The Silk Industry of Bursa, 1880-1914," in *The Ottoman Empire and the World-Economy*, ed. Huri İslamoğlu-Inan (Cambridge: Cambridge University Press, 1990), 286.

²⁴⁰ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 471.

²⁴¹ BPP, CP, No. 482, VIII (8), *Select Committee on Consular Service and Appointments. Report, Proceedings, Minutes of Evidence, Appendix, Index*, 1857-1858, 613.

²⁴² The Jewish community of Bursa discouraged their women from working in the factories on religious grounds. The Jewish women also refused to work on Saturdays, which was not appealing to employers. Hatice Yıldız, "Parallels and Contrasts in Gendered Histories of Industrial Labour in Bursa and Bombay 1850–1910," *The Historical Journal* 60, no. 2 (2017): 21.

²⁴³ Leila Erder, "Factory Districts in Bursa during the 1860s," *METU Journal of the Faculty of Architecture* 1 (Spring 1975): 91.

²⁴⁴ *Ibid.*

²⁴⁵ An estimate shows 154 workers operated 100 reels, 100 being wheelers and 54 being auxiliary personnel. BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad, respecting Condition of Industrial Classes in Foreign Countries*, 1870, 251.

²⁴⁶ Bilecik, Söğüt, and Karacasehir regions in the east of Bursa were thought to bring in healthy cocoons but soon they were hit by the disease as well. OA. A.} MKT. UM. 425 / 63 (AH. 21-02-1277 / 08-09-1860).

²⁴⁷ Quataert, "The Silk Industry of Bursa, 1880-1914," 286.

found wide acceptance in France and Italy, where healthy eggs were produced. Bursa imported these eggs at the cost of 3 million francs²⁴⁸ to continue silk production and, at the same time, became the largest importer of the cocoons of Salonica while also pooling large amounts from Lebanon, Thessaly, and Rumelia.²⁴⁹ The British market bought half of the province's silk during the Franco-Prussian War of 1870-1871, but this impetus was not maintained.²⁵⁰ Meanwhile, due to disease and low silk prices, most households had to cut down their mulberry trees. The reduction in the production capacity of cocoon-producing and silk-reeling operations reflected itself in the number of actively operating filatures that remained unchanged at 90 into the 1870s.²⁵¹

Changes in global trade flows also affected the health of Bursa's cocoons and its economy. The massive entry of machine-reeled Chinese and Japanese silk into Europe, promoted by the newly-opened Suez Canal in 1869, and the subsequent fall in international silk prices slowed the widespread adoption of the Pasteur remedies and postponed it to the late 1880s.²⁵² Large volumes of cocoons started to be imported from Japan to make up for disease-induced shortages.²⁵³ In 1880, nearly half of the fresh cocoons in the Bursa markets came from Japan (80%), India, Baghdad, and Bukhara. Silk waste and deformed cocoons that had no value before 1870 became an essential trade article between Bursa and Marseilles.²⁵⁴

The story of silk weaving was that of a steady decline and plateauing. The nominal price of aggregate British cotton goods, the essential import article, increased from 175.000 pound-sterling in 1858 to 310.000 in 1870.²⁵⁵ They formed around four-fifths of all imported cotton manufactures, while Switzerland imported most of the rest in the mid-nineteenth century. Influenced by their affordability, long cloths, madapolams, calicoes, printed

²⁴⁸ Ibid., 287.

²⁴⁹ Edmond Dutemple, *En Turquie d'Asie: notes de voyage en Anatolie* (Paris: Charpentier, 1883), 201; Erder, "Factory Districts," 91.

²⁵⁰ Edmond Dutemple, *En Turquie d'Asie*, 212.

²⁵¹ Erder, "Factory Districts," 91.

²⁵² Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 125; Ma, "The Modern Silk Road," 333.

²⁵³ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 124.

²⁵⁴ Edmond Dutemple, *En Turquie d'Asie*, 201.

²⁵⁵ BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments, 1858-71 Part III. (Ottoman Dominions)*, 1872, 54.

calicoes, and *zebras* or paisley shawls were the most popular items being consumed among the local populace.²⁵⁶ Whereas there were 50 shops in the city selling imported cotton goods in 1839, their number jumped to 150 in 1857. British cotton yarn and cloth shops went from five to fifteen between these years.²⁵⁷

On the other hand, albeit severely challenged, the domestic market kept Bursa weavers alive. They used cheap imported cotton yarn to substitute silk and homespun cotton yarn. Textiles woven by old looms operated by hand, and one or two workers, primarily served the lower end of the market.²⁵⁸ Between 1840 and 1857, the city and its immediate environs produced 12.000 to 20.000 pieces of silk-cotton cloth for wear (the most prominent being *hakir*, *basma*, *sandal*, *beledi*, *kutni* and *kaftan*), whose prices fell around 10 percent, small quantities of silk interwoven with gold or silver thread, and such items at locally high demand as silk handkerchiefs.²⁵⁹ Local demand also appreciated cheap coarse cotton cloth produced in Western Anatolia through rural and urban putting-out networks. However, the climbing imports of British and American raw cotton and cotton cloth also reduced their production. Still, we do not know how and where this reduction was significant, given difficulties in transport and acquiring cash as well as high interdependence among the region's inhabitants.

Overall, the regime created by free trade agreements and capitulations discouraged native enterprises. The eight percent internal customs duty, joined by an additional four to six percent on shipment to Istanbul and rising consumer prices, limited the maneuvering capacity of domestic handicraftsmen and put them at a severe disadvantage with foreign importers, though the severity and spatiality of this transformation shall be studied at micro levels to determine the uniformity of its impact throughout the region and western Anatolia.

In the face of advancing silk and cocoon prices and the demise of silk reeling activities due to the silkworm disease and hostile international competition, the urban silk weaving industry came to a near end, dropping to a mere output of 2000 pieces by the early 1860s.

²⁵⁶ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 468.

²⁵⁷ *Ibid.*, 469.

²⁵⁸ Erder, "The Making of Industrial Bursa," 99.

²⁵⁹ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 110.

The looms dedicated to silk and silk-cotton weaving dropped from around 200 in 1840 to 26 in 1862.²⁶⁰ Low capital accumulation and heavy taxes stalled modernization attempts. Cotton yarn was increasingly employed in making coarse stuff for wear and other domestic purposes woven at home and looms, most notably bath towels and wrappers (*futa* and *peştemal*).²⁶¹ However, perfect and cheap imitations of these articles by the English and Swiss diminished the power of Bursa cotton goods in the domestic market.²⁶² The loss was clear: The looms producing cotton goods went from more than 200 in the mid-1840s to 60 in 1862.²⁶³ The Bursa earthquake of 1855 accelerated the progressive disappearance of looms in the city because it destroyed many premises where they were worked.²⁶⁴ A consular report from 1870 looked at the situation of manufacturing and observed the following: “Broussa ... once so renowned for [its] velvets, satins, and silks, do not now produce a tenth part of what they yielded forty years ago...”²⁶⁵

2.2.3. An Introduction to the Bursa Region in the Nineteenth Century

During the rapid phase of deindustrialization and flow of imports, especially after the 1840s, the two great articles that significantly contributed to repaying the large imports into the Ottoman Empire from Great Britain and elsewhere were the silk of Bursa and, yet to a lesser degree, albeit important, the opium of Karahisar, the adjacent district to the south that yielded the whole opium exported from Izmir.²⁶⁶ Other than silk, the Bursa region did not furnish bulky articles to make up for the imports and, therefore, did not directly participate in export trade with multiple commercial operations.

British cotton manufactures were by far the most voluminous import commodities, figuring in all to the annual value of 120.000 pound-sterling in the mid-1850s (adjusted for inflation, more than £9,6 million in 2017).²⁶⁷ Coffee and sugar were the other two notable imports into the district, while the rest comprised minuscule amounts of stuff, notably tinware, glassware, and paper (we should add the fine mass-produced Marseille tiles and

²⁶⁰ Ibid., 111.

²⁶¹ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 467.

²⁶² Ibid., Georges Perrot, *Souvenirs d'un voyage en Asie Mineure* (Paris: Michel Lévy frères, 1864), 81.

²⁶³ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 111.

²⁶⁴ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 466.

²⁶⁵ No. C.113, LXV.563 (65), *Reports by H.M. Secretaries of Embassy and Legation on Manufactures and Commerce of Countries in which they reside (Appendices on Coal and Flax)*, 1870, 236.

²⁶⁶ BPP, CP, No. 482, VIII (8), *Select Committee on Consular Service and Appointments*, 1857, 613.

²⁶⁷ Ibid., 616.

bricks getting wide circulation after the 1850s). The tax collected from the district in 1861 was around 130.000 pound-sterling (more than £7,6 million in 2017), to which silk duties contributed £52.363 (7 million *guruş* or more than £3 million), highlighting the weight of silk production and cocoon rearing in the well-being of the Bursa region.²⁶⁸

Nevertheless, the changes and continuities of the nineteenth century cannot be limited to the rhythms of industrialization. It is also clear from these revenue figures that the Bursa's production and intra- and interregional trade of crops and manufactures were equally responsible for the region's economic vitality and self-sufficiency. In fact, the mushrooming of filatures forced people to steer away from manufacturing towards engaging in mulberry tree growing and cocoon rearing, which increased total agrarian activity and its fragility to multiple environmental, infrastructure, and socioeconomic conditions, as in the case of the pebrine disease. Moreover, as the flooding of European markets with East Asian silk imports shows, incorporation was a double-edged sword that could benefit and harm the people.

The coming sections will explore the Bursa region's economic and population geography in the context of the said determinants in detail. But before we begin, we must delimit what we mean by this particular location to delve into the respective determinants. Bursa region, formally known as the Hüdavendigar *sancak*, was the central and largest district of the Anatolian province (*eyalet*) until 1836.²⁶⁹ Ruled by the representatives of high-ranking pashas (of *vezir* and *beylerbeyi* rank) since the seventeenth century, urban notables took over the administration from the late eighteenth century onwards.²⁷⁰ The city of Bursa, the province's administrative and most commercialized center, was a *mevleviyet*, or high-ranking-judgeship of the third class. It came after the chief qadiships of Rumelia and Anatolia (first), Istanbul, Mecca, and Medina judgeships (second) and ranked along with Plovdiv, Cairo, Damascus, and Edirne.

²⁶⁸ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign Office from H.M. Consuls, January-June 1862*, 1862, 355. A detailed breakdown of the taxes is presented in section 2.3.5.

²⁶⁹ The Hüdavendigar province was one of the first Ottoman administrative units. Covering a larger area in the previous centuries, its 1856 borders included the southern Marmara region to central Sakarya plateau (Kocaili district) in the north, to Manisa in the south, and to northwestern central Anatolia until Ankara in the east. In terms of districts, Biga, Karesi (today's Balıkesir), Bursa, Kocaeli, Karahisar-ı Sahib (today Afyonkarahisar), and Kütahya. Feridun Emecen, "Hüdavendigar," in *TDV İslam Ansiklopedisi* (İstanbul, 1998), <https://islamansiklopedisi.org.tr/hudavendigar--bursa>.

²⁷⁰ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 395.

To regain central authority from the competing local notables, Bursa was made a *mutasarrıfate* (*mutasarrıflık*) by order of Mahmud II in 1812 and started to be governed by a centrally appointed *mutasarrıf* (governor), specifically by a vizier.²⁷¹ Triggered by the Morea rebellion, Hüdavendigar was united with the Karesi district in the west in 1821. It was later joined by Kocaili (east) and Menteşe (southwest) to form a larger body to be governed by *mütesellims* appointed by high-ranking military officials (*pashas*) in charge of the security of the straits to the Black Sea (*Karadeniz Boğazı Muhafızı*). As per the military reforms of the post-Janissary abolishment (1826) period, all tax revenues of the Hüdavendigar district were transferred to the central treasury (*Mukataat Hazinesi*) in 1829, and the district began to be governed by the centrally-appointed *mütesellims*. The revenues of the Bursa district were accrued to the special treasury of the new army (*Mansure Hazinesi*) in 1831.

The arrival of the army of Ibrahim Pasha of Egypt, the son of Mehmed Ali, to Kütahya in 1833 soon tested the efficacy of the new army. Undisciplined and outmanned, the Ottoman forces quickly retreated to Bursa and Iznik. The state declared that the army's needs would be procured from the central treasury to appease the local taxpayers and prevent them from sympathizing with the invaders. However, the disorderly behavior of the irregular Albanian and Bosnian troops caused discomfort among the populace.²⁷² Before things got worse, thanks to the help of British and French armies, Ibrahim Pasha moved his troops back to Syria in 1833, but his threat was far from over. So, administrative concerns were once again united with military ones. Upon the formation of reserve (*redif*) troops in districts in 1834, certain districts containing *redif* units were merged. Thus, the Hüdavendigar province (*eyalet*) was established in 1836 and restructured as a military unit (*Redif-i Hassa-i Hüdavendigar Müşirliği*), now headed by military governors (*müşir*) residing in Istanbul. Its revenues were again attached to the army treasury.

Like the province, the Bursa region's borders and subdistricts changed due to Ottoman administrative experimentations in the first half of the nineteenth century. A population register summary (*icmal*) from 1831²⁷³ and an Assistance to Holy War tax record from 1836²⁷⁴

²⁷¹ Ibid., 13.

²⁷² Fatih Gencer, "İbrahim Paşa'nın Anadolu'yu İstilas (1832-1833)," *Journal of International Social Research* 9 (2016): 651–52.

²⁷³ OA. NFS. d. 1514 (AH. 15-5-1246 / 01-11-1830).

²⁷⁴ Cited in Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 20.

show that, in addition to the city of Bursa and the subdistricts surrounding it, the Bursa district included faraway and spatially disconnected subdistricts of Kepsud (in present-day Balıkesir), Bayramiç, Ayvacık (Çanakkale), Bergama (İzmir), Soma (Manisa), Sivrihisar (Eskişehir), Beypazarı, and Nalluhan (Ankara). These distant localities were affixed to Bursa because of an old Ottoman policy of accumulating sufficient economic resources to support Bursa city's population and adjacent regions.²⁷⁵

Once the administrative aims of the Tanzimat decree were declared, and the Egyptian threat was far from Anatolia, the Hüdavendigar province was finally transformed into a proper administrative unit with compact districts (i.e., without faraway subdistricts) governed by a centrally appointed bureaucratic cadre such as governors (*vali*) and treasurers (*defterdar*) in 1841. After the district of Kütahya's short period as the seat of the province, the Bursa/Hüdavendigar *sancak*, which I refer to as the Bursa region, became the central district of this unit in 1842.²⁷⁶ By 1839, the Bursa *sancak* officially acquired more or less today's provincial extent. Its subdistricts included Mihaliç (with Sincan township comprising the villages on the Sincan (alternatively, Baldıran) mountain southeast of Mount Olympus), Mudanya, Gemlik, Pazarköy, İznik, Yenişehir, İnegöl, Bursa, Kite (with Cebel-i Atik township consisting of the villages along the southern border of Mount Olympus), Kirmasti, Atranos (with Cebel-i Cedit township including villages sandwiched behind Cebel-i Atik) and Harmancık.

To better oversee property registration, revenue collection, and internal peace, four subdistrict directorates (*kaza müdürlüğü*) were established in 1857, with the city of Bursa (along with Kite and Cebel-i Atik township), Mudanya (Mihaliç, Sincan township, Tirilye township, and Gemlik), Yenişehir (with İznik and İnegöl), and Harmancık (with Atranos, Cebel-i Cedit township, Kirmasti, and Domaniç) as their capitals.²⁷⁷

The province's constituent subdistricts and their borders were changed relatively frequently until the 1864 Provincial Regulation. Six significant changes to the administrative organization of the Bursa region happened until 1870. The Pazarköy subdistrict was attached

²⁷⁵ Ergenç, *XVI. Yüzyılın*, 122–23.

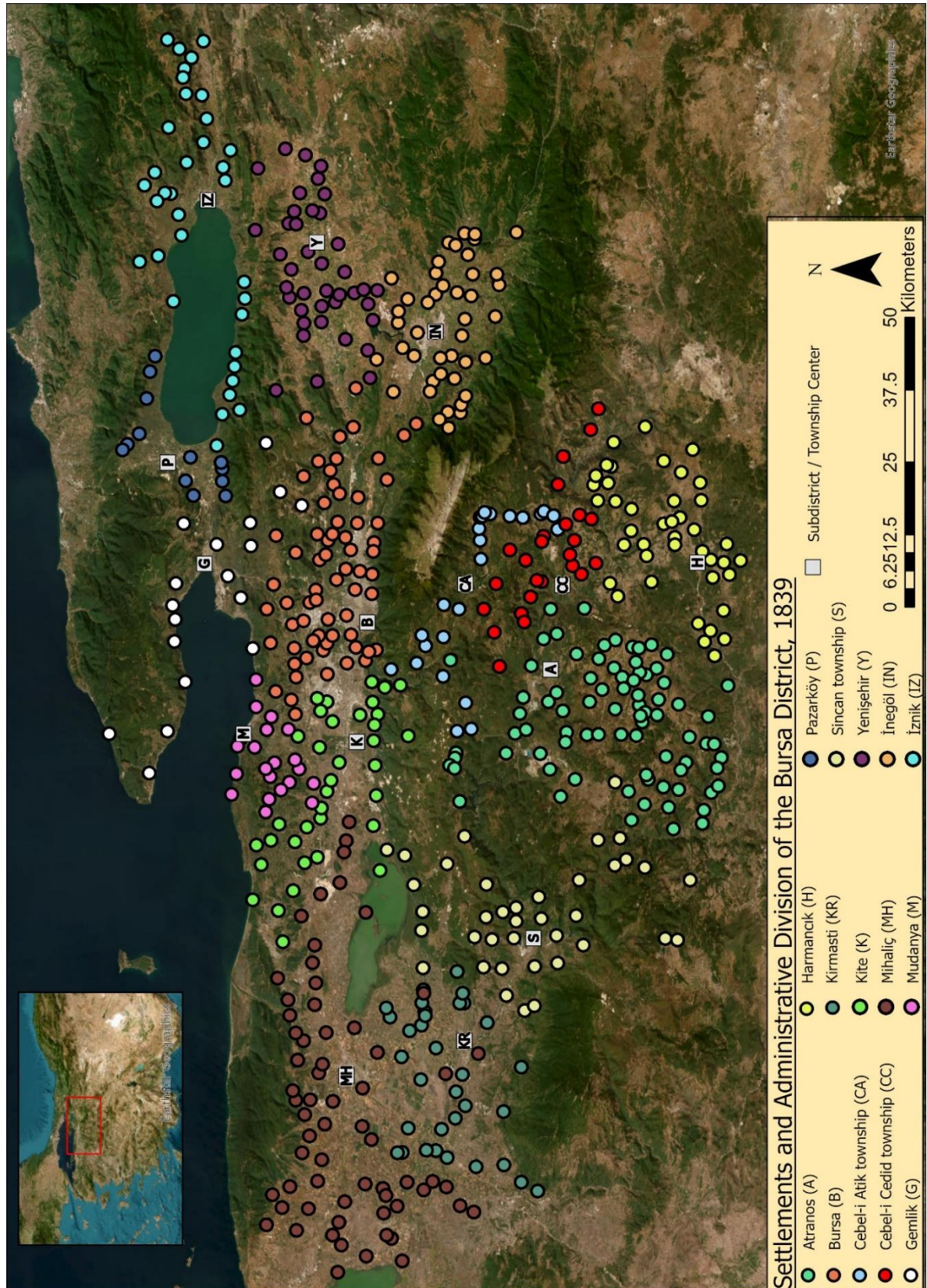
²⁷⁶ Satıcı, “19. Yüzyılda Hüdavendigar Eyaleti,” 254–55.

²⁷⁷ For a summary report of the administrative reforms realized as per the “Novel Reforms” (*İslahat-ı Cedit*), see OA. A.} MKT. MVL. 98 / 25 (AH. 16-11-1274 / 28-06-1858).

to the Kocaili district of the Bolu province and, therefore, temporarily detached from the region between 1842 and 1849. Iznik lost its subdistrict status and was demoted to a township (*nahiye*) under Yenişehir in 1864. The same year, the Kite subdistrict was abolished, and its villages were connected to Bursa. Similarly, the sizeable Tirilye village, located in the western extremity of Mudanya and with a small port, was promoted to a township due to its crowded community and significant tax revenues driven by its olive trade. Domanıç subdistrict just south of Bursa was attached to Inegöl. Lastly, Pazarköy became a town under Gemlik in 1870.

A layout of the subdistricts with their centers prepared according to the summary results of the 1839 population counts can be viewed in Map 1 (more on the counts in section 3.3.1.1.1). Each subdistrict's extent equals the spatial dispersion of their settlements, which totaled 591.

Map 1: Settlements and Administrative Division of the Bursa Region in 1839



2.3: Major Environmental, Infrastructural, and Socioeconomic Determinants, 1820-1870

2.3.1. Topographical and Climatic Features of the Region

Occupying a settlement area of 10.828 square kilometers²⁷⁸, the Bursa region's one-third is mountains and foothills (see Map 2 for reference). They are composed of mountain chains with an average elevation of 1000 to 1500 meters, except for Mount Olympus, (today Uludağ, or, by its Ottoman moniker Monk's Mountain [*Keşiş Dağı/Cebel-i Ruhban*] until the Republican times), the highest mountain of western Anatolia with its 2543 meters height. Mountain chains stretch in the east-west direction. The Samanlı Mountains form the region's northern border, extending from the coast of Bozburun in the west through the west of Gemlik Gulf to the north of Lake Iznik. The Mudanya Mountains range to the southern portion of the Gemlik Gulf (rising behind the coast of Mudanya), continue to join the Katırlı Mountains to cover the southern part of Lake Iznik and separate the Bursa plain from the Marmara Sea. Asarcık (Hisarcık) mountains east of Iznik allow only a small plain area around the town, and connections with Geyve and Kocaeli regions are only via a narrow valley. Karadağ mountain range west of Mudanya and north of Mihaliç draws the northern border of the Mihaliç subdistrict and separates it from the Marmara Sea.

Uludağ Mountains, the mountain massive with Mount Olympus being the largest and highest, the Sincan mountain (east of Lake Apolyond) and Çataldağ mountains in its southwest, and Domaniç mountain chains to the southeast, formed an arc that marked, in Austrian scholar Joseph von Hammer-Purgstall's words, "the battle between the vegetable and stone kingdoms."²⁷⁹ It delimited the southern border of the Greater Bithynia region by separating the fertile plains of Mihaliç, Kirmasti, Bursa, Yenişehir, and İnegöl from the south and hilly locations.²⁸⁰ It also symbolically separated the "Turkish" and "Christian" kingdoms, as the previously uninhabited area in the south was occupied exclusively by Muslims with

²⁷⁸ The Ottoman state did not measure its districts' acreage. This area was calculated as the following: It is assumed that villagers optimized their energy efficiency by altering their roads to stay within a maximum radius of 90-minutes walking distance to cultivate the land, feed the livestock, extract mineral resources, fish, perform daily activities, and so on, which is based Kabadayı and Çelik's estimations achieved using the nineteenth century cadastral maps of Bursa. Çelik and Kabadayı, "Agricultural Productivity in Western and Central Anatolia: A Regional Perspective 1840-1950." For each settlement, 90-minutes slope-weighted walking distance rasters were created, converted to polygons, and then clipped.

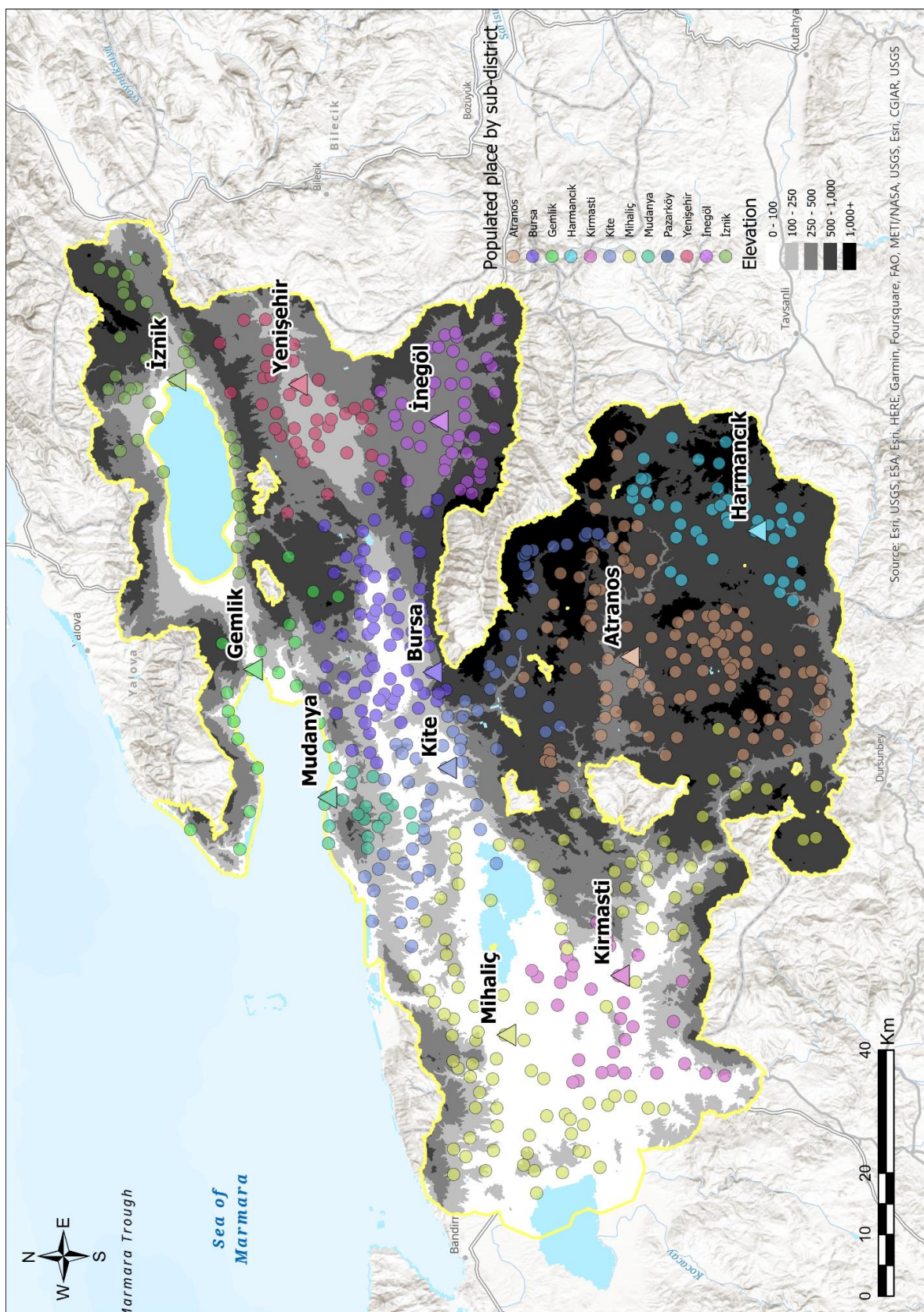
²⁷⁹ Joseph Hammer-Purgstall, *Umblick auf einer Reise von Constantinopel nach Brussa und dem Olympus : und von da zurück über Nicäa und Nicomedien* (Pesth: bey Konrand Adolph Hartleben, 1818), 78–79.

²⁸⁰ Weissová, "Regional Economy," 84.

the arrival of the Ottomans and stayed so, as opposed to the ethnoreligiously mixed populations in the north.

Last but not least, the arch deforms the stretch of the plains. The maximal height of the Mihaliç, Kirmasti, and Bursa plains is about 150 meters from sea level, whereas elevation sharply rises to 250 meters in Yenişehir and 350 meters in Inegöl plains that are surrounded by the Ahı mountain in the east, Katırlı in the north and west, and Domaniç and Uludağ mountains in the south, and separated from Iznik and Bursa plains by hills of gentle ascent. The gradually rising hills and mountains encircling the Yenişehir plain make the subdistrict's average altitude 350 meters, and the mountainous parts in the south and north of Inegöl elevate this subdistrict's altitude to an average of 500 meters. Because of Katırlı and Ahı mountains, communications with the eastern subdistricts of Lefke, Söğüt, and Bilecik was possible through narrow valleys. As we will see in the coming parts, elevation, slope, ruggedness, harsher climate, and fewer water sources conversely impact yield quality, quantity, transportability, and marketability.

Map 2: Elevation Map of the Bursa Region with Settlements, 1839



Certain water bodies shaped settlement patterns and determined economic activities to a certain degree. The Marmara Sea offered natural harbors and fishing and maritime transportation opportunities to the coastal subdistricts of Gemlik, Mudanya, and Mihaliç. Two large lakes, Iznik (about 300 km²) in the east and Apolyond (today Ulubat, approximately 130 km²) in the west, provided little plains, fertile soil (for especially water-thirsty crops), and lake fishing benefits to the neighboring towns and villages.

Rivers and countless streams bestowed agricultural advantages upon the region. The Nilüfer (Odrysses) River, originating in the southern foothills of Mount Olympus and joined by scores of small streams along the way and those spilling from the mountain's northern and eastern slopes that water the plain, runs through the Bursa plain, flows untreated to the Mihaliç plain in the west, finally unites with the Rhyndacus River.

The ancient Rhyndacus originates in southwest Kütahya. One of its branches, starting in Çavdarhisar (the ancient city of Aizanoi), flows through Tavşanlı (Kütahya), to the west through southern Atranos, then the valleys and descending heights of Sincan hills and flows unrestricted over the Kirmasti plain to enter Lake Apolyond. The lake is fed by snowmelt from Olympus en route, which flooded the entire floodplain in the spring.²⁸¹ Another branch of Rhyndacus goes through the Emet subdistrict of Kütahya, is conjoined by small streams on the road, and continues straight to Kirmasti to merge with the other branch. Exiting Lake Apolyond on its western extremity, the Rhyndacus passes through the Mihaliç plain and Karadağ mountain range and goes into the Marmara Sea.

Simav or Susurluk River, whose host is in the Şaphane Mountains of southwestern Kütahya, flows past Susurluk, enters the Bursa region from its southwestern end, goes between Lake Manyas and Apolyond to unite with Rhyndacus near the town of Mihaliç and joins the sea. Lastly, Kocadere, which starts from the southeastern end of Lake Manyas, draws a short curve downward, flows northeast toward Mihaliç, and merges with other rivers to continue to the sea.

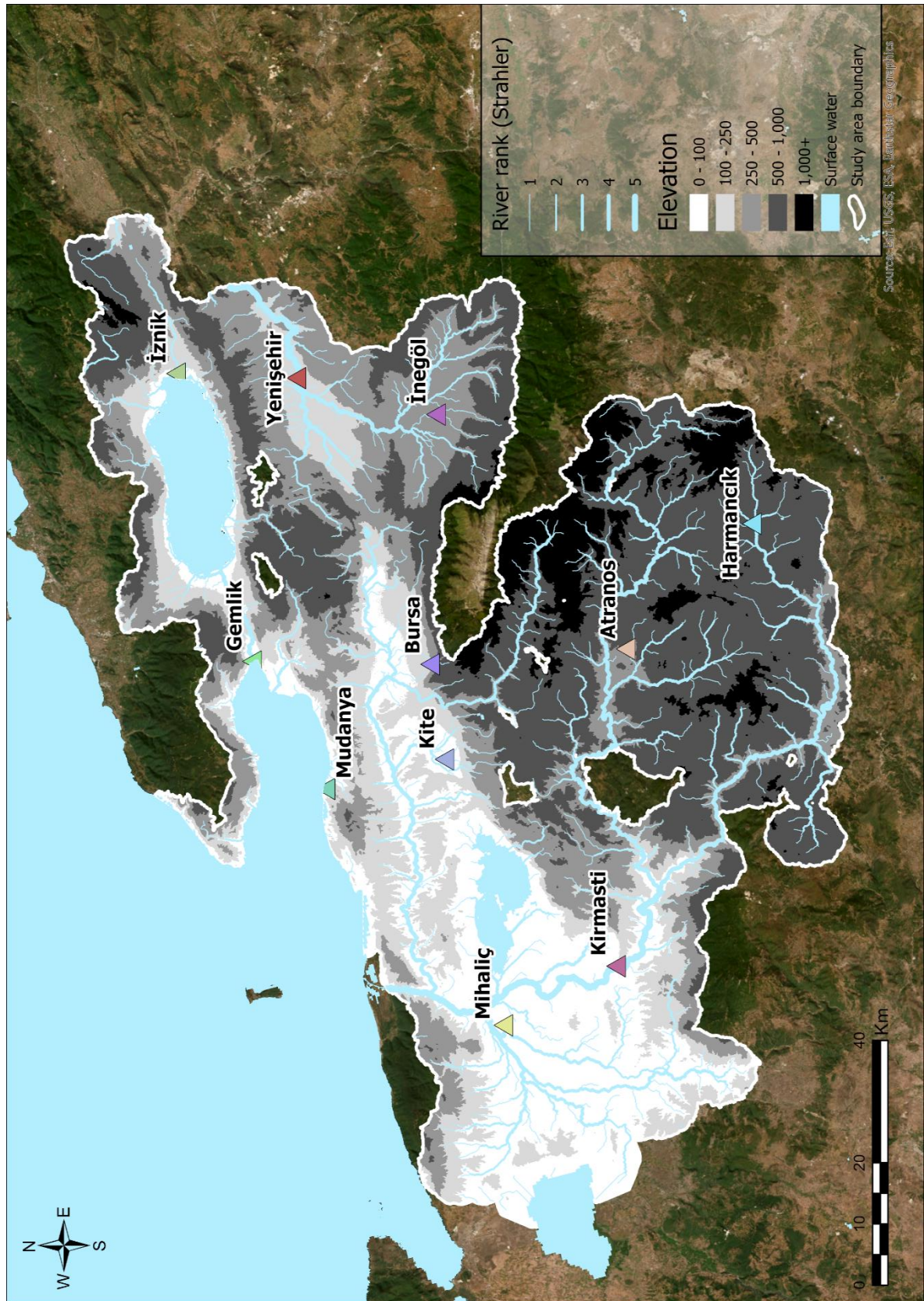
In the northeast, Karsak stream, originating at Lake Iznik, divides the Gemlik plain and the town into two sides and discharges to the Marmara Sea. Lastly, in the southeast,

²⁸¹ Charles Texier, *Asie mineure: description géographique, historique et archéologique des provinces et des villes de la Chersonnèse d'Asie* (Didot frères, 1862), 138.

multiple streams of Olympus and Domaniç mountains merge in the Inegöl plain to go through Inegöl and Yenişehir to join Lake Sangarius in the east. Harmancık and Atranos, the high-altitude subdistricts in the south, had few and weak water sources. Map 3 illustrates the water resources of Bursa and clearly demonstrates how well-endowed the western and central sections are compared to the south. Of course, having rivers, streams, and lakes proved disadvantageous and provided new farming opportunities when they flooded, particularly in early spring and fall, a topic to be treated in subsection 2.3.4.5.



Map 3: Map of Water Sources in the Bursa Region



Climate and precipitation season and amount greatly influence crop profile and productivity. With an average altitude of 155 meters above sea level, mild climate reigns all year round around the region, albeit with regional climatic variations. Whereas the Marmara Sea and lakes made the weather warmer in the northern part of the region, mountainous southern regions were confronted by the harsh climate of Mount Olympus. The region encompasses, according to Köppen's climate classification, a warm-summer Mediterranean climate with temperate and rainy winters rarely falling below 0°C (January, the coldest month, has a mean temperature of 5,4°C) and relatively hot summers (July, the hottest month, has a mean temperature of 24,5°C). It receives 70% of its precipitation during winter (October to March), and the annual mean rainfall is 660mm, though the northern and plainer parts receive more rain and tend to be less climatically extreme than the elevated parts in the south.²⁸²

2.3.2. Agricultural Suitability and Natural Resources

2.3.2.1. Agricultural Suitability

An agricultural suitability map based on land use capability classes (LCC) variables consisting of soil quality and quantity, ruggedness, and connectivity (proximity to roads based on a historical transport map prepared by the German Army Staff in 1943, more on this in the next section) is provided below (Map 4).²⁸³ It is clear from the map that the Greater Bithynia comprising Kirmasti, Mihaliç, Mudanya, Kite, Bursa, southern Gemlik, Pazarköy, Iznik, Yenişehir, and Inegöl, where all the fertile alluvial plains were located, stood in contrast to the southern part of the region in terms of soil quality and agricultural land area. The south of Olympus and Domaniç mountain chains is colder and receives distinctively less precipitation during summers, akin to the Central Anatolian climate.²⁸⁴ Because of this rainfall and elevation difference, as seen in section 3.2, the subdistricts laying to the northern,

²⁸² Onur Çalışkan, İhsan Çiçek, and Andreas Matzarakis, “The Climate and Bioclimate of Bursa (Turkey) from the Perspective of Tourism,” *Theoretical and Applied Climatology* 107 (2012): 417–25 I found it plausible to cite Çalışkan et al.’s study because of the preciseness of their measurements. On the other hand, two early Republican surveys of Bursa’s climate yielded similar results. Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara Havzası: Bursa Vilayeti Coğrafyası*, ed. Mehmed Fatih Birgül and Levent Ali Çanaklı (İstanbul [Bursa]: Maarif Vekaleti [Bursa İl Özel İdaresi], 1927), 35–42; Carl Louis Stotz, “The Bursa Region of Turkey,” *Geographical Review* 29, no. 1 (1939): 86.

²⁸³ The basis for the suitability map is the Corine Land Cover (CLC) nomenclature of the European Union’s Earth Observation Programme (Copernicus). On the most updated guideline on this nomenclature, see Kosztra B, Büttner G, Hazeu G, Arnold S. European topic centre on urban, land and soil systems: Updated CLC illustrated nomenclature guidelines. Copenhagen: European Environment Agency; 2019.

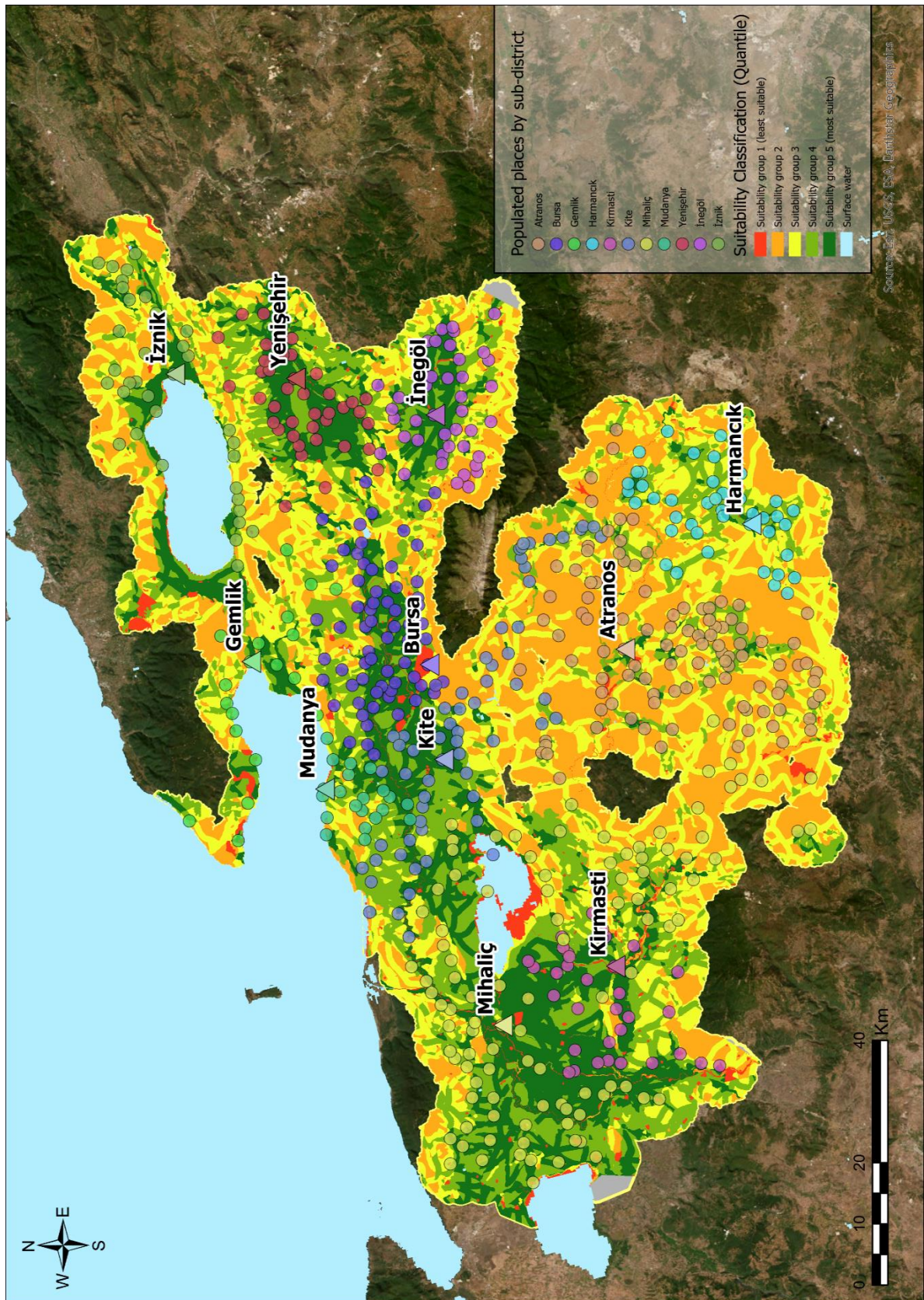
²⁸⁴ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 20.

western, and central parts were more populated, had a more diverse crop profile, obtained higher and better quality yields, and could produce a surplus, particularly in the alluvial fans of Bursa and the oases of Mihaliç and Kirmasti. In the more “suitable” areas (colored green on the map), the rich alluvial soils, abundant irrigation water, and the long growing season enabled the peasantry to obtain as many as four crops annually, making intertillage a common feature of agriculture.²⁸⁵ Also, we will see in the next section that thanks to their relatively flatter terrain compared to the southern part, settlements in these subregions had a denser road network, which correlated positively with agricultural production level.



²⁸⁵ Stotz, “The Bursa Region,” 93.

Map 4: Agricultural Suitability Map of the Bursa Region with Settlements, 1839



2.3.2.2. *Natural Resources – Forests, Ice, and Mines*

The region's climate induced mostly characteristic Mediterranean forests, woodlands, and scrub vegetation. Immediately below the snowline were the always-moist habitat of grass and flowering plants, and below them were scattered conifers (e.g., fir, spruce, cedar), among which the black and yellow pine that dominated the uphill of Bursa thanks to their wide growing range and provided the high-quality charcoal. Broadleaf varieties, which were the least Mediterranean aspect of the flora, predominated at the base of the mountains and hills. Especially the plane tree, black and white oak, poplar, mulberry tree, ash tree, hornbeam, pistachio, walnut, chestnut, and beech were commonplace.

The plains were home to short-grass vegetation. There, the grazing of livestock, grain growing, and cultivating various fruit trees (planted and taken care of by the people) were prioritized. Included in the habitat were private groves in areas closer to Mount Olympus and naturally growing cottonwoods and willows along the streams and swamps around lakes and rivers.

On the north of the plain and the leeward side of the coastal heights were the thorny evergreen bushes intermixed with bulbous plants such as wild hyacinths, snowdrops, and anemones in the spring. Olives dominated the seaward slopes of the coastal heights. Grasses, poppies, and various natural bulbous plants grew profusely between the trees wherever natural vegetation allowed. In other words, the trees dominating the region's landscape all around were indispensable actors in economic and social life, as the green, productive space has given rise to the name "Green Bursa" (*Yeşil Bursa*).

As in Bursa, the presence and abundance of high-quality forests in Western Anatolia and the Balkans kept the Empire from importing lumber from outside at high costs. In the nineteenth century, the state increasingly considered the exploitation of forests an important source of wealth, which could not be sufficiently realized due to low capital and the high cost of infrastructural investments.²⁸⁶ Forests relatively close to imperial shipyards were the natural source of timber and non-timber products.

²⁸⁶ Selçuk Dursun, "Forest and the State: History of Forestry and Forest Administration in the Ottoman Empire" (PhD Thesis, İstanbul, Sabancı University, 2007), 6.

Apart from food and sericultural needs, Bursa had one of Anatolia's largest natural forest extents²⁸⁷, with 12.311.880 million *dönüm* (12.311,88 square kilometers) in 1880 (administrative changes and elevation differences not accounted for in acreage calculations should be factored in).²⁸⁸ Black and yellow pine, black and white oak, and beech were the commonest trees. They provided timber for house-, ship-, cart-, barrel-, and, in the nineteenth century, factory-building; firewood and charcoal as fuel; as well as raw materials such as resin, turpentine, tar, and pine bark.²⁸⁹ About one-fifth of the forests were located in the northern part, where Gemlik was most prominent (2,5 million). The more elevated bottom half of the region was abundant with trees. Bounded by Olympus, Domaniç, and Ahı mountains in the south, the subdistrict of Inegöl alone had more than half of the total forest area.²⁹⁰ Being born near a forest was sometimes a curse, especially in Inegöl and Gemlik, as the pressing needs of the navy put their people on corvée in the mid-nineteenth century, as we shall see in the coming sections.

The most extensive category of forests was the *cibal-i mübaha*, the state-owned forests on behalf of the public interest and under the management of the administrative unit of Ottoman Imperial Dockyards.²⁹¹ As understood by the existence of many "Imperial Groves" (*Koru-yı Hümayun*) within the region, forest areas were under strict state (*miri*) and imperial waqf ownership and generating income for them.²⁹² We should remember that the state got hold of a significant amount of the forests, especially through the annulment of title deeds before the forest regulation of 1870.²⁹³

Many households in the Bursa plain and on Mount Olympus also earned income from their private groves. Woodcutting, timber making, and charcoal production and distribution

²⁸⁷ Ibid., 293.

²⁸⁸ Edmond Dutemple, *En Turquie d'Asie*, 252.

²⁸⁹ Dursun, "Forest and the State," 53.

²⁹⁰ Statistics on the forest area: Cebel-i Atik (northern slopes of the Mount Olympus): 785.000 (dönüm), Gemlik: 2.505.000 d., Mihaliç: 955.000 d., Kirmasti: 1.353.460 d., Atranos and southern slopes of Olympus: 2.201.280 d., and Inegöl: 4.512.140 d. For a detailed report on the ways the forests were exploited, see Edmond Dutemple, *En Turquie d'Asie*, 251–52.

²⁹¹ Dursun, "Forest and the State," 66.

²⁹² Ömer Faruk Dinçel, "Bursa'nın Padişah Ormanları... 'Koru-yı Humayun,'" *Şehrengiz*, no. 61 (2015): 9–15. Timbers provided from these groves were stored in Istanbul or the Imperial Dockyard at Gemlik. As part of Selim III's naval reforms, the superintendent of these groves (*Koru Ağası*) was tasked with organizing a labor force to cut down trees in 1793. OA. AE. SSLM. III. 396 / 22867 (AH. 1207 / 1793).

²⁹³ Dursun, "Forest and the State," 294.

remunerated many more inhabitants on the region's slopes, hills, valleys, bays, and shores, including urban dwellers. Different timber qualities of the trees of Bursa were appreciated so much that they were renowned by the name of the settlements where they grew – such as “Kayapa tree,” “Karacakaya timber,” and “Kızık wood.”²⁹⁴ Labor relations surrounding the joint use of large bucksaws (*bıçkı*), ownership of other implements, and the transportation of timber is an understudied area that can illuminate various aspects of local political economies.

But, in general, the immense forests that Bursa enclosed, whose exploitation alone would suffice to make Bursa's fortune, could not be exploited for lack of communications and technological infrastructure. Instead, most trees were consumed on the spot.²⁹⁵ Gemlik and Inegöl's forests were transported to Constantinople, and especially the latter's population was burdened with cutting the fine-quality trees and transporting them to the imperial arsenals at Gemlik and Istanbul. Burning forests (through slash-and-burn method) to reclaim land for pasture and cultivation (intensified in the late nineteenth century with the arrival of the refugees)²⁹⁶ and haphazardly cutting trees for fuel (particularly for the needs of the filatures) were persistent problems threatening the health of the forests. It is argued that the state benefited more from the forests after the 1870s through the enforcement of scientific principles, the arrival of French forestry experts, and increases in the number of forestry students and concessions to private enterprises.²⁹⁷ However, a detailed report from 1928

²⁹⁴ See the detailed inheritance inventory of an Armenian timber-trader named Ohannes from the city of Bursa: OA. MŞH. ŞSC. d. 3092 (C / 70), p. 69. (AH. 03-07-1270 / 01-04-1854).

²⁹⁵ Edmond Dutemple, *En Turquie d'Asie*, 248.

²⁹⁶ Küçükceran, “Agriculture,” 128.

²⁹⁷ Changes in the forest administration after 1870 seems to have expanded the state control over the forestry and helped the treasury. Selçuk Dursun tabulated the revenues from and expenses on the forests in the 1890s compiled by French surveyors. For the Bursa region, the official statistics were as follows (Dursun, “Forest and the State,” 295.):

	Estimated forest area (ha)	Revenue (guruş)	Expenses (guruş)
1890	1.379.454	610.184	210.300
1894	1.379.454	1.418.939	444.272
1897	1.379.454	773.442	212.800

confirmed the continuing malpractices in forest use and management and complained that Bursa's industries and trade still suffered from not adequately using its tree resources.²⁹⁸

As variegated green colored the landscape, white accompanied and often dominated mountain sceneries. Mountains received snow from late November till April, and their tops were covered with perennial snow and multiple glacial lakes. For centuries, the ice of the Katırlı and Olympus Mountains fulfilled the demands of the palace and the shops in the cities of Bursa (such as those of ice cream and sherbet makers) that used it for storage purposes.²⁹⁹ Ice was cut into large blocks and carried in sacks made of water and heat-resistant goat leather (*keçe*). It was transported from the mountains to the city in twelve hours and from there to Mudanya in six hours in good weather.³⁰⁰

Prior to the late nineteenth century, mining was a relatively small insignificant industry. Iron ore deposits existed along the Gulf of Gemlik and, more importantly, in the southern and mountainous region, which may be one of the potential reasons why the south was incorporated into the ancient Bithynia. Although never amounting to reserves of significant size, these ores were used by small-scale town industries of blacksmiths, iron tool (i.e., farming- and industrial-implement and bell) makers, musket and rifle manufacturers, and, among the most famous of them all, knife- and sword makers. Similarly, negligible amounts of lead and copper were extracted in the west and south.³⁰¹ Self-sufficiency in these metals in the changing environment of the nineteenth century is doubtful. Iron (carried from Istanbul by English and Russian ships), tin (by English vessels), and lead shot (by French boats) had been imported in considerable quantities in the 1850s and 1860s via Bandırma and Gemlik ports. It is unclear how much of these imports were consumed by the Bursa region alone and used by the state.³⁰² Like Inegöl and Yenişehir's silver mines, their revenues

²⁹⁸ Doktor Osman Şevki, *Bursa ve Uludağ*, ed. Mehmed Fatih Birgül, Levent Ali Çanaklı, and Coşkun Ağra (İstanbul [Bursa]: Türk Gezinler Cemiyeti [Bursa İl Özel İdaresi], 1928), 179–80.

²⁹⁹ Burcu Kurt, "Buz Temininde Sanayilesme ve Osmanlı İmparatorluğu'nda Kurulan Buz Fabrikaları," *OTAM (Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi)* 30, no. 30 (2011): 75–76.

³⁰⁰ Robert Walsh, *Narrative of a Journey from Constantinople to England* (London: Frederick Westley and A. H. Davis, 1828), 210.

³⁰¹ OA. C. DRB. 25 / 1211 (AH. 05-05-1122 / 02-07-1710).

³⁰² The statistics provided by the British consul for the imports cleared at the Bandırma Port in 1861 is as follows. Iron (English) 830 tons for £8200, iron (Russian) 280 tons for £6300, lead shot (French) 125 tons for £3800, tin (English) 19 tons for £3000. BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 347.

were farmed by the imperial mint (*darbhane*) in Istanbul to the highest bidders for centuries.³⁰³ In addition to this subdistrict, gold and silver were mined in Atranos and certain regions around Mount Olympus.³⁰⁴

The opening of mines was part of the environmental change, though their impact on the regional economy remained very limited until 1870. Bursa had the richest chrome deposits in Anatolia by the 1850s. A mine was established in Gemlik³⁰⁵, at least two in Inegöl, and four in Harmancık³⁰⁶ subdistrict in the mid-nineteenth century. Critical in making stainless steel by hardening and toughening it, chromium was in progressively increasing need primarily by British steel manufacturers. The nominal value of British imports of Bursa chromium rose from 7000 pound-sterling in 1858 to 24.000 in 1870.³⁰⁷ Another relatively large-sized mineral deposit discovered was copper in Mihaliç. A mine was established in 1839 and rented by tender to the highest bidders for ten years.³⁰⁸ The state was interested in copper output as copper coins with small denominations for daily transactions were minted in 1844.³⁰⁹

The silk filatures of Bursa heavily depended on wood coal to power their steam engines. Close to 1870, lignite was extracted from a deposit four hours away from the city. The British vice-consul stated that the heating capacity of Bursa lignite was very close to coal and that even better quality could be obtained if excavations went deeper. However, mining in the region, regardless of mineral, was conducted at the surface using rudimentary methods. No information is available regarding the quantitative aspects of the production and consumption of Bursa lignite or coal, but they never reached significant levels.³¹⁰ Charcoal

³⁰³ OA. MAD. d. 15789 (AH. 14-09-1057), 10133 (AH. 29-11-1266).

³⁰⁴ Aziz Elbas, “Paranın Seyrinden Notlar: Bursa Darphanesi,” *Bursa'da Zaman*, no. 3 (2012): 53.

³⁰⁵ OA. HH. d. 72 (AH. 21-05-1267 / 24-03-1851), HH. İ. 28 / 33 (AH. 15-12-1274 / 27-07-1858), HR. TO. 71 / 74 (AH. 16-11-1857).

³⁰⁶ Celil Bozkurt, “Osmanlı Devleti’nde Kromun Keşfi ve Harmancık Krom Madenlerinin İşletilmesi (1848-1922),” in *Klasikten Moderne Osmanlı Ekonomisi*, ed. Arif Bilgin and Burhan Çağlar (İstanbul: Kronik Kitap, 2019), 235.

³⁰⁷ BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments*, 1872, 54.

³⁰⁸ OA. İ. MVL. 139 / 3840 (AH. 20-05-1265 / 13-04-1849).

³⁰⁹ Pamuk, *A Monetary History*, 208.

³¹⁰ Alaaddin Tok, “From Wood to Coal: The Energy Economy in Ottoman Anatolia and the Balkans (1750-1914)” (PhD Thesis, Istanbul, Boğaziçi University, 2017), 174–75; Georges Perrot notes charcoal was practically the only source of fuel. Perrot, *Souvenirs d’un voyage en Asie Mineure*, 78–79.

making involved stacking fagots and logs in a tepee fashion, covering them with clay, and firing them inside, which caused one of the most common reasons for forest fires.³¹¹

The Hüdavendigâr province had the richest mineral deposits by the end of the nineteenth century, to which Karesi and Kütahya *sancaks* contributed the most.³¹² But, cash shortages, lack of large initial capital, distrust of foreign capital in mining operations, primitive technology coupled with the costliness of digging deeper and transportation, and mismatching of costs and revenues which plagued the Ottoman mining history in the mid-nineteenth century seem to have generally affected the Bursa region's capacity in this sector.³¹³

All in all, the revenue potential, diversity, exploitation area, reachability, and export capacity of forest and mineral resources of the region could be truly realized only after the foundation of the Turkish Republic.³¹⁴

2.3.3. Transport Network and Modalities

The most serious obstacles that opposed the development of commercial and industrial relations in the region consisted of the dilapidated state of the existing major arteries and the absence of passable roads suitable for transport in all localities. No development had occurred in terms of road typology until the mid-1860s. The Greater Bithynian thoroughfares paved during the Hellenistic period and maintained later by the Romans formed the main skeleton of the intertown road infrastructure in the north of the region.³¹⁵ These thoroughfares, sometimes old torrent beds, were maintained by being beaten over time by the passing of horses, mules, and camel caravans. Their width ranged between 3 to 5,7 meters, not allowing for the passage of two (usually two-wheeled) carriages simultaneously, and they were

³¹¹ Stotz, "The Bursa Region," 99.

³¹² Mehmet Bayartan, "XIX. Yüzyılda Osmanlı Madenlerinin Coğrafi Dağılışı," *Osmanlı Bilimi Araştırmaları* 10, no. 1 (2018): 137–55.

³¹³ For thorough surveys of regional and financial difficulties of mining operations, see Fahrettin Tızlak, "XIX. Yüzyılın Ortalarında Osmanlı Maden Yatakları," *Belleten* 60, no. 229 (1996): 703–18; Yaşar Öcal, "19. Yüzyılda Osmanlı Madencilik Sektörünün Sorunları," *OTAM (Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi)*, no. 44 (2018): 189–220.

³¹⁴ It was reported that the true potential of Bursa's forestry and mining capacity could not be appropriately used in the early years of the Republic. Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 21–22, 57–64.

³¹⁵ For a comprehensive spatio-temporal treatment, see Weissová, "Regional Economy," 234–44.

widened at certain times if necessary.³¹⁶ They were, generally, according to the English observer Robert Walsh in 1821, "beaten pathways, made by one horseman and followed by another, and every man may make one for himself if he pleases. The only carriages are wooden planks, laid upon rough wheels, called *arabas* drawn with cords by buffaloes."³¹⁷

In other words, unless beaten by animals and other passersby, the grass and all the luxuriant flora of the region took possession of these roads. Traffic was nearly impossible during wintertime (until March) due to deep and slippery mud not allowing horses, camels, and carts to cross. The expansion of marshes due to inundations in the mid-nineteenth century made communications within the region even harder. In certain seasons Nilüfer and Rhyndacus rivers "cannot be crossed at all; and the road to Moudania remains for weeks 'broke off in the middle.'"³¹⁸ In summer, the difficulties of communication were exacerbated by river torrents and the ebb and flow of lakes, resulting in an enormous increase in the prices of foodstuffs and other commodities.³¹⁹ Even Mustafa Nuri Pasha, the governor of Bursa in 1845, acknowledged that the roads and bridges³²⁰ were so impassable that he seldom went out of the city, and when he did, he never went beyond the village of Hacivat in the east, which is situated away by one-hour horse walk. But he added that the roads, "bad as they were, the people were accustomed to them, and that he had no money to make them better."³²¹

As suggested by travelogues and animal ownership patterns in the tax surveys from the mid-nineteenth century, horses, donkeys, mules, cattle, buffalo, and oxen were used as

³¹⁶ Ümit Ekin, "Klasik Dönemde Osmanlı İmparatorluğu'nda Karayolu Ulaşımını ve Nakliyatı Etkileyen Faktörler (1500-1800)," *Belleten* 81, no. 291 (2017): 388.

³¹⁷ Walsh, *Narrative of a Journey from Constantinople to England*, 2.

³¹⁸ Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country*, vol. 2 (Philadelphia: Lean and Blanchard, 1850), 56, 80.

³¹⁹ Edmond Dutemple, *En Turquie d'Asie*, 254.

³²⁰ A British consular report from 1841 noted that "the bridges on the road to this place [the city of Bursa] have been destroyed by floods within these few years; or otherwise completely dilapidated or neglected." BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 104. Indeed, multiple reports from the 1840s-1870s show that the generally wooden (all around) and sometimes stone (usually in the Bursa plain) bridges traversing the Nilüfer and Rhyndacus Rivers and many small streams were generally rough and broken, whose deficiency was exacerbated by the 1855 earthquake, inundations, and lack of maintenance and waqf and state funds. Some examples to these reports include OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845 [all around the district]), C. BLD. 126 / 6252 (AH. 29-01-1261 / 07-02-1845 [Kirmastı]); MVL. 735 / 73 (Age Rumi [Hereafter AR.] 20-03-83 / 01-06-1867 [Yenişehir]), p. 3; İ. ŞD. 16 / 689 (AH. 1286 / 1869/1870 [Mihaliç]), 1536 / 14 (AH. 1289/1290 / 1873/1874 [Bursa plain]), 40 / 2101 (AH. 19-08-1295 / 18-08-1878 [Bursa-Kite]).

³²¹ Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country*, vol. 1 (Philadelphia: Lean and Blanchard, 1850), 119.

pack and tractor animals. Horses and donkeys were preferred for riding. Mules and donkeys were essential in transporting relatively small loads of goods (e.g., instrumental in the ice and timber trade).³²² Camels were the chief actor in the interregional exchange of goods for centuries, especially in the silk trade, though dependency on them progressively decreased in the nineteenth century. While certain camel owners profited greatly from this intermediation³²³ through their collaboration with camel riders usually grouped in the eastern sections of the city where the ancient silk road reached Bursa³²⁴, some semi-nomadic tribespeople (with some living permanently in the city) had their own camel caravan network and hence an impact on interregional commerce.

Animal and cart renting (*kiracılık*) and cart riding (*sürücülük*) were popular occupations in the city of Bursa and towns of the region. The detailed excursion itinerary of William Hunter, who traveled from Izmir to Yalova in 1792, gives an average trip on horseback as 5,6 kilometers (3,5 miles) an hour.³²⁵ By comparison, camel caravans were making 30 to 40 kilometers a day (camels endured travel for about four days).³²⁶ The *arabas* were used mainly for cargo and passenger transport.³²⁷ However, expecting the carts to move uninterrupted on the roads would be a mistake. In Edmond Dutemple's words:

Where roads exist in a really embryonic state, principally on the coast, transport is also carried out by *arabas*, sorts of small unsprung carriages drawn by buffaloes; the axles of these ungreated and all-wooden arabas produce the most discordant music and, as a result of squeaking and friction, eventually break. Also, on the roads, you almost always come across two or three arabas with broken axles. The squatting buffaloes doze peacefully, and the *arabadji* [driver], stretched nonchalantly at the foot of a tree, gently smokes his cigarette,

³²² See for instance the tax survey of Çongara village located above the city of Bursa and in the forests of the Mount Uludağ where villagers were by-employed in timber trade and used their mules and donkeys. OA. ML. VRD. TMT. d. 7404 (AH. 1261 / 1845).

³²³ The inheritance inventory of two rich camel pack owners left a good record detailing the complicated relationship between them, riders, and merchants. OA. MŞH. ŞSC. d. 2968 (B / 340), p. 94 and 121 (AH. 1240 / 1824/1825).

³²⁴ The 1839 register recorded at least thirty-eight camel riders. OA. NFS. d. 1396 (AH. 1255 / 1839). Their tax survey records demonstrate that they did not usually own income-generating property and earned modest annual incomes of 300-400 *guruş*. See the Kızıyakub quarter's *temettuat* register for instance. OA. ML. VRD. TMT. d. 7418 (AH. 1261 / 1845).

³²⁵ William Hunter, *Travels Through France, Turkey, and Hungary, to Vienna, in 1792: To Which Are Added, Several Tours in Hungary, in 1799 and 1800: In a Series of Letters to His Sister in England* (London: J. White, 1803), xix.

³²⁶ Ekin, "Klasik Dönemde Osmanlı İmparatorluğu'nda Karayolu Ulaşımını ve Nakliyatı Etkileyen Faktörler (1500-1800)," 387.

³²⁷ Tekeli and İlkin, *Cumhuriyetin Harcı 3 - Modernitenin Altyapısı Oluşurken*, 92–105.

while waiting, without impatience, for the passage of some colleagues who will be able, by chance, to provide him with a new axle.³²⁸

A georeferenced transport map prepared by the German Army Staff in 1943 (Map 5) demonstrates that cart roads (*araba yolu*, natural, not-expanded road with few improvements, German: *Fahrweg/Karawanenweg*) and footpaths (*patika*, German: *Fußweg*) formed a vast majority of the region's road network, with plainer parts better connected to each other via macadamized roads (built upon the Roman road network, suitable for motorized vehicles, most of them being from the Republican times).³²⁹ Knowing that the improvement in overland transport was limited, it can be used to approximate the road network of the Ottoman Bursa, as there are no earlier alternatives that match its quality. Note that the map was made after the formation of 185 villages by the post-1878 migrants and several more by sedentarized semi-nomadic tribes in the late nineteenth and early twentieth century.³³⁰ Still, this map works best as an "approximation" rather than an exact representation because the roads' easy appearance and disappearance confused even the sharpest mappers. A French resident of Bilecik, the neighboring town east of Bursa, commented in the 1880s on finding one's way in and out of Bursa using the map of Heinrich Kiepert, arguably the best and most detailed cartographic representation of Anatolia prepared in 1845³³¹: "Seeing these furrows [on the map], it would seem that the ways of communication are numerous and well distributed. But let a tourist traveling in the interior try to follow these routes indicated by Kiepert; at first, he will no longer find them, but were he to meet them by chance, he has nine chances out of ten of heading north thinking he is going east, or going south thinking he is going west."³³²

³²⁸ Edmond Dutemple, *En Turquie d'Asie*, 255–56. My translation.

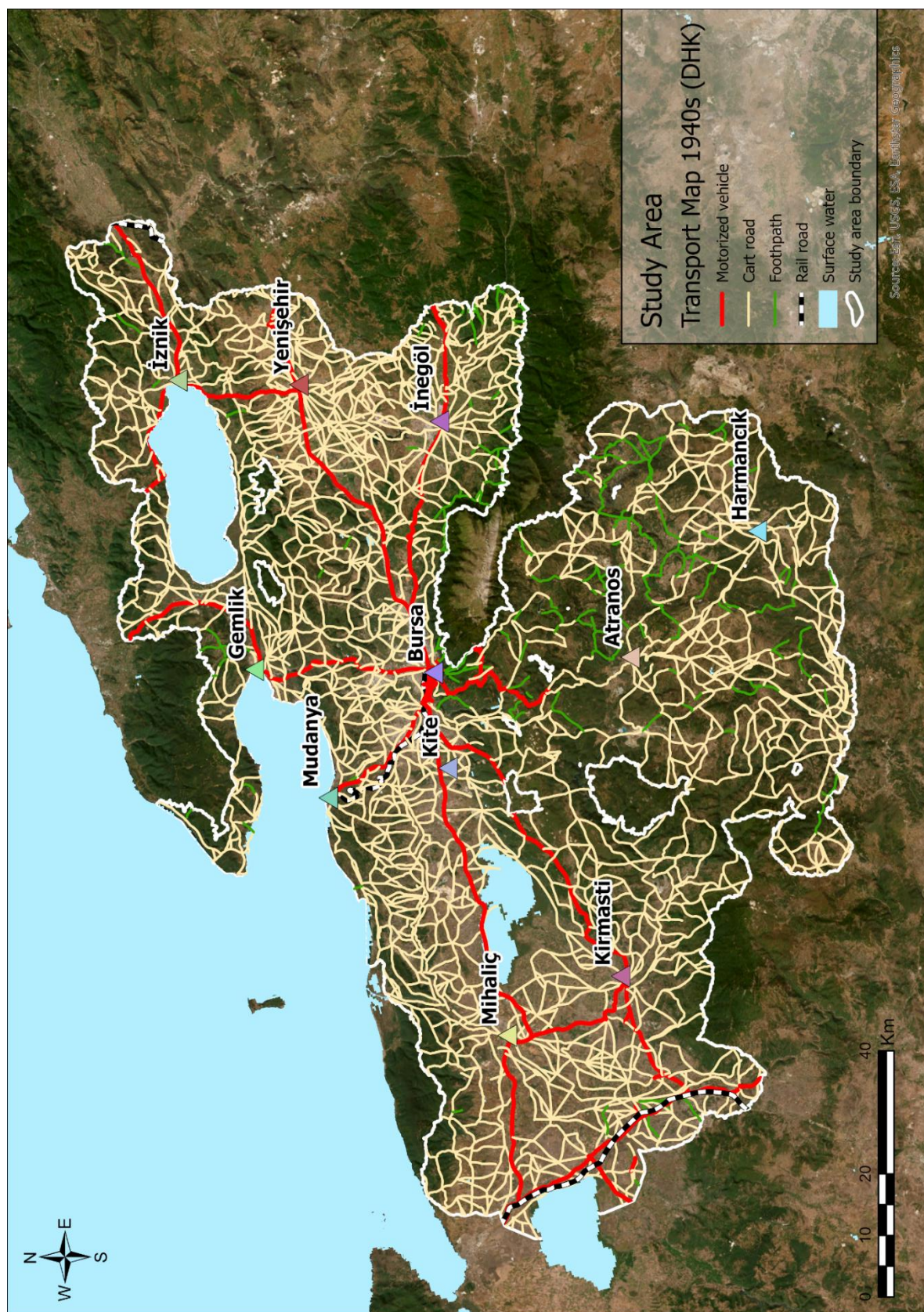
³²⁹ These maps cover all of Turkey except Hatay province in the south. The Bursa region sheet was prepared based on Turkish 1:200.000 series dated 1910-1937. For more info, see United States. Department of the Army, *TM 5-248 Foreign Maps*, 1956, 145, <http://archive.org/details/TM5-248>; For further information on the uses and reliability of the map, see Jilian Ma, Akın Sefer, and M. Erdem Kabadayı, "Geolocating Ottoman Settlements: The Use of Historical Maps for Digital Humanities," *Proceedings of the ICA 3* (2021): 1–8.

³³⁰ The number of the villages founded by the migrants of the Ottoman-Russo war of 1877-1878 is based on Muammer Demirel, "XIX. Yüzyılda Bursa'da Göçmen İskanı," in *Bursa'nın Zenginliği: Göçmenler*, ed. Zeynep Dörtok-Abacı (Bursa: Osmangazi Belediyesi Yayınları, 2008), 45–48.

³³¹ DİA, "Kiepert," in *TDV İslam Ansiklopedisi* (İstanbul, 2002), <https://islamansiklopedisi.org.tr/kiepert>.

³³² Edmond Dutemple, *En Turquie d'Asie*, 257. My translation.

Map 5: Overland Transport Map of the Bursa Region, c. 1940s, based on Deutsche Heereskarte



Now that we have seen an approximate illustration of the transport network, we can better contextualize the distance on the main arteries linking the city of Bursa to other subdistricts. A travel-hours table from 1875 (Table 1) shows the distances between each subdistrict on walking horseback as follows, showing how slope and elevation affected communications and how they factored in the formation of the district boundaries³³³:

Table 1: Distances Between Subdistricts, 1875

From the City of Bursa to the subdistrict center of	Travel Hours
Mihaliç (west)	12
Kirmasti (southwest)	12
Mudanya (north)	6
Gemlik (north)	6
Iznik (northeast)	13
Yenişehir (east)	10
Inegöl (southeast)	10
Atranos (south)	9
Harmancık (south)	12

Bursa, as the seat of the provincial government and a trade hub, was stationed at the crossroads of the ancient Anatolian imperial highways, known in the Ottoman terminology as the left-way (*sol kol*), center-way (*orta kol*), and the right-way (*sağ kol*, also known as the pilgrimage road). The right-way led to Aleppo via Eskişehir and Konya or to Kütahya and beyond via the steep tracks of Inegöl and the Domaniç mountain. The left- and center-ways passed through the northern section of the region, joining Rumelia via Gallipoli in the former and the Black Sea via Bolu in the latter.

The *derbend* organization provided transportation and travel security along the main roads until the Tanzimat reforms. The *derbend* points were located at relatively unsafe mountain passes, conjunctures at military and commercial routes, and desolate and sparsely populated places. In the nineteenth century, villagers near critical junctions were tasked with

³³³ *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1292 / 1875, p. 157.

maintaining security on the roads and were exempted from certain taxes for their services. After the abolition of the Janissaries, regular and reserve troops also oversaw regional security. The *derbend* officials were incorporated into or selected from the new police/gendarmerie force (*zabtiye*) in 1845. In 1846, the city of Bursa had a police force of 93 officers with ten *derbend* officials, and the whole region except the city had 114 officers, 109 of whom were stationed at specific *derbend* locations. In the following years, their numbers progressively increased to combat depredations committed by brigands in the countryside more effectively and to control people's movement. However, a police force of 200-250 people fell short of battling the rising brigandage, especially during spring and summer in the interior.

As early as the 1820s, banditry in the region was out of control. This is why Halil Bey, the *ayan* of Bursa, who was praised for his non-compromising attitude on this issue, maintained his position for some time.³³⁴ But his efforts were not enough: Parallel to economic problems, gangs formed by the locals of Bursa and people from adjacent subdistricts notorious for murder, rape, and theft were active in most parts. The new Tanzimat government frowned upon the issue, noting that provincial authorities must deal with such incidents immediately; otherwise, brigands would gain more popularity amongst the local populace.³³⁵ Increased commercial relations with Europe compounded the situation. It was reported in 1849 that gangs frequently assaulted passengers and traders between Bursa and the main port town of Gemlik because the *derbend* organization was weak and far from each other.³³⁶ According to the recollections of a resident of Tirilye (west of Mudanya), for example, the land route to Bursa took about eight hours and was dangerous because of road robberies.³³⁷

In the face of financial difficulties, the state temporarily appointed the traditional rural commanders (*kır serdari*) and recruited some *redif* soldiers for a few months to aid the regular police, on the condition that the locals pay these temporary forces' salaries. However, it could

³³⁴ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," n. 54 on p. 45.

³³⁵ OA. MVL. 1 / 10 (AH. 27-02-1259 / 29-03-1843).

³³⁶ OA. A.} MKT. MHM. 14 / 31 (AH. 21-07-1265 / 12-06-1849). This document also gives the name of the most troublesome bandit leaders and their origins.

³³⁷ Ayşe Ozil, *Orthodox Christians in the Late Ottoman Empire: A Study of Communal Relations in Anatolia* (London: Routledge, 2013), 5.

not enforce the desired stability and order in the countryside due to corruption in the appointment of the extra troops and increased banditry incidents.³³⁸ Several village raids and mail coach robberies recorded in the archives aside³³⁹, perhaps the biggest threat to the region's security were the gangs led by Manol and Lefter in the Yenişehir-Iznik-Inegöl-Kütahya-Bilecik region in the late 1860s. It took years for the state to crush them, despite big crews of gendarmerie and private security being dispatched over the said regions.³⁴⁰ What is more, because of the worsening state finances and relative lack of security, the likelihood of robbery by villagers made certain areas dangerous to pass through without a weapon.³⁴¹ On their way from Bursa to Iznik in 1862, the governor insisted on giving the traveler Georges Perrot and his companions six gendarmes. The writer noted: “This province of which Brousse is the capital, Kouvendighiar, is moreover one of the most disreputable of the empire; neighbor of Constantinople, it serves as a refuge for all the deserters, for all the bandits who escape from it.”³⁴²

Finally, in 1871, as per the 1867 Provincial Reform Law, the number of members of the police force was increased to 579.³⁴³ But, the absence of practicable means of communication, occult protection practiced by the peasants towards these bands from which they often derive profit, lack of regularity in the payment of the police, and sometimes even the deliberate connivance of unscrupulous officials were the obstacles to the dispersal and annihilation of brigands.³⁴⁴

The modernization of the Bursa region's road network did not start until the 1860s. One of the first macadamized road projects of the Ottoman Empire was the 23-kilometers-

³³⁸ Satıcı, “19. Yüzyılda Hüdavendigar Eyaleti,” 351–57. The British vice-consul in Bursa wrote in 1864 that the police force “though under better discipline, has not improved in humanity, nor has there been any amelioration in the mode of administering justice in the different tribunals.” BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office from H.M. Consuls, July 1863-64*, 1864, 435.

³³⁹ OA. C. EV. 589 / 29706 (AH. 1255 / 1838-1839) (Kite); C.ZB. 82 / 4067 (AH. 29-06-1262 / 24-06-1846) (Pazarköy); A.} DVN. 133 / 19 (AH. 19-12-1274 / 31-07-1858) (Gemlik); MVL. 576 / 6 (AH. 29-02-1275 / 08-10-1858) (Bursa).

³⁴⁰ Fatma Melek Arıkan, “A History of a Western Anatolian Region: Yenişehir and Iznik during the Late Ottoman Empire, 1855-1909” (PhD Thesis, Istanbul, Sabancı University, 2018), 109–14.

³⁴¹ Mevsim, *Bulgar Gözüyle Bursa*, 42–47.

³⁴² Perrot, *Souvenirs d'un voyage en Asie Mineure*, 47. My translation.

³⁴³ Additionally, there were 27 officers tasked with tax and debt collection (*tahsildar*). *Salname-i Vilayet-i Hüdavendigar* (the Yearbook of the Hüdavendigar Province), AH. 1288 / 1871, pp. 99-100.

³⁴⁴ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 433. In 1879, an Orthodox Christian resident of the large Susurluk village told that the police force sometimes robbed the passengers. Mevsim, *Bulgar Gözüyle Bursa*, 26.

long Bursa-Gemlik carriage road, which was an inland extension of the steamship line and designed to replace the former road by being at all seasons practicable for suitable vehicles. It was planned immediately after the establishment of the reconstruction council (*İmar Meclisi*) of Bursa in 1845 and started to be built in 1850. Besides technical staff such as carpenters, timber cutters, and drilling and blasting masters, corvee labor was used in the road's construction, maintenance, and security due to insufficient tax resources allocated for this task. 69.810 workers (*amele* and *rençber*) were selected from the Bursa, Bilecik, and Izmit regions, and their working days were determined based on their proximity to the road, while those who did not want to work had to pay five guruş per shift. Gemlik, Kite, and Inegöl subdistricts were also burdened with providing timber. Money shortages, embezzlement incidents, and the 1855 earthquake stalled the plan for fifteen years, and only sixteen kilometers could be completed. The road was finally completed in 1865 thanks to the firm hand of the Sultan's High Commissioner Ahmed Vefik Efendi, who served as regional inspector of northwestern Anatolia from 1863 to 1864, again relying on locally extracted funds and heavy use of corvee.³⁴⁵ If properly maintained and in fine weather, the new road shortened the journey from Bursa to Gemlik on a fine horse carriage (e.g., a landau) to around four hours and on a good horse around five.³⁴⁶

Vefik Efendi brought about an impetus toward infrastructural change along Western lines. During his short inspectorship, the Bursa-Mudanya road was extended, straightened, and connected to the Bursa, Gemlik, and Kütahya roads. A road between the city of Bursa and the nearby village of Çekirge was constructed. Taking advantage of the devastation the 1855 earthquake caused, he had the Gemlik road extended as the main artery leading to the

³⁴⁵ For a detailed study of labor and resource procurement for the Bursa-Gemlik road, see Sinan Kaya, “Tanzimat’ın Bursa’da Uygulanması” (PhD Thesis, Istanbul, 29 Mayıs Üniversitesi, 2022), 114–32; Could the money for the road have been found earlier? An imperial kiosk was built on the eastern slopes of the city for the two-day visit of Sultan Abdülmecid in 1845, the same year the Bursa-Gemlik road was planned. It was entirely neglected after the Sultan left. MacFarlane criticized this spending: “A sum which, if properly applied, would have made a good road half way from Brusa to Ghemlik, was thus childishly wasted.” MacFarlane, *Turkey and Its Destiny*, 1850, 1:92.

³⁴⁶ Commentaries by Bulgarians in the 1880s, Mevsim, *Bulgar Gözüyle Bursa*, 72–73; by French and Russian officials, Marie De Launay and Bonkowski Bey, *Bursa ve Civarı*, ed. İsmail Yaşayanlar and Burcu Kurt (İstanbul: Heyamola Yayınları, 2015), 117; by American missionaries in 1851, Muhsin Önal, “Amerikan Board Kayıtlarına Göre Protestan Misyonerlerin Bursa ve Çevresindeki Faaliyetleri (1833-1883)” (MA Thesis, Bursa, Uludağ Üniversitesi, 2012), 61; and by Edmond Dutemple, *En Turquie d’Asie*, 94.

newly-built administrative center (*Hükümet Konağı*) of the city.³⁴⁷ As part of his comprehensive infrastructural projects, several new water canals were opened, watercourses were properly embanked, some bridges were repaired, and the Bursa-Istanbul telegraph line was laid in 1864.³⁴⁸

Overall, in economic terms, difficulties in land transport posed significant limitations to the exchange and profitability of goods within and exported from the region, be it to the ports, other subdistricts, or the fairs of Balıkesir and Bilecik. The British vice-consul of Bursa wrote in 1854 that, besides heavy taxation, the profits generated by grain cultivation were absorbed by "the exorbitant cost of carriage coming to 16 piastres [*guruş*], or upwards of 2*d.* per [imperial] bushel [39,6 liters] for every distance from hence of 40 miles."³⁴⁹ Like all other items, the freight cost across the Marmara Sea, with the addition of customs tax chargeable from 8 to 12 percent, posed further disadvantages. The state of things was no different fifteen years later: "[T]he transport cost of a sack of grain from a hundred miles inland to the coast amounts to somewhat more than the prime market value of the article itself."³⁵⁰

Communications by sea with the Bursa region took place along several routes. Three coastal subdistricts, Mihaliç and Mudanya on the southern and Gemlik on the eastern shore of the Gulf of Gemlik, offered natural harbors that connected the Balkans and Istanbul to Anatolia, the Mediterranean, and the Black Sea. They were linked with the regional economies of the Marmara Sea, or, as known by its Byzantine nickname, "the lake of Constantinople," for, since the foundation of the city, all sea routes had led to it.³⁵¹ Until the mid-nineteenth century, the Orthodox Christian communities of Mudanya and Gemlik transported people and goods by means of gondola-like 13-15 meters long 3- to 4-pair of scull boats known as *çektirme*, *pereme*, *şayka*, *tombaz*, *salapurya*, and *ada kayığı* (that were

³⁴⁷ Béatrice Saint Laurent, "Ottoman Power and Westernization : The Architecture and Urban Development of Nineteenth and Early Twentieth Century Bursa," *Anatolia Moderna. Yeni Anadolu* 5, no. 1 (1994): 215–16.

³⁴⁸ Kübra Uslu, "Ahmed Vefik Paşa ve Bursa'nın Modernleşmesi Üzerine Bir Deneme" (MA Thesis, Istanbul, Marmara University, 2019), 61.

³⁴⁹ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 183.

³⁵⁰ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad, respecting Condition of Industrial Classes and Purchase Power of Money in Foreign Countries*, 1871, 743-744.

³⁵¹ Anna Avramea, "Land and Sea Communications, Fourth–Fifteenth Centuries," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 1 (Washington, DC: Dumbarton Oaks, 2002), 83.

usually altogether referred to as *sefine*, based on the Arabic term for boat) that frequented between other ports along the coast and between Bursa and Istanbul, carrying the manufactures of Bursa and produces of the coastal tree crops, mainly olives and vines, and spirits.³⁵² Their gross tonnage varied between 800-2000 *kile*³⁵³ (733 - 1833 imperial bushels).³⁵⁴ Rarely, in cases where large shipments needed to be quickly delivered, ships with larger tonnage, like *çekeleve*, were hired from Istanbul.³⁵⁵

Without wind, a voyage from Istanbul (Eminönü) to Mudanya or Gemlik could be accomplished with oars in 10 to 12 hours. In cases where there was a light favorable breeze, the journey on a sailboat (felucca) lasted around 6 hours, followed by a trip that rarely exceeds 5 hours to the city center on horseback.³⁵⁶ The boats were unable to make any way against the wind and had to take refuge in a creek until the weather became favorable. When the wind was blowing so strong from the north, Lord Kinneir's journey to Istanbul from Mudanya on a six-oared felucca in 1818 lasted 36 hours.³⁵⁷ Though Lord Kinneir did not share his experience, the Prussian military captain Helmuth von Moltke genuinely put into words the stiff journey he had in 1836: “On the afternoon of the 11th [of June], I embarked in a Turkish vessel, and a fresh north wind took us in four hours to the rocky promontory of Posidoni [Bozburun of westernmost Gemlik], eight miles distant. Here the sea was so high that our *reis* or helmsman, crouching on the high, delicately carved stern of the ship, was already beginning his *Allahu akbar*– “God is merciful” – when the wind died down so completely with the darkness that we were only able to reach nearby Mudania at 8 o'clock

³⁵² William Turner, *Journal of a Tour in the Levant*, vol. 3 (London: John Murray, Albemarle Street, 1820), 171.

³⁵³ The reader will notice that this weight unit is used throughout the thesis. *Kile* was a traditional grain and fruit measurement unit whose value changed from one locality and one product to another. Istanbul *kile*, which equals 20 *okka* (or *kıyye*=1.282 gr.) 25,64 kg in wheat, was used in Bursa. A consular report from 1870 noted that, in Bursa, 12 *kile* was equal to 11 imperial (Winchester) bushel (one imperial bushel = 36,36 liters, then one *kile* = 39,6 liters). BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 739. I prefer to use the imperial bushel unless otherwise stated, as this is the safest way to prevent miscalculations.

³⁵⁴ Aynural, *İstanbul Değirmenleri ve Fırınları*, 24.

³⁵⁵ Cafer Çiftçi, *Osmanlı Döneminde Mudanya İskeleyi ve Gümrüğü* (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2012), 49, 84, 90–93.

³⁵⁶ Godfrey Levinge, *The Traveller in the East; a Guide* (Curzon Street, Mayfair, London, 1839), 240.

³⁵⁷ Sir John Macdonald Kinneir, *Journey Through Asia Minor, Armenia, and Koordistan in the Years 1813 and 1814: With Remarks on the Marches of Alexander and Retreat of the Ten Thousand* (London: John Murray, Albemarle Street, 1818), 248–49.

the next morning.”³⁵⁸ Only a few days before this, Julia Pardoe uttered similar words. Following a calm morning sail from the Golden Horde, which left every soul on board asleep, halfway through the trip “the wind failed us altogether; the slumbering *caiquejhes* [boatsmen] were awakened, the oars were plied, and we moved over the Sea of Marmora, of which I had such horrible memories, from the night of pain and peril that I had passed upon it on my way to Turkey, as though we had been traversing a lake.”³⁵⁹

After the 1830s, large ships and steamers sailing under various flags became more visible as trade accelerated. They reduced the time to reach Istanbul to about five hours and eight to nine in adverse weather.³⁶⁰ That said, the shipping trade of the region was, by and large, a coasting one. Direct exportations from Bursa were almost none, which were confined to such articles as olives, grains, and minerals. All the more valuable products were sent to Istanbul or Izmir for reshipment.³⁶¹ In the mid-nineteenth century, there was some direct trade with the Danubian ports and Odessa (the queen city among Black Sea ports), triggered mainly by the trade of olives and grains from these regions in foreign-owned ships, which I am exploring in section 2.3.4.2.

Mudanya was the region's primary port until the first decades of the nineteenth century. In addition to the town, there were a few natural harbors to the west (Arnavud, Tirilye, Sigi, and Eşkel) and east until Gemlik (Burgaz, Kurşunlu, Altıntaş). Mudanya gradually lost much of its activity after the introduction of steamers³⁶² and because of its relatively shallow- and narrow coast exposed to said infamous strong winds necessitating heavy reliance on the intermediation of small boats to unload their goods.³⁶³ Gemlik town, on the other hand, was in a more favorable position owing to its suitable anchorage, with a wide beach sheltered from strong currents and winds and a good depth of water offering a safe holding ground for all vessels to dock and discharge and load goods along.³⁶⁴ Greek ships

³⁵⁸ Helmuth Moltke, *Briefe über Zustände und Begebenheiten in der Türkei aus den Jahren 1835 bis 1839* (Berlin : E.S. Mittler, 1841), 63. My translation.

³⁵⁹ Julia Pardoe, *The City of the Sultan and Domestic Manners of the Turks, in 1836. By Miss Pardoe ... In Three Volumes*, vol. II (London: Colburn, 1838), 172.

³⁶⁰ Mevsim, *Bulgar Güzüyle Bursa*, 15, 22.

³⁶¹ BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments*, 1872, 53.

³⁶² BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 349.

³⁶³ Çiftçi, *Osmanlı Döneminde Mudanya*, 40–41.

³⁶⁴ Admiralty Hydrography Department, *Sailing Directions for the Dardanelles, Sea of Marmora, and the Bosphorus* (Poultry & Tower Hill, London: J. D. Potter, 1877), 61–62.

were particularly active in the Gemlik port and a few natural harbors along the gulf (Armudlu, Fıstıklı, Kapaklı, Karacaali, Kumla³⁶⁵). With Ottoman ships, they formed the majority of the traffic in the gulf. Greek nationals were working in circulating import goods in the town and vicinity.³⁶⁶

Soon more smoke filled the air. Already by 1843, the Austrian Danube Company's steamer was plying between Istanbul and Gemlik once a week.³⁶⁷ The only regular Ottoman steamer in 1856 belonged to an Armenian *sarrafs*' company³⁶⁸, which served as the official post ship in 1858.³⁶⁹ The nationalities of other foreign ships frequenting the port were British, French, Russian, Greek, Serbian, and Wallachian in the 1860s.³⁷⁰ The shipping entered and cleared on an average of 1868-1870 from the ports of Mudanya and Bandırma shows the Ottoman-flagged ships were dominant in the traffic, more than four-fifths of the total number (of relatively large ships), with 40 sailing ships and 113 steamers annually frequenting the said ports, suggesting shipment of silk and cocoons to Istanbul (as they were re-exported from there) was their main mission.³⁷¹ In order to counter the smuggling of goods, particularly silk³⁷², fruits, olives, and grains, from small village ports such as Tirilye and Siği (west of Mudanya), imperial ships (*sefine-i hümayun*) and small navy boats were tasked with patrolling the coasts³⁷³, though they largely failed at it.³⁷⁴

Maritime transport activity between Gemlik and Istanbul had increased by 1861, with European steamers running twice to four times weekly, and there was often an intermediate

³⁶⁵ Mudanya and Gemlik's alternative ports are from Çiftçi, "Osmanlı Döneminde İstanbul'un İfaşesinde Bursa'nın Rolü," 156–57.

³⁶⁶ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States of Europe and America: Part VIII. Ottoman Empire; Part IX. Greece; Part X. African States*, 1843, 105.

³⁶⁷ Ibid.

³⁶⁸ Kasaba, *The Ottoman Empire and the World Economy*, 79.

³⁶⁹ Satıcı, "19. Yüzyılda Hüdavendigâr Eyaleti," 389.

³⁷⁰ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 349.

³⁷¹ BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments*, 1872, 53. The data includes Greek-flagged ships - 6 sailing and 5 steamers; British-flagged - 5 sailing and 4 steamers, and French-flagged - 2 steamers, whereas it lacks data on Russian, German, Austrian, and Italian ships as well as on the port of Gemlik.

³⁷² The State strictly forbade silk export from any port other than Istanbul, allowing only the ports of Mudanya and Gemlik to serve as Bursa's intermediary control points. OA. C. ML. 318 / 13067 (AH. 04-03-1256 / 08-05-1840).

³⁷³ OA. C. BH. 1336 / 452 (AH. 13-02-1256 / 16-04-1840).

³⁷⁴ Satıcı, "19. Yüzyılda Hüdavendigâr Eyaleti," n. 144, based on Satıcı's reading of the court records from the mid-nineteenth century on page 371.

post.³⁷⁵ Still, Ahmed Vefik Efendi's report to Istanbul shows that the raw silk produced in the city could not be efficiently shipped to Istanbul, and regular voyages between Bursa and the imperial capital by Ottoman ships shall start as soon as possible.³⁷⁶ Thanks to his and Bursan entrepreneurs' efforts, the Ottoman Gemlik Ferry Company (*Gemlik Vapur Kumpanyası*) started regular cruises in 1865.³⁷⁷ Routine ferry services between Mudanya and Istanbul began in 1871.³⁷⁸ On the other hand, without being supported by suitable overland transportation modalities, the increased steamer activity did not positively correlate with a significant population rise and the export of the region's perishable foodstuff and durable industrial commodities.

Gemlik and Mudanya ports naturally received the most attention because they were the busiest and within the region's borders. However, the crucial ports of Bandırma in the west and Karamürsel in the north handled some imports and exports, though the volume cannot be determined. Bandırma, just to the west of Mihaliç, exported some grain, sheep, silk, and cocoons from the western section of the region. Karamürsel port of Izmid, north of Iznik, collected some amounts of grain, silk, cocoons, and livestock from Iznik, Pazarköy, and Yenişehir. The opening of the Istanbul-Izmid macadamized road in 1834 must have made Karamürsel a more popular destination from thence onwards.

Riverborne transportation is an understudied realm for Western Anatolia as there is a general lack of great navigable rivers like the Balkans. Due to the costliness and slow pace of overland transport, rivers sometimes made a difference for subregions, no matter how negligible the volume of goods carried might be in the grand scheme of international and domestic trade. Mihaliç and Kirmasti conveyed fruits, vegetables, timber, and oars to the capital or nearby locations through the Rhyndacus River. The river emerged into the sea by a beautiful valley about five hundred meters wide; the vessels of a strong tonnage, some of

³⁷⁵ James Lewis Farley, *The Resources of Turkey Considered with Especial Reference to the Profitable Investment of Capital in the Ottoman Empire* (London: Longman, Green, Longman and Roberts, 1862), 111.

³⁷⁶ Nilüfer Alkan Günay, "Modernleşme Dönemi Bursa'sında Ulaşımındaki Gelişmeler," in *Osmanlı Modernleşmesi ve Bursa*, ed. Cafer Çiftçi (Bursa: Osmangazi Belediyesi Yayınları, 2009), 261.

³⁷⁷ Zeynep Dörtok Abacı, "İngiliz Konsolosluk Belgeleri Işığında Bursa Ekonomisi (1848 - 1896)," *Uludağ Üniversitesi Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi* 7, no. 11 (2006): 168; Mine Akkuş, "19. Yüzyılda Bursa'daki İpek Ticaretini Geliştirmeye Yönelik Bir Kurum: Vapur Kumpanyası ve Nizamnamesi," *OTAM (Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi)*, no. 24 (2008): 1–20.

³⁷⁸ Alkan Günay, "Modernleşme Dönemi Bursa'sında," 261.

which were capable of fifty to sixty tons, could go up to approximately ten kilometers in the interior and station with a village called *İskele* (İskelekçi – where the Rhyndacus and Nilüfer met, today it is empty, it used to be about two-and-a-half kilometers south of the village of Ekmekçi).³⁷⁹ Then it got narrower and shallower to Lake Apolyond and out to Kirmasti and became navigable only by oared boats with small sailing craft and rafts.³⁸⁰ The Nilüfer River, which originated in the peaks of Mount Olympus and went through the Bursa plain for about 90 kilometers, was used for transporting wood, timber, and charcoal down the mountain and along the plain, as a seventeenth-century court register and a nineteenth-century traveler's account show.³⁸¹ It is reasonable to think that relatively small loads of crops and other goods were carried on the river.

Notwithstanding the gradual developments of inland and maritime transport until the 1870s, transport difficulties and general underdevelopment of transport infrastructure remained significant impediments to the agrarian-based regional economy.

2.3.4. Focus of Agricultural Production – Tree, garden, and field crops, livestock husbandry, and the state of agricultural technology

Although agricultural production and livestock farming formed the backbone of the region's economy and ensured self-sufficiency, critical regional determinants of agricultural activities, output, and trade have been largely neglected in the literature. This section explains the techniques involved in cultivating Bursa's diverse crops and livestock farming as well as the quality and marketability of the agrarian output. The region's most remunerative and extensively-grown crops, vineyards, mulberries, olives, and grains, are given special attention, while other crops are accounted for under one title. Livestock raising, beekeeping, and fishing, which were widely practiced, are treated in a separate subsection.

Typical of the Mediterranean landscape, the Greater Bithynia was better suited to cultivating trees, "a process whereby the previous natural vegetation forms are preserved in

³⁷⁹ Texier, *Asie mineure*, 138; MacFarlane, *Turkey and Its Destiny*, 1850, 1:319.

³⁸⁰ BPP, CP No.3060, LIX (1), Commercial Reports received at Foreign Office, 349, MacFarlane, *Turkey and Its Destiny*, 1850, 1:304; Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 25–27; Mevsim, *Bulgar Gözüyle Bursa*, 76.

³⁸¹ Raif Kaplanoğlu, *Bursa Ansiklopedisi I: Yer Adları* (Bursa: Avrasya Etnografya Vakfı Yayınları, 2001), 225; Hammer-Purgstall, *Umblick auf einer Reise*, 78.

an artificial arrangement."³⁸² This feature was most pronounced, especially in the northern and central parts of the Bursa region. Trees were important as sources of food, lumber and fuel. Compared with Byzantine agricultural practices, very little seems to have changed regarding the natural environment's arrangement in Ottoman times.³⁸³ According to the British Consul in Trabzon W. Gifford Palgrave, in Western Anatolia, "[T]he cultivation of vines, olives, and fruit trees ... consists almost wholly in letting them grow just as nature wills, without pruning, cleaning, clipping, binding, or even so much as turning the earth about their stems. Grafting is the only horticultural art known or practiced."³⁸⁴

In terms of agrarian and industrial trade, regional markets and town supply networks mattered the most. Weekly marketplaces held in the subdistricts facilitated economic integration within Bursa.³⁸⁵ Also, multiple large fairs in Balıkesir to the west of Bursa served as an avenue that was supplied with produce and manufactures of the province as well as British and other imported goods.³⁸⁶

2.3.4.1. Vineyards

Sweet grapes of Bursa provided an essential article of subsistence as well as a source of livelihood for the people of the region. For these reasons, in addition to transportation costs, vineyards were grown all around and hand-harvested from late summer to late autumn. Because self-sufficiency was prioritized, the people went for quantity and generally did not care about quality. Vines were planted too close, cut back but left to grow too old, and little care was given to planting vine cuttings and renewing.³⁸⁷

Grapes were not usually dried into raisins, which was common practice in the vicinity of Izmir by the mid-nineteenth century.³⁸⁸ When dried, Bursa grapes lost their quality due to

³⁸² Bernard Geyer, "Physical Factors in the Evolution of the Landscape and Land Use," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 1 (Washington, DC: Dumbarton Oaks, 2002), 33.

³⁸³ Bryer, "The Means of Agricultural Production."

³⁸⁴ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 739.

³⁸⁵ William John Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, vol. 1 (London: Murray, 1842), 83; Perrot, *Souvenirs d'un voyage en Asie Mineure*, 91.

³⁸⁶ The locations and days when these marketplaces and fairs were set up were specified in the provincial yearbook of 1870. *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1287 / 1870, p. 141-142.

³⁸⁷ Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made in 1847 and 1848 to Examine into the State of That Country*, vol. 1 (Philadelphia: Lean and Blanchard, 1850), 227.

³⁸⁸ Widespread consumption of dried figs and raisins in Europe and Americas in the last quarter of the nineteenth century triggered their production. İnal, "Fruits of Empire," 6.

their low alkaloid content caused by the region's climate and became cheaper than the much-demanded southwestern Anatolian currants.³⁸⁹ Instead, grapes were squeezed in large, archaic stone mills (known as *şırhane* as they were recorded in inheritance inventories). The juice (*şıra*) was usually boiled in large copper kettles in houses to make molasses (*pekmez*) stored in jars.³⁹⁰ Molasses was used as a sweetener and food-bulking agent that is calorie-dense and packed with iron minerals.³⁹¹ Of course, grapes were an essential ingredient for vinegar, jam, and pickles, which are not mentioned in the sources as widespread as molasses.³⁹² Although the fruit was consumed regionally, a small amount collected along the Marmara coast and a few highly-appreciated kinds (see the wine part below for more details) were sent to Constantinople, fresh and dried.³⁹³

Varieties of winter grapes stayed fresh for months when the bunches were hung under the right conditions. They were prevented from freezing in cold weather by linseed oil lamps and transported in special long wooden barrels open at either end. This way, if the grapes were not bruised, they lasted a long time without fermenting or perishing. The proceeds of winter grapes, also known as “barrel grapes” (*fıçı üzümü*), brought wealth to some inhabitants of the northern sections of the region.³⁹⁴

Non-Muslims mainly produced white wine in large hand-hewn wooden wine presses known as *şaraphane*. Black grapes, whose yield was about one-tenth of white grapes, were extensively used to manufacture wine.³⁹⁵ Viticulture, winemaking, and beverage storage practices suggest a continuity with the late Byzantine techniques.³⁹⁶ The wine was not worked; it was raw and natural. When the bunches of grapes were crushed, the juice was

³⁸⁹ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 19.

³⁹⁰ MacFarlane, *Turkey and Its Destiny*, 1850, 1:227.

³⁹¹ “Five tablespoons supplied almost half of an adult male’s and one-quarter of an adult female’s daily iron requirement and over 250 much-needed calories.” Todd Lee Savitt, *Medicine and Slavery: The Diseases and Health Care of Blacks in Antebellum Virginia* (Illinois: University of Illinois Press, 2002), 94.

³⁹² Çiftçi, *Osmanlı Döneminde Mudanya*, 83.

³⁹³ *Ibid.*, 84.

³⁹⁴ Priscilla Mary Işın, “Ottoman Fruit Cultivation as Reflected in Evliya Çelebi’s Book of Travels,” in *Travellers in Ottoman Lands: The Botanical Legacy*, ed. Ines Asceric-Todd et al. (Oxford: Archaeopress Publishing Ltd, 2018), 50–51.

³⁹⁵ In the plain of Bursa, during an average harvest, nearly 1000 tons of black grapes, and around 10.000 tons of white grapes were harvested. Edmond Dutemple, *En Turquie d’Asie*, 184–86.

³⁹⁶ Ilias Anagnostakis, “The Sweet Wine of Bithynia in the Byzantine Era,” in *Of Vines and Wines: The Production and Consumption of Wine in Anatolian Civilizations through the Ages*, ed. Lucienne Thys-Şenocak (Leuven: Peeters, 2017), 109.

placed in barrels where it was left to ferment for about two months. This juice was then transferred to other barrels, and the wine was made. The pressed grape marc provided the *raki*, the aniseed and resinated pomace brandy that was widely consumed. This marc was placed in open barrels and fermented after twenty to twenty-five days. It was then put in ancient copper alembics; when it came to a boil, a certain quantity of anise was added, and the marc extract was obtained in different degrees.³⁹⁷

Some vineyards supplied wines that had the qualities of the wines of Spain and the Rhine. But generally, the spirits of Bursa, having no remarkable quality except those produced from the grapes on the slopes of Mount Uludağ³⁹⁸ (such as those of the Misi village), in a few hilltop villages (e.g., Filedar/Philadar, Kurşunlu)³⁹⁹ and in the hinterland of Iznik (like Elbeyli), were consumed chiefly domestically.⁴⁰⁰ Almost every Christian family made alcohol. Thousands of barrels were made from year to year and sold for low prices.⁴⁰¹ A minor portion of those produced in areas close to the coast (where most non-Muslims lived) and those with superior quality were exported via Mudanya and Gemlik ports and in Iznik via Karamürsel port to Constantinople.⁴⁰²

Contemporary sources claim that in the early 1800s, wine was not allowed to be publicly sold in Bursa.⁴⁰³ This restriction seems to have been relaxed in the 1820s, as the number of wine shops (*meyhane*, *meygede*, *şerbethane*) was twelve in the city in 1834.⁴⁰⁴ Elizabeth Schneider corroborates this by stating that 12-13 wine shops were operating in the

³⁹⁷ Edmond Dutemple, *En Turquie d'Asie*, 186–87.

³⁹⁸ Launay and Bonkowski Bey, *Bursa ve Civarı*, 98.

³⁹⁹ Filedar, Misi, Kurşunlu, and Elbeyli's splendid grapes were highly appreciated in Istanbul and priced, and therefore grown in exceptionally large vineyards of up to a dozen *dönüm*. The tax surveys of these villages show the somewhat profitable nature of vineyard ownership. OA. ML. VRD .TMT. d. 7468, 7958, 8283, 8407 (AH. 1261 / 1845), see also a report on Iznik's grapes, OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 2.

⁴⁰⁰ Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 1:76.

⁴⁰¹ Eliza Cheney Abbott Schneider, *Letters from Broosa, Asia Minor* (Chambersburg, Pa.: the Publication Office of the Ger. Ref. church, 1846), 49.

⁴⁰² Wine and raki production in and exports of Gemlik can be followed closely in the archival collections devoted to taxes levied on alcoholic beverages (*zecriye*). A quick glance at these tax records until the mid-nineteenth century reveal a lively coastal traffic. OA. D. BŞM. ZCR. d. 20321 (AH. 08-06-1225 / 03-07-1810), 20340 (AH. 1228 / 1813), MAD. d. 5745 (AH. 20-10-1234 / 12-08-1819), 2571 (AH. 03-04-1238 / 18-12-1822), ZCR. d. 20428 (AH. 26-10-1241 / 03-06-1826), 20476 (AH. 30-11-1246 / 12-05-1831), 20500 (AH. 13-11-1248 / 03-04-1833), ML. VRD. d. 1247 (AH. 1261 / 1845).

⁴⁰³ Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 1:76.

⁴⁰⁴ OA. C. BLD. 36 / 1784 (AH. 15-11-1249 / 26-03-1834).

city by 1839.⁴⁰⁵ By 1845, the tax surveys recorded fourteen wine shop owners, ten Orthodox Christians, three Jews, and an Armenian. In comparison, Gemlik, the port town, had ten and Mudanya seventeen (all Orthodox Christians).⁴⁰⁶ European residents opened vineries in the city and countryside and sold wine. One of them was Emanuel Falkeisen, who established the first silk factory in Bursa and owned a white wine factory called *Vin d'Olympe*.⁴⁰⁷

The tithe on vineyards was collected in cash, and its amount was determined by local councils based on the current market value. Grapes could be taxed in the marketplace or during harvest season per weight. More commonly, in the Bursa region, vineyards were taxed per *dönüm*, assuming they had similar vine density and fruit yield on the subdistrict level. The tithe on grapes was generally farmed with that of the grains. The tax rate was revised every two or three years. This assumptive method caused frequent disturbances among the locals. Moreover, due to the delicate nature of vineyard cultivation, sometimes the late arrival of tax collectors could spoil the grapes.⁴⁰⁸ In addition to the tithe, a spirits tax of 25 percent was imposed on the spirits when made, besides the duty on consumption of 12 percent.⁴⁰⁹

Occasionally, heavy or lack of rain, harsh winters, and several local diseases (e.g., *silkme*, *sarılık*, *felç*, *siğil*, *külleme*) destroyed grapes.⁴¹⁰ But a great disease brought an unprecedented challenge in the mid-nineteenth century. The oidium, also known as powdery mildew, became general and very disastrous in the vicinity of Paris (hence the nickname “Great French blight”) and then the whole of southern Europe from 1851 onwards.⁴¹¹ It ravaged the vineyards of the Bursa region as early as 1852, when the disease had naturalized itself in the Empire.⁴¹² Grape yields decreased considerably, and their quality diminished. Reporting from Iznik in 1862, Perrot wrote that “[a]s for the disease of the vine, it has not

⁴⁰⁵ Schneider, *Letters from Broosa*, 48.

⁴⁰⁶ Raif Kaplanoğlu, *1844 Yılı Temettuat Defterlerine Göre Değişim Sürecinde Bursa'nın Ekonomik ve Sosyal Yapısı* (Bursa: Nilüfer Akkılıç Kütüphanesi Yayınları, 2011), 185–222, in passim; İklil Oya Selçuk, “Ondokuzuncu Yüzyılın Ortasında Mudanya'nın İktisadi Durumu,” *Bursa'da Yaşam*, June 2013, 136–41; Raif Kaplanoğlu and Yusuf Oğuzoğlu, *Asri Gemlik* (Bursa: Gemlik Belediyesi Yayınları, 2011), 116.

⁴⁰⁷ MacFarlane, *Turkey and Its Destiny*, 1850, 2:376; Kuster Vettiger, “Ein Basler im Bursa,” 83.

⁴⁰⁸ Mehmet Karakaş, “Tanzimat Dönemi Aşar Vergisi” (PhD Thesis, İstanbul, Marmara Üniversitesi, 2003), 66–68.

⁴⁰⁹ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 104.

⁴¹⁰ For a detailed overview of vine diseases in the hinterland of İzmir, see Özgün, “İzmir ve Artalanında,” 343–53.

⁴¹¹ United States Bureau of Manufactures, *Monthly Consular and Trade Reports* (Washington, DC: U.S. Government Printing Office, 1888), 287.

⁴¹² BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 184.

yet disappeared from these regions. Everything therefore does not bode well for sad inhabitants of these countrysides once so fertile. This is only an increase in misery and poverty, only one more step in decadence.”⁴¹³

The oidium’s intensity, which “rendered the culture of the vine hardly worthwhile,”⁴¹⁴ successfully abated after 1865 after the sprinkling of the vintages with sulfur.⁴¹⁵ In the meantime, grapes’ failures made the people increasingly resort to colonial sugar from the Americas as a substitute, whose imports multiplied severalfold.⁴¹⁶ Sugar (carried mainly by ships under English, French, and Dutch flags, while Egyptian and Russian sugar was also imported) remained one of Bursa’s most noteworthy imports during the nineteenth century, after British cotton goods and coffee from West Indies. John Zohrab, an entrepreneur of a prominent Armenian family (his brother James Zohrab was a *sarraf* and the British vice-consul of Mostar), started cultivating sugarcane (the most water-intensive crop) and erected a sugar processing mill in 1862 to profit in this environment.⁴¹⁷

2.3.4.2. Olives

Almost all olives were grown on the hills and coastal zone around the Marmara Sea and Lake Iznik, save a negligible olive presence in the central plain. They were usually used as black olives for common food. By an estimate, ten to twelve well-grown trees sufficed the subsistence needs of a household.⁴¹⁸ One Ottoman *dönüm* of traditionally rain-fed olive orchard included ten to thirty trees.⁴¹⁹ In a good season, a well-looked-after tree yielded between 50 and 100 *kıyye* (64-128 kg) of olives, with yields changing from one village to

⁴¹³ Perrot, *Souvenirs d’un voyage en Asie Mineure*, 52. My translation.

⁴¹⁴ BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office*, 1863, 453.

⁴¹⁵ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office from H.M. Consuls*, 1865, 790.

⁴¹⁶ BPP, CP, No. 2285, XXXVIII (38), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls, 1856-57*, 1857, 180.

⁴¹⁷ OA. İ. MVL. 463 / 20904 (25-09-1278 / 11-03-1862).

⁴¹⁸ Laiou, “The Agrarian Economy,” 321.

⁴¹⁹ Data from low-density rainfed Mediterranean olive grove data show similar results. Álvaro López-Bernal et al., “OliveCan: A Process-Based Model of Development, Growth and Yield of Olive Orchards,” *Frontiers in Plant Science* 9 (2018), <https://www.frontiersin.org/article/10.3389/fpls.2018.00632>; Laura L. de Sosa et al., “Agro-Industrial and Urban Compost as an Alternative of Inorganic Fertilizers in Traditional Rainfed Olive Grove under Mediterranean Conditions,” *Agronomy* 11, no. 6 (2021): 1223, <https://doi.org/10.3390/agronomy11061223>; Olive groves were usually recorded by land size in the tax surveys. However, Pazarköy subdistrict, whose olive production was not different than its neighbors to the east and west, had an average of 10,43 trees per household, and the village with the most trees (Karsak-ı Müslim) had 28. Dilek Akkaya, “Temettu Defterlerine Göre Pazarköy Kazâsının Sosyo-Ekonomik Durumu (H. 1260-1261/M. 1844-1845)” (MA Thesis, Niğde, Niğde Üniversitesi, 2004), 42.

another.⁴²⁰ Due to the region's climate, they were preserved, consumed, and sold as salted, and, for our study period, less suitable for oil extraction.⁴²¹ Olives were salted in the salt pans (*tuzla*, *memleha*) formed by retaining seawater in wide pockets along the seacoast in Mudanya and Gemlik. They then were stored in depots to wait for domestic use (to prepare and preserve food and as fodder to be fed to horses) throughout the region and exportation when appropriate.⁴²² Moreover, small quantities of olive varieties from Izmir and Edremid found their place in the Bursa market next to the domestic kind of olives.⁴²³

Black olives were exported chiefly to Istanbul and the Danubian and Russian ports (mainly Odessa where a substantial Greek community resided) and ports along the Marmara⁴²⁴, and a small portion was carried to different parts of the Empire as far as Alexandria.⁴²⁵ A British commercial report from 1841 shows that the traffic in olives was fairly extensive in Gemlik: A total of 160 warehouses stored a capacity of around 3000 tons. A daily wage of five to ten *guruş* (one to two shillings) was paid to migrant laborers from nearby villages and abroad to pick olives.⁴²⁶ The total salted black olive produced on the northern coasts of the region in 1858 amounted to between 15.400 and 18.100 metric tons.⁴²⁷ In 1862, salted olive exports from the Gemlik port were as follows: 75 tons to Russia (£1000), 865 tons to the Danube (£11.200), and 656 tons to Istanbul (£8800).⁴²⁸ This picture is incomplete without the port of Karamürsel, where Iznik exported its premium olive products

⁴²⁰ Launay and Bonkowski Bey, *Bursa ve Civarı*, 98.

⁴²¹ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 19.

⁴²² Admiralty Hydrography Department, *Sailing Directions*, 62. The inhabitants of a large salt-pan farm (Tuzla Çiftliği) in Gemlik were recorded in the population registers. OA. NFS. d. 1410, 1411. MacFarlane saw not one but nine saltpans in Gemlik, all of a row and close together, hence increasing the likelihood of malaria, given the swamps between them and the town of Gemlik. MacFarlane, *Turkey and Its Destiny*, 1850, 2:82; Most of the salt pans were state property in the Ottoman Empire. That said, small pans were sometimes privately owned. Cafer Çiftçi, *Bursa'da Vakıfların Sosyo-Ekonomik İşlevleri* (İstanbul: Gaye Kitabevi, 2004), 109.

⁴²³ Suraiya Faroqhi, "Erken Modern Osmanlı İmparatorluğu'nda Zeytin ve Zeytinyağı Tüketimi" (İzmir: İzmir Akdeniz Akademisi, 2018), 108.

⁴²⁴ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 472. For an account of the volume and destinations of and actors involved in this trade in the early nineteenth century, see Çiftçi, *Osmanlı Döneminde Mudanya*, 74.

⁴²⁵ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 105. See also same commentary being made by a Bulgarian in 1899, Mevsim, *Bulgar Gözüyle Bursa*, 71.

⁴²⁶ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 105.

⁴²⁷ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 472.

⁴²⁸ BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office from H.M. Consuls, July 1862-63, 1863*, 453.

to Istanbul and other ports along the Gulf of Gemlik.⁴²⁹ But suffice it to say that there was no reported significant demand-based increase in yield.

Annual variations in climate heavily affected the yield of olive trees and the accumulation of oil, making it almost like a lottery in terms of total production. The olive crop became almost nil after one of great abundance.⁴³⁰ As a result, in stark contrast with 1858, total produce dropped to around 6200 tons in 1861, 3000 in 1862⁴³¹, and rose to 9000 tons (Mudanya contributed with 5000 and Gemlik 3500) in 1863.⁴³² In addition, because beating the olive tree with a long pole was the collection method, it must have impacted the yield in normal seasons because branches were damaged.

Oil was made from damaged olives extracted in public mills (*yağhane*), where they were also heavily taxed, which might have discouraged the populace from participating in this trade.⁴³³ Six kilograms of oil were made from fifty kilograms of olives.⁴³⁴ Good oil was scarce, and the price of olive oil was low, though one observer deemed its quality as "unfit for general family use."⁴³⁵ The portion of the crop used in oil extraction depended on the market. If the market for the fruit was good, the bulk of the commercial crop was prepared for table use; in times of depression, a more significant part went into oil production.⁴³⁶ We must remember that a variety of animal fats (e.g., bone marrow fat, tallow fat, and butter) for those who could get them, and especially vegetable oils (e.g., linseed oil, walnut oil, and notably sesame oil) were also used for cooking and illumination, meaning olive oil

⁴²⁹ Arıkan, "A History," 6.

⁴³⁰ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 184.

⁴³¹ BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office*, 1863, 455.

⁴³² BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 429, 431.

⁴³³ MacFarlane, *Turkey and Its Destiny*, 1850, 1:226.

⁴³⁴ Launay and Bonkowski Bey, *Bursa ve Civarı*, 98; Suraiya Faroqhi points to that the sixteenth century market inspection register of 1502, where different types of animal fats the candle and soap makers were using were recorded to the finest detail, did not include any reference to olive oil. Faroqhi, "Erken Modern Osmanlı İmparatorluğu'nda Zeytin," 108.

⁴³⁵ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790.

⁴³⁶ Stotz, "The Bursa Region," 93.

production was affected by the frequency of use of alternative oil and fat sources.⁴³⁷ Keeping these remarks in mind, in 1862, 52,5 tons of olive oil was exported to Istanbul (£2300).⁴³⁸

Presumably, due to the bad quality and relatively small quantity of olive oil, an authentic soap industry did not flourish. In other realms dependent on oil, we know emulsified olive oil was used in textile dyeing, a rapidly decaying industrial activity.⁴³⁹ But, it quickly seeped into a reviving sector: Some unremarkable quantities of oil were purchased by temporary yet frequent Orthodox Christian residents in Gemlik and Mudanya and exported to Istanbul and Danubian ports.⁴⁴⁰ As the buyers were coming from Bulgarian regions with *aba* industries, the oil must have been bought as an ingredient in wool manufacturing.

Olive oil was commercialized mainly in the last quarter of the nineteenth century when native and foreign owners established mills that furnished oil with superior quality.⁴⁴¹ Until then, oil and soap were imported mainly from Crete, Mytilene, and the other Aegean regions (e.g., Edremid) and islands⁴⁴², regions already supplying Marseilles's soap industries for over a century.⁴⁴³ They were carried overland from Izmir port, and transport fees increased their price by up to 20 percent in the Bursa market, though the arrival of steamships brought soap to the Gemlik and Mudanya ports from the mid-nineteenth century on.⁴⁴⁴

⁴³⁷ On the rise of olive oil in Ottoman everyday use and its transformative impact on agricultural land use in western Anatolia and thorough surveys on the prevalence of alternative fat and oil consumption, see Fikret Yılmaz, "16. Yüzyılda Tarımsal Yapılarda Değişim, Akdeniz Mutfağı ve Yağ Kullanımı," *Tarih ve Toplum - Yeni Yaklaşımlar*, no. 10 (Spring 2010): 23–42; Fevzican Abacıoğlu, "Oils, Fats, and the Rise of Margarine in Turkey: A Historical Perspective" (MA Thesis, Istanbul, İstanbul Bilgi University, 2020).

⁴³⁸ BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office from H.M. Consuls, July 1862-63, 1863*, 453.

⁴³⁹ Yusuf Oğuzoğlu, "Bursa Sanayiinde Uygulanan İpek Dokuma Teknolojileri," *Bursa'da Yaşam*, December 2013, 76.

⁴⁴⁰ Edmond Dutemple, *En Turquie d'Asie*, 270; Çiftçi, *Osmanlı Döneminde Mudanya*, 306. Also refer to Gemlik's port clearance data for imports and exports from March 1842, OA. C. ML. 583 / 23967 (AH. 29-02-1258 / 14-03-1842).

⁴⁴¹ Elif Acar Bilgin and Özlem Köprülü Bağbancı, "19. yüzyıl Endüstri Mirası Örneği Olarak Tiryile'de Bir Zeytinyağı Fabrikası," *TÜBA-KED*, no. 13 (2016): 149.

⁴⁴² BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 429-430. There was no soap producer recorded in the entire region. Ethnoreligious connections seem to have made Orthodox Christian merchants a monopoly in valuable trade of soap. See the detailed inheritance inventory of a soap merchant resident of Bursa who died in 1839. OA. MŞH. ŞSC. d. 3015 (B / 356), p. 9.

⁴⁴³ Suraiya Faroqhi, "Introduction," in *The Cambridge History of Turkey: The Later Ottoman Empire, 1603-1839*, ed. Suraiya Faroqhi, vol. 3 (New York: Cambridge University Press, 2006), 4.

⁴⁴⁴ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 359, 367.

Olive trees had multiple side benefits. The seeds and olive mill pomace were used as fertilizers, the leaves were fed to cattle, sheep, and goats, and the wood was used as timber – all serving the localities nearby.⁴⁴⁵

Olives were weighed in mills or warehouses, weighed by estimate if in salt containers, and taxed in kind. In addition to the tithe, 12 percent of customs duty was levied at the place of consumption, which made this burden exorbitant.⁴⁴⁶ Due to complaints and fluctuations in yield, the olive tithe was farmed biennially after 1860.⁴⁴⁷

2.3.4.3. *Mulberry Trees, Cocoon Rearing, and Cotton*

The rearing of mulberry silkworms, which proliferated thanks to growing raw silk production in the region, gave high impulse to planting almost exclusively wild white mulberry trees with whose leaves silkworms were fed and with whose fruit the people. In contrast with the European practice of collecting leaves in the field, branches of the trees were cut off with the leaves attached.⁴⁴⁸ Cutting the branches instead of picking the leaves was a time- and labor-saving process. Fresh shoots coming in the season had new leaves in the following spring or summer. It also prevented the trees from growing taller, nullifying the need for a ladder but also causing the trees not to yield large leaves. Most mulberry trees were closely packed, leaving little room for other items in the soil.⁴⁴⁹ The mulberries were short-lived in the dry seasons; even in that case, replanting them was needed only every twenty years.⁴⁵⁰

The branches were placed on the floor to form a bed about eight to ten centimeters thick. Upon these, the worms were laid to reach the leaves naturally. The worms were separated into other beds as they grew in size, and this practice persisted until they refused nourishment and began to spin their cocoons.⁴⁵¹ For this purpose, dwarf oak branches were used for the worms to climb and finish their process. All crevices of the apartments were carefully stopped to prevent the admission of air. A fire of charcoal ashes was constantly

⁴⁴⁵ Özgün, “İzmir ve Artalanında,” 299–300.

⁴⁴⁶ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 104.

⁴⁴⁷ Karakaş, “Tanzimat Dönemi Aşar,” 64–66.

⁴⁴⁸ Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 1:83.

⁴⁴⁹ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 182.

⁴⁵⁰ BPP, CP, No. C.734 & C.826, LXVIII (68), *Reports of H.M. Secretaries of Embassy and Legation respecting Factories*, 1873, 189.

⁴⁵¹ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls, 1859 and 1860*, 1862, 182.

maintained throughout the day and night to keep up optimum temperature conditions and prevent the silkworms from heading downward.⁴⁵²

An ounce (about 28 grams) of silkworm eggs consumed 750 to 900 kilograms of leaves before spinning a cocoon. One *dirhem* (anglicized as *dram*), or 637 grams, of larvae laid, in excellent conditions, five kilograms of cocoons.⁴⁵³ In this process, a silkworm grew seventy times in size, and approximately 200 kilogram of leaves produced one kilogram of silk.⁴⁵⁴ Around one acre (4047 square meters or about four Ottoman *dönüm*) of mulberry trees could produce 190 kilograms of fresh cocoons⁴⁵⁵, which yielded approximately 10,4 kilograms (about two *okes* or *kıyye*) of thread.⁴⁵⁶ Fresh cocoons were produced in far greater quantities than dry ones because filatures preferred the former over the latter.⁴⁵⁷ Filatures and some farmers dried cocoons after boiling to hold them for better prices to be generated from their exportation (usually to France) and a general method of saving themselves during the market failures in the 1860s.⁴⁵⁸

Silkworms started to be cultivated in early May when the weather was warmer. Going through several phases, it lasted about forty days for the fully grown cocoons to emerge, which coincided with wheat, barley, and oat harvest time (mid-June).⁴⁵⁹ Then they were sorted and valued based on their freshness, color, size, shape, and texture and sent to the inns of Bursa, particularly to the covered bazaar (*bedesten*), and the Silk (*Harir / İpek*) and Cocoon (*Koza*) inns. The cocoon tax was taken in kind or cash when they were brought to the designated marketplaces.⁴⁶⁰ Mulberry trees were not taxed to prevent double taxation because they were considered a means of production.

⁴⁵² Pardoe, *The City of the Sultan*, II:256–57.

⁴⁵³ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 183.

⁴⁵⁴ Doumani, *Family Life in the Ottoman Mediterranean*, 247.

⁴⁵⁵ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 184.

⁴⁵⁶ In 1870, it was calculated that 14,25 kıyye (18,24 kg) of wet cocoons produced 1 kıyye (1.28 kg) of raw silk. Çakıcı, “Osmanlı Sanayileşme Çabalarında,” 86.

⁴⁵⁷ For instance, in 1878, when Bursa cocoons were healed from the disease, total yield of the region’s fresh cocoons amounted to 237.018 oke while dry cocoons to 39.169 oke. Vasileios I. Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, ed. Selahattin O. Tansel, trans. Dimitri Demirci and İbrahim Kelağa Ahmet (İstanbul: Gaye Kitabevi, 2008), 129.

⁴⁵⁸ BPP, CP, No. 2435, LV (55), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls, 1855-57, 1857-1858*, 215.

⁴⁵⁹ İsmail Yaşayanlar, “Sözlü Tarih Verileri Işığında Bursa ve Çevresinde Koza Üretimi,” *Bursa’da Yaşam*, December 2013, 131.

⁴⁶⁰ Karakaş, “Tanzimat Dönemi Aşar,” 73.

Sericulture had all household members involved in the process along gendered lines. Whereas males took care of the trees and cut the branches, females reared and fed the silkworms and cleaned the cocoons. Children helped in all stages.⁴⁶¹ Raising cocoons had stamped a significant cultural impact on the inhabitants. Requiring skillful nurturing and manipulation of silkworms that were extremely sensitive to environmental fluctuations, the fragile nature of the business was accompanied by many superstitions and folksongs.⁴⁶² Here, the situation of Bursa cultivators was the same as their counterparts in Shimotsuke Plain in Japan, where the "Japanese coevolved with their creative silkworm partners," which had "a biological ingenuity": The "[h]umans needed to exercise some cultural creativity to turn this process to their own ends, but a far more fundamental creativity lay within the silkworms themselves."⁴⁶³

Coexistence with the worms was truly an essential part of producing the thread. Feeding cocoons required a particular section of a household to be reserved for this operation. During the heyday of the mechanized silk operations in Bursa, almost all inhabitants' houses, "even to their parlors, were filled with worms, feeding on the mulberry leaf."⁴⁶⁴ Staying at the house of a wealthy Orthodox Christian at Mihaliç, William Hamilton wrote on the conditions of production at home:

[The household head] had several handsome children, whose occupation was feeding silkworms, for which purpose a large room was fitted up with two tables suspended from the ceiling; on each of these were four or six square piles of mulberry-branches covered with worms. They are fed three times a-day, that is to say, their food is renewed three times by placing fresh-cut branches with their leaves still on over the old ones, which are never removed, but remain as a kind of bed until the worms are full grown. With the true vagueness of all Orientals, they would not venture to make even a guess as to the quantity of silk their stock of worms might produce. "*Allah bilir*," or God knows ; "perhaps five okes [6,5 kg], perhaps twenty [25,6 kg]," was the only answer I could obtain.⁴⁶⁵

As can be understood from this quote, silkworm-rearing operations' highly labor-intensive, space-requiring, and short-term nature prevented the formation of large mulberry plantations. Most owners tended to keep about one or two *dönüm* of trees in addition to their activities.

⁴⁶¹ Yaşayanlar, "Sözlü Tarih," 129.

⁴⁶² Dilek Altun, "İpekböcekçiliğinin Sosyal Yaşama Etkisi," *Bursa 'da Yaşam*, December 2013, 118–26.

⁴⁶³ Timothy J. LeCain, *The Matter of History: How Things Create the Past* (New York: Cambridge University Press, 2017), 228.

⁴⁶⁴ Schneider, *Letters from Broosa*, 50.

⁴⁶⁵ William John Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, vol. 2 (London: Murray, 1842), 94.

Quality-based payment brought certain areas in the region more oriented towards raising mulberries than others. The cocoons of the northwestern part, Bursa plain, Gemlik, Mudanya, and Mihaliç, had the highest demand.⁴⁶⁶ The highest prices were paid to the fresh cocoons of the best class, usually grown near the city in the plain, known as the Demirdesh (Demirtaş) and Filedar kind (named after the respective villages), which led to vast tracts of mulberries of 5-15 *dönüm* in those localities, thanks primarily to the investment of notables and moneylenders.⁴⁶⁷

The mid-nineteenth-century sericulture offered most households a tremendous opportunity to generate cash quickly, but not to the point of making this trade very profitable. For example, in 1844, cocoons fed on one *dönüm* of mulberry trees generated between 105⁴⁶⁸ and 220 *guruş*⁴⁶⁹ in the Bursa plain, meaning 50 to 110 per *oke* (if we omit the unusually high prices of 300 to 600 *guruş* paid for the Filedar / Philladar kind).⁴⁷⁰ Incited by rising demands and inflation, and assuming they were mostly in the fresh state, these rates reached 120 to 180 per *oke* at the beginning of the Crimean War⁴⁷¹ and 80 to 140 in 1857, just before the adverse season began. The filatures profited highly, nevertheless. Whereas the dry cocoons produced in them were sold to European buyers at two to three times, and the silk reeled in them four to five times the cost of fresh cocoons bought from the people.⁴⁷²

The unfortunate pebrine disease that weakened or sterilized the silkworms first appeared in France 1840s, spread to Italy in the 1850s, and peaked in Europe in the 1860s. It drastically reduced the number of cocoons from 26 to 8 million between 1853 and 1856 to a mere 4 million in 1865 in France.⁴⁷³ European manufacturers immediately turned to Bursa for cocoon and silk supplies, which peaked in the early 1850s. When the disease reached Anatolia in 1857, the Bursa silk industry entered a phase of contraction. As measured by weight, an 80% decline in cocoon production was observed in the region between the early

⁴⁶⁶ Çakıcı, "Osmanlı Sanayileşme Çabalarında," 70.

⁴⁶⁷ OA. ML. VRD. TMT. d. 7463; 7568 (AH. 1261 / 1845).

⁴⁶⁸ Çiftçi, *Bursa'da İpekçilik*, 175, 179.

⁴⁶⁹ OA. ML. VRD. TMT. d. 7568 (AH. 1261 / 1845).

⁴⁷⁰ OA. ML. VRD. TMT. d. 7463 (AH. 1261 / 1845).

⁴⁷¹ Çakıcı, "Osmanlı Sanayileşme Çabalarında," 70.

⁴⁷² BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 465.

⁴⁷³ Shinya Sugiyama, *Japan's Industrialization in the World Economy: 1859-1899: Export, Trade and Overseas Competition* (London: Bloomsbury Academic, 2012), 92.

1860s to 1880s.⁴⁷⁴ The average price of fresh cocoons fell drastically, below 46 *guruş* in 1860⁴⁷⁵ and between 25-40 *guruş* in 1865 (whereas dry cocoons produced by the filatures were sold at 90 to 110 in this year).⁴⁷⁶

Despite the state's encouragement of growing mulberry trees by not taxing them for a few years and rewarding those growing them in large fields⁴⁷⁷, this decline in total cocoon yield gradually culminated in the replacement of many mulberry gardens by grain fields and turned commons used for mulberry plantations into grazeland.⁴⁷⁸

Besides imported fresh cocoons, thanks to the great impulse given by Ahmed Vefik Efendi, attention was swiftly turned towards cultivating cotton, whose price was continually high during the American Civil War, to ameliorate the losses in the silk business and reduce dependency on foreign cotton. For centuries, the raw cotton needed by Bursa cotton manufacturers was brought in from the Manisa region (east of Izmir), globally well-reputed for this crop.⁴⁷⁹ That said, cotton was no stranger to the Bursa region. It was grown in the northeastern section, particularly in the Yenişehir plain, marketed in the city, and even woven into sailcloth for the imperial arsenal until the 1840s.⁴⁸⁰ Due to geographical reasons (Izmir and its hinterland marketed their cotton much more easily) and its inferior quality to the Izmir-Manisa crop, the cotton of Bursa was not cultivated on a larger scale. Rapidly increasing imports of British cotton goods greatly diminished this trade so that by the 1840s, the women of Bursa “widely recognized the ‘waste of time spent in spinning cotton of native growth.’”⁴⁸¹

⁴⁷⁴ Quataert, “The Silk Industry of Bursa, 1880-1914,” 286.

⁴⁷⁵ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 183.

⁴⁷⁶ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 789-790.

⁴⁷⁷ OA. A.} MKT. UM. 482 / 55 (1277 / 1860-1861); A.} MKT. MHM. 214 / 21 (24-09-1277 / 01-04-1861); A.} MKT. MVL. 144 / 82 (20-10-1278 / 20-04-1862); A.} MKT. MHM. 335 / 9 (20-01-1282 / 15-06-1865).

⁴⁷⁸ Küçükceran, “Agriculture,” 28.

⁴⁷⁹ Suraiya Faroqhi, “Ottoman Cotton Textiles : The Story of a Success That Did Not Last, 1500 - 1800,” in *The Spinning World : A Global History of Cotton Textiles, 1200 - 1850*, by Giorgio Riello and Prasanna Parthasarati (Oxford: Oxford University Press, 2009), 96.

⁴⁸⁰ OA. C. ML. 511 / 20845 (05-03-1240 / 28-10-1824); A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), and the tax surveys of Yenişehir from 1845. For the sailcloth argument, see Suraiya Faroqhi, *Towns and Townsmen of Ottoman Anatolia: Trade, Crafts, and Food Production in an Urban Setting, 1520-1650* (Cambridge: Cambridge University Press, 1984), 127.

⁴⁸¹ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 114.

Coming back to the cotton varieties planted in Bursa, in the 1860s, after failed experiments with indigenous (Balıkesir origin) and Egyptian seeds, the New Orleans seed provided by the Manchester Association yielded the largest crop of excellent quality.⁴⁸² Commercial cotton production started in Bursa, Mihaliç, and Kirmasti plains, and Kütahya and Karahisar districts in the south.⁴⁸³ The product was exhibited in the 1863 Ottoman General Exposition, and its quality was found to be excellent.⁴⁸⁴ Following an adverse season in 1864 owing to a cold May and inundations in June⁴⁸⁵, 1865 was a peak season, requiring many seasonal male workers to pick cotton and females as weeders in return for fair wages.⁴⁸⁶ Changes in the international political and economic scene declared the end of the hopes for a revival of this crop. As cotton required continuous and controllable labor, Egypt's rise as a major cotton exporter during and after the American Civil War seriously diminished the region's large-scale cotton export and investment prospects.⁴⁸⁷

2.3.4.4. *Other Fruits, Vegetables, and Industrial Crops*

Having every adaptation of soil for bulbous and succulent vegetables, fruits, and esteemed kernel fruits, the Bursa region was home to extensive horticulture for mainly self-sustenance and surplus. Villages, especially in the vicinity of urban areas, had been cultivating commercialized crops such as pears, peaches, cherries, berries, plums, apples, almonds, and walnuts (the last two were extremely water-intensive crops, and walnut husks were also used as dyestuff). Black figs, which were grown naturally in the coastal and central parts of the region and are one of the trademark export tree crops today, were not cultivated extensively until their commercialization in the late nineteenth century, connected to the arrival of railroads, the introduction of new packing methods, and the appreciation of figs in world markets.⁴⁸⁸ Aside from products such as fruit leather, pickle, and marmalade, fruits like mulberries, pears, apples, and pomegranates were alternative ingredients in making molasses.

⁴⁸² BPP, CP, No. 3498, LVII (57), *Commercial Reports received at Foreign Office from H.M. Consuls, 1865*, 1865, 14-16.

⁴⁸³ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office, 1865*, 780.

⁴⁸⁴ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 210–11.

⁴⁸⁵ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office, 1865*, 780.

⁴⁸⁶ BPP, CP, No. 3498, LVII (57), *Commercial Reports received at Foreign Office, 1865*, 14-16.

⁴⁸⁷ Edmond Dutemple, *En Turquie d'Asie*, 271.

⁴⁸⁸ By the early twentieth century, figs became one of the most important fruits cultivated in the region. Salname-i Vilayet-i Hüdavendigâr (the Yearbook of the Hüdavendigâr Province), AH. 1325 / 1906, p. 315. As of yet, there is no available work on the development of fig cultivation in Bursa. I drew my conclusions based on İnal, "Fruits of Empire."

Vegetable (*sebze*, *göğeri*) gardens appeared everywhere, usually as *bostan* and sometimes as *harim tarla* (when mixed with fruits) in the records without specifying their crops. They included various fresh ones and dried pulses – pepper, eggplants, tomatoes, maize, lettuce, legumes, okra, onion, artichoke, leek, carrot, turnip, celery, zucchini, cauliflower, and the like. Vegetables eased self-sufficiency, and dried varieties kept the people going during winters. The surplus was destined for mainly town and city bazaars and, if demanded and founded profitable, other regions and Istanbul.⁴⁸⁹ Because vegetables thrive on fertilizers, we may guess their yields were low since manuring was not widely and regularly practiced. Their size and popularity in the market, along with those of some fruits, are very different from our current consumption patterns.⁴⁹⁰

Plots alongside rivers and streams were occasionally reserved for market garden crops such as garlic, onion, tobacco, and broad beans. They were sown in early spring, before the grain sowing season, when the waters ebbed and left a fertile ground. In case of inundations, the riverside plots spared for market crops were exchanged with grains. Because the *çiftlik*s flourished near water sources, the labor organization for these crops on large estates required sharecropping. If their plots were inundated, the landowner would profit even more since the sharecroppers would be in debt and bound to the land.⁴⁹¹

The dry-farming zones in the more mountainous and rugged south had long enjoyed beans, zucchini, maize (sweet and flour), and winter squash that varied their starch- and meat-based diets. Dry cereal cultivation was also regularly done in areas bordering extensive tree plantations such as olive groves.

Garden produce was first and foremost reserved for household consumption. The surplus of fresh varieties was carried to the nearest markets or sold to the grocers. But, the bulk of fruit and vegetables for trade was preserved by drying.⁴⁹² In terms of marketability, the export of these high-quality products to Istanbul and other districts and even subdistricts

⁴⁸⁹ Çiftçi, “Osmanlı Döneminde İstanbul’un İaşesinde Bursa’nın Rolü,” 164–65.

⁴⁹⁰ For a short overview of how our taste evolved since early modern times, with reference to some of the vegetables and fruits mentioned here, see Arif Bilgin, “From Artichoke to Corn: New Fruits and Vegetables in the Istanbul Market (Seventeenth to Nineteenth Centuries),” in *Living the Good Life: Consumption in the Qing and Ottoman Empires of the Eighteenth Century*, ed. Elif Akçetin and Suraiya Faroqhi (Leiden: Brill, 2018), 257–82.

⁴⁹¹ Küçükceran, “Agriculture,” 91.

⁴⁹² Işın, “Ottoman Fruit,” 51.

had been minimal due to poor overland transport infrastructure.⁴⁹³ In an exceptional case, large quantities of fresh melons and vegetables grown on the eastern border of Lake Apolyond and in the Mihaliç plain were sent to Istanbul via the Rhyndacus River.⁴⁹⁴ Generally, though, improper picking and cultivation methods and a variety of post-harvest losses ranging from growing conditions to handling by intermediaries must have caused much damage to most vegetables and fruits.

Rice, wet or dry (rainfed), was an inseparable part of the region's diet and a significant cash crop popularized by the arrival of the Ottomans in the fourteenth century.⁴⁹⁵ Especially the swamps of the Bursa plain and Lake Apolyond were abundant. It was of the short-grain (round) type, consumed within the region, and rarely exported due to competition from Egyptian and central Mediterranean rice.⁴⁹⁶ Wet rice fields also fed mosquitoes, though. An imperial decree prohibited rice cultivation in the vicinity of Bursa in 1842 due to the insalubrious environment conducive to malaria, mainly triggered by the expansion of marshlands and floods in the preceding decade.⁴⁹⁷ This situation continued until 1878, when rice fields were permitted on lands two hours from the city center.⁴⁹⁸ Therefore, it is not surprising that after the much-appreciated colonial goods trio of cotton, coffee, and sugar, rice from Genoa ranked as the fourth most imported foreign goods in 1863.⁴⁹⁹ Most probably, Plovdiv and Egypt greatly supplied the region in the interim. Rice cultivation, as in tobacco, saw a surge after the relaxation of prohibitions and the migration of diverse and large groups of refugees to the Bursa region in the 1880s.⁵⁰⁰

⁴⁹³ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 430.

⁴⁹⁴ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 106. In addition, MacFarlane notes that villagers along the coast of Lake Apolyond carried timber and firewood down the lake and through the river to the Sea of Marmara. Although the trade via the Simav River is negligible in the grand scheme of imports, exports, and domestic circulation of goods, this is one exception to the general view that Anatolia had no navigable rivers. MacFarlane, *Turkey and Its Destiny*, 1850, 1:355.

⁴⁹⁵ Gilbert Dagron, "The Urban Economy, Seventh–Twelfth Centuries," in *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, ed. Angeliki E. Laiou, vol. 2 (Washington, DC: Dumbarton Oaks, 2002), 445–46.

⁴⁹⁶ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 154.

⁴⁹⁷ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 106. See also travelers testimony on the cultivators' complaints: Eliza Cheney Abbott Schneider, *Letters from Broosa, Asia Minor* (Chambersburg, Pa.: the Publication Office of the Ger. Ref. church, 1846), 48; MacFarlane, *Turkey and Its Destiny*, 1850, 1:100.

⁴⁹⁸ OA. ŞD. 1537 / 15 (AH. 25-05-1295 / 27-05-1878).

⁴⁹⁹ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 430.

⁵⁰⁰ Küçükceran, "Agriculture," 155.

Besides the region's much-renowned and demanded fruits of peaches and pears (that sometimes reached close to a kilogram per piece and were sent to the capital⁵⁰¹), of particular notice among the fruits that yielded profits were the chestnuts of Vandyke brown grown on grafted trees in the thick forests on the lower declivities of Mount Olympus (including the city), Katırlı and Samanlı Mountains, and hilltop settlements in the plain. The highest yield per tree in a good season was about 5 – 6,5 kilograms (4 – 5 *oke*).⁵⁰² The exportation of this sweet and non-perishable fruit to Istanbul and towns along the Danube, particularly Ruse, was hampered by distance to the ports.⁵⁰³ Since chestnuts were heavy enough and carried only on horses, it was impracticable to transport them in large quantities.⁵⁰⁴ As winter fruits, their transport was also exacerbated by the road network. Thus, whereas the want of supplies increased the price of chestnuts in Istanbul, maybe tenfold, their abundance and easy availability in the Bursa market left little profit to the growers.⁵⁰⁵ Still, they were presumably utilized as fattening food for animals, and sometimes their flour was used to make bread in food shortages, as in World War I.⁵⁰⁶ In general, depending on the region, demand, variety, and perishability, the tithe on fruits and vegetables was demanded in cash or kind.⁵⁰⁷

Tobacco was cultivated throughout the district for subsistence needs and internal markets since the late 1600s.⁵⁰⁸ Farming tobacco required large amounts of hand labor and a long crop cycle of fifteen months from plantation to harvest.⁵⁰⁹ This crop was taxed in cash based on yield quality, with the tithe on tobacco being increased to 20% by 1851.⁵¹⁰ Marketing and preparing domestically-produced and exported tobacco, merchants (including herbalists [*attar*]) and mincers (*duhan kıyıcısı*) were numerous in the city and towns. After the export duties on tobacco were abolished in 1861⁵¹¹, the real impetus for the commercialization came with the arrival of Rumelian migrants, who were highly experienced

⁵⁰¹ Mevsim, *Bulgar Gözüyle Bursa*, 60.

⁵⁰² Ibid., 26; Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, 128.

⁵⁰³ Çiftçi, *Osmanlı Döneminde Mudanya*, 74.

⁵⁰⁴ MacFarlane, *Turkey and Its Destiny*, 1850, 1:225.

⁵⁰⁵ Ibid.

⁵⁰⁶ OA. DH. İ. UM. EK. 23 / 33. (AH. 05-01-1335 / 01-10-1916).

⁵⁰⁷ Karakaş, "Tanzimat Dönemi Aşar," 46.

⁵⁰⁸ Fehmi Yılmaz, "Osmanlı İmparatorluğunda Tütün: Sosyal, Siyasî ve Ekonomik Tahlili (1600-1883)" (PhD Thesis, Istanbul, Marmara University, 2005), 23.

⁵⁰⁹ Turhan Çalay, "Tarih İçinde Bursa Köylerinde Değişim: Çalı Örneği," *Bursa'da Yaşam*, May 2017, 95.

⁵¹⁰ Karakaş, "Tanzimat Dönemi Aşar," 55, 70–74, 95.

⁵¹¹ Yılmaz, "Osmanlı İmparatorluğunda Tütün," 79.

in cultivating this crop, in the 1880s, when the tobacco industry boomed. Bursa's soil made it possible to produce double the yield of the local Rumelian variety (65 to 130 kilograms per *dönüm* as opposed to 30 to 65 kilograms in Rumelia).⁵¹²

Opium, the trademark crop of the Kütahya and Karahisar-ı Sahib regions of the southern Hüdavendigâr province, was one of the Empire's most valuable and thriving export commodities. With the demand shifting from opium for smoking to opium for pharmaceuticals after 1840, these regions' opium, renowned for its high morphine content that had no equal and exported via İzmir port to Britain, the United States, and Europe, skyrocketed. Although there is evidence that this crop was grown in Bursa in 1839⁵¹³ and sporadically in small fields in Yenişehir in 1845⁵¹⁴, the opium culture was progressively introduced in the region's southeastern and eastern borders in the 1860s, perhaps to offset the losses in silk, but it did not reach important levels.⁵¹⁵ Geographic exigencies, labor costs, and the opium's good quality and well-established trade network in the southern districts prevented Bursans from engaging in it. Culturing the poppy and extracting the juice that becomes opium required concentrated and intensive labor during the sowing and harvesting. The crop was also extremely fragile to frosts and rains, necessitating risk aversion by sowing poppy plants in October, December, and February to guarantee the desired result.⁵¹⁶ Like silk, opium cultivation could be a gift and a curse. At the global level, the Opium Wars in the mid-nineteenth century reduced exports for a short period. In the domestic scene, the growing indebtedness of the peasants caused the opium produce of Kütahya and Afyon to be taken by usurers from peasants in payment of interest in the 1860s.⁵¹⁷

Flax and hemp plant (*keten*) and presumably cannabis (*kenevir*) recorded as *keten*, sown broadcast in late March or early April, and harvested with early grains, occasionally accompanied the water-intense crops, especially in the Bursa and Mihaliç plains. But it was

⁵¹² Yusuf Oğuzoğlu, "XX. Yüzyılın Başlarında Bursa Sancağı'ndaki Tarımsal Üretim Artışı," *Bursa'da Yaşam*, May 2017, 23.

⁵¹³ OA. AE. SMHD. II. 3 / 142 (AH. 18-02-1255 / 03-05-1839).

⁵¹⁴ Selin Özcan, "1844-45 (H.1260-61) Tarihli Temettü'ât Defterlerine Göre Bursa İlinin Yenişehir Kazasına Bağlı Çelebi, Kozdere, Burçin, Köprühisar, Çardak Karyelerinin İktisâdî ve İctimai Durumu" (MA Thesis, Kütahya, Dumlupınar Üniversitesi, 2021).

⁵¹⁵ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790.

⁵¹⁶ Poroy, "Expansion of Opium," 195.

⁵¹⁷ OA. MVL. 691 / 55 (AH. 26-08-1281 / 24-01-1865).

never commercialized and became an export crop as in the Black Sea, Izmir's hinterland, and southern Anatolia.⁵¹⁸ Still, their seeds were important for fodder and oil (*beziryağı* – used in cooking, lamps, and rubbed into cattle hides as insect repellent).⁵¹⁹ Their fibers were important for flax/hemp/cannabis yarn (*kınnab*), linen (*kirpas*, the coarse cloth mixed with cotton), twine, rope, and sack makers, though the goods never had a distinct quality to create a separate cloth and rug-weaving industry of its own.

Madder (*kökboya*), the industrial dye crop plentifully grown in the Karesi subdistrict in the west and Manisa region in Izmir's hinterland and exported overseas, was evidently cultivated only in Mihaliç⁵²⁰ but never became a significant export crop (partly due to competition and high labor input in producing it) and lost its importance when the synthetic dyes came after 1870. A significant number of the inhabitants of the southern section of the region worked in the madder fields of Manisa and were by-employed in trading madder root extract (see section 3.3.3.5). Similarly, a fine specimen of indigo (*çivit*) was grown in Iznik in 1845 but did not have a remarkable impact again due to imported dyes and dyed textiles and domestic competition.⁵²¹ The south of the Hüdavendigâr province, particularly in Gediz, had important and high-quality alum mines used to fix dyes.

As mentioned in the section on the forests (2.3.2.2.), private groves (*koru*) of villages in the middle and lower elevations of Mount Olympus, in the Bursa plain (particularly between the mountain and Lake Apolyond) created alternative income sources for hundreds of households. Wood, timber, and charcoal resources of forests were sometimes a curse as much as a gift for those who benefitted from them, since the state, to some extent, enforced their production and transport in exchange for little to no income (more on this in section 2.3.4.6. and 3.3.3.4., especially with reference to Inegöl). Private and rental waqf-owned meadows (*çayır*) and clover fields (*yoncalık*), especially in the plains, made an additional income for wealthy (mostly *çiftlik* owner) households.

⁵¹⁸ For a detailed account on commercialized cultivation of these crops, see Özgün, “İzmir ve Artalanında,” 279–82.

⁵¹⁹ Füsun Ertuğ, “Linseed Oil and Oil Mills in Central Turkey Flax/Linum and Eruca, Important Oil Plants of Anatolia,” *Anatolian Studies* 50 (2000): 176–79.

⁵²⁰ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 19.

⁵²¹ *Ibid.*, p. 2.

2.3.4.5. Grains

Grains were cultivated everywhere but more intensely and on larger areas in the plains than in the littoral sections and at high altitudes (the 250-meter contour line generally marked the upper limit of important agricultural production).⁵²² Also, a general trend suggests that locations farther from subdistrict centers produced more grain than closer locations.⁵²³

Wheat and barley were consistently grown during the Byzantine era, though secondary grain crops, oats, rye, vetch, and millet being the most prominent, were introduced between the seventh and twelfth centuries.⁵²⁴ A glance at the Ottoman tax surveys (*temettuat*, more on them in part 3) for the Bursa region reveals that wheat and barley (mainly as a staple food and then fodder) remained the most popular and remunerative crops. At the same time, they were co-cultivated with oats (primarily as fodder), rye, vetch, maize (*mısır*, *mısır buğdayı*, sometimes *kokoroz*), and millet (*darı* – sometimes recorded as maize – *mısır*). Legumes -lentils, green peas, chickpeas, kidney beans, navy beans, and sesame- formed a central part of the locals' diet. The grains in drier areas were accompanied particularly by them and maize. Widespread cultivation and the relatively fertile ground kept cereal prices in Bursa noticeably lower than in other central, southern, and eastern Anatolian regions.⁵²⁵

The tithe on grains accounted for more than one-third of the revenues collected from Bursa. Given the absolute lack of statistics, we find approximate quantitative information on the grains with total produce of over 5000 *kile* in a report prepared by the Austro-Hungarian consul in Bursa in 1872 (Table 2).⁵²⁶ It should be noted that these figures are roughly accurate. A critical insight from this report is that Bursa considerably lagged behind Balıkesir, Kütahya, and (Afyon) Karahisar subdistricts in the yield of wheat, barley, rye, and vetch production. The replacement of some fields by mulberry trees, dietary diversity through varied food cultivation, and low exportability of Bursa wheat largely impacted this trend. Lastly, sesame, an essential article in the economy for its seed oil and paste (tahini being the main ingredient in the widely consumed halwa), became increasingly demanded in the global

⁵²² Stotz, "The Bursa Region," 91; For the geographical importance of the middle horizontal section of the region for grain production, see Ustaoglu, Kabadayı, and Gerrits, "The Estimation."

⁵²³ Ustaoglu, Kabadayı, and Gerrits, "The Estimation."

⁵²⁴ Lefort, "The Rural Economy, Seventh–Twelfth Centuries," 250.

⁵²⁵ Mustafa Öztürk, "Bursa'da Hububat Fiyatları (1775-1840)," *Tarih İncelemeleri Dergisi* 7, no. 1 (1992): 181–82.

⁵²⁶ Edmond Dutemple, *En Turquie d'Asie*, 239–40.

market (mainly France) for its use in soap and perfume industries and as machine oil. Its production increased in the hinterland of Izmir in the second half of the nineteenth century, but not so much in Bursa, if ever.⁵²⁷

Table 2: Prominent Grains Cultivated in the District of Bursa, 1872

Grain	Total Produce (in Kile) in 1872	In Imperial (Winchester) Bushels
Wheat	2.500.000	2.291.666
Barley	1.000.000	916.666
Rye	20.000	18.333
Vetch	5000	4583
Oat	not included, but presumably close to 5000	< 4583
Sesame	10.000	9166
Beans	10.000	9166
Peas	10.000	9166

Archaic cultivation technology significantly impeded the quality and quantity of grains. Plows were nothing more than a stick shod with a piece of iron contained in a tenpenny nail at the end and merely worked for scratching the soil instead of properly digging it, thereby not cutting up the weed and letting rank vegetation smother the young grain.⁵²⁸ They were pulled by oxen, horses, and mules, though these animals were unavailable to many.⁵²⁹ Spade husbandry was largely not practiced. A two-pronged fork, whose blades were of hardwood, edged with a little iron, worked as a spade to break up clods, although most peasants had hardly any spades to dig with. Some interwoven twigs made up a harrow. Hoes and rakes were not used. Sickles and iron hatchets were of the rudest descriptions. Rollers and scarifiers were unknown. Instead of rollers, uncouth flintstone threshing sledges (*döven*) drawn by animal power did the threshing. Crops such as sesame, rice, beans, and flax were

⁵²⁷ Özgün, “İzmir ve Artalanında,” 276–78.

⁵²⁸ William John Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, vol. 3 (London: Murray, 1842), 171.

⁵²⁹ A pair of oxen could plow 3-4 dönüm of land, whereas horses and mules could plow about 6-7 dönüm. Oxen were the best for rugged and steep terrain as well as maintenance. To keep a horse meant feeding it throughout the year with barley, oat, grass, and hay, while an ox required seven months of feeding with vetch and hay, and abundant pastures would take care of this animal for the rest of the year. Güran, *19. yüzyıl Osmanlı Tarımı*, 86.

threshed by beating the ears on a log. Winnowing meant throwing the grain into the breeze to separate them from the chaff. No manure was known except sheep and cattle excrements (wood ashes were not used, and oilseed cakes were widely unknown).⁵³⁰ In the late seventeenth century, an English observer in the region made some similar remarks to the nineteenth-century accounts:

In their gardens they have several little trenches to convey water, where it may be most necessary for their plants and flowers. They know little or nothing of manuring their grounds: Sometimes they burn their fields and vineyards after harvest and vintage, partly to destroy the vermin, and partly to enrich the soil. They tread out their corn with oxen, drawing a square plank board, about a foot and half or two foot over, studded with flints, and winnow it upon their threshing floors in the open air, the wind blowing away the chaff.⁵³¹

Crop rotation was either unknown or under no established system. In the rich and inundation-prone Bursa plain, after sowing wheat for a year, water-intense crops such as broad beans (which increased productivity of land when rotated with grains) and melons, or, in case of dry seasons, lentils or sesame were planted, the third year oat, rye (these two could be produced on weaker soils), and winter wheat were cultivated, followed by fallow on the fourth. But this had been practiced by the "best" farmers in the rich alluvial soils of the central and western plains. Leaving fields fallow every other year or two was common to avoid over-fatiguing the soil.⁵³² In a general sense, aggregated tax survey records from 1845 show that, under normal conditions, nearly half the cropland was left fallow.⁵³³ It is important to note that fallow lands were not abandoned; they were plowed three or four times, or optimally, even more, to reduce unwanted growth that would rob the land of its nutrients. Fallow was also used as ley, purposefully for grazing.⁵³⁴ Particularly the more livestock-oriented production of the mid-nineteenth century might have enhanced this practice. In the hilly parts

⁵³⁰ All descriptions of technology in this paragraph are from BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 739.

⁵³¹ Thomas Smith, "An Account of the City of Prusa in Bithynia, and a Continuation of the Historical Observations Relating to Constantinople, by the Reverend and Learned Tho. Smith D. D. Fellow of Magd. Coll. Oxon. and of the Royal Society," *Philosophical Transactions (1683-1775)* 14 (1684): 444; Flintstone threshing sledges ceased to be produced in the region in the 1970s. For a fascinating study on the Çakmak (flintstone) village of Harmancık where flint extraction and flint tool making were common ways of earning a living until recent times, see Emek Yılmaz, John Whittaker, and Kathryn Kamp, "Çakmak Köyü Yontma Taş Ustalarının Bugünü," *Bursa'da Yaşam*, May 2017, 60–72.

⁵³² MacFarlane, *Turkey and Its Destiny*, 1850, 1:223.

⁵³³ See section 2.3.6. for references to the surveys.

⁵³⁴ Küçükceran, "Agriculture," 110, Note 320.

of the region, grains (mostly wheat and barley, both winter and summer) were alternated with fallow⁵³⁵ or oat and rye in the case of crop deficiencies.

Structural concerns were as much on the forefront as soil-related causes when it came to fallow. Vice-consul Maling points to that, as a general practice, the land was left fallow for one or more years if overtaxed, and later tilled exactly as before.⁵³⁶ Another explanation for why the land was not over-tilled is that fruits, legumes, and vegetables greatly supplemented the average Bursa person's diet.⁵³⁷ With the addition of mutton, fish, and dairy products, albeit unavailable to many, these abundantly-found food items must have significantly reduced per capita grain consumption.⁵³⁸ The absence of population pressure, like in the hinterland of other port cities, the general lack of demand for Bursa grains from other regions, and the importations of grains from the Black Sea also contributed to the under-utilization of lands. The *çiftlik* agriculture practiced in relatively large areas, particularly in favorable locations in the plains, tended to minimize fallow area to maximize profits, a theme I cover in section 2.3.6.

Lack of monied capital, heavy taxation, and general imperviousness of the state and wealthy classes to invest in agricultural and industrial productivity prevented the development of mechanized agriculture. Imported agricultural implements were adopted in the lands of a handful of English landowners and perhaps a few Ottoman *çiftlik*-holders⁵³⁹, as

⁵³⁵ MacFarlane, *Turkey and Its Destiny*, 1850, 1:223.

⁵³⁶ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 739.

⁵³⁷ Schneider, *Letters from Broosa*, 44; BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 256.

⁵³⁸ Hale Güney's meticulous comparison of modern and ancient figures for average annual wheat consumption per head in Byzantine Nicomedia suggests that 225 kg per person can be roughly suggested as breadline which is minimum requirement for self-subsistence. Hale Güney, "The Resources and Economy of Roman Nicomedia" (PhD Thesis, Exeter, University of Exeter, 2012), 142 Consul Palgrave's report on the dietary requirements of rural classes in 1870 reported that around 200 kgs of wheat sufficed for a solely-wheat-growing western Anatolian family. Although this account falls silent on how much of their bread was prepared by mixing wheat with other ingredients, this still suggests that a great deal of supplementary food items were consumed to make up for the remainder of their calorie intake. BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 739.

⁵³⁹ For instance, MacFarlane was greeted by a Behram Ağa in Yenişehir, an admirer of English plows, "who had a quick eye to agricultural improvement." MacFarlane, *Turkey and Its Destiny*, 1850, 1:220. John Zohrab, the Director of Agriculture of the Hüdavendigar province, petitioned to the Grand Vizierate in 1863, asking for the issuing of bonds to afford exportations of agricultural implements from London. He gave the example of a Torosoğlu Aci Bedros who used such (horse-driven) machinery and yielded favorable returns from his mulberry and grain fields. OA. MVL. 646 / 84 (08-10-1279 / 29-03-1863).

in other parts of western Anatolia.⁵⁴⁰ The British vice-consul noted in 1864 that English plows, harrows, and threshing and reaping machines were already appreciated, and soon the steam plow would undoubtedly follow.⁵⁴¹ Thirty-three years later, though, another consular report stated that agriculture in the Bursa region still depended on archaic methods. According to his report, mechanized agriculture was practiced on large estates owned by Europeans and some lands that belonged to well-off migrants from Bulgaria, Rumelia, and Greece.⁵⁴²

Grain milling was essential in producing bread, one of the central food items of the Ottoman diet. Bursa had abundant streams and mountain torrents to supply waterpower. Thus, many Byzantine and Ottoman watermills (*asiyab*) were erected along the watercourses to grind grain. Thanks to the strong winds of Uludağ mountains and the Marmara Sea, windmills (*değirmen*), and in the relative absence of power, wind- and animal-powered mills (*kıraç değirmen*) existed, but they were rare and more costly to operate.⁵⁴³

Watermills were by far the most popular mills. Villagers owned them mainly for self-sustenance purposes, bakers for commercial operations, and private individuals and waqfs to generate cash and in-kind income.⁵⁴⁴ The last category of owners led to the creation of a “mill economy” where the required dependence on these establishments enabled their owners, mostly local and the city’s notables, to create local spheres of influence and made mills very expensive assets. For instance, a large mill in the subdistrict of Kite, which could mill above 600 tons of wheat, was sold for the price of a large mansion in the city of Bursa in 1669.⁵⁴⁵

Most mills (fifty-one by one estimate in 1875)⁵⁴⁶ were situated in the Bursa and Kite subdistricts, which had easy access to abundant waterpower and the city’s markets, with

⁵⁴⁰ Kurmuş, “The Role of British Capital,” 154.

⁵⁴¹ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 791.

⁵⁴² Murat Baskıcı, “Osmanlı Tarımında Makineleşme: 1870 - 1914,” *Ankara Üniversitesi SBF Dergisi* 58, no. 1 (2003): 35.

⁵⁴³ Ruhi Özcan, “Arşiv Belgeleri Diliyle Su Değirmenleri (Âsiyâb),” *OTAM (Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi)*, no. 40 (2016): 197.

⁵⁴⁴ Gerber, *Economy and Society in an Ottoman City*, 98. An Ottoman report from 1845 shows that mills were everywhere in the region with access to running water. OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845).

⁵⁴⁵ *Ibid.*, 78.

⁵⁴⁶ *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1292 / 1875, pp. 148-149.

many of them dating to the fourteenth and fifteenth centuries.⁵⁴⁷ That said, mills appeared where a good head of water could be obtained, particularly in locations against steep slopes of Samanlı, Katırlı, Mudanya, and Uludağ mountains as well as hills encircling Iznik, Yenişehir, and Inegöl. They were valued based on the number of their “eyes” or stones (while the larger ones were called *çarh*, *horos* denoted the smaller ones) and the proximity to settlements.⁵⁴⁸ The mill setup was a less-efficient horizontal-wheeled type that prevailed in Byzantine times.⁵⁴⁹ The millstones being made of sandstone were not changed, which “melted” the flour and made it greyish and contain sand.⁵⁵⁰ Salih Aynural notes that fourteen percent of wheat was wasted during grinding.⁵⁵¹

Grains of Bursa were consumed chiefly within the region, mainly by the city. Relatively small quantities were exported to the capital, primarily from Mihaliç, Bursa plain, and Iznik-Pazarköy⁵⁵², whose volume was determined according to failures in wheat importations from central Balkans, Moldo-Wallachian principalities, and the Black Sea regions.⁵⁵³ Barley as fodder was in much more consistent and increasing demand from Istanbul for the provisioning of the army. The significant contraction of grain fields in Mihaliç due to constant floodings since the early nineteenth century must have reinforced this trend.

Although the centrally-imposed grain quotas (*mübayaa* – for the subdistrict-based allocation and procurement of grain supply for the capital, on market prices from 1795

⁵⁴⁷ Gerber found 60 mills in the seventeenth century based on the court records. Gerber, *Economy and Society in an Ottoman City*; Evliya Çelebi allegedly counted 170 mills in the city of Bursa in 1640. Dağlı and Kahraman, *Günümüz Türkçesiyle Evliyâ Çelebi Seyahatnâmesi*, 2:22; See also Mevlüt Çam’s detailed account of waqf-owned watermills in Bursa from the fourteenth through the seventeenth century. Mevlüt Çam, “Osmanlı Vakıflarında Bursa Su Değirmenleri,” *Bursa Günlüğü*, no. 20 (June 2023): 70–75.

⁵⁴⁸ Gerber, *Economy and Society in an Ottoman City*, 78; Özcan, “Arşiv Belgeleri Diliyle,” 199.

⁵⁴⁹ Edmond Dutemple, *En Turquie d’Asie*, 287–88; Bryer, “The Means of Agricultural Production: Muscle and Tools,” 111. Water fell on obliquely set paddles attached to a horizontally laid wheel that was supported by a vertical axis. They comprised two to three-“eyed” mills where stones ran together on a bench above the same inclined water channel (a flume). They invariably always turned from right to left. The sleeping wheel was convex and the wheel rotating was concave. The use of the water level rule was completely foreign to the millers.

⁵⁵⁰ Edmond Dutemple, *En Turquie d’Asie*, 248.

⁵⁵¹ Aynural, *İstanbul Değirmenleri ve Fırınları*, 88.

⁵⁵² Küçükceran, “Agriculture,” 87; Arıkan, “A History,” 5.

⁵⁵³ Especially the changing geopolitical context of provisioning Istanbul after the 1774 Küçük Kaynarca treaty suddenly increased the dependency of the capital on the Mediterranean grains. Çiftçi, “Osmanlı Döneminde İstanbul’un İfaşesinde Bursa’nın Rolü,” 160.

onwards) were abolished and restrictions on the exportation of grains were greatly relaxed since 1839⁵⁵⁴, the peasants and the district administration were indifferent to improving the region's general agriculture and to the food needs of the capital or the industrializing countries. As the governor of Bursa Mustafa Nuri Pasha stated in 1845, "you send to the Black Sea and the Danube for corn and maize; other countries grow corn and maize: we grow silk."⁵⁵⁵ His remarks are in tune with what Thomas Smith observed for Bursa in 1683, that the peasants "till no more ground than will serve their necessities; being supplied with corn from Egypt, and from Moldavia and Walachia, by the way of the Black Sea, letting vast tracts of ground lie wast and uncultivated; so that their sloth herein sometimes is justly punished with dearths."⁵⁵⁶

Surely, the mixture of various grain flours, not only in bread but also in other pastry phyllo dough (*yufka*) that were essential diet items of the region ensured the domestic consumption of most grains. However, Bursa's wheat and flour quality were partly responsible for the reluctance to engage in commercial grain farming. Besides the rich, wheat-, barley-, and bulgur-based cuisine of the region, including various thick staple soups (notably *tarhana*), bulgur-pilaff, orzo (*erişte*), vermicelli (*şehriye*), and porridge dishes (e.g., *lapa* and *keşkek*), the wheat of Bursa and its environs were very coarse and never used alone in preparing bread, the chief item of Ottoman diet.⁵⁵⁷ Pure wheaten bread was made far less in quantity in the region than coarse bread made up of various preparations of wheat, barley, other grains⁵⁵⁸, and even chestnut flour⁵⁵⁹, which one American observer described as "unwholesome."⁵⁶⁰ Bursa wheat was also without strength and could not bear any addition of maize, which was grown plentifully in the region.

⁵⁵⁴ Ağır, "The Evolution of Grain Policy," 591.

⁵⁵⁵ MacFarlane, *Turkey and Its Destiny*, 1850, 1:119.

⁵⁵⁶ Smith, "An Account," 447.

⁵⁵⁷ Edmond Dutemple, *En Turquie d'Asie: notes de voyage en Anatolie* (Charpentier, 1883), 244–45.

Dutemple describes the flour quality as such: "The flour trade in Bursa is almost nil. After having provided for the consumption of the city, it is hardly until winter that the miller sometimes sends flour much appreciated in Constantinople for the preparation of *cadaif*, a kind of Turkish vermicelli; but the quantity is almost insignificant."

⁵⁵⁸ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 727.

⁵⁵⁹ OA. DH. İ. UM. EK. 23 / 33 (AR. 18-08-1332 / 31-10-1916).

⁵⁶⁰ Schneider, *Letters from Broosa*, 46.

The general demand for better-quality wheat in Bursa attracted a steady stream of trade from Central Anatolia and the Danube to the region. Turkoman (nomadic) camel drivers, who brought (durum and soft) wheat from Konya and the surrounding area, supplied Bursa. This variety yielded very fine flour, superior in taste to that of the Danube, but could not swell, preventing Bursa millers from competing with flour from Russian bakers in Constantinople. “Haymana wheat,” coming from Ankara and its environs, was of second quality. A third quality came from the Kütahya and Eskişehir regions in the south and southwest of Bursa, carried on muleback or by cart. Overland transport of grains from interior parts of Anatolia, even from the grain-rich Karesi in the west, subjected its price to significantly more fluctuations than importing crops via sea.⁵⁶¹

Therefore, importing Danubian wheat was much more preferable: It was preferred not merely because the inhabitants were accustomed to its taste but also because it could be mixed with up to thirty percent maize flour which was commonly found throughout Bursa.⁵⁶² Besides wheat quality, small-scale cultivation, expansion of mulberry plantations, and contraction of grain areas due to inundations and droughts encouraged wheat imports from the Danube and Anatolia.⁵⁶³ Although unnoticed, fruit seeds might have also been used as an alternative replacement for starch flour.

Prohibitions on grain exports were briefly reinstated from 1854⁵⁶⁴ after the Russian occupation of Moldavia and Wallachia (the grain reserves of the Empire) until 1856⁵⁶⁵ to meet the local and army supplies. During this period, non-subsistence grain producers of Bursa profited enormously from the Crimean War by providing the allied troops, which helped relieve the inhabitants from the 1855 earthquake’s impact.

⁵⁶¹ Özgün, “İzmir ve Artalanında,” 219.

⁵⁶² Edmond Dutemple, *En Turquie d’Asie*, 245.

⁵⁶³ Vasileios I. Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, ed. Selahattin O. Tansel, trans. Dimitri Demirci and İbrahim Kelağa Ahmet (İstanbul: Gaye Kitabevi, 2008), 128. In year 1861, total volume of grain imports to the Gemlik port is as follows. Wheat 100.000 bushels (Danubian and Rumelian) + 25.000 bushels (Russian) + Barley 18.000 bushels (Danubian and Rumelian) = 143.000 bushels of grain (about 5200 tons) for £32.900 (about 3.620.000 *guruş*). Smuggled grains and grains imported from Bandırma and brought from Izmid are not included. BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 348.

⁵⁶⁴ OA. A.} AMD. 51/41. (AH. 10-10-1270 / 06-07-1854).

⁵⁶⁵ BPP, CP, No. 2285, XXXVIII (38), *Abstract of Reports of Trade of various Countries*, 1857, 182.

But, in general, besides farming techniques, labor⁵⁶⁶, and transportation costs, grain exports were hindered by taxes and customs duties, because of which the cultivator “profited but very inadequately of the advantageous market.”⁵⁶⁷ According to one well-informed estimate for Anatolia in 1870, to establish the profitability of grain trade in this part of the Ottoman Empire, a well-to-do peasant sowed six *kile* (of Istanbul – x 25,64 kilograms, approximately 154 kilograms) of wheat seed to an average of 8 acres (about 3,2 hectares – 32 *dönüm*), which yielded about sixteenfold. Of the 2462 kilograms yielded, around 154 went to be stored up as seeds for the following year⁵⁶⁸ and 154 as food for the peasant and his family. The remaining 2154 kilograms were sold for 1848 *guruş* (15l. 18s.) in 1869. If selling wood, eggs, and other extra agricultural activity yielded at best 200 *guruş*, of the total 2048, 320 went to taxes and other duties, and 330 to agrarian expenses. After subtracting the household needs nearing 1295 *guruş*, the cultivator was left with a mere 103 piastres (17s. 2d.).⁵⁶⁹

If the peasant wanted to export his produce, upon the tithe, he had to pay 2,5% sales tax and 8% customs duty; a total of 20,5% solely went to the mandatory levies, let alone big carriage expenses covered above. Transportation costs sometimes were twice the value of the commodity at its starting point.⁵⁷⁰ Extreme price fluctuations between years of abundance and scarceness occurred at the expense of the producers. Because taxes and debt payments absorbed a significant amount of the product in good years, storing sufficient grains for long-term survival was difficult. Furthermore, granaries and underground storage pits could not keep the grains for more than two or three years.⁵⁷¹

⁵⁶⁶ Ordinary wages for field work (*ücret* – usually resorted to during harvest time) was 14 to 15 *guruş* (or 1s. 9 d. to 2s.) a day in 1858. BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 182.

⁵⁶⁷ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 183.

⁵⁶⁸ The percentage of total yield stored as seed for the next season remains a contentious issue for productivity calculations. Some historians claimed one-fourth to one-third of the total produce was saved as seed. Here it was given as 1/16th. For a detailed discussion on this issue, see Kayhan Orbay, “Osmanlı İmparatorluğu’nda Tarımsal Üretkenlik Üzerine Tetkikat ve Notlar,” *Belleten* 81, no. 292 (2017): 832–34.

⁵⁶⁹ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 739.

⁵⁷⁰ Edmond Dutemple, *En Turquie d’Asie*, 246.

⁵⁷¹ Danubian and Black Sea grains could last only for a year while the Mediterranean grains could be stored up to two to three years. Aynural, *İstanbul Değirmenleri ve Fırınları*, 13.

Notwithstanding the human side of difficulties, environmental threats also exerted constant pressure on the harvest. The plight of locusts such as in 1839⁵⁷², 1854⁵⁷³, and 1855⁵⁷⁴; occasional heavy rainfalls and hails⁵⁷⁵; adverse weather conditions in 1833⁵⁷⁶ and 1852⁵⁷⁷, lack of rain as in 1862⁵⁷⁸, droughts followed by severe winters in 1863⁵⁷⁹ and 1865⁵⁸⁰; inundations of the Nilüfer River and its tributaries such as in 1835⁵⁸¹, 1836⁵⁸², 1838⁵⁸³, 1842⁵⁸⁴, 1859⁵⁸⁵, 1862⁵⁸⁶, 1863⁵⁸⁷, and 1864⁵⁸⁸ that flooded adjoining quarters, villages, and fields; and crop deficiencies as in 1841⁵⁸⁹ and 1864⁵⁹⁰ were among the noteworthy examples. Successive floods of the Nilüfer, Rhyndacus, and Simav rivers from the 1830s onwards⁵⁹¹ and inundations of Lake Apolyond⁵⁹² caused the contraction of grain fields and the collapse of large estates in the Mihaliç and northern Kirmasti plains, one of the most important grain reserves of Western Anatolia. The total annual wheat yield dropped from 63.000 *kile* (57.750

⁵⁷² Levinge, *The Traveller in the East; a Guide*, 234.

⁵⁷³ BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade*, 1854, 84.

⁵⁷⁴ In the Bursa plain, OA. A.} MKT. NZD. 151 / 23 (AH. 25-09-1271 / 11-06-1855); Inegöl and Yenişehir subdistricts. OA. A.} MKT. UM. 196 / 10 (AH. 29-08-1271 / 17-05-1855).

⁵⁷⁵ While heavy rains were always disastrous, hails, though less frequent, greatly stopped agricultural production for instance in Inegöl, Yenişehir, İznik and Pazarköy, in 1847: OA. MVL. 13 / 13 (AH. 21-07-1263 / 06-07-1847) and MVL. 13 / 27 (AH. 29-07-1263 / 13-07-1847); Gemlik in 1859: OA. A.} MKT. MHM. 163 / 45 (AH. 21-01-1276 / 20-08-1859); Mihaliç in 1868: OA. İ. ŞD. 16 / 689 (AR. 16-05-1285 / 28-07-1869).

⁵⁷⁶ MacFarlane, *Turkey and Its Destiny*, 1850, 1:252.

⁵⁷⁷ Kasaba, *The Ottoman Empire and the World Economy*, 66.

⁵⁷⁸ BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office*, 1863, 455.

⁵⁷⁹ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 433.

⁵⁸⁰ OA. MVL. 716 / 82 (AH. 13-08-1282 / 01-01-1866).

⁵⁸¹ OA. HAT. 552 / 27259 (AH. 1251 / 1835/1836).

⁵⁸² Pardoe, *The City of the Sultan*, II:184.

⁵⁸³ MacFarlane, *Turkey and Its Destiny*, 1850, 1:310.

⁵⁸⁴ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 106.

⁵⁸⁵ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 182.

⁵⁸⁶ OA. A.} MKT. MHM. 242 / 19 (AH. 07-04-1279 / 02-10-1862).

⁵⁸⁷ OA. MVL. 647 / 68. (AH. 11-1279 / 04/05-1863).

⁵⁸⁸ OA. YB. 04. 6 / 65 (AH. 1280 / 1864); BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790.

⁵⁸⁹ BPP, CP, No. 359, *Abstracts of Information relative to Corn and Agricultural Produce, from H.M. Ministers and Consuls on Continent of Europe, 1841 and January 1842*, 1842, 12.

⁵⁹⁰ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790: "In a great part of this Sanjak there were but very poor grain crops, as the growing stalks run too much into straw without the ears being full, then owing to bad weather after reaping, which arrested the thrashing out of the corn, most of which was thus spoilt, and part entirely lost from being flooded and swept away by torrents. Fortunately the like misfortunes did not befall at the chief sources, of growth in the interior, and ample arrivals of wheat, especially from the fertile, extensive fields of Emir Dagh..."

⁵⁹¹ Küçükceran, "Agriculture," 87–88.

⁵⁹² Texier, *Asie mineure*, 138; Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 2:92–93. A report from 1843 states that a decade long series of destructive floods in Lake Apolyond destroyed forty villages along the Rhyndacus in the Mihaliç and Kirmasti subdistricts. OA. C. NF. 6 / 262 (25-03-1259 / 25-04-1843).

imperial bushels) in the mid-1820s to 18.000 in 1840 and 13.000 in 1841.⁵⁹³ Many villages were abandoned from the submersion of their lands, and only a few wealthy households possessed any substantial property due to land loss. MacFarlane claims that in 1845, the decay in grain trade greatly impoverished the villages of Mihaliç and decreased the town's population, particularly that of the Muslims.⁵⁹⁴ Livelihood from silk production helped the subdistrict.

In response to ecological fragility, water-intensive crop production and sheep breeding by small peasant households on the expanded marshlands due to inundations transformed production relations. Changing land boundaries when the waters ebbed caused disputes among the landholders who wanted to expand, small villagers who wanted to keep their land, and animal breeders who lost their access to pasturelands, fearing, in a villager's words, that their "animals would not be able to make it to the following year."⁵⁹⁵ In the eastern section, the flooding of Lake Iznik was a constant threat to agricultural production and created local tensions along the lake's periphery, which was encircled by swamps.⁵⁹⁶ Similarly, many streams going down Olympus and Domaniç mountains occasionally left the Bursa, Inegöl, and Yenişehir plains inundated.⁵⁹⁷

The Central Anatolian famine of 1845 hit the Bursa region.⁵⁹⁸ The eastern and southern subdistricts suffered the famine earlier and more intensely than other parts. According to one observer from the central subdistrict, "these famines are every year occurring in some part of the interior every year. One district can hardly succor another, because there are no roads— and because each district grows little more than what suffices for its own consumption. Here we shall soon have famine again."⁵⁹⁹ A report from March 1845 reveals that Inegöl and the adjacent Gölpazarı and Pazarcık subdistricts of the Hüdavendigar province were in "extreme economic distress and trouble" (...*kemal-i*

⁵⁹³ Küçükceran, "Agriculture," 47, note 78.

⁵⁹⁴ MacFarlane, *Turkey and Its Destiny*, 1850, 1:251; İsmail Yaşayanlar, "Bursa ve Çevresinde Yörüklerin İskanı (19. Yüzyıl)," *Bursa'da Yaşam*, May 2019, 29.

⁵⁹⁵ Küçükceran, "Agriculture," 95.

⁵⁹⁶ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845) ; In the early 1860s, the villagers of Iznik and Pazarköy complained about the hazards the lake brought the adjacent fields and raised money to clean the periphery of the lake and take protective measures against its flooding. OA. MVL. 641 / 9 (23-05-1279 / 16-11-1862).

⁵⁹⁷ OA. DH. MKT. 76 / 11 (AH. 27-11-1310 / 12-06-1893).

⁵⁹⁸ OA. A.} MKT. 27 / 68 (AH. 28-08-1261 / 01-09-1845).

⁵⁹⁹ MacFarlane, *Turkey and Its Destiny*, 1850, 1:100.

muzayaka ve ıztıraba dûçar...). In fact, the tax survey data demonstrate that the estimated yield of a cultivated plot for 1845 fell to one-third of what was sown in 1844 in Inegöl⁶⁰⁰ and between one to two-thirds in Harmancık.⁶⁰¹ The central administration decided to send fodder help as well as wheat and barley to the population⁶⁰² and seed aid in the early spring of 1846.⁶⁰³ As the situation in the east had subsided, the western sections of the region faced the challenge of famine. Following a drought season, grains became scarce in the Mihaliç and Kirmasti subdistricts in 1846, which required large volumes of wheat imports from Istanbul.⁶⁰⁴

The grain-growing regions to the southeast of Bursa suffered the famine more intensely. Even though the state tried to maintain authority by prohibiting movement and authorizing help such as the importation of 440.000 bushels of grain to Gemlik from Russian ports on the Black Sea to be distributed to northwestern and central Anatolia, the calamity was one that brought ruin and dismay to households.⁶⁰⁵ Suffering enormously from the famine, locals of the Domaniç subdistrict bordering Inegöl and Harmancık deserted their localities and ran to other places, such as Bursa.⁶⁰⁶ Similarly, escaping from the famine and ensuing death (about 6000 in the Ankara province), poverty, bankruptcy, and indebtedness, the poor of Ankara had migrated in large crowds to Bursa, where food was more abundant and job opportunities plentiful.⁶⁰⁷ A few years later, Bursa's fate turned for the worse once again: A yearlong famine in 1852 found the region unprepared and hit it so hard that the peasants had to mix the flour with the bark of trees to make bread.⁶⁰⁸

⁶⁰⁰ Adnan Polat, "1844-1845 Yıllarına Ait Temettuat Defterlerine Göre Inegöl Kazası'nın Sosyo-Ekonomik Durumu" (MA Thesis, Sakarya, Sakarya Üniversitesi, 2010), 107.

⁶⁰¹ Ahmet Çubuk, "1844-45 Tarihli Temettuat Defterlerine Göre Hüdavendigâr Vilayeti Harmancık Kazasına Bağlı Cenubta (Güney) Bulunan Köylerin Sosyo-Ekonomik Yapısı" (MA Thesis, Kütahya, Kütahya Dumlupınar Üniversitesi, 2019); Gökhan Kartal, "1844-1845 Yılları Temettuat Defterlerine Göre Hüdavendigâr Vilayeti Harmancık Kazası'na Bağlı Şimal (Kuzey) Köylerin Sosyo-Ekonomik Durumu" (MA Thesis, Kütahya, Kütahya Dumlupınar Üniversitesi, 2019).

⁶⁰² OA. C. İKTS. 8 / 397 (AH. 21-02-1261 / 01-03-1845). Another report noted that drought had an adverse impact on the produce of Pazarcık. OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 14.

⁶⁰³ OA. A.} MKT. 36 / 72 (AH. 25-02-1262 / 22-02-1846).

⁶⁰⁴ Necmi Odabaşı, "Mihaliç Çiftlikât-ı Hümâyûnu ve İdaresi" (PhD Thesis, Bursa, Uludağ Üniversitesi, 2014), 300-301.

⁶⁰⁵ Kasaba, *The Ottoman Empire and the World Economy*, 149.

⁶⁰⁶ OA. MVL. 6 / 18 (AH. 14-07-1262 / 08-07-1846).

⁶⁰⁷ Semih Çelik, "The Rich, the Poor and the Hungry Social Differentiation and Famine in Ankara in 1845" (MA Thesis, İstanbul, Bilgi University, 2010), 90; Köksal, *The Ottoman Empire in the Tanzimat Era*, 36.

⁶⁰⁸ Kasaba, *The Ottoman Empire and the World Economy*, 64.

Failures and deficiencies of crops for domestic consumption necessitated bulk importations of the Black Sea and Syrian grain via sea and Konya, Ankara, Eskişehir, Karahisar, and Kütahya grains via land routes.⁶⁰⁹ Potatoes that would help meet their nutritional demands as a food and flour source started to be grown by the region's inhabitants, mostly confined to the vicinity of the Bursa district, in the 1850s.⁶¹⁰ After a few years of disease, potatoes were commercialized in the 1860s with ready buyers in Istanbul. However, insufficient consumption⁶¹¹ and the requirement to pay at least three duties from the plain to Mudanya or Gemlik ports greatly limited their marketability.⁶¹²

2.3.4.6. *Livestock raising, Leather and Wool Industries, Beekeeping, and Fishing*

Above, I have accounted for the agricultural knowledge, technology, and contingencies in cultivating commercial tree crops and grains. Because of its low labor requirements, ready markets in Bursa, and increased demands in Istanbul, livestock farming, mostly sheep breeding, gained more importance on large estates in the first half of the nineteenth century. Particularly the *çiftlik*s owned by local notables and provincial authorities in Mihaliç and Yenişehir and their environs, thanks to their abundant pasturelands and proximity to Istanbul via sea and land trade routes, profited from this trade by enlarging their farming operations. In the same 1872 report above by the Austro-Hungarian consul, we find an approximate statistic of the livestock, which formed one of the main wealths of the region (Table 3).⁶¹³

Table 3: Approximate Livestock Capacity of the Region, 1872

Livestock	Number in 1872
Oxen, cows, and buffaloes	600.000
Sheep and goats	500.000
Horses and mares	20.000
Camels	600

⁶⁰⁹ BPP, CP, No. 359, *Abstracts of Information relative to Corn*, 1842, 12; BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 106; BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 184; BPP, CP, No. 3229, LXX (70), *Commercial Reports received at Foreign Office*, 1863, 455; BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790-791.

⁶¹⁰ BPP, CP, No. 2435, LV (55), *Abstract of Reports of Trade of various Countries received by Board of Trade*, 1857-1858, 216.

⁶¹¹ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 353. See also Schneider, *Letters from Broosa*, 48.

⁶¹² MacFarlane, *Turkey and Its Destiny*, 1850, 1:225.

⁶¹³ Edmond Dutemple, *En Turquie d'Asie*, 240–41. Still, Bursa had fewer sheep, goats, horses and mares, and camels than the Balıkesir, Kütahya, and (Afyon) Karahisar regions but it surpassed them in terms of the number of oxen and cattle (not separated).

The consul's figures are the only source that provides the region's approximate animal numbers. The sum of all animals recorded in the household-based tax surveys from 1845 (more on their content in part 3) will provide the only point of comparison – we do not have an all-encompassing count yet. At least, raw animal counts for the district from the yearbook of 1884 provide close estimates in terms of total sheep and goats (387.941) and horses and mares (17.718) (the rest of the counts do not include oxen and camels).⁶¹⁴ Export data from Bursa's ports cannot be proxied because a sub-regionalization developed within the southern Marmara basin regarding the livestock geography. Bandırma (west of Bursa) and, to a way lesser extent, Mihaliç ports, whose hinterland witnessed extensive commercial livestock –especially sheep and goat- husbandry, were the central nodes of animal trade.

The approximate nature of this statistic should be underscored with due sensitivity for some reasons. First, as understood from the roughly rounded number for each animal, it might not be possible to estimate animals, especially in distant locations such as Harmancık and Atranos. Secondly, there is always the possibility of animals being hidden from view by villagers and pastoralists. Thirdly, and more importantly, because the Bursa region was an important center in the meat provisioning of Istanbul and essential in keeping meat prices in check, large sheep flocks brought by state agents, merchants (*celeb*), and nomadic communities from within the Hüdavendigâr province and east and central Anatolia were stationed there and used the wide pastures (of notably the western sections and those at the bottom of Mount Olympus and Mudanya and Katırlı mountains), a practice lasting until the end of the Empire.⁶¹⁵

Having seen that large and small ruminants were bred extensively in Bursa, it is valuable to talk about the particularities of raising and benefitting from them. The demand for meat in Istanbul led to an increase in sheep breeding from the 1830s onwards. Flooding in the western parts of Bursa constricted arable lands but opened up pastures, and the

⁶¹⁴ *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1301 / 1884, p. 344-345. Total number of cows and buffaloes is 75.737 and that of donkey is 12.559.

⁶¹⁵ OA. AE. SSLM. III. 357 / 20491 (AH. 12-09-1205 / 15-05-1791); A.} M 4 / 75 (AH. 1263 / 1846/1847); AE. SMHD. II. 61 / 4280 (AH. 17-05-1225 / 20-06-1810); BEO. 181 / 13532 (AH. 20-09-1310 / 07-04-1893); BEO. 3023 / 226689 (AH. 16-02-1335 / 12-12-1916); ŞD. 1246 / 14 (AH. 09-12-1331 / 09-11-1913), p. 1-2. I thank Yonca Köksal for initiating me to the last three of these documents. See also Çiftçi, "Osmanlı Döneminde İstanbul'un İfaşesinde Bursa'nın Rolü," 162–64.

skyrocketing demands during the Crimean War catalyzed this trend.⁶¹⁶ Similarly, the landed gentry and smallholders in eastern and central Bursa increasingly turned their attention to raising livestock, which is also evident in the growing tendency among the rich to open sheepfolds (*ağıl*) in their large rural estates.⁶¹⁷ The reader must be cautious that the following observations concern the standard practices among the settled peasantry. Among the non-settled, the semi-nomads came to the forefront, and we know that their primary trade was in livestock, woolen goods, and animal products, for which they became even more crucial economic actors in the nineteenth century.⁶¹⁸

Pasturage was abundant in the Bursa region in a good season, from early spring to late autumn.⁶¹⁹ But, animals seldom got anything except what they picked up for themselves when grazing. This was one reason sheep and goats were the most popular farm animals, for they could find feed in the sparse grasses, whereas cattle were generally kept in high mountain valleys and on the swampy margins of water bodies.⁶²⁰ Although substantial amounts of crops of hay could be yielded, little hay was made, and that little, before it was ripened, went mainly to horses when they returned from grass in June and July.⁶²¹ Thomas Smith had a similar observation in the 1680s: “They feed their horses with barley and chopt straw, for I do not remember ever to have seen any oats among them; and they make but little hay.”⁶²² Clovers that grew in the wild state all over the region were largely uncultivated, though the changes in land regime, especially in the plain of Bursa, gradually made them a valuable commercial item, as they frequently appear in large estates in the tax surveys from 1845. Artificial grass and turnips that would make great alternative feed sources for cattle during winter were unknown to the locals.⁶²³ Oilseed cakes (*küşpe*), made from the seeds of

⁶¹⁶ Küçükceran, “Agriculture,” 92–93.

⁶¹⁷ Arıkan, “A History.”

⁶¹⁸ Yonca Köksal and Mehmet Polatel, “A Tribe as an Economic Actor: The Cihanbeyli Tribe and the Meat Provisioning of İstanbul in the Early Tanzimat Era,” *New Perspectives on Turkey* 61 (2019): 97–123.

⁶¹⁹ BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade*, 1854, 85.

⁶²⁰ Stotz, “The Bursa Region,” 95–96.

⁶²¹ MacFarlane, *Turkey and Its Destiny*, 1850, 1:224.

⁶²² Smith, “An Account,” 444.

⁶²³ MacFarlane, *Turkey and Its Destiny*, 1850, 1:224. BPP, CP, No. C.414, LXVIII (62), Reports from H.M. Diplomatic and Consular Agents Abroad, 1871, 739.

the region's cash crops such as olive, flax, and cotton, for fodder and fertilizer had never been widespread, if ever used.⁶²⁴

Despite being occasionally preferred by the army and the sudden demand boom during the Crimean War, common breeds of horses (of mid-sized Turkoman type) and oxen were described as “stunted and defective,”⁶²⁵ and no means were taken to improve their species by crossing (which would change at the end of the nineteenth century with the coming of the Circassians with their horses, Balkan Muslims with their oxen, and thanks to state initiatives in selective breeding of animals⁶²⁶). Habits of negligence and improvidence in terms of winter keeping were too “deeply rooted to be easily overcome.”⁶²⁷ Thus, during harsh winters, such as in 1832-33, the horses and oxen grew thin, and sheep perished in want of food. But, even in ordinary years, the sheep became very poor from the middle or end of December, making mutton very scarce and bad.⁶²⁸ These features allow us to draw a general picture of stockbreeding. Exceptionally, particular anecdotes show that some wealthy large estate owners bred fine-quality Caramanian breed (peculiar for its horns, its large size, and curious tail).⁶²⁹ Inundations, swamps, and abundant water sources made excellent habitats for Asian water buffaloes (commonly known as *manda*, *camuŝ*, *donbay ineđi*), which were numerous around water bodies, especially in the Bursa and Mihaliç plains.

The region's inhabitants ate a diet predominantly composed of starch, vegetables, and fruits. Mutton was practically the only flesh meat to be found. Beef and poultry (turkeys and chicken), fowl, and meat of wild animals hunted on the mountains and in the plains complemented it to some extent. Even though Bursa's butchers and itinerant meat sellers sold fresh meat, food sellers (e.g., cooks and kebab-makers) prepared meals out of them, and, since most inhabitants ate meat very rarely, usually on festive occasions⁶³⁰ like the Feast of Sacrifice, for ease of storage, meat was generally sold and consumed in sausage (*sucuk*) and dried meat (*pasdırma*) form. Dairy products, namely milk (usually of cow's), yogurt (the prioritized way of consuming and storing milk, especially during summer, as most peasants

⁶²⁴ Orbay, “Osmanlı İmparatorluğu'nda Tarımsal Üretkenlik Üzerine Tetkikat ve Notlar,” 810.

⁶²⁵ BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade*, 1854, 85.

⁶²⁶ Küçükceran, “Agriculture,” 156.

⁶²⁷ BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade*, 1854, 85.

⁶²⁸ MacFarlane, *Turkey and Its Destiny*, 1850, 1:224.

⁶²⁹ *Ibid.*, 1:90, 127.

⁶³⁰ *Ibid.*, 1:229; Stotz, “The Bursa Region,” 93.

had relatively little milk to profit from), white cheese, and butter produced in traditional ways in generally rural households (the western section of the region was especially renowned for animal products), and eggs were regularly sold in town and rural markets in small quantities.⁶³¹ Products like tallow fat and bone marrow fat were alternative oil sources, though there is no quantitative data or enough qualitative remarks on their prevalence.

The average milk and meat yield of cattle and sheep indicates their body weight and frame size. As there were no improvements in dairying (even remotely comparable to mechanical reapers) before 1900, most influences on dairy production came from improved breeding, feeding, and care of farm animals. By the turn of the twentieth century, in the Bursa region, an average cow, which was usually the Anatolian Black cattle (*kara sığır ineği*), yielded 150 to 200 kg of meat (beef) and 640 to 900 liters of milk per year. An average sheep, usually of the fat-tailed *daglıç* type and far less frequently the thin-and-long-tailed *kivircik*⁶³², gave 13-19 kg of mutton and 39-51 liters of milk. A water buffalo produced 770-1410 kg of meat.⁶³³ 32 to 45 kg of butter could be made from the annual milk yield of a cow and 7-9 kg of cheese from annual milk per sheep/goat.⁶³⁴ By comparison, the average animal yield in the generality of English farms in 1850 was 317 kg of beef and 1665 liters of milk for cows, and 32 kg of mutton per sheep.⁶³⁵ In 1845, depending on the subdistrict, the annual income generated from cows was between 20-30 *guruş*, sheep between 10-20 *guruş*, goats between 7-15 *guruş*, and water buffaloes 50 *guruş*.⁶³⁶

In terms of taxation, the in-kind taxation, in other words, appropriation of sheep for the provisioning of Istanbul (one in every ten sheep)⁶³⁷ that supplied the in-cash traditional sheep tax (*ağnam*), ended with the Tanzimat. The sheep-tax was standardized in 1840 as 5,5

⁶³¹ BPP, CP, No. 3582, LXIX (69), Commercial Reports received at Foreign Office, 1865, 792. Examine the inventory of a rich Muslim butcher: OA. MŞH. ŞSC. d. 317 (C / 115) (AH. 09-10-1282 / 25-02-1866), p. 77b. Schneider, *Letters from Broosa*, 47; MacFarlane, *Turkey and Its Destiny*, 1850, 1:90; Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 204; Uğur, "The Ottoman Court Records," 117.

⁶³² Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 185.

⁶³³ Güran, *19. yüzyıl Osmanlı Tarımı*, 104–5.

⁶³⁴ Based on the assumption that 20 liters of cow's milk is required to produce 1 kg of butter and 5,5 liters of sheep's / goat's milk to produce 1 kg of cheese. Güran, *19. yüzyıl Osmanlı Tarımı*, 104.

⁶³⁵ Robert C. Allen, "English and Welsh Agriculture, 1300-1850: Outputs, Inputs, and Income.," Working Paper (Nuffield College: Oxford University, 2005), 33.

⁶³⁶ Kaplanoğlu, *1844 Yılı Temettuat*, 164.

⁶³⁷ The distribution of sheep burden per subdistrict in 1826-1827 can be viewed via Süleyman Bilgin, "Bursa Şer'iyye Sicilleri B-317 / 558 Nolu Defterin Değerlendirilmesi" (MA Thesis, Istanbul, Istanbul University, 2002), 36–38.

guruş per sheep but practiced differently across regions, albeit not too far from this rate. Other livestock were taxed per their productivity and maturity type and subject to a tithe. After 1858, the sheep tax started to be collected in this fashion and was fixed at different rates in different provinces.⁶³⁸ In Bursa, the tax was four *guruş* for full-grown sheep and goats per head in 1870.⁶³⁹ Tractor and transport animals like horses, donkeys, mules, and oxen were not taxed.

Tanneries of Bursa, numbered about forty only in the city⁶⁴⁰ and multiple in the subdistrict centers in the mid-nineteenth century, had access to hides and skin thanks to extensive sheep, goat, and cattle raised in the region, in conjunction with proximity to the salt of the Marmara Sea, tanbark of Bursa, and valonia resources of the Karesi (Balıkesir) and Biga (Çanakkale) regions to the west (connected via sea). Hides were consumed chiefly domestically, such as in the shoe sector, and satisfied the needs of middle- and low-income earners. Because there was no unified and good production scheme, Bursa's leather could not be exported in significant quantities. Mostly unprocessed, leather was shipped to Trieste and Marseilles ports in small amounts from Istanbul. Good quality leather was imported from France and secondary quality from Italy, implying the inferior quality of Bursa's product.⁶⁴¹

Wool industries, however, were not as developed as tanneries. Bursa's wool had poor marketability power because the sheep's fleece was of coarse, carpet-wool type. Further damaging its market power was the poor shearing methods. The sheep, which yielded about two kilograms of wool annually, were shorn without washing or cleansing, and it was packed as it was clipped, hence reducing the quality to a great extent.⁶⁴² The autumn wool sold much dearer, as it was suitable for stuffing mattresses and making felt. Its unfitness prevented it from becoming a branch of export trade of considerable significance, like the fine wool industries of Salonica that clothed the army and the palace, or the British, Venetian, and French wool that used to be sold in the Bursa markets. The fleece of (the Anatolian hair) goat

⁶³⁸ Feridun Emecen, "Ağnam Resmi," in *TDV İslam Ansiklopedisi* (İstanbul, 1988), 479, <https://islamansiklopedisi.org.tr/agnam-resmi>.

⁶³⁹ BPP, CP, No. C.113, LXV.563 (65), *Reports by H.M. Secretaries of Embassy and Legation*, 1870, 228.

⁶⁴⁰ Ferhat Öztürk, *Tarihte Bursa Esnafı: Sermaye, Borç ve Alacakları Açısından (1800-1839)* (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2017), 25.

⁶⁴¹ Hüseyin Mevsim, "Sofya Ticaret ve Sanayi Odası'nın 1909 Bursa Sergisi Raporu," in *Osmanlı Modernleşmesi ve Bursa*, ed. Cafer Çiftçi (Bursa: Osmangazi Belediyesi Yayınları, 2009), 62, 66.

⁶⁴² MacFarlane, *Turkey and Its Destiny*, 1850, 1:128.

was shorn the same way and had no remarkable quality as the Angora goat. It was used in specific yet widely appreciated sectors such as rug-making, goat-hair spinning, and goat-woolen-cloth-making (*muytab/mutaf*). The large community of Bulgarian wool, sheep, fur, and coarse woolen cloth dealers in the region may indicate the low quality of the wool produced.

As a result, Bursa's wool was consumed chiefly domestically in the nineteenth century.⁶⁴³ Its quality was sufficient enough for the populace. Men and women of all levels owned coarsely woven wool cloth garments called *çuha*, whose production and trade remunerated many artisans, home-based industries in rural areas, and nomadic communities. Fez manufacturers, felt makers (*keçeci*), and other sectors working with domestic wool, such as saddlers who used it to stuff their saddles and quilt makers their quilts, promoted the use of this article.⁶⁴⁴ Regarding exports, it was reported in 1860 that 625 tons of wool were clipped in the districts of Konya and Karahisar, most of which went to Izmir. The Bursa district's contribution to international trade was minuscule compared to the interior parts of the province. Vessels of 66 tons were ready at Bandırma and 120 tons at Gemlik ports to be headed towards Marseilles via Istanbul in the same year.⁶⁴⁵ Determining the share of authentic Bursa wool in this trade is problematic. But, at least, in comparative terms, the wool furnished within the Mihaliç subdistrict in 1843 amounted to 32 to 40 tons, which was increased by collections from other parts of the interior to somewhere between 51 to 65 tons.⁶⁴⁶ While the incorporation into the world economy played a role in terms of the amount of wool exported in the meantime, the silk connection between Bursa and France, improvements in the quality of wool in the Imperial farms, and the cotton crisis of the 1860s might have stimulated Bursa wool exports in the following decades.

A crucial point in analyzing the performance of the woolen industries is the domestic production and consumption of woolen carpets that have not been adequately studied in the case of Bursa to complicate the picture of economic performance and socioeconomic

⁶⁴³ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 472.

⁶⁴⁴ In fact, fezze made of Bursa's wool was found to be way superior to those made in Edirne and very much appreciated by the central administration so that the fez of the region was used alongside those produced in the imperial fez factory (*feshane*) in Istanbul to cloth the new army. OA. HAT. 326 / 18985 (AH. 1250 / 1834/1835).

⁶⁴⁵ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 184.

⁶⁴⁶ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 104.

relations. Small and medium-sized rugs were essential items in most houses and public buildings. Household-based industries, where women and child labor were essential in spinning wool yarn and weaving carpets, together with the small minority of seminomadic females known to weave rugs, must have been active in meeting the regional demand. We only know that the woollen carpet industries of Bursa were never commercialized like those of the Denizli, Uşak, and Manisa regions in the 1860s.⁶⁴⁷ Similarly, the deindustrializing impact of the filatures and imported foreign textiles, coupled with increasing inflation, money shortages, and sheep breeding, might have boosted Bursa's woollen industries because especially the poor and middling classes appreciated coarse cloth.

Lastly, like the grains and tree crops, the animals were at imminent risk of disease and being wasted at any time. Especially the hitherto unreported occurrences of droughts and famines in the 1830s and 1840s led to frequent epizootics (e.g., rinderpest, sheeppox, mastitis, and lumpy skin disease) that reduced the number, fertility, and yield of cattle and sheep in western and central Anatolia.⁶⁴⁸ For example, in 1845, diseases hit the imperial merino flocks due to negligence in provision during winter and in times of inundations of pastures.⁶⁴⁹ Disease and mortality among the sheep significantly reduced the wool yield of the Bursa region in 1853.⁶⁵⁰ A year later, a murrain among the cattle introduced from Iznik occurred, infecting the animals in Yenişehir. It alarmed the central administration but ceased without spreading further.⁶⁵¹ Another murrain in 1861 had carried off many thousands of oxen all over the region, to the extent of leaving localities destitute of these species.⁶⁵² Not long after, yet a destructive murrain visited the western part of Bursa in 1863, killing many oxen and buffaloes. A considerable number of sheep died of measles in the vicinity of the district of Bursa the same year.⁶⁵³

⁶⁴⁷ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 134–60.

⁶⁴⁸ Semih Çelik, “‘It’s a Bad Fate to Be Born near a Forest’: Forest, People and Buffaloes in Mid-Nineteenth Century North-Western Anatolia,” in *Seeds of Power: Explorations in Ottoman Environmental History*, ed. Onur İnal and Yavuz Köse (Winwick, Cambridgeshire: White Horse Press, 2019), 117.

⁶⁴⁹ MacFarlane, *Turkey and Its Destiny*, 1850, 1:306.

⁶⁵⁰ BPP, CP, No. 2006, LV (55), *Abstract of Reports of Trade*, 1854, 82.

⁶⁵¹ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 184.

⁶⁵² BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 353.

⁶⁵³ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 433.

Hard physical labor and overwork of animals harmed their health. The state's increased raw wood and timber demands for imperial dockyards and other construction projects since the 1830s put the peasantry and animals of northwestern Anatolia under great strain. Human and animal resources were overexploited under a corvee arrangement known as the *kerestekeşan* (timber-contracting) system. A look at Gemlik and Mudanya ports' customs records and military purchase records indicates the timber of the eastern Bursa province was transported in significant quantities to imperial dockyards in Istanbul and Gemlik.⁶⁵⁴ For example, the state ordered the community of the Inegöl subdistrict to cut trees and ordered dozens of oxen to drag them to the coast, all at the cost of working the men near the forest and the subdistricts' animals to the maximum extent, while leaving the lands untilled.⁶⁵⁵ Wood cutting, timber making, and coal production involved more than half of Inegöl households. The little returns and corvee on these tasks made a villager utter the following words:

“The forest,” said they, “is our friend, giving us fuel and light; but the forest is also our enemy, for they cut great trees there for the Padishah's ships, and they take our oxen to drag them towards the coast. Today there is a demand upon us for twenty pair of oxen, to drag a giant tree! We have not twenty yoke left in the village: we could not do the thing even if we left our fields all untilled, and the time for tillage is at hand. We cannot do it, but we shall suffer for it! When we work ourselves and our cattle to death, we are never properly paid. Yes! It is a bad fate to be born near a forest.”⁶⁵⁶

Heavy government timber corvee persisted and probably peaked during the 1860s. Sultan Abdülaziz's (r. 1861-1876) comprehensive naval modernization programs, the rebuilding of Bursa and its environs after the 1855 earthquake, and several road construction projects increased the burden. While the peasantry was dealing with the murrain of 1861, a decisive requisition came for them to transport timber from the inland forests as far as Ankara. Georges Perrot describes the situation as such:

All day long we had met arabas on the road loaded with planks and dragged by oxen or buffaloes; sometimes there are thirty or forty which follow each other in line. We also see horses each loaded with about twenty boards. All this comes from the forests of Bithynian Olympus, ten or twelve hours from the sea. Each board, returned to the shore, costs 72 *paras* (about 55 *centimes*). The same men cut down the wood they transport. At the sawmill, they give one in ten boards as the price for sawing; these are the only costs they have to bear their work is insufficiently remunerated.⁶⁵⁷

⁶⁵⁴ Satıcı, “19. Yüzyılda Hüdavendigar Eyaleti,” 260–72.

⁶⁵⁵ MacFarlane, *Turkey and Its Destiny*, 1850, 1:149–50.

⁶⁵⁶ Ibid.

⁶⁵⁷ Perrot, *Souvenirs d'un voyage en Asie Mineure*, 212. My translation.

Still, though, a consular report stated that the state, despite its efforts, could not get more than ten percent of what was asked, since the task was most onerous on the part of the peasants who, now diverted from home labor, were not even given anything in compensation for the cattle worn out in tedious toil.⁶⁵⁸

Rich in pine and chestnut forests and populated by wildflowers, Bursa's flora was highly suitable for beekeeping which rendered a large stock of honey and wax to the keepers and a considerable in-cash tithe revenue for the central treasury.⁶⁵⁹ Like molasses, honey was added to the content of various desserts. Bees were of the endemic Anatolian type, namely *kılıç* (sword) and *kalburcu/kalkan* (shield) named after their honeycomb-making patterns. Responsible for these names was the archaic nature of the hives, which were parts of tree trunks hollowed out and opened on both ends. They were placed in holes poked in wooden walls.⁶⁶⁰ Before modern beekeeping techniques (with moveable frames) became visible in the late nineteenth century, the only work was in the swarming season, when the swarms were watched for a few weeks during April-May. A few puffs of smoke from the pitcher-smoker were blown on the bees. Because human hands broke the hives to extract the honey, bees built the honeycomb anew following every swarming season.⁶⁶¹ Honey harvest was in summer. A well-kept hive yielded approximately four to six kilograms of honey and 300-600 grams of wax.⁶⁶² The hives were subject to a tithe after 1840. They were taxed from late July to early August when the beekeeping season was nearing its end.⁶⁶³

Bordered by the sea and containing two lakes and countless rivers and streams abounding with fish, fishing provided an additional source of food and income and compensated for wheat shortages. Still, transport costs and perishability played a vital role in seafood consumption. As MacFarlane saw, "[a]t Brusa, and in the plain, they had ... plenty of milk, but hardly ever any sea-fish: at Moudania, only eighteen miles off, they had an

⁶⁵⁸ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 354.

⁶⁵⁹ OA. MVL. 669 / 7 (09-01-1281 / 14-06-1864).

⁶⁶⁰ MacFarlane, *Turkey and Its Destiny*, 1850, 1:104.

⁶⁶¹ Tamar Novick, "Milk & Honey: Technologies of Plenty in the Making of a Holy Land, 1880-1960" (PhD Thesis, Philadelphia, University of Pennsylvania, 2014), 22-43.

⁶⁶² Güran, *19. yüzyıl Osmanlı Tarımı*, 105.

⁶⁶³ İbrahim Solak, "Osmanlı İmparatorluğu Döneminde Anadolu'da Arıcılık," in *Tarihçiliğe Adanmış Bir Ömür: Prof. Dr. Nejat Göyünç'e Armağan*, ed. Hasan Bahar et al. (Konya: Selçuk Üniversitesi Matbaası, 2013), 351; Karakaş, "Tanzimat Dönemi Aşar," 57.

abundance of fish and no milk.”⁶⁶⁴ Sea, lake, and river fishes and caviar were caught and usually consumed on the spot, and the surplus was salted and sent to the nearest market where fish sellers and grocers sold them.⁶⁶⁵ Lake Apolyond was lucky in terms of the fish and caviar trade. Fed by the Rhyndacus river and branches of the Nilüfer, and advantageous in terms of standing near the plain and having access to the Marmara Sea, high-quality fish and caviar products could be sent relatively easily to the city of Bursa and exported to Istanbul.⁶⁶⁶

Regarding fish consumption and fishing tendencies, cultural differences between Muslims and non-Muslims were more pronounced than physical factors. Muslims were reportedly not much knowledgeable about catching fish, and those who lived near water sources were only interested in eating a limited, usually freshwater, variety that they deemed clean (e.g., glani, carp, trout, mullet, perch, and roach).⁶⁶⁷ They obtained almost no boats and fishing implements and caught fish by entrapping or shooting them with a musket or a fowling piece near the shore. The non-Muslims, especially the Orthodox Christians settled in coastal areas, were employed in the sea and fishing trade, and knew how to prepare and trap fish with nets (e.g., by hunting in boat pairs, trailing a net behind a sailing boat, or stretching nets over the poles in shallow water), cure their fish (prominent sea creatures included anchovy, atherine, sardines, bream, and bonito) with salt and save them for later (in various ways, like making soup of them).⁶⁶⁸ Fishermen of Gemlik and Mudanya did not limit

⁶⁶⁴ MacFarlane, *Turkey and Its Destiny*, 1850, 1:225–26.

⁶⁶⁵ In the city of Bursa there were nine fish-sellers in 1839, eight of them being Jews – possibly for their kosher diet, and one Muslim. NFS. d. 1396, 1398 (AH. 1255 / 1839). See the inheritance inventory of an Orthodox-Christian grocer (bakka) in the city of Bursa: OA. MŞH. ŞSC. d. 3134 (C / 112), pp. 13-14. (AH. 27-01-1281 / 02-07-1864). The maximal fixed price regulations from the town of Mudanya reveals that grocers sold fish and caviar there. Uğur, “The Ottoman Court Records,” 124; MacFarlane reports on Mudanya’s fish sellers as well. MacFarlane, *Turkey and Its Destiny*, 1850, 2:63; On the continuity of the Byzantine practices in transporting and the grocers’ (saldamarioi) central role in selling fish, see Dagon, “The Urban Economy, Seventh–Twelfth Centuries,” 447.

⁶⁶⁶ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 196.

⁶⁶⁷ Faruk Doğan, “Osmanlı’da Boğaziçi’nde Balıkçılık (18.Yüzyıl - 20. Yüzyıl),” *Tarih Okulu Dergisi* 2011, no. X (2010): 41.

⁶⁶⁸ MacFarlane, *Turkey and Its Destiny*, 1850, 1:218, 230; Fish sometimes was more than a food source. Fish oil was used as an ingredient in the red-dyeing of certain cloths like basma. Canan Torlak-Emir, “Osmanlı Başkentinde Basmacı Esnafı ve Ermeni Basmacılar,” *Medeniyet Kültürel Araştırmalar Belleteni* 2, no. 2 (2022): 65; For the fishing techniques in the Sea of Marmara, see Suraiya Faroqhi, “Fish and Fishermen in Ottoman Istanbul,” in *Water on Sand: Environmental Histories of the Middle East and North Africa*, ed. Alan Mikhail (New York: Oxford University Press, 2013), 91–110.

their activities to the littoral zone; they also seasonally went to the Bosphorus and the Black Sea.⁶⁶⁹

Like anything else, fish were affected with a tax (known as *sayd-ı mahi* or *dalyan mukataası*), which was farmed separately per subdistrict⁶⁷⁰ or the whole district.⁶⁷¹ This tax generated a fair revenue for the state: Fishing activities and licenses in Gemlik, Pazarköy, and Mudanya made close to one-third of the gross sheep-tax amount in these districts in 1879, for example.⁶⁷²

2.3.5. State of Taxation, Cash scarcity, and Credit Relations

A British commercial report from 1856 states, "[t]o give regularity and more extension to the trade of Brussa, the two desiderata are further – a good road to the coast...and the establishment of a branch bank."⁶⁷³ In 1820-1870, infrastructural and environmental restraints on production and the want of money in the face and because of increasing demands of in-cash tax payments created an extremely profitable environment for rural- and urban-based capital-holders. These comprised foreign merchants, Armenian *sarrafs*, and the Muslim elite, who appropriated the lion's share of the region's commercialized agriculture surplus to loan cash at high-interest rates to meet the liquidity demands of rural and urban sections. The Tanzimat period's unsuccessful attempts at directly taxing households based on their income and introducing paper money, coupled with high rates of devaluation and inflation, drifted the producers toward indebtedness and resorting to usurious borrowing from moneylenders in the relative absence of state regulation.

The persistence of tax-farming and collective taxation throughout much of the nineteenth century was one reason taxes consumed a substantial portion of the surplus of agriculture of the Bursa region, and borrowers were entrapped in cycles of debt. In dire need of money caused by worsening budgetary problems, the state auctioned tax revenues, usually below their actual value, especially from the mid-nineteenth century onwards. As the British vice-consul of Bursa observed in 1857, the tax farmers, who acquired their privileges in

⁶⁶⁹ Ozil, *Orthodox Christians*, 5.

⁶⁷⁰ For an example, see a compliant written by the collectors of fishing taxes of Erdek, a few miles west of Mihaliç. OA. AE. SMHD. II. 49 / 3166 (AH. 1235 / 1819/1820).

⁶⁷¹ OA. MVL. 1035 / 165 (AH. 06-05-1284 / 05-09-1867).

⁶⁷² *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1297 / 1880, p. 143.

⁶⁷³ BPP, CP, No. 2285, XXXVIII (38), *Abstract of Reports of Trade of various Countries*, 1857, 182.

Istanbul, had their local agents collect the traditional tithe (*öşür*) and other duties (e.g., customs, scale, stamp). Usually, they collaborated with and divided the tax amount among intermediaries – namely *sarrafs*- to carry out their financial operations, since they had enough accumulated capital to provide money to the greatest number of people thanks to the nature of their undertakings.⁶⁷⁴

These *sarrafs* were generally in direct collaboration with the financier circles of Istanbul, private banking firms also known as the Galata bankers, who enjoyed profits from high-interest rates on money lent to small borrowers as much as on short-term credits provided to the central treasury. As the nineteenth century progressed, they increasingly obtained the roles of tax farmers in their localities.⁶⁷⁵ According to a villager in 1845, the *sarrafs* sublet these privileges to still smaller men in towns and villages in return for profit by charging high interest on the initial capital lent. These small contractors, therefore, had to make high profits in their localities.⁶⁷⁶ In the face of declining government control over international trade and financial markets, small producers who dominated urban and rural production had little or no means to resist or escape usury to pay their taxes and expenses. Coupled with the dissolution of guilds, the fading artisan and cash waqfs that once helped them could not adequately serve their functions since the early nineteenth century.⁶⁷⁷

Higher rates of in-cash taxation levied on agricultural produce and incomes earned over them were considered by Ottoman subjects, travelers, and consuls as severely curtailing the profitability that growing tree crops and cultivating grains might generate. Straining of the peasantry due to the heavy burden of taxes was thus described by an Orthodox Christian peasant in the mid-nineteenth century Bursa: “I am in trouble and in woe...I have been obliged to sell all my grapes to pay my taxes! I have none left to make *petmez* [*pekmez*-molasses]. What will my children do without *petmez*? How are we to get through the winter without *petmez*?”⁶⁷⁸ Poll tax (later military-exemption tax), the tithe, the special tax, and miscellaneous excise taxes and tariffs (levied on stamp, customs, market, scale, mill, spirits,

⁶⁷⁴ Kasaba, *The Ottoman Empire and the World Economy*, 76.

⁶⁷⁵ *Ibid.*, 77.

⁶⁷⁶ MacFarlane, *Turkey and Its Destiny*, 1850, 1:102.

⁶⁷⁷ Çiftçi, *Bursa'da Vakıfların*, 90–95, 192–214.

⁶⁷⁸ MacFarlane, *Turkey and Its Destiny*, 1850, 1:141–42.

state/waqf-land rent, etc., the total of which was called *rüsumat*) placed immense weight upon the producers.

Taxes were not the problem per se, but what became of the money was. Lack of money, agricultural and industrial input and implements, and means of market communications were partly caused and exacerbated by the economic demands of the

... government, that taking much gives nothing in return; that taxes the agricultural population directly and indirectly, at a rate of 30 per cent., yet in requital provides neither public works nor public security, nor public justice, nor police, nor sanitary care, nor commercial freedom, nor any other benefit whatsoever. Worse still, the army conscription, levied exclusively on the Mahometan subjects of the Porte, bears on the agricultural population, nine-tenths of which are Mahometan, with a weight alike disproportioned to their numbers and their means.⁶⁷⁹

Diminution of or exemption from taxes was rarely admitted. For example, in 1841, the Orthodox Christians could not complete the *jizya* demand on them for 120.000 piasters, without including infants and superannuated males (of whom the wealthier classes paid 60 *guruş* per head). The deputies would have to call anew on those within the city of Bursa to make up the deficit.⁶⁸⁰ In a more striking instance, following an adverse season in 1852, the peasants had to sell even their clothing, kitchen utensils, and other household trivia to meet their obligations.⁶⁸¹

The failure to shift the tax burden to wealthier classes was one reason such cases occurred. The imperial project of taxing households based on their income-generating activities and assets in 1845 failed, and collective taxation continued (more on this in section 3.3.2). The population, property, and tax surveys conducted in the region in 1858 could not replace this system⁶⁸², and tax farming persisted. Vefik Pasha's inspections in Bursa revealed that, depending on local power relations, village and quarter headmen did not distribute the

⁶⁷⁹ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 744.

⁶⁸⁰ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 103.

⁶⁸¹ Kasaba, *The Ottoman Empire and the World Economy*, 66.

⁶⁸² Kaya, "Tanzimat'ın Bursa'da Uygulanması," 50–106. In addition, a consular report from 1870 recorded the following regarding the nature of the 1858 counts: "At Broussa a survey of real property, and a census of the population, were carried out in 1857-58, by Government engineers, for the city and neighbourhood, and the 'salyane' established accordingly. Those surveyors were recalled on account of the process being considered too tedious and expensive; and they were succeeded by a number of clerks from the Porte, who continued the cadastre throughout the district, but not in the same scientific mode. Their demarcations and valuations remain in force as a basis of taxation." BPP, CP, No. C.113, LXV.563 (65), *Reports by H.M. Secretaries of Embassy and Legation*, 1870, 210. .

taxes equitably among households.⁶⁸³ In response, the peasants of Bursa did not collectively resist or uprising against the increasing weight of the new state but displayed everyday forms of resistance. Sometimes, the agricultural economy was upset, as evidenced by the practice of fallowing land for prolonged periods if overtaxed. Exasperated by other taxes, most people gave up on beekeeping or reduced the number of beehives from the 1850s onwards.⁶⁸⁴ Informal, covert, and daily resistance types, ranging from cheating, pilfering, theft, foot-dragging, and tax evasion to violence, were likely used, as these methods were regularly deployed in the early Republican times by most peasants.⁶⁸⁵ MacFarlane recorded the memoirs of a confrontation between the villagers of Dudaklı and Narlıdere (northeast of the plain) and tax collectors, as told by a villager in 1845:

The revenue officers had made an assessment for the *salıane*, or property-tax [read: communal tax], in the fairness of which the head men of the two villages agreed; but when the time came for levying the tax, every man found that his assessment had been about doubled. Ibrahim was quiet until they came to Dudaklı for payment. He then remonstrated. The tax-gatherers referred to their scrolls of paper. "Those writings speak not the truth," said Ibrahim. The publicans told him that he did not know how to write, that none of the villagers could even read. "But we can remember," said Ibrahim, "and we all do remember the figures we agreed upon. I was to pay 300 piastres, Mustapha 200, Halil 150, and so with the rest of us; and now you ask us all nearly double. This cannot be." All the head men said, very decidedly, that it was not just, and that they would not submit to it. The levyers said that they who could read and write, and keep accounts, must be in the right, and that the villagers must all be in the wrong; and they stormed and talked very big. Ibrahim pointed to a deep lake a very little above the village, and asked them whether they could swim? They moderated their tone, got into their saddles, and turned their horses' heads away from Dudaklı. The Turks of the prosperous corn village on the hills, under which we had passed in coming from Ghemlik, had long been accustomed to defend their rights in the same strenuous manner. ... Wherever the Turks showed this sort of spirit they were comparatively in a thriving condition, but the examples were very rare.⁶⁸⁶

We need empirical data to concretize subjective judgments and display periodic and sporadic data, but we can only get an approximate sense of taxation. Compiling tax statistics for the first half of the nineteenth century is difficult because revenue (*varidat*) records do not tabulate all annual income sources per subdistrict. Because most revenues were divided into small units and farmed to different individuals, and the state and the pious endowments directorate were experimenting with varying taxation modalities, keeping track of all

⁶⁸³ Arıkan, "A History," 145.

⁶⁸⁴ OA. MVL. 669 / 7 (AH. 09-01-1281 / 14-06-1864).

⁶⁸⁵ Murat Metinsoy, "Negotiating the Price of the New State and Republican Modernization: Resistance to the Agricultural Taxes in Modern Turkey," *New Perspectives on Turkey* 63 (2020): 80–112.

⁶⁸⁶ MacFarlane, *Turkey and Its Destiny*, 1850, 1:105.

proceedings per year in an orderly fashion is often tiresome and sometimes an impossible task for the historian. Still, to gain a rough sense of the tax burden in the region, we can use two total revenue data for the whole region from 1861 and 1874. The former was prepared by the British vice-consul Donald Sandison using official statistics.⁶⁸⁷

Given that Bursa's permanent population changed little between 1839 and 1861, we can estimate per household and head tax burden. The special tax on all incomes and earnings, silk duties, and the tithe on grains formed the major sources of income, with 11,6 million. Miscellaneous taxes comprised various burdens, including the levies on spirits, livestock, and fishing, the tithe on olives, and the military exemption tax (i.e., poll-tax substitute paid by the non-Muslims) constituted the other main sources. In total, 17,3 million *guruş* was collected. Regarding this information, the special tax incurred on almost all households created a burden of 98 *guruş* per this unit. If everyone paid miscellaneous tax (e.g., stamp, notary, and sheep tax), this burden rises to 111 *guruş*. In the few years leading to 1861, cocoon production peaked, so presuming everyone more or less was engaged in it, the tax burden rose to 282 *guruş* per household and 122 per male. Table 4 gives a breakdown:

⁶⁸⁷ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 355.

Table 4: Tax Collected from the District of Bursa, 1861

Revenue Type	Amount in <i>guruş</i>	in 1861 Pound-Sterling
The Special Tax on all Incomes and Earnings (<i>virgü</i>)	4,000,000	
Miscellaneous, called <i>Rüsumat</i> (including those levied on spirits, livestock, and fishing)	536,000	
Military exemption tax (in lieu of <i>jizya</i>)	566,000	
Total	5,102,000	38,650
Tithe (<i>öşür</i>) on grain (auctioned with the tithe on grapes)	4,600,000	
Tithe on olives	450,000	
Silk duties	7,000,000	
Joint amount (as stated)	12,205,000	91,300
Grand Total	17,307,000	129,950
Special Tax per Settled Household in 1839 (N=40.218)	100	
Special Tax per Settled Male in 1839 (N=94.605)	42	
Special Tax + Miscellaneous Taxes per Settled Household in 1839	113	
Special Tax + Miscellaneous Taxes per Settled Male in 1839	48	
Special Tax + Miscellaneous Taxes + Silk Duties per Settled Household in 1839	287	
Special Tax + Miscellaneous Taxes + Silk Duties per Settled Male in 1839	122	

The second tax compilation comes from near the end of our study period and is given in table 5. On the verge of declaring bankruptcy, the Ottoman State published a summary of its revenues from Bursa in 1874 per subdistrict in the official yearbook of the Hüdavendigar province. According to these records, a total of 14,7 million *guruş* was collected. Although we do not have a detailed breakdown of each tax article, and all miscellaneous duties (*rüsumat*) are not displayed, compared to the 1861 figures, the loss of silk incomes may explain a significant part of the decrease between the two gross revenue totals. Indeed, the tithe remained the most prominent article, but its nominal value decreased from around 12 million to 8 million *guruş*, and its relative proportion in gross revenues dropped from 70 in 1861 to 50 percent. However, the special tax increased from 4 million (23% of the total) to

5,6 million (38%). Military exemption tax also increased by 57% due to the region's growing non-Muslim population, which I deal with in section 2.3.7.5. Luckily, population totals were published in the same yearbook so that we could make more accurate estimations.

First and foremost, a direct relationship exists between the population and the tax burden (Table 6). The plains of Bursa, where 61% of all the households were situated, and grain, fruits, vegetables, and other cash crop cultivation and animal husbandry were practiced, paid 60% of all taxes. Bursa (including the city) and Kite took the lead with 26%. Mihaliç, Kirmasti, Yenişehir, and Inegöl (including the Domaniç subdistrict) contributed 34% altogether. Mihaliç, which had a port, more *çiftlik*s than the rest, and extensive sheep breeding, accounted for 14%. The olive belt, comprising the subdistricts of Mudanya (including Tirilye township), Gemlik, Pazarköy, and Iznik, generated 32% of all taxes. Gemlik, the port town with a growing non-Muslim (particularly Orthodox Christian) population, and its neighbor Pazarköy, which received a mass Armenian population and touched both the Marmara Sea and Lake Iznik, made 18%. Olive, viniculture, and, to a lesser extent, grain cultivation and sheep breeding must have saved them. The southern subdistricts of Atranos and Harmancık, with only Muslim populations living on high altitudes who grew mostly grains and bred livestock, were responsible for 7% of the total revenue pool.⁶⁸⁸

Based on the 1874 revenues and population data, we can calculate that the tax amount per *male* was 129 *guruş* and per *household* 309 *guruş*. Only the special tax burden per household was 118 *guruş*, and the addition of the tithe raised it to 264 *guruş* (or 110 per male). The tithe-added per household result is in conjunction with consul Palgrave's estimation that "the average amount levied yearly by the Ottoman Government in Anatolia on each country householder [in 1870], taking land-owners, tenants, and labourers of whatever degree together, the more with, the less, cannot be estimated under 240 piastres (2*l*. English) per head per annum."⁶⁸⁹

⁶⁸⁸ *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1292 / 1875, p. 148.

⁶⁸⁹ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 737.

Table 5: Total Tax Collected in the Bursa Region in 1874 (in guruş)

Subdistrict	Livestock Tax	Military Exemption Tax (In Lieu of Jizya)	Tithe	Special Tax	Total Tax
Bursa and Kite and Cebel-i Atik township	238.752	258.747	1.593.046	1.714.043	3.804.588
Gemlik	90.950	104.500	566.120	437.400	1.198.970
Pazarköy	46.700	153.116	648.850	600.250	1.448.916
Mudanya	34.278	91.426	557.162	371.806	1.054.672
Tirilye township	2052	46.646	221.197	126.622	396.517
Iznik	82.964	7800	255.055	264.014	609.833
Mihaliç and Sincan township	275.132	127.144	1.083.856	532.559	2.018.691
Kirmasti	113.752	14.062	319.500	336.269	783.583
Yenişehir	99.708	27.500	633.645	278.841	1.039.694
Inegöl and Domanıç subdistrict of Kütahya	55.212	60.000	626.122	462.371	120.3705
Harmancık	80.126	0	191.920	220.098	492.144
Atranos and Cebel-i Cedid township	101.140	0	252.202	294.238	647.580
Total	1.220.766	890.941	6.948.675	5.638.511	14.698.893

Table 6: Population of the Bursa Region and Tax per Male and Household, 1874

Subdistrict	No. of Settlement	1874 Total HH	1874 Muslim Males	1874 Non-Muslim Males	1874 Total Male Population
Bursa and Kite and Cebel-i Atik township	104	16.587	22.826	12.882	35.708
Gemlik	20	3983	3495	3754	7249
Pazarköy	13	3261	2170	5760	7930
Mudanya	18	1836	3476	3063	6539
Tirilye township	1	800	55	1660	1715
Iznik	37	3549	3916	359	4275
Mihaliç and Sincan township	79	4060	6322	4541	10.863
Kirmasti	36	1783	N/A	N/A	5337
Yenişehir	55	2187	N/A	N/A	9170
Inegöl and Domanıç subdistrict of Kütahya	92	4405	8112	3638	11.750
Harmancık	43	1510	3970	0	3970
Atranos and Cebel-i Cedid township	107	3638	9421	0	9421
Total	605	47.599			113.927
Subdistrict	Tax Per Male	Tax Per HH	Special Tax Per HH	Special Tax + Tithe Per HH	Military Exemption Tax per Non-Muslim Male
Bursa and Kite and Cebel-i Atik township	107	229	103	199	20
Gemlik	165	301	110	252	28
Pazarköy	183	444	184	383	27
Mudanya	161	574	203	506	30
Tirilye township	231	496	158	435	28
Iznik	143	172	74	146	22
Mihaliç and Sincan township	186	497	131	398	28
Kirmasti	147	439	189	368	N/A
Yenişehir	113	475	127	417	N/A
Inegöl and Domanıç subdistrict of Kütahya	102	273	105	247	16
Harmancık	124	326	146	273	0
Atranos and Cebel-i Cedid township	69	178	81	150	0
Average	129	309	118	264	

Market conditions, seasonal variations, subsistence requirements, the versatility of economic activity, the size of tax farms, and how the special tax was allocated per household increased the liabilities of producers and artisans. Aggregate tax and income data from the 1845 surveys can help us understand variation in Bursa. Kirmasti, with its large population and rich agricultural production, paid on average 343 *guruş* per household, amounting to 21 percent of the 1521 *guruş* per household average expected income.⁶⁹⁰ Harmancık, the subdistrict in the south that mainly raised livestock and silkworms and cultivated grains, paid 237 *guruş* per household, 41 percent of the 560 *guruş* expected income for each household.⁶⁹¹ Given that the surveys for Harmancık did not record the tithe on vegetables, fruits, and cocoons, this rate gets closer to 50 percent. On top of these taxes, add miscellaneous fees levied on selling goods, transport duties, poll tax (if non-Muslims), extra service and payment requirements demanded by the state and local notables, waqf and state rental fees (e.g., *mukataa* and *ijara* [*icare*] for tilling the land⁶⁹²), and production and living expenses. Then, even during a regular season, the cash needs of the population would prompt them to borrow from available sources where usurers were the most prominent actors.

2.3.5.1. Persistence of Usury

From the mid-nineteenth century, the informal credit market operated on effective interest rates of 20 to 25% all around the Empire, albeit subject to wide regional and seasonal differences, more than the canonically lawful maximum rate of 12 percent.⁶⁹³ In Bursa of the 1870s, 25 percent was the minimum; this rate often rose to 36%.⁶⁹⁴ What MacFarlane witnessed in the Mudanya of 1845 is corroborative: “The weight of interest lay like an enormous incubus upon the people. Here, at Moudania, where every enterprise was stopped through want of capital, money was not to be procured under 25 percent: and Moudania was next door to the capital [Istanbul].”⁶⁹⁵ Similar rates were observed during Mihaliç and Kirmasti

⁶⁹⁰ İsmail Yaşayanlar, “19. Yüzyılda Kirmasti (Mustafakemalpaşa) Kazasının Sosyo-Ekonomik Durumu” (MA Thesis, Bursa, Uludağ Üniversitesi, 2012), 66.

⁶⁹¹ Kartal, “Harmancık Kazası’na Bağlı Şimal (Kuzey) Köylerin,” 8, 115, 131; Çubuk, “Harmancık Kazasına Bağlı Cenubta (Güney) Bulunan Köylerin,” 20, 147, 169.

⁶⁹² By 1845, *mukataa-i zemin* (the state rental fee variety) was collected at one *guruş* per dönüm of grains and 1,5 per dönüm of mulberries and vineyards. Its proceedings went into the pockets of the tithe collectors. MacFarlane, *Turkey and Its Destiny*, 1850, 1:150; see also Çiftçi, *Bursa’da Vakıfların*, 109–11.

⁶⁹³ Kasaba, *The Ottoman Empire and the World Economy*, 81.

⁶⁹⁴ Edmond Dutemple, *En Turquie d’Asie*, 237.

⁶⁹⁵ MacFarlane, *Turkey and Its Destiny*, 1850, 2:67.

subdistricts in 1839.⁶⁹⁶ This feature of the economy suggests that the market rates, not the statutory maximum rates (assuming the legal rates were closely monitored and not legal fictions⁶⁹⁷), were prevailing in the region.

What motivated and, to some extent, excused these exorbitant rates was the absolute lack of security in reimbursement. An 1861 consular report writes: “[a]s taxes must first of all be paid, the authorities are often very lenient to individual claims for debts, which were almost impracticable of recovery by legal process; and the best compromises to be made by instalments and renewals of bonds are accepted instead. The peasantry, taking advantage of this indulgence shown to them, evade payments to the utmost...”⁶⁹⁸ Barring exceptional years, peasants did not have their debts due and were content only to pay the interest.⁶⁹⁹ Persuasiveness and the ability to collect one’s debts were therefore critical. A contemporary account of a Bulgarian writer who came to Bursa to collect his deceased merchant father’s debts is full of anecdotes of poor debtors begging for mercy or ready to pick a fight. In addition, putting property in the spouse’s name, declaring bankruptcy, and arranging false witnesses to deny debt claims were not unusual. Ultimately, if not powerful enough, the lender might have gotten a tiny fraction of the total amount loaned.⁷⁰⁰

On the giving end of money collection, the lack of security meant that it was not uncommon for the producers to face dreadful treatment from tax collectors. Complaints and lamentations from the countryside of the Bursa region in the mid-nineteenth century exemplify but a few of those. Properties from carts and plows to little kitchen utensils were seized to meet small debts. Grains were measured with the tax-gatherers’ measures that

⁶⁹⁶ Aytekin, “Cultivators, Creditors and the State,” 299.

⁶⁹⁷ Gerber’s study of moneylending transactions from the seventeenth-century Bursa points to the prevalence of ruses as common instruments of lending, be it from the cash waqfs or individuals. Among the most popular ones were the *istiğlal*, what was known as the “wool price” (*çuka bahası*), and *murabaha* which were applied on top or in lieu of the 12-15% interest rates. *İstiğlal* involved the debtor handing over his/her immovable property to the lender supposedly as a sale but actually as a pawn. In the “wool price” method, a piece of wool was supposed with the price purchased literally being extra interest. *Murabaha*, on the other hand, meant a resale of a property with stated interest to circumvent interest rates. Gerber, *Economy and Society in an Ottoman City*, chap. 7; For a short historical overview of means of circumventing interest in Islamic and Christian contexts, see Jared Rubin, “Institutions, the Rise of Commerce and the Persistence of Laws: Interest Restrictions in Islam and Christianity,” *The Economic Journal* 121, no. 557 (2011): 1310–39.

⁶⁹⁸ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign Office from H.M. Consuls, January-June 1862*, 1862, 356.

⁶⁹⁹ Edmond Dutemple, *En Turquie d’Asie*, 237–38.

⁷⁰⁰ Mevsim, *Bulgar Gözüyle Bursa*, 25–48.

allowed them to take more than the tenth. Only the best grains were collected when their tithe was collected in kind, leaving the inferior grains aside. Sometimes the tithe incurred on tree crops, usually collected in cash, was gathered in-kind when the money was not forthcoming. In such cases, the collectors fixed their own low prices to profit from reselling the produce in the market.⁷⁰¹ In other cases, the tax amount was set before its collection. People of the Bergama subdistrict (western Hüdavendigar province) suffered from such mistreatment in 1845. The tax farmer, also the governor, assessed the tithe on grains, cotton, and tobacco, about twice the actual amount these products would yield, and collected it accordingly.⁷⁰²

Another misconduct the tax farmers committed was delaying the crop valuation in case of bad harvests or markets. The Ottoman economic system did not allow agricultural produce to be marketed until its tithe was paid. The tax farmer evaluated the crops while still on the ground to assess their levy. If the markets were relatively good during harvest time, he would promptly collect the tithe and the remaining crop to secure a considerable profit. If they were not, the collection might be delayed even for months, thereby deteriorating the yields on the ground, leaving no choice for the producer but to sell his crops for a low price and become even more indebted.⁷⁰³

In times of bad harvests and urgent cash needs, village communities occasionally received loans in kind, such as oats and barley, to be used as food and feed, whose interest rate was calculated based on a sale price much higher than the market prices. Once sold on the market, the in-kind loan became a loan in-cash that faced outstanding interest rates, sometimes as high as 85%, extending the borrowers' indebtedness.⁷⁰⁴ Bad harvests were not the only concern, though. Environmental, infrastructural, and macroeconomic factors were a constant check on industrial and agricultural activities, making borrowing essential to prolong surplus production.

Although there was a constant flow of money to Bursa from the sale of supplies to the Allied forces in the Crimean War, it quickly ceased with the war's termination, significantly reducing the exports from the region to pre-war levels. Imports and cash flow

⁷⁰¹ MacFarlane, *Turkey and Its Destiny*, 1850, 1:150–51.

⁷⁰² Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 327.

⁷⁰³ Kasaba, *The Ottoman Empire and the World Economy*, 77.

⁷⁰⁴ Aytakin, "Cultivators, Creditors and the State," 300.

to the region were further limited by the losses caused by the international monetary crisis of 1857, exacerbated by deficiencies in the yields of grains and cocoons.⁷⁰⁵ Scarcity aside, the depreciation of and sudden fluctuations in the currency's value were ruinous for trade. Settling the money at some intrinsic par became impossible without formal institutional banking, let alone a district branch bank. The *kaime* (paper note) could not be exchanged on demand against the gold Medjidie (Ottoman pound) or any other good coin standard because gold could find its way out as easily as it came in. The loans to the central treasury could only introduce temporary relief to the economy. The *kaime* could not represent anything real or substantial, and its value was uncertain from one day or week to another for gain or loss. Whereas a gold Medjidie was fixed at 150 piasters in paper in 1856, it was lowered to 140, and then quickly to 110 in 1857 due to the fall of operations at Istanbul. Upon large issues of paper money in 1854, the calling in of the *kaimes* in 1858 to prevent its value from sinking induced confusion among the populace. The state's refusal to accept tax payments in paper money the same year pushed people who had no other currency but paper money to seek money from the moneylenders.⁷⁰⁶ This quick turn of events skyrocketed interest rates, reaching 0,25% to 0,5% daily and 4-5% on monthly loans in 1859.⁷⁰⁷

The erosion of the Ottoman state's economic credibility following the failed Mirés loan of 1861 increased the prevailing financial uncertainty. While the rate of gold medjidie to 100 *guruş* was valid in the filature silk trade, up to 150 was the norm in buying various goods in the bazaars. A Medjidie's worth was 120 piasters in transactions between individuals, far below the value of 220 *guruş* declared according to the imperial order (*ferman*). This depreciation of money without limit caused a significant loss of state revenues when the government issued extra *kaimes* and accepted them as legal tender. The withdrawal of the *kaimes* in the provinces and the ensuing sudden cash scarcity and coin overvaluation permitted usury to flourish. Whereas the lowest annual (from August to August) market interest rate was from 15 to 20 percent, most transactions took place on a scale from 20 to

⁷⁰⁵ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 468.

⁷⁰⁶ Pazarköy villagers' demand was a severe case. Their business partners and clients made payments in paper money. As the government called in the *kaimes* first from the provinces, they had nothing but notes. However, the local treasury did not grant them special privileges to pay their dues in banknotes, and they eventually turned to the moneylenders. Arıkan, "A History," 47–48.

⁷⁰⁷ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 184.

40, and even 100 percent in 1862.⁷⁰⁸ The unavailability of money and dejection of credit reached levels so that “the real property in [the city and region] is unsaleable, unless at an enormous sacrifice of its real worth.”⁷⁰⁹ Meanwhile, due to high devaluation rates and inflation, everyday expenses slowly became a financial burden between the 1850s and 1870. This inflation trend was already under way since 1775 but became sharper after the 1830s.⁷¹⁰ Sandison wrote in 1857:

... the enormous rise here in cost of the necessities of life produced in the country, has been such of latter years, as to derange all rules of domestic economy, for those living on a limited fixed income. Wheat, with flour and bread in proportion, has, during my residence, become tripled, barley for the keep of horses quadrupled in price at this day. Meat, oil, tallow, kitchen, and table butter, also poultry and vegetables, risen much in the same ratio, and firewood and charcoal, primary wants, are at rates quite extravagant. To give a few examples of other items: milk, formerly 1 piastre, is now 4 piastres the *oke*; that is, with allowance for difference of exchange, gone up from 2.25*d.* to 7.5*d.* for 1.5 pints. Eggs we used to get at 6 *paras* [*para* = 1/40 of a *guruş*/piaster] each, or 11 piastres the dozen, are at 20 *paras* each; 6 piastres, or 11 *d.* per dozen. Horse-hire for a ride of a few miles, wont to cost about 1*s.*, is now charged 3*s.* to 3*s.* 6*d.*; and labour for any sort of job or masons and carpenters work to be done, has followed the general course of rise in prices.⁷¹¹

According to the city residents’ calculation, living costs nearly doubled between 1858 and 1870. Articles of goods and commodities had also advanced in price, as with salaries and wages.⁷¹²

The *sarrafs* were the most influential actors in the informal credit market established in Bursa.⁷¹³ But they were far from being a monopoly. Most wealth was accumulated in the hands of a few who were usually well-established political, legal, and merchant dynasties with easier access to capital circles. They were “a few” because, in the city of Bursa, the means of acquiring wealth was already hard. According to Hülya Canbakal’s study based on Bursa inheritance inventories (more on them in section 4.3.2), the inequality level in the period 1820-1840 was, in Gini coefficient terms, 0,74 (closer to 1 means less equal), which indicates very high levels of inequality.⁷¹⁴ This trend continued since the last quarter of the

⁷⁰⁸ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 357.

⁷⁰⁹ *Ibid.*, 356.

⁷¹⁰ Öztürk, “Bursa’da Hububat Fiyatları (1775-1840),” 190.

⁷¹¹ BPP, CP, No. 482, VIII (8), *Select Committee on Consular Service and Appointments*, 1857, 616.

⁷¹² BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments*, 1872, 54.

⁷¹³ Arıkan’s microstudies of local tensions in Yenişehir and Iznik reveal how Armenian *sarrafs* with connections in Istanbul dominated tax-farming operations, skyrocketed indebtedness, and expanded their sphere of influence by owning and extending their lands. Arıkan, “A History,” 48–70, 80–91.

⁷¹⁴ Hülya Canbakal, “Wealth and Inequality in Ottoman Bursa, 1500–1840” (Draft Paper, New Perspectives in Ottoman Economic History, Yale University, 2012), 19.

eighteenth century when the top one-fourth of the inventory population owned four-fifths of the entire wealth.⁷¹⁵ Due to the worsening domestic financial situation and fall of silk industries, the coefficient based on the inventories dropped to 0,543 in the years from 1868 to 1870, still implying profound inequality, as obvious based on an estimation that the wealthiest 20% held at least 62% of total wealth in the city.⁷¹⁶

Increased cash demands provided further impetus to lending to those in need, which did not require significant cash to qualify as a lender. Although a credit market was well established in the Bursa region for centuries, in the thriving scene of moneylending in the nineteenth century, *any* wealth holder in the urban and rural parts had investment endeavors. Suraiya Faroqhi argues that moneylending was “the royal road even to modest wealth” in the calamitous late eighteenth-century Bursa: “[L]ending out money could not only make the lender rich but also might allow him to establish a position of at least informal power.”⁷¹⁷ The decline of the cash waqfs brought by the centralization drive during the period of Mahmud II must have led to them more easily charging interest at market rates. Although the waqfs whose cash deposits were assigned for specific social services, such as neighborhood, mosque, and church waqfs, remained intact, the reforms ensured the appropriation of money not endowed for a special cause. This change impacted most cash waqfs whose centrally-appointed trustees were already exploiting the waqf money by lending it to the *sarrafs* or the public at higher rates.⁷¹⁸

Around the time of the declaration of the Tanzimat Edict, a detailed report noted that usury had persisted in Bursa’s subdistricts and villages from time immemorial (*min-el kadîm*), with interest rates exceeding 20 percent. On top of this rate, the lenders often bought the peasants’ wheat below-market prices and took such tributes as a few chickens, a horse,

⁷¹⁵ Ali İhsan Karataş, “XVIII. Yüzyılda Bursa Halkının Ekonomik Yapısı,” *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 15, no. 2 (2006): 60.

⁷¹⁶ Sema Keleş Yıldız, “1868-1870 Yıllarına Ait Tereke Kayıtları Işığında Bursa ve Rize Kentlerinin Sosyo-ekonomik Açidan Karşılaştırmalı Bir İncelemesi,” *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi* 8, no. 3 (2021): 570.

⁷¹⁷ Suraiya Faroqhi, “Surviving in Difficult Times: The Cotton and Silk Trades in Bursa around 1800,” in *Bread from the Lion’s Mouth: Artisans Struggling for a Livelihood in Ottoman Cities*, ed. Suraiya Faroqhi (New York: Berghahn Books, 2015), 152; See also Nilüfer Alkan Günay’s work on the extensive credit networks established by the wealthy of the same period. Nilüfer Alkan Günay, “A Study of Social Network Analysis: The Âyan of Bursa in the Late 18th Century,” *Gazi Akademik Bakış* 5, no. 10 (2012): 39–49.

⁷¹⁸ Çizakça, “Cash Waqfs of Bursa, 1555-1823,” 349.

or one or two cartloads of wood from households. Even though the borrowers were asked to oppose non-legal (above 15 percent) interest rates and tribute-seeking behavior, most refused to comply, fearing they could never borrow again.⁷¹⁹ Upon this document's compilation, in the spirit of the Tanzimat, an official in charge of the land affairs in the western section of Bursa prepared a register containing the debtors' obligations in 1839. By this year, the percentage of indebted villages in Mihaliç was 45 percent, whereas those in Kirmasti were 81 percent. Sixty percent of the residents of Mihaliç, whose total debt obligation was much higher than those of Kirmasti, declared that they could not repay their debts. This rate was 20 percent in Kirmasti.⁷²⁰

The 1839 debt register is also informative on the geographical spread of credit networks. It reveals that the spatial relationship of borrowers to moneylenders followed a classical pattern of the village-town model where the city of Bursa's wealthy residents played the most important role. There was a high incidence of villages borrowing collectively from and people appealing to the same moneylenders over decades, a trend also discerned in the late eighteenth century.⁷²¹ Still, a more diversified credit portfolio is observed in the northern parts where peasants sought credit from a wide variety of individuals from villages (usually the rural rich affiliated with the urban rich) to other town centers or Istanbul. In the southern half of the region, moneylending was more confined to the village-to-subdistrict center profile, where powerful notable households played an integral role.⁷²² This difference can be interpreted with the diversity of agricultural activity, higher population densities, relatively lower elevation profile, and the subdistricts' proximity to each other and ports.

Escalating indebtedness among the peasantry, coupled with environmental limitations and disasters, resulted in rural dispossession in some cases.⁷²³ 20 to 25 percent annual interest rates were usually charged on loans of less than a year. The borrower, who was in dire straits to pay his taxes, was willing to pledge his returns in tree crops, grains, and income from his trades and even to "transfer over as security the title deeds of his property"

⁷¹⁹ OA. C. ADL. 64 / 3832 (16-04-1255 / 29-06-1839).

⁷²⁰ Aytekin, "Cultivators, Creditors and the State," 297–98.

⁷²¹ Alkan Günay's study of the credit networks of the late-eighteenth and early-nineteenth century wealthy moneylenders point to this trend. Alkan Günay, "A Study of Social Network," 46.

⁷²² Aytekin, "Cultivators, Creditors and the State," 307.

⁷²³ Arıkan, "A History," 415; Küçükceran, "Agriculture," 106–7.

as security for the money borrowed.⁷²⁴ Unable to pay his debt back, the producer was sometimes left with no chance but to become a tenant on his land or a sharecropper on a rural/provincial/urban notable's land. Bankruptcy caused by high-interest rates and real or pretended arrears in payment of taxes sometimes resulted in cruel treatment by the police force and imprisonment (i.e., being bound and chained) for no other sin than that of debt, and those indebted formed a substantial part of the prison population in the Tanzimat's early years.⁷²⁵

Most of the region's revenues were absorbed by local administration's expenses in salaries of public functionaries, clerks, and the local police force. As we have seen in the road security issue, in the face of fiscal strains, taxes often came in arrears, rendering the pay very irregular of those in the service. In the end, those unable to pay were abused by those not getting paid: In the late 1850s and early 1860s, to enforce the payment of regular taxes to meet the forced loans against the *kaime*, the gendarmerie was sent to the villages where they harassed the inhabitants by every sort of enactment. These events caused great disorders and, joined to the underpay of the servicemen, led to one of the worst grievances.⁷²⁶

Atilla Aytekin argued that the Tanzimat state was hesitant to intervene in indebtedness that reached levels of dispossession so long as it was "controllable."⁷²⁷ The "controllability" of indebtedness took different meanings in different contexts. For instance, the bylaws issued by the state in the 1850s justified and reinforced the dispossessed peasantry's bondage to the soil in Trikala (central Greece), where large *çiftliks* dominated the property regime.⁷²⁸ But in Bursa, where small-scale production dominated and Istanbul's supervision of events was, albeit selective, solid, increased peasant dispossession and debt bondage alerted the state to take action.

Ahmed Vefik Efendi responded to the cries from the countryside during his visits in 1863-1864. His initial observation was that a large chunk of the agricultural surplus was

⁷²⁴ Farley, *The Resources of Turkey*, 109.

⁷²⁵ Those imprisoned for debt were liberated during Sultan Abdülmecid's visit to Bursa in 1844. Schneider, *Letters from Broosa*, 52-53; For more commentary on the imprisonment of indebted Muslims and non-Muslims, see MacFarlane, *Turkey and Its Destiny*, 1850, 1:113-16, 282.

⁷²⁶ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 356.

⁷²⁷ Aytekin, "Cultivators, Creditors and the State," 304.

⁷²⁸ Kaya, "Were Peasants Bound to the Soil in the Nineteenth-Century Balkans? A Reappraisal of the Question of the New/Second Serfdom in Ottoman Historiography."

appropriated way below the market price through forward-purchasing (*salam*) moneylending contracts with high interests.⁷²⁹ Alternatively, sometimes, large landowners paid lump-sum taxes of communities to the state to collect their debts in kind and cash at harvest.⁷³⁰ With these and other measures, notable moneylender and merchant households almost “racketeered” villages by charging “unbelievable” surplus interest – such that, in Yenişehir, in extreme cases, a loan of 3000 *guruş* could easily become 29.000 *guruş* over a year.⁷³¹ He also noted that the subdistrict directors (appointed from among the Bursa’s powerful notables in 1857) and their police retinue worsened the situation because of embezzlement charges and mistreatment of the locals.⁷³²

Vefik Efendi set up commissions to investigate the charges laid against the usurers and punish them according to the gravity of their misdeeds. At its first meeting, scores of petitions flooded the commission, with 3000 coming from Bursa, 830 from Yenişehir, and 300 from Inegöl, convincing its members that more would follow. Given that village communities were the borrowers instead of single individuals in many cases, we can sense the high propensity among rural communities to loan from usurers.⁷³³ In fact, a report asking an official from Istanbul to witness and corroborate the “interest” proceedings, possibly written by Vefik Efendi, stated that for a long time, the (mostly Armenian) moneylenders of the Bursa region had “found extreme pleasure” in lending out money with very high interest.⁷³⁴ One other reason why debt issues were out of control and gained more state recognition was that domestic lenders were not the only actors in the lending scene. The debts owed to prominent Armenian moneylenders mainly were pooled by the agents of the foreign consulates, namely, Austrian, Russian, and British, because of whose pressures the debt bills

⁷²⁹ The 1845 report on the economic situation of Bursa’s subdistricts show that *salam* was one of the most widespread moneylending methods in the region, with the eastern sections (Iznik-Yenişehir-Inegöl) more affected by it. OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845).

⁷³⁰ Though not in the report, this method was likely used by creditors. I draw from Kokdaş, “Land Ownership,” 66.

⁷³¹ OA. İ. MVL 492 / 22265 (29-03-1280 / 13-09-1863).

⁷³² Satıcı, “19. Yüzyılda Hüdavendigar Eyaleti,” 340.

⁷³³ Güran, *19. yüzyıl Osmanlı Tarımı*, 136.

⁷³⁴ “... sermayedaran icab-ı hükm-ü zaman olmak üzere ileri derecede faiz menafinden lezzetyab oldukları...” OA. A.} MKT. MHM. 284 / 3 (03-06-1280 / 15-10-1863).

were coercively obtained from the poor and, when debts were largely unpaid, the state had to involve in resolving credit issues.⁷³⁵

Vefik Efendi's name has appeared and will occasionally appear throughout this thesis. His powerbroker role between social groups and the state and notables during his relatively short stay was attributable to his personality and charisma emanating from the power he was granted, but only partially. Actually, the 1860s marked the start of a new era in the Tanzimat period, where the state learned from the local dynamics and effectively restricted local notables' financial and administrative power.⁷³⁶ Exercising the unlimited discretionary powers vested in him, Vefik Efendi largely extinguished enormous usury, reigning in both the city and other subdistrict centers, by freezing debts until the interest rates on them were reassessed through retrials and harsh penalties so that the inhabitants of the Bursa region became "indebted to his mission for deliverance from the fangs of the usurers."⁷³⁷

Vefik Efendi also reassessed and redistributed taxes by practically erasing the tax burden on villagers and billing them to the wealthier sections, i.e., local notables, moneylenders, and property owners, some of whom did not even pay their taxes for years. Not only did the peasantry have more money at their command at any period since the Crimean war, but they also became more reliant on their means.⁷³⁸ With the help of resources he expropriated from the locals, a certain amount of tax revenues were dedicated to modernization projects in the city as well as in the countryside: His actions created funds for the repair and building of governmental and public buildings, marketplaces, bridges, major roads, telegraph line, and initiation of social projects for the migrants.⁷³⁹

Eventually, though, the check given to extortionate usury caused a suspension of money accommodation, which made borrowing cash and selling property almost impracticable in the face of the grievous want of circulating medium.⁷⁴⁰ Still, the peasantry

⁷³⁵ OA. İ. MVL 492 / 22265 (29-03-1280 / 13-09-1863).

⁷³⁶ Yonca Köksal, "Imperial Center and Local Groups: Tanzimat Reforms in the Provinces of Edirne and Ankara," *New Perspectives on Turkey* 27 (2002): 129–35.

⁷³⁷ BPP, CP, No. 3488, LIII (67), *Commercial Reports received at Foreign Office from H.M. Consuls, 1865*, 1865, 164.

⁷³⁸ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office, 1864*, 435.

⁷³⁹ Uslu, "Ahmed Vefik Paşa ve Bursa'nın Modernleşmesi Üzerine Bir Deneme," 69–82.

⁷⁴⁰ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office, 1865*, 793.

was laboring under the debt burden in 1865 (in other words, a year after the end of Vefik Pasha's mission) because the inhabitants of the region had to bear "the weight of taxation most unfairly...however low [they were] in the social scale,"⁷⁴¹ and the "suppression of usury could not end all."⁷⁴² In the absence of a bank or pecuniary state aid giving cheap credit (even at interest levels of 10-12 percent) to the people, the cycle of indebtedness fueled by excessive taxation persisted. In 1869, the official newspaper of the province, *Hüdavendigar*, regarded the unavailability of credit due to scarcity of cash among the most significant problems confronting the agricultural producers.⁷⁴³ Although a branch of the agricultural credit cooperatives known as the "Homeland Funds" (*Memleket Sandıkları*) was opened in Bursa in the same year, their operations remained severely limited, and a big portion of its funds was quickly concentrated in a few rich hands or accrued to the central treasury to meet the state's debts.⁷⁴⁴ The cheap yet small credits the cash waqfs offered could not solely relieve the situation throughout the region. In the immediate aftermath of the Ottoman-Russia War of 1877-1878, a Bulgarian commentator noted the cries of poor villagers crushed between multiple heavy taxes introduced due to the war and high interest rates in the market.⁷⁴⁵

2.3.6. Patterns of Landholding – With an Emphasis on the *Çiftlik*s

Agricultural production formed the backbone of the regional economy of Bursa. Given the impediments to production, scarcity of money, and accumulated capital being used mainly in the direction of moneylending, it is necessary to briefly touch upon the general patterns of landholding. Available tax data suggest that small- and mid-sized peasant holdings formed the predominant form of ownership in all districts.⁷⁴⁶ This view is confirmed by the statement of the British vice-consul Maling that

⁷⁴¹ BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 254.

⁷⁴² BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 793.

⁷⁴³ Arıkan, "A History," n. 388, on page 121.

⁷⁴⁴ Edmond Dutemple, *En Turquie d'Asie*, 238–39; Güran, *19. yüzyıl Osmanlı Tarımı*, 151–52.

⁷⁴⁵ Mevsim, *Bulgar Gözüyle Bursa*, 35.

⁷⁴⁶ Ümit Ateş, "Bursa Kazası; Alışar - 7537, Gölcük - 7424, Seç - 7379, Akça - 7372 ve Anarlı Dere - 7377 Köylerinin Temettuat Defterleri'nin Tahlili ve Değerlendirilmesi (H. 1260 - 1261 / M. 1844-1845)" (MA Thesis, Niğde, Niğde Üniversitesi, 2002); Akkaya, "Temettu Defterlerine Göre Pazarköy"; Niyazi Topçu, "Temettu Defterlerine Göre Keles," *Bursa Araştırmaları*, no. 12 (Spring 2006): 27–31; Raif Kaplanoğlu and Aziz Elbas, *Uludağ'ın Beşbirliği Bursa Kızık Köyleri: Cumalıkızık, Değirmenlikızık, Derekızık, Fidyekızık, Hamamlıkızık Köyleri* (Bursa: BURSAV, 2009); Polat, "1844-1845 Yıllarına Ait Temettu Defterlerine Göre İnegöl Kazası'nın Sosyo-Ekonomik Durumu"; Kaplanoğlu and Oğuzoğlu, *Asri Gemlik*, 114–15; Yaşayanlar, "19. Yüzyılda Kirmasti"; Selçuk, "Ondokuzuncu Yüzyılın Ortasında Mudanya'nın İktisadi Durumu"; İsmail Özgören, "XIX. Yüzyılın Ortalarında İznik'in Sosyo - Ekonomik Durumu: Nüfus ve Temettu Defterlerine

Generally speaking, in Bursa [district], where population is scanty, and there is no accumulated capital seeking investments in land, the working man is owner of his dwelling-house, in some cases as a freehold, but more generally held by a limited tenure from the administration of the Church lands (“Vacoufs” [waqfs]), which engrosses the fee-simple of such a large portion of the [region]...[P]retty generally, in the rural parts especially, the workman also owns a few acres of land, which his family cultivates.⁷⁴⁷

This trend was more or less valid in 1909, when, by one estimate, 75% of Bursa’s fields were below five hectares (fifty *dönüm*), with the average farm size being 12,7 *dönüm* (around 1,2 hectares).⁷⁴⁸ The persistence of tree crop cultivation since Byzantine times reinforced the predominance of small peasant proprietors.⁷⁴⁹ Drawing on multiple tax registers from the seventeenth and eighteenth centuries, Hofmeester and Lucassen found the average farm size to be around 6,5 to 8 hectares, claiming that three-fourths of all households were independent farmers producing for the market.⁷⁵⁰ Similarly, Gerber’s study on a 1696 survey of 69 commercial *çiftlik*s from the vicinity of Bursa (including the coastal subdistricts of Gemlik and Mudanya) shows that land areas of these estates averaged from 20 to 50 hectares, minutely divided into plots of a few *dönüm* or scattered around a location.⁷⁵¹ A geographical survey of Bursa from 1938 noted that most peasants worked small holdings, often not adjoining, on which machine cultivation would be impossible. In addition, many of them were engaged in working the lands of the large landholders.⁷⁵²

Other factors in such land formation frequency were the constricted plain areas (except in the western section), the low exportability of Bursa grains, and the low arable land requirement of the region’s inhabitants’ diet. But, above all things, the costliness of

Göre” (MA Thesis, Kütahya, Dumlupınar Üniversitesi, 2015); İsmail Yaşayanlar, “Temettuât Defterlerine Göre Kite (Ürünli) Kazası’nın Sosyo-Ekonomik Durumu,” in *Odryses’ten Nilüfer’e Uluslararası Nilüfer Sempozyumu*, ed. Mustafa Şahin, Sezai Sevim, and Doğan Yavaş (Bursa: Nilüfer Belediyesi, 2015), 881–94; Şaban Yalazı, *Nüfus ve temettuat defterlerine göre 19. yüzyılda Karacabey’in toplumsal ve ekonomik yapısı* (Bursa: Avrasya Etnografya Vakfı Yayınları, 2016); Arıkan, “A History”; Çubuk, “Harmancık Kazasına Bağlı Cenubta (Güney) Bulunan Köylerin”; Kartal, “Harmancık Kazası’na Bağlı Şimal (Kuzey) Köylerin”; Küçükceran, “Agriculture”; Özcan, “1844-45 (H.1260-61).”

⁷⁴⁷ BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 252.

⁷⁴⁸ Kirmasti subdistrict was excluded, and the data was collected regardless of whether these farms were owned by households or not. Tefvik Güran, ed., *Osmanlı Dönemi Tarım İstatistikleri 1909, 1913 ve 1914* (T.C. Başbakanlık Devlet İstatistik Enstitüsü, 1997), 28.

⁷⁴⁹ Lefort, “The Rural Economy, Seventh–Twelfth Centuries,” 321.

⁷⁵⁰ Hofmeester and Lucassen, “Ottoman Tax Registers,” 43.

⁷⁵¹ Gerber, *Economy and Society in an Ottoman City*, 98–99. Because the investors were interested in the commercial potential of these çiftlik, Gerber assumes this result must have set the ceiling for their size, as, according to him, farm size correlated positively with their proximity to the city.

⁷⁵² Stotz, “The Bursa Region,” 90–91, 96–97.

exploiting large and medium-sized terrains limited land size. According to one estimate in 1880, without specifying comparison parameters, in the Hüdavendigar *province*, the number of farmers cultivating large rural estates was about 10%, that of farmers cultivating medium-sized farms was 20%; and the rest cultivated only tiny areas of land. The operating capital was available to the first category of farmers who usually operate the soil in cooperation with other farmers who procured sufficient labor. The small amount of money available to the second category of farmers did not allow them to employ farmers; moreover, it was barely enough to exploit themselves. The rest had insufficient capital.⁷⁵³ Smallholders, who sometimes owned tiny fields and/or a few animals, prioritized subsistence first and produced some surplus for the market. A part of self-sufficiency and profiting from the market required laboring for others, co-cultivation, and trading labor and produce in exchange for essentials like flour.

That said, northern parts of Bursa, particularly the west to the east axis from Mihaliç-Kirmasti to Yenişehir- Inegöl, which was plainer and more populous than other parts, had the most number of large-scale landholdings known or recognized as the *çiftlik*s within the region. A population summary register from 1839 recorded 50 of them, 17 of which were in Yenişehir, 13 in Mihaliç, 10 in Kirmasti, 2 in Kite, 3 in Gemlik, 4 in Mudanya, and one in Atranos. It is entirely silent on those in the Bursa plain.⁷⁵⁴ We can at least infer from this data that the eastern and western sections of the region saw the highest concentration of *çiftlik*s and that they were dwarfed by the total area of smallholdings, no matter their size.

An attempt to define *çiftlik*s can help us better contextualize things. They were distinguished from small peasant holdings chiefly by their size. Let us employ Bruce McGowan's identification of establishments between 25 to 50 hectares (250 to 500 Ottoman *dönüm*) as small (or, in Gerber's parlance, "modest") and those larger than 50 hectares as large *çiftlik*s.⁷⁵⁵ Provided that most of the large estates were concentrated in the middle and plainer section of the region, aggregated tax survey data from selected subdistricts in 1845 will give us a sense of *çiftlik* size, number, and the official terminology. Bursa and Kite had 50 establishments above 25 hectares, 22 of which were above 50. In Mihaliç, this was 20 out

⁷⁵³ Edmond Dutemple, *En Turquie d'Asie*, 236–37.

⁷⁵⁴ OA. NFS. d. 1518 (AH. 1255 / 1839).

⁷⁵⁵ McGowan, *Economic Life in Ottoman Europe*, 72.

of 52, Yenişehir 15 out of 36, Pazarköy 2 out of 10, Kirmasti 3 out of 6, and Atranos 2 out of 2.⁷⁵⁶ They did not generally exist as one whole parcel but sometimes incorporated distant pasturelands and grain fields into themselves.

In contrast, the average field size (including all from grainland, fallow land, other crops, and private meadows) per household (N=4343) in the Bursa plain (i.e., Bursa-Kite subdistricts) was 32 *dönüm*, or 3,2 hectares.⁷⁵⁷ Pulling this average upwards were not the *çiftlik*s per se but the grainfields (total of cultivated and uncultivated) of between 50 to 250 *dönüm* possessed by urban and rural notables in the plain and agriculturally suitable areas of hills at moderate elevations and labored primarily by smallholders who had too small or no grain fields. Generally, profitability and relative ease of marketability of garden, tree, and industrial crops, high land suitability and expansion opportunities, relative ease of exchange of goods and labor, abundant pastures, and persistence of sharecropping and debt bondage in the plains and littoral areas in the north created a system of small fields existing side by side with large ones. To generate cash, both large and small estate owners sometimes tended to lease out parcels of their land to small cultivators and animal breeders who could afford it and relatively large landholders who wished to expand their farming operations. Subsistence pressure, low agricultural suitability, less monetization of the economy, labor costs, and low profitability of grain cultivation and livestock husbandry in high altitudes, especially in the south, on the other hand, kept the land size generally small and resulted in most households owning grain lands and a few animals.⁷⁵⁸

The *çiftlik*s (above 25 hectares) and large estates rarely specialized in producing a single article. Whereas livestock raising and grain cultivation were prioritized, cultivation of market crops simultaneously took place on large-scale estates to maximize profits. Debt bondage and the prevalence of sharecropping in the region, particularly in the plains, due to small ownership or lack of land, variety of diet, and dependency on others for subsistence food, provided free or cheap-enough labor for most modest farms and large enterprises without having to invest in labor-saving machinery. In some cases, the *çiftlik*s of the Bursa

⁷⁵⁶ Kaplanoğlu, *1844 Yılı Temettuat*, 108–12.

⁷⁵⁷ Ibid., 150–61.

⁷⁵⁸ Çubuk, “Harmancık Kazasına Bağlı Cenubta (Güney) Bulunan Köylerin”; Kartal, “Harmancık Kazası’na Bağlı Şimal (Kuzey) Köylerin”; Polat, “1844-1845 Yıllarına Ait Temettuat Defterlerine Göre İnegöl Kazası’nın Sosyo-Ekonomik Durumu”; Topçu, “Temettuat Defterlerine Göre Keles.”

region sometimes existed as *çiftlik*-villages that comprised entire villages such as Çardak, Toprakocak, and Karasıl in Yenişehir that included landless (indebted) peasants, which conceals the real number of *çiftlik*s. In other cases, *çiftlik*s enlarged through legal (depending on the power of a notable, waqf power, and scantiness of population) and environmental manipulations (i.e., blurring village boundaries due to marsh formation) by swallowing the neighboring villages.⁷⁵⁹ The *çiftlik*s along the west-east axis also hosted Muslim and non-Muslim seasonal laborers (*ırgat/rençber/karaişçi*) and shepherds coming from nearby areas, including the city as well as different parts of the Empire, staying in different places short-term or in the same place for years, depending on their place of origin and savings prospects. But the number of *çiftlik*-dwelling temporary inhabitants, at least those recorded in 1839, were 170^{vidence}170 insignificant, meaning sharecropping, debt-bondage, and hiring peasants from nearby locations were generally used.⁷⁶⁰ At this point, it should be emphasized that while the state's penetration into the rural sphere through census and cadastral mechanisms deepened and became more sophisticated throughout the nineteenth century, the actual size of the mobile labor force might not have been effectively surveyed in the early Tanzimat years.⁷⁶¹

The *çiftlik*-holders indeed sought monetary profit. Grains were mostly consumed domestically, especially by the central city. Raising sheep and cattle was also profitable in Bursa and Istanbul. Yenişehir plain had access to Istanbul via land (and sea by Karamürsel port) and Mihaliç via sea (using Mihaliç but mainly Bandırma ports). The emergence and continuity of these *çiftlik*s were impacted by a combination of geophysical conditions, land-to-labor ratio, scarcity of commons, transportation costs, political and economic transformation, ecological factors, security conditions, and local power and property relations. They were formed within the complex property rights surrounding land use. As Maling observed, particularly along the east-west axis, most *çiftlik*s were established on

⁷⁵⁹ Arıkan, "A History," 80.

⁷⁶⁰ The population summary register enumerated a total of 61 Muslim, 40 Orthodox Christians and 2 Armenians in Yenişehir, 32 Muslims and 122 non-Muslims (likely Orthodox Christians) in Mihaliç (4 Muslim and 68 non-Muslim being in the imperial farm). OA. NFS. d. 1518 (AH. 1255 / 1839).

⁷⁶¹ İrfan Kokdaş's long-term analysis of the movement and capital accumulation profiles of the mobile labor force frequenting Manisa's *çiftlik*s and other similar establishments such as sheepfolds illuminates the complex nature of this labor movement through mainly Ottoman sharia court records. Kokdaş, "Manisa'da Çiftlik, Ağıl ve Mandıralardaki."

waqfs founded by the imperial dynasty and state elite to generate revenue for various purposes. At the same time, some of them existed and enlarged on state lands (*miri arazi*).⁷⁶²

Economic, population, and environmental changes in the nineteenth century altered land use profiles in the plains. Land use was more intense and the population denser in the large central subdistrict of Bursa (and the adjacent Kite) compared to Mihaliç-Kirmasti to the west and Yenişehir-Inegöl to the east. In the central Bursa plain, most villages and land were under waqf control, agricultural production was diversified, and commons were rare due to the mountains constricting it from north and south. As a method of circumventing the intricacies of legal complexities surrounding land use, the intensification of mulberry growing on arable lands and meadows since the seventeenth century gradually forced sheep breeders to use fallow lands directly for grazing or raising clover fields.⁷⁶³ Therefore, the size and number of *çiftlik*s producing grains and raising livestock were generally minuscule, though the landed gentry living in the city sometimes owned large fields as big as several hundred and thousand *dönüm*, leased them, and effectively used debt bondage as a labor source in the nineteenth century.

On the other hand, there were abundant and abandoned lands in the western and eastern sections. Major estates were usually formed on swampy and marshy plains, making it easier for one powerful clique to claim a plot of land due to blurring/fading boundaries. Novel perspectives on wetlands reconceptualize these spaces as “hubs of autonomous social networks and political structures that responded to specific local conditions that realized significant and diverse economic opportunities.”⁷⁶⁴ Indeed, inundations in the mid-nineteenth century diversified land-use patterns, specifically in the Mihaliç-Kirmasti axis, where

⁷⁶² An estimate indicates that waqfs formed one-fourth and state-land (*miri arazi*) 5 percent of all cultivable lands (around 30 percent of the total land) and in Western Anatolia in 1869. Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 91; Being the first capital of the Ottoman Empire, subdistrict centers and coastal sections in the northern part of the Bursa region were partitioned among multiple waqfs formed by the dynasty and ruling elite in the early centuries of the Empire, though they became more numerous and extended to the agriculturally suitable countryside until the nineteenth century. Küçükceran, “Agriculture,” 87.

⁷⁶³ Küçükceran, “Agriculture,” 112–13.

⁷⁶⁴ Semih Çelik and Christina Luke, “Of Wetlands and Reclamation Regimes: Climate Change, Social Upheaval, and Political Practice in Western Anatolia,” in *Winds of Change: Environment and Society in Anatolia*, ed. Christopher H. Roosevelt and John Haldon (Koç University Press, 2022), 252.

existing *çiftlik*s took advantage of the existing and enlarging wetlands and encroached on damaged peasant plots and commons.⁷⁶⁵

In the Yenişehir plain, a pattern of *çiftlik* formation similar to Mihaliç-Kirmasti took place. Since the late eighteenth century, large estates were established on previously uninhabited wastelands. Another popular form of land reclamation was the encroachment of meadows and uncultivated waqf lands by the powerful notables.⁷⁶⁶ The fast-growing marshlands triggered different uses of arable lands defocusing from grain cultivation and focusing more on livestock breeding and market crop cultivation (if possible, water-intensive crops).⁷⁶⁷ In addition, large *çiftlik* owners in the region's periphery planted new tracts of mulberry orchards, which increased during the peak of cocoon production in the 1850s.⁷⁶⁸

Given the general non-development of agriculture and the costs and changing nature of grain cultivation, the now-expanding *çiftlik*s turned more to livestock husbandry in the nineteenth century thanks to the growing domestic (in Bursa and Istanbul) and foreign demand and low-labor-input needs.⁷⁶⁹ This reorientation kept the free peasantry alive as well, even though indebtedness pushed them more and more to work for free in large estates. Peasants also earned their lives by laboring on other villagers' land or the *çiftlik*s in sharecropping agreements⁷⁷⁰, the dominant labor organization on large estates until World War I.⁷⁷¹ Sharecropping was not merely a form of earning extra income: The lack of tractor animals, implements, fields, or seeds made the peasants dependent on each other in one way or another.⁷⁷² Sharecropping contracts were of their nature annual only, "but under the easy-

⁷⁶⁵ Küçükceran, "Agriculture," 277.

⁷⁶⁶ Arıkan, "A History," 82.

⁷⁶⁷ Tabak, *The Waning of the Mediterranean, 1550–1870*, 226; Küçükceran provides a detailed description of changing and unchanging trends in Mihaliç çiftlikleri during the nineteenth century. Küçükceran, "Agriculture," 82–129.

⁷⁶⁸ Quataert, "Ottoman Manufacturing in the Nineteenth Century," 286.

⁷⁶⁹ Arıkan, "A History," 82. Also, in 1855, 20.000 head of cattle oxen and cows, and 30.000 sheep collected mostly from the Bursa region were exported from the ports of Bandırma and Gemlik, under the supervision of British and French commissariats. Of the wool clipped from the sheep at the imperial estates in Mihaliç, around 142 metric tons (315.000 lbs.) was exported from Bandırma to Marseilles, whereas the rest was sent to Istanbul. BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 188.

⁷⁷⁰ Ibid., 80; Küçükceran, "Agriculture," 91.

⁷⁷¹ Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913*, 93.

⁷⁷² The 1845 report on the subdistricts' production profile clearly demonstrates the high frequency of this trend. OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845).

going landlords ... it often glides into a life tenancy, and even a hereditary one.”⁷⁷³ Last but not least, the spread of *çiftlik*s also coincided with the resettlement of migrants in and near the *çiftlik*s, starting with Caucasians and Crimeans in the 1860s and intensifying after the arrival of thousands of refugees from the Balkans and Caucasia fleeing the Russo-Ottoman War of 1877-1878, increasing food needs as well as providing the labor source.

In addition to changing land and labor relations, the growing trend in livestock incentivized the naturalization of the merino breed of sheep and mohair (*tiftik*) goats in the imperial *çiftlik*s in the plain of Mihaliç (*Mihaliç Çiftlikat-ı Hümayunu*) to provide imperial cloth factories with fine quality wool and occasionally procure the meat needs of Istanbul. Orthodox Christian shepherds from Albania, Plovdiv, and Pazardzhik were employed to look after the sheep in the first years.⁷⁷⁴ These *çiftlik*s operated as model farms where fine-quality grains, vegetables, fruits, mulberry trees, tobacco, cotton, madder root, and even potatoes were cultivated. Sharecropping agreements were made with villagers in the vicinity to increase the productivity of these establishments, where half the produce was handed over to the farmer.⁷⁷⁵ The subdistrict’s port, proximity to the capital, and plentiful lands suitable for this operation accelerated the opening of these establishments.⁷⁷⁶ The model farms soon extended southwards to Kirmasti with the same agricultural focus and labor organization.⁷⁷⁷

A brief note must be made regarding an observable change in *çiftlik* ownership in the first decades of the nineteenth century. Until the mid-1820s, the city and subdistricts were *de facto* governed by powerful dynasties known as the *ayans*. These dynasties enriched themselves by owning large *çiftlik*s, engaging in tax farming and moneylending through collaboration with the *sarrafs*, and, as their bargaining power, having their armed forces that they were entitled to send to Istanbul or warzone when needed. In the late eighteenth century, the central government tried, as elsewhere, to reassert its dominance over the provinces. But,

⁷⁷³ BPP, CP, No. C.414, LXVIII (62), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1871, 740.

⁷⁷⁴ Odabaşı, “Mihaliç Çiftlikât-ı Hümayûnu,” 113.

⁷⁷⁵ *Ibid.*, 297–312.

⁷⁷⁶ Starting with around 10.000 sheep in 1840, their number increased swiftly to 30.000 in 1850 and dropped to 10.000 in the late 1850s. As a result of improvements in the animals’ health conditions and the quality of wool, their number peaked to 30.000 in 1870. *Ibid.*, 322.

⁷⁷⁷ Yaşayanlar, “19. Yüzyılda Kirmasti,” 62–63; MacFarlane provided lengthy yet negative opinions on these farms. MacFarlane, *Turkey and Its Destiny*, 1850, 1:304–8.

these powerholders, who were landlords, fiscal and security agents, provisioners of the district in times of environmental disasters, collectors and distributors of grains for the provisioning of Istanbul and the army, and maintainers of public buildings, were too powerful during a time when the Empire needed a standing army, stable internal affairs, and uninterrupted and quick money flow to the central treasury. During the reign of Mahmud II, the *ayans* were largely demilitarized; some were incorporated into the central government, and the rest were forced to abide by the new rules of provincial politics.

In the Bursa region, the rivalry between the *ayans* over control of certain regions, the governance of the city, and clashes with the state about sending their forces to the central army caused great distress among the local populace and artisans.⁷⁷⁸ We have evidence that, after the confiscation of the *çiftlik*s of deposed and dissident local notables during the early nineteenth century, Istanbul-based elites and local-tax farmers-cum-moneylenders with bureaucratic and economic connections with Istanbul seized many sizeable *çiftlik*s in Mihaliç, Kirmasti, Yenişehir, Inegöl, Bursa and Iznik plains.⁷⁷⁹

Additionally, the Ministry of Pious Foundations (founded in 1826 to control all waqf matters) tried to annex family-waqf lands whose trustees were absent for some time. The aim was to distribute these lands among small peasant households to accrue revenues to the central treasury and not deal with strong trustees. This process created contestations over lands between the ministry and descendants of the families with endowment deeds proving their entitlement to their family-waqf estates.⁷⁸⁰

⁷⁷⁸ Volkan Tekdemir, “Osmanlı İmparatorluğu’nda Ayanlık Kurumu ve Bursa Ayanları: 1750-1800” (MA Thesis, Bursa, Uludağ Üniversitesi, 2004); Satıcı, “19. Yüzyılda Hüdavendigar Eyaleti,” 13,14, 152–75; Cafer Çiftçi, “Derviş Paşazade Numan Bey’in Ayanlık ve Tersanecilik Faaliyetleri,” *Belleten* 75, no. 273 (2011): 387–406; Kaplanoğlu, *1844 Yılı Temettuat*, 100–105; Alkan Günay, “A Study of Social Network”; Nilüfer Alkan Günay, “19. Yüzyıl Başlarında Bursa’da Âyanlık ve Âyanlık Mücadelesi,” *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi* 13, no. 22 (2012): 1–22; İbrahim Serbestoğlu, “Pazarköy Âyanı Turnacıbaşı Esad Bey İsyanı (1812-1813),” in *Uluslararası Gazi Süleyman Paşa ve Kocaeli Tarihi Sempozyumu - III*, ed. Haluk Selvi (Kocaeli: Kocaeli Büyükşehir Belediyesi, Kültür ve Sosyal İşler Dairesi Başkanlığı Yayınları, 2017), 911–17.

⁷⁷⁹ Özer Küpeli, “Yenişehir (Bursa) Âyanı Sarıcaoğlu Osman Ağa ve Muhallefâtı,” *History Studies* 3, no. 3 (2011): 247–65; Alkan Günay, “19. Yüzyıl Başlarında”; Nilüfer Alkan Günay, “Müsaderenin Sosyal ve Ekonomik Bir Analizi: 18. Yüzyıl Sonlarında Bursa’da Yapılan Müsadereler,” *Belleten* 76, no. 277 (2012): 793–816; Yaşayanlar, “19. Yüzyılda Kirmasti,” 58–62; Serbestoğlu, “Pazarköy Âyanı”; Arıkan, “A History,” 83, 273–74; Küçükceran, “Agriculture,” 89, 273–74; Alkan Günay, “19. Yüzyıl Başlarında”; Kaplanoğlu, *1844 Yılı Temettuat*, 106.

⁷⁸⁰ Fatma Melek Arıkan conducted several microstudies around such contestations. Arıkan, “A History,” 80–94.

Still, a class of rural and urban gentry remained to gain increasing profits from relatively large estates in the region. Depending on local power configurations and environmental peculiarities, the application of the 1858 Land Code, which did not disturb existing landholding patterns when initiated, caused disputes between powerful landholders wishing to expand their territories by referring to the articles encouraging cultivation and usufruct rights over non-cultivated lands and marshes. In contrast, the peasantry tried to gain the upper hand by referring to articles on the collective use and boundaries of commons and areas around water sources. Waqf control, the power of interest-holders, environmental change, indebtedness, and the influx of immigrants were indispensable in resolving the short and long-term conflicts.⁷⁸¹

Overall, in the grand scheme, subsistence needs, labor shortage, the prevalence of horticulture, dietary variety, adaptation to changing environmental circumstances, the dominance of sharecropping, low-exportability of grains, and proximity to the imperial capital facilitated the persistence of small owners possessing land, animals, and trees in 1820-1870. Add to these factors the relatively unchanging population of the region that did not initiate a consumption boom, which we will touch upon below.

2.3.7. Major Changes in Population – Migration, Conscription, Diseases, and Disasters

2.3.7.1. Migration and Settlement of Semi-Nomadic Tribes

By 1839, the Bursa region had a permanent population of around 189.000. The city of Bursa contained approximately 32.000 inhabitants, making it the second-largest populated location in Western Anatolia, surpassed by Izmir (with about 130.000 people). Bursa city's population exceeded that of other nearby significant urban centers, such as Ankara (13.000), Izmid (23.000), and Manisa (15.000).⁷⁸² Bursa had a cosmopolitan demographic structure like Izmir, Ankara, and Manisa. Its Muslim-majority population had large Orthodox Christian and Armenian populaces primarily settled in the northern part of the region. Armenians and

⁷⁸¹ Akan's 2015 MA thesis uses the imperial decrees in the Anadolu Ahkam registers (particularly Bursa and Inegöl) to uncover the impact of local responses on the promulgation of the 1858 Code. Zeynep Akan, "Anadolu Eyaletinde Yaşanan Arazi Anlaşmazlıkları Işığında 1858 Osmanlı Arazi Kanunnamesinin Uygulanması (1858-1864)" (MA Thesis, Bursa, Uludağ Üniversitesi, 2015); Arıkan, "A History," 80–91; Küçükceran, "Agriculture," 82–129; Kaya, "Tanzimat'ın Bursa'da Uygulanması," 50–106.

⁷⁸² Figures are from 1831 population totals. Total male numbers were doubled to account for the females and then rounded to the nearest thousand to give a rough estimate. Kemal H. Karpat, *Ottoman Population, 1830-1914: Demographic and Social Characteristics*, Turkish and Ottoman Studies (Madison, Wis: University of Wisconsin Press, 1985), 109–14.

Orthodox Christians were joined by small Jewish, Armenian Catholic, and Roma communities. This section is concerned with the changes in population caused by major migration movements, conscription, diseases, and disasters. I will substantiate the region's population characteristics in part 3.

The region's large population determined the consumption and exportation of agricultural and industrial products and the need for certain services. Thus, crisscrossed by a network of inns, bachelor rooms, and shops offering shelter, the region was a strong pole of attraction for merchants, laborers, and travelers from all over the Empire and abroad. As Suraiya Faroqhi argues, "[n]ot only the ethnic backgrounds of the permanent and temporary inhabitants, ... the prosperity of Bursa depended on mobility."⁷⁸³ True, Bursa's attractiveness for migrants had faded since the seventeenth century. Nevertheless, apart from inns, hundreds of migrant male laborers stayed in shops, coffeehouses, mills, tanneries, bakeries, bachelor chambers, and farms. The city of Bursa aside, especially the coastal subdistricts of Gemlik, Mudanya, and Mihaliç, witnessed migration flows in the nineteenth century due to the growing silk trade, the need for agricultural labor (from nearby villagers and migrants, especially Kurds⁷⁸⁴), and particular services such as carpentry or sheepherding (usually performed by Bulgarians, Albanians, and Moldo-Wallachians). The workers and merchants migrated in seasonal or circular patterns, from urban to rural areas and vice versa, specialized in certain occupations, and maintained close connections with their place of origin by forming migrant communities based on family and neighborhood networks in place of destination.⁷⁸⁵ In addition to the pull factors of the Bursa region, work- and pilgrimage-related migration was common among the permanent population as well.

⁷⁸³ Faroqhi, *Travel and Artisans*, 99.

⁷⁸⁴ MacFarlane tells the scenery in western Bursa as such: "Reclining under the plane-trees, were groups of migratory industrious Kurds, who annually make immense journeys, and come down to reap the harvests and do other work. Generally, they bore the characters of quiet honest fellows, but there were terrible exceptions to the rule." MacFarlane, *Turkey and Its Destiny*, 1850, 1:101.

⁷⁸⁵ For a comprehensive microstudy on the nature of mobility patterns in the mid-nineteenth century, on the Krusevo subdistrict residents (attached to Bitola [Manastır] in northern Macedonia) to different parts of the Ottoman Empire and how their movement contributed to sociopolitical transformation of the region in the later part of the century see, Akin Sefer, Aysel Yıldız, and Mustafa Erdem Kabadayı, "Labor Migration from Kruševo: Mobility, Ottoman Transformation, and the Balkan Highlands in the 19th Century," *International Journal of Middle East Studies* 53, no. 1 (2021): 73–87.

Because of territorial losses in the nineteenth century, forced migrations turned the Bursa region into a second home for hundreds of thousands of dislocated Ottoman subjects. Between 1824 and 1828, as a result of the successful Greek rebellion in the Peloponnese, around 200 to 300 Muslim households (800 to 1500 people, assuming a household was made up of 4 to 5 people) from Morean towns (mainly Tripolitsa, Nauplia, Argos, and Athens) were relocated in the region, with 100 to 150 of them in the city of Bursa, where they contributed to the spiritual culture by opening a convent.⁷⁸⁶ The rest were resettled in villages of the subdistricts of Mihaliç (at least 35 households)⁷⁸⁷, Gemlik, Inegöl, and Yenişehir.⁷⁸⁸

Russian occupation of the region from the Aras River to Yerevan in 1828 and of Kars, Ardahan, and Bayazıt in Eastern Anatolia resulted in the migration of around 8000 Armenians to Pazarköy subdistrict to live with their coethnics.⁷⁸⁹ This migration wave, combined with the fortunes in the rapidly rising silk industries, intensified in the coming years. An official report from 1845 noted that 350 Armenians from Göldağlı, Muradça, and Türkmen villages of the Gölpazarı subdistrict in the east temporarily settled in the Iznik district to raise cocoons and reel silk.⁷⁹⁰ Such trends must have taken a permanent character in the coming years. Another report from 1856 or 1857 acknowledged that the Armenian population of Pazarköy increased significantly in recent years due to the Muslims' conscription and sales of property to Armenians.⁷⁹¹ During Vefik Efendi's inspection tours in Iznik and Pazarköy in 1863, a group of villagers said that the populations of some Christian (Armenian) villages had increased lately, so the tax burdens of their own villages shall be transferred to these growing villages.⁷⁹² Likely, Yenişehir and Inegöl subdistricts that were home to large Armenian populations accommodated a section of newcomer coreligionists to the Bursa region, an issue I am substantiating with data in section 2.3.7.5.

⁷⁸⁶ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 77; For the small financial aid extended to 42 households in the city in 1826, see Bilgin, "Bursa Şer'iyye Sicilleri B-317," 11–14; On the Moravi convent of Bursa, see Bedri Mermutlu and Hasan Basri Öcalan, *Bursa Hazineleleri*, Tarihi Bursa Mezar Taşları, I (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2011), 176–77.

⁷⁸⁷ Raif Kaplanoğlu and Ozan Kaplanoğlu, *Bursa'nın Göç Tarihi* (Bursa: Nilüfer Belediyesi, 2014), 36.

⁷⁸⁸ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 77.

⁷⁸⁹ İsmail Yaşayanlar, "Bursa Pazarköy (Orhangazi) Ermenilerinin Demografik Yapılarına Yönelik Bir İnceleme (1831-1914)," in *Osmanlı'nın Seçkin Tebaası İken Yabancılaşan Topluluk: Bursa Ermenileri* (Bursa: Türk Ocakları Bursa Şubesi Yayınları, 2016), 232.

⁷⁹⁰ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 2.

⁷⁹¹ OA. A.} MKT. UM. 290 / 44 (AH. 1273 / 1856/1857).

⁷⁹² Arıkan, "A History," 145.

Armenians were not the only ones whose immigration was caused by Russian irredentism. The 1830 registers recorded a few Muslim households in the city, led by natives of the northern Caucasus from Anapa, Akhaltsikhe, and Dagestan, possibly the early migrants of the Russo-Circassian War (1763-1864). This migration movement gradually lasted into the 1850s. In 1845, 45 Circassians were resettled in Mihaliç, and two Circassian ulama households (including relatives and students, comprising 74 people) were in the city. Seven years later, 47 Circassians were sent to Mihaliç again.⁷⁹³ Still, the spatial extent of Caucasian migration, however small, requires further study of the population records of the region's northern, eastern, and western sections, where they mostly settled, were given a small aid, and had disputes with native non-Muslims.⁷⁹⁴

The changing political atmosphere in Europe and the Ottoman Empire brought unprecedented refugees to the district at the turn of the 1850s. Many Moldo-Wallachians, some belonging to the nobility (*boyar*) class, were interned there following the troubles of the Principalities in 1848, and they obtained only later the authorization to return to their country.⁷⁹⁵ Several Hungarian and Polish refugees escaping the revolutions joined them the following year, while the bulk of their emigration continued to Kütahya in the south, and they were sent back to their countries in 1851.⁷⁹⁶

Laramans, the Albanian crypto-Catholics of Kosovo, who pretended to be Muslims to get positions in Ottoman administration and escape poll tax, openly confessed their Christianity after the declaration of the Tanzimat edict. Their persecution by the Muslims and Christians drew the attention of Ottoman and European states and resulted in the forcible expulsion of about two hundred Laraman men, women, and children to Mihaliç and Mudanya in 1846. They suffered horribly on the road to Skopje, Salonica, and from there to Bursa, dying or injured from hunger, cold, and beating. Only a hundred people could arrive at Bursa.

⁷⁹³ İsmet Sarıbal, "XIX. Yüzyılın İkinci Yarısında Osmanlı Devleti'nde Muhaceret, Iskân ve Entegrasyon : Bursa Sancağı Örneği" (PhD Thesis, Ankara, Ankara Üniversitesi, 2015), 36–42.

⁷⁹⁴ OA. İ. MVL. 77 / 1494 (AH. 09-05-1262 / 05-05-1846); C. DH. 154 / 7689 (AH. 12-01-1263 / 31-12-1846); MVL. 62 / 77 (AH. 26-11-1264 / 24-10-1848).

⁷⁹⁵ OA. MB. İ. 2 / 48 (04-06-1264 / 08-05-1848). The state provided regular aid to them. OA. MVL. 331 / 40 (05-08-1268 / 27-03-1852); C. MTZ. 6 / 298 (09-07-1268 / 04-04-1852); HR. MKT. 189 / 39 (16-09-1273 / 10-05-1857); HR. MKT. 209 / 30 (10-02-1274 / 30-09-1857).

⁷⁹⁶ Jean Henri Abdolonyme Ubicini, *La Turquie Actuelle* (Paris: Librairie Hachette, 1855), 35. Regarding the choice of Kütahya, see OA. A.} DVN. DE. 14 / 89 (AH. 1265 / 1848/1849); and their extradition from the Empire, see OA. HR. SYS. 2921 / 40 (17-08-1851).

However, their suffering did not end there, as they experienced discrimination, even if the state tried to ensure their safety under pressure from European powers. Only seventy or eighty people could return to their birthplace in 1848.⁷⁹⁷

Aggravations with Russia after the Crimean War largely determined the course of immigration to Bursa. At least 630 Muslim Crimean and Kazan Tatar households with 2932 people were resettled sparsely in subdistricts, notably Mihaliç and Kirmasti *çiftlik*s, where horse and sheep breeding was widespread, and, to a lesser extent, central and eastern plains until between 1860-1861.⁷⁹⁸ Gemlik, Mudanya, and Mihaliç ports played a crucial role in the movement of migrants to Bursa and inner Anatolia. Several waves of Crimean households (hundreds of people, hard to determine the exact figures) followed until 1870, with peak years being 1864-1865 and 1870, likely triggered by the incoming Circassian tribes.⁷⁹⁹

About 6000 Muslim northern Caucasian and Circassian (the latter term sometimes also refers to Crimeans) migrants who fled the exile of 1864 arrived in 1865.⁸⁰⁰ Multiple waves of small Circassian tribes followed until 1870. Their resettlement and control had been a serious test for the state. In 1864, Vefik Efendi tried to get funds from the central government and local notables to drain swamps, build houses in Iznik for the resettlement of 400 Circassian households waiting in Istanbul, and provide them with oxen and seeds. Instead, his hastiness had migrants and the locals do most of the draining, construction, and provisioning, causing most of the first waves of migrants to die or survive under miserable conditions.

The second and third wave of Circassian immigrants between 1865 and 1870, however, caused much social unrest due to their assertiveness, as evident by the numerous reports of their desire to live as tribal confederations, widespread possession of arms, habitual acts of armed robbery, stealing animals, (wealthy ones) mistreating their slaves, and rebelling whenever possible. The Tanzimat state sought to ensure their integration with the locals but

⁷⁹⁷ For a detailed story of the Laramans' moving story in these subdistricts from 1846 to 1848, see Yakup Ahabab, "Laramanlar: Gizli Hristiyan Arnavutların Mihaliç'e Sürgünü (1846-1848)," *Osmanlı Araştırmaları*, no. 55 (2020): 207–42; For a contemporary account, see also MacFarlane, *Turkey and Its Destiny*, 1850, 1:126–41.

⁷⁹⁸ Şemsettin Seyhan, "Kırımdan Bursa'ya Göç Eden Muhacirler ve Yerleşme Problemleri (1853-1914)" (MA Thesis, Istanbul, Marmara University, 2014), 71, 81.

⁷⁹⁹ *Ibid.*, 1.

⁸⁰⁰ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 793.

largely failed and instead dispersed most tribes to regions in the far north (Düzce) and south (Saruhan) and replaced or minoritized them by bringing in hundreds of Crimean and Nogai households from the neighboring districts.⁸⁰¹

In the meantime, an unspecified number of Muslims came to Bursa from Crete during the Cretan Insurrection of 1866-1869, though they were sparsely distributed within the region.⁸⁰² It must be highlighted that not all migrants permanently stayed in Bursa. Environmental factors such as bad harvests and lack of food, housing, and sanitary care were often the problem, but disagreements with the natives and orders from Istanbul had them migrate to different districts and subdistricts.

Another type of population movement within the region was the coercive and voluntary sedentarization of semi-nomadic tribes or *yörüks*. Particularly the plains and mountains of the region's western, eastern, and southern sections were home to tribes in Bursa, who used migratory routes to Gallipoli, Kütahya, and Bilecik, depending on their proximity.⁸⁰³ Like in the past, they were almost wholly self-reliant in the nineteenth century: They made their tents and everything they wore from horsehair, goat hair, sheep wool, and coarse cloth, bartered their wool in fairs or villages for cotton, and made money by selling their sheep and cattle and famed rugs the women knitted (see section 3.3.1.3 for their population details and economic activities).⁸⁰⁴

Tanzimat state's policies aimed at controlling movement, accurately delineating the borders of estates and registering property, conscripting males for the army, and containing diseases prepared the ground for making the settling of tribes a primary concern for the central administration. Charging the semi-nomads multiple generous settled taxes instead of a few semi-nomad taxes (mainly animal taxes and grazing fees) might have motivated the state to limit their movement. Administrative interests aside, legal and environmental issues

⁸⁰¹ Arıkan, "A History," 145–54; Küçükceran, "Agriculture," 140–45; Yaşayanlar, "19. Yüzyılda Kırmastı," 29; Writing in 1879, Nikola Nachov tells in his memoirs that a villager from the village of Susurluk (Gürsu today) told that he lost most of his 200 sheep when the Circassians were resettled near them. Moreover, he claimed that their acts of stealing animals and robbing of the Orthodox Christians were actively encouraged by the local officers. Mevsim, *Bulgar Gözüyle Bursa*, 29.

⁸⁰² Kaplanoğlu and Kaplanoğlu, *Bursa'nın Göç Tarihi*, 37.

⁸⁰³ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 80.

⁸⁰⁴ MacFarlane, *Turkey and Its Destiny*, 1850, 1:158; Launay and Bonkowski Bey, *Bursa ve Civarı*, 85–87; Ali Rıza Yalgın, "Maddi Konular: Uludağ Türkmen Etnografyası - 7) San'at ve Zeneat," *Türk Folklor Araştırmaları Dergisi* 1, no. 12 (July 1950): 185–86.

were relevant to this decision. Confrontations between the semi-nomads and settlers regarding the frequent trespassing of the former over the latter's land in search of pasture had long been a severe issue for the region.⁸⁰⁵

Besides general carelessness and increased timber-cutting for the imperial navy and coal needs of Bursa silk factories, semi-nomadic herdsmen's attempts to open more pasturage for their flock and sheep through clear-cutting or slash-and-burn techniques contributed to forest fires.⁸⁰⁶ The great conflagration of November 1861, during a season of strong south winds after a long drought, burned a large section of Mount Olympus, threatened the city of Bursa, and spread as far inland as Kütahya.⁸⁰⁷ This event must have provided the state with reasonable justification to ensure the settlement of semi-nomadic tribes because the hills of the mountain were their home from time immemorial.

Since 1840, the settlement of the tribes had been overseen by the newly-formed subdistrict and district councils.⁸⁰⁸ Dilaver Pasha, the district governor of Kütahya until 1842, then the governor of the Bursa province, started the process of settling certain large tribes in the vicinity of their winter pastures in Biga (today Çanakkale), Karesi, and southern Bursa districts or certain villages within the said subregions, either through coercion or negotiation.⁸⁰⁹ Although there is no in-depth study on the sedentarization of tribes in Bursa by the time of writing the present thesis, Cengiz Orhonlu has argued that many tribes had been settled in the region between 1843 and 1864. The semi-nomads' mobility and their access to pastures and rural resources were curtailed, and tribes increasingly sought official land allocation.⁸¹⁰

⁸⁰⁵ Ömer Düzbakar, "Hüdavendigâr Sahasında Konar Göçerler," *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi* 4, no. 4 (2003): 65–66.

⁸⁰⁶ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 354; Hammer-Purgstall, *Umblick auf einer Reise*, 78; Launay and Bonkowski Bey, *Bursa ve Civarı*, 179; Küçükceran, "Agriculture," 79.

⁸⁰⁷ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 354.

⁸⁰⁸ Cengiz Orhonlu, *Osmanlı İmparatorluğunda Aşiretlerin İskânı* (İstanbul: Eren yayıncılık ve kitapçılık, 1987), 114.

⁸⁰⁹ OA. C. DH. 247 / 12339 (AH. 1255 / 1838/1839) ; 31 / 1548 (AH. 10-06-1258 / 19-07-1842) ; A.} MKT. 58 / 63 (AH. 1262 / 1845/1846). For a study of the tribes settled in villages in Atranos and Harmancık subdistricts and their tax records, see Ömer Faruk Dinçel, "19. Yüzyılda Dağ Yöresi Yörükleri: Karakeçili, Kızılkeçili ve Şehitli," *Şehrengiz*, no. 74 (2016): 30–37.

⁸¹⁰ Orhonlu, *Osmanlı İmparatorluğunda*, 118.

Forced resettlement of tribes in the eastern⁸¹¹ and western⁸¹² parts of the Bursa region climaxed during Ahmed Vefik Efendi's inspectorship in the mid-1860s. When he returned to Bursa as the governor in 1879, he accelerated the process of settling the tribes, particularly those around Mount Olympus and in Inegöl and Yenişehir through mostly extortionate methods⁸¹³, which gave him the nickname the "tent burner" and "tent ripper," still alive among the descendants of semi-nomads.⁸¹⁴ Still, the strict hierarchical organization of tribes and the inability of the small-sized lands allocated to them to feed their many sheep resulted in weak communication and hostility between the coercively settled seminomads and the state, eventually ending up in most tribes returning to their old ways of living.⁸¹⁵ The summer pasture life of the *yörüks* of Bursa, though they were a tiny minority, continued in a lively way in the 1950s.⁸¹⁶

Planned and uncontrolled settlement of the migrants and tribes conditioned the power struggles and, following the 1858 Land Code's promulgation, the legalization and enhancement of private property on land. Because local testimonies (*ilmühaber*) assumed a critical role in the code's implementation, land disputes revolving around the encroachment of large estates and the settlement and trespassing of migrant and seminomadic communities decelerated the land surveying process. On the other hand, the landed gentry found a ready and cheap, if not free, workforce to exploit on their *çiftlik*s and the areas they wished to reclaim in the eastern (Yenişehir-Iznik-Inegöl), central (Bursa-Kite), and western (Mihaliç-Kirmasti) sections of the region.⁸¹⁷

⁸¹¹ Arıkan, "A History," 126–29.

⁸¹² Nahide Şimşir, "XIX. Yüzyılın İlk Yarısında Balıkesir ve Çevresindeki Karakeçililer," *Türk İslam Medeniyeti Akademik Araştırmalar Dergisi* 11, no. 22 (2016): 104–5.

⁸¹³ Uslu, "Ahmed Vefik Paşa ve Bursa'nın Modernleşmesi Üzerine Bir Deneme," 92.

⁸¹⁴ Zeynep Şimşek Umaç, "Balıkesir çepnilerinde göçebelik ve iskân izleri," *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 15, no. 28–1 (2012): 177–88; Yaşayanlar, "Bursa ve Çevresinde Yörüklerin," 31.

⁸¹⁵ Yaşayanlar, "Bursa ve Çevresinde Yörüklerin," 29–31.

⁸¹⁶ The ethnographer Ali Rıza Yalgın's works on the semi-nomads of Bursa provide unique insights into the lives of these people. They were published in the Journal of Turkish Folkloric Studies (*Türk Folklor Araştırmaları Dergisi*), issues 8–15 in 1950. For the first article in the mentioned journal: Ali Rıza Yalgın, "Maddi Konular: Uludağ Türkmen Etnografyası - 1," *Türk Folklor Araştırmaları Dergisi* 1, no. 8 (March 1950): 120–22.

⁸¹⁷ Arıkan, "A History," 87–128; Küçükceran, "Agriculture," 103–4, 150; Akan, "Anadolu Eyaletinde Yaşanan Arazi Anlaşmazlıkları Işığında 1858 Osmanlı Arazi Kanunnamesinin Uygulanması (1858-1864)", in *passim*.

Nevertheless, the region and the city did not face serious population pressure and land scarcity and allocation problems due to the influx of refugees until the last quarter of the nineteenth century. The Ottoman-Russo War of 1877-1878 brought large migrant populations of Balkan and Transcaucasian Muslims to the region until 1910. According to official statistics, the migrants resettled in the *province* from 1878 to December 1881 numbered 42.815.⁸¹⁸ On the other hand, the region received close to 60.000 migrants until 1910. The city housed a quarter of them, and Kirmasti-Mihaliç sections another quarter.⁸¹⁹ During this process, a new and crowded wave of Cretan Muslims was relocated to the region due to the 1897 rebellion on the island, though their number was not specified.⁸²⁰ Plains and mountains of the northern parts of the Bursa region became the primary destination for most migrants during the nineteenth century and beyond when the Balkan Wars of 1912-1913, the Greek-Turkish population of 1924, exiled civilians of the Dersim rebellion of 1938, and work-related migration of thousands in the following decades went there. The city of Bursa housed an important portion of the migrants after 1870, as evidenced by the emergence of new quarters.

2.3.7.2. *Conscription and the Issue of the Decline of the Muslim Population*

The conscription of Muslims for up to twelve years to the new army starting in 1826 caused a state-mandated migration. Able-bodied males of 15-30 years of age had to migrate to the regional reserve army and Istanbul.⁸²¹ The new draft regime not only triggered discontent among the local populace but also exacted a heavy demographic toll on the Muslim population since, in George Keppel's words in 1829, "...all the youths have been made conscripts; there remain only beardless boys and grey-bearded men....In the space of little more than two years, has nearly the whole, effective population of this fertile region been dragged from home..."⁸²² An Orthodox Christian middleman in 1846 (after the promulgation

⁸¹⁸ Demirel, "XIX. Yüzyılda Bursa'da Göçmen İskanı," 38.

⁸¹⁹ Ibid., 45-48. The subdistrict of Bursa and İnegöl were the next most important destinations for the migrants and each received about 11 percent of the newcomers.

⁸²⁰ Regarding the issues faced by the Cretan refugees, see OA. DH. MKT. 2178 / 53 (AH. 03-11-1316 / 15-03-1899), A. } MKT.MHM. 515 / 29 (AH. 17-07-1319 / 30-10-1901).

⁸²¹ The first conscription demanded 1000 men from the sancak of Bursa. Süleyman Bilgin, "Bursa Şer'iyye Sicilleri B-317 / 558 Nolu Defterin Değerlendirilmesi" (MA Thesis, Istanbul, Istanbul University, 2002), 15. Official number of recruits from the region was, excluding Pazarköy, 2468 Muslims in 1839. OA. NFS. d. 1518 (AH. 1255 / 1839). The establishment of a *redif* unit in Bursa must have contributed.

⁸²² George Thomas Keppel, *Narrative of a Journey across the Balcan, by the Two Passes of Selimno and Pravadi: Also of a Visit to Azani, and Other Newly Discovered Ruins in Asia Minor in the Years 1829-1830*, vol. 2 (London: Henry Colburn and Richard Bentley, 1831), 381.

of the first conscription law of 1844) complained along similar lines: “[t]here is no one left except the old. If two [persons] exist for cultivating the land, they took them both. Still, they are demanding for recruits, not caring whether there exists any.”⁸²³ A consular report estimated that conscription damaged the economic viability of one in four peasant households.⁸²⁴

Apparently, conscription was one of the most critical causes of depopulation among the Muslims of the region.⁸²⁵ John MacFarlane observed in 1845 that whereas the poor Orthodox Christians and Armenians had large families, their Muslim counterparts could not afford to bring up one, who, if a male, was drafted by the state just as he was beginning to become useful at home. Forced abortions, performed by unprofessional old women, became prevalent among Muslim females throughout the region as early as conscription was introduced⁸²⁶, no matter how damaging this practice to their fertility was.⁸²⁷ The Sultan’s limiting the military service to five years did not positively impact the Ottoman population’s perception of conscription.⁸²⁸

Conscription must have affected fertility. An event such as the Crimean War, when 250.000 men at marriageable age, amounting to five percent of the Anatolian Muslim population, were drafted, cultivated public consciousness of wartime mortality and the long-term absence of males within settlements.⁸²⁹ Moreover, being stationed in barracks did not guarantee life safety. Parallel to the spread of epidemics, hundreds of soldiers were dying each month across all military bases.⁸³⁰ These factors also caused long-term deserters. There is no empirical study on the implications of conscription on Bursa during the Crimean War, but considering the fact that 45.000 men were drafted from the Aydın province alone and only a fraction of them could return home, mostly sick and injured, Bursa’s labor force must

⁸²³ Veysel Şimşek, “Ottoman Military Recruitment and the Recruit: 1826-1853” (MA Thesis, Ankara, Bilkent University, 2005), 64.

⁸²⁴ Kasaba, *The Ottoman Empire and the World Economy*, 67.

⁸²⁵ Karpas, *Ottoman Population, 1830-1914*, 11.

⁸²⁶ Abortions became widespread in other parts of the Empire immediately after the implementation of conscription. For a few examples, see Quataert, “The Age of Reforms,” 790.

⁸²⁷ MacFarlane, *Turkey and Its Destiny*, 1850, 1:146.

⁸²⁸ Şimşek, “Ottoman Military Recruitment and the Recruit,” 65–66.

⁸²⁹ Justin McCarthy, *Population History of the Middle East and the Balkans*, *Analecta Isisiana* 62 (Istanbul: Isis Press, 2002), 100.

⁸³⁰ Şimşek, “The First ‘Little Mehmeds,’” 285–86.

have been irreparably impacted from its impact.⁸³¹ A consular report notes that by 1859, there had been a secular decline in Muslim quarters of the Bursa city, as progressive in villages.⁸³²

However, conscription was not the only factor behind the fertility decline. This trend seems to have existed since as early as the first decades of the nineteenth century, irrespective of high natural mortality rates and epidemics. The decay of Muslim quarters was also observed by another foreigner who compared the situation in the Bursa plain in early 1814 and 1846, saying, “there were villages that were entirely Turkish, and other villages where Turks and Rayahs [non-Muslims] were mixed; in the first sort there are now more Rayahs than Turks, and in the second, the Turks have almost entirely disappeared; in many cases there is not a Turkish house left in such villages.”⁸³³ It is, therefore, more plausible to relate the decline of Muslim depopulation to long-term changes (e.g., resource scarcity due to disasters and inheritance division practices).

2.3.7.3. Diseases

Apart from wars, civil disorders, fires, and famines that constantly threatened the Ottomans’ lives, endemics such as tuberculosis, dysentery, and malaria and epidemics like plague and cholera took a heavy toll on the populations.⁸³⁴ As a region, Bursa did not see significant armed conflicts in the nineteenth century yet suffered from multiple environmental disasters, such as the earthquake of 1855.

Epidemics hit the Bursa region the hardest during the first decades of the nineteenth century. It is often hard and impossible to give a complete account of the prevalence of diseases in certain subdistricts. Most works and Ottoman documents are concerned with the situation in the city of Bursa, since the high population densities of cities are known for facilitating infection and filth. Contemporaneous commentary on the city’s medical situation can be used to proxy the region’s epidemic and endemic conditions. Examining the health situation is also important to evaluate population data, demographic trends, and health-related hindrances to regional economic activities.

⁸³¹ Özgün, “İzmir ve Artalanında,” 151.

⁸³² BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 355.

⁸³³ MacFarlane, *Turkey and Its Destiny*, 1850, 1:151.

⁸³⁴ McCarthy, *Population History*, 97–99.

During Lord Kinneir's stay in 1814, the plague killed some "many thousands" in the city of Bursa.⁸³⁵ To compare, during a day of the greatest mortality in 1812-1813, 3000 deaths passed the gate of Adrianople (Edirnekapı) in Istanbul, while total deaths exceeded 300.000. By the same time, the plague swept off 30.000 to 40.000 people in Izmir, amounting to one-third of its population.⁸³⁶ The epidemic lasted at intervals until the early 1830s in Bursa.⁸³⁷ Proper imposition of quarantine in the early 1830s⁸³⁸ at the ports and strategic roads that connected Bursa with Anatolia and Istanbul effectively controlled infectious diseases.⁸³⁹ That said, the plague's severity in the 1830s was no less than the last time. Its return to Istanbul in 1834 and revisit in 1836 killed 1220-1500 people daily at its height.⁸⁴⁰

Reportedly, there was *some* plague in the district of Bursa in 1839.⁸⁴¹ Between 1840 and 1846, a spontaneous plague was again observed in the region. During this episode, Hamilton wrote that it caused a few cases in the neighboring western district of Karesi in Mihaliç and around Lake Apolyond in 1842, though without reaching dangerous levels.⁸⁴² By 1842, it had entirely disappeared from the city, whose inhabitants were described as "generally healthy in constitution and appearance."⁸⁴³ The authorities, comprising French medical scientists, tried hard to keep it away from the city but were unable to trace communication with an infected person or substance. Luckily, most people escaped the disease after contact with those seized with it, even in its most malignant stage. The quarantine laws were then relaxed upon carefully examining the disease's infectiousness.⁸⁴⁴

Next up, the cholera pandemic of 1847-48 depressed the energies of Bursa's population until July 1848.⁸⁴⁵ Sporadic affection of rural and urban people by malaria and

⁸³⁵ Kinneir, *Journey Through Asia Minor*, 246.

⁸³⁶ BPP. CP. No. 475, LIV (1), *Correspondence relative to Contagion of Plague, and Quarantine Regulations of Foreign Countries*, 1836-43, 1843, 356.

⁸³⁷ Schneider, *Letters from Broosa*, 45-46.

⁸³⁸ OA. C. SH. 26 / 1265 (no date).

⁸³⁹ Schneider, *Letters from Broosa*, 46.

⁸⁴⁰ BPP. CP. No. 475, LIV (1), *Correspondence relative to Contagion of Plague*, 1843, 355.

⁸⁴¹ BPP, CP, No. C.138, XLIII (43), *Statistical, Sanitary and Medical Reports of Army Medical Dept.: 1868*, 1870, 311.

⁸⁴² Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 2:94-98.

⁸⁴³ BPP. CP. No. 475, LIV (1), *Correspondence relative to Contagion of Plague*, 1843, 356.

⁸⁴⁴ BPP, House of Commons Hansard Sessional Papers, Third Series, Volume 91, *Commons Sitting of Thursday, March 18, 1847*, 1847, 156.

⁸⁴⁵ Özgür Yılmaz, "1847-1848 Kolera Salgını ve Osmanlı Coğrafyasındaki Etkileri," *Avrasya İncelemeleri Dergisi* 6, no. 1 (2017): 50; See also Charles MacFarlane, *Turkey and Its Destiny: The Result of Journeys Made*

dysentery⁸⁴⁶ was fought by prohibiting rice cultivation in the 1840s and unsystematic drainage of dead water and marshes that started under the supervision of Ahmed Vefik Efendi in the mid-1860s.⁸⁴⁷ Until then, the inundations of the rivers and streams and the resultant formation of unhealthy marshes were spreading malaria, “which was bringing every year those terrible intermittent fevers, and tending to depopulate the thinly-peopled country.”⁸⁴⁸

Intermittent fever and various respiratory diseases of non-lethal kind prevailed in the region also due to the inhabitants’ unwise use of water and careless exposure to the strong winds of Mount Olympus.⁸⁴⁹ Among the unhealthy habits of the urbanites, some pointed to hazardous ones such as excessive smoking and dumping of filth and industrial waste into the streams, the latter becoming more pronounced after the opening of filatures in the 1840s.⁸⁵⁰ Otherwise, Bursa was renowned for its salubriousness. A commercial report from 1841 describes Bursa as “the cleanest of the Turkish cities.”⁸⁵¹ The British vice-consul reported in 1860 that “Brussa itself is notable for such salubrity as does not allow of frequent scope for medical practice. During twenty years’ residence, I have not had a day’s serious illness, save from an attack of cholera in 1848.”⁸⁵² Public health had been described as good until 1870, with the reserve of a generally non-fatal recrudescence of typhus fever in the early 1861⁸⁵³ and 1868⁸⁵⁴.

2.3.7.4. *Natural Disasters*

Environmental hazards and diseases constantly checked the region’s agricultural production and population. Fires and earthquakes, the two other significant disasters, undermined industrial and farm productivity and demolished populations. Local fires were unsurprising

in 1847 and 1848 to Examine into the State of That Country, vol. 1 (Philadelphia: Lean and Blanchard, 1850), 162. To follow the state’s responses to the occurrence of cholera in the region, see OA. A.} MKT. MHM. 4 / 65 (AH. 18-05-1264 / 22-04-1848) ; A.} MKT. 139 / 66 (AH. 11-08-1264 / 13-07-1848) ; 140 / 43 (AH. 15-08-1264 / 17-07-1848).

⁸⁴⁶ MacFarlane, *Turkey and Its Destiny*, 1850, 1:162.

⁸⁴⁷ BPP, CP, No. 3488, LIII (67), *Commercial Reports*, 164. For detailed descriptions of the harms inflicted by marsh formation by Ahmed Vefik Efendi, see OA. MVL. 667 / 68 (AH. 13-09-1280 / 21-02-1864).

⁸⁴⁸ MacFarlane, *Turkey and Its Destiny*, 1850, 1:231.

⁸⁴⁹ Schneider, *Letters from Broosa*, 43.

⁸⁵⁰ MacFarlane, *Turkey and Its Destiny*, 1850, 1:120–240, in passim; Erder, “Factory Districts,” 89.

⁸⁵¹ BPP, CP, No. 513, LVII (487), *Commercial Tariffs and Regulations of States*, 1843, 103.

⁸⁵² BPP, CP, No. 2686, LX (60), *Reports on Quarantine by H.M. Consuls in Levant, and Despatches from Foreign Office; Correspondence between Sir H. Bulwer and Turkish Authorities on Quarantine Regulations*, 1860, 21.

⁸⁵³ BPP, CP, No. 3060, LIX (1), *Commercial Reports received at Foreign*, 1862, 357.

⁸⁵⁴ BPP, CP, No. C.138, XLIII (43), *Statistical, Sanitary and Medical*, 1870, 313.

since forests surrounded the region, and almost all houses had wooden structures. They occurred all too frequently in different localities. For instance, on December 12, 1846, a fire occurred in Koçu, a small village of Atranos that produced grains and fruits in small plots and raised a cow or sheep per house. The flames spread from one villager's home to others, eventually destroying all the houses, the stored produce, and most animals. Male household heads, now homeless, were haphazardly building small cabins for their families, who had no clothes and nothing to eat, begging for the state's mercy in cold winter 700 meters above sea level.⁸⁵⁵

What befell the village of Koçu was neither the start nor the end of local calamities. However devastating their results were for their respective communities, this section is concerned with those that got out of control and affected large areas. High levels of seismicity in western Anatolia climaxed in large earthquakes, whose consequences, as in any other context, were horrendous for the inhabitants and the state. These disasters greatly affected the urban centers, whose high population densities facilitated fire frequency and spread, cost more lives than rural areas, and halted commercial operations.

At the turn of the nineteenth century, the city of Bursa was consumed by a great fire in 1801 that ravaged two-thirds of the urban area, starting in the eastern sections, continuing to the central part, and ending around the inns and bazaars region. Three years after the event, Joseph von Hammer's visit to the city left vivid descriptions of a place still trying to recover from the conflagration.⁸⁵⁶ Another fire in August 1848 swallowed some houses, warehouses, and workshops. Though its size is unknown, its occurrence simultaneously with a severe fire in Istanbul that razed houses and manufacturing enterprises and the 1848 revolts in Europe must have left its imprint on urban crafts, specifically weaving.⁸⁵⁷ Another serious fire visited central Bursa near the citadel in March 1852, destroying forty-one shops (mainly carpenters but also grocers, butchers, halwa-makers, coffeehouses, farriers, barber, and butchers), an olive press, and two houses.⁸⁵⁸

⁸⁵⁵ OA. A.} MKT. 59 / 83 (AH. 08-01-1263 / 27-12-1846), ML. VRD. TMT. 7152 (AH. 1261 / 1845).

⁸⁵⁶ Hammer-Purgstall, *Umblick auf einer Reise*, 21, 59.

⁸⁵⁷ Çiğdem Dumanlı, "Viyana-Berlin Üzerinden 1848 Devrimleri'nin Osmanlı Devleti'ne Etkileri" (PhD Thesis, Ankara, Hacettepe Üniversitesi, 2017), 237.

⁸⁵⁸ Exact location was the Çırapazarı quarter at the entrance of the covered bazaar and just across the Bali Bey Inn. İ .DH. 249 / 15243 (AH. 15-05-1268 / 07-03-1852).

Wrecked by the outbreaks of plague and cholera, the region's inhabitants suffered multiple earthquakes. For the period under study, the first serious one occurred in the western subdistricts of Mihaliç and Kirmasti in 1850, destroying numerous houses in Mihaliç, and 282 in Kirmasti, while killing an unspecified number of people and animals, destroying fields and agricultural implements.⁸⁵⁹

Five years later, the whole region suffered from one of the major earthquakes in western Anatolia. Popularly called the "Little Doomsday," two earthquakes with magnitudes on the moment magnitude scale of over seven on 28 February and 11 April 1855 shattered Bursa and its environs.⁸⁶⁰ In the first earthquake, Bursa, Kite, Mihaliç, and Kirmasti, (i.e., central and western subdistricts) were heavily damaged with casualties, with 400 within the city and 300 in the vicinity. Deaths aside, sometimes whole settlements were destroyed. For example, all the houses in the town center of Kite were gone. Only ten out of 300 houses in the Kayapa village remained intact. Like Kayapa, villages to the west of Bursa plain lost many buildings.⁸⁶¹ If death numbers in the rest of the region are similar to those of the other affected subdistricts, over 1000 fatalities is not an unrealistic approximation.⁸⁶²

The second earthquake was more severe, killing about 150 people as soon as it occurred.⁸⁶³ With subsequent fires, it destroyed over 1000 shops and 3000 houses⁸⁶⁴ and killed 3600 lives in the city.⁸⁶⁵ 80 Orthodox Christian and 25 Jewish homes underneath the citadel were crushed under falling rocks.⁸⁶⁶ One building squeezed under the citadel's rocks was the local Orthodox Christian Karaoğlanoğlu Anastas' silk factory, where he, his wife, and two sons died, along with thirty female workers staying there.⁸⁶⁷ Eastern sections of the city where most Armenians lived saw the most destruction. Several mosques, churches, madrasas,

⁸⁵⁹ OA. A.} MKT. MVL. 27 / 62 (AH. 04-07-1266 / 16-05-1850).

⁸⁶⁰ Mehmet Yıldız, "1855 Bursa Depremleri," in *Tarih Boyunca Anadolu'da Doğal Afetler ve Deprem Semineri*, 22-23 Mayıs 2000: *bildiriler*, ed. Gülden Sarıyıldız (İstanbul: İstanbul Üniversitesi, 2002), 119–40.

⁸⁶¹ Neslihan Özeydin, "Arşiv Belgeleri Işığında 1855 Bursa Depremi ve Bursa Yapılarına Etkileri" (PhD Thesis, Bursa, Uludağ University, 2017), 32.

⁸⁶² *Ibid.*, 31.

⁸⁶³ İlhami Oruçoğlu, "Bir İngiliz Konsolosunun Gözüyle 1855 Bursa Depremi," *Bursa Araştırmaları Dergisi*, no. 15 (2006): 7.

⁸⁶⁴ Besim Özcan, "Bursa Depremleri (2 Mart - 12 Nisan 1855)," *Atatürk Üniversitesi Güzel Sanatlar Enstitüsü Dergisi*, no. 5 (1999): 96.

⁸⁶⁵ Özeydin, "Arşiv Belgeleri," 32.

⁸⁶⁶ *Ibid.*, 34.

⁸⁶⁷ Özcan, "Bursa Depremleri," 96.

schools, inns, public baths, and bridges collapsed within and outside the city. A contemporary New Zealand newspaper *The Lyttelton Times* wrote based on what they furnished from *the Times*' correspondent: "The shock which took place on the evening of the 11th has levelled to the ground the greater part of the ancient city, and destroyed some of the finest monuments of Roman, Byzantine, and Mussulman art which this country could boast of."⁸⁶⁸ Houses affected by the quake or fires lost plenty of their household goods. The second earthquake also damaged a larger area, extending to Gemlik, Mudanya, Mihaliç, Kirmasti, Pazarköy, Iznik, Yenişehir, and Inegöl (practically the whole region), although the reports from these subregions do not provide data on casualties and destructions.⁸⁶⁹ An Armenian manuscript and a British consular account indicate that some villages in the Bursa plain and Kite subdistrict were shattered, and crops and livestock were damaged.⁸⁷⁰

Following the earthquakes and fires, the Ottoman State quickly laid out measures and tasked the famous Midhat Pasha with coordinating relief efforts.⁸⁷¹ The moderate savings of the quarter, village, and city waqfs were not ready for such destruction. The central treasury gave around 350.000 *guruş* to provide food and tents for the people.⁸⁷² In addition, financial aid was collected by the wealthy of the city (41.000 *guruş*) and Armenian (50.000 *guruş*) and Orthodox Christian (30.000 *guruş*) patriarchates of Istanbul.⁸⁷³ Vienna's Jewish community trusted an unspecified amount to Emmanuel Falkeisen, the owner of the first silk factory in Bursa, and the Austrian and Russian consul.⁸⁷⁴ Tax payments of those affected and conscription within the district were delayed for a year.⁸⁷⁵ Bursa's provincial council prepared detailed reports and demanded architects, engineers, officers, five hundred carpenters, and hundreds of laborers from Istanbul and nearby regions to clear the debris and rebuild razed buildings and infrastructure since a significant portion of the local workforce exited the city.

⁸⁶⁸ Ömer Faruk Dinçel, "Bir Vakıf Defterine Göre 1855 Depreminin Bursa'daki Eserlere Etkisi," *Bursa Günlüğü*, no. 20 (June 2023): 32.

⁸⁶⁹ Özeydin, "Arşiv Belgeleri," 12.

⁸⁷⁰ Here, for instance, it is said that 48 people died in the Tepecik village to the west of Bursa (whose population was completely Orthodox Christian). Özcan, "Bursa Depremleri," 96; Oruçoğlu, "Bir İngiliz Konsolosunun," 7.

⁸⁷¹ Yıldız, "1855 Bursa Depremleri," 132.

⁸⁷² Özeydin, "Arşiv Belgeleri," 44.

⁸⁷³ Ibid., 43–51.

⁸⁷⁴ Kuster Vettiger, "Ein Basler im Bursa," 81.

⁸⁷⁵ Özeydin, "Arşiv Belgeleri," 55–56.

The capital helped with labor and planners, and the Navy authorized the cutting of extra timber from the forests of Pazarköy and Inegöl, increasing the corvee on their inhabitants.⁸⁷⁶

Bazaars and other avenues of commerce traffic had been destroyed to a large extent in the city, while the urban population was laying scattered among ruins and in distress. Raw silk production and silk-cotton manufacturing had fallen to a low extreme from the destruction of several filatures, cocoon stores, and hundreds of houses engaging in cocoon cultivation.⁸⁷⁷ In Late July 1855, 47.000 *guruş* was gathered to rebuild the covered bazaar, the heart of the silk trade and taxation. The Pious Endowments Directorate and the silk tax farmer Allahverdioğlu gave 10.000 each, and the rest was covered by the city's silk businessmen and rich bazaar artisans. Its reconstruction was completed in December.⁸⁷⁸

While trade in the branch of silk production and exports was largely suspended, the rest of the region, with some fatal exceptions, had escaped from the catastrophic damage in the city center. Although rains, hot winds, and locust attacks in the summer damaged all the district's wheat crops⁸⁷⁹, it was not a severe threat to subsistence.⁸⁸⁰ Rural inhabitants saw unprecedented and favorable demand for their products and labor. Through purchases of their livestock, forage, wheat, and barley by the Allied Forces in the Crimean War, a profusion of money inundated the peasantry, which increased the export trade.⁸⁸¹

From May 1855 onwards, the central administration stimulated the traders to take measures to meet the demand.⁸⁸² It loaned an additional 1,5 million *guruş* from the *sarrafs* of Bursa and distributed it among those who could provide a hypothec and witness, which caused trouble among those who failed to provide any security and escaped the region before the aid began. Although this remedy was to be paid back by the receivers without interest in three-year installments, the region's lucratively profitable foodstuff and livestock exports in the 1855-1856 season enabled the state to clear its debt to the *sarrafs* and make up for trade-

⁸⁷⁶ Hüseyin Gürsel Bilmiş, *Tanzimat'tan Cumhuriyet'e Bursa'da mimarlık ortamı* (Bursa: Nilüfer Belediyesi Akkılıç Kütüphanesi Yayınları, 2021), 443–44.

⁸⁷⁷ BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 466.

⁸⁷⁸ Çiftçi, *Bursa'da İpekçilik*, 52–55.

⁸⁷⁹ BPP, CP, No. 2078, LVII.1 (57), *Abstract of Reports of Trade of various Countries received by Board of Trade from H.M. Ministers and Consuls*, 1854, 1856, 57.

⁸⁸⁰ OA. A.) MKT. NZD. 152 / 23 (AH. 07-10-1271 / 23-06-1855).

⁸⁸¹ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 185.

⁸⁸² Ibid.

related tax losses.⁸⁸³ Also, in 1856, the yield, price, and exportation of cocoons and reeled silk exports had reached the highest levels hitherto encountered, primarily thanks to the increasing demand stemming from the silkworm disease prevailing in Europe.⁸⁸⁴

Getting over the effects of the earthquake became one of the Ottoman state's top priority policy matters.⁸⁸⁵ Economic restoration was the main and expected objective to stabilize the socioeconomic context. Immediately after the quake, a small portion of the bazaars had been spared from the destruction and became the focus of economic activity in the city, along with some repurposed contiguous shops and warehouses.⁸⁸⁶ Enlargements of the thoroughfares in the bazaar area, reappropriations of shops for the sale of merchandise, and repairs of filatures quickly restored the city's attractiveness in 1856, along with the surge in demand for cocoons and reeled silk. However, most inns could not start to be used until 1859.⁸⁸⁷

Comprehensive post-earthquake reconstruction efforts in the city of Bursa began under the superintendence of Ahmet Vefik Efendi in the mid-1860s. Rebuilding the first Ottoman capital stood as a critical test for the Tanzimat period's Western-inspired urban and architectural design aspirations, particularly as per the "Road and Building Regulation laws" (*Turuk ve Ebniye Nizamnamesi*) published in 1861. A group of engineers from the Ottoman General Staff under the command of Suphi Bey prepared a detailed cadastral survey of the city at a 1/2000 scale between 1857-1859, reprinted in 1862. Commonly known as the "Suphi Bey map," the survey provides a detailed portrayal of the city of Bursa's special structure.

The finalization of the Suphi Bey map coincided with the inspectorship of Ahmed Vefik, who carefully observed Haussmann's renovation of Paris during his ambassadorship there between 1860 and 1861.⁸⁸⁸ During his short stay at Bursa, he oversaw repairs of mosques, various public buildings, and bridges; the opening of new government buildings;

⁸⁸³ Özeydin, "Arşiv Belgeleri," 43–51.

⁸⁸⁴ BPP, CP, No. 2285, XXXVIII (38), *Abstract of Reports of Trade of various Countries*, 1857, 181.

⁸⁸⁵ Cevdet Pasha wrote that the central administration in Istanbul was informed about the earthquake a few days after the event. The British, in the meantime, had already sent two vessels load of bread to the local populace. Özcan, "Bursa Depremleri," 97.

⁸⁸⁶ BPP, CP, No. 2131, LVII (57), *Abstract of Reports of Trade*, 1856, 185.

⁸⁸⁷ Özeydin, "Arşiv Belgeleri," 35.

⁸⁸⁸ Beatrice Saint-Laurent, "Ottomanization and Modernization The Architecture and Urban Development of Bursa and the Genesis of Tradition 1839-1914" (PhD Thesis, Harvard University, 1989), 56.

regularization of streets; demolition of dead ends; and opening of commodious roads leading to mineral baths in nearby Çekirge village. But the damages could not easily be retrieved, and buildings could not be built the same as before in the urban space where the inhabitants had little to no accumulated capital. Perrot writes in 1862:

The houses have almost all suffered from the earthquake; also those of the Turks as those of the Christians, for those of the Christians, for the greater part rebuilt in haste after the disaster, are of very poor appearance. The whole city is made of mud and planks. One wonders how these one- or two-story shacks can withstand a hurricane or heavy rains. The most miserable are still those of the Jewish quarter, west of the Bazaar; one cannot believe how many women and children are lying there of women and children, lying one on top of the other, among cushions, in a very small room; the fish do not swarm more, at the time of spawning, in our streams.⁸⁸⁹

Upon all this suffering, a large fire in 1863 consumed the Armenian quarter and a few Muslim houses in the eastern segment of the city. Five hundred thirty-six homes were destroyed, affecting 3715 people, besides 63 shops, five filatures, six mosques, seven schools, two churches, and one police station.⁸⁹⁰ A consular report tells that the Armenians were hosted hospitably in Muslim households until their houses were repaired.⁸⁹¹

Until 1871, a series of large-scale natural disasters hit the port towns of Gemlik and Mudanya. In August 1856, an all-day fire swept through the entire town of Gemlik. Only a few houses remained intact while all cocoon, silk, olive, and other commodity stores vanished.⁸⁹² Shortly after the fire, a heavy hailstorm destroyed gardens and vineyards in the town and villages.⁸⁹³ The Gemlik-Iznik (Nicaea) fault line became active in 1857, destroying buildings along the Gulf of Gemlik⁸⁹⁴ and the arsenal.⁸⁹⁵ The fault line reactivated in 1863, ending in a serious earthquake, though its impact is unknown.⁸⁹⁶

Mudanya, the other port town, was devoured by a large fire in 1871, mainly destroying the houses of Orthodox Christians who lived in quarters near the sea. Accelerated by strong winds, the fire destroyed, by one contemporary estimate, 500 buildings, including

⁸⁸⁹ Perrot, *Souvenirs d'un voyage en Asie Mineure*, 69. My translation.

⁸⁹⁰ For a thorough report on the damage assessment and relief efforts, see OA. İ. DH. 515 / 35044 (AH. 15-04-1280 / 29-09-1863).

⁸⁹¹ BPP, CP, No. 3393, LIX (61), *Commercial Reports received at Foreign Office*, 1864, 434.

⁸⁹² Kaplanoğlu and Oğuzoğlu, *Asri Gemlik*, 75.

⁸⁹³ OA. A.} MKT. MHM. 163 / 45 (AH. 21-01-1276 / 20-08-1259).

⁸⁹⁴ OA. İ. MVL. 586 / 26362 (AH. 13-02-1274 / 03-10-1857).

⁸⁹⁵ OA. A.} AMD. 26 / 35 (AH. 27-01-1267 / 02-12-1850).

⁸⁹⁶ OA. A.} MKT. UM. 536 / 43 (AH. 27-07-1278 / 28-01-1862).

shops, schools, and churches.⁸⁹⁷ A comparison of the provincial yearbooks from 1871 and 1875 reveals that the total household number of the subdistrict of Mudanya, whose settlement number did not change in the meantime, dropped from 1836 to 900.⁸⁹⁸ The Christian populace penned several letters to the central treasury stating that many of their coreligionists died and they were living in misery.⁸⁹⁹ In return, as an exceptional case, the state approved their demand for temporary tax relief, and the tax burden on the Christians affected by the fire was remitted for the said year.⁹⁰⁰

Major natural disasters had severe negative short-term negative fiscal impacts and long-term implications for economic development. Their outcomes and responses to them help us consider the importance of vulnerabilities and historical contingency and re-consider, especially in the case of the 1855 earthquake, the state-society interactions, the weight of agriculture within the regional economy, and the dependency between the “urban” and “rural” space, and avoid linear and teleological economic grand narratives.

2.3.7.5. A Comparison of the Region's Population in 1839 and 1870

To quantify the facts described in this section on a broad scale, let us look at the change in population figures from 1839 to 1870 using population registers of the permanent population for the former and the provincial yearbook⁹⁰¹ for the latter. In this section, I provide only Tables 7 & 8 comparing population figures for each point by subdistrict. In the next part, I will cover the aims behind the 1839 population registers and give a detailed breakdown of the region and the city of Bursa's population. The reader must be cautious that the mid-nineteenth-century figures are readjusted for commensurability purposes. Some subdistricts' populations were reorganized, and the Domaniç subdistrict's population (866 households, 2813 Muslim males in 1839) was added to Inegöl. Still, the table is imperfect, as there were village exchanges within and between regions, and it is unknown whether the 1870 figures represent only the settled inhabitants. But, because adding the temporary residents and semi-nomads (around 8000 people) to the 1839 population will make it extremely close to 1870

⁸⁹⁷ Ali Pekman, “1870 Yılındaki Büyük Mudanya Yangını...,” *Bursa'da Yaşam*, June 2013, 201.

⁸⁹⁸ *Salname-i Vilayet-i Hüdavendigar* (the Yearbook of the Hüdavendigar Province), AH. 1288 / 1871, p. 117; AH. 1292 / 1875, p. 149.

⁸⁹⁹ OA. ŞD. 1535 / 6 (AH. 27-06-1288 / 13-09-1871).

⁹⁰⁰ OA. İ. ŞD. 22 / 939 (AH. 01-07-1288 / 18-09-1871).

⁹⁰¹ *Salname-i Vilayet-i Hüdavendigar* (the Yearbook of the Hüdavendigar Province), AH. 1287 / 1870, p. 150.

numbers and neglect migration in the meantime, I will assume that both points reflect all the permanent male populace. I will also suppose that the 1870 figures include the conscripts, like the 1839 registers.

Last but not least, we must concede that the provincial yearbooks do not cite their sources, so we do not know if the counts belong to 1870 or before. As we shall see, the change is there and suggests a pattern. Before jumping to analysis, I should caution the reader that the 1870 results are tabulated with a slight edition. The yearbooks sometimes make mistakes, such as conflating Arabic numerals 0 (۰) and 5 (۵), publishing row or column totals as values of a single unit, and adding *çiftlik*s to the total count of settlements of a subdistrict in a year but not the other. Comparing 1870 figures published in the province's first yearbook with those from the succeeding years makes it clear that certain settlement numbers and population figures should be modified. They are italicized in the table.

With these cautions in mind, the Bursa region's male population seems to have experienced a small growth over the thirty years. Excluding the slight annual population growth, forced and voluntary immigration is likely the most significant cause. 10.870 *males* were added to Bursa's population, with 3146 Muslims and 7724 non-Muslims. We must remember that several thousand, at least 4300 reported, died in the 1855 earthquake, and silk operations halted with the silkworm disease in the 1860s. If we start with the non-Muslims, we will see that Bursa and Kite, Gemlik, Pazarköy, and Inegöl were responsible for 74% of the increase. With the addition of Iznik, Yenişehir, and Mudanya (including Tirilye), this rate goes to 96%. The rest 4% went to Mihaliç and Kirmasti, where changes in the numbers of non-Muslims are attributable to natural population growth and enlargement of *çiftlik*s (hence the requirement for more migrant laborers).

Increased trade activities along the coast attracted non-Muslims, presumably mostly Orthodox Christians, to Gemlik, the main port, and Mudanya, the secondary. In the latter, Tirilye, the small port town, captured most of them, which probably brought about its promotion to a township. Bursa and Kite, the heart of regional consumption and production with Orthodox Christian villages in its countryside and a cosmopolitan ethnoreligious structure in the city, received almost a quarter of the incomers, with the city doubtlessly being the most important destination. Pazarköy, Iznik, Yenişehir, and Inegöl, in other words, the

eastern subdistricts saw the greatest increases in their non-Muslim populations. Likely, the Armenian migration wave of the post-1829 period continued, and the non-Muslim (almost wholly Armenian) escapees of the 1845 central Anatolian famine settled here. Inegöl, Iznik, and Pazarköy, the subdistricts with Armenian populations, grew remarkably with no change in their total number of settlements (non-Muslims had to live in a few villages and town centers), with Pazarköy and Iznik experiencing only a tiny increase in their Muslim population. But, as noted above, opportunities in the rising silk industries (and olive trade in the north) catalyzed the increasing population of non-Muslims, whose propensity to live in extended households was also an easing factor.

Regarding the Muslims, the resettlement of the Crimeans, Circassians, and seminomadic groups must have played a vital role, as the Kirmasti subdistrict, which did not receive non-Muslim immigrants, saw a surge in the number of Muslim households. Yenişehir and Inegöl-Domaniç experienced the highest increase in the Muslim population fueled by immigrations caused by wars and, presumably, the famine (due to extensive farming operations, hence survival chances, here). Bursa and Kite, which received natural and war-related immigration, absorbed almost sixty percent of the total increase. Gemlik lost 774 Muslims while gaining 991 non-Muslims and keeping the same number of locations. We are uninformed about the casualties the 1856 fire brought, but economic and environmental reasons must have motivated this decrease. Atranos, the all-Muslim subdistrict in the south, also lost a substantial number of Muslims. Harmancık, its neighbor, gained little due to natural increase and possibly some village transfers from adjacent subdistricts and townships.

Overall, the Bursa region did not experience a significant population increase. Given the almost non-existent natural population growth, the difference in the total number of males from 1839 to 1870 was 11 percent, with the share of Muslims in their respective years decreasing only slightly by 2,6%. War-, conflict-, and disaster-related immigrants had a considerable share of this change. Economic opportunities, particularly the silk industries, attracted a significant population, especially non-Muslims, but the quick fading of cocoon production due to the pebrine disease must have slowed and halted it. The elimination of widespread epidemics must have played a role in facilitating stable natural population growth, given the relatively low life expectancy. To put Bursa's population increase in

perspective in the Western Anatolian context, the city of Izmir's *total permanent population* increased from around 130.000 in 1841 to 187.000 in 1868.⁹⁰² Unfortunately, we do not have a separate population count for the city of Bursa for exact comparison. However, the Bursa and Kite subdistricts' total male population increased by around 2000, indicating the city barely grew. A boost to the population provided by immigrants and seasonal migrants increased food needs, but given the rural background and employment of most migrants and already relatively small change in urban and rural population, not to the point of triggering extensive land reclamation and foodstuff production like what was witnessed in Izmir and its vicinity.⁹⁰³

⁹⁰² N. Feryal Tansuğ, "Communal Relations in İzmir/Smyrna, 1826-1864: As Seen Through the Prism of Greek-Turkish Relations" (PhD Thesis, Toronto, University of Toronto, 2012), 75.

⁹⁰³ İnal, "Fruits of Empire."

Table 7: A Comparison of the Region's Population by Religious Affiliation and Subdistrict, 1839-1870

(Legend: Σ =Sum, HH= Household, POP=Population)

	1839 Σ Settl emen t	1870 Σ Settl eme nt	1839 Σ POP Males Musli m	1870 Σ POP Males Musli m	Diff eren ce	Diff eren ce (%)	1839 Σ POP Males Non- Mus	1870 Σ POP Males Non- Mus	Diff eren ce	Diff eren ce (%)
Total	623	635	66941	70087	3146	5	30339	38063	7724	25
Bursa and Kite and Cebel-i Atik township	128	135	20928	22826	1898	9	11159	12883	1724	15
Gemlik	19	20	3042	2268	-774	-26	3004	3995	991	33
Mudanya (without Tirilye)	20	19	1384	1604	220	16	2551	2699	148	6
Tirilye	1	1	93	55	-38	-41	1211	1660	449	37
Pazarköy	14	13	2019	2045	26	1	4010	5563	1553	39
İznik	36	38	3901	4076	175	4,5	1110	1810	700	63
Mihaliç	103	105	6298	6689	391	6	4380	4573	193	4
Kirmasti	34	36	2946	3433	487	16,5	533	690	157	29
Yenişehir	41	43	3855	4085	230	56	690	1020	330	48
İnegöl (44 settl. + Domanıç 32 settl.)	76	77	8268	9277	1009	12	1691	3170	1479	87
Atranos subdistrict and Cebel-i Cedid townships	108	105	9186	9759	573	6	0	0	0	
Harmancık	43	43	3636	3970	334	9	0	0	0	
Share of All Totals			68,8	64,8			31,2	35,2		

Table 8: A Comparison of the Region's Population and Household by Subdistrict, 1839-1870

Subdistrict	1839 Σ HH	1870 Σ HH	Difference	Difference (%)	1839 Σ POP Males	1870 Σ POP Males	Difference	Difference (%)	1839 HH Size	1870 HH Size
Total	41019	47824	8465	17	97280	108150	10870	11	2,37	2,26
Bursa and Kite and Cebel-i Atik township	15030	16408	1378	9	33472	35709	2237	7	2,22	2,18
Gemlik	2773	3983	1210	44	6046	6263	217	4	2,18	1,57
Mudanya (without Tirilye)	1803	1836	33	2	3935	4303	368	9	2,18	2,34
Tirilye	660	800	140	21	1304	1715	411	32	1,98	2,14
Pazarköy	2575	3261	686	27	6029	7608	1579	26	2,34	2,33
İznik	2140	3549	1409	66	5011	5886	875	17	2,34	1,66
Mihaliç	3871	4060	189	5	10678	11262	584	5	2,76	2,77
Kirmasti	1293	1783	490	38	3479	4123	644	19	2,69	2,31
Yenişehir	1906	2130	224	12	4545	5105	560	12	2,38	2,40
İnegöl (44 settl. + Domaniç 32 settl.)	3910	4578	668	17	9959	12447	2488	25	2,55	2,72
Atranos subdistrict and Cebel-i Cedid township	3651	3926	275	8	9186	9759	573	6	2,47	2,49
Harmanlık	1407	1510	103	7	3636	3970	334	9	2,58	2,63

2.4: Conclusion

There is little question that the most important economic change in the Bursa region in 1820-1870 was the opening of silk filatures by European entrepreneurs at the city center and in the region in the 1840s. With the inundation of markets with cheap cotton cloth, Bursa's hand-reeling and loom-weaving industries had significantly lost their share in the traditional occupational structure.

The quick proliferation of these factories was possible thanks to the favorable trade agreements, depreciation of the value of Ottoman money, and the ready and willing population to raise mulberry trees and rear cocoons. The share of silk duties within all taxes at the height of factory production in 1861 was forty percent. In a sense, the region's incorporation into the world economy, which started in the mid-fifteenth century and slowed down in the coming centuries, resumed and massively intensified in the mid-nineteenth century, resulting in a deindustrialization episode for the silk sector, though not eradicating it nor significantly impacting other crafts.

On the flip side of the coin, the quick shift of the population to raising cocoons had its roots in the region's agrarian economy founded upon a fusion of the legacy of the Greater Bithynian and Ottoman agricultural and industrial practices. In other words, the forty percent cannot be adequately understood without its historical underpinnings and juxtaposition with the other sixty percent that gave the region its economic character. The making of the Bursa region resulted from complex processes that worked together, not despite each other nor due to the peripheralization of the Empire. Geophysical and climatic characteristics, biodiversity, and millennia-old land use and settlement patterns made multiactivity and polyculture essential features of Bursa's economy, to which mulberry trees and cocoon cultivation joined in the seventeenth century.

The cultivation of garden, field, and industrial crops, exploitation of forest resources, and animal husbandry, whose diversity and scale depended primarily on the environmental properties, constituted the cornerstones of the economy, coupled with manufacturing/building, trade, and service activities in the capital city and subdistrict centers. Silk was the only significant export commodity within this variegated and relatively

commercialized economy. The rest of the output of the agrarian and crafts activities, to an immense extent, was intended for and consumed within the domestic markets.

The first phase of export expansion of 1820-1870 did not generally lead to an increase in productivity and the quantity of capital. The surplus of the region's commercialized agriculture and industrial production was appropriated by a class of moneylenders, local notables, merchants, and foreign entrepreneurs who successfully orchestrated tax collection and lending money at high interest. The lack of bulk exportation was inextricably connected to the performance of the agrarian sector that formed the backbone of the region's economy. Most agriculturalists were small landowners who prioritized self-sufficiency and produced a small surplus for the market. Agricultural technology remained simple, and yield ratios of produce and animal husbandry were low. Polyculture and the resultant varied diet of the inhabitants favored this trend, kept field sizes generally small, and made sharecropping on large grainfields, co-cultivating water-intense/industrial crops, and shepherding others' animals an essential part of agriculture. While suitable soil, abundant land and water, and expansion of marshlands expanded *çiftlik* agriculture assisted by increasing livestock husbandry in the plainer areas, there was practically no investment in new technology. Nor did most peasants have the necessary agricultural inputs (e.g., seeds, implements, oxen) ready for them at once. Sharecropping, migrant labor, and, more importantly, debt bondage had been the only means of finding labor. The pressure of non-redistributive high taxation, unchecked high interest rates, imperial financial instabilities, and progressively rising living costs exacerbated the chronic cash shortage and eased binding households to soil and cultivation.

The region's and the city's population did not significantly change between 1840 and 1870 to create a pressuring demand. The change was eleven percent, and most newcomers were peasants. Even though migrant laborers flooded the coastal and plainer areas during sowing and harvest season, the increase in population was connected to the resettlement of war-, conflict-, and disaster-related immigrants and, secondarily, to a lesser extent, semi-nomads. We must also consider the wide-scale impact of conscription on the already naturally declining Muslim population, overall high mortality, and the natural and ecological disasters that kept the population from growing.

Nor was there an extra-regional demand for Bursa's agricultural, industrial, and mining output to initiate large-scale exportation, save exceptions such as livestock and barley demands from Istanbul, small olive trade with Bulgarian lands and Russia, the temporary episode of high exports during the Crimean War, chromium bought by the British, and the usual and lowering demand for woven textiles. Moreover, costly and archaic overland transport infrastructure and the limiting of the shipping trade to a coasting one were the other factors that confined the region's economy to the domestic arena.

Of course, such broad generalizations can be reached only by repressing environmental determinants that adversely impacted and fragmented Bursa's social and economic trajectory. Epidemics such as plague, cholera, malaria, and typhus concerned most inhabitants. The lack of proper medical facilities and the general carelessness of society also subjected people to many diseases and kept mortality rates high. Although Bursa was politically stable, natural and climatic calamities such as inundations, fires, heavy rains, severe winters, droughts, crop failures, animal diseases, and earthquakes posed constant threats to the inhabitants.

The Great Bithynia region's major thoroughfares formed the main arteries of Bursa's transportation network. However, overland transport was prohibitively costly, and the roads were impassable during certain times of the year, causing isolation even within the region. The region had ports, but it was not a port region. The shipping trade was immensely limited to a coasting one carried out by small boat crews. Istanbul had always been the greatest buyer of articles shipped from ports along the Marmara coast, but increased steamer activity did not transform the volume or versatility of exportation from Bursa. That the silk was reexported from Istanbul also prevented directing the attention of global and imperial trade to the district. The road from Gemlik to the city center, which provided better and slightly faster access to the main port, was built to facilitate silk exports but could be opened in 1865 when silk operations severely diminished.

The infamous 1845 Central Anatolian famine hit the region in its eastern and southeastern parts, but Bursa also became a refuge for those in other provinces escaping it. Especially the post-1850s were unfavorable for the population and economy. Several thousand people (at least 4300 enumerated) were killed by the 1855 earthquake, which

demolished many buildings in the city and the region and shattered factories in the urban area, suspending most trade operations. Combined with diseases of the previous decades and persistently unpredictable agricultural conditions, the earthquake had a negative demographic impact on the already-thinly populated region. Oidium, or the vine disease, which appeared in 1852, devastated the vineyards grown by almost every household for subsistence, increasing sugar imports. Pebrine, or the silkworm disease, decreased Bursa's cocoon output (by 80% until the 1880s), quality, and silk exports. Efforts to cultivate cotton to compensate for the losses in silk during the American Civil War were short-lived and abandoned after the war.

Part 3: Economic and Population Profile of Bursa in the Mid-Nineteenth Century

3.1: Introduction

In the last part, I cataloged the determinants of production, consumption, and exchange. This part is concerned with *who* and *where* – in other words, with the producers and consumers and where they lived and labored. It quantitatively illustrates the region's and the city's economic and population geography. In doing so, it uses aggregated microdata from Ottoman population registers and tax surveys from around the 1840s to quantitatively map out the interaction between regional endowments and modalities of human lives on subdistrict, town, village, and quarter levels. Especially the occupational structure of the city and town centers and their labor relations are covered here.

Since the 1840s represent the midpoint of my research period, we can examine a realistic snapshot of the region's demography and economy in light of the significant environmental, demographic, and infrastructural properties of and developments in 1820-1870. Moreover, it can be argued that, besides the period's unique industrial, agricultural, and population changes, the mid-nineteenth-century data can give us a rough approximation of the previous centuries' economic situation and population density. Comparisons across time and space can be made by juxtaposing this data source with tax records from earlier centuries.

3.2: Introduction to Ottoman Population and Tax Microdata

The population registers and tax surveys are indispensable tools in portraying the population and economic geography of the district. They were conducted in a mammoth bureaucratic

undertaking to introduce universal conscription following the abolition of the Janissaries based upon the former and individual taxation based on household income based on the latter. Aside from their specific purposes, the design and practice of the population and tax records could not escape political obstacles as well as environmental, demographic, and infrastructural limitations, which again call for a need to study regional conditions before using them. Therefore, a history of the rationale behind these data sources is necessary to account for their flaws. Doing so will also shed light on the state's political, economic, military, and ideological aims in preparing these records, and the discrepancies between theory and practice. What these sources *do* and *do not show* is also important. This section provides a critical and detailed introduction to their content.

3.2.1. Population Registers (*Nüfus Defterleri* – NFS) and Censuses

During the short peace following the costly treaty of Adrianople in 1829 that concluded the Ottoman-Russia war, to strengthen the new army, centralize conscription, rebuild the navy, and maximize its tax revenues to reverse retrogressive affairs of state, the Ottoman Empire conducted its first population registers in 1830 (AH. 1246), except for Istanbul, where registration started in 1829 (AH. 1245).⁹⁰⁴ The registers' first purpose was to enumerate male inhabitants to regularly conscript non-disabled Muslims aged between 15 and 30 to have them serve for a minimum period of twelve years.⁹⁰⁵ Istanbulites were exempt from military service until 1909, and the Muslim Roma population was only recruited to fill modest auxiliary tasks, such as serving in the military band.⁹⁰⁶ The number of draftees was allotted in proportion to the people of districts.⁹⁰⁷

Ibrahim Pasha's troops' advancement into Western Anatolia in 1833, combined with the reluctance among the general population to enlist in the army, led to the foundation of the (mostly infantry) *Redif-i Asakir-i Mansure* (Victorious Reserve Soldiers) in 1834 to supply the regular army with a pool of trained recruits during wartime and to meet the

⁹⁰⁴ Sedat Bingöl, "İstanbul'da 1829 Nüfus Sayımı ve Bazı Mahallelerin Nüfusu," *Tarih Araştırmaları Dergisi* 23, no. 36 (2004): 43–60.

⁹⁰⁵ Zürcher, "The Ottoman Conscription System, 1844-1914," 438.

⁹⁰⁶ In Ottoman society the Roma (usually Muslims) were separated from the Muslim and non-Muslim communities and popular as musicians who entertained locals in public venues. This must have been the reason behind this decision. Eyal Ginio, "Neither Muslims nor Zimmis: The Gypsies (Roma) in the Ottoman State," *Romani Studies* 14, no. 2 (2004): 123.

⁹⁰⁷ Mehmet Hacısalıhoğlu, "Inclusion and Exclusion: Conscription in the Ottoman Empire," *Journal of Modern European History* 5, no. 2 (2007): 266.

military personnel needs of the provinces. The reserve troops recruited able-bodied Muslim males of 23 to 32 years old who trained and served in or near their residence (village, district center, etc.) in three-month rotations and with the regular army twice a year.⁹⁰⁸ In 1835, non-Muslims living in the coastal areas (mostly Orthodox Christians) were recruited to the navy for the first time.⁹⁰⁹

Another aim of the registers was to determine the age and financial eligibility of non-Muslim males (females and children were exempt) for the yearly poll tax (jizya) payment. Tax amount was classified into and represented in the registers by three rates: high (*ala*), medium (*evsat*), and low (*edna*).⁹¹⁰ In addition, population counts were undertaken to serve as a basis for a fair and individual taxation system that would desirably replace collective taxation.⁹¹¹ Pilot surveys of lands, animals, and estates were conducted in several locations around the Empire, a topic I explore in the next section.

Another main aim was to document, control, and limit movement within the Empire. The issuance of internal passports (*mürur tezkiresi*) became widespread in the late 1820s. Economic opportunities and difficulties due to intensified integration into the world economy, the crowdedness of Istanbul, and the disbandment of Janissaries made the “prohibition of passage” (*men-i mürur*) regulation, in Ottoman administrative parlance since the late 1600s, even more needed during the nineteenth century.⁹¹² After 1830, the registers took over the duty of tracking movement. A byproduct of this process was the need to record the births and deaths. Ages were added to this information to determine eligibility for military service, tax payment, and migration.

⁹⁰⁸ Abdülkadir Özcan, “Redif,” in *TDV İslam Ansiklopedisi* (İstanbul, 2007), 524, <https://islamansiklopedisi.org.tr/redif--ordu>.

⁹⁰⁹ Ufuk Gülsoy, *Osmanlı Gayrimüslimlerinin Askerlik Serüveni* (İstanbul: Simurg Yayınları, 2000), 29.

⁹¹⁰ Jizya formed one of the most significant revenue sources of the central treasury. Since the jizya reform of 1691, the tax was collected per head. In 1829, *ala* paid 48, *evsat* 24, and *edna* 12 *guruş* (piasters). In 1835, their respective burden increased to 60, 30, and 15 *guruş*. Halil İnalcık, “Cizye (Osmanlılar’da),” in *TDV İslam Ansiklopedisi* (İstanbul, 1993), 47, <https://islamansiklopedisi.org.tr/cizye#2-osmanlilarda-cizye>.

⁹¹¹ Mübahat Kütükoğlu, “1830 Nüfus Sayımına Göre Menteşe Sancağında Hane Nüfusu,” *Osmanlı Araştırmaları* XXIII (2003): 75–76; Enver Ziya Karal, *Osmanlı İmparatorluğunda ilk nüfus sayımı 1831* (Ankara: Başvekâlet İstatistik Umum Müdürlüğü, 1943), 8.

⁹¹² Mehmet Demirtaş, “XIX. Yüzyılda İstanbul’a Göçü Önlemek İçin Alınan Tedbirler: Men-i Mürûr Uygulaması ve Karşılaşılan Güçlükler,” *Bellefen* 73, no. 268 (2009): 745.

Religious and judicial hierarchy members were appointed to undertake population counts as quickly as possible and with minimum resistance from respondents.⁹¹³ A Population Registry Department (*Ceride Nezareti*) within the Ministry of the Interior was founded in 1831 with a network of offices (*Defter Nazırlıkları*) in the districts to supervise registrations and compile and preserve the registers. After its establishment, this duty was transferred from qadis (*qadi*) and deputy qadis (*naib*) in districts and towns to the Population Registry Department.⁹¹⁴

The first registration period started in 1830 but finished at different times in different regions. It covered 14 out of the 29 provinces (*eyalet*) in total.⁹¹⁵ The European *eyalets* were Rumelia and Silistra (roughly limited to the area from today's Bulgaria, southern Serbia, and Montenegro in the north to Peloponnese in the south), and the rest corresponded roughly to modern Turkey minus provinces along today's Syrian border, Mosul, Aegean islands, and Cyprus.⁹¹⁶ Egyptian occupation of Greater Syria between 1831 and 1840 under the leadership of Mehmed Ali's son Ibrahim Pasha limited the extent of registration. The difficulty of conscripting Albanians, Bosnians, Kurds, and Arabs who had enjoyed privileged autonomy for centuries must have been why the central authority did not bother going further south in Mosul.⁹¹⁷ The registers were updated until 1838.

To securely and easily complete the registration process, the help of local and religious headmen of each community (quarter, village, tribe, etc.) was sought.⁹¹⁸ Population officials (*nüfus mukayyidi* and *jurnal katibi*) were instructed "to register all births, deaths, and migrations and to report several times a year to the central office."⁹¹⁹ They were tasked

⁹¹³ Karal, *Osmanlı İmparatorluğunda ilk nüfus sayımı 1831*, 12.

⁹¹⁴ The control over internal migration intensified especially after the abolishment of Janissaries to capture their surviving members. For a comprehensive examination of the origins and development the internal passport mechanism in the 1830s and 1840s, see Nalan Turna, *19. Yy'den 20. Yy'ye Osmanlı Topraklarında Seyahat, Göç ve Asayiş Belgeleri: Mürur Tezkereleri* (İstanbul: Kaknüs Yayınları, 2013), 59–70.

⁹¹⁵ For a concise listing of Ottoman provinces in 1831, see Fazıla Akbal, "1831 Tarihinde Osmanlı İmparatorluğunda İdarî Taksimat ve Nüfus," *Belleten* XV, no. 60 (1951): 617–28.

⁹¹⁶ Based on the summary (*icmal*) results of the counts in the European provinces: OA. NFS. d. 7436 (AH. 1246 / 1831) and 7439 (AH. 1252 / 1836–1837) and in the rest: 7429 (AH. 1254 / 1838), 2709 (for Harput vilayet, AH. 1250 / 1834), and 3742 (for Mosul vilayet, AH. 1253 / 1837).

⁹¹⁷ Virginia H. Aksan, "Military Reform and Its Limits in a Shrinking Ottoman World, 1800–1840," in *The Early Modern Ottomans: Remapping the Empire*, ed. Virginia H. Aksan and Daniel Goffman (Cambridge: Cambridge University Press, 2007), 130.

⁹¹⁸ Hafız Ahmed Lûtfî, *Tarih-i Lûtfî*, vol. 2 (İstanbul: Matbaa-i Amire, 1873), 145–46.

⁹¹⁹ Karpas, *Ottoman Population, 1830–1914*, 20.

to compile recruitment (*yoklama*) and vital events (births, deaths,⁹²⁰ migration) registers (*vukuat defteri* – based on the notification certificate [*ilmühaber*] sent by quarter headmen) and send them to the central bureau once every six months.⁹²¹ The officials appointed to count the male population were also obliged to record self-reported biographical information (names, titles/family names, ages, and occupations), infirmities, tenancy status, military, and poll-tax eligibility, temporary residents (migrants, inn-stayers), and changes in house conditions due to natural disasters. In some cases, updates were made on a master register, while the vital events registers were kept separately. Population counts were annually compiled in summary (*icmal*) registers that listed the total number of people by administrative division.

Besides its incomplete coverage, the first population registration of 1830-1838 largely failed to entirely enumerate the population it targeted, regularly update the records for some regions, and achieve interregional consistency in record keeping.⁹²² Bureaucratic shortfalls, distance, and local resistance hindered the enumerations or made their results vulnerable. Inhabitants of isolated areas and members of hard-to-reach tribes are assumed to have been undercounted or assigned a population estimate appearing only in the summary results.⁹²³ The conscription system was another arena of difficulty. In Mosul, the commoners' protests ended in killing a population official, and order was finally maintained by cannons

⁹²⁰ Unfortunately, death causes were not instructed to be recorded. Our knowledge about public health and health behavior of the Ottomans is extremely limited. At the same time, the first recognizably modern-style death registers in the Ottoman Empire were produced, in 1838–9, only for Istanbul, as a result of the state's reaction to the cholera pandemic of 1831. Apart from general death causes such as fever, causes such as fate, the work of spirits, and evil eye indicate that these registers were limited by contemporary medical knowledge and heavily impacted by superstitious beliefs. For a systematic analysis of these registers, see Gülhan Balsoy and Cihangir Gündoğdu, "Ottoman Death Registers (Vefeyât Defterleri) and Recording Deaths in Istanbul, 1838–1839," *Middle Eastern Studies* 57, no. 2 (2021): 197–208.

⁹²¹ Cevdet Küçük, "Ceride Nezâreti," in *TDV İslam Ansiklopedisi* (Istanbul, 1993), 409, <https://islamansiklopedisi.org.tr/ceride-nezaret-i>.

⁹²² Engin Deniz Akarlı, "Ottoman Population in Europe in the 19th Century : Its Territorial, Racial, and Religious Composition" (MA Thesis, Madison, Wis, University of Wisconsin-Madison, 1972), 30. The registers also failed to achieve harmony between Muslims and non-Muslims registers of locations. For instance, Bursa's non-Muslim registers from 1830 (OA. NFS. d. 1394 and 1395) did not record ages except for children to determine their age-eligibility for jizya payment. Refer to the Figure 2 at the end of this section for an example.

⁹²³ Stanford J. Shaw, "The Ottoman Census System and Population, 1831–1914," *International Journal of Middle East Studies* 9, no. 3 (August 1978): 326.

being fired at the city.⁹²⁴ Locust invasions, a plague epidemic, and the flooding of the Tigris in the following year collapsed all hopes for achieving registration aims.

Enforcing conscription, even among the surveyable population, lacked a standard procedure. As previously, finding recruits fell mainly to local notables and community and tribal leaders. Military officers, scribes, administrators, and religious hierarchy members were appointed to supervise recruitment. Whereas in places where populations were enumerated, draft boards used the records, in others, men were rounded up arbitrarily and forcibly by recruitment parties.⁹²⁵

After Tanzimat, the Population Registry Department was abolished, and its provincial offices were reallocated to new property and land survey, conscription, and travel certificate offices.⁹²⁶ Building on the lessons learned from the previous population and tax surveys, the central administration issued comprehensive regulations that set forth the responsibilities of officials, methods of record-keeping and updating, ways of military recruitment, and penalties for avoiding registration.⁹²⁷ The conscription system was reformed to ensure compliance by the respondents and collect the highest quality information. One crucial development in this regard was the new army regulations in 1843 that introduced the drafting method based on the drawing of lots (*kur'a*) that supposedly brought about a fairer recruitment system. Five regional standing armies (Istanbul, Rumelia, Anatolia, Arabia, and the Guards [Iraq and Hejaz made it six in 1848]) were established with their specific recruitment districts. The regulations limited the term of service in the regular army to five years and in the reserve troops to seven years.⁹²⁸ However, the new system failed to establish universal conscription because non-Muslims could not be drafted, except to the navy.⁹²⁹

⁹²⁴ Reşat Kasaba, *A Moveable Empire: Ottoman Nomads, Migrants, and Refugees* (Seattle: University of Washington, 2009), 99.

⁹²⁵ Şimşek, "The First 'Little Mehmeds,'" 274–75.

⁹²⁶ Küçük, "Ceride Nezâreti"; Karpas, *Ottoman Population, 1830-1914*, 28.

⁹²⁷ For "Instructions for population registration and property surveying" (*Tahrir-i emlak ve nüfus talimat defteri*), see OA. A. { DVNS. NZAM. d. 39 (AH. 1255 / 1839), for a collection correspondence on the application of the instructions around the Empire, see KK. d. 60 (starts with the instructions on *evasıt* 1255 / late May - early June 1839 and ends in AH. 1259 / 1843).

⁹²⁸ Zürcher, "The Ottoman Conscription System, 1844-1914," 439.

⁹²⁹ On the opposition to recruitment of non-Muslims by non-Muslim subjects and Muslim religious authorities, see Hacısalihoglu, "Inclusion and Exclusion," 268–70.

Now better prepared, the second registration period started for certain regions in 1839 (AH. 1255). It again counted only males but covered a larger area, now extending to Bosnia and Crete in the west and Syria, Lebanon, and Israel until and including Jerusalem in the east.⁹³⁰ The registers for the region from southeastern Anatolia to Jerusalem started around 1844 (c. AH. 1260). European and Eastern Anatolian (laying east of Konya, except the Black Sea coast) provinces were recounted around this time, presumably instead of updating records or in order to provide better estimates following the launch of the first conscription law in 1844. For this reason, the second wave of registers is mistakenly known as the “1844 census.” The vital registration period (mainly for Western Anatolian and Black Sea regions) continued until the mid-1860s. The process faced problems from the respondents as from the registrars and middlemen.

In spite of penalties, numerous reports attest to the high incidence of people avoiding registration and being hidden from registrars by religious and civil headmen and even by population officials. The primary motivation for these acts was to evade conscription. For example, in Kayseri, one of the large urban centers of central Anatolia, the imam and headman (*muhtar*) of a quarter each hid one of their sons. As an exemplary punishment, both were sent to Istanbul, where they were tried and received a month’s sentence.⁹³¹ In several villages in the environs of Kayseri, it was discovered that 69 people were hidden by village headmen, a crime for which they were exiled to the Tokat district.⁹³² In the districts of Denizli, Alaiye,⁹³³ Trabzon⁹³⁴, and Maden-i Hümayun⁹³⁵, population officials, in the authorities’ words, “dared” to hide populations and were punished by exile and removal from office. A memorandum sent to every district governor and the War Minister (*Serasker*) by the Supreme Council of Judicial Ordinances (*Meclis-i Vala-yı Ahkam-ı Adliye*) in 1852 warned that the most common way to hide people from registration was to have them registered dead, so each death case shall be investigated thoroughly. It also complained that the population of some

⁹³⁰ Based on the summary (*icmal*) results of the counts in the European provinces: OA. NFS. d. 7441 (AH. 1257 / 1841), 74423 (AH. 1257 / 1841) and 5956 (for Bosnia, AH. 1266 / 1849/1850 [Bosnian counts started in AH. 1266]) and in the rest: 3867 (AH. 1264 / 1847-1848), and 3868 (AH. 1270 / 1853-1854).

⁹³¹ OA. MVL. 56 / 54 (29-05-1264 / 04/05-1848).

⁹³² OA. C. DH. 22 / 1071 (29-06-1264 / 28-07-1849).

⁹³³ Denizli and Alaiye are mentioned in OA. A.} MKT. MVL. 53/62 (24-08-1268 / 12-07-1852).

⁹³⁴ OA. MVL. 319 / 35 (AH. 17-05-1274 / 03-01-1858).

⁹³⁵ OA. A.} MKT. UM. 367 / 20 (AH. 22-02-1276 / 20-09-1859).

regions still could not be fully enumerated, and update registers from others failed to be regularly sent to the center.⁹³⁶

Given such occurrences in the Empire's core territories, it is highly possible that the registers' accuracy was determined by a multitude of regional factors, especially in the outlying provinces where notables and tribes were powerful. In fact, the gravity of this possibility was well acknowledged by the state. In 1844, the central administration estimated the male Muslim population to be recruited was four million: "The authorities derived that figure from about 2,9 million men actually counted, and another 1,16 million estimated to reside in Albania and the Arab provinces."⁹³⁷ Like the Mosul example, population counts in these provinces could not be efficiently or entirely carried out. For instance, the 1849 population count of the city of Nablus in Syria resulted in a deliberate undercount due to the local notables' reluctance to cooperate with the Ottoman Empire in an attempt to keep the peasants on land, pocket the amount between tax collected and reported, and increase their popularity in the eyes of the populace.⁹³⁸ Many people panicked, armed themselves, and fled to the mountains in nomadic parts of Syria, mainly in Aleppo and Leja, and conscription was postponed until 1850.⁹³⁹ Tribal chiefs and local notables in Albanian, Kurdish, and Arab provinces had full control over the population counts. It was remarked upon in an 1848 correspondence of the councilors' chamber of the War Ministry that "among the new recruits which have arrived, there is not a single son of a notable."⁹⁴⁰

The first- and second-wave population registers share similar organizational characteristics despite their problems. They classified the Empire's subjects not as traditional *askeri* (military-administrative) and *reaya* (civilian/non-military) tax denominators but as commonly and officially recognized ethnoreligious identities.⁹⁴¹ It is hard to refer to all the identities since they changed across multi-confessional and multicultural administrative

⁹³⁶ OA. A.} MKT. MVL. 53 / 62 (AH. 24-08-1268 / 12-07-1852).

⁹³⁷ Şimşek, "The First 'Little Mehmeds,'" 268.

⁹³⁸ Beshara B. Doumani, "The Political Economy of Population Counts in Ottoman Palestine: Nablus, circa 1850," *International Journal of Middle East Studies* 26, no. 1 (1994): 1–17.

⁹³⁹ Yvette Talhamy, "Conscription among the Nusayris ('Alawis) in the Nineteenth Century," *British Journal of Middle Eastern Studies* 38, no. 1 (2011): 34.

⁹⁴⁰ Hacısalıhoğlu, "Inclusion and Exclusion," 269.

⁹⁴¹ Cem Behar, "Qui compte ? [« Recensements » et statistiques démographiques dans l'Empire ottoman, du XVIe au XXe siècle]," *Histoire & Mesure* 13, no. 1 (1998): 138–40.

regions and sometimes across individual registers. For the registration period until 1845, in central and western Anatolia, these identities were confined to Muslim, Orthodox Christian (*Rum*), Armenian, Catholic, Jewish, Roma, and nationalities of foreign citizens. For instance, the Mardin region in southeastern Anatolia included the native Christian sects of Jacobites, Chaldeans, and Assyrians.⁹⁴² The subdistrict of Midye in Edirne province in southeastern Europe contained Bulgarians⁹⁴³, whereas most registers encompassing modern Bulgaria with Slavic, Albanian, and Romanian populations spoke only of “Orthodox Christians.” The number of ethnoreligious classifications progressively increased until the last official census of 1906, as the Ottoman Empire recognized new identities (e.g., Bulgarians semi-officially since 1847 and Protestants since 1850).⁹⁴⁴

The registers were organized along spatial and temporal lines. While the unit of entry was household dwelling (*hane/menzil*), the standard unit of register was the quarter (*mahalle*) in urban and village (*karye*) in rural settings, the basic legal-administrative as well as an important cohesive and protective unit. Houses with no males (*zükurdan hali*) and no inhabitants (*hali/zükurdan ve inasdan hali*) were differentiated. Populated public spaces such as inns, dervish lodges, madrasas, coffeehouses, bakeries, and the like were recorded separately. In conjunction with these places, temporary non-local (*yabancı*) residents such as migrant laborers, inn-stayers, and unskilled bachelors (*bî-kâr*) at the time of registration were recorded along with their place of origin and for how long they had been in the migrated place. Non-Muslim migrants’ records were annotated with information regarding the last location where they got their poll-tax certificate and if they would make their next tax payment in the migrated location.⁹⁴⁵ At the same time, absentee residents were recorded in their households with complete information and a note stating the reason for absence (military [then the branch is included] or another location). Whether this practice was successfully carried out is unknown, but occasional update entries of individuals who were

⁹⁴² Ekrem Demir, “3736 Numaralı Mardin Kazası Nüfus Defterinin Transkripsiyon ve Değerlendirilmesi” (MA Thesis, Batman, Batman Üniversitesi, 2016), 24–38.

⁹⁴³ OA. NFS. d. 3980 (AH. 1255 / 1839).

⁹⁴⁴ Fuat Dündar, “Empire of Taxonomy: Ethnic and Religious Identities in the Ottoman Surveys and Censuses,” *Middle Eastern Studies* 51, no. 1 (2015): 14.

⁹⁴⁵ This practice started with the *jizya* reform of 1691. İnalcık, “Cizye (Osmanlılar’da),” 46.

“not recorded previously” (e.g., *hin-i tahrirde taşrada olub*) or “newly recorded” (*tahrir-mande*) without showing where they came from raise reasonable suspicion to the contrary.

Until the first Empire-wide *censuses* of 1881-1893 and 1906-1914 that recorded males and females all across the Empire, several population councils and cadaster agencies were formed, and census and population certificate regulations were issued. The most notable milestones of this process were the cadastral surveys of 1859 carried out in several pilot provinces, and the population counts in the new Danube province between 1866 and 1873 that introduced novel categories of record keeping. As a result, the mentioned surveys and counts had more detailed information, including the total count of residents per house, marital status, more accurate descriptions of age and occupation, and immovable properties owned.⁹⁴⁶

A new census regulation issued in 1874 reinstalled the Census Department as an independent “General Directorate of Census” under the Ministry of Interior. However, a new and general census could not be realized until 1881 due to financial constraints and political turmoil resulting from the depositions of Abdülaziz (r. 1861-1876) and Murad V (r. 1876) and the accession of Abdülhamid II (r. 1876-1908). As a result, to elect the members of the first Ottoman parliament in 1876, representatives of ethnoreligious communities were assigned seats based on the 1844 population registers’ results.⁹⁴⁷

Except for the last two censuses, Ottoman population counts can be described as *population registers* or *proto-censuses* because they aim to achieve specific goals by recording all but only males regardless of age and completing records at different times for different regions.⁹⁴⁸ Detailed registers of the first wave of Ottoman population counts, namely those conducted and updated between 1829-1838 and from 1839 to 1864, were made public

⁹⁴⁶ Alp Yücel Kaya and Yücel Terzibaşoğlu, “Tahrir’den Kadastro’ya: 1874 İstanbul Emlak Tahriri ve Vergisi: “Kadastro Tabir Olunur Tahrir-i Emlak,” *Tarih ve Toplum - Yeni Yaklaşımlar* 9 (2009): 9–58; Aşkın Koyuncu, “Tuna Vilâyeti’nde Nüfus Ve Demografi (1864-1877),” *Journal of Turkish Studies* 9, no. 4 (2014): 675–737.

⁹⁴⁷ To appease the European powers, European provinces were favored with a 2:1 ratio in the parliament. M. Şükrü Hanioglu, *A Brief History of the Late Ottoman Empire* (Princeton, NJ: Princeton University Press, 2010), 119.

⁹⁴⁸ Mark Mather and Rachel Cortes, “Demographic Data: Censuses, Registers, Surveys,” in *Blackwell Encyclopedia of Sociology Online* (Blackwell Publishing, 2016), <https://onlinelibrary.wiley.com/doi/10.1002/9781405165518.wbeosd018.pub2>.

by the Ottoman Archives in 2011 and cataloged under the code NFS. d. Microdata for the last two censuses is unavailable except for very limited fractions.⁹⁴⁹

Only a few academic works exist on the Ottoman population in the nineteenth century due to the unavailability of population registers and censuses until 2011. They relied on census summaries and focused mainly on determining the total population of the Ottoman Empire and its subdivisions.⁹⁵⁰ Despite the impossibility of working on demography before the opening of the early population registers, MA theses have been contended with transcribing the sources and superficially utilizing the variety in the data.⁹⁵¹ That said, several recent works have used these valuable sources critically and creatively for analyses of mortality, migration, agricultural land use, and urban spatial, ethnoreligious, and occupational distribution.⁹⁵²

Only the first two waves of population records are available for the Bursa region. They have the luck of having vital registers. The population registers were kept and routinely updated from 1830/31 to 1838, and the second wave between 1838/39 and 1864. No irregularities were reported regarding the registration process, though they were most likely undercounted. For the second wave, the master register ceased to be updated after 1843 (AH.

⁹⁴⁹ For a few studies that could access these fractions, see Alan Duben and Cem Behar, *Istanbul Households: Marriage, Family, and Fertility, 1880-1940*, 15 (Cambridge: Cambridge University Press, 1991) (their data is available online via SALT: <https://archives.saltresearch.org/handle/123456789/1470>); Johann Bussow, *Hamidian Palestine: Politics and Society in the District of Jerusalem, 1872-1908* (Leiden: Brill, 2011), 138–67; Michelle U. Campos, “Placing Jerusalemites in the History of Jerusalem: The Ottoman Census (Sicil-i Nüfus) as a Historical Source,” in *Ordinary Jerusalem, 1840-1940*, ed. Angelos Dalachanis and Vincent Lemire, vol. 1, *Opening New Archives, Revisiting a Global City* (Brill, 2018), 15–28; Daniel Ohanian, Z. Mehmet Başkurt, and M. Erdem Kabadayı, “An Historical Geographic Information System for Ottoman Studies: The c. 1907 Ottoman Census and Armenian Settlement in Istanbul,” *Turcica* 51 (2020): 255–83 (their data is stored at <https://www.houshamadyan.org/mapottomanempire/vilayet-of-istanbul/istanbul/locale/demography.html>).

⁹⁵⁰ Karal, *Osmanlı İmparatorluğunda ilk nüfus sayımı 1831*; Shaw, “The Ottoman Census System and Population, 1831–1914”; Justin McCarthy, *Muslims and Minorities: The Population of Ottoman Anatolia and the End of the Empire* (New York: New York University Press, 1983); McCarthy, *Population History*; Karpas, *Ottoman Population, 1830-1914*; Cem Behar, *Osmanlı İmparatorluğu’nun ve Türkiye’nin Nüfusu, 1500-1927 = The Population of the Ottoman Empire and Turkey, 1500-1927 (with a Summary in English)*, Türkiye’nin Nüfusu (Ankara: T.C. Başbakanlık Devlet İstatistik Enstitüsü, 1996).

⁹⁵¹ By September 2020, Turkish Council of Higher Education database shows the number of MA thesis using population registers as 61. No PhD thesis has used the registers for its main analysis <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>

⁹⁵² Kabadayı, Gerrits, and Boykov, “Bridging the Gap between Pre-Census and Census-Era Historical Data”; Erünel, “Examining Age Structure and Estimating Mortality Rates in Ottoman Bursa Using Mid-Nineteenth-Century Population Registers”; Ma, Sefer, and Kabadayı, “Geolocating Ottoman Settlements”; Ustaoglu, Kabadayı, and Gerrits, “The Estimation”; Sefer, Yıldız, and Kabadayı, “Labor Migration from Kruševo.”

1259). The rest is available in the form of vital records, some of which are missing. The non-Muslim vital registers ended in 1849 (AH. 1265).

An example page from the Muslim register (NFS.d 1396) can be seen in Figure 1. For an example of poll-tax update and non-kin relations under one roof, see Figure 2.



Figure 1: A population register snapshot showing a Muslim quarter and households, 1839 (OA. NFS. d. 1396) (start from the upper right corner and read from right to left)

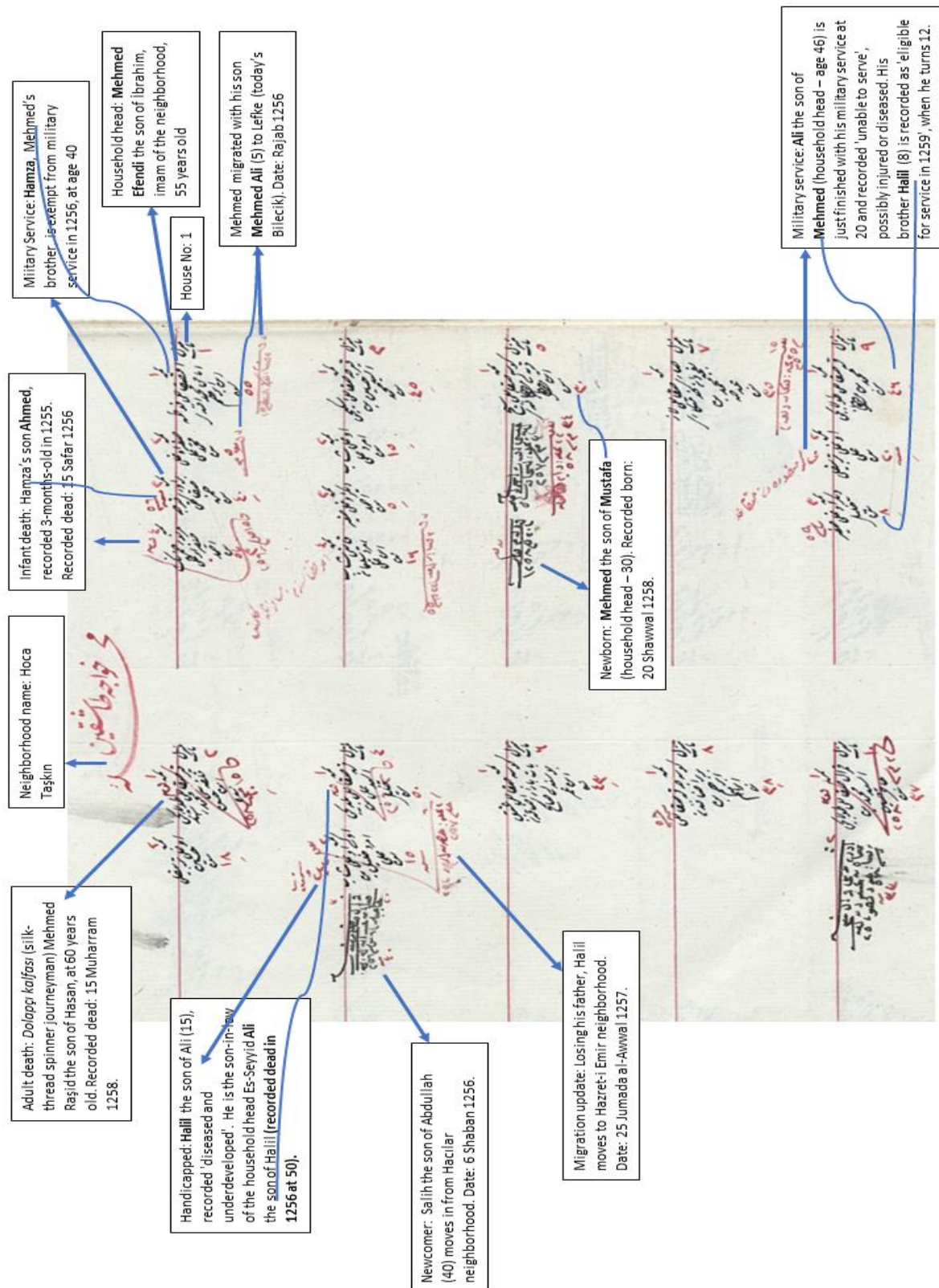
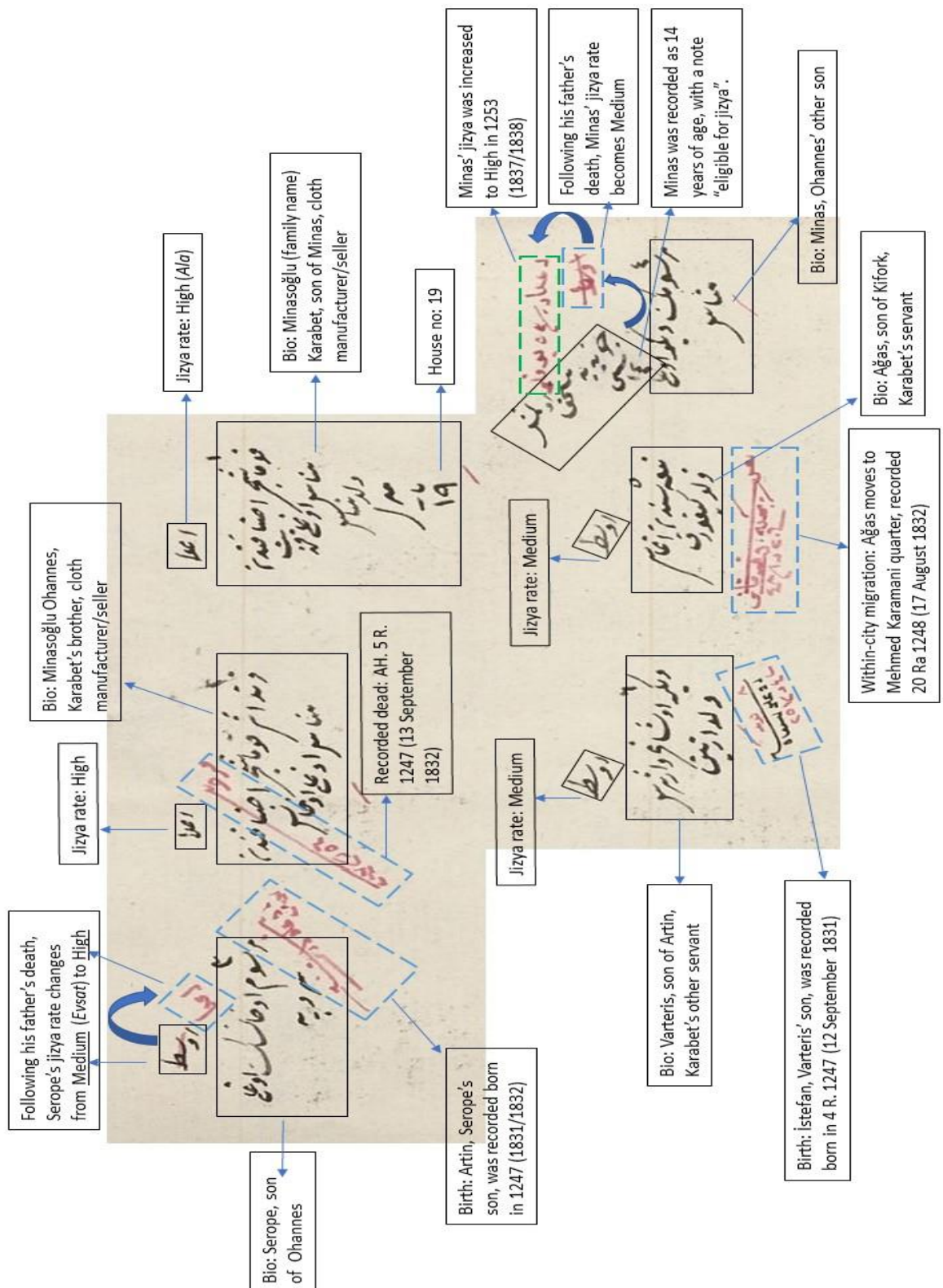


Figure 2: A population register snapshot showing changes in an Armenian household, 1830 (OA. NFS. d. 1394) (start from the upper right corner and read from right to left)



3.2.2. Tax Surveys (*Temettuat Defterleri* – TMT)

Expanding tax collection required more intrusive and complex bureaucratic structures, which in many cases became the vanguard of bureaucratic modernization and political and fiscal centralization. Sophisticated censuses and tax records were central to distinguishing taxpayers and their income sources. With the Tanzimat reforms, the state unified the customary collective taxes and expenses into one special tax and aimed to allocate it based on the regional ability to pay by replacing the old tax apportionment method (*tevzi registers*).⁹⁵³

In terms of their assessment and collection methods, the market tax of 1826 and the Assistance to Holy War tax of 1833 were precursors to the post-Tanzimat tax surveys. The land, animal, and real estate surveys of 1832 in Gelibolu, Eceabat, and Keşan (northwestern Anatolia); 1833 in Cyprus; 1834 in Kayseri (mid-Anatolia); and 1838 in Hüdavendigâr and Gelibolu (northwestern Anatolia) regions presented new Ottoman administrative practice of registering cultivated land and other properties as items for which personal or household income can be determined and taxed.⁹⁵⁴

At the start of the reform period in 1839, provincial and district-level administration in Anatolia until and including Sivas in the East (except Istanbul, which was exempt from taxation), the Balkans (except today's Bosnia, Montenegro, and Albania), and the Islands was reorganized hierarchically. Provinces (*eyalet*) were subdivided into 137 *muhassıllık* [tax collection units], represented by provincial and subdistrict level local assemblies headed by centrally appointed tax collectors-cum-notables known as *muhassıls* at the top.⁹⁵⁵ In the same year, special treasuries created for the regular (*mansure*) and the reserve (*redif*) armies were abolished, extraordinary taxes ceased to be collected, and the newly inaugurated Ministry of

⁹⁵³ Continuously rising regular and extraordinary tax demands of the state from the second half of the seventeenth century onwards led to the creation of the *tevzi registers*, the lists for the apportionment of taxes and communal expenses among the population. Resuming until the mid-nineteenth century, the collection of these revenues facilitated the growth of powerful notables, especially where centrifugal tendencies were strong. Yakup Akkuş, "Osmanlı Maliyesi Literatüründe İhmal Edilmiş Bir Tartışma: Tevzi' Defterlerinden Vergi-i Mahsûsa'ya Geçiş," *Tarih Dergisi*, no. 65 (2017): 29–61.

⁹⁵⁴ Alp Yücel Kaya, "Les Reformes Ottomanes Anterieures Aux Tanzimat: Vers Un Nouveau Mode Administratif," in *Enjeux Politiques, Economiques et Militaires En Mer Noire (XIV-XXI Siecles)*, ed. Faruk Bilici, Ionel Candea, and Anca Popescu (Braila: Musée de Brăila-Editions Istros, 2007), 597–608.

⁹⁵⁵ Ayla Efe, "Muhassıllık Teşkilatı" (PhD Thesis, Eskişehir, Eskişehir Anadolu Üniversitesi, 2002), 147–54; Since the application of *tevzi* registration was limited to where *timar* regime was in force, the extent of *muhassıllık* regions and *temettuat* survey areas can be better contextualized. Akkuş, "Osmanlı Maliyesi Literatüründe," 43.

Finance (*Umur-ı Maliye Nezareti*) became the only treasury of the Ottoman Empire. The *muhassıls* were dispatched with instructions as to detailed and fast registration, collection, and sending of the subjects' taxes to Istanbul.⁹⁵⁶

Standardized cadastral surveys of income-yielding moveable properties, real estate, and occupational incomes were needed to substitute the lump-sum tradition with individualized taxation based on income and regardless of one's privileges. Hence, the new surveys were officially dubbed "surveys of real estate, land, animals, and profits and income" (*emlak, arazi, hayvanat ve temettuat tahrir defterleri*). Also known as the *temettuat* surveys, they perceived the income of an individual (usually male household heads), land, and other properties as income-yielding activities and assets whose profitability (in theory) can be assessed, taxed, and increased.⁹⁵⁷

The cadre to carry out the surveys comprised finance scribes (*mal katibi*), property scribes (*emlak katibi*), and population officials (*nüfus katibi*), appointed by the provincial center and local councils, headed occasionally by the *muhassıls*, were accompanied by local headmen and ethnoreligious community leaders of locations surveyed.⁹⁵⁸ However, peasant discontent, bureaucratic constraints, and clashes of interest impeded the undertaking of the 1840 surveys. Despite being bound by the same regulations, the *muhassıls*, to a great degree, did not cooperate and failed to send the survey results and taxes to the imperial center simultaneously and on time. Thus, the surveys could not be completed for all the targeted regions, and registration of properties stopped halfway through.⁹⁵⁹ The limited number of *temettuats* from 1840 in the archives attests to this halt in the process.⁹⁶⁰ Consequently, the *muhassılıks*' salaried officials exhausted the central treasury. Their total number was first reduced to 51, but the institution was finally abrogated soon after.⁹⁶¹

⁹⁵⁶ Efe, "Muhassıllık Teşkilatı," 45–54.

⁹⁵⁷ Huri İslamoğlu-İnan, "Towards a Political Economy of Legal and Administrative Constitutions of Individual Property," in *Constituting Modernity: Private Property in the East and West*, ed. Huri İslamoğlu-İnan (London: I. B. Tauris, 2004), 3–34.

⁹⁵⁸ Kaya and Terzibaşoğlu, "Tahrir'den Kadastro'ya," 13.

⁹⁵⁹ Ibid., 14.

⁹⁶⁰ Said Öztürk, "Temettuat Tahrirleri," *Akademik Araştırmalar Dergisi*, no. 4-5 (Osmanlı Özel Sayısı) (2000): 555. However, based on my experience, some of the 1840 surveys are classified as dating to 1845.

⁹⁶¹ Ayla Efe, "Osmanlı Devleti'nde Mali Sistem Arayışının Getirdiği yerel Yönetim Uygulamaları: Muhassıllık Örneği," *Tarih Dergisi*, no. 49 (2012): 86. Especially considering the fact that the revenues from muhassıllık areas made up around %50 of cash incomes of the central treasury.

In 1842, as per the recently introduced revised administrative model (*tensikat-ı mülkiye*), the *muhasıls* in provinces and districts were replaced by provincial governors (*müşir*) aided by district (*sancak/liva*) chiefs (*kaymakam*), treasurers (*defterdar*), and regional revenue directors (*mal müdürü*) to supervise tax apportioning and collection in cooperation with local councils. Again, most old tax farmers and *muhasıls* retained their offices.⁹⁶² Although a sultanic decree (*irade*) from 1843 ordered new *temettuat* surveys⁹⁶³, they were postponed until 1845.⁹⁶⁴ In the meantime, the special tax continued to be collected in lump-sum. Several studies on surveys from 1840 and 1845 conclude that the special tax-to-incomes ratio differs widely across regions.⁹⁶⁵ In the meantime, upon taxpayer complaints, the special tax collection was redesigned to be paid by peasants after harvest and in multiple annual installments by artisans and merchants.⁹⁶⁶

The principal aim of the new surveys was to redistribute the special tax burden on regions based on their aggregated incomes. The taxation area of the 1845 tax surveys remained almost the same as before, this time extending to Harput and Erzurum in eastern Anatolia. The central administration admitted the previous surveys' errors and shortcomings⁹⁶⁷ and provided the provinces with sample surveys conducted in specific locations around the Empire to ensure standardized record keeping.⁹⁶⁸ Two significant improvements were made to the design of the new surveys. First, the 1840 surveys attempted to tax based on the estimated capital value of each household's income-yielding assets, which

⁹⁶² Nadir Özbek, *İmparatorluğun Bedeli: Osmanlı'da Vergi, Siyaset ve Toplumsal Adalet 1839-1908* (İstanbul: Boğaziçi Üniversitesi Yayınevi, 2015), 49.

⁹⁶³ Öztürk, "Temettuat Tahrirleri," 555.

⁹⁶⁴ For example, a mandate regarding the modalities of tax surveying and collection was sent by the Grand Vizierate to Trikala (in today's Greece) in May 1845. OA. A.} MKT. 24 / 36 (AH. 11-05-1261 / 18-05-1845).

⁹⁶⁵ Mübahat Kütükoğlu, "Osmanlı Sosyal ve İktisadi Tarihi Kaynaklarından Temettü Defterleri," *Belleten* LIX, no. 225 (1995): 411–12; Kayoko Hayashi, "Conclusion: The Ottoman Temettuat Registers: Significant Results from a Failed Venture," in *The Ottoman State and Societies in Change: A Study of the Nineteenth Century Temettuat Registers*, ed. Kayoko Hayashi and Mahir Aydın (London ; New York: Kegan Paul, 2004), 226–27; Kaya and Terzibaşoğlu, "Tahrir'den Kadastro'ya," 14; Nadir Özbek, "Osmanlı İmparatorluğu'nda Gelir Vergisi: 1903-1907 Tarihli Vergi-i Şahsi Uygulaması," *Tarih ve Toplum - Yeni Yaklaşımlar*, no. 10 (2010): 53.

⁹⁶⁶ Tefvîk Güran, "Tanzimat Döneminde Osmanlı Maliyesi: Bütçeler ve Hazine Hesapları, 1841-1861," *Belgeler* XIII, no. 17 (1988): 222.

⁹⁶⁷ Ayla Efe, "Osmanlı Devleti'nde Yeniden Yapılanmanın Şafağında Üç Vergi Sayımı," *Akademik İncelemeler Dergisi* 11, no. 2 (2016): 30.

⁹⁶⁸ For examples of the Supreme Council of Judicial Ordinances' reception of these sample surveys. OA. MVL. 27 / 40 (Konya) (AH. 21-07-1261 / 26-07-1845); 41 / 10 (Niş) (AH. 21-07-1261 / 26-07-1845); 41 / 15 (Plovdiv) (AH. 29-07-1261 / 03-08-1845); 41 / 32 (Silistra) (AH. 14-09-1261 / 16-09-1845); 41 / 36 (Yambol) (AH. 03-09-1261 / 05-09-1845); 41 / 35 (Drama) (AH. 12-09-1261 / 14-09-1845).

was their distinguishing feature.⁹⁶⁹ In return, problems and discontent arose regarding the subjective assignment of values to properties.⁹⁷⁰ The 1845 surveys recorded the *monetized* income figures gained from individuals' assets and economic activities based on self-claim without registering their estimated value.

Second, the Islamic tithe (*öşür*) imposed on agricultural crops and the sheep tax (*ağnam*) were added, and the amount per each taxpayer unit was specified. Due to severe inefficiencies in the centralized collection and transfer (of those collected in-kind) of these traditional taxes to the imperial center in 1840, the Empire reverted to tax-farming them to provincial tax-farmers in 1843.⁹⁷¹ However, in 1845, these taxes were farmed out “at a fixed price (*maktu*), determined according to the average of previous tax revenues for a certain number of years, slightly adjusted to accommodate the needs of the treasury.”⁹⁷² Thus, the insertion of the tithe and sheep-tax amount to be paid in the surveys ensured these taxes were based on one's agricultural activities.

The juxtaposition of the traditional Islamic taxes with new property and income surveying methods, like the coexistence of old and new tax distribution methods, portrays the transitional and experimental nature of the *temettuat* system. As İslamoğlu-İnan observed, “*temettuat* surveys represented an arena which encompassed the old and the new as the old categories insinuated themselves alongside the new.”⁹⁷³ Related to this observation was replacing the old land (*çift*) and weight measurement units with standardized and modernized ones in the surveys – dönüm (~0,25 acres) and applying the weight unit called Istanbul *kile* while assessing taxes.

⁹⁶⁹ Egari Hikawa's study of the Muslim (non-Muslim registers were unavailable) urban inhabitants, villagers, and nomads of Balıkesir district in northwestern Anatolia using 1840 surveys is a fine example to understand similarities and differences in record keeping, and which uses and interpretations they may offer. Egari Hikawa, “Balıkesir: A Rural City in Social Economic Change,” in *The Ottoman State and Societies in Change: A Study of the Nineteenth Century Temettuat Registers*, ed. Kayoko Hayashi and Mahir Aydın (London ; New York: Kegan Paul, 2004), 107–40.

⁹⁷⁰ Kaya and Terzibaşoğlu, “Tahrir'den Kadastro'ya,” 15.

⁹⁷¹ Özbek, “Tax Farming in the Nineteenth-Century Ottoman Empire,” 233–34.

⁹⁷² *Ibid.*, 234.

⁹⁷³ Huri İslamoğlu-İnan, “Politics of Administering Property: Law and Statistics in the Nineteenth-Century Ottoman Empire,” in *Constituting Modernity: Private Property in the East and West*, ed. Huri İslamoğlu-İnan, *The Islamic Mediterranean 5* (London ; New York: I. B. Tauris, 2004), 303.

Multiple local commissions were founded to carry out the surveys systematically. Chief administrative personnel in the provinces (namely provincial and district governors and their financiers), provincial councils, director of agriculture (*ziraat müdürü*), local headmen and ethnoreligious leaders, and many salaried officers worked together to compile the necessary information.⁹⁷⁴ As in the case of the population registers that coexisted with and served as a basis to tax reforms, the *temettuat* registers were organized along the quarters and used households as the data collection unit. Because migration events were closely monitored, only the permanent⁹⁷⁵ inhabitants of a location (except foreign subjects⁹⁷⁶) were subject to taxation. Self-reported biographical information is provided with occupations. Now, the annual incomes generated from occupations are presented as well. If a household head was exempted from taxation due to old age, this information is also noted.

Income-yielding assets can be classified into livestock, agricultural lands, and real and commercial estate. Lands are demonstrated concerning two different phases of productive activity, that is, those cultivated (*mezru*), fallow/uncultivated (*gayrimezru* – though this category was sometimes not included by the record keepers), and two different lease statuses, that is, leased out/rented (*icar*) and jointly-owned (*müşterek*) land. They are taxed according to size, type (e.g., vineyard or wheat field), and lease and cultivation status. Inputs such as seeds are not included. Similarly, we do not know if the estimated incomes are hypothetical figures based on how much money could be made if all the produce is sold without considering self-sufficiency purposes.

Animals are counted and annotated with descriptions showing their stages of growth, such as pregnancy, nursery, or degeneracy. Beehives were calculated separately. Plough and transport animals like horses, mules, donkeys, and oxen are counted but not taxed. Ranging

⁹⁷⁴ Yoichi Takamatsu, “Ottoman Income Survey (1840-1846),” in *The Ottoman State and Societies in Change: A Study of the Nineteenth Century Temettuat Registers*, ed. Kayoko Hayashi and Mahir Aydın (London ; New York: Kegan Paul, 2004), 24.

⁹⁷⁵ “Permanent” does not necessarily mean “settled.” In rural areas, certain nomadic tribes, that were also recorded in the population registers, were surveyed during the *temettuat* period. Their summer and winter pastures are sometimes noted as well. While doing so, the Ottoman state might not have been able to settle them but recorded their “income-yielding assets” anyway.

⁹⁷⁶ Alp Yücel Kaya’s work on the negotiations over the apportionment of taxation over the foreign subjects in İzmir prior to the *temettuat* surveys clearly demonstrate how the criterion of apportionment was negotiable and changed not only from one locality but also from one individual to another. Alp Yücel Kaya, “Politics of Property Registration: Cadastre of İzmir in the Mid-Nineteenth Century,” in *New Europe College Regional Program Yearbook, 2005-2006* (Bucharest: New Europe College, 2003), 149–79.

from shops and rooms subleased to mills, silk-spinning machines, and storehouses, real and commercial estates are described in detail with their location, size, lease status, and, if owned by multiple people, ownership shares. Each asset is taxed annually according to the income generated per household in the preceding year and the expected revenue for the following.

In the end, all incomes generated from agriculture, animals, and real and commercial estates in the previous year and annual income from occupations are added together to reach an estimated yearly individual income (*bir senede temettuatı*). The special tax amount each male income earner paid in the previous year is also inserted.

However, one should not forget that the “income-yielding assets” were determined according to the needs of 1845, and the *temettuat* surveys do not include all the components that make up *wealth*. They comprise only the tangible aspect of wealth that directly supplies income to the owner. They, therefore, are silent on extra gainful activities a person might have been engaged in, especially in an agrarian polity like the Ottoman Empire. As male household heads dominate the surveys, these documents are usually silent on female and, more generally, household labor. Regarding the recorded income information, because most regions’ surveys are from 1845, there is no room for comparison between prior or later years’ economic activities and output, which is especially crucial for crops like olives that were seldom prolific for two consecutive years. This factor also makes it impossible to inquire if households’ income sources were under- or non-registered, stemming from either deliberate undercount on the part of the scribes or the reasons that peasants and urbanites could conceal a part of their land and hide their animals in the mountains, caves, and canyons.⁹⁷⁷

The total number of *temettuat* registers, around 18.000, is regarded as a reassuring sign of their accuracy.⁹⁷⁸ Notwithstanding their numeric majority, depending on the region, the results of the 1845 surveys were far from perfect. Ayla Efe showed that although they were applied everywhere simultaneously, most surveys did not arrive at the central treasury

⁹⁷⁷ Hiding large portion of the animals in distant locations, also known as *sirkat* (theft), to pay as minimum sheep tax as possible was a common practice in all corners of the Ottoman Empire. this practice intensified after the 1850s in parallel with the financial deterioration and sheep tax raises. For an interesting study on this topic, see Alaattin Aköz, “Ağnam Sayımlarında Hayvan Gizleme: Sirkat,” *History Studies International Journal of History* 12, no. 4 (2020): 1381–92.

⁹⁷⁸ Takamatsu, “Ottoman Income Survey (1840-1846),” 15.

until 1847.⁹⁷⁹ Reported errors in the property counts and income estimations of the rich and notables in certain districts caused suspicions of under-taxation of the socioeconomic elite.⁹⁸⁰ In one example, power relations adversely affected the surveys in the Manisa region: In order not to burden the property of the influential notable Karaosmanoğlu family, who *de facto* owned a large portion of the urban Manisa and many villages in its surroundings, the governor, also a member of the family, made sure that the town and its environs were taxed “moderately.”⁹⁸¹ In another, the state tended to reduce the tax load on İzmir’s notables to ensure their cooperation.⁹⁸²

One major source of error was evasion. The surveys caused discontent among the residents of the city of Salonica, where the Jews and Greeks, whose majority did not own any moveable or immovable property and lived off others’ aid⁹⁸³, allegedly hid their trades and incomes.⁹⁸⁴ Surveying the assets of those holding religious exemptions, such as sheiks and descendants of the prophet, created another arena of contention between them and officials trying to register as many taxpayers as possible to get promoted.⁹⁸⁵

Despite falling short of its goal of completing the surveys in a year, the Ottoman central administration calculated the ratio of each subdistrict’s lump-sum special tax burden to their population totals and aggregated incomes based on the surveys received from 1846 to 1848. According to the per-head and per-income earner calculations and negotiations with the local populace and intermediaries, it was decided to increase, decrease, or not change the regional special tax amount. For instance, in 1847, the tax burden of the Bursa, Edirne, and Aydın provinces was deemed “reasonable” except for a few subdistricts. By June of the same

⁹⁷⁹ Ayla Efe, “1845 Temettuat Sayım Sonuçları Ne Oldu,” *History Studies* 8, no. 1 (2016): 32.

⁹⁸⁰ Çelik, “The Rich, the Poor and the Hungry Social Differentiation and Famine in Ankara in 1845,” 23; Tefik Güran, “Temettuat Registers as a Resource about Ottoman Social and Economic Life,” in *The Ottoman State and Societies in Change: A Study of the Nineteenth Century Temettuat Registers*, ed. Kayoko Hayashi and Mahir Aydın (London: Kegan Paul, 2004), 10.

⁹⁸¹ Kasaba, *The Ottoman Empire and the World Economy*, 104.

⁹⁸² Alp Yücel Kaya, “19. Yüzyıl İzmir’inde Tüccarlar ve Esnaflar Veya ‘Hacıağalar, Beyler ve Frenkler,’” in *Osmanlı’dan Cumhuriyet’e Esnaf ve Ticaret* (İstanbul: Tarih Vakfı Yurt Yayınları, 2012), 79–104.

⁹⁸³ Dilek Akyalçın-Kaya, “‘Living off Others’ Aid”: The Socioeconomic Structure of Salonica’s Jews in the Mid-Nineteenth Century,” *Jewish History* 28, no. 3–4 (2014): 313–36.

⁹⁸⁴ OA. MVL. 41 / 18 (05-08-1261).

⁹⁸⁵ Nuri Adıyeke, “Temettuat Sayımları ve Bu Sayımları Düzenleyen Nizamname Örnekleri,” *Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi*, no. 11 (2000): 775.

year, their actual tax burdens were redetermined.⁹⁸⁶ Most tax increases in Anatolia and the Balkans were either postponed, limited, or avoided. Therefore, by 1847, tax assessment and reallocation were finalized only for Izmid, Gelibolu, Aydın, and Edirne districts.⁹⁸⁷ Even in these cases, communal authorities were responsible for distributing the revised tax burdens to taxpayers.

One of the factors behind slow and hesitant tax assessment was that the *temettuat* surveys' results regarding income-generating activities and assets were "so vague" that the Ottoman government could not immediately introduce a new tax system based on them.⁹⁸⁸ The Supreme Council of Judicial Ordinances acknowledged in July 1848 that the state failed, in general, to collect income data correctly. The Council thus terminated *temettuat*-based taxation operations and reinstated lump-sum taxation; this time, regional burdens would be determined based on their total household numbers and tithe amounts rather than incomes.⁹⁸⁹

The archival collection of the *temettuat* surveys (classified into the fonds of ML. VRD. TMT.d., with a few exceptions in MAD. and KK.) was made accessible to researchers in the 1990s. Almost all settlements in Bursa have a *temettuat* survey in good condition. Despite the ever-expanding literature⁹⁹⁰, as in the case of the population registers, most studies have neglected the discursive dimension of the surveys and taken the information contained therein for granted.⁹⁹¹ We must remember that, in an age of cash scarcity and high interest rates, monetized income figure is evidence of neither the actual income nor the amount of cash earned from the activity. They do not represent the actual degree of commercialization. In addition, whereas the special tax does not correspond proportionally to the income figures, it and the tithe were recorded for fiscal planning, not actual tax

⁹⁸⁶ Ayla Efe, "Tanzimat Döneminde Vergi Adaletini Sağlama Çalışmaları: Uygulama Örnekleri," in *Klasikten Moderne Osmanlı Ekonomisi: (Kurumlar-Uygulamalar)*, ed. Arif Bilgin and Burhan Çağlar (İstanbul: Kronik Kitap, 2019), 52–54.

⁹⁸⁷ Efe, "1845 Temettuat Sayım," 29.

⁹⁸⁸ Hayashi, "Temettuat Registers," 226.

⁹⁸⁹ Efe, "1845 Temettuat Sayım," 32.

⁹⁹⁰ As of December 2020, Turkish Council of Higher Education theses database gives the number of theses (mostly MA-level) using "*temettuat*" in their name as 162. *Temettuat* studies can be easily amplified to thousands if we consider local historians' works.

⁹⁹¹ For a critic, see Ayla Efe, "Mülkü Mülksüzleştirmek, Sıradan İnsanı Görünmez Kılmak: Temettuatlar Nasıl Okunamaz," in 2. *Uluslararası Osmanlı Coğrafyası Arşiv Kongresi*, vol. 1 (Ankara: T.C. Çevre ve Şehircilik Bakanlığı Tapu ve Kadastro Genel Müdürlüğü, 2019), 173–80.

extraction. With these in mind, we may proxy the tax data to study the relative worth and monetary potential of the different sectors of agricultural production.

Several critical case studies have used the surveys to achieve broader narratives of socioeconomic change across the Empire. Thanks to the multifaceted nature of the data, study themes have included the division of labor and industrialization in urban and rural areas⁹⁹², income inequality and economic segregation⁹⁹³, the impact of environmental disasters on agricultural and industrial production⁹⁹⁴, and spatiotemporal analysis of crop and livestock profile⁹⁹⁵, among others.

An example of a tax survey household entry from a quarter of Bursa city can be seen in Figure 3 below.

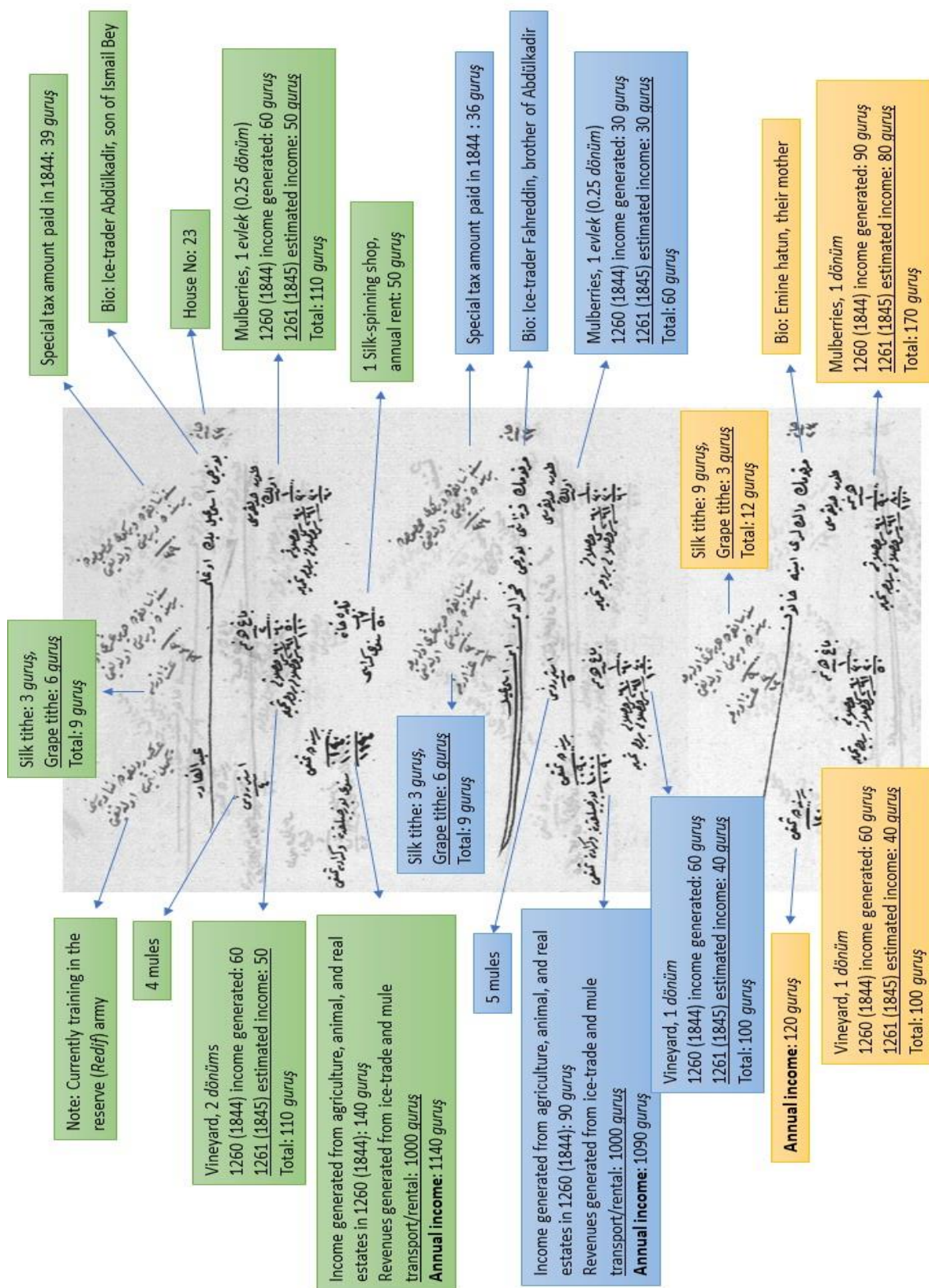
⁹⁹² Öncel, “Proto-Industrialization in the Mid-Nineteenth-Century Balkan Countryside”; M. Erdem Kabadayı, “Working for the State in the Urban Economies of Ankara, Bursa, and Salonica: From Empire to Nation State, 1840s–1940s,” *International Review of Social History* 61, no. S24 (2016): 213–41.

⁹⁹³ Akyalçın-Kaya, ““Living off Others’ Aid”.”

⁹⁹⁴ Çelik, “The Rich, the Poor and the Hungry Social Differentiation and Famine in Ankara in 1845.”

⁹⁹⁵ Semih Çelik, “‘Sheep Go to Heaven, (Angora) Goats Go to Hell’: A Spatio-Temporal Analysis of Angora Goat Economy in the Province of Ankara (1889-1905),” in *Weaving the History: Mystery of a City*, ed. Gözde Çerçioğlu-Yücel (Ankara: VEKAM, 2018), 95–107; Ustaoglu, Kabadayı, and Gerrits, “The Estimation.”

Figure 3: A tax survey snapshot showing a Muslim household, 1845 (OA. ML. VRD. TMT. d. 7467)



3.3: Economic and Population Profile of the Bursa region

This section provides a detailed breakdown of the region's settled and temporary population and then gives an overview of economic activities on the town and village levels. While doing so, it assists its arguments with maps in visualizing the findings.

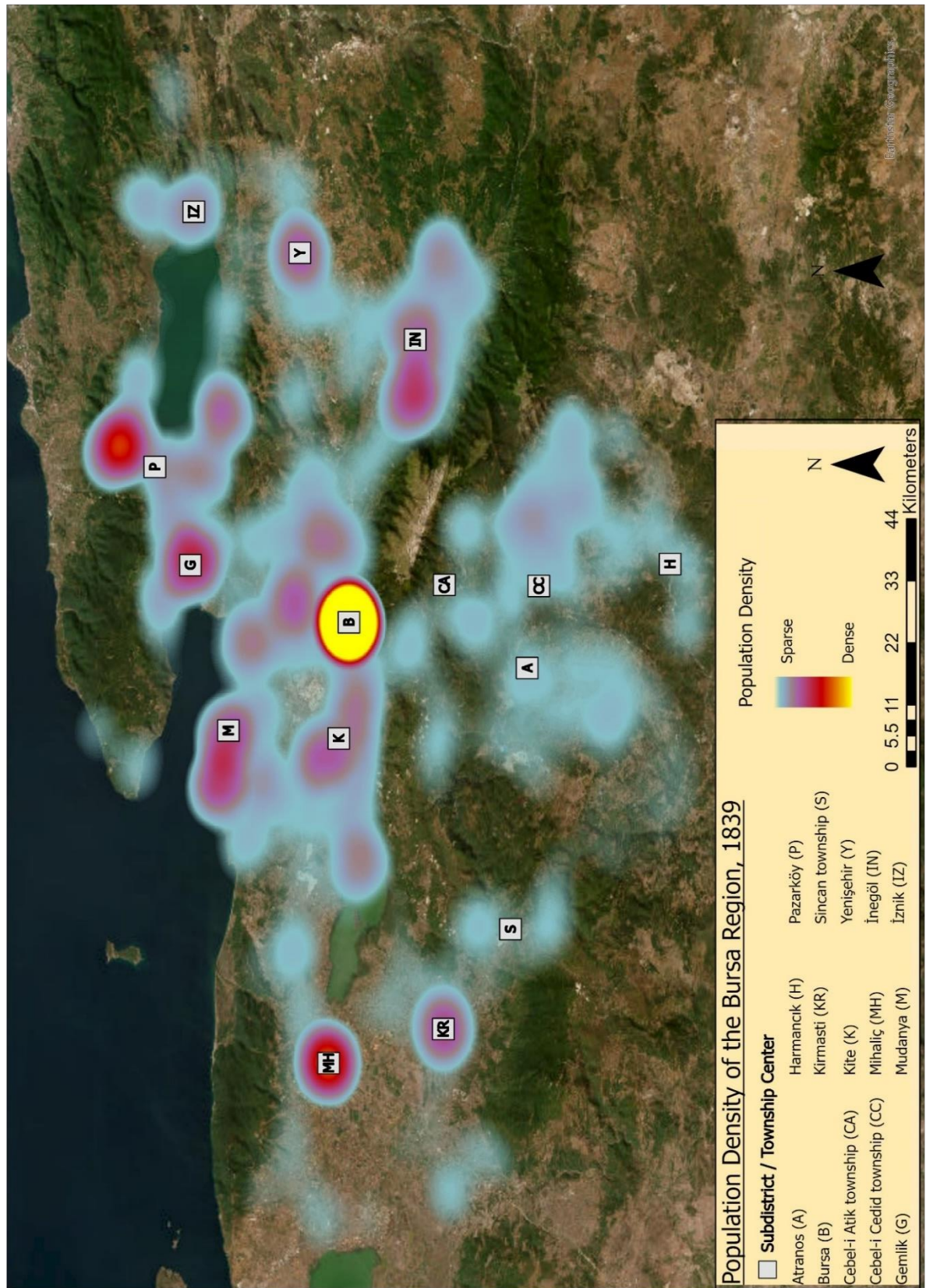
3.3.1. The Population of the Bursa Region

3.3.1.1. *Permanent Population*

Historical contingencies, agricultural suitability, and altitude impacted the subdistricts' extent and the region's population. The settled inhabitants resided in 591 locations, with a total male population of 94.605 in 1839.⁹⁹⁶ If we double this number to account for the females, we reach a total population of 189.210. Map 6 projects population densities over satellite imagery. It is clear that the Greater Bithynia region, with fertile plains, good agricultural suitability (see section 2.3.2.), and relative ease of commerce, constituted the most populous area in the mid-nineteenth century. Population densities followed along and contributed to the formation and maintenance of roads, as discussed in section 2.3.3. Altitude affected population densities and limited settlements to specific sections.

⁹⁹⁶ OA. NFS. d. 648 ; 649 ; 651 ; 1378 ; 1390 ; 1396 ; 1397 ; 1398; 1399 ; 1403 ; 1411 ; 1412 ; 1452 ; 1454 ; 1472 ; 1473 ; 1491 ; 1494 ; 1514 ; 1518 ; 1766 ; 1768 ; 1774 ; 1778 ; 1786 ; 1787 ; 1794 ; 1800 ; 1802 ; 1804 ; 1808; 7140.

Map 6: Population Density of the Bursa Region, 1839



3.3.1.1.1. The Bursa Region's Permanent Population by Subdistrict and Ethnoreligious Identity

A cursory look at the map and population data yields that the subdistricts laying to the region's upper and middle third section, roughly overlapping the more fertile Greater Bithynia region, held more than three-fourths of the total population. The subdistricts of Bursa (25% of the total – the city included), Kite (10%), and Mihaliç (11%), taken together with the lightly populated Yenişehir (5%), constituted about half. Constricted by mountains, sea, and the Lake Iznik, Gemlik, Mudanya, Pazarköy, and Iznik subdistricts each contained around 6% of the total population, bringing their combined share to about one-fourth of the total. The bottom third held the remaining one-fourth, with Kirmasti (4%) and Inegöl (8%), the two subdistricts with plains, and Atranos (9%) and Harmancık (4%) having almost equal shares in it. Calculated differently, the littoral and hilly subdistricts in the north (Gemlik-Mudanya-Pazarköy-Iznik) comprised 23% of all the region's inhabitants, the settlements in the mountainous south (Atranos and Harmancık subdistricts and the townships of Sincan, Cebel-i Atik, and Cebel-i Cedit) 20%, while the rest 57% lived in the middle, primarily in the plains.

Bursa was a Muslim-majority region with a substantial non-Muslim population. Muslims, including the tiny Muslim Roma community, formed about two-thirds of the region's inhabitants. In addition to Armenian-dominated Pazarköy, non-Muslims outnumbered the Muslims in the coastal subdistricts of Mihaliç, Mudanya, and Gemlik and balanced each other in Bursa and Kite. Orthodox Christians, most of whom were the descendants of their Byzantine ancestors, also called *Rum* (Roman), constituted one-fifth. Their settlement area was Bursa, Kite, Mudanya, Gemlik, Mihaliç, Kirmasti, Iznik, and Yenişehir. Armenians (including the Armenian Roma), who were around 12%, resided in Pazarköy, Bursa, Inegöl, Iznik, Gemlik, Mihaliç, Yenişehir, and Kirmasti, but mainly in eastern parts of the region. The Catholics and Jews stayed only in the city of Bursa. As the years passed, the number of non-Muslims claiming or acquiring foreign nationality/protection, mainly Greek, Russian, and British, Bursa's most important commercial actors, increased.⁹⁹⁷ The tables 9, 10, 11, and 12 below show a full breakdown of

⁹⁹⁷ Their reluctance to pay taxes and comply with official procedures concerned the state. Especially the local council of Bursa which convened during Ahmed Vefik Pasha's inspection tour produced detailed reports addressing this issue. OA. HR. MKT. 428 / 97 (AH. 17-09-1279 / 08-03-1863); MVL. 662 / 5 (AH. 15-06-1280 / 27-11-1863).

the region's population. Following them is Map 7, showing the density of Muslims in the region to put the tables in perspective. In that map the settlement (point) color closer to dark red means it is populated more by non-Muslims than Muslims, and colors closer to dark blue represent vice versa.⁹⁹⁸

Table 9: Muslim Population of the Region by Subdistrict, 1839

(Legend: HH=Household, POP=Population, M=Muslim, Non-M=Non-Muslim OC=Orthodox Christian, ARM=Armenian, Cat=Catholic, Σ =Sum, HH SIZE= Σ POP/ Σ HH)

Subdistrict	Σ HH M	Σ POP M	Σ HH M Roma	Σ POP M Roma
Grand Total	28477	63762	157	366
Bursa ⁹⁹⁹	8107	15661	58	117
Atranos	2199	5485		
Atranos – Cebel-i Cedid township	1452	3701		
Kite	1897	4091		
Kite – Cebel-i Atik township	1059	2444		
İnegöl	2358	5416	17	39
Mihaliç	1492	3658	21	51
Mihaliç – Sincan township	800	2589		
İznik	1710	3860	15	41
Yenişehir	1635	3811	23	44
Gemlik	1550	3036	3	6
Harmancık	1407	3636		
Kirmasti	1084	2887	20	59
Pazarköy	978	2010		9
Mudanya	749	1477		
Share of All Totals	71%	67,5%	0%	0%

⁹⁹⁸ The colors of the points were calculated as such: Total Number of Muslim Males / Total Number of Males. If fully Muslim = 1, if no Muslim = 0.

⁹⁹⁹ The city of Bursa's population counts are from the summary register from 1839 (OA. NFS. d. 1518) to ensure consistency with the rest of the district figures. For master register totals for the city, see section 3.4.1.

Table 10: Non-Muslim Population of the Region by Subdistrict, 1839

Subdistrict	Σ HH OC	Σ POP OC	Σ HH ARM	Σ POP ARM	Σ HH ARM Roma	Σ POP ARM Roma	Σ HH Cat	Σ POP Cat	Σ HH Jew	Σ POP Jew
Grand Total	7059	18014	4258	11626	6	25	43	157	218	655
Bursa	1727	4581	856	2898			43	157	218	655
Atranos										
Atranos – Cebel-i Cedid township										
Kite	1065	2868								
Kite – Cebel-i Atik township										
İnegöl			669	1691						
Mihaliç	1246	3513	194	512	6	25				
Mihaliç – Sincan township	112	330								
İznik	57	123	423	1125						
Yenişehir	79	225	169	465						
Gemlik	951	2364	269	640						
Harmancık										
Kirmasti	108	248	81	285						
Pazarköy			1597	4010						
Mudanya	1714	3762								
Share of All Totals	17,6 %	19,1 %	10,4%	12,2%	0%	0%	0,1 %	0,2%	0,5 %	0,7%

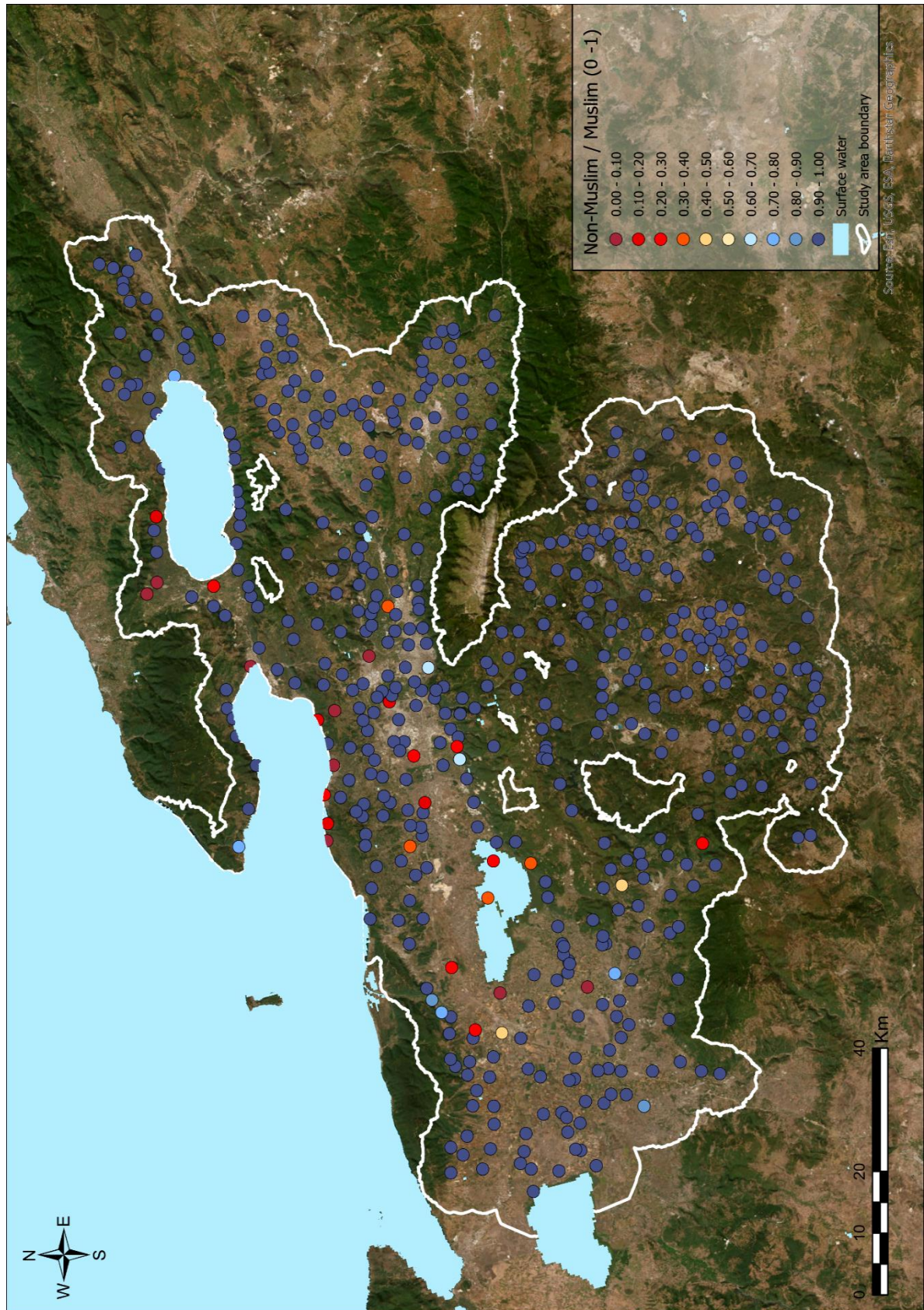
Table 11: Population of the Region, Breakdown by Muslim and Non-Muslim Affiliation and Subdistrict, 1839

Subdistrict	Σ Settlement	Σ HH M	Σ POP M	Σ HH Size M	Σ HH Non-M	Σ POP Non-M	Σ HH Size Non-M
Grand Total / Average	591	28634	64128	2,24	11519	30339	2,63
Bursa	67	8165	15778	1,93	2844	8291	2,92
Atranos	83	2199	5485	2,49	0	0	0
Atranos – Cebel-i Cedid township	25	1452	3701	2,55	0	0	0
Kite	37	1897	4091	2,16	1065	2868	2,69
Kite – Cebel-i Atik township	24	1059	2444	2,31	0	0	0
İnegöl	44	2375	5455	2,30	669	1691	2,53
Mihaliç	65	1513	3709	2,45	1446	4050	2,80
Mihaliç – Sincan township	38	800	2589	3,24	112	330	2,95
İznik	36	1725	3901	2,26	415	1110	2,67
Yenişehir	41	1658	3855	2,33	248	690	2,78
Gemlik	19	1553	3042	1,96	1220	3004	2,46
Harmancık	43	1407	3636	2,58	0	0	0
Kirmasti	34	1104	2946	2,67	189	533	2,82
Pazarköy	14	978	2019	2,06	1597	4010	2,51
Mudanya	21	749	1477	1,97	1714	3762	2,19
Share of All Totals		70,9%	67,5%		28%	32,1%	

Table 12: Household and Population Totals of the Region by Subdistrict, 1839

Subdistrict	Σ Settlement	Σ HH	Σ POP	HH SIZE	%-OF- Σ HH	%-OF- Σ POP
Grand Total / Average	591	40218	94605	2,35	100%	100%
Bursa	67	11009	24069	2,19	27%	25%
Atranos	83	2199	5485	2,49	5%	6%
Atranos – Cebel-i Cedid township	25	1452	3701	2,55	4%	4%
Kite	37	2962	6959	2,35	7%	10%
Kite – Cebel-i Atik township	24	1059	2444	2,31	3%	3%
İnegöl	44	3044	7146	2,35	8%	8%
Mihaliç	65	2959	7759	2,62	7%	8%
Mihaliç – Sincan township	38	912	2919	3,20	2%	3%
İznik	36	2205	5149	2,34	5%	5%
Yenişehir	41	1906	4545	2,38	5%	5%
Gemlik	19	2773	6046	2,18	7%	6%
Harmancık	43	1407	3636	2,58	4%	4%
Kirmasti	34	1293	3479	2,69	3%	4%
Pazarköy	14	2575	6029	2,34	6%	6%
Mudanya	21	2463	5239	2,13	6%	6%
Share of All Totals		100%	100%			

Map 7: Ethnoreligious Map of the Bursa Region, 1839



3.3.1.1.2. Household Size by Subdistrict

In terms of household size, in other words, male residents per household, apart from Jews and Catholics (who lived only in the city and will be treated in 3.3.1.1.), Muslims (including Roma) ranked in last place, with 2,24 males. Orthodox Christians were 2,55, and Armenians (including Roma) 2,74. These averages must be read against the fact that the population numbers used in this section include those conscripted and migrated, as their population entries were annotated with this information. However, these migratory movements could be severely under-recorded.¹⁰⁰⁰ Frequently, updates to the registers show people who were not recorded during the completion of the master registers, often those returning from elsewhere to their households. This bias is significantly more pronounced in towns than in villages where movement is more limited. Still, these household size figures can indicate a kernel of truth to the contemporaneous commentaries on the Muslims' declining population in the Bursa region.

Besides the natural decline argument, several factors influenced the cohabiting groups' size and composition. Life expectancy was so low that families could rarely experience extension. Fission in Muslim households usually took place after the patriarch's death and the inheritance's transmission.¹⁰⁰¹ Late fission would lead to larger and more complex households. Our population registers reveal that the likelihood of non-Muslims living with their relatives and tenants was greater than that of Muslims. Their confinement to a specific area in urban and rural environments and labor migration in the nineteenth century might have increased this likelihood. Physical attributes and production relations must have played a role, as, for instance, Atranos and Harmancık, the poorest and least populated districts at high altitudes, had the largest Muslim household sizes. Land tenure systems (i.e., collective cultivation, *çiftlik* dominance), agricultural mix, and total yield and its quality might have resulted in differentiation of household formation patterns, but such

¹⁰⁰⁰ For instance, the population summary register of 1840 gives the total number of conscripts as 2468, excluding Pazarköy. (Bursa subdistrict 442, Kite, 206, Mudanya 72, Gemlik 131, Iznik 104, Mihaliç 411, Kirmasti 112, Yenişehir 165, Inegöl 163, Harmancık 99, Atranos 261. These numbers include the 33 Orthodox Christians from Kite, Mihaliç, Gemlik and Mudanya who were drafted to the navy.) This amounts to 1,2 percent of the total male population and inn great contrast with the locals' experience with conscription as abovementioned. OA. NFS. d. 1518 (AH. 1255 / 1839).

¹⁰⁰¹ For a historical-anthropological evaluation and comparison of this phenomenon, see Alan Duben, "Turkish Families and Households in Historical Perspective," *Journal of Family History* 10, no. 1 (1985): 75–97.

phenomena, albeit not visible at the subdistrict level, can be traced only within subregions (i.e., through village-to-village comparison).¹⁰⁰²

The evidence from house architecture, which may determine household size and composition¹⁰⁰³, is too scanty and inconclusive to point to a definitive difference between Muslims and non-Muslims on a large scale and should be tested first at localities before making generalizations.¹⁰⁰⁴

3.3.1.1.3. Urban and Town Population

28,6% of the total population (27.082 males) resided in *officially recognized* town centers known as *nefs* situated at strategic locations and/or agriculturally the most endowed settlements among others. All subdistricts had an official *nefs* center, except for the southern subdistricts of Atranos and Harmancık (where the villages of Beyce and Çardı in the most favorable locations served as their unofficial centers, respectively). Regarding social and economic differentiation, such town centers except Bursa city were referred to as *kasaba* – larger than a village but smaller than a fully urbanized area. Almost one-sixth of the region’s population lived in the city of Bursa, which for centuries remained the center of the gravity of economic and administrative life. Among the rest, no other center rivaled Bursa city by size or the scope of economic activities. Table 13 gives a breakdown of all officially recognized town centers.

¹⁰⁰² For example, Kokdaş’s systematic study of the impact of production relations in the çiftlik-abundant Thessaly of the mid-nineteenth century revealed significant differences between the east and west parts of the region. İrfan Kokdaş, “Osmanlı Çiftliklerinde Tek Tip Bir Demografik Yapı Var Mıydı? 19. Yüzyıl Teselya Çiftliklerinde Sosyo-Ekonomik Dinamikler ve Nüfus Yapıları,” *Kebikeç*, no. 48 (2019): 271–303.

¹⁰⁰³ Lutz K. Berkner, “The Use and Misuse of Census Data for the Historical Analysis of Family Structure,” *The Journal of Interdisciplinary History* 5, no. 4 (1975): 731.

¹⁰⁰⁴ Although their building material showed variance across subregions, village houses were generally two to three-story buildings, with the basement being used as a warehouse/barn. For case studies of Bursa village-house typologies, see Aziz Elbas, ed., *Bursa Köylerinde Geleneksel Mimari ve Arkeoloji - I* (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2014); For instance, a commonality among some Armenian houses in Pazarköy and western Iznik villages is that they are massive, three or four-story dwellings with shops and large storage spaces under them. A local study with sources can reveal whether the silk and olive industries and local power relations influenced such typology. Deniz Mazlum et al., “Orhangazi (Bursa) Karsak Köyü Kırsal Mimarlık Envanteri,” *TÜBA-KED*, no. 3 (2004): 229–57.

Table 13: Population of Town (Nefs) Centers, 1839

(Legend: Σ =Sum, HH=Household, POP=Population, M=Muslim, M-Roma=Muslim Roma, OC=Orthodox Christian, ARM=Armenian, ARM-Roma= Armenian Roma)

Town (Nefs)	Σ HH M	Σ POP M Males	Σ HH M-Roma	Σ POP M-Roma Males	Σ HH OC	Σ POP OC Males	Σ HH ARM	Σ POP ARM Males
Bursa ¹⁰⁰⁵	5194	9498	58	117	756	2159	856	2898
Gemlik	27	49	3	6	607	1616	5	11
İnegöl	453	906	17	39				
İznik	346	762	15	41	57	123		
Kirmasti	396	1010	20	59	54	130	81	285
Kite	71	141						
Mihaliç	626	1256	21	51	541	1285	194	512
Mudanya	196	328			473	1069		
Pazarköy	258	500		9				
Yenişehir	582	1208	23	44			54	133
Grand Total	8149	15658	157	366	2488	6382	1190	3839
Share of Total	67%	58%	1%	1%	20%	24%	10%	14%
→ CONT'D	Σ HH ARM-Roma	Σ POP ARM-Roma Males	Σ HH Catholic	Σ POP Catholic Males	Σ HH Jewish	Σ POP Jewish Males	Σ HH	Σ POP Males
Bursa			43	157	218	655	7125	15484
Gemlik							642	1682
İnegöl							470	945
İznik							418	926
Kirmasti							551	1484
Kite							71	141
Mihaliç	6	25					1388	3129
Mudanya							669	1397
Pazarköy							258	509
Yenişehir							659	1385
Grand Total	6	25	43	157	218	655	12251	27082
Share of Total	0%	0%	0%	1%	2%	2%	100%	100%

¹⁰⁰⁵ The figures for the city of Bursa are from the 1839 population summary register (OA. NFS. d. 1518). The master register totals are provided in section 3.4.1.

3.3.1.2. *Temporary Population*

With its wide variety of agricultural and commercial production, the Bursa region remained attractive to economic migrants from other parts of the Empire during the financially turbulent nineteenth century. The population officials recorded about 6000 temporary residents in Bursa in 1839 (refer to Table 14 for a full breakdown). This number can be higher as there might be escapees and people who were not originally from Bursa but had been staying in places like *çiftlik*s for years. Another reason is that the Pazarköy subdistrict, which experienced a substantial increase in its Armenian population during the mid-nineteenth century, does not have summary registers showing a detailed breakdown of its temporary inhabitants in 1839. Although I used a population summary from 1830 for Pazarköy, it is very likely that this subdistrict, which had twelve inns – second only to Bursa- was housing a significant number of temporary residents in the 1840s.¹⁰⁰⁶

Depending on the structure of economic production, demographic characteristics, and class relations in each locality, migration patterns occurred along a strict division of labor and cross-cut ethnic-religious and regional identities. Migration networks formed due to this process also led to fragmentation along class differences that became visible through spatial segmentation between the permanently settled dwellers and migrants in inns, bachelor rooms, and other temporary lodgings such as government-provided buildings (like barracks), shops, and coffeehouses in towns, villages, *çiftlik*s, and elsewhere. Because temporary migration in 1840 was primarily for economic reasons, the spatial concentration of migrants can be proxied for relatively more populated and agriculturally suitable subregions. In the early 1840s, the Greater Bithynia region, with its agricultural suitability, industrial blossoming, and proximity to ports, was attractive to migrants.¹⁰⁰⁷

The Bursa *subdistrict* drew the highest number of migrants in 1839, with 2245 people, around four-fifths of whom lived in the city, including ninety-four foreign state representatives (see 3.3.2 for a detailed analysis). Aside from the shops and other working residences of the city, the inns, bachelor room infrastructure, and workshops had served even

¹⁰⁰⁶ *Salname-i Vilayet-i Hüdavendigâr* (the Yearbook of the Hüdavendigâr Province), AH. 1292 / 1875, p. 148.

¹⁰⁰⁷ Akın Sefer, Efe Erünel, and M. Erdem Kabadayı, “Mid-Nineteenth-Century Gemlik and Its Environs: A Survey of a West Anatolian Region and Its Long-Term Economic and Demographic Development,” *Journal of Balkan and Near Eastern Studies*, 2023..

more migrants in the previous centuries. Following the capital city was Gemlik, housing 1279 temporary residents. The subdistrict's total population (when villages were factored in) means that around one in six males was not a permanent resident in Gemlik. Less than half of those stayed in the 102 bachelor rooms (*oda* – 16 in the town and 86 in villages along the coast) opened by merchants and landowners (of olive groves and mulberry plantations), presumably in recent years, since the inn infrastructure was insufficient to accommodate most of them.¹⁰⁰⁸ The rest stayed in their workshops, work sites (e.g., *çiftlik*s), or other places like coffeehouses in towns and villages. By 1875, besides five inns, sixty taverns (*meygede*), sixty coffeehouses, fourteen baths, and 150 shops were operating in the town and nearby locations.¹⁰⁰⁹

A thriving port town with an imperial shipyard in the mid-nineteenth century, Gemlik's migrant profile included Muslims, Orthodox Christians, and Armenians from Rumelia, Albania¹⁰¹⁰, the Marmara coast, the Black Sea region, and central Anatolia. After the introduction of the steamers, they were recorded in a temporary resident register (*yabancı defteri*) in 1846, when the silk trade was prospering. According to this source, those with recorded occupations include coarse-cloth (*aba*) and wool traders of Plovdiv, coal-burners / dealers (*kömürcü*), joiners (*dülger*), day/farm laborers (*rençber*), servants (*tebaa*), bread-makers (*etmekçi*), and lots of unskilled and agricultural laborers, all of whom migrated to Gemlik and its environs in varying numbers but from shared places of origins.¹⁰¹¹ In addition, thirteen British and seventeen Greek citizens, the most proactive trade actors thereabouts, stayed in the town. Unfortunately, we are uninformed about the register's date, but given the nature of communications in the inner region, it was likely from spring to autumn. We may

¹⁰⁰⁸ OA. NFS. d. 1518 (AH. 1255 / 1839). The number of bachelor rooms increased with proximity to Gemlik and in proportion to having a port of some sort. Umurbey (16) and Kumla-i Sagir (22) had the most, for instance. Gemlik was by far the leader in bachelor rooms, indicating its thriving nature as a port town in the mid-nineteenth century. Mudanya subdistrict had at least 11 rooms in addition to two inns and two coffeehouses, and Mihaliç had 5 rooms in addition to 12 inns, Kite had 8, and Yenişehir had 1 room in addition to 6 inns and two coffeehouses.

¹⁰⁰⁹ *Salname-i Vilayet-i Hüdavendigar* (the Yearbook of the Hüdavendigar Province), AH. 1292 / 1875, p. 148.

¹⁰¹⁰ People of the Balkans continued to frequent the city, Gemlik, and most subdistricts as builders. Maling observes: "In the building trades (the masons and house carpenters, who constitute a numerically large proportion of the operative classes), there is a large body of workmen, natives of the rural parts, who are very migratory in their habits. They are chiefly natives of the Epirus and hilly countries of Roumely [Rumelia]..." BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 253.

¹⁰¹¹ OA. ML. VRD. CMH. d. 661 (AH. 1262 / 1846).

stipulate that the mulberry-cutting season, olive, vine, grain harvest, and timber-cutting attracted most unskilled and agricultural laborers. Because Gemlik was the principal port back then, some of them might be temporary among the permanent residents.

Mihaliç and Yenişehir, where *çiftlik*s were more prominent than other subdistricts; Kite, which was in the plain and next to Bursa; Mudanya, the other port town; and Iznik, which stood at the crossroads between Istanbul and central Anatolia, were the other migration-pulling subregions with many inns and bachelor rooms at their town centers, and *çiftlik*s in their hinterland to pull skilled (notably traders, builders, and bakers) and unskilled labor. Kirmasti and Inegöl, the southwestern and southeastern subdistricts with fewer *çiftlik*s and relatively weak town economies than the subdistricts to the north, were home to fewer migrants. Atranos and Harmancık, which formed the southern subdistricts of the region and were located at high elevations, had almost no foreigners. Atranos' temporary residents were only Orthodox Christian laborers, shepherds, and traders from the Aegean island of Imbros (Gökçeada), suggesting that population figures for the south should be taken with a grain of salt, as there are zero temporary Muslim inhabitants. Before moving to Table 14, I must note that Pazarköy's temporary resident numbers are from circa 1834 (AH. 1249) due to the unavailability of its total counts and original master registers from 1839.¹⁰¹²

¹⁰¹² OA. NFS. d. 669 (AH. 1249 / 1833/1834).

Table 14: Temporary Population by Subdistrict, 1839

(Legend: Σ =Sum, , T.POP=Temporary Population, M=Muslim, OC=Orthodox Christian, ARM=Armenian, Tw= Town, Ru=Rural)

Subdistrict	Σ T.POP M Tw	Σ T.POP M Ru	Σ T.POP OC Tw	Σ T.POP OC Ru	Σ T.POP ARM Tw	Σ T.POP ARM Ru
Iznik	107	54	80	63	6	6
Harmancık		26				
Yenişehir	103	135	73	63	12	13
Atranos				45		
(Atranos) Cebel-i Cedit						
Mihaliç	144	125	109	225	8	
(Mihaliç) Sincan	15					
Kite	42	111		199		9
(Kite) Cebel-i Atik						
Kirmasti	41	109	9	42	11	
Inegöl	88					91
Gemlik	288	638	159	146	20	28
Mudanya	148	94	62	52		
Bursa	1044	364	541		175	
Pazarköy (c. 1834)	31				3	
Total (5957)	2051	1656	1033	835	235	147

3.3.1.3. Semi-nomads

By their nature, semi-nomads were temporarily permanent in different pasture zones with their flocks during different seasons. Most tribes of Bursa were legal “waqf communities” (*vakıfreayası*). Due to the generous in-cash sheep and pasture tax revenue and the importance of meat supply for the market, they were registered under the sultanic (*selâtin*) and the *Harameyn* (two holy sanctuaries of Mecca and Medina) pious endowments since the early days of the Empire. Local authorities could not interfere with their freedom of movement and could not burden them with extraordinary taxes or corvee. The tribes paid special grazing fees and rented pastures from tax farmers and villagers (particularly in the northern and southern periphery of the plain and the western sections of the region).¹⁰¹³ Their migratory and shepherding habits did not guarantee peace, though. Especially from the mid-eighteenth

¹⁰¹³ Küçükceran, “Agriculture,” 153; Yaşayanlar, “Bursa ve Çevresinde Yörüklerin,” 28.

century, frequent disturbances occurred between the semi-nomadic tribes, the locals, and regional power magnates.¹⁰¹⁴

A document from 1802 reveals that the inhabitants of Mount Olympus opposed the renting out of the meadows to the semi-nomads, citing harms such as the thousands of sheep eating up the grass and the tribes destroying the forests and contaminating streams (for they pitched their tents near rivers or fountains¹⁰¹⁵) (see also section 2.3.7.1 for similar reasons put forth for sedentarizing the tribes).¹⁰¹⁶ Again, possibly for these reasons, on 23 September 1829, the villagers of Aksu and Dimboz, 25 km east of the city and at the end of the Bursa plain, set aflame the forests to burn the tents and belongings of a branch of the Zahidler tribe, which temporarily settled there. Bursa sharia court and some notables arbitrated the tensions between the groups, and the tribe agreed to receive a compensation of 600 *guruş*.¹⁰¹⁷ In a different case decades later, in Iznik and Yenişehir, the nomadic communities' robbery of the postal coaches, harassment of the non-Muslims, destruction of waqf buildings, and trespassing of "uncategorized" pastures *de facto* held by the elite were conceived as challenges to the modernization agenda of Tanzimat.¹⁰¹⁸ However, such occurrences should not blind us to the cordial relationships the semi-nomads had developed with villages on the slopes of Olympus, Domaniç, and Katırlı mountains, whose inhabitants were, as one observer told, "half-yerooks themselves."¹⁰¹⁹

To properly enumerate, tax, and sedentarize them, the semi-nomads of Bursa were recorded name by name in a detailed register from 1830. Missing its first and last pages, it demonstrates that 1934 semi-nomadic males lived in 798 households in 82 settlement zones dispersed around the region.¹⁰²⁰ According to the population summary register from nine years later, the picture was similar. There were at least 1133 semi-nomad males, plus 13 tribes whose populations were unspecified, in the whole region (see Table 15 for a full

¹⁰¹⁴ Nilüfer Alkan Günay, "18. Yüzyıl Osmanlı Taşra Yönetim Düzeni Açısından Hüdâvendigâr Sancağı'nda Yaşayan Vakıf Reayası Yörükler," *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi* 18, no. 33 (2017): 317–38.

¹⁰¹⁵ Smith, "An Account," 447.

¹⁰¹⁶ Yaşayanlar, "Bursa ve Çevresinde Yörüklerin," 28.

¹⁰¹⁷ OA. MŞH. ŞSC. d. 2962 (B / 303) , p. 24 (AH. 29-03-1245 / 28-09-1829).

¹⁰¹⁸ Arıkan, "A History," 168, 217.

¹⁰¹⁹ MacFarlane, *Turkey and Its Destiny*, 1850, 1:228.

¹⁰²⁰ Raif Kaplanoğlu, *1830-1843 Yılları Nüfus Defterlerine Göre Bursa'nın Ekonomik ve Sosyal Yapısı* (Bursa: Nilüfer Akkılıç Kütüphanesi Yayınları, 2013), 57–62.

breakdown). They were all Muslims and recorded with their tribal names and, in some cases, the number of their tents (*hayme*). Supposing we add the tribes with unspecified populations to this figure and consider the likelihood of those escaping registration, the total semi-nomadic population might go up to a range of 1500 to 2000 males, which is around 1% of the total population, including the temporary residents (about 195.000 males). Since population registers were snapshots of a certain time, the inclusion of all tribes using Bursa for winter or summer pastures will not significantly change this picture.

The population registers found the semi-nomads in the plains during winter (from October to May, then they went uphill¹⁰²¹), as this season was much easier to record with minimal or no error. Mainly west of Bursa was home to the greatest concentration of semi-nomads. While the plains of Kite, Kirmasti, and Mihaliç with the Sincan township contained about four-fifths of them in both counts, the immense plains in the hinterland of Yenişehir and Iznik and vast mountainous areas of Atranos and Harmancık (as part of the Turkic heartland of Inner Aegean region) had the rest.¹⁰²² This information is in line with von Hammer's observation in 1804 that the 800 semi-nomad households of Mount Olympus were camping in groups of 40 to 50 in the area from the lower plains of the Mountain to the Mihaliç and Kirmasti plains.¹⁰²³

Historically, the majority of Bursa *yörüks* chose the southern, eastern, and southwestern areas, namely Mount Olympus and İnegöl, Domaniç, Gökçedağ, Kepsut, and Pazarcık (Bilecik) regions, as their summer pasture. At the same time, a minority headed further into Karesi in the west and southwest.¹⁰²⁴ The concentration of tribes in these zones,

¹⁰²¹ Küçükceran, "Agriculture," 154.

¹⁰²² Strangely, the subdistrict of Bursa had no tribes according to the population registers, although travelers noted their encounters with semi-nomadic people on their way to the higher altitudes of Mount Olympus. We know from Raif Kaplanoğlu, *1830-1843 Yılları Nüfus Defterlerine*, p. 58 that the city of Bursa and its environs had a small tribal community. For the rest of the subdistrict, I suppose the population of the mountain above a certain threshold was considered a part of other subdistricts, presumably Atranos.

¹⁰²³ Hammer-Purgstall, *Umblick auf einer Reise*, 75.

¹⁰²⁴ Feridun Emecen, "Batı Anadolu'da Yörükler," in *Anadolu'da ve Rumeli'de Yörükler ve Türkmenler Sempozyumu Bildirileri (13-14 Mayıs 2000)*, ed. Tufan Gündüz (Ankara: Yörtürk Vakfı Yayınları, 2000), 117.

which were generally out of Bursa, is well documented in the 1839 summary population register.¹⁰²⁵

Was there a specific settlement policy pursued in Bursa, then? Yonca Köksal's study on the four tribes of Ankara found that tribes with more hierarchical organization and a fixed migration trajectory than others could be sedentarized through negotiation than those against whom coercion was used.¹⁰²⁶ It has not yet been replicated for the tribes of western Anatolia, some of which were heavily depended on for transportation in the era of administrative modernization and intensified commercialization.

During the initial stages of the Tanzimat state's attempts at settling the tribes, their movement and economic interests were recorded in official documents, some of which survived in the archives. A population register dated to April 1845 shows that some small branches of the Karakeçili (17 households, 42 males), Kızılkeçili, and Şehidler tribes were settled "in accordance with the imperial orders" in Harmancık in southeastern Bursa.¹⁰²⁷ Income-generating activities *yörüks* in Atranos and Sincan were surveyed in the same year, showing that they bred sheep and goats primarily, ranging from a dozen to 300, usually half being infertile (*yoz* – for wool and meat purposes), per household. A few cattle (some of which were infertile) and calves supported each family; mares were the only means of transport. The surveys from Sincan township explain why this area was popular amongst the tribes. In addition to renting pastures, they owned small plots of grazing land (*çayır*) between 3 to 30 *dönüm* on the downward slopes of the mountain overlooking the Kirmasti plain.¹⁰²⁸ With access to good winter and summer pastures, they probably showed little resistance to resettlement.

¹⁰²⁵ OA. NFS. d. 1518 (AH. 1255 / 1839). The sub-regions with recorded semi-nomadic tribes were **Yenişehir:** (tribes of) Şehidlü, Karabağlı, Akçakoyunlu, Bozoğlu, Hacıhalil Obası, Haym Kethüda; **Harmancık:** Karakeçili, Kızılkeçili, Şehidli; **Atranos:** Akçainlü, Karakeçili, Bozoğlu, Deliler; **Mihaliç:** Turfallı, Köseleler, Caferler, Bozoğlu, Karakeçili, Sultanöyüğü; **Sincan:** Elmaçukuru, Zahidler, Akçakoyun, Sipahi, Gündüzlü, Bükçü, Deliler, Poyrazlı, Sivrikülâh Tahtacı (*tahtacı*s belong to a special lumbering-semi-nomadic groups peculiar to western, central, and southern Anatolia who usually provided timber products to timber merchants), Şeyhli (*yörükân-ı Karahallidli*), Turuzlu, Karabakılı; **Kite:** Alaçukur, Zahidler, Bükçü, Karakeçili

Kirmasti: Karakeçili, Zahidler, Bükçü; **The City of Bursa (eastern periphery):** Zahidler, Bozoğlu, Turfallı.

¹⁰²⁶ Köksal, "Coercion and Mediation."

¹⁰²⁷ "Kayd-ı iskan üzere mütemekkin ve mütesekkin olan ba-irade-i şehinşahiye imtisalen...." OA. NFS. d. 1439 (AH. 09-04-1261 / 17-04-1845).

¹⁰²⁸ OA. ML. VRD. TMT. d. 7180; 8985; 8992 (AH. 1261 / 1845).

Whether tribal identity in the registers and described in the surveys apply to those who transitioned to sedentary life needs further research. Adding further complexity is that some members of certain tribes were already a permanent part of Bursa's urban life. They were residing in the city's central and particularly the eastern section with their families and employed in different sectors such as agricultural laborer, butcher, silk-spinner, and towel maker, implying they transitioned long before 1830. Not only were they recorded with their tribal origins (in areas to the west of the city – e.g., Sincan, and west and south of the region – e.g., Balıkesir, Kepsud, Dağardı), but some also kept honorary titles like “*bey*” and “*Efendi*.” For example, twenty-one of the 132 Muslim households of Çelebi Sultan Mehmed Han quarter were *yörük* households. One of the quarter's headmen was a forty-eight-year-old *yörük* Memiş *Efendi*, who went on pilgrimage in 1834 and died in 1835.¹⁰²⁹ Such persons might have acted as trade intermediaries.

Furthermore, it may also be wrong to picture the wandering semi-nomads as entirely dependent on livestock trade. In 1864, down in the southern Hüdavendigâr province, where wheat was of better quality, “the fertile, extensive fields” of Emirdağ were “cultivated by roving *Yuruks* or Turcomans.”¹⁰³⁰ They might have been hired seasonally or were transitioning to sedentary lives. But there is no evidence that silk, opium, and grain trade in the province led to the large voluntary or forced employment of semi-nomads in agriculture, as observed in the Adana-Mersin region in the second half of the nineteenth century due to the extension of cotton cultivation or as in the case of large grain *çiftlik*s in northern Greece.¹⁰³¹

In general, based on the population registers that have not adequately been consulted in semi-nomadic population literature, I can confidently assert in comparative terms that Bursa was a region with few people on the move.

¹⁰²⁹ OA. NFS. d. 1393 (AH. 1246 / 1830), pp. 62-66.

¹⁰³⁰ BPP, CP, No. 3582, LXIX (69), *Commercial Reports received at Foreign Office*, 1865, 790.

¹⁰³¹ Toksöz, *Nomads, Migrants and Cotton*; Fatma Öncel, “Transhumants and Rural Change in Northern Greece Throughout the Nineteenth Century,” *International Review of Social History*, no. 1 (2021): 49–83.

Table 15: Semi-nomads by Subdistrict, 1839

(Legend: Σ =Sum, HH=Household)

Subdistrict	Σ Semi-nomadic males	Σ Semi-nomadic Tribes	Σ HH Semi-nomadic (Tents)
Iznik	43	N/A	10
Harmancık	39	N/A	15
Yenişehir	119	2 recorded plus 4 tribes, population unspecified	42
Atranos	50	1 recorded plus 3 tribes, population unspecified	N/A
(Atranos) Cebel-i Cedid township	22	N/A	11
Mihaliç	N/A	6 tribes, population unspecified	N/A
(Mihaliç) Sincan township	550	25	N/A
Kite	150	N/A	64
(Kite) Cebel-i Atik township	N/A	N/A	N/A
Kirmasti	156	4	
Inegöl	4	N/A	2
Gemlik	N/A	N/A	N/A
Mudanya	N/A	N/A	N/A
Bursa	N/A	N/A	N/A
Pazarköy (c. 1834)	N/A	N/A	N/A
Total	1133	32 + 13 with unspecified population	144

3.3.2. Economic Overview of the Region's Urban and Semi-urban Areas

The city of Bursa had the most differentiated occupational structure and thus attracted those wishing to perform a specific craft or seeking employment in most building, manufacturing, and service sector occupations. No other subdistrict center was a manufacturing town.¹⁰³² In fact, most town dwellers were agriculturalists whose activities reflected the general pattern of agricultural production in the hinterland. For instance, whereas the inhabitants of the town of Gemlik owned vineyards, mulberry and olive trees, fruit orchards, and sheep; in central

¹⁰³² For this subsection I draw on the tax survey literature cited in section 2.3.6. The two additions are a thesis on the population of Atranos and a study on the court records of Mudanya. Zehra Yazak, "XIX. Yüzyılda Adranos Nüfusu (H- 1246 /M- 1831 Tarihli 1377 Numaralı Nüfus Defterinin Değerlendirmesi)" (MA Thesis, Eskişehir, Eskişehir Osmangazi Üniversitesi, 2018); Uğur, "The Ottoman Court Records," 151–54.

Yenişehir, apart from vineyards and mulberry orchards, grain fields, vegetable gardens, and cattle were more prominent. A geographical survey from 1938 showed the town centers as areas surrounded by lands devoted to fruit and truck farming.¹⁰³³ The average size of agricultural lands did not significantly differ in the towns either. Bursa city was no exception to the heavily understudied phenomenon of urban agriculture, a theme I will explore in sections 3.3.1.1. and 3.4.3.3.

The heavy dominance of agriculture in towns might be tempting to reconceptualize them as large rural economies. Yet, what differentiated towns/subdistrict centers were the relative versatility of social and economic life, whose development level depended on their hinterland's environmental, infrastructural, and demographic attributes, and the strength of economic linkages with other towns and major trade routes. We can use the data on individuals identified with certain occupations as a proxy for this observation. Occupational information is the most diverse for urban/quasi-urban locations. In population and tax registers, it is usually recorded for urban craftsmen and workers. Though occupations, in general, are functional identifiers serving registration purposes, this tendency may be an artifact of the influence of guild tradition on the Ottoman bureaucratic mindset.

A cursory look at the distribution of occupations other than agriculture based on the population and tax data reveals that these were subsistence-prioritized economies. Judging by some of the artisans' agrarian assets, in many cases, they were peasants exceptionally skillful and industrious to augment their earnings with gains from secondary activities. Manufacturers included a handful of agricultural implement makers, shoemakers, tailors, barrel-makers, butchers, bakers, saddle-makers, and a few more jobs specific to regional circumstances and endowments, such as halwa and boat makers. In view of their small number (sometimes one person per occupation) and moderate incomes generated from these activities, we may conclude that they primarily, if not exclusively, catered to the town's needs.

A similar observation can be made about those working in the service and transport sectors. Common occupations under this rubric were religious leaders (imams, priests,

¹⁰³³ Stotz, "The Bursa Region," 82.

sheiks, etc.), grocers, flour makers, barbers, locksmiths, blacksmiths, tinsmiths, farriers, furniture and household goods-makers, second-hand cloth and shoe dealers, carpenters, coffeehouse owners, loggers, barrel-makers, coal sellers, cart drivers, transport animal renters, and state officials. In towns whose environs were open to extensive animal husbandry, such as Yenişehir and Mihaliç, tanneries and wool industries operated. Town-specific exceptions were reserved for more interregional trade-oriented zones, such as merchants (of agricultural goods), porters, caulkers, innkeepers, and soldiers. Many of these breadwinners were also engaged in agriculture and their households in sericulture, spinning, weaving, and rugmaking.

The southern section (the subdistricts of Atranos and Harmancık and the townships of Sincan and Cebel-i Atik and Cebel-i Cedid) did not have officially recognized towns. It was heavily dominated by subsistence agriculturalists, except a few by-employed as saddle-makers, tinsmiths, ironsmiths, farriers, timber/wood cutters/transporters/merchants, and halwa makers. Sharecropping and bartering were essential parts of the mountain economy. However, the slim chances of earning a profit made its people significant actors in and around other towns. A crowded community was engaged in the silk sector of Bursa, agriculture in the city and plain (see section 3.4.1.1), and some household heads went to towns in İzmir's hinterland to extract dyes from madder roots (see 3.3.3.5).

It is implausible to assert that all towns relied on the said manufacturers and service providers. For example, a family could make (and many likely made) their bread, a fisherman's family their net, or someone able to maintain good hoof care for his horse (although most horses were walking barefoot). Town artisans' low to moderate income may imply the extent to which they were relied on – there were no bakers and farriers in most villages, for instance. However, in an environment of chronic money shortages and extensive rural production, they might as well be bartering their labor for life necessities such as food and clothes. We must not forget the women, children, and other household members' labor that facilitated households' subsistence in terms of food, clothing, and firewood. Also, putting-out arrangements between merchants, who owned raw material, cash, and sometimes even the tools, and rural- and town-dwelling inhabitants, who undertook spinning and weaving, that had existed for at least three centuries cannot be directly inferred due to general

lack of documentation of by-employments. Therefore, one must be careful while utilizing the Ottoman tax and population records for occupational history.

3.3.3. A Panorama of Agricultural Activity in the Region

Because small peasant households dominated the region, it is reasonable to explore the focus of agricultural activity in the region by taking a sample of five settlements/populated places from each subdistrict. A carefully selected sample is cost and time-effective, given the large size of the district and the great time and teamwork requirements of reading every settlement's tax survey. The sampling was carried out using the Geographical Information Systems¹⁰³⁴ in conjunction with a multiparametric Analytical Hierarchy Process (AHP) that considers a) agricultural suitability (land capability classes) based on elevation, ruggedness, and soil quality (given 85% weight), b) connectivity - settlements located within a 500-meter radius of a historical road (15% weight, justified based on the fact that connectivity is an exogenous factor to agricultural suitability), and c) subdistrict level population size based on the population registers (the selected villages must represent at least 5% of the subdistricts total population).¹⁰³⁵

Among the selected settlements, a village or a few households may be outliers in terms of field sizes or crop specifications, so I checked their data with the secondary literature as much as possible. Moreover, households that did not own any land, such as those headed by the shepherds, disabled, elderly, and dispossessed, however important studying their data is, are in the minority and omitted here to achieve a general result. Lastly, Map 1 in section 2.2.3 could be referred to follow the sections.

¹⁰³⁴ The analytical hierarchy process (AHP) developed in the 1980s is still most used for decision-making based on quantitative and qualitative information. For an example of the application of this method with GIS and satellite imagery to pinpoint potential archaeological sites of interest, see Ange Felix Nsanziyera et al., "GIS and Remote-Sensing Application in Archaeological Site Mapping in the Awsard Area (Morocco)," *Geosciences* 8, no. 6 (2018): 207.

¹⁰³⁵ Special thanks to Piet Gerrits who applied the AHP with GIS technology in Ottoman history, using the Bursa settlement points. Ustaoglu, Kabadayi, and Gerrits, "The Estimation." In addition, Mustafa Erdem Kabadayi, Piet Gerrits and Efe Erunal will publish an article detailing the geosampling process.

3.3.3.1. Northern section (Mudanya-Gemlik-Pazarköy-Iznik) – the Olive belt¹⁰³⁶

This section concerns the four mainly littoral subdistricts, Mudanya and Gemlik, along the Marmara coast, and the neighboring Pazarköy and Iznik subdistricts around Lake Iznik. These locations had more humid climates with milder winters than the rest of the region and were connected by the triumvirate of olives, vineyards, and mulberry trees. Surrounded by hill chains and the Samanlı and Katırlı Mountains, this section's tree crops dominated the scenery. Grains were cultivated in the Gemlik and Iznik plain and hilltop locations (of Mudanya, Iznik, Pazarköy, and in villages south of the city of Gemlik). Mudanya and Gemlik had regular passages to Istanbul, other port towns of Marmara, and the Black Sea, which influenced the orientation of their agricultural and manufacturing surplus and limited their connection with the rest of the region. Pazarköy and Iznik showed many similar production and exchange relations with the inland eastern section of Bursa (see section 3.3.3.4 below)

The average size of olive orchards per household was around 1-3 *dönüm* in Mudanya, Pazarköy, and Iznik. In Gemlik, plots between 1-10 *dönüm* were more prominent. Gemlik also showed more cultivation activity in vineyards, with areas between 3-10 *dönüm* persisting. These were smaller in Mudanya, Pazarköy, and Iznik, around 0,5-2 and 1-5 *dönüm*, respectively. Gemlik's rise to becoming a relatively more important port town, more horizontal settlement extension providing better and fast connectivity between locations, and its high seasonal worker population may explain the devotion of seemingly larger areas to olives and vineyards. Urban notables often invested in the olive trade by owning relatively large tracts of lands tilled by the local peasants.

Mulberry trees, on the other hand, were commonly raised in areas of 1-3 *dönüm* in all four subdistricts. Chestnuts were naturally grown in higher elevations, but their ownership and income-generating capacity were generally low but still higher than the rest of the region, thanks to the proximity to the port.¹⁰³⁷ Especially the chestnut trees of Kumla-i Sagir village

¹⁰³⁶ The tax survey (ML. VRD. TMT. d.) codes for each subdistrict are as follows. Villages have entirely Muslim population unless otherwise specified. Mudanya: 9076 (Çepni), 9077 (Mirzaobası), 9082 (Arnavud [entirely Orthodox Christian]), 9083 (Ak), 9096 (Dede); Gemlik: 7947 (Armudlu [Mixed with Orthodox Christian]), 7963 (Kumla-i Sagir), 7958 (Kurşunlu [Mixed with Orthodox Christians]), 7949 (Katırlı), 7964 (Engürücük [Mixed with Orthodox Christians]); Iznik: 8297 (Beyli), 8311 (Dutluca), 8283 (Elbeyli), 8296 (Mustafalı), 8278 (Boyalıca).

¹⁰³⁷ OA. ML. VRD. TMT. d. 7488 [AH. 1261 / 1845]).

near the town of Gemlik generated 90 *guruş* per tree, as opposed to 10 per tree in Inkaya, the village above the city of Bursa appreciated for its chestnuts.

Horticulture was more diversified in Iznik, like the middle sections of the region. Pears were particularly abundant, with 10-15 trees per household. However, the rich alluvial site circling Lake Iznik was inundated, and its produce was destroyed in 1845.¹⁰³⁸ Fruits like cherries, walnuts, and pomegranates were raised in relatively negligible amounts in Gemlik, though chestnuts were important for villages on higher elevations and around the town. Still, the *temettuat* records are concerned with what was grown in privately owned fields. Single trees of fruits such as figs that naturally grew but were not largely commercialized in these areas were likely unrecorded.

Cultivation of grains and crops other than grapes, mulberries, olives, and fruits was not widespread but more discernible in the plain areas of the subdistricts. In Gemlik, villages located in the westernmost point (e.g., Armudlu), those on Samanlı and Katırlı mountains, usually saw small plots of cultivated grain fields of 3-10 *dönüm* for subsistence. Its disadvantage in grain cultivation is reflected in the archives. For example, the people of Gemlik requested in 1818 that they should not be obligated to deliver a portion of their grains (for the provisioning of Istanbul and the army) because their generally mountainous and rugged (*dağıstan ve sengistan*) subdistrict did not support grain farming and they had to consume grains bought from other places and regions.¹⁰³⁹ In Mudanya, access to locally produced grains was easier even though they were insufficient to feed all. Households in higher elevations cultivated wheat barley and oats fields of between 5-20 *dönüm*.

Most Pazarköy villages were located in the Gemlik plain. Thus, grainfields were far more widespread and scattered homogenously all across the subdistrict. The households usually had 3-10 *dönüm* of cultivated wheat, barley, and oat fields. Certain Muslim rural gentry possessed larger than 250 *dönüm* of cultivated land. As we gather from the survey property ownership data, several grain mills were north and west of Lake Iznik and along the Karsak stream.

¹⁰³⁸ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 3.

¹⁰³⁹ OA. C. ML. 135 / 5783 (AH. 25-02-1234 / 24-12-1818).

Iznik's situation is more in line with large tracts in abundant lands of Yenişehir and Inegöl subdistricts to the south. There, 5-30 *dönüm* of cultivated mixed wheat, oats, barley, and vetch fields existed, though a considerable number of cultivated plots of around 30 *dönüm* and more appeared as well. Grain fields were less pronounced in the northern and southern areas of the lake but were more prominent in mountainous regions encircling the lake and town center, which had better air and sanitary conditions that were the motors of Iznik's agrarian economy. Especially the plain hinterland of the town saw *çiftlik*s larger than 250 *dönüm*. Apart from chickpeas and sesame, subsistence-level cotton and market-oriented tobacco production took place.

Land use in all four subdistricts was not intense, with almost 1:1 cultivated to fallow grain area on most occasions, with *çiftlik*s owned by local notables and absentee landlords from the city and Istanbul usually tending to cultivate more intensely, employing the labor of indebted (through *salam* and other moneylending contracts) and sharecropper peasants and migrant laborers.¹⁰⁴⁰

Horses and donkeys (and mules in mountainous Gemlik) were the popular transport animals. Although the three subdistricts had their market space where agricultural products were transferred to and from, Iznik peasants relied on the port of Karamürsel in the northern Kocaili district for sea transport. To a lesser extent, the townships of Bilecik and Küplü in the east were alternative market destinations. Because most of Iznik and north Pazarköy's roads were unsuitable for carts, the peasants had to rely on horses and donkeys.¹⁰⁴¹

Animal husbandry was less pronounced than in the rest of the region. Sheep, especially goats that thrived in mountains and valleys, were grown more extensively than cattle in all four subdistricts. Cattle ranching was made in the plainer areas, especially Pazarköy and Iznik, where water buffaloes enter the scene thanks to the lake and streams. Fishing earned a secondary source of income for coastal settlements, as apparent by those registered as fishermen in Gemlik and Mudanya, where people also seasonally went to the Bosphorus and the Black Sea. Some households, especially in Gemlik and Mudanya, were engaged in beekeeping.

¹⁰⁴⁰ Arıkan, "A History," 36–94.

¹⁰⁴¹ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 3.

3.3.3.2. Western section (Mihaliç-Kirmasti)¹⁰⁴² – Marshlands, large grain fields, and livestock husbandry

With this fertile section, we enter the region's second most populated and agriculturally most diverse area. A defining feature of this area was the wasteland. Writing in 1841, vice-consul Sandison observed that “for the last 7 years the damage from inundations has been spreading over the plain, one of the riches in this part of Asia Minor for corn and the breeding of cattle. [...] Many villages are seen abandoned or going to decay...”¹⁰⁴³ The periphery of Rhyndacus, Simav, Kocadere, and Nilüfer rivers, as well as Manyas and Apolyond lakes, saw more frequent floodings in the nineteenth century, growing pastures, marshlands, water meadows at the expense of arable lands and blurring settlement boundaries.¹⁰⁴⁴ Marshlands amounted to an area of about 500.000 *dönüm* in the Mihaliç and Kirmasti plains in 1870 and about 400.000 in 1928 (thanks to drainage efforts in the fifty years in between)¹⁰⁴⁵, and shaped local power configurations, particularly about the dominance of *çiftlik*s owned by local, urban, and Istanbulite gentry. Due to inundations, lands were leased more frequently than other sections.

Aside from mulberries and vineyards, which were commonly grown in plots of 0,5-3 *dönüm*, 1-5 *dönüm* of garden crops (*bostan*) were raised by the inhabitants to benefit most from the enlarging marshlands and help with their indebtedness. Melons, watermelons, and eggplants were the most popular garden crops, though cherries, peaches, pomegranates, almonds, walnuts, and other crops were raised as well. In addition, in this well-irrigated and rainfed zone, water-intensive crops of maize, onion, garlic, broad beans, cabbage, and flax, accompanied by the industrial and drier-climate staple crops, most notably, maize, millet, beans, chickpeas, tobacco, and sesame, were grown in all corners of this section. Rice cultivation was done to a small extent and was mostly confined to imperial estates, in other words, under strict state control.¹⁰⁴⁶ Mihaliç also produced madder, an important dye crop, although it was not highly demanded beyond the region. Occasionally, the wealthier sections owned mulberry plantations and mixed-fruit-vegetable fields of 5-20 *dönüm*, again to benefit

¹⁰⁴² The tax survey (ML. VRD. TMT. d.) codes for each subdistrict are as follows. Villages have entirely Muslim population unless otherwise specified. Mihaliç: 8891 (Doğla), 8915 (Arız), 8948 (Çamlıca [entirely Orthodox Christian] in Sincan township), 8988 (Karaoğlu); 8998 (Şehriban) Kirmasti: 8478 (Azadlı [Mixed with Orthodox Christian]), 8495 (Kavaklı), 8511 (Paşalar), 8512 (Ada), 8517 (Tepecik).

¹⁰⁴³ FO. 78/441, March 18, 1841, no.8, p.262, quoted in Küçükceran, “Agriculture,” 46–47.

¹⁰⁴⁴ Ibid., 49–75.

¹⁰⁴⁵ Ibid., 100; Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 24.

¹⁰⁴⁶ Odabaşı, “Mihaliç Çiftlikât-ı Hümayûnu,” 81.

from the marshes and high incomes generated from cocoon production, sometimes between 300-600 *guruş* per *dönüm* of trees.

Most agricultural production in the two subdistricts focused on grains. Thanks to abundant waters, plains, and inundations, large estate formation, and yield per *dönüm* proxied by the market value of crops were the highest in Bursa, facilitated by extremely well agricultural suitability and proximity to the city, and Bandırma, Mihaliç, and Mudanya ports. Cultivated intermixed wheat, barley, vetch, oats, maize, and millet fields between 5-40 *dönüm* were the most popular, although there were 50 *çiftlik*s whose size ranged from 250 to several thousand *dönüm* owned by urban, rural, and Istanbulite notables. In between stood the cultivated fields of 50 to 250 *dönüm* owned mainly by the local power figures. Although small ownership of grain fields persisted, large estates sometimes swallowed the estates near them, employed the labor of poor villagers from the neighboring subdistricts and all around the province as well as itinerant laborers from Anatolia and shepherds from Rumelia, and were parceled and leased out to peasants.

Though mainly a plain area, the Kirmasti subdistrict had fewer extremes of land distribution, with 5-30 *dönüm* being frequent. Wheat, barley, rye, maize, and millet were primarily cultivated there. It had eleven *çiftlik*s, four of which were owned by two Istanbul-based notables, İstanbullu Sadullah Bey and İstanbullu İsmail İsmet Efendi, and one (Haremağılı) was an imperial estate.¹⁰⁴⁷ Cultivated fields of between 50 and 250 *dönüm* were common to all settlements, being more numerous near water sources west and north of the town. The grain cultivation area might have been affected because half of the Kirmasti subdistrict (mainly south and east) was in the less agriculturally suitable zone, and there were fewer water sources, hence less formation of marshlands than Mihaliç. Many mills operated along the rivers, streams, and downslopes of the Sincan heights.

This section paid the most sheep tax in 1875, and this situation was likely so in the mid-nineteenth century. Households in both subregions were engaged in extensive livestock farming but differed in focus. Whereas sheep and goat raising prevailed alongside cow and water buffaloes in Mihaliç, especially in *çiftlik*s, cows and cattle breeding was more important in Kirmasti, where sheep raising was performed chiefly by the Orthodox

¹⁰⁴⁷ Yaşayanlar, “19. Yüzyılda Kirmasti,” 58–62.

Christians, notably in the Tepecik *çiftlik*-village.¹⁰⁴⁸ Still, the disease that killed many sheep in Mihaliç in 1845 might distort the generalizability of these findings. In addition, Mihaliç and Kirmasti settlers, especially the latter, also specialized in horse raising along with cattle ranching. This trade had its roots long before the survey period, as evidence from the eighteenth century shows that the army had been using the horses of Kirmasti.¹⁰⁴⁹ Water buffaloes were plenty along the rivers, streams, and water meadows of lakes. Many families generated income from beekeeping, and those near the lake from fishing.

Horses, donkeys, and ox carts carried the goods of the two subdistricts to the weekly bazaars at their town centers. Mihaliç port was the destination of the subregions' products if they were to be marketed via sea routes. The Kirmasti stream and the Rhyndacus River were essential in carrying goods of moderate weight to the port.¹⁰⁵⁰

Forestry was essential and remunerative for the inhabitants of the subdistricts, albeit not stressed enough in our select villages. They extensively produced timber, wood for carriage (*koçu*) construction, and firewood.¹⁰⁵¹ As a side note, Kirmasti villagers had long been tasked with making oars for the navy, cutting timber, and making charcoal from white willow (*aksöğüt* – a key component in gunpowder) for the Imperial artillery in Istanbul. These products were sent to Mihaliç via the Kirmasti stream and, from there, along with the wood of Mihaliç, to Istanbul via the Rhyndacus River and Mihaliç port.¹⁰⁵²

A high land-to-labor ratio persisted in both subdistricts, leaving many lands untilled. Available evidence shows that the small peasantry resorted to sharecropping, *salam* contracts on other farms, and small loans from orphan funds (*eytam sandığı*), but eventually borrowing mainly from moneylenders/*çiftlik* owners at high interests, which trapped them in indebtedness cycles.¹⁰⁵³

¹⁰⁴⁸ Total survey data reveals that there were six sheep, two goats, two water buffaloes, cows, and oxen per household in Mihaliç. In Kirmasti, there were six bovine and three bovine animals per household. Ibid., 50; Yalazı, *Nüfus ve temettuat defterlerine*.

¹⁰⁴⁹ OA. AE. SMST. III. 196 / 15424 (AH. 14-11-1283 / 11-07-1770); AE. SSLM. III. 218 / 12769 (AH. 25-10-1204 / 08-07-1790), p. 7.

¹⁰⁵⁰ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 17 and 19.

¹⁰⁵¹ OA. AE. SMST. III. 196 / 15424 (AH. 14-11-1283 / 11-07-1770); A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 19.

¹⁰⁵² Yaşayanlar, "19. Yüzyılda Kirmasti," 53; Küçükceran, "Agriculture," 123.

¹⁰⁵³ OA. A.}. d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 18. Küçükceran, "Agriculture," 53; Aytekin, "Cultivators, Creditors and the State."

3.3.3.3. Central Section (Bursa-Kite)¹⁰⁵⁴ – Dense population, changing altitudes, and mixed-sized fields

This section was the most populated and paid the most tithe. Because it was located in the area from Mudanya to Bursa to villages on the slopes of Mount Olympus, its agricultural diversity and richness were poetically described by passersby, to quote one:

The plain lay green and fertile, with flowering orchards and undulating fields of barley, spreading out between the city and the low mountains which hid the blue Marmara. In the Spring, violets, anemonies and hyacinths carpeted the ground, white irises lining the streams, and plantations of pears, quince, almonds, plums, figs, pomegranates and peach trees in bloom, gave an ethereal aspect to the landscape. Later, the red flowering oleanders grew wild, and at harvest time the fields were like a sea of gold. [...]

Groups of oaks and planes are seen in every homestead, plantations of fruit trees and great groves of mulberries. On the slopes of the hills are the vineyards, and the olive trees, rivalling in age the hills themselves. Higher up on the mountain are forests of pine. One hears the bleating of sheep, singing of the larks, the shepherds' pipes and barking of a dog, braying of a donkey.

As one nears the city, the dark cypresses, the sycamores and walled gardens appear; lovely terraced gardens full of flowers, vegetables, rich clusters of fruit trees, little tables and chairs on every terrace surrounded with oleanders and orange and lemon trees in pots.¹⁰⁵⁵

Our survey data help us quantify such diversity. Small plots of vineyards (1-5 *dönüm* per household), mulberries (1-3 *dönüm*), and various fruit orchards (2-3 *dönüm*) balanced grain production and livestock breeding. The special quality of cocoons in some locations, such as Demirtaş, Filedar, and Balıklı, led to the growth of fields of between 5-15 *dönüm* devoted to mulberry trees and famous grapes of villages such as Misi and Filedar had more extensive vineyards. Many families grew water-intensive crops near the Nilüfer River and countless streams feeding it, especially maize, bulbous plants, green vegetables, tubers, and flax. In drier areas and on well-drained soils, beans, maize, millet, chickpeas, and tobacco were cultivated. Every so often, the river took as much as it gave when it flooded.

Because these two subdistricts saw the formation of the earliest forms of large waqf estates and privately held *çiftlik*s, one must be careful in generalizing the size of lands dedicated to grain cultivation. Mixed wheat, barley, oats, rye, and millet fields were usually

¹⁰⁵⁴ The tax survey (ML. VRD. TMT. d.) codes for each subdistrict are as follows. Villages have entirely Muslim population unless otherwise specified. Bursa: 7385 (Vakf-ı Susıgırı), 7434 (Aksu), 7397 (Tepecik [entirely Orthodox Christian]), 7511 (Ahmedbey), 7474 (Göynüklü); Kite: 8471 (Bağlı), 8411 (Doğancı), 8414 (Evciler), 8420 (Çalı), 8410 (Has).

¹⁰⁵⁵ John G. Hun, "Bursa Gardens," *La Turquie Kemaliste*, no. 29 (February 1939): 2–3.

relatively small, between 10-50 *dönüm*. This section had the second largest swamp area after the (northern) Mihaliç – (western and southern) Kirmasti regions, which amounted to an area of between 60.000 and 70.000 *dönüm*, suitable for the enlargement of pestilential marshes, contraction of fields, and quick spread of malaria. MacFarlane recounts that the calls of the villagers near the Nilüfer River and Katırlı mountains to drain bogs and swamps and enlarge the riverbed had been looked down upon by the state in the mid-nineteenth century.¹⁰⁵⁶

Access to water sources, soil quality, co-cultivation of grains with fruit trees, and, more importantly, the existence of financially and politically powerful elites and careful waqf trustees overseeing the production outcome determined the size of lands devoted to grain cultivation and fallow. Especially locations along the Nilüfer River and its branches and relatively emptier lands on the west and east sides of the plain created fertile conditions for *çiftlik*s to flourish and easily find labor from nearby villages through *salam* contracts, moneylending, and sharecropping. For instance, in Susıgırlık village in northeastern Bursa, most cultivated grain lands varied by 50 to 250 *dönüm* in size. In Has village of Kite, a Karagöz İbrahim Ağa, an absentee landlord in Istanbul, owned 400 *dönüm* of grainfield and stood out as an outlier. Waqf and private mills were numerous in all directions, as waters flowing down Olympus and Katırlı created many opportunities.

On the other hand, this section was very heterogeneous in terms of land distribution, where a considerable portion of the populace cultivated only tree crops and/or possessed some livestock, and a significant minority owned nothing and earned their lives as laborers and shepherds, especially in the plain areas near the city. The proximity to the city, reasonably firm waqf supervision, relatively easy marketability of crops, inundations of the Nilüfer and streams, multidirectional access to and abundance of water, and centuries-old sharecropping and moneylending practices must have played a role in the formation of such a pattern. It must also be remembered that the surveys did not cover the widespread home-based spinning and weaving activities.

The presence of Olympus, Katırlı, and Mudanya mountains in the general picture was also a decisive factor. This section included the villages on the slopes of Olympus, to the city's east and west. The farther away a settlement was from the plain; its crop profile became

¹⁰⁵⁶ MacFarlane, *Turkey and Its Destiny*, 1850, 1:230–31.

less diverse. Villages on the northern slopes were engaged in grain cultivation less than their counterparts in the field, about two *dönüm* per household. Besides small gardens of mulberries and vineyards, households owned fruit (especially cherry, pears, and strawberry) gardens, grew chestnuts and had private large tree groves. Sheep and cattle breeding was not different from the plain settlements. On the opposite side stood the villages on the slope and hills of Katırlı, about 100-400 meters from sea level. Grainfields were homogenously distributed, with most households owning 10-30 *dönüm*, a pair of oxen, a cow, and multiple goats, and almost all having small vineyards and mulberry trees.

A considerable number of households in Kite owned pine and oak groves. 1-5 *dönüm* of pine, oak, and plane groves held by families in an area stretching from the densely forested western foothills of Mount Olympus to Lake Apolyond. These groves have been a trademark of the landscape since earlier centuries. Appearing abundantly in the tax registers of Kite from 1521, these groves were taken from the families in the 1950s when forests were nationalized.¹⁰⁵⁷

Cow and buffalo ranching balanced sheep and goat breeding in both subdistricts. Water buffaloes were bred along the many streams of Olympus. Meadows and clover fields were abundant in the plain and high elevations. Having said this, settlements near the city concentrated more on cultivation than animal husbandry, which was more extensively practiced at high altitudes and in Kite. Even then, this section did not particularly focus on sheepbreeding as Mihaliç and Yenişehir subdistricts, at least by 1845. Beekeeping was occasionally practiced. Fishing was done in the River and streams. Horses and donkeys were widely held to carry goods and people, and oxen, buffaloes, and horses, as draft and transportation animals. Gemlik and Mudanya ports were used to export goods to other places.

3.3.3.4. *Eastern Section (Yenişehir-Inegöl)*¹⁰⁵⁸ – *Plains, Hills, Çiftliks, and Forestry*

Separated by the southern extremity of the Katırlı Mountains and connected via a highway, Yenişehir and Inegöl's agricultural focus mirrored that of the western section but differed from it through their geographical attributes.

¹⁰⁵⁷ Çalay, "Tarih İçinde Bursa," 92.

¹⁰⁵⁸ The tax survey (ML. VRD. TMT. d.) codes for each subdistrict are as follows. Villages have entirely Muslim population unless otherwise specified. Yenişehir: 7458, 9563 (Marmaracık [[entirely Armenian]], 9561

Many rivers pouring down Olympus, Domaniç, and Ahı joined in the plain of Inegöl and continued toward Yenişehir through a narrow highway, where it became the only water source. Also known as the Göksu River, this water was extended to specific farms and the town of Yenişehir via canals and enabled the cultivation of vegetable gardens and water-thirsty crops. Again, this river also inundated its surroundings every few years.¹⁰⁵⁹ Apart from rivers, thanks to the existence of vast areas of marshes in this section, water-intensive crops such as onion, garlic, and broad beans, and wet and dry vegetables, beans, sesame, maize, millet, and tobacco were cultivated in plots of a few *dönüm* in addition to wheat, barley, rye, and vetch fields. Waters also enabled rice cultivation in Inegöl, in and around the town. This crop was banned in most of Yenişehir.¹⁰⁶⁰ It is not hard to imagine why malaria took the lives of about two thousand people in the Iznik and Pazarköy subdistricts to the north in the 1870s.¹⁰⁶¹

An average of 1-5 *dönüm* of mulberry orchards and 1-3 *dönüm* of vineyards were grown popularly by the inhabitants. Villages on the hills and slopes of Olympus and Domaniç mountains also grew 0,5-2 *dönüm* of chestnuts, walnuts, and other fruit trees.

As in the west, extensive cultivation of grains was the main activity. Cultivated fields of 3-40 *dönüm* prevailed in Yenişehir. Because large *çiftlik*s existed in the west and eastern plains of Yenişehir and their number increased since the late eighteenth century, cultivated plots of 100 to 3000 *dönüm* were not uncommon. Some villages were *çiftlik*s such as Mekri, Çardak, Misenöz, Toprakocak in the west and Umran, Köprühisar, Akdere, and Söylemiş in the east. A considerable portion of the peasants did not own any grain field and earned their living from trees, small meadows, and sharecropping – a feature only to be more prevalent as *çiftlik*s would expand in the area. Directly facing Mount Olympus, Yenişehir plain was subject to infrequent white frosts and frequent cold breezes, making it challenging to grow crops and affecting their yield and quality.

(Kozdere), 9567, 17758 (Çelebi), 9569 (Ayaz) ; 9555 (Çardak) ; İnegöl: 8221 (Genci), 8239 (Kurşunlu), 8223 (Yenice-i Müslim), 8240 (İsaviran), 8270 (Akhisar).

¹⁰⁵⁹ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 5.

¹⁰⁶⁰ Arıkan, “A History,” 399.

¹⁰⁶¹ OA. ŞD. 2898 / 50 (04-07-1297 / 12-06-1880).

İnegöl's higher elevation, smaller plain area, surroundings with forests, possibly tighter waqf control, and, possibly, the formation of marshes due to inundations resulted in the predominance of smallholdings with 3-30 *dönüm* persisting. The rural gentry, especially those in Akhisar, owned more extensive cultivated estates between 30 to 100 *dönüm* in the plain and near the branches of Göksu. Mill ownership along the river and streams played an important role in building wealth and, especially in Yenişehir, power.

Cotton, a heat-tolerant crop, was one of the notable cash products grown by many Yenişehir households on 0.5-2 *dönüm* of land in settlements bordering Iznik. Although there are no contemporaneous remarks on the quality of the Yenişehir cotton, we may infer that it was inferior to the commercially-appreciated kind that started to be produced in the 1860s. We only know that the cotton and rice of Yenişehir and Iznik were grown for subsistence use¹⁰⁶², but by the 1840s, the British cotton yarn displaced cotton of native growth to a great extent.¹⁰⁶³ A few households in northern Yenişehir also grew opium poppy (*haşhaş*), though its impact on the regional economy was insignificant.

As they did not have large central markets and merchant class, Yenişehir and İnegöl brought their products to the city or subdistrict of Bursa via four-wheeled carts, horses, and camel caravans to transfer them to the Gemlik port and to a way lesser extent, townships of Bilecik and Küplü in the east.¹⁰⁶⁴

Livestock raising remained an important activity in the two subdistricts, though Yenişehir peasants, having more *çiftlik*s and pastureland, took the lead. Cows, buffaloes, sheep, and goats were raised in significant quantities in İnegöl, particularly by the villages in the hilly periphery where quality pastures were abundant. In Yenişehir, cattle and sheep were plentiful, but large *çiftlik*s tended to own significant amounts of sheep by grazing them on pastures and uncultivated land. In Çardak, the Istanbul-based Mahrukizade Ali Pasha (who had the said 3000 *ıdönüm* along with 26.000 *dönüm* uncultivated) had 400 sheep, 90 goats, 48 cattle, and 31 mares. Oxen remained the most crucial tractor animal, and horses, mares, and donkeys were essential in transportation. Bordered by large mountain forests, timber and

¹⁰⁶² OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 6.

¹⁰⁶³ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 114.

¹⁰⁶⁴ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 5 and 12.

coal provision for the state and regional needs had most of Inegöl's household heads (fifty percent was recorded in the survey but was likely higher) work in the transportation of these products, though, as abovementioned, sometimes to their detriment when corvee was implemented. Some households earned incomes from beekeeping, with a minority keeping four to five hives.

Assuming the people recorded in the surveys did not move or moved for only brief periods, Inegöl had a relatively balanced land-to-labor ratio due to the geographical position of the plain between mountains. Some peasants lacked oxen, plowing equipment, land, or seeds. Thus, sharecropping was common. Instead of turning to usurers (moneylenders from the city of Bursa and local notables), the peasants tried to opt for *salam* contracts and borrowing from orphan funds at 25% interest.¹⁰⁶⁵ In Yenişehir, which had a high land-to-labor ratio, on the other hand, moneylenders (that included Iranian Armenian merchants – who might be affiliated with the Armenian community of Inegöl) were more active in 1845. Small loans on interest left the populace in a growing debt cycle,¹⁰⁶⁶ which paved the way for the exploitation of the small peasantry and sometimes the appropriation of their lands by çiftlik owners.¹⁰⁶⁷

3.3.3.5. Southern Section (Atranos-Harmancık, and Townships of Cebel-i Atik, Cebel-i Cedit, and Sincan)¹⁰⁶⁸ – Mountains, forests, and dry farming

Harmancık and Atranos subdistricts and Cebel-i Cedit and Cebel-i Atik townships had exclusively Muslim populations and were located at 500 to 1300 meters and in a drier climate zone than the rest of the region. The Sincan township (all Muslim except three mixed villages) is a strange case because it is like a lateral section of the Bursa region. In the southeast, it includes settlements above 300 meters whose agricultural attributes are more like the neighboring Atranos. In its northern and western periphery, the elevation rapidly falls below 300 meters and reaches the Kirmasti plain and Lake Apolyond through multiple valleys with access to the Rhyndacus and good pasture, leaving no doubt why the majority

¹⁰⁶⁵ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 13. For debt relations in Inegöl, see also Polat, “1844-1845 Yıllarına Ait Temettuat Defterlerine Göre Inegöl Kazası'nın Sosyo-Ekonomik Durumu,” 205–12.

¹⁰⁶⁶ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 7.

¹⁰⁶⁷ Arıkan, “A History,” 36–94.

¹⁰⁶⁸ The tax survey (ML. VRD. TMT. d.) codes for each subdistrict are as follows. Villages have entirely Muslim population unless otherwise specified. Atranos: 7113 (Firoz), 7175 (Girencik), 7086 (Çörel), 7168 (Alpagut) ; 7109 (Körülkü) ; Harmancık: 8191 (Ilıcaksu), 8177 (Gedikvıran), 8168 (Davudlar), 8181 (Kıçmanlar), 8193 (Çardı).

of Bursa's semi-nomads spent their winters and summers in this zone. A few villages like Melik and Kaaraoğlu in the plain showed similar characteristics of *çiftlik* agriculture in Kirmasti, and like Fadıl, whose inhabitants earned profits from tree crops like western Kite villages, are exempted from generalizations here.

Most Cebel-i Cedid and Cebel-i Atik settlements were located along the spring of the Nilüfer River. They usually owned small cultivated grain fields of 3-10 *dönüm*, and mulberry plantations, vineyards, chestnut groves, fruit and vegetable gardens, and private meadows of 0,5-2 *dönüm*. Households had a few goats and (to a lesser extent) sheep, usually a pair of oxen, occasionally a cow, and, for transport, a donkey, mule, mare, or horse.

Harmancık and Atranos subdistrict and the southern and central Sincan township located on rugged yet flatter terrain than Cebel-i Atik and Cedid generally shared a similar crop and livestock profile. Still, the size of the grain fields and livestock changed depending on local endowments, the most important of which were water proximity and ruggedness since elevation and soil moisture affected vegetation growth, living near forests provided more acidic soil, and rain and snow-fed soils gave lower yields.

Harmancık settlements were located on elevations between 700-1100 meters and their only running water source was two small and weak streams in its southern section that served about a third of its population, narrowing the crop diversity (mainly wheat and barley in grains).¹⁰⁶⁹ Atranos had access to the Rhyndacus in its southern hillier section and attracted snowmelt water thanks to its downward slope in the north, where the Kocadere stream, starting in the small Orhaneli plain (10,6 km²), bifurcated and flowed down toward the Bursa plain and Lake Apolyond.

Atranos, Harmancık, and Sincan focused mainly on grain cultivation and animal husbandry. They were associated with the lowest grain yields and smallest land areas devoted to cultivation on average within the region.¹⁰⁷⁰ Moreover, they had the fewest population and narrowest agricultural basket and, thus, paid the least tithe in 1874 than other sections. Grainfield sizes were generally homogeneous, with 10-30 *dönüm* persisting. Estates rarely varied between 30 to 100 due to the scarcity of suitable, large, profitable land and labor.

¹⁰⁶⁹ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845).

¹⁰⁷⁰ Ustaoglu, Kabadayı, and Gerrits, "The Estimation."

Exceptions were rare but most significant. There was a *çiftlik* of 350 *dönüm* in the village of Çöre in the Orhaneli plain with access to water, owned by Yazıcızade Osman Efendi, a religious scholar from one of the most potent urban notable families, who was engaged in the wool trade in addition to grain cultivation. The reason for his interest in this area was his leverage in the power relations there: His father, Ali Efendi, was the elected director/governor of the subdistrict (*kaza müdürü*), who incurred extra taxes under the rubric of “expenses” on the populace every year between 1840 and 1845.¹⁰⁷¹ Ali Efendi held an enormous *çiftlik* in Kusumlar, the village just five kilometers south of Çöre, and owned 650 *dönüm* of grainfield, 30 *dönüm* of vineyard and mulberry trees, 500 sheep, 100 cattle, and two mills, showing how these “elected” positions were granted and provided leverage for local notables.¹⁰⁷² Another “elected” notable was Hacıveyiszade Mustafa Ağa in the Çardı village from Harmancık, the plainest area and acted as the quasi-center of Harmancık. Mustafa Ağa held a gigantic grainfield of 750 *dönüm*, mulberry plantations, vineyards, and vegetable gardens totaling 22 *dönüm*, three mills, 180 sheep and goats, 19 cattle, and 14 mules and horses. Mustafa Ağa and his sons (who also owned large fields, many animals, and mills) seem to have monopolized all the profits from land and water use.¹⁰⁷³

Both subdistricts contributed to Bursa’s silk industries by raising mulberries, averaging 1-2 *dönüm*. But mulberry raising was significantly less intense than in other parts of the region, indicative of fewer water sources and more time spent cultivating grains rather than feeding silkworms. Vineyards, a source of food and income, were grown on average 0,5-2 *dönüm*, albeit, again, still less popular than other sections. Atranos and Sincan’s villages near the Rhyndacus River had a more diverse crop profile. Water-intensive industrial crops and vegetables grew near water sources and accompanied the drier-climate crops beans, maize, millet, sesame, tobacco, chickpeas, and anise (*anason* – produced only in Harmancık by a few households). Speaking of water proximity, snow- and rain-fed dryland farming crops of winter cereals, beans, lentils, millet, zucchini, and melons assisted this section’s people’s diet. Mills existed along rivers and streams.

¹⁰⁷¹ OA. A.} MKT. UM. 62 / 33 (AH. 05-08-1267 / 05-06-1851).

¹⁰⁷² OA. ML. VRD. TMT. d. 7157 (AH. 1261 / 1845), p. 11.

¹⁰⁷³ OA. ML. VRD. TMT. d. 8193 (AH. 1261 / 1845), p. 3-4.

Livestock profiles differed in the two subregions. Whereas cows and water buffaloes balanced sheep and goats in Atranos and Sincan, it was the reverse in the case of Harmancık, where sheep and goats were more commonly raised. Donkeys and mules were the most popular transportation means in both districts due to their rugged topography. In fact, Harmancık generally lacked pasturelands, which induced the peasantry to rent horses and oxen from neighboring areas and semi-nomads.¹⁰⁷⁴ Some households earned a small income from their beekeeping activities.

As understood by many peasants' income from laboring in others' fields, sharecropping was an essential feature of this section to generate a surplus. Also, high-quality trees all around led to the by-employment of most households in wood and timber cutting and charcoal making. In terms of extra-economic activities, as we will see in section 3.3.1.1., many households migrated to the city to assist in silk spinning. A considerable number in the south, on the other hand, temporarily headed the Manisa (Karaağaç and Gördes specifically) and Aydın regions to earn income by sharecropping in madder root (*boya*) fields, extracting the red colorant from roots, and trading their shares in Bursa to trade intermediaries, peasants, and nomad weavers. The more isolated and subsistence-oriented production profile of the southern section, the significant presence of semi-nomads, and the involvement of males in silk spinning in Bursa and extracting dyes in the hinterland of İzmir, plus the home-based spinning and weaving operations, might have created a "mountain textile economy."

Mudanya was their principal port if their crops were to be exported. The goods of Cebel-i Atik and Cedid were carried along and, in the case of timber, by the Nilüfer River. Those of Atranos, Harmancık, and Sincan (mostly cocoons and timber) were transported to the nearest market behind Mount Olympus, possibly the village of Beyce in the Orhaneli plain, with the help of donkeys, mules, and plow animals under the supervision of shepherds. But, in the end, households in each subdistrict, especially the more isolated settlements with lower soil quality and higher elevation and further to the south, could not generate high incomes from agriculture due to environmental and infrastructural reasons. Amidst cash scarcity, high taxes, and transport difficulties, moneylending was visibly less intense, salam

¹⁰⁷⁴ OA. A.} d. 3258 (AH. 11-09-1261 / 13-09-1845), p. 16. One pair of oxen costed from 400 to 700 *guruş*, and one horse from 250 to 300 *guruş*.

contracts were generally non-existent, and interest rates, about sixteen percent annually, were high but still lower than the rest of the region.¹⁰⁷⁵

3.3.3.6. Conclusion

The complex vegetation mosaic of the Bursa region was influenced by the climatic effects of elevation, local relief, and the contrast between the plainer northern and mountainous southern parts, as well as water proximity, millennia of human settlement and land use, domestic and international market forces, and supplemented by animal husbandry. Polyculture and multiactivity worked well with expanding demand for nutritive products, industrial raw materials, and specific crop specializations connected with the market. Whereas fruit and vegetable gardens, mulberry trees, vineyards, and grainfields were all common to the five sections, olives were extensively grown in the northern part, and water-intensive- and some industrial crops (e.g., broad beans, tobacco, cotton, flax) were peculiar to certain biogeographic zones. The size of the fields depended on the physical space, crop marketability, and landholder power. Livestock husbandry and type relied on local and subsistence needs first, then the power of *çiftlik* agriculture in a given subregion.

3.4: Economic and Population Profile of The City of Bursa

Once travelers reached the Bursa plain after hours of riding through the wooded hills surrounding it, a splendid view of Mount Olympus greeted them all the way. A short journey through green gardens and fields led them to the magnificent scenery of the city of Bursa, standing at the southwest extremity of the plain. Stretching five kilometers along the lower declivities of Mount Olympus and half a kilometer on the north-south axis, the city was divided roughly into four sections by two streams, Cilimboz to the west and Gökdere to the east, and the citadel at the center. Two smaller streams, Namazgah and Karınca, divided the city's southeastern section. Dozens of spring waters sourced from the said streams and many more from Olympus flew through the city's quarters to join the Nilüfer River in the plain.¹⁰⁷⁶ Freshwater from the streams and springs was distributed through a system of canals to public

¹⁰⁷⁵ Ibid.

¹⁰⁷⁶ Kandes listed at least thirty springs. Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, 127; Eighteenth-century poet Hasib Efendi's poem "Miyahiyye" individually praises the thirty-eight springs of Bursa. Süleyman Eroğlu, "Türk Edebiyatında Miyahiyye Türüne Bir Örnek: Hasib Efendi'nin Miyahiyyesi," *Uludağ Üniversitesi Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, no. 15 (2008): 434.

buildings, baths, fountains, and houses.¹⁰⁷⁷ Many waqfs were donated to channel and fountain construction and maintenance, as obvious also from the many water conduit servicemen (*suyolcu*) and fountain founder (*çeşmecî*) working in the city.¹⁰⁷⁸ Access to water, especially cleaner water, remarkably determined the extent of the urban area.¹⁰⁷⁹

The hilly landscapes of Bursa led early Ottoman rulers to optimize the city's topography by having built mosque complexes that celebrated their reign and determined the extent of the urban landscape in the long run.¹⁰⁸⁰ The city reached its full extension in the sixteenth century and retained it until the 1880s, when the first new quarters to accommodate Balkan migrants were formed. Its urban fabric was radically altered by the 1855 earthquake and the opening of filatures along the streams after the 1840s. Inspired by the travelogues of Hayrullah Efendi (1820-1866), who was a physician, historian, and statesman of the Tanzimat period who visited Bursa in 1844, 1851, and 1863, İsmail Hamî Danişmend interpreted the state of the city in these years as the first, second, and third Bursa.¹⁰⁸¹ He said the third Bursa was a “characterless Tanzimat city,” founded by changing everything in the urban fabric except most religious and historical relics. Upon the rebuilding of the city, to which the destruction of some of the old monuments contributed, the silhouette and spirit of the old Bursa were no more, and the “first” and “third” Bursa had no resemblance in any respect.

¹⁰⁷⁷ Water became less clean the further from the water source as it passed from one building to another. The ground of the city was crisscrossed with waterways pouring to pools at the ground level of buildings. Launay and Bonkowski Bey, *Bursa ve Civarı*, 131–37.

¹⁰⁷⁸ Cafer Çiftçi, “Osmanlı Dönemi Bursa Su Yollarının Bakımı ve Onarımında Vakıfların Rolü,” *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi* 3, no. 3 (2002): 57–74.

¹⁰⁷⁹ Maintenance of these canals reflected the environmental and economic realities of the region. The ones directing the Pınarbaşı got destroyed due to inundation in 1848. The cost of repairing it was calculated at 86.850 *guruş*. Although the Ministry of Pious Foundations decided to cover the half, the Supreme Council of Judicial Ordinance acknowledged that the majority of the city's population was poor and should not be demanded a dime for repairs. OA. A.} MKT. 150 / 97 (AH. 25-10-1246 / 24-09-1848) ; A.} MKT. MVL. 30 / 100 (AH. 30-10-1266 / 05-09-1850). The canals were destroyed once again for the same reason in 1862, this time the expenses (totaled at 36.000 *guruş*) were shared by the Pious Foundations Ministry, some rich artisans, and factory owners. OA. A.} MKT. MHM. 247 / 12 (AH. 27-05-1279 / 20-11-1862).

¹⁰⁸⁰ Suna Çağaptay, “Prousa/Bursa, a City within the City: Chorography, Conversion and Choreography,” *Byzantine and Modern Greek Studies* 35, no. 1 (2011): 45–69; Ergenç, *XVI. Yüzyılın*, 325–28.

¹⁰⁸¹ İsmail Hamî Danişmend, “Hayrullah Efendi'nin Gördüğü Üç Bursa,” in Bursa: Yapı Kredi Bankası Bursa Şubesinin Açılış Hatırası (İstanbul: Doğan Kardeş Yayınları, 1948), pp. 38-39, quoted by Fulya Düvenci Karakoç, “Yirminci Yüzyıla Girerken Bursa'da Sosyal ve Kültürel Yaşam,” in *Osmanlı Modernleşmesi ve Bursa*, ed. Cafer Çiftçi (Bursa: Osmangazi Belediyesi Yayınları, 2009), 206–7.

The previously mentioned Suphi Bey map of 1862 is the only visual source to study the pre-1855 earthquake urban layout thoroughly. Prepared at 1/1600 scale, the cadastral map is a photogrammetric drawing where the buildings, streets, gardens, mills, and other elements of the urban built environment were annotated and rendered precisely. The citadel, inns, and bazaar area at the center and quarters formed around religious buildings dominated the urban area. The many narrow and dead-ended streets of Bursa, oriented toward religious buildings of the residential quarters, led to the city's main artery, Saray Street, which cut the urban area in half. I have overlaid the Suphi Bey map upon satellite imagery to visually study the city of Bursa's population, filatures, and trade center.¹⁰⁸²

3.4.1. Permanent Population and the Quarters of Bursa

In 1839 (AH. 1255), Bursa had an ethnoreligious mixed population of 16.451 males, of whom 15.201 were permanent residents who lived in 7248 households. This population number changed slightly from 15.552 permanent male residents recorded in 1830.¹⁰⁸³ Aside from the relatively low life expectancy keeping this number stable, the impact of the plague might have stalled its progression. In a few Muslim quarters, dervish lodges and convents were treated as houses in the registers, and I did not refrain from considering them so, which did not change the overall quantitative picture. As noted, the city's settled population lived in an organic assemblage of quarters often identified by religious buildings and headed by quarter and religious headsmen. If we take the registration categories for granted, Bursa had 162 quarters in 1839, 38 of which were ethno-religiously mixed.¹⁰⁸⁴

Before delving into demographic details, it may be beneficial to study how the neighborhoods maintained their integrity before the foundation of the first municipality in 1867 and the radical alterations made to the urban space from the 1860s onwards. Quarter waqfs composed of several waqfs handled the quarters' economic matters, as in villages.¹⁰⁸⁵ Construction, repair, and maintenance of specific structures (e.g., fountains, roads, wells,

¹⁰⁸² Special thanks to Raif Kaplanoğlu and M. Erdem Kabadayı for providing me with a high-resolution copy of the map.

¹⁰⁸³ Based on the aggregate numbers given in the 1830 population registers for Muslims (OA. NFS. d. 1391, 1393) and non-Muslims (NFS. d. 1394).

¹⁰⁸⁴ Quarter by ethno-religious identity: Muslim (115), Muslim-Roma (4), Muslim-Armenian (8), Muslim-Armenian-Catholic (11), Muslim-Orthodox-Christian (14), Muslim-Orthodox-Christian-Roma (1), Orthodox-Christian (6), Armenian (2), Jewish (1).

¹⁰⁸⁵ Gerber, *Economy and Society in an Ottoman City*, 140; Mefail Hızlı, "XVIII. Yüzyıl Başlarında Bursa Vakıfları," *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 9, no. 9 (2000); Çiftçi, *Bursa'da Vakıfların*, 85–90.

pavements) and buildings (ranging from religious ones to houses), remuneration of religious functionaries, illumination of religious structures, and assistance to the poor were the main functions of these waqfs. Premortem or postmortem donations of the wealthy and their kin and waqfs established by them also contributed to the well-being of a quarter community. Non-Muslims also founded waqfs and charity organizations to improve their communities' lives.¹⁰⁸⁶ Apart from quarters, lands, gardens, shops, stables, mills, inns, and other forms of urban property were endowed as waqfs. Their use rights were handed under various conditions to trustees or private individuals to generate money for many purposes.¹⁰⁸⁷

On the other hand, the management of large urban expenses and taxation of the urbanites was handled by urban notables (*şehir ayanı*), such as Cizyedarzade, Uryanizade, Tahir Ömerzade, Müftizade, Yahnikapanzade, and Feyzizade households. Urban notables were the head-*ayan* of the sanjak and selected with the consent of multiple sections of the society, the other notables of the city and subdistricts, head artisans, judges, scholars, and high-ranking officers, enabling them to establish direct relationships with the state, amass more wealth and coercively rule over the region. The institution of the head-*ayan* was abolished in 1828 as part of the general struggle against the *ayans* and their mismanagement of public funds. Their duties were transferred to the office of the *mütesellim* (centrally appointed governor) and carried out under the control of the qadi. While these families continued to be important social actors, the notables of the smaller towns retained their power as administrators for some time.¹⁰⁸⁸

The counts carried out by the collaborative efforts of the *mütesellim*, judicial authorities, and quarter and religious headmen were as follows. Muslims were the majority, with 60 percent (9293 permanent resident males in 5317 households). They occupied the entire citadel area and were all around the city. The tiny Muslim Roma community, whose

¹⁰⁸⁶ Ali İhsan Karataş, "Fethinden XIX Yüzyılın Sonlarına Kadar Bursa'da Ermeniler," *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 14, no. 2 (2005): 81–106; Turgay Akkuş, "Meşrutiyet'ten Cumhuriyet'e Bursa Kent Tarihinde Gayrimüslimler" (PhD Thesis, İzmir, Dokuz Eylül University, 2008), in passim; Hasibe Tuna, "Social, Cultural and Economic Situation of the Jews in Bursa during the Tanzimat Period" (MA Thesis, Ankara, Middle East Technical University, 2013), 51–55.

¹⁰⁸⁷ Çiftçi, *Bursa'da Vakıfların*, 51–156; Satıcı, "19. Yüzyılda Hüdavendigâr Eyaleti," 131–51.

¹⁰⁸⁸ Multiple powerful Muslim households of judicio-administrative origin competed for the office of the urban notable, which made this institution a problem to be solved rather than a problem-solver. For a detailed treatment, see Satıcı, "19. Yüzyılda Hüdavendigâr Eyaleti," 152–72.

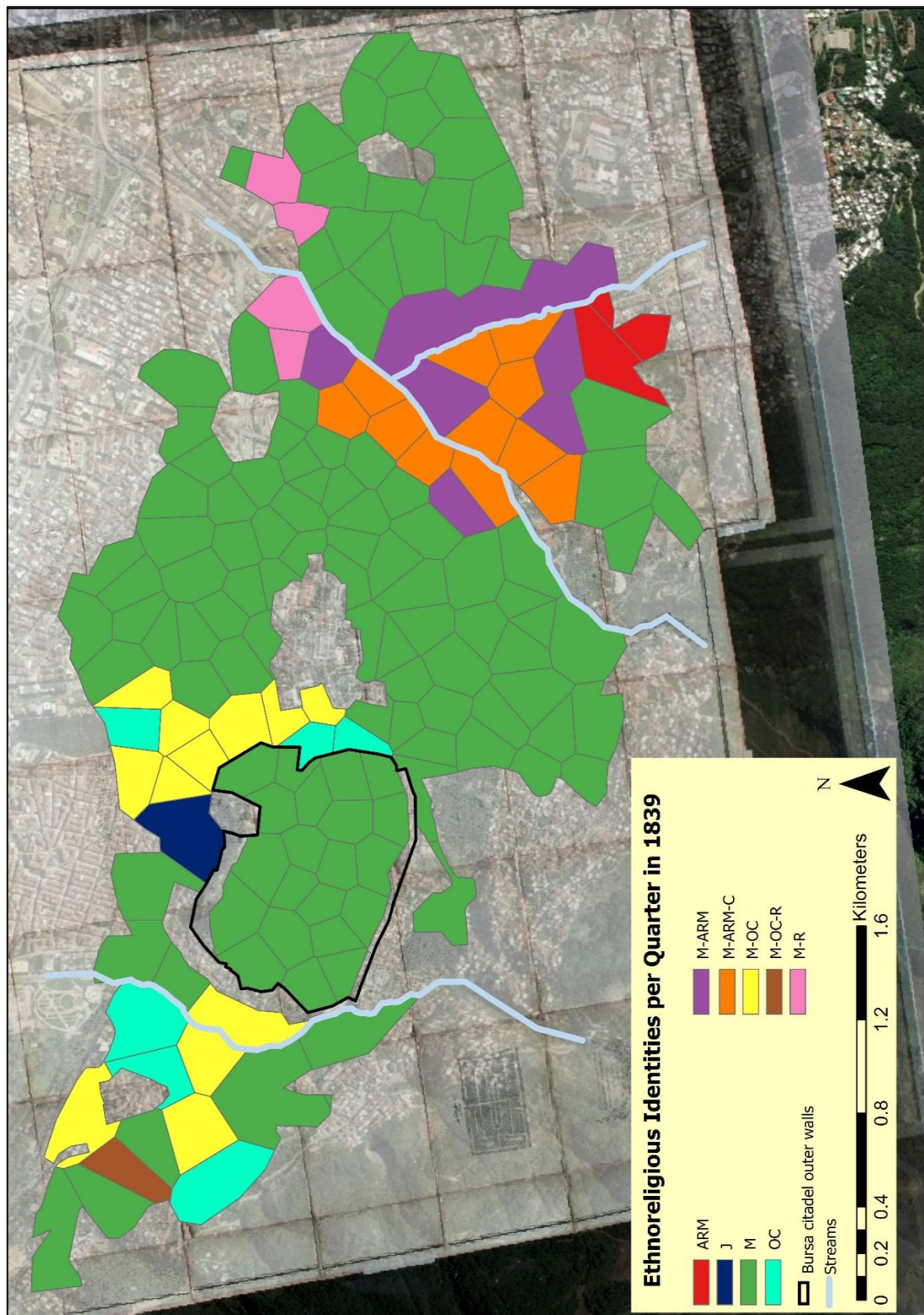
members (117 people) were not conscripted (except to the imperial band as musicians or *mehter*, as the Muslim population register shows¹⁰⁸⁹), was 0,8% and relegated to the quarters to the southeast parts. Among the non-Muslims, the **Armenians** came first with 18% (2848 permanent residents in 856 households + 50 temporary inhabitants), mainly occupying the urban area's eastern sections. The **Orthodox Christians** (*Rum*) followed them with 14,5% (2159 permanent residents in 756 households + 239 temporary inhabitants), primarily in the west and central areas. The **Jews**, who were confined only to the Kuruçeşme quarter, were four percent (652 permanent residents in 218 households + 3 temporary inhabitants). The Catholic minority, residents only in the city of Bursa like the Jews, were small minorities in the Armenian quarters because they were Armenians who had recently accepted the authority of the Roman Catholic Church.¹⁰⁹⁰ They were around one percent (132 permanent residents in 43 households + 25 temporary inhabitants).

An ethnoreligious map of the city's quarters is provided below to present the population's cosmopolitan nature (Map 8). Regarding how the internal or quarter boundaries were set: I determined a central point for each quarter based on the information provided by the Suphi Bey map and additional historical and archaeological evidence (e.g., public buildings like a mosque or public places like a central avenue). Then, the ArcGIS Pro software automatically created Thiessen/Voronoi diagrams to generate adjacent quarter polygons. The outer boundaries of the map, uninhabited areas of inns and bazaar areas, and large cemeteries are removed from the analysis to limit the extent of the quarters more accurately. In addition, the borders of the citadel and the streams were added to increase the map's accuracy by setting internal buffers. The "mixed" quarters (those shown on the right side of the legend) are not determined based on a cut-off value but instead exactly reflect the quarters' ethnic and religious composition, even if one had a single household with a different identity. After that, a map of the city's population per quarter (Map 9) follows to speculate on the links between ethnoreligious affiliation and population size.

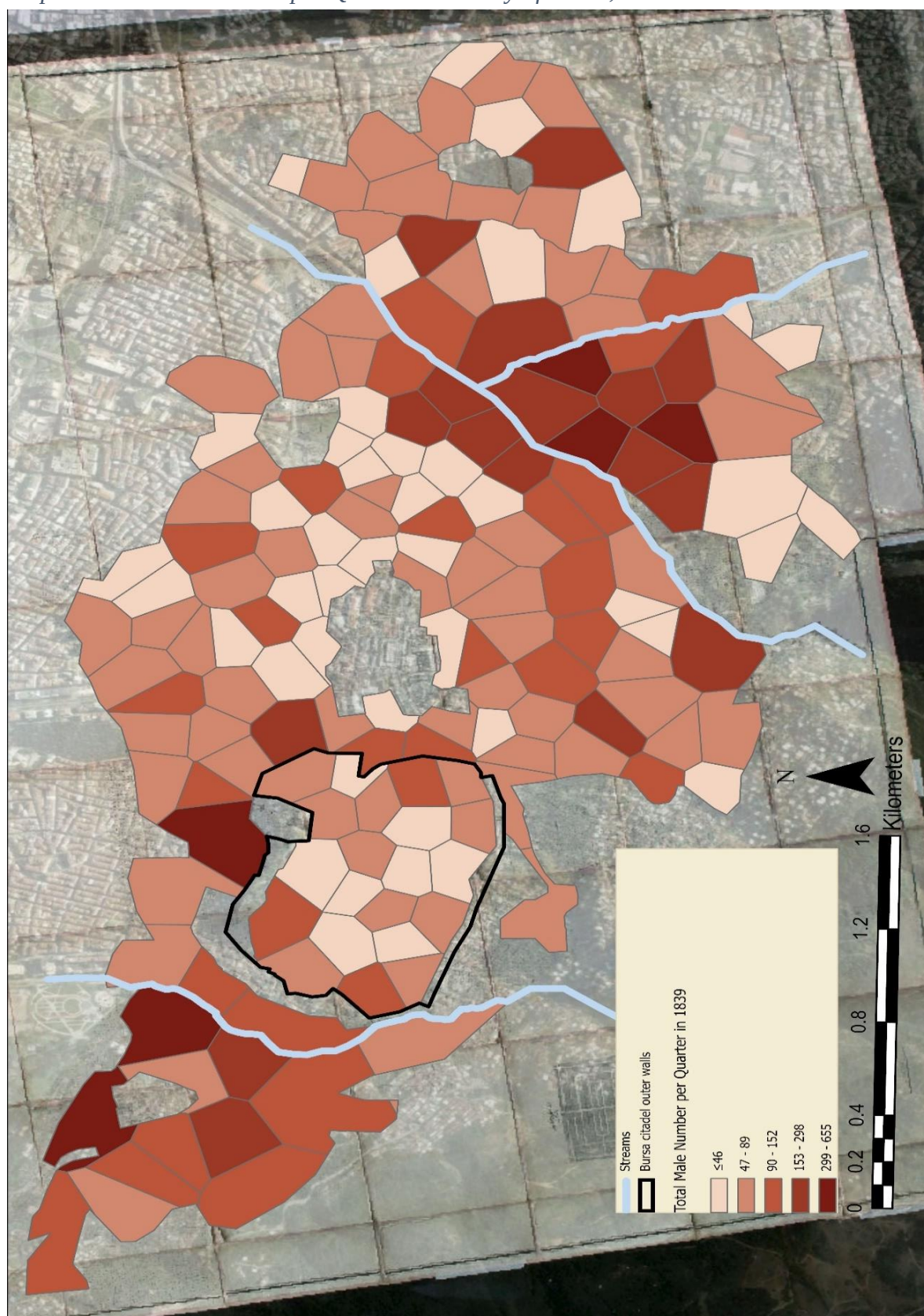
¹⁰⁸⁹ OA. NFS. d. 1396.

¹⁰⁹⁰ Although they might be considered Armenians for statistical purposes, the relationship between all Christian sects of Bursa, namely the Eutychian and Catholic Armenians, as well as the Orthodox Christians and Protestants was not without trouble. MacFarlane, *Turkey and Its Destiny*, 1850, 1:115, 252; Edmond Dutemple, *En Turquie d'Asie*, 45.

Map 8: Map of Ethnoreligious Identity by Quarter in the city of Bursa, 1839



Map 9: Total Male Number per Quarter in the city of Bursa, 1839



3.4.1.1. Household Size by Ethnoreligious Identity and the Issue of “Permanent” Tenants and Migrants

The Muslims might have dominated Bursa’s population, but they had the smallest household size, with 1,74 males per dwelling. The Muslim Roma followed them with 2,02. Non-Muslim households, in contrast, were relatively densely populated: The Orthodox Christians had a household size of 3,10 , Armenians 3,38 , Catholics 3,65 , and Jews 3. Limiting household sizes was the relatively short lifespan that, as elsewhere, prevented the formation of multigenerational households. The average life expectancy at birth, regardless of creed, was 25 to 30 and at five years of age was 45 to 47.5 years. Three to four in every ten children died before reaching their first birthday.¹⁰⁹¹

What about the differences between the household sizes of Muslims and non-Muslims? Even if the Muslim population’s decline is still a strong argument to explain this contrast, it is plausible that conscription and work- or pilgrimage-related migration might have shrunk the number of Muslims. In fact, the share of the 20-29 age cohort, where males were more likely to migrate and be drafted, in the age distribution of the total population of Bursa was less than its expected share (according to Coale & Demeny Regional Model Life Tables) despite this being not affected by ethnoreligious affiliation.¹⁰⁹²

Upon close examination of the population data, it is evident that non-Muslims were likelier to live with their kin (e.g., married brothers, sons-in-law, brothers-in-law, nephews) and tenants (*müstecir*) than Muslims.¹⁰⁹³ Cultural and economic influences aside, because they were constrained to specific sections of the urban area, which remained nearly unchanged for centuries¹⁰⁹⁴, it can be speculated that they did not expand their residential areas (or perhaps *could not*, given limitations on the size and construction of non-Muslim houses until the Tanzimat¹⁰⁹⁵). A British consular report from 1861 shows that this situation

¹⁰⁹¹ Erünel, “Examining Age Structure and Estimating Mortality Rates in Ottoman Bursa Using Mid-Nineteenth-Century Population Registers.”

¹⁰⁹² Ibid., 190.

¹⁰⁹³ This was the case for the non-Muslims of Salonica in the mid-nineteenth century, for instance. 25 percent of the Christians and 60 percent of the Jews derived their extra-occupational income from renting rooms in their houses primarily to combat poverty. Kaya, ““Living off Others’ Aid”,” 335.

¹⁰⁹⁴ In this case, the Jews of Bursa were truly a “gated community” in the 1700s. Their only quarter was separated from the rest of the city by large gates on the two side entrances. Raif Kaplanoglu, “En eski Bursalılar Yahudiler,” *Yeni Bursa İnternet Gazetesi*, December 11, 2013, <https://www.yenibursa.com/en-eski-bursalilar-yahudiler-makale,107736.html>.

¹⁰⁹⁵ Ali İhsan Karataş, “Bursa’daki Uygulamalar Işığında Osmanlı Devleti’nde Gayrimüslimlerin Meskenleriyle İlgili Düzenlemeler,” *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 16, no. 2 (2007): 123–54.

was already changing. Muslims were increasingly getting drafted into the army, and their permanent population was declining. As a result, in light of rising living costs and shortage of money, they were more than willing to sell their houses to non-Muslims, who were more crowded per household and more so through migration to Bursa.¹⁰⁹⁶

The issue of tenancy contributed to the larger household size of the non-Muslims as much as their propensity to form extended households. The Armenians took the lead in this aspect. 161 Armenian households lived as tenants in others' houses, and 49 lived in separate homes. Tenancy was essential to their lives, so much so that three temporary residential areas known as the "chambers" (*odalar*) were counted as part of their neighborhoods. 31 Armenian households occupied eleven chambers in the Mufti Chambers, the Bahçe/Garden Chambers had 38 households in 17 residences, and the Armenian Chambers housed 24 households in 17 rooms. With them, the total number of tenant Armenians in the city of Bursa rises to 303. Tenancy among Orthodox Christians was less pronounced, with 81 Orthodox Christian households living with a co-religionist's family and two in separate dwellings. The Christian tenants mainly lived on the peripheries and along the rivers. Within the Jews, 26 households lived as tenants with their host's family, and 13 stayed in separate houses. Usually, the temporary non-Muslim populations are annotated with a note on where they paid their last poll tax and would pay the next, which was not the case with the tenants, a treat distinguishing them from temporary stayers in the city.

Muslims rarely lived with their kin and tenants. However, available empty Muslim houses and the non-existence of prohibitions on the expansion of residential spaces created a different situation, revealed by a critical stylistic difference between the 1830 and 1839 registers. The 1830 enumerations provide much more detailed information on the origins of the inhabitants than the 1839 records. It appears that the birthplace of about one-fourth (1299 out of 4961, or 26%) of Bursa's Muslim household heads was outside the city, with 60% (781) being from the region's villages, especially from the relatively poor and subsistence-farming Atranos and Harmancık, and the rest, excepting the Morean migrants, being from other areas, primarily from the Hüdavendigar province, central Anatolia (e.g., Ankara, Eskişehir, Konya, Tokat, Sivas), and a variety ranging from Erzurum to Damascus and from

¹⁰⁹⁶ Akkuş, "Meşrutiyet'ten Cumhuriyet'e Bursa Kent Tarihinde Gayrimüslimler," 59.

the Black Sea to Belgrade to Algeria. The residents from the region's (mainly central and southern) settlements and Hüdavendigar province (Kütahya, Karahisar, Balıkesir, and Bilecik) lived on the peripheries and streamside quarters of Bursa and opened conduits to the environs of the region. This finding is largely unidentified in the non-Muslim population, only about two percent of whose household heads were born elsewhere. It seems that incoming new residents from the region made up for the decline of Bursa's Muslim population.

The phenomenon of widespread tenancy among the non-Muslims and a significant minority of migrant households in the case of the Muslims call into question the theoretical borders separating the "urban" from the "countryside" and "permanent" (*yerli*) from the "temporary" (*yabancı/perakende* – parts of Ottoman administrative taxonomy for centuries.) That the total permanent population figures slightly differed from 1830 to 1839 does not ensure their content largely remains the same but at least reassures that these phenomena had persisted for some time. Many non-Muslim tenants were present in both registration periods. Still, we do not know their place of origin to argue whether sudden events such as the large Armenian flight from Eastern Anatolia following the 1828-1829 Ottoman-Russo War or tumultuous events in Anatolia and the Balkans caused the prevalence of tenancy. Perhaps, then, being a tenant had more profound cultural, economic, and administrative implications.

Though separated by taxonomy, the non-Muslim tenants and permanent Muslim migrants had an overlapping occupational structure. Service sector occupations were usually transporters, second-hand items dealers, small sellers in the bazaar, peddlers, and mostly armed or domestic servants. Manufacturing sector saw a greater ethnoreligious division – weavers (e.g., Armenian *basımacıs* and Orthodox Christian *sandalcıs*), carpenters, and shoemakers were generally non-Muslim, and tanners, ironsmiths, and silk-spinners (*dolapçı*) almost all Muslims. It seems that the rise of silk-weaving activities during the Continental Blockade continued to attract laborers. But, the agricultural sector, which employed most of them and corresponded meaningfully to these people's spatial distribution in the city, leaves little doubt about their origin. They were day laborers (*rençber* [mostly agricultural]) and woodcutters regardless of confession. In addition, a community of Muslim millers from

Akhalsikhe and flour-makers/traders (*uncu*) from Alexandretta were active in the western section. I will contextualize the economic weight of these activities in subsection 3.4.1.

Nevertheless, we may conclude that the constant need for agricultural and industrial jobs in the city and the plain created a “longer-than-temporary” population in Bursa. When this phenomenon started, the extent to which the plague episode and the declining Muslim population had been responsible for it, and whether guilds wholeheartedly welcomed these people, are unknown. In light of this finding, we must skeptically approach the administrative categories.

3.4.1.2. Houses and Households

The relationship between the households and the houses they occupied is often untouched. With its position on the slopes of Mount Olympus, the city’s narrow, dead-ended, and ill-paved streets and natural barriers limited the expansion of its quarters. Dead-ends were a typical feature of the oriental urban fabric because the streets did not lead to homes but vice versa. The roads were an extension of the houses, highlighting households’ private and autonomous nature.¹⁰⁹⁷ The city’s homes deserve a brief mention to further illuminate life in quarters, social differentiation, and the influence of environmental features of the region on architectural types.

Muslims and non-Muslims lived in much the same Ottoman house types in Bursa.¹⁰⁹⁸ These were usually two-storied (if not single) buildings built of frail materials and generally mudbrick-filled wooden carcass structures,¹⁰⁹⁹ and “in no wise calculated to shelter the inmates from either heat or cold.”¹¹⁰⁰ Several commentaries on the situation of Bursa houses converge on the idea that they were “tumble-down,” “tottering,” looking like they were

¹⁰⁹⁷ Doğan Kuban, *Türk ve İslam Sanatı Üzerine Denemeler* (İstanbul: Arkeoloji ve Sanat Yayınları, 1982), 207.

¹⁰⁹⁸ Maurice Cerasi, “The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures,” *Muqarnas* 15 (1998): 132; Rafet Metin, “Şeriyeye Sicillerine Göre XVIII.Yüzyılda Bursa Evleri ve Kullanılan Eşyalar,” *Journal of Turkish Studies* 9, no. 1 (2014): 359.

¹⁰⁹⁹ M. Asım Yediyıldız, “XVII. Asır Bursa Evleri (Bursa Şer’iye Sicillerine Göre),” *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 12, no. 1 (2003): 185–92; Mehmet S. Erhan, “Bursa Halkının Ahşap Mekan Kültürü,” in *Osmanlı Kültüründe Bursa*, ed. Hasan Basri Öcalan (İstanbul: Türkiye Yazarlar Birliği Bursa Şubesi, 2003), 27–37; Feyza Aksoy, “17. ve 18. Yy Bursa Evleri Yapı Çözümlemesi” (MA Thesis, İstanbul, Mimar Sinan Güzel Sanatlar Üniversitesi, 2011); Metin, “Şeriyeye Sicillerine Göre”; Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 158–59.

¹¹⁰⁰ BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 252.

“going to decay.”¹¹⁰¹ Architectural remains show us that the Muslim dwellings were about a hundred square meters per story, with usually two to three rooms.¹¹⁰² They were typically enclosed with a thick wall up to the second story.¹¹⁰³ The dwellings of the wealthier sections (mostly Muslims) were fine, large mansions known as *konaks*.

A close study of the Suphi Bey map shows that a distinctive feature of Bursa houses was that they usually included small garden plots (more on this in section 3.4.3.3.). The size and use of garden areas differed between Muslims and non-Muslims. The entrance to the Muslim houses was disconnected from the outside world by gardens.¹¹⁰⁴ In comparison, the gardens of the non-Muslim dwellings were visibly minor. Their buildings also tended to be adjacent, presumably to use the space more efficiently to meet their population densities, and generally directly entered the street.¹¹⁰⁵ We can also guess the interiors of the non-Muslim houses were organized to accommodate crowded households, for example, by reducing the size of shared spaces like depots. An example of garden plots extracted from the Suphi Bey map can be seen in Figure 4.

¹¹⁰¹ Comments are in order of appearance MacFarlane, *Turkey and Its Destiny*, 1850, 1:108; Levinge, *The Traveller in the East; a Guide*, 232; Schneider, *Letters from Broosa*, 35.

¹¹⁰² Aksoy, “17. ve 18. Yy Bursa Evleri.”

¹¹⁰³ Ibid.

¹¹⁰⁴ Erhan, “Bursa Halkının,” 28–29; Elizabeth Schneider also made a note of this: “The front of a dwelling house usually faces the dooryard, and has no reference to the street.” Schneider, *Letters from Broosa*, 83.

¹¹⁰⁵ Sinem Türkoğlu, “Formation and Transformation of Urban Fabric in the 19th Century Bursa” (MA Thesis, Ankara, Middle East Technical University, 2002), 35–37.

Figure 4: A detail from the Suphi Bey map showing the built environment (painted gray), courtyards, Cilimboz river in the middle, and gardening areas in the city of Bursa, c. 1859



3.4.2. Temporary Population

A total of 1760 males were recorded *officially* as temporary inhabitants in 1839. We should remember that this figure is from before the boom in factory production in the city. The thirty inns located at the urban center housed most of the temporary inhabitants (their map is in section 3.4.3.2.). Some of the inns were extensive and contained forty to fifty rooms and were used as depots, stables, warehouses, markets, and for selling items such as agricultural produce. Before the opening of hotels in the eastern extremity of the city and the village of Çekirge nearby in 1845, even wealthy visitors had to stay in the inns.¹¹⁰⁶

¹¹⁰⁶ İsmail Yaşayanlar, *Osmanlı Dönemi Bursa Otelleri* (Bursa: Nilüfer Belediyesi Akkılıç Kütüphanesi Yayınları, 2013), 42.

In most cases, social and occupational networks cut across ethnoreligious and place of origin among the merchant and laborer inn stayers. Certain inns were reserved for particular ethnoreligious groups, occupations, or people sharing the same birthplace. For instance, flour traders (*uncu*) from Alexandretta and porters and watchkeepers (*pasban*) from the İbradı town of the district of Antalya (south of Turkey) were dominant in the fourteenth-century Kapan (Measurement) Inn, which was populated solely by the Muslims. A crowded community of Western Macedonian Orthodox Christians laborers filled the Yoghurt Inn. *Aba* makers and merchants from Bulgarian lands rushed to the Simkeş Inn, where they stayed for long periods, sometimes years. A small community of Armenian and Muslim merchants from central and eastern Anatolia neighbored them. Thinking that merchants, moneylenders, and caravan organizers, who established vast economic networks, had their offices in the inns, and the arrival and return of villagers and intermediaries paying a short visit to the inns and marketplaces, human movement in the city must have been greater than what the register could capture.

Due to the city's economic activities and needs, some temporary inhabitants found shelter elsewhere. Those working as saddlemakers, bakers, tanners, millers, coffeehouse and bath servants, post riders (*menzilhane sürücüleri*), agricultural laborers, and communities of specific manufacturing sectors, such as the block-printed-silk-and-cotton-fabric (*basma*) producers from Mosul, and many other laborers staying in various shops formed a sizeable portion of the migrants in the urban landscape.

Work-related migration of the city's residents must have formed an important share of the total immigration. Because the causes of why one left his home were not written, we cannot truly establish its significance. Further studies on population registers from important port towns and neighboring towns may reveal if the region's inhabitants were active in other areas. That said, we know that the city's merchants were active in various parts of the Empire between the 1800s and 1840s to market their wares and lend money. The surviving inheritance inventories of those who died in locations other than Bursa show trade destinations such as Istanbul, towns of Asia Minor, Egypt, Greater Syria, and Russia. Bursa's

inns were the final destination for a vast clientele of merchants and guests from Anatolia, the Balkans, Europe, the Arab lands, Egypt, and Iran.¹¹⁰⁷

Students and scholars annually flooding the city caused another source of significant migration. Nearly 500 students, most of whom were between 14 and 30 years of age, were learning Koran by heart and studying other Islamic disciplines in twenty-six madrasas (which were either part of a mosque complex or a waqf-supported institution). One must be cautious that the number of operating madrasas in the city in the mid-nineteenth century was at least 36.¹¹⁰⁸ By 1839, the primary (*sıbyan*) schools and madrasas were the only educational institutions accessible to ordinary Muslims. Institutions inculcating worldly knowledge were the palace and military schools. The first military school of Bursa opened in 1845, and the first secondary school (*rüşdiye*) in the 1850s.

Owing to Bursa's position in the learning hierarchy, many boys from mostly around the Hüdavendigar province attended the madrasas in the city, and their movements were recorded in the registers.¹¹⁰⁹ Raif Kaplanoğlu argues that poverty must have been an important factor in attending madrasas since the mountainous section in the south (Atranos and Harmancık and the surrounding townships), where economic opportunities were limited, sent their children and young to these establishments primarily to find better and free shelter and food.¹¹¹⁰ Given the migratory habits of the adults of these regions, such as having households in the city (see section 3.4.1.1) and seeking economic opportunities in İzmir's hinterland (see 3.3.3.5), this phenomenon is not surprising.

¹¹⁰⁷ Öztürk, *Tarihte Bursa Esnafı: Sermaye, Borç ve Alacakları Açısından (1800-1839)*, 175–97.

¹¹⁰⁸ Mefail Hızlı, "XIX. Yüzyıl Ortalarında Bursa Medreseleri ve Müderrislerine Yapılan Yıllık Ödemelere Dair Bir Belge," *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 20, no. 1 (2011): 8.

¹¹⁰⁹ The primary schools do not even appear in the registers. Given the number of Muslim boys under 9 was 2082, this student potential enables a rough approximation of one primary school per quarter, which would turn their number as 164. The combined number of traditional primary schools and those modernized by the state until 1880 was given as 225 in the state yearbook of 1881. Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 221–22; Moreover, the Orthodox Christian, Armenian, Catholic, and Jewish educational institutions that were opened mostly in the nineteenth century and serving the needs of their community in Bursa were neglected not only in the registers but also in the Suphi Bey map. There were at least three Orthodox Christian, two Armenian, one Catholic, and one American Board school open between 1820 and 1870. For more information regarding the schools of Bursa's non-Muslims, see Akkuş, "Meşrutiyet'ten Cumhuriyet'e Bursa Kent Tarihinde Gayrimüslimler," 122–38; and Pardoe, *The City of the Sultan*, II:254–55.

¹¹¹⁰ Kaplanoğlu, *1830-1843 Yılları Nüfus Defterlerine Göre Bursa'nın Ekonomik ve Sosyal Yapısı*, 125.

In addition, many dervishes registered in seven zawiyas, and presumably dozens of unregistered dervishes in dervish convents were the other guests of the spiritually venerated city of Bursa.

3.4.2.1. *Foreign Citizens and Consulates*

As western states' economic and political interests grew, so did pull factors for Europeans to settle in Bursa. Many Europeans annually visited Bursa and found their graves here after establishing mercantile enterprises and consulates in the urban area. A community of foreign citizens of 110 males (including those who acquired citizenship later) was reported to stay in 1845.¹¹¹¹ The British, French, and Russians were overrepresented among the Europeans. The Americans, Prussians, Austrians, Italians, Wallachians, and Greeks accompanied them. Nine Iranians, mostly consular staff, were the only registered eastern society.

The Europeans' number in the city seems to have slightly increased from the "ten to fifteen Frank families" reported by Elizabeth Schneider a few years prior.¹¹¹² From 1838, Bursa had four consulates until 1845: the British (the earliest), French, American, and Russian,¹¹¹³ to whom many countries, including Austrians, Dutch, Belgians, Italians, Neapolitans, Tuscans, Romanians, among others, entrusted their commercial interests.¹¹¹⁴ Bursa's agricultural potential, growth in the raw silk trade, and growing European influence over the Empire's finances, Greek, Prussian, and (post-unification) Italian vice consulates were opened until 1870, with an additional British vice-consulate at Gemlik thanks to the traffic of goods therefrom.¹¹¹⁵

The European colony in the city remained small even in the early 1880s, with around eighty people.¹¹¹⁶ Whether the filature owners and European silk merchants were regularly and correctly recorded is unknown. Most likely, Bursa's proximity to Istanbul discouraged foreigners from permanently settling in Bursa for comfort concerns and business convenience. Aided by a regular steamer connection, a journey to Bursa was just an overnight

¹¹¹¹ OA. NFS. d. 1731 (AH. 1261 / 1845).

¹¹¹² Schneider, *Letters from Broosa*, 54.

¹¹¹³ Ibid.

¹¹¹⁴ Yaşayanlar, "Bir Anadolu Şehrinde Frenk Kolonizasyonu: Bursa'da Fransız Varlığı (1834-1926)," 128.

¹¹¹⁵ BPP, CP, No. C.530, LX (60), *Reports relative to British Consular Establishments*, 1872, 54.

¹¹¹⁶ Edmond Dutemple, *En Turquie d'Asie*, 42.

trip for Istanbul's long-established foreign colony. Moreover, silk exports were made only from Istanbul, so their presence there was crucial.¹¹¹⁷

Other than consular officials and economic guests, the most important permanent foreign communities were the American Board (Protestant) and French Catholic missionaries who worked to change the religions of the Armenians and Orthodox Christians and have them choose American or Western European style lives by funding their families. After their clashes with local Christian authorities subsided in the 1860s, both missionaries opened their churches in the city with growing followers. Especially the protestants opened up fifteen missions across the whole region and had a congregation of more than five hundred followers, one-third living in the city.¹¹¹⁸

3.4.2.2. *Banished Officials: Permanent Guests of Bursa*

As much as it was a preferable destination for many political retirees, Bursa was among the most important places of banishment in the Ottoman Empire. Many perpetrators of political, civil, religious, and moral offenses were exiled from all over the Empire for a brief or long period. Especially the officeholders who incurred the displeasure of the central administration due to frequent reversals of the Ottoman policy and various misconducts and allegations were sent to the city, and its environs, which became the habitual asylum of many demoted and dismissed viziers, soldiers, judges, and other political and religious figures. The choice of the region was obvious: An exiled Grand Vizier in 1879 was told by an official that Bursa was "...a neighborhood of Istanbul. You will be disturbed."¹¹¹⁹

Our knowledge of the impact of the political exiles on urban life is limited to archival records justifying or terminating their banishment.¹¹²⁰ A register of imprisonments in the fortresses and exiles (*kalebend defteri*) for 1826–1833 shows that Bursa received seventy-six deportees—more than any other region except Bozcaada (with eighty-two) – though the term

¹¹¹⁷ Erder, "The Making of Industrial Bursa," 235.

¹¹¹⁸ Önal, "Amerikan Board Kayıtlarına Göre Protestan Misyonerlerin Bursa ve Çevresindeki Faaliyetleri (1833-1883)"; İsmail Yaşayanlar, "Les Soeurs de Charité Misyonu'nun Bursa'daki Faaliyetleri," *Bursa'da Yaşam*, October 2018, 82–85.

¹¹¹⁹ Raif Kaplanoğlu, *Meşrutiyet'ten Cumhuriyet'e Bursa (1876-1926)* (İstanbul: Avrasya Etnografya Vakfı Yayınları, 2006), n. 162 on page 132. The Grand Vizier was Mütercim Rüşdi Pasha.

¹¹²⁰ Ali İhsan Karataş's work on the causes and consequences of exiles should be noted here. Ali İhsan Karataş, *Osmanlı Dönemi Bursa Sürgünleri (18-19. Asırlar)* (Bursa: Emin Yayınları, 2015).

of the seventy percent of them did not exceed a year.¹¹²¹ Among the most internationally-acclaimed political prisoners were the Greek Metropolit Anthimos (stayed in 1783-1807), Emir Bashir Shihab II, the only Maronite ruler of Mount Lebanon who ruled Lebanon for forty years and later allied himself with Mehmed Ali Pasha (stayed with his family for a short time in the late 1840s), Abdelkader el-Djezairi, who orchestrated the Algerian revolt against the French, (between 1853-1855), and Ilarion Makariopolski, one of the prime actors for an autonomous Bulgarian church (between 1862 and 1864).¹¹²²

The population registers offer a glimpse into the political exiles' social life because they were recorded as part of the settled population with a note stressing their non-belonging to the city's community. Again, this information is subject to the will and aims of the record keepers. For instance, the registers are quiet on the many ex-Janissaries and Janissary-affiliated officials exiled to the city. But, as we understand from the ten households led by banished political figures in 1830, they were atypical in their size and composition.

Take, for example, the home of Ibrahim Pasha, who was once the protector of the straits to the Black Sea and governor of the districts of Bursa, Karesi, Izmit, and Eskişehir from the 1810s until 1823.¹¹²³ Until his death in 1849, the Pasha stayed in a large mansion at the center of Bursa with his five sons, chamberlains, tens of Muslim servants from Bulgaria and the Black Sea region, African slaves, his tobacco and hookah preparer, and several stablemen.¹¹²⁴ Elizabeth Schneider, who visited his extensive house, described thirty to forty people attached to the household, including three wives and several concubines.¹¹²⁵ Like other recorded deportees, he lived in luxury with his family and received a monthly stipend from the government. Actually, his annual income of 90.000 *guruş* made him the top income earner in the city by 1845.¹¹²⁶

¹¹²¹ Sibel Kavaklı, "929/a Numaralı Nefy Defterinin (1826/1833) Transkripsiyon ve Değerlendirmesi" (MA Thesis, Tokat, Gaziosmanpaşa Üniversitesi, 2005), p. 618, quoted in Dağlı, "Kütahya in the Eighteenth Century," 222.

¹¹²² Ubicini, *La Turquie Actuelle*, 51–52; Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, 150; Mevsim, *Bulgar Gözüyle Bursa*, 9.

¹¹²³ Satıcı, "19. Yüzyılda Hüdavendigar Eyaleti," 14–15, 23–24.

¹¹²⁴ OA. A.} AMD. 12 / 61 (AH. 1265 / 1849) (death record); OA. NFS. d. 1391 ; 1396 (registers).

¹¹²⁵ Schneider, *Letters from Broosa*, 66.

¹¹²⁶ OA. ML. VRD. TMT. d. 7428 (1261 / 1845).

3.4.3. A General Overview of Economic Activities in the City in the Mid-Nineteenth Century

With the factories emerging on its periphery, the city of Bursa acquired a distinctly industrial character differentiated from the economic activity at the city center and, arguably, became the most industrialized town of the Ottoman Empire in the mid-nineteenth century.¹¹²⁷ M. Erdem Kabadayı and Murat Güvenç have analyzed the occupational distribution of chosen regions in current western Turkey, Bulgaria, and Greece based on the registered occupations in the tax surveys. The occupations in Bursa have the highest level of “dissimilarity and diversification, since Bursa was a center for industrial production and administrative functions, and hence had a diverse urban economy.”¹¹²⁸ It seems that the vibrant and multifaceted nature of the city’s economy in the early sixteenth century was continuing with slight modifications.

As can be gauged from the self-reported occupational information stored in the tax surveys, the diversified occupational structure of Bursa points to an occupational structure shaped primarily by the manufacturing and services sectors. A market inspection register from 1827 included 116 officially recognized artisans and merchant guilds with at least 3672 shops. The 1830 population master register recorded 215 different artisan and trader classes.¹¹²⁹ Whereas a myriad of administrative and service jobs, ranging from qadi to guardsmen to dancers, are not here, it would still be historically inaccurate to relegate laborers to shop, as many occupations were partially or entirely itinerary, like barbers, and some were performed in houses, such as weaving. Also, depending on survey needs, occupational variety can be portrayed in more detail.

The *temettuat* surveys give 495 different occupational titles, for instance. 7792 out of 8083 people’s (including 457 females)¹¹³⁰ occupations were recorded (this information may be subject to change as the surveys for some quarters and some ethnoreligious groups in mixed quarters have not yet surfaced.) Their and population registers’ content has been

¹¹²⁷ Erder, “Factory Districts,” 96.

¹¹²⁸ M. Erdem Kabadayı and Murat Güvenç, “Ethno-Religious Division of Labour in Urban Economies of the Ottoman Empire in the Nineteenth Century,” in *Working in Greece and Turkey: A Comparative Labour History from Empires to Nation-States, 1840–1940*, ed. Leda Papastefanaki and M. Erdem Kabadayı (New York: Berghahn Books, 2020), 217.

¹¹²⁹ Öztürk, *Tarihte Bursa Esnafı: Sermaye, Borç ve Alacakları Açısından (1800-1839)*, 23–30.

¹¹³⁰ I am indebted to M. Erdem Kabadayı for providing me with access to check the dataset to obtain the most up-to-date numbers. I was part of the team that entered Bursa *temettuat* data.

extensively used to study Bursa's occupational structure on quarter, urban, ethnoreligious, and gender levels and from social and economic history perspectives.¹¹³¹ This section aims to reiterate these valuable works' general findings to give a sense of the occupational structure and focus more on the work environment largely neglected in the literature.

True, the surveys give occupational descriptors on an income earner's level but still hide crucial aspects of economic life, such as by-employment, household labor, and whether people identified with their careers. Therefore, their detailed data must be taken with a pinch of salt while interpreting labor division. Fifty percent of the surveyed individuals were occupied in manufacturing and industries, 22% in service and public sectors, 12% in agriculture, forestry, and mining, 13% were dealers/sellers/traders, and 3% were in the business of transport and communication.¹¹³²

Unsurprisingly, the manufacturing and trading of textiles and clothing took the lead. By 1845, when the filatures were flourishing, silk-spinners, raw-silk-manufacturers, silk- and cotton-cloth weavers and merchants, dyers, tanners, shoemakers, and towel makers constituted some of the most prevalent occupations. On the verge of their economic importance vanishing, Bursa's guilds, that of weavers in particular, were trying their last efforts to revive their economic base.¹¹³³ A report from 1848 points out that most Armenian households had reels and wheels for reeling silk from cocoons and twisting it and had weaving machines with which they manufactured clothes, dresses, handkerchiefs, shawls, and many more. The state estimated that these home-based activities wasted ten to thirteen tons of silk to be wasted and not taxed. Immediate measures were called for to prevent unauthorized and non-taxed silk and "Bursa stuff" production.¹¹³⁴

¹¹³¹ See for instance Kaplanoğlu, *1844 Yılı Temettuat*; Mustafa İlter, "Socio-Economic Structure of 1844's Bursa According to Temettuat Register" (MA Thesis, Istanbul, Sabancı University, 2014); Fatih Yücel, "Socio-Economic Life in Three Ottoman Cities (Bursa, Kütahya and Vranje) in the Mid - 19th Century through Temettu'at & Nüfus Registers" (MA Thesis, Istanbul, Bilgi University, 2015); Serdar Furtuna, "The Barber's Mirror: An Observation on Ethno-Religious Division of Labour through Barbers of the Late Eighteenth to Mid-Nineteenth-Century Ottoman Empire in the Capital and Provincial Centres" (MA Thesis, İstanbul, Bilgi University, 2015); Uygur Karaca, "Comparing Urban Occupational Structures from the Ottoman Empire to the Turkish Republic with Imperial Russia to the USSR" (MA Thesis, Istanbul, Bilgi University, 2015); Kabadayı, "Working for the State"; Kabadayı and Güvenç, "Ethno-Religious Division."

¹¹³² Yücel, "Socio-Economic Life in Three Ottoman Cities (Bursa, Kütahya and Vranje) in the Mid - 19th Century through Temettu'at & Nüfus Registers," 69–70.

¹¹³³ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 111.

¹¹³⁴ OA. C. ML. 215 / 8889 (AH. 13-11-1264 / 11-10-1848).

Apart from manufacturers, sellers of textiles in the bazaars and dealers in second-hand clothes and shoes were also numerous. Specifically, in parallel to the specific modalities emanating from the incorporation of the Ottoman Empire into the world economy, forty-six “Europe’s merchants” (*beratlı Avrupa tüccarı*) stayed in the city in 1839.¹¹³⁵ Many workers were employed in other prevailing sectors such as food establishments, smitheries, jewelers, barbershops, coffeehouses, horseshoers, saddlers, builders/joiners, bakers, administrative and religious institutions, animal renters, and baths. This picture still falls short of thoroughly describing the complex breakdown of the work environment that included various activities ranging from brokers to beggars, traders of Mount Olympus’ ice to bagel sellers in the streets, and second-hand book dealers to musicians.

In the changing economic environment of the 1860s, when the filatures had already reached their peak number, the vice-consul Maling’s report on the industrial classes of Bursa reveals that, by his estimation, only about ten percent of the total population followed employment that required technical education and ability, such as builders, marble workers, and machinists, “and even in this estimate must be comprised many whose rude and imperfect acquirements scarcely entitle them to be ranked as skilled laborers.”¹¹³⁶ Only the silk masters of the filatures employed skilled labor on a large scale. Note that weaving had already been a decaying domestic industry and handled by handlooms by then.

Most shops were in the khan, the bazaar, and the *charshi* (*çarşı*) area at the city’s center, generally owned by waqfs and leading notables, who also rented them from the waqfs to engage in rentier activity.¹¹³⁷ The khans, or inns, were usually two-story stone buildings from the first three centuries of the Empire, with a vast courtyard and small vaulted chambers. The first floors were used as a warehouse and a stock exchange by merchants and *sarrafs*. The courtyards were where all the business was transacted. Here, the produce was weighed, bought, and taxed. The covered bazaars (including the Grand *bedesten*, Batpazarı, and Sipahpazarı) of Bursa with vaulted alleys had the same layout as those in the principal cities of Asia, where Muslim, Orthodox Christian, Armenian, and Jewish sellers and grocers (*bakkal* – where grains and flour were marketed along with a variety of daily items) dealt

¹¹³⁵ OA. NFS. d. 1398. Twenty Orthodox Christian, seventeen Armenian, five Catholics, and four Jews.

¹¹³⁶ BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 251.

¹¹³⁷ Çiftçi, *Bursa’da Vakıfların*, 96–121.

their articles on counters raised one meter above the soil. A part of the bazaars and some avenues around them were designated as the *charshi*. They were known by their historical names (e.g., shoemakers, feltmakers, quiltmakers) or their location (e.g., Kayhan, Hacı Ivaz) and sold basic necessities, raw materials, foodstuff, and drinks. Not far from the city center, a small concentration of shops and workshops existed in the bazaars of Sedbaşı (including the covered Irgandı bridge) in the east and Muradiye quarters in the west. Also, service venues such as coffeehouses, farriers, and smiths were dispersed all around the region. Houses were likely used as quasi-shops to perform small tasks and warehouses for some occupations.

There is little evidence about the working conditions of the wage earners of the bazaar and the *charshi*. Dutemple wrote that they were content with day-to-day profits and worried little about amassing for the future. Once they earned the few piastres necessary for daily maintenance, they hastened to close their counters and quietly go to take a nap in the sun or bath. Besides the three holy days for each ethnoreligious group per week that limited commerce, the occasions for rest were ample during the day. Plenty of excursion spots made leisure an essential part of life: The shade of the great plane trees on the hills of Olympus above the city, the old cemeteries shaded by centuries-old cypresses, the Pınarbaşı spring, and the gardens of Sedbaşı, in a word, they convened in all the sites which bring together the beauty of the view, the freshness, the pure water.¹¹³⁸

Industrially-minded European commentators argued that this way of understanding and practicing the trade did not bring any commercial guarantees in an era of accelerating world trade. But “despite [their] misery which increased every day,” Dutemple observed, “all this population with torn slippers; to the patched dresses, not only does not complain but takes life cheerfully and flourishes happily in the warm sunshine. Happy natural, admirably supported by the climate! Greeks, Turks, and Armenians, each has fun in his own way, does not spare himself distractions, and thus testifies by the pleasure that he takes his perfect contentment to feel alive there.”¹¹³⁹

¹¹³⁸ Edmond Dutemple, *En Turquie d'Asie*, 34–35.

¹¹³⁹ *Ibid.*, 35. My translation.

Let us quantify in all our abilities what working was like in the urban context. Maling's descriptions of the labor organization in other trades can be used to proxy for the 1820-1870 period. The employer of the work was a mere master worker with his two or three journeymen and an apprentice, often his relatives. Agreements between the employer and the worker were basically "a day's wages for a day's work;" (monthly arrangements were rarely made) and binding solely on honor or conscience. A day was reckoned from sunrise to sunset, with one or two breaks in between for meals. The city's laborers were not generally overtasked, and their tasks were generally light and healthy.¹¹⁴⁰

In 1870, unskilled industrial classes earned between one to three *guruş* daily, whereas those skilled (e.g., carpenters, masons, and builders) between 4,5 to 6 *guruş*.¹¹⁴¹ Even in light of inflation, these wages did not change significantly in nominal terms. Kabadayı and Güvenç's analysis of the *estimated* incomes in the tax surveys from 1845 reveals that most households were relatively low income. Close to 70 percent of *annual* occupational earnings were less than 500 *guruş*. Aggregate household income data show that only thirteen percent of the recorded households had an estimated income of 1000 *guruş* or more. Reflecting the income inequality estimates derived from inheritance inventories, only one percent (high-level officials, major industrialists, cloth, silk, and coffee dealers, commercial agents, etc.) could earn more than 4000 *guruş* yearly.¹¹⁴²

There was no strict ethnoreligious labor division among the city's permanent residents except for a few occupations. Armenians, Catholics, and Orthodox Christians were prominent and sometimes the only actors in certain professions, especially in the textile sector as makers, sellers, and dealers of silk/cotton cloth, furs, shoes, and tailors, in the construction sector as joiners, carpenters, brickmakers, masons, locksmiths, coppersmiths, and tinsmiths, and in the finance sector as professional *sarrafs* and jewelers. Religious and administrative tasks aside, the occupational division was more remarkable in lower and sometimes more tedious labor market ranks (in remuneration), such as farriers and tanners

¹¹⁴⁰ BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 252.

¹¹⁴¹ *Ibid.*, 253-254.

¹¹⁴² M. Erdem Kabadayı and Murat Güvenç, "Reading and Mapping Mid-Nineteenth Century Ottoman Tax Registers: An Early Attempt toward Building a Digital Research Infrastructure for Ottoman Economic and Social History," in *Digital Historical Research on Southeast Europe and the Ottoman Space*, ed. Dino Mujadžević (Berlin: Peter Lang, 2021), 167–201; Kaplanoğlu, *1844 Yılı Temettuat*, 29–37.

(almost all Muslims), porters (performed mainly by Armenians and Muslims), small traders (where Jews were prominent) and basket- (*sepetçi*), sieve- (*elekçi*), tinsmiths (*kalaycı*), and instrument players (the traditional ways of living for the Roma).¹¹⁴³

Official economic documents make cursory remarks on females and children who performed domestic tasks and directly contributed to the regional economy. Excepting the historical evidence on female ownership of production and hereditary transmission of status among military/administrative classes, preparing a fishing net, raising the cocoons, spinning silk for towel makers, carrying stuff, looking after animals, helping the adults, and many other tasks run the economy of Bursa. Although their labor was almost always not rewarded, the rise of factory production at least changed the conventional ways of earning an income. Moreover, female factory workers might have earned more than their relatives or husbands, especially when they were paid premium wages in the heyday of filature operations.

3.4.3.1. *Slavery: A Special yet Understudied Case*

Even though they were registered in the population registers, the relatively recent opening of these records has not attracted sufficient attention to slavery. The slaves (*gulam*) of Bursa were far fewer in number in 1839 than in the sixteenth century because they were no longer relied upon in industry and agriculture since the seventeenth century, for their employment was costly, and only a few well-to-do elites could own them. Before the eighteenth century, slaves were a “prestige good” whose existence in households displayed wealth. However, changes in conspicuous consumption patterns also largely ended this trend.¹¹⁴⁴ Another factor diminishing their number was the increased Western (mainly British) abolitionist pressures on the Ottoman Empire to prohibit the trade in Africans and Caucasians from the mid-nineteenth century onwards.¹¹⁴⁵ The slave trade in Africans, Circassians, and Georgians declined, but the institution died out only with the Empire’s demise.

In the late fifteenth and sixteenth centuries, the estimated number of male and female slaves sold annually in Bursa was 6000. Such a high number was not excessive, given that

¹¹⁴³ Kabadayı and Güvenç, “Reading and Mapping”; Kaplanoğlu, *1830-1843 Yılları Nüfus Defterlerine Göre Bursa’nın Ekonomik ve Sosyal Yapısı*, 126–60.

¹¹⁴⁴ Canbakal and Filiztekin, “Slavery and Decline of Slave-Ownership in Ottoman Bursa 1460–1880,” 74.

¹¹⁴⁵ Ehud R. Toledano, *The Ottoman Slave Trade and Its Suppression* (New Jersey: Princeton University Press, 1982), 91–123.

many merchants came to the city to buy slaves.¹¹⁴⁶ In 1839 and 1845, five slave dealers (*esirci*) who sold slaves and concubines in the city's old slave market (*kölepazarı*, also known as the *Avratpazarı*) were recorded in the registers and tax surveys. Because they were organized in guilds, one was their head (*esirciler kethüdası*). This occasion was their last appearance in official records because slave markets were *officially* abolished in the Ottoman Empire in 1847, and Bursa's slave bazaar at the city's center was no exception.¹¹⁴⁷ But we must remember the practice of Black slavery was outlawed in 1889 and White slavery was made illegal in 1908. Only elite Muslim households owned or registered slaves who were used in paid or unpaid domestic help¹¹⁴⁸, even though the non-Muslim ownership of slaves was not uncommon before the nineteenth century.¹¹⁴⁹

Bursa's slaves appeared only in the population registers and not in the tax surveys, since they were considered property from a legal perspective, and not, at least technically, income earners. There were eighty slaves, three of whom were manumitted (*ma'tuk gulam*). This total number may be a little higher because the master register for the Muslims misses a few pages, and at least 136 slaves (out of the overall population of 15,552 males, or 0,9%) were recorded in the 1830 enumerations.¹¹⁵⁰ Although most were registered without their origins, we can still comment on their ethnic/racial composition based on the available evidence. African (*zenci*) and Orthodox Christians (*Rum*) formed the majority, while Circassian (*Çerkes*) and Georgian (*Gürcü*) slaves were a minority. A great majority were between the ages of ten and twenty, their youngest was eight, and the oldest was 40. Considering the propensity for age-heaping, the commonality of the 10-20 age bracket may

¹¹⁴⁶ Y. Hakan Erdem, *Slavery in the Ottoman Empire and Its Demise, 1800-1909*, St. Antony's Series (New York: St. Martin's Press, 1996), 16.

¹¹⁴⁷ Ali İhsan Karataş, "Bursa Şer'iyye Sicilleri Işığında Osmanlı Devleti'nde Köleliğe Bir Bakış," *İSTEM*, no. 9 (2007): 138–39.

¹¹⁴⁸ On historical commentaries on the appearance and role of slaves in wealthy and politically powerful households, see Mostafa Minawi, *Losing Istanbul: Arab-Ottoman Imperialists and the End of Empire* (Stanford, California: Stanford University Press, 2022), especially pp. 47-51.

¹¹⁴⁹ Karataş, "Bursa Şer'iyye Sicilleri Işığında," 139–48.

¹¹⁵⁰ Raif Kaplanoglu, "1830 Yılı Nüfus Sayımına Göre Bursa'da Sosyal Yapı ve Kölelik Kurumu," in *DeFTERology: Festschrift in honor of Heath Lowry*, ed. Cemal Kafadar et al., vol. 39–40, Journal of Turkish Studies (Cambridge, Mass.: Department of Near Eastern Languages and Civilizations, Harvard University, 2013), 199.

support the fact that the slaves were generally freed after ten years of service.¹¹⁵¹ The tax surveys recorded six “Africans,” who were likely manumitted. Most freed ones did not have a title implying their previous status. On the other hand, generic slave names such as Abdullah, Hurşid, Mercan, Selim, and Hüsrev are abundant in the surveys, meaning they continued to work in the city or region.

The slaves did not solely perform domestic tasks. People from various occupations, such as butchers, mule-renters, coffeehouse operators, shoemakers, towel makers, and silk spinners, owned a slave, suggesting they helped in the workplace and other services such as debt collection. Despite this valuable picture of slavery, the registers are silent on the vital issue of female slaves and concubines who were a part of wealthy households as wives and domestic servants and sold in vast slave-trading networks connecting various Ottoman regions.¹¹⁵²

British diplomatic and commercial representatives throughout the Empire were keenly monitoring the state of slavery. The vice-consul Sandison’s report prepared in 1841 illuminates the origins, commonality, and treatment of slaves in Bursa: “The state of slavery which exists here is in its mildest form, as common throughout Turkey. Some of the richer Mussulmans purchase either African blacks, or Circassians and Georgians, who are placed on the footing of members of their families, or domestics. They are sometimes, but rarely, resold; and I have never heard of their being treated with inhumanity as slaves, nor does their caste or colour depress them in society.”¹¹⁵³

The case of Hurşid concurs with this statement. He was the Orthodox-Christian-origin slave of Tahir Ağa, one of the prominent notables-cum-tax-farmers of Bursa, an influential figure in Mudanya, later a member of the provincial council, and finally, the governor of Bursa as a Pasha in 1861. Hurşid was fifteen in the 1830 register and was manumitted in

¹¹⁵¹ Toledano, *The Ottoman Slave Trade and Its Suppression*, 111; Karataş, “Bursa Şer’iyye Sicilleri Işığında,” 144; Sema Keleş-Yıldız’s study of the Bursa court records from the first half of the eighteenth century found that 24 of the 28 cases that involved slaves were about their manumission. Sema Keleş Yıldız, “18. Yüzyılın İlk Yarısında Bursa’da Sosyal ve İktisadi Hayat” (PhD Thesis, İstanbul, Marmara Üniversitesi, 2019), 103–14.

¹¹⁵² Yahya Araz and İrfan Kokdaş, “In Between Market and Charity: Child Domestic Work and Changing Labor Relations in Nineteenth-Century Ottoman İstanbul,” *International Labor and Working-Class History* 97 (2020): 81–108; İrfan Kokdaş and Yahya Araz, “The Changing Nature of the Domestic Service Sector in 19th-Century İstanbul: Female Slaves and Wage-Earning Girls,” *Archiv Orientalní* 90, no. 1 (2022): 61–91.

¹¹⁵³ BPP, CP, No. 405, XLIV (44), *Correspondence with Foreign Powers, not Parties to Conventions giving Mutual Right of Search of Vessels suspected of Slave Trade, 1841 (Class D)*, 1842, 77.

1837 at 22. Having lived as a servant in Tahir Ağa's mansion with other slaves for a while, Hurşid owned his own house in the same quarter. Now recognized as Hurşid "Ağa," he became a shoe maker/dealer (*haffaf*) and the warden of the guild of shoemakers (*haffaflar kethüdası*), with a high annual income of 2000 *guruş* in 1845.¹¹⁵⁴

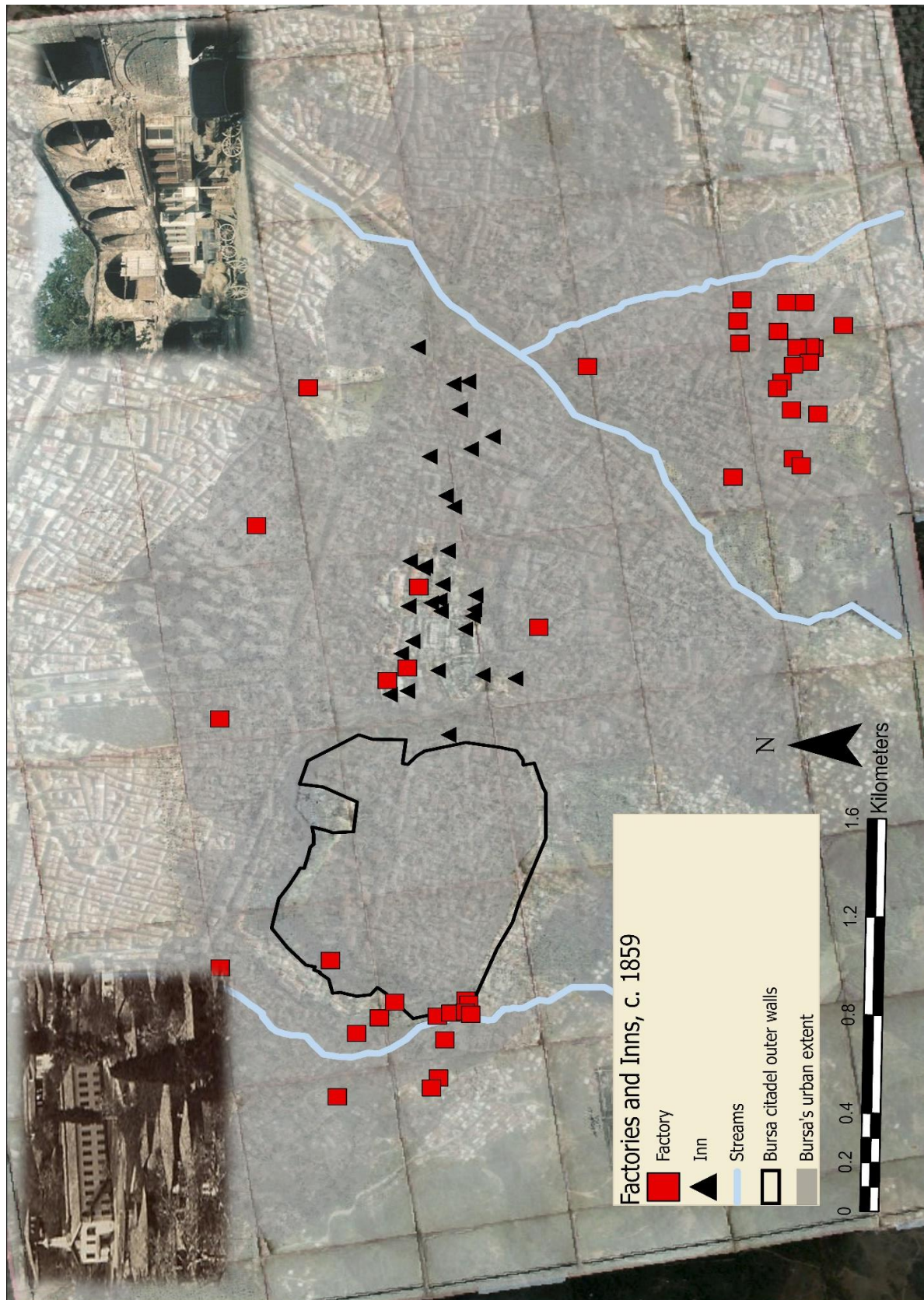
Moreover, fifty-eight households had servants (*tebaa* and *hizmetkar*) in place of or in addition to slaves. In total, there were at least 294 servants performing various domestic, workshop, and other (e.g., *çiftlik*) tasks, generating estimated incomes from 100 to 2000 *guruş* annually in 1845. Some of them were ex-slaves, judging from their names.

3.4.3.2. Filatures: The New Work Environment

Despite Dutemple's observation about the common wage owners' contentment with their daily profits, those employed in the silk industry – especially the weavers and silk spinners and dealers – were likely dissatisfied with their radically decreasing earnings and disappearing business ventures. As much as the filatures transformed Bursa's labor organization, they also had a severe urban and environmental impact. Because they were founded near rapidly running water sources to operate the mills and dispose of cocoon-boiling wastewater, the filatures' concentration along the major streams of Bursa resulted in a spatial differentiation. A map of the central bazaar area with inns and factory locations makes this clear in Map 10, prepared using the Suphi Bey map, where 30 inns and 42 factories are observed.

¹¹⁵⁴ OA. NFS. d. 1393 (AH. 1246 / 1830), p. 146, household 5; 1396 (AH. 1255 / 1839), p. 15, household 17; ML. VRD. TMT. d. 16039 (AH. 1261 / 1845), p. 8. When he died in 1847, his gravesite in the Pınarbaşı cemetery is marked with a tombstone with a beautiful verse written on it. Bedri Mermutlu and Hasan Basri Öcalan, *Pınarbaşı Mezarlığı*, vol. 1–2, Tarihi Bursa Mezar Taşları, III (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2016), 322 (Vol. 2); Hurşid was not alone in his fate. In 1794, the inheritance inventory of a merchant Hacı Hasan was valued at an enormous sum of 721,846 *guruş*. Hacı Hasan had once been the slave of a Çingilioğlu, an urban notable. Erdem, *Slavery in the Ottoman Empire and Its Demise, 1800-1909*, 17.

Map 10: Factories and Inns in the city of Bursa, 1859



I briefly outlined the transformative impact of and gross output raised from the factories in section 2.1.2.2. Just as they spatially challenged the urban sphere and organizationally transformed the occupational structure of Bursa, the filatures also had ramifications for the environment and social relations, which were interconnected. The more filatures there were, the greater of a threat they became for their surroundings. For one, these establishments' increased waste disposal contaminated the waters, making living near the streams unbearable due to the smell.¹¹⁵⁵ In 1856, a consensus was reached between the provincial council and filature owners to bury the used cocoons outside the city.¹¹⁵⁶

The forests surrounding the city space came under constant threat by the increasing demands of the factories. Because no coal was extorted from the earth, the stoves where the cocoons were boiled had to be heated with wood. For this operation, everything in the city's vicinity was devastated, and according to Perrot, writing in 1862, Bursa would soon deforest with this improvidence.¹¹⁵⁷ The heaters did not only detrimentally affect the environment. The wage-earning sacrifice of females, whose labor was disciplined, came at the cost of their lives in the heated and vitiated air of the establishments, especially during summertime.¹¹⁵⁸ Just as the working conditions in the poorly ventilated filatures were problematic, the equipment was also not adequately checked. In 1860 and 1861, superheated boilers exploded in different filatures, killing boiler room operators, wounding many in the factories with shrapnel, demolishing the factory, and damaging the buildings nearby.¹¹⁵⁹

The mushrooming of the filatures also led to private entrepreneurs' illegal appropriation of urban commons. An Austrian named Panagiotis (most likely a native Orthodox Christian who acquired citizenship) tried to build a silk factory near the citadel in 1858. However, the central administration halted his construction because the plot he selected was a vegetable garden and near a bakery.¹¹⁶⁰ Four years later after this incident, Kırmızıoğlu Kevork, a local Catholic, bypassed the restrictions on factory construction on waqf lands and

¹¹⁵⁵ Erder, "Factory Districts," 89.

¹¹⁵⁶ Cafer Çiftçi, "Bursa'da İpek Çekim Fabrikalarının Kurulması," *Bursa'da Yaşam*, December 2013, 52.

¹¹⁵⁷ Perrot, *Souvenirs d'un voyage en Asie Mineure*, 78–79.

¹¹⁵⁸ BPP, CP, No. C.68, LXVI (66), Reports from H.M. Diplomatic and Consular Agents Abroad, 1870, 253. An Orthodox Christian woman described the labor conditions in French factory in the 1880s as "exhaustive." Mevsim, *Bulgar Gözüyle Bursa*, 43.

¹¹⁵⁹ Çiftçi, "Bursa'da İpek Çekim," 52–53.

¹¹⁶⁰ OA. A.} MKT. 126 / 34 (AH. 29-06-1274 / 14-02-1858).

constructed a filature upon a waqf-owned water distribution center (*maksem*) and next to the Muslim cemetery in Kurtoğlu quarter to the east of the city. He possibly received the construction permit from Tahir Pasha, the governor of Bursa at the time, whose name was associated with corruption cases since 1846. Because Kevork cut the locals' access to water and disposed of its wastewater to the cemetery, a large mob of artisans, the ulama, and madrasa students burned the factory down in 1862. In retaliation, the perpetrators were arrested and forced to rectify the damages. A large chunk of the compensation amount could not be collected due to general cashlessness and poverty among the populace.¹¹⁶¹

3.4.3.3. *Agriculture in the Bursa City*

Historiography on towns and urbanization has long dictated the false dichotomy of urban versus rural by theorizing urban areas as “big non-agrarian settlements.”¹¹⁶² This orientation, coupled with the evaluation of the nineteenth-century Ottoman economic history as part of global capitalistic development, has biased Ottoman urban studies to highlight mainly, if not merely, the built environment and industrial and commercial activity and sideline the embeddedness of agriculture in cities.¹¹⁶³

As Onur İnal argues, urban ecology is an area that awaits exploration by the students of Ottoman history to understand the interplay between the city and environment and to contextualize “urban environments within the framework of environmental history.”¹¹⁶⁴ Voices raised against the encroachment of filatures into commons were as much as the opening and operation of these establishments. More importantly, the city had agricultural production in its core and hinterland, without which our understanding of its spatial economy of the city would be gravely lacking. Gardens were as much a part of household life as houses themselves. Therefore, a “non-agrarian” reading of the occupational data will neglect the non- and under-recorded agricultural activities engaged in by households. For one, the tax

¹¹⁶¹ For a vivid description and detailed cross-examination of this event based on Ottoman archives and consular reports, see Elçin Arabacı, “Kapitalizmin Victoria Çağı’nda Bursa’da Hukuksuzluk, Mülksüzleştirme ve Bir Şehir Ayaklanması,” in *Tanzimat’tan Günümüze Türkiye İşçi Sınıfı Tarihi 1839-2014*, ed. Y. Doğan Çetinkaya and Mehmet Ö. Alkan (İstanbul: Tarih Vakfı Yurt Yayınları, 2015), 56–119.

¹¹⁶² Erich Landsteiner and Tim Soens, “Editorial: Farming in the City,” in *Farming the City: The Resilience and Decline of Urban Agriculture in European History*, ed. Erich Landsteiner and Tim Soens (StudienVerlag, 2020), 7.

¹¹⁶³ For an excellent treatment of urban agriculture in the context of Istanbul’s bostans, see Paul J. Kaldjian, “Istanbul’s Bostans: A Millennium of Market Gardens,” *Geographical Review* 94, no. 3 (2004): 284–304.

¹¹⁶⁴ Onur İnal, “Environmental History as an Emerging Field in Ottoman Studies: An Historiographical Overview,” no. 38 (2011): 13.

surveys document household heads registered as engaging in agrarian occupations, among whom were woodchoppers (*oduncu*), foresters (*ağaççı*), shepherds, and (primarily agricultural) workers/day laborers (*rençber*). As subsection 3.3.1.2 covered, a significant minority of the city's non-Muslim tenants and a quarter of permanent Muslim households were engaged in agricultural activities.

Known for his proneness to exaggeration, Evliya Çelebi wrote in 1640 that the city of Bursa was like a “paradise garden,” and contained some “forty-seven thousand vineyards and fruit, vegetable, and flower gardens.” Its streets were “markets decorated with grapevines.”¹¹⁶⁵ Even though we cannot determine the counting unit he used, there is merit to this statement. The city was abundantly gifted with never-failing water from Mount Olympus flowing in all directions, for the supply of mills along rapid torrents, fountains at every corner and in every residential area, house gardens, and the commons for the residents' and waqfs' use. Surrounding it were “[t]hick overhanging woods begin directly above the town, while many trees, principally the tall cypress, rise up in and about it, interspersed with numerous graceful minarets and glittering domes.”¹¹⁶⁶ The inhabitants were involved in agriculture as well as in the production and processing of agricultural commodities and goods. “The great number of gardens both within and around the city,” wrote Schneider, “afford charms of rural beauty” to it.¹¹⁶⁷

True, the residents of Bursa city were more dependent on its food bazaar (set up twice a week)¹¹⁶⁸ and bakers than the rest of the region. But, food and raw material production, and to a lesser extent, animal breeding, remained an important part of a variegated household economy in urban settings, as in the case of other towns of the Bursa region. Our tax surveys were usually read from the occupational diversity and remuneration standpoint, but their data provide important and alternative insights into the ways of living and the reality of “rural beauty.” In 1845, each household had, on average, half to one *dönüm* of a vineyard and one to two *dönüm* of mulberry trees. Vegetable and fruit gardens appeared along waterways. Similarly, like their village counterparts on the slopes of Olympus, some on the upper

¹¹⁶⁵ Dağlı and Kahraman, *Günümüz Türkçesiyle Evliyâ Çelebi Seyahatnâmesi*, 2:30.

¹¹⁶⁶ Hamilton, *Researches in Asia Minor, Pontus, and Armenia*, 1842, 1:71.

¹¹⁶⁷ Schneider, *Letters from Broosa*, 35.

¹¹⁶⁸ Mevsim, *Bulgar Gözüyle Bursa*, 44.

elevations were engaged in growing chestnuts. In some cases, these agricultural properties were likely taken care of jointly by multiple households (for example, one household owned it, and their neighbor, who did not own anything, took its share of produce in exchange for looking after it).

As the Suphi Bey map shows and contemporary sources pointed out, multiple mills existed along Gökdere and Cilimboz streams and Pınarbaşı waterways.¹¹⁶⁹ When the streams dried up in the summer like other rivers of the region, grain and filature mills stopped their operations. Horses, donkeys, mules, oxen, and caravan camels were a part of the city's landscape. While some Muslims owned a few cows, some Orthodox Christian households bred sheep and goats.¹¹⁷⁰

What the population and tax data do not show about agriculture is also critical. They are silent on the potential of the gardens that completed houses, as they did not report on single trees that were not considered an economic asset or poultry, let alone the activities of the other members of households. Evidence from court records and archeological examination of the uses of the extant Ottoman houses in the early Republican period demonstrate that gardens were filled with various fruit trees and vegetables,¹¹⁷¹ without even counting the orchards and vegetable gardens filling the extensive green commons of the city. This feature allows us to argue for a degree of self-sufficiency among the inhabitants, which reduced (in some cases eliminated) dependency on purchasing fruits and vegetables that were their main diet. It also enables us to go beyond treating self-reported annual incomes as a proxy for the residents' purchasing power.

True, the burden of taxation did not escape the urbanite Bursans. Still, the monetized income figures may not be enough to quantify living standards given the resourcefulness of the region owing to the advantageous environmental conditions. Maling's report states that Bursa's workers earned wages somewhat higher than the rest of the country due to the region's proximity to the capital, but their earnings were way lower than other (though not

¹¹⁶⁹ Edmond Duteuple, *En Turquie d'Asie*, 244.

¹¹⁷⁰ A quick glance at and a brief tabulation of the agricultural activities in the city, see Kaplanoğlu, *1844 Yılı Temettuat*, 90–99.

¹¹⁷¹ Yediyıldız, "XVII. Asır Bursa Evleri," 186; Metin, "Şerhiyye Sicillerine Göre," 359; Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 159.

stated, presumably western) countries by 1870. Yet, considering the worker and his family's "primitive wants and habits, he earned very fair wages, and sufficient to maintain him after his own ideas of comfort."¹¹⁷²

The population registers contain migration information but did not record short daily visits to the forests and the large plain nearby. As mentioned above, the surplus of the city's hinterland found its way to the city, the region's largest market, for centuries. Villagers frequenting the city were as much part of it as the city's occupants were a part of the fertile plain. In fact, the city and towns of Bursa were the surpluses of the millennia of agricultural history as unchanging and imposing as Mount Olympus and as dynamic and unpredictable as the Nilüfer River.

3.5: Conclusion

The population registers and tax surveys offer micro-level cross-regional evidence on economic and population geography. Ethnoreligious characteristics, spatial distribution, and diversity of its inhabitants and their economic activities can thus be realistically portrayed before the filatures started appearing and the 1855 earthquake ravaged the city.

The Bursa region had a Muslim-majority (60%) cosmopolitan settled population of about 189.000. More than three-fourths of them lived in the area corresponding to the more agriculturally suitable and fertile Greater Bithynia region. Low life expectancy kept household sizes small, though non-Muslim households were larger due to their propensity to live with kin and tenants.

Geophysical attributes, soil suitability, elevation, water proximity, and historical contingencies all factored in the diversification of agriculture. Cultivation of tree, garden, field, and industrial crops and sheep and cattle breeding gave the region its production characteristics, where mulberry trees and vineyards were owned by almost every household. The Greater Bithynia area was significantly more agriculturally diverse than the mountainous sections in the south, which had limited production prospects.

Besides a tiny (about 1%) semi-nomadic population, agricultural opportunities in coastal areas and the plains (e.g., sowing, harvesting, shepherding) and trade in the city and

¹¹⁷² BPP, CP, No. C.68, LXVI (66), *Reports from H.M. Diplomatic and Consular Agents Abroad*, 1870, 254.

on the ports drew a temporary population of about 6000 people to the region in 1839. Most migrants were attracted to the city of Bursa, where trade and employment were at their highest. Thanks to the registers, we were able to study the issue of tenancy, migrant households, slaves, political exiles, and foreign citizens who came to the city because of its economic and political importance.

Towns or taxonomically non-rural areas had one-third of the total settled population. The economic activities in towns were heavily characterized by agriculture, and some of their inhabitants were engaged in craftsmanship, trade, and other manufacturing and service sectors. The city of Bursa had by far the highest population (about 16.000) and the greatest occupational diversity, with most of its households engaged in manufacturing and service jobs where silk production, reeling, silk and mixed-silk textile manufacturing and trade were the highlights of the economy. However, agricultural employment and by-employment were significantly high, thanks to its position near the plain and on the mountain slope and its residents' ownership of trees and animals. With the constant short-term migration from and to the city, the distinction between urban and rural categories is not as sharp as suggested by taxonomical designations.

The filatures, the new work environment, expanded mulberry plantations all around the region and gave the city new spatial characteristics by their concentration along the streams, destroying the trees for fuel, polluting the waters with wastewater, employing native females, and consuming most of the cocoon output. Their high productivity and high labor demands were in stark contrast with the rest of the city's manufacturing activities, which were light, healthy, intended primarily for the city's markets, and contented with daily profits, suggestive of why Bursa's export levels remained low except filature-produced raw silk in 1820-1870.

Part 4: Historical Life Course (HLC): A Novel Approach to Ottoman Regional and Biographical Studies

4.1: Introduction

In the previous two parts, we studied the major determinants, critical junctures, and population and production characteristics of Bursa's regional economy in 1820-1870. Instead of viewing regional economic trajectory as the inevitable consequence of deep-rooted and

long-term forces, we saw contingency as a decisive factor. Still, by my choice of narrative inquiry, I categorically presented the aspects of Bursa's economic and population geography. Moreover, implicit in any master narrative of development, such as incorporation and deindustrialization, is teleological reasoning. Can we achieve a narrative style more attuned to contingency and interconnectedness and reads history in its unfolding? Our main microdata can help.

The population and tax data were used almost exclusively in aggregate fashion while reconstructing economic and population geographies. Because these sources were the product of the same bureaucratic mindset and provide information on the residents of households, their value as individual entries is as significant as their cumulative representation. We can delve more into the peculiarities of the regional economy by tapping their full potential and using their complete information in conjunction with each other. This way, various variables of regional economic and demographic development or non-development can be studied.

The creation of longitudinal datasets from linked data, such as population registers and tax surveys, has enabled examinations of historical socioeconomic and demographic trends. Known as the "Historical Life Course" approach, the linkage of individual and household-level information from a wide range of administrative and non-administrative sources reconstructed not only life courses at the micro level but also divergent trajectories of regional economies. This part outlines the development of this approach in Western academe in the twentieth century, the evolution from manual to computerized linkage methods, and the fruitful outcomes of longitudinal databases.

No matter how rewarding their results are, the HLC studies have an excessive quantitative orientation, and the linked data is still appreciated cumulatively. I argue that the biographical value of data entries should be welcomed more. An atomic and qualitative analysis of life course trajectories of individuals, households, and communities provides a means to construct agency, stress the weight of contingency and choice, and observe the changing and unchanging elements in the macro sphere from the microcosm of people and localities. Writing life course biographies grants us access to some aspects of ordinary lives that are missing from most biographies and histories of the nineteenth century and a method

to generate this for many people in the past since the records are available for them. The life course approach is also valuable for Ottoman studies to cross-examine and complement the content of the sources to ensure their compatibility.

In the following sections, I first evaluate the complementarity between the population registers and tax surveys, whose substance and history I examined in the last part, for life course inquiries. Following that, I introduce the post-mortem Ottoman inheritance inventories, one of the oldest and the most detailed sources showing wealth components at one's death. Then, after arguing how including varied sources can enrich our analyses, I present an example – tombstones, which are the most subjective material. Ultimately, I argue that the biographical aspect of the life course approach created by juxtaposing various documents sheds light on structural and contingent dimensions of regional histories from a micro and unique perspective.

4.2: Introduction to Historical Life Course (HLC) Approach

The life-course approach is a relatively new emerging scientific concept used across various disciplines, from history to behavioral psychology to medicine.¹¹⁷³ As opposed to “lifespan” and “life cycle,” which are psychological or biological constructs, “life-course” refers to a social phenomenon and focuses on the intersection of biography and history.¹¹⁷⁴ Life-course studies are concerned with how human beings structure their lives and what transitions they and their generations undergo in connection with multiple social, cultural, economic, and demographic determinants. Thus, they require a longitudinal perspective that observes individuals at various points in life, from birth to death, and investigates the context within which their lives unfold.

Because the life-course approach is not a theory that does not need to be tested, its cross-fertilization with social science perspectives has snowballed. One critical subbranch has emerged in the field of history. The historical life course (HLC) approach aims to reconstruct and analyze individuals, families, or groups' life trajectories as they pass through time and space. It retrieves the experiences of people in chronological order and examines

¹¹⁷³ Michael J. Shanahan, Jeylan T. Mortimer, and Monica Kirkpatrick Johnson, “Introduction: Life Course Studies - Trends, Challenges, and Future Directions,” in *Handbook of the Life Course* (New York: Springer, 2015), 1–26.

¹¹⁷⁴ Duane F. Alwin, “Integrating Varieties of Life Course Concepts,” *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 67B, no. 2 (2012): 211.

variations, continuities, and discontinuities in life-course stages in the context of historical and socioeconomic circumstances. Through their methods and the long-run perspective, HLC studies permit new ways of identifying problems, formulating questions, and selecting and analyzing data in historical demographic and economic research.

Data linkage across two or more sources and the creation of longitudinal datasets are central to analyzing HLC. Data linkage is the “task of identifying and matching individual records from disparate databases that refer to the same real-world entities or objects.”¹¹⁷⁵ Records of key life/major transitional events such as birth, marriage, migration, education, employment, death, and inheritance corresponding to the same individual or a household are connected to create longitudinal data. This way, multiple transition points can be examined together to construct life trajectories. Whereas a *transition* refers to a particular time-bound event leading to changes in the life and status of people and families, a *trajectory* is the linked sequence of transitions demonstrating long-term patterns of stability and change.¹¹⁷⁶

The family reconstitution technique Louis Henry and Michel Fleury developed in the 1950s initiated the discipline of historical demography and the HLC approach.¹¹⁷⁷ The method has allowed the reassembly of families through the linkage of vital event records, mainly baptism, marriage, and burial, from parochial registers to analyze demographic behavior over the life course of individuals and in the long term. Henry and Fleury focused on fertility in France based on forty parish records from 1670-1829.¹¹⁷⁸ A prominent figure of the *Annales* school and one of the first researchers of *Institut national d'études démographiques* (INED), Henry's turn from contemporary to historical demography has influenced the subsequent generation of demographers. Then again, the most crucial problem Henry and other contemporaneous researchers faced was the time- and energy-consuming manual linking procedure.

¹¹⁷⁵ Peter Christen, *Data Matching: Concepts and Techniques for Record Linkage, Entity Resolution, and Duplicate Detection* (Berlin: Springer Science & Business Media, 2012), 3–4.

¹¹⁷⁶ Elizabeth D. Hutchison, *Dimensions of Human Behavior: The Changing Life Course* (SAGE Publications, 2010), 14–15.

¹¹⁷⁷ Paul-André Rosental, “The Novelty of an Old Genre: Louis Henry and the Founding of Historical Demography,” *Population* 58, no. 1 (2003): 97–129.

¹¹⁷⁸ Louis Henry, *On the Measurement of Human Fertility: Selected Writings of Louis Henry*, trans. Mindel C. Sheps and Evelyne Lapierre-Adamcyk (Amsterdam: Elsevier Pub. Co, 1972).

To ameliorate the linkage problems Henry faced, early in the 1970s, Tony Wrigley, one of the founders of the Cambridge Group for the History of Population and Social Structure (Campop), edited a book that offered several strategies for data standardization and rule-based automated family reconstitution. Assembling scholars of history, demography, and genetics, the book was aptly named “Identifying People in the Past.”¹¹⁷⁹ Computer-assisted methods, the six scholars of the book assumed, would make the linkages much faster and wholly consistent. However, fully automatic systems could not tackle non-systematic errors inherent in sources. The cost and feasibility of developing suitable algorithms for specific data types and building comprehensive databases in the 1970s and the 1980s led researchers to opt for semi-automated preliminary procedures.¹¹⁸⁰

Rapid advancements in computer technology since the 1990s have made reconstructing life courses faster, more efficient, and more adaptive without necessarily introducing linkage rules. Several regional reconstitutions were carried out to implement these procedures to varying extents. Campop, now equipped with more sophisticated data linkage technology, estimated nuptiality, fertility, and mortality trends in selected 26 rural communities and market towns of England from the sixteenth to the nineteenth century.¹¹⁸¹ John Knödel adopted a similar perspective in his massive study of 11.000 couples married between 1700-1899 and their 55.000 children in fourteen German villages.¹¹⁸² Kertzer and Hogan reconstructed the lives of 19.000 residents of the rural Casalecchio community in Italy between 1861 and 1920 by linking population registers with various archival materials such as tax and conscription records to analyze societal and demographic change.¹¹⁸³

¹¹⁷⁹ E. A. Wrigley, ed., *Identifying People in the Past* (London: Arnold, 1973).

¹¹⁸⁰ Eli Fure, “Interactive Record Linkage: The Cumulative Construction of Life Courses,” *Demographic Research* 3 (December 12, 2000): 11; Gill Newton, “Recent Developments in Making Family Reconstitutions,” *Local Population Studies*, no. 87 (2011): 85.

¹¹⁸¹ E. A. Wrigley et al., *English Population History from Family Reconstitution 1580-1837* (Cambridge: Cambridge University Press, 1997). CAMPOP conducts a series of data linkage projects aimed at reconstructing the evolution of occupational structure of Britain from 1379 to 1911 (<https://www.campop.geog.cam.ac.uk/research/occupations/> [accessed 4 June 2020]) and mapping the demography of England and Wales in 1851-1911 (<https://www.populationspast.org/imr/1861/#8/54.083/-2.568> [accessed 4 June 2020]).

¹¹⁸² John E. Knodel, *Demographic Behavior in the Past: A Study of Fourteen German Village Populations in the Eighteenth and Nineteenth Centuries* (Cambridge: Cambridge University Press, 2002).

¹¹⁸³ David I. Kertzer and Dennis P. Hogan, *Family, Political Economy, and Demographic Change: The Transformation of Life in Casalecchio, Italy, 1861-1921*, Life Course Studies (Madison, Wis: University of Wisconsin Press, 1989).

In the 2000s, easier access to and storage of individual-level data and the creation of relational databases have allowed for linking data across various sources and simultaneously interrogating multiple tables.¹¹⁸⁴ Optical character recognition (OCR) automated, to a large extent, the process of extracting information from handwritten records. Geographic Information Systems (GIS) technology enabled HLC researchers to map and analyze data, identify complex networks and patterns, and devise geospatial sampling models to enhance their analysis units' representativeness.¹¹⁸⁵ As a result, recent decades have witnessed forays by social scientists into quantitatively examining various aspects of life course such as nuptiality, fertility, migration, labor force participation, social mobility, socioeconomic status, and mortality using longitudinal micro-data.¹¹⁸⁶

Most of the recent HLC studies have been published as products of projects creating demographic datasets and undertaking record linkages at the regional and national levels from earlier times to the twentieth century, such as the Norwegian Historical Data Centre (NHDC), the *POPUM* database at the Umeå University [Sweden], China Multi-Generational Panel Dataset-Liaoning (*CMGPD-LN*), the Research Program in Historical Demography at Montreal University (*PRDH-IGD*) [Quebec], the Historical Sample of Netherlands (*HSN*), The Baix-Llobregat (*BALL*) Demographic Database [Barcelona], and, among others.¹¹⁸⁷ Collection, curation, and linking of large bodies of individual-level data has proved possible “the big microdata revolution” that marks the transition in historical demography from a data-poor to a data-rich environment.¹¹⁸⁸ Large-scale international collaborations such as

¹¹⁸⁴ George C. Alter, “The Evolution of Models in Historical Demography,” *The Journal of Interdisciplinary History* 50, no. 3 (2019): 346.

¹¹⁸⁵ For example, see Sebastian Kluesener et al., “Spatial Inequalities in Infant Survival at an Early Stage of the Longevity Revolution: A Pan-European View across 5000+ Regions and Localities in 1910,” *Demographic Research* 30, no. 68 (2014): 1849–64; Ian Gregory, Donald A. DeBats, and Donald Lafreniere, eds., *The Routledge Companion to Spatial History* (London: Routledge Taylor & Francis Group, 2018).

¹¹⁸⁶ Sandra E. Black and Paul J. Devereux, “Recent Developments in Intergenerational Mobility,” in *Handbook of Labor Economics*, ed. David Card and Orley Ashenfelter, vol. 4 (Amsterdam: Elsevier, 2011), 1487–1541; Cameron Campbell, “Historical Demography,” UCLA California Center for Population Research On-Line Working Paper Series (California: UCLA, 2012), <http://papers.ccpr.ucla.edu/index.php/pwp/article/download/PWP-CCPR-2012-008/123/>.

¹¹⁸⁷ To review the active longitudinal population databases list of European Historical Population Samples Network, see <https://ehps-net.eu/databases> (accessed 13 June 2020).

¹¹⁸⁸ Steven Ruggles, “Big Microdata for Population Research,” *Demography* 51, no. 1 (February 1, 2014): 287–97.

IPUMS¹¹⁸⁹, Mosaic¹¹⁹⁰, and European Historical Population Samples Network (EHPS-Net)¹¹⁹¹ have enabled scholars to access billions of interoperable records from tens of databases worldwide, thereby maximizing the possibility of conducting comparisons across time and space. In addition to and benefitting from demographic databases, genealogical organizations like ancestry.com, familysearch.org, and geneanet.org provide access to billions of linked census, vital records, and other supplemental data (e.g., educational, military, and appointment records) extending back centuries for those pursuing ancestral research.

Although the abovementioned demographic materials contain critical information for the HLC analyses, tracing individuals across various sources remains a complex problem due mainly to chronological gaps between and the diverse natures and aims of the sources. Creating biographies of people and families from datasets is a sound way to cross-check the HLC material, explore the potential of data linkages, and concentrate on the missing points in one's life course.

4.2.1. Biographical Method as a Way of Understanding Individual and Household Life Courses

Most HLC studies deal with one or a few transitions based on large aggregate data. However, they are not yet as proficient in qualitative analysis as in quantitative analysis. This situation stems from an old disconnect between social/cultural historians and social scientists.¹¹⁹² Because qualitative studies do not necessarily involve large numbers and aim for statistical

¹¹⁸⁹ IPUMS currently brings together and disseminates over 2 billion records for over 100 countries from censuses and surveys mainly from late-eighteenth to twenty-first century. The project uses data-mining technology to develop representative linked samples and GIS technology to facilitate cross-spatial analyses. The historical micro-database links over 7 million people at two points in time: <https://ipums.org> (accessed 13 June 2020). Tracy A. Kugler and Catherine A. Fitch, "Interoperable and Accessible Census and Survey Data from IPUMS," *Scientific Data* 5, no. 1 (February 27, 2018): 1–8.

¹¹⁹⁰ The Mosaic project database currently consists of over 1 million microdata derived from census and census-like material from the nineteenth century and earlier and later times for the whole continental Europe and beyond: <https://censusmosaic.demog.berkeley.edu> (accessed 13 June 2021). Mikołaj Szoltysek and Siegfried Gruber, "Mosaic: Recovering Surviving Census Records and Reconstructing the Familial History of Europe," *The History of the Family* 21, no. 1 (January 2, 2016): 38–60.

¹¹⁹¹ EHPS-Net links all-existing European and some north American and East Asian microdata sets in a common format called the Intermediate Data Structure (IDS) to harmonize data and stimulate cross-temporal and cross-spatial comparisons: <https://ehps-net.eu> (accessed 14 June 2021). The network publishes a yearly journal named *Historical Life Course Studies*: <https://ehps-net.eu/journal> (accessed 14 June 2021).

¹¹⁹² Recent treatments of the present state of this disconnect see, Jan de Vries, "Changing the Narrative: The New History That Was and Is to Come," *The Journal of Interdisciplinary History* 48, no. 3 (2017): 313–34; Herbert S. Klein, "The 'Historical Turn' in the Social Sciences," *The Journal of Interdisciplinary History* 48, no. 3 (2017): 295–312.

representativeness, they are frowned upon and largely neglected. As a result, the life-course perspective's defining property of being at "the intersection of biography and history" has not been stressed enough in HLC inquiries. In fact, biography and historical analysis are inseparably intertwined, in which they view the individual agent and household as points at which diverse historical forces and structures converge.¹¹⁹³

Taking biographies as units of analysis maximizes the potential of each source being used in a longitudinal observation. In this way, life transitions and trajectories can be considered entirely, and a more nuanced and multifaceted picture of them can be arrived at. For instance, how occupational careers and household structure change over time, when migrations between different places occur, and how the composition of wealth differs in relation to one's social and economic networks can be explored individually.

The development of the life course perspective's crossing with biography is attributed to have originated in W. I. Thomas and F. Znaniecki's (1918-1920) work *The Polish Peasant in Europe and America*, which focused on Polish immigrants to the US between 1880-1910.¹¹⁹⁴ The authors explored life trajectories and relations between individuals and society based on longitudinal documents such as letters, newspapers, and autobiographical accounts. Unfortunately, their work, as well as the biographical and qualitative approach cultivated by the Chicago School in the 1920s and 1930s, was soon discredited for the next decades.¹¹⁹⁵ Although biography as a literary and historical genre has never been entirely dismissed, particularly after the Second World War, academic historians and sociologists marginalized biography as not being "real history."¹¹⁹⁶ The intellectual hegemony of the *Annales* School has been, to a great extent, responsible for this negative view.¹¹⁹⁷ True, the School has been

¹¹⁹³ Ludmilla Jordanova, *History in Practice*, Second edition (London: Bloomsbury Publishing, 2016), 45.

¹¹⁹⁴ William Thomas and Florian Znaniecki, *The Polish Peasant in Europe and America*, Student edition (Urbana: University of Illinois Press, 1996).

¹¹⁹⁵ Roswitha Breckner, "Case-Oriented Comparative Approaches: The Biographical Perspective as Opportunity and Challenge in Migration Research [Online]," in *Concepts and Methods in Migration Research. Conference Reader*, 2007, 113–20, <http://sowi-serv2.sowi.uni-due.de/cultural-capital/reader/Concepts-and-Methods.pdf#page=113>; American sociology dismissed Thomas and Znaniecki's work for failing to conform to the principles of physical science. Herbert Blumer's appraisal of their work proclaimed that biographical material built on subjective procedures cannot allow for valid and reasonable generalizations. Thomas, "Herbert Blumer's Critique of The Polish Peasant."

¹¹⁹⁶ Nigel Hamilton, *Biography: A Brief History* (Harvard University Press, 2009), 186–212.

¹¹⁹⁷ Josef Konvitz, "Biography: The Missing Form in French Historical Studies," *European Studies Review* 6, no. 1 (January 1, 1976): 9–20.

influential by reorienting mainstream historical research toward innovative ways of seeing the past, such as the life course and family reconstitutions. But its preference for macro-level analysis and fixation on structures and long-term processes lost “the scent of human” and sidelined the craft of biography.¹¹⁹⁸ From the 1950s to 1970s, the popularity of quantitative methods and macroscopic approaches made many historians further neglect the individual “in favor of gains in scientificity.”¹¹⁹⁹

In an age of grand narrative syntheses focusing on big structures, large processes, and huge comparisons, the revival of the biographical method came with the microhistory genre. Gaining broad appeal in the 1990s after having existed as a peripheral methodological current for two decades, micro-historical research has aimed to save the individual for its epistemological worth against its quantitative reduction. Motivated by the skepticism of large generalizations and top-down perspectives, microhistorians rejected the subsumption of fragments of historical data under master narratives. Instead, they turned to exhaustively scrutinizing an event, a place, or an individual in microscopic detail to interpret the human condition of these narratives.

The “method of clues” was the most important methodological feature of microhistory, which initiated a breakthrough in humanities.¹²⁰⁰ Advocated by Carlo Ginzburg and Giovanni Levi in the early 1970s, the concept of “clues” argues that the researchers’ objective is not to form unambiguous causal relationships but rather to arrange their clues to allow for a credible story to emerge.¹²⁰¹ This methodological preference benefits the HLC perspective, which aims to put fragmentary sources into a life story.

¹¹⁹⁸ Although the Annales movement has never had a single voice, especially the first and second generation Annalists have adopted opposing view of the role of humans in history. The founders of the Annales school, Marc Bloch and the Luther biographer Lucien Febvre saw the central subject of history as human beings who are behind every landscape, tools, machines, documents, institutions, and events: “[I]t is men that history seeks to grasp. ... The historian is like the giant of the fairy tale. He knows that wherever he catches the scent of human.” Marc Bloch, *The Historian’s Craft* (Manchester University Press, 1992), 22.

¹¹⁹⁹ Hubert Watelet, “Illusions About and Underestimation of the Role of Sentiments in the Historian’s Work,” in *History Under Debate: International Reflection on the Discipline*, ed. Lawrence J. Mc Crank and Carlos Barros (Routledge, 2013), 222.

¹²⁰⁰ Matti Peltonen, “Clues, Margins, and Monads: The Micro-Macro Link in Historical Research,” *History and Theory* 40, no. 3 (2001): 347–59.

¹²⁰¹ Carlo Ginzburg has produced multiple essays examining the oscillating positions assigned to the role of evidence, proof, and truth in historiography. He recommends a balance between the inferential and positivist approaches where proof and evidence aid and guide historical reconstructionists. See Carlo Ginzburg,

Drawing on the empirically constructed nature of life courses, Pierre Bourdieu has warned of what he has termed the “biographical illusion,” thinking of an individual's life as a coherent entity comprising a logical sequence of events with an origin and an end.¹²⁰² Especially the paucity and formulaic nature of the surviving material is tempting to exert personal involvement and bend the narrative to the degree the researcher diverges from the window of interpretation that the evidence allows, as Ginzburg argues.

Notwithstanding the mutually enriching link between biographical and micro-historical research, differences exist between these two fields in terms of their approach to individuals. Microhistorians have usually chosen their protagonists because of their marginal lifestyle based on the concept of “normal exceptions.” This concept presupposes that individuals' abnormal, unusual, or punishable behavior mirrors their society's norms and hegemonic beliefs. These individuals, such as criminals or heretics (i.e., Ginzburg's *Menocchio*, Natalie Zemon Davis's *Martin Guerre*, and Jonathan D. Spence's *John Hu*), are made protagonists not because of their merits but representativeness of larger processes or communities. Jill Lepore has contrasted the methods of biography with the “biographical method” that microhistories rely on:

If biography is largely founded on a belief in the singularity and significance of an individual's life and his contribution to history, microhistory is founded upon almost the opposite assumption ... Traditional biographers seek to profile an individual and recapitulate a life story, but microhistorians, tracing their elusive subjects through slender records, tend to address themselves to solving small mysteries, in the process of which a microhistorian may recapitulate the subject's entire life story, though that is not his primary purpose. The life story, like the mystery, is merely the means to an end-and that end is always explaining the culture.¹²⁰³

Lepore highlights that while the biographer aims to document an entire life despite careful contextualization, the microhistorian focuses on the illuminating episode, a mystery, or phenomena, where biography has value in its own right.

“Checking the Evidence: The Judge and the Historian,” *Critical Inquiry* 18, no. 1 (1991): 79–92; Carlo Ginzburg, “Proofs and Possibilities: Post-Script to Natalie Zemon Davis, *The Return of Martin Guerre*,” in *Threads and Traces: True False Fictive* (University of California Press, 2012), 53–71.

¹²⁰² Pierre Bourdieu, “The Biographical Illusion,” in *Identity: A Reader*, ed. Paul du Gay, Jessica Evans, and Peter Redman (London ; Thousand Oaks ; New Delhi: SAGE, 2000), 297–303.

¹²⁰³ Jill Lepore, “Historians Who Love Too Much: Reflections on Microhistory and Biography,” *The Journal of American History* 88, no. 1 (2001): 133.

The renewed interest in the individual propelled by microhistory and several social and political movements at the end of the twentieth century has given rise to a “biographical turn” in humanities that seeks to investigate the ways biographical methods affect interrogating and interpreting histories.¹²⁰⁴ The resurgence of the biographical method, when coupled with longitudinal historical relational databases, offers new horizons for historical and interdisciplinary research.

The HLC approach does not only give rise to productive and exciting analysis; it also effectively reconciles the seemingly clashing positions of microhistorians, Lepore, and Bourdieu pertaining to the selection and reconstruction of life courses:

- a. First, the novelty and major strength of the HLC approach is that it suggests putting together and analyzing big microdata that allows for tracing the life course of people from every walks of life as much as the data allows. The linked data provided for generations enlarges the pool of biographical candidates from the “bottom” as much as from the “top” or from the “normal” as much as from the “exceptional.”
- b. Second, the individual or “micro” focus of the HLC approach is always in a reciprocal relationship with the macro-level analyses that construct, assess, and refine socioeconomic and demographic structures and processes, in our case, the regional economic and population dynamics in the nineteenth century. On the individual level, these structures and processes help define the various constraints on decision-making, mobility, and movement. They also help increase observations' socioeconomic, demographic, and spatio-temporal representativeness. The HLCs of individuals and households flesh out subtleties, contradictions, and nuances that will act as correctives to macroanalyses and can generate new research directions previously unconsidered.
- c. Third, whereas the HLC approach stresses the singularity of individuals and households, its focus stays on life transitions provided by the limited and formulaic

¹²⁰⁴ Prue Chamberlayne, Joanna Bornat, and Tom Wengraf, “Introduction: The Biographical Turn,” in *The Turn to Biographical Methods in Social Science: Comparative Issues and Examples*, ed. Joanna Bornat, Prue Chamberlayne, and Tom Wengraf (London ; New York: Routledge, 2000), 1–30; Michael Rustin, “Reflections on the Biographical Turn in Social Science,” in *ibid.*, 33–52; Hans Renders, Binne de Haan, and Jonne Harmsma, “The Biographical Turn: Biography as Critical Method in the Humanities and Society,” in *The Biographical Turn: Lives in History*, ed. Hans Renders, Binne de Haan, and Jonne Harmsma (Taylor & Francis, 2016), 3–12.

data in vital records on which most reconstructions are based. It tracks clues through multiple sources to discover hidden connections and emphasizes contingency and change as well as hitherto unsuspected factors in the development of life trajectories. Thus, instead of assigning coherence to the story, the reality of individuals guiding and being guided by their and others' life trajectories is highlighted.

The HLC perspective is particularly illuminating for the Ottoman Empire, for which very little work has been devoted to individuality and family life. The biographical focus has long been on a small elite comprising the Ottoman dynasty and prominent political, military, artistic, and literary figures about whom autobiographical, archival, and other biographical material are relatively easily available. The unavailability or absence of micro-level data has led to the neglect of the individual in the rest of Ottoman society and perpetuated culturalist readings where Ottoman "subjects" subordinated their individual and familial identities. As a result, individuality¹²⁰⁵ has long been seen as a sign of modernity that solely resulted from "structural transformations caused by an expanding world capitalist economy, encounters with secular, individual-based Western culture, and interventions by newly established (colonial and post-independence) states."¹²⁰⁶

The microhistorical and biographical turns have produced a small body of fruitful research that facilitated the rethinking of the concept of the individuality and paying attention to the individual as a category of analysis. Since the early 1980s, Suraiya Faroqhi has laboriously studied sharia court records through the fifteenth to eighteenth centuries and provided illuminating surveys of the Ottoman cultural and social world by focusing on individuals in different socioeconomic contexts.¹²⁰⁷ Cemal Kafadar's microstudies of hitherto

¹²⁰⁵ I regard individuality as a complex of features and attributes that distinguish an individual and household from others. The question of whether the degree of individuality attributed to a subject under scrutiny stems from the author's own identification of individuality and uniqueness still retains its validity. See Lawrence C. Watson, "The Question of 'Individuality' in Life History Interpretation," *Ethos* 17, no. 3 (1989): 308–25.

¹²⁰⁶ Doumani, *Family Life in the Ottoman Mediterranean*, 19.

¹²⁰⁷ Suraiya Faroqhi, *Stories of Ottoman Men and Women: Establishing Status, Establishing Control* (İstanbul: Eren, 2002); Suraiya Faroqhi, *Men of Modest Substance: House Owners and House Property in Seventeenth-Century Ankara and Kayseri* (Cambridge: Cambridge University Press, 2002); Suraiya Faroqhi, "How to Live and Die Rich in Eighteenth-Century Bursa: The Fortune of Hacı İbrahim, Tanner," in *Pauvreté et Richesse Dans Le Monde Musulman et Méditerranéen*, ed. Jean-Paul Pascual (Paris: Maisonneuve and Larose, 2003), 99–118; Faroqhi, "Surviving in Difficult Times"; Suraiya Faroqhi, "Women, Wealth and Textiles in 1730s Bursa," in *Living the Good Life: Consumption in the Qing and Ottoman Empires of the Eighteenth Century*, ed. Elif Akçetin and Suraiya Faroqhi (Leiden: Brill, 2018), 213–25.

unexamined sources from the sixteenth and seventeenth century recovered the voices of four individuals: a Janissary, a Muslim merchant in Venice, a dervish, and a devout Muslim woman and her dreams. They were compiled into a book aptly named to refer to the absence of individuals in Ottoman studies – “Who was here before us” (*Kim Var imiş Biz Burada Yoğ iken*).¹²⁰⁸ The recent rise in publications with biographical themes has found repercussions in Ottoman historiography. Several academic works have placed formerly non-dominant and, to the historian, hitherto unknown people at the center of focus and read social relations and local power configurations through the individual and familial agency.¹²⁰⁹ Meanwhile, the consultation of personal archives propagated quantitative and micro analyses of the rise and transformation of bourgeoisie households.¹²¹⁰

The HLC approach can prove helpful in reading grand narratives of incorporation into the world economy, deindustrialization, financial change, and regional determinants through the microcosm of life stories at the most local level possible. Individual and household life courses flesh out regional endowments and contingencies and quantitatively-demonstrated demographic and economic facts. The biographical method inherent in the HLC approach amplifies the gaps, contradictions, and subjectivities nested within the

¹²⁰⁸ Cemal Kafadar, *Kim var imiş biz burada yoğ iken: dört Osmanlı : yeniçeri, tüccar, derviş ve hatun* (Istanbul: Metis, 2009).

¹²⁰⁹ To name a few examples, see Iris Agmon, “Social Biography of a Late Ottoman Shari’a Judge,” *New Perspectives on Turkey* 30 (2004): 83–113; Dana Sajdi, *The Barber of Damascus: Nouveau Literacy in the Eighteenth-Century Ottoman Levant* (Stanford University Press, 2013); Edhem Eldem, “An Exercise in Ottoman Sartorial Micro-History: The Many Breeches, Shoes, and Fezzes of Mehmed Cemal Bey, 1855–1864,” in *Fashioning the Self in Transcultural Settings* (Ergon-Verlag, 2015), 93–116; Yaşar Tolga Cora, “Transforming Erzurum/Karin: The Social and Economic History of a Multi-Ethnic Ottoman City in the Nineteenth Century” (PhD Thesis, University of Chicago, 2016); Thomas Philipp, *The Governors of Ottoman Bilād Al-Shām: The Reconstruction of Individual Biographies by Looking at Groups of Governors Sharing Some Common Features : Bayt al-Aẓm as an Example [Online]*, Occasional Papers in Ottoman Biographies 2016 (Bamberg: Otto-Friedrich-Universität Bamberg, 2016), <https://fis.uni-bamberg.de/handle/uniba/40445>; Doumani, *Family Life in the Ottoman Mediterranean*; Fırat Yaşa, ed., *The Other Faces of the Empire: Ordinary Lives Against Social Order and Hierarchy*, trans. Esra Taşdelen (Istanbul: Koc University Press, 2022).

¹²¹⁰ Paul Dumont and François Georgeon, “Un Bourgeois d’Istanbul Au Début Du Xxe Siècle,” *Turcica*, no. 117 (1985): 127–88; Edhem Eldem, “Un Bourgeois d’Istanbul Au Milieu Du XIXe Siècle. Le Livre de Raison de Mehmed Cemal Bey, 1855-1864,” in *Penser, Agir et Vivre Dans l’Empire Ottoman et En Turquie. Études Réunies Pour François Georgeon*, ed. Nathalie Clayer and Erdal Kaynar (Paris: Peeters, 2013), 372–406; Dilek Akyalçın-Kaya, “Les sabbatéens saloniens (1845-1912) : des individus pluriels dans une société urbaine en transition” (PhD Thesis, Paris, EHESS, 2013); Edhem Eldem, “(A Quest for) the Bourgeoisie of Istanbul: Identities, Roles, and Conflicts,” in *Urban Governance Under the Ottomans: Between Cosmopolitanism and Conflict*, ed. Nora Lafi and Ulrike Freitag (London: Routledge, 2014), 159–86; Dilek Akyalçın-Kaya, “Mustafa Arif Efendi’nin Selanik Yılları: 19. Yüzyılda Osmanlı Taşrasında Burjuvazinin Oluşumu,” *Cihannüma Tarih ve Coğrafya Araştırmaları Dergisi* 1, no. 2 (2016): 39–59.

juxtaposition of multiple social realities. In doing so, it incorporates “the procedures of research itself, the documentary limitations, techniques of persuasion and interpretive constructions” so that “the researcher’s point of view becomes an intrinsic part of the account.”¹²¹¹ It involves the reader in a dialogue where they participate in constructing the historical argument.

4.2.2. The Sources and Area of HLC Study – The City of Bursa

Undoubtedly, the microdata contained in Ottoman population registers and tax surveys provide two of the most accessible HLC materials with similar aims, timeframe, unique and shared information, and the widest coverage. That they are used aggregately, quantitatively, and in a non-cross-examined fashion is encouraging to employ them individually and qualitatively. Still, they cover a limited timeframe (speaking only on the master population registers, from 1830 to 1845). Supplementing these sources with others will enhance their power and extend the life courses before and after this period. The most important documents with a relatively wide coverage are Ottoman inheritance inventories that bring the dimensions of death, property ownership and dissolution, by-employment, credit relations, and domestic consumption and production at individual levels. The following section studies the compatibility of these sources for HLC investigations and argues that more always means better when it comes to data linkage. To prove this statement, it introduces a widely consulted yet marginal biographical material: tombstones.

Before delving into the HLC materials' specifics, we must specify our study area. I picked the city of Bursa. As we saw in parts 2 and 3, it was one of the largest cosmopolitan settlements in Western Anatolia, with the most varied occupational structure and vibrant social and cultural environment. It was well connected with the rest of the region for its position and being the greatest consumer of agricultural products and industrial goods manufacturer, attracted most migrants, and had a significant agrarian activity within. I argue that writing HLC biographies allows us to transgress the overemphasis put on silk manufacturing only with which deindustrialization and incorporation literature is concerned. Moving to a micro approach will add nuances and complexities to economic and population geography. It will also amplify contingency and choice and bring to the fore people's

¹²¹¹ Giovanni Levi, “On Microhistory,” in *New Perspectives on Historical Writing*, ed. Peter Burke (Cambridge: Polity Press, 2001), 110.

dependency on each other and their environment and the inseparable relationship between the city and the rest of the region.

4.3: The Linkage Between Population Registers and Tax Surveys and Introduction to other HLC Materials

As we examined in part 3, the nineteenth-century Ottoman population and tax records yield unique and complementary information essential for writing HLC biographies in 1820-1870 and for the greatest number of people. This section's aims are threefold – to introduce the other HLC material that will allow us to make longitudinal inquiries, namely, inheritance inventories and tombstones, to examine the harmony between them and population and tax records, and to discuss the availability of each source for the city of Bursa.

4.3.1. Complementarity of Bursa Population Registers and Tax Surveys for HLC Purposes

By the time of the writing of this thesis, only the first two waves of population records are available for the Bursa region. They have the advantage of having vital registers. The population registers were kept and routinely updated from 1830 to 1838, and the second wave between 1839 and 1864. No irregularities were reported regarding the registration process. For the second wave, the master register ceased to be updated after 1843 (AH. 1259). The rest is available in vital registers, some of which are missing. The vital updates for the non-Muslims ended in 1849 (AH. 1265).

Both waves' registers cover the same area and contain similar information. The variety of biographical information in the records is essential to creating a comprehensive HLC account. Especially the unique features of vital, military service, health, and age information provide crucial clues for individual and household histories. Despite an observed high tendency of age heaping to the nearest five, ages are recorded only in these sources, thereby helping estimate the age of individuals at specific transition points in life. On the other hand, the assumedly self-reported nature of biographical information allows tracking changes and errors across documents.

Because only the population registers recorded every male member of a residential space (e.g., houses, inns, lodges, bachelor rooms, convents, madrasas, mills, bakeries, *çiftlik*s, etc.) regardless of age, we can comment on household structure, non-kin relations under one roof, migration patterns, age gradient in important events, mobility, military service, and

poll-tax status change, among other transition points. The spatial concentration of occupations and ethnoreligious affiliation of the permanent and migrant population can be laid out to give a location's demographic and economic snapshot in either 1830 or 1839. One shortcoming of the professions recorded in the registers is the maker/seller problem, often faced by historians and sociologists using serial administrative sources worldwide.¹²¹² For example, whether a *kumaşçı* (literally “clothier”) was a merchant, manufacturer, or both, cannot be differentiated.

For town economies, the registers allow us to see labor division, the agrarian nature of these settlements, and the impact of their location (e.g., coastal towns of Gemlik and Mudanya) on their population and economy. In rural areas, production relations can be studied extensively in the context of geographical attributes. For instance, labor specifics of *çiftlik* and small-scale production zones, dry-farming villages, settlements producing high-demanded products such as valuable silk and grapes, and those situated near town economies can be observed in minute detail. Arguments on debt bondage and labor shortages can be substantiated with data by considering not the village or *çiftlik* in question with those in their hinterland.

The master registers were updated monthly with annotations based on recruitment, poll tax, and vital updates. This feature makes them the only living document and enables researchers to trace the urban populace from 1830/31 to 1843 uninterrupted. Birth and death dates or update dates are provided and defined in a day-month-year fashion (though predominantly expressed in years). The movement to, from, and within locations is documented with dates. In addition, while the age of eligibility and exemption for military service and military bases of active-duty soldiers are recorded, changes in the categories of poll-tax burden for non-Muslims are specified, adding another layer of continuity.

That said, the updated data must be regarded with suspicion. They may not accurately reflect the date of every event. For example, in certain instances, multiple birth and death records in different households of the same quarter carry the same date. I am in no position

¹²¹² Bart Van de Putte, Putte Bart, and Erik Buyst, “Occupational Titles? Hard to Eat, Easy to Catch,” *Belgisch Tijdschrift Voor Nieuwste Geschiedenis* 40, no. 1–2 (2010): 7–31.

to generalize this observation (and many others) to other regions but let it not be overlooked that vital events data were collected by regional authorities and sent to Istanbul by regional population offices. Cooperativeness and motivation of the informants, carefulness of regional authorities and officials, and logistics of document delivery impacted the quality of the updated data, at least those specified by months and days.

As we discussed, all the *temettuat* surveys of the Bursa region come from a single year, 1845. No irregularities were reported in the surveying process. However, not all surveys have survived or been discovered yet.

Like the population registers, the *temettuat* surveys are separated into quarters and organized along ethnoreligious lines. These factors ease the process of linking individuals between the two sources. Using the population registers and tax surveys together generates several benefits. The relatively short year gap between the two sources facilitates data linkage. The registered dwelling numbers (*menzils*) do not match those in the tax surveys. Since the *temettuat* was conducted right after the master-population-register ends, they are helpful not as population but as household counts. That they recorded only the permanent inhabitants limit our ability to create biographies of the temporary population. Regarding the settled population, data linkage enables us to track movement. This observation can be further corroborated by adding vital registers to the picture.

Individual-level data in the households contain names, titles, and family names. These are the key information to match individuals. For tax-eligible non-Muslims, poll-tax status is specified as high, medium, or low. More than merely describing occupations, the surveys record the annual income gathered from them as well as from income-yielding assets for the year 1845. Since the population registers also have these data, we can determine whether “self-reported” occupations and names, titles, and family names change from one source to another. Occupational information in each can be cross-checked to track changes in employment and assess the economic activities based on each source. Still, the maker/seller issue persists here. Ages in the population registers can be used to determine in which episode of an individual’s lifetime (i.e., prime, post-prime) they yielded incomes. This connection with the population registers turns the tax surveys into life-course documents.

Comparing occupational descriptions and occupational structures derived from the surveys and the population registers is possible. This way, the confusion arising from certain professions (such as *yemenici*, which both means a fabric manufacturer and shoemaker) may be resolved, and the impact of economic changes (e.g., the opening of the filatures) may be observed. Wealth-contributing incomes from assets demonstrate alternative livelihood activities in which a household was engaged. Detailed documentation of agricultural properties aids our understanding of engagement in the supposed commercialized agriculture market of the nineteenth century and helps us rethink and question the theoretical divides between urban and rural areas of the Ottoman Empire. Once examined with the population and tax records of the properties' location and surrounding settlements, the properties of rural and town-dwelling landlords can give unique insights into the networks of regional economies. The size of agricultural plots under cultivation and fallow illuminates the relationship between landholding patterns and physical features. Rich numerical information on the agricultural mix helps us understand a location's market integration, self-sufficiency potential, and economic and ecological trade-offs in regional crop specializations.

As discussed above, the surveys usually ignore females unless they owned income-yielding assets and remain silent on household composition and labor. The surveys for Bursa recorded a considerable number of females only if they owned immovable property that generated income. But still, economic activities performed by females, children, and the elderly that were not exchanged in the market and thus remained unwaged and unrecorded in sources as occupations cause a significant problem in producing a reliable description of the actual state of the labor force, household division of labor and structural change in the Ottoman economy.

The linked population and tax records information is versatile yet limited mainly in scope and timeframe. Adding inheritance inventories, which hold the most detailed, diverse, and longest-term evidence for many people, into the mix enhances the quality of biographies and our interpretive capabilities. Because they are available for all periods, the inventories are essential to creating longitudinal datasets.

4.3.2. Inheritance Inventories (*Tereke Defterleri* – TRK)

Ottoman inheritance inventories (*tereke defterleri*) containing the assets and belongings of deceased individuals were kept in the records of sharia courts of many Ottoman towns since the early years of the Ottoman Empire. As a guardian of social equilibrium and a public records office of sorts, the state-sanctioned sharia courts, which had a vast and controlled network all around the Empire, were frequented by people from all walks of life, Muslim and non-Muslim, rich and poor, elite, and non-elite, man and woman, and so on. Apart from the central provincial courts in large provinces such as Istanbul, Edirne, and Bursa, several additional courts were headed by deputy qadis (*naib*) within the urban and subdistrict centers. The court records, known as *sicil* (archival code MŞH. ŞSC. d.), documented centuries of judicial activities and social interactions. They are one of the most essential Ottoman economic, political, social, and cultural history sources.

Civil/secular (*Nizamiye*) courts founded in 1864 eventually superseded Islamic courts in all civil and criminal matters. Still, the sharia courts remained the only institution that adjudicated matters pertaining to personal status (i.e., marriage, divorce, family relationships), inheritance, and pious endowments (*vakıf*), as these matters were entirely handled in the Quran. From a larger perspective, except for the short-lived Family Law (*Hukuk-ı Aile Kararnamesi*) of 1917, the Empire did not have a centralized codified family law because matters relating to personal status and inheritance were traditionally regulated by principles prescribed in the holy texts of diverse religious groups. Inheritance was thus one of the most important spheres in which Ottoman and communal judicial bodies competed.

Communal court records of Orthodox Christians, Armenians, and Jews from the Ottoman period are largely unknown and, when available, are restricted to a specific community or time.¹²¹³ We also do not know much about the quantity and quality of non-

¹²¹³ For examples of studies that used Orthodox Christian and Jewish communal records from Ottoman era, see Joseph R. Hacker, "Jewish Autonomy in the Ottoman Empire: Its Scope and Limits: Jewish Courts from the Sixteenth to Eighteenth Centuries," in *The Jews of the Ottoman Empire*, ed. Avigdor Levy (Princeton: Princeton University Press, 1994), 153–202; Rossitsa Gradeva, "Orthodox Christians in the qadi Courts: The Practice of the Sofia Sheriat Court, Seventeenth Century," *Islamic Law and Society* 4, no. 1 (1997): 37–69; Jacob M. Landau, "Changing Patterns of Community Structures, with Special Reference to Ottoman Egypt," in *Jews, Turks, and Ottomans: A Shared History, Fifteenth Through the Twentieth Century*, ed. Avigdor Levy (New York: Syracuse University Press, 2002), 77–87; Eugenia Kermeli, "The Right to Choice: Ottoman

Muslim judicial apparatus, especially in Anatolian provinces. But we know that non-Muslims frequently used sharia courts for inheritance cases even when it was not required (we will see later in this section the cases when it was compulsory). Several assumptions favored Ottoman/Muslim cultural impact,¹²¹⁴ weak communal organization,¹²¹⁵ lower fees, and state-supported judicial powers of sharia courts (hence a greater chance of enforcing its rulings),¹²¹⁶ and better financial and personal outcomes.¹²¹⁷

Because of the reasons outlined above, the term “Ottoman inheritance inventories” refer to inventories found in the Ottoman sharia court registers. Islamic inheritance practices, also known as “the science of shares” (*ilm al-fara'id*), strictly regulated post-mortem transmissions of property with clear instructions to designate who shares in the estate and how much they will inherit. Heirs were ranked according to a class of kinship and assigned fixed shares, depending on who was alive when the inventory was prepared. In the presence of male and female heirs, males inherited twice the share of females. After the primary heirs (children first, then spouse/s, and then parents) received their prescribed shares, then came the secondary heirs who were descendants of the first ascendant (brothers, nephews, etc.), and then all male agnates, however remote, who shared the residue according to their class. Up to one-third of the estates could be left as bequests at will to someone who was not a legal heir.

Not every death generated an inventory. The courts required estates to be recorded in two conditions, which made up the bulk of inheritance inventories. Fatih Bozkurt’s doctoral thesis on the inventories of Istanbulites in 1785-1875 shows that approximately 75% had to

Justice Vis-à-Vis Ecclesiastical and Communal Justice in the Balkans, Seventeenth-Nineteenth Centuries,” *Journal of Semitic Studies* 52, no. 23 (2007): 165–211; Ayşe Ozil, *Orthodox Christians in the Late Ottoman Empire: A Study of Communal Relations in Anatolia* (London ; New York: Routledge, 2013).

¹²¹⁴ Haim Gerber, *State and Society in the Ottoman Empire* (Farnham: Ashgate, 2010), 114.

¹²¹⁵ Aryeh Shmuelevitz, *The Jews of the Ottoman Empire in the Late Fifteenth and the Sixteenth Centuries: Administrative, Economic, Legal, and Social Relations as Reflected in the Responsa* (Leiden: Brill, 1984), 43–44; Hacker, “Jewish Autonomy in the Ottoman Empire: Its Scope and Limits: Jewish Courts from the Sixteenth to Eighteenth Centuries,” 183–84.

¹²¹⁶ Gradeva, “Orthodox Christians in the qadi Courts,” 69.

¹²¹⁷ Ronald C. Jennings, “Zimmis (Non-Muslims) in Early 17th Century Ottoman Judicial Records: The Sharia Court of Anatolian Kayseri,” *Journal of the Economic and Social History of the Orient* 21, no. 3 (1978): 271; Najwa Al-Qattan, “Dhimmi in the Muslim Court: Legal Autonomy and Religious Discrimination,” *International Journal of Middle East Studies* 31, no. 3 (1999): 515; Ozil, *Orthodox Christians*, 87.

be drawn up due to two legal reasons.¹²¹⁸ 56% of all civilian and 67.2% of all military-class Istanbulites' inheritance was inventoried because of the presence of minors (*sagir* – in legal terms, those who did not hit the age of puberty [*bülüğ/bulugh*], traditionally from 12 for males and 9 for females to 15 for both), and mentally disabled (*mecnun*) and senile (*matuh*) among inheritors to protect their rights to property.¹²¹⁹

High fertility and mortality rates throughout the Empire contributed to the frequency of orphaned minors, hence their high representation in the inventories. A legal guardian (*vasi*), usually a family member, was assigned to supervise their share until they reached maturity. Close surveillance over minors' properties also stems from their money being used in the credit market, loaned to borrowers on the official maximum threshold of 15% annual interest, and increasingly so since the eighteenth century due to chronic cash shortages.¹²²⁰ This customary use acquired an institutional character with the Department for Administering Orphans' Property (*Emval-i Eytam Nezareti*) and Ottoman Orphan Funds (*Emval-i Eytam Sandıkları*) in 1851.

According to Bozkurt's estimations, the inventories of heirless, childless, absent, and missing people formed 13% of those of the civilians and 7,4% of the military-administrative class.¹²²¹ When a person died heirless, leaving only a spouse, or in a different location (*gaib* – i.e., migrants or guests), or s/he was missing for a long time (*mefkud*), the state treasury (*beytülmal*) claimed all estates (or its half or three-quarters if the spouse was the only heir) after performing an inventory as quickly as possible and sealing the items (and storing them for half a year if the person was a *gaib* and for a year if s/he was a *mefkud*) to prevent them from being stolen.¹²²² If the deceased died in a location or real estate that belonged to the *Harameyn* ("two holy sanctuaries") pious endowments (established for the benefit of the poor of Mecca and Medina), the courts worked cooperatively with the pious endowments

¹²¹⁸ Fatih Bozkurt, "Tereke Defterleri ve Osmanlı Maddî Kültüründe Değişim (1785-1875 İstanbul Örneği)" (PhD Thesis, İstanbul, İstanbul Üniversitesi, 2011), 183.

¹²¹⁹ Ibid., 167.

¹²²⁰ Cafer Çiftçi, "18. Yüzyılda Bursa'da Para Vakıfları ve Kredi İşlemleri," *Ankara Üniversitesi DTCTF Tarih Araştırmaları Dergisi* XXIII, no. 36 (2004): 85–86.

¹²²¹ Bozkurt, "Tereke Defterleri," 168–70.

¹²²² Arif Bilgin and Fatih Bozkurt, "Bir Mali Gelir Kaynağı Olarak Varissiz Ölenlerin Terekeleri ve Beytülmal Mukataalar," *Kocaeli Üniversitesi Sosyal Bilimler Dergisi*, no. 20 (2010): 1–31.

inspector (*muaccelat nazırı*). Finally, they delegated determining the net value of inheritance to the inspector.

In the non-compulsory inheritance cases where all heirs were adults and present, one dissatisfied and underprivileged heir's or beneficiary's request to the court was sufficient legal grounds to divide the decedent's estates according to sharia. Bozkurt estimates that these cases amounted to 24% of the military-administrative class and 29% of civilian inheritance inventories.¹²²³ Six to eight percent of all inheritance cases were brought to the court by debtors. Although many inventories recorded the deceased individuals' debts to others, their heirs must have been loyal to the debts or figured out a way to resolve their disputes. Some inventories included the standard expression that the deceased died leaving debts more than/equal to the total value of their estates (*düyunu terekesinden ezyed /düyunu terekesine vaki / garimen vefat eden-halik olan*). In such cases, the total value of estates was divided among the debtors in proportion to their debt. If the value of estates was less than that of debts, the debtors could not demand payment from the heirs because Islamic law draws a line between the deceased's and inheritors' property.¹²²⁴

The remainder of the inheritance cases (15% to 25% of all cases in Istanbul) was taken to court, most likely because of inter-family conflicts over asset distribution. As we are uninformed about self-interest or justice motives, inheritance size, and discontentment with local customs, the demands of secondary heirs in the absence of first-degree relatives must have increased the likelihood of bringing inter-family disputes of adult and present heirs to the court.

4.3.2.1. *Inventories' content and estate valuations in them*

Strictly speaking about the eighteenth and nineteenth centuries, most items were sold at auctions. After scribes brought together the estates and wrote the lists, porters brought them to the nearest commercial district, and an auctioneer/broker (*dellal*) put them up for bidding. Inventories explicitly stated whether an asset was sold at an auction or included auctioneers' fees (*dellaliye*) or porters' fees (*hammalliye, bargiriyye, harc-ı kayık*) that were later

¹²²³ Bozkurt, "Tereke Defterleri," 167.

¹²²⁴ Hamza Aktan, "Miras," in *TDV İslam Ansiklopedisi* (İstanbul, 2005), 144, <https://islamansiklopedisi.org.tr/miras>.

subtracted from the total value before it was divided among heirs.¹²²⁵ In addition, if valuations were estimations, they were specified in the introduction, and their fees (*muhammeniye* or *takvimiyye*) were in the expenses part.¹²²⁶ In 90% of all inheritance cases in late-eighteenth and nineteenth-century Istanbul, estates were auctioned and bought by the heirs, second-hand dealers, and other people.¹²²⁷

The auctioning of estates is a good indicator of the extensivity of the use of second-hand goods in the Empire and that their values reflected market prices. Investigating inventories from Istanbul, Manisa (western Anatolia), Ayntab (southern Anatolia), and Trabzon (northeastern Anatolia) from the late seventeenth to the mid-nineteenth century, Pınar Ceylan compared the item prices to contemporary market prices and concluded that “inventory valuations were generally consistent and were closely related to the conventional prices of the time and, thus, can be reliably employed to study historical prices.”¹²²⁸ Karagedikli and Tunçer’s study of house prices in the Ottoman province of Edirne (Adrianople) from 1720 to 1814 showed that population changes and the location and size of houses influenced relative prices in the housing market.¹²²⁹ On the other hand, real estates, such as houses, shops, and lands that made up the most expensive items in most inventories, were sometimes assigned an estimated value based on market prices if they could not be sold simultaneously as other items.¹²³⁰ This could be a pressing issue during severe inflation and cashlessness, such as in the late 1850s Bursa.

Like the legalistic literary format of other cases in the court records, the phrasing of the inheritance inventories had a highly formal, laconic, and uniform structure. They are structured along four primary operations:

¹²²⁵ In Bursa inheritance inventories, the auction process was usually described as follows: “...sold at the central bazaar by auction...” (“*suk-ı sultanide bilmüzayede fûruht olunub...*”)

¹²²⁶ Bozkurt, “Tereke Defterleri,” 197.

¹²²⁷ Ibid., 368.

¹²²⁸ Pınar Ceylan, “Essays on Markets, Prices, and Consumption in the Ottoman Empire (Late-Seventeenth to Mid-Nineteenth Centuries)” (PhD Thesis, London, London School of Economics and Political Science, 2016), 271.

¹²²⁹ Güner Karagedikli and Ali Coşkun Tunçer, “House Prices in the Ottoman Empire: Evidence from Eighteenth-Century Edirne,” *The Economic History Review* 74, no. 1 (2021): 6–33.

¹²³⁰ Bozkurt, “Tereke Defterleri,” 145–46.

1) The introduction of the deceased, heirs, and (in particular cases) inheritance and treasury officials, information on domicile, and reason and date of portioning.

- a. In this part, the deceased is identified by their name, titles, family name, father's name (albeit rarely, grandfather's name is given in some cases), occupation (occasionally), domicile (by city and quarter/inn/bath/madrassa, etc. and village) or place of death other than residence (e.g., on the way to / return from pilgrimage), and, albeit rarely, the cause of death (e.g., by the plague). This part is followed by the heirs and their degree of affinity to the deceased.
- b. The reason why the inventory was drawn up – the court's intervention due to the existence of minors, upon request of the heirs, no heirs available, and other reasons mentioned above.
- c. If the treasury claims partial or full ownership of the estates, the title and name of the treasury agent (*emin-i beytülmal*) are given. If a military-administrative-class individual's inheritance is inventoried, then the inheritance official's title and name are registered. Whether the estate was auctioned is stated.
- d. The date of the partitioning of inheritance, expressed in day-month-year format, finishes this section. This date cannot be taken as the time of death because, in the inventories' opening sentences, it is often said that the decedent "died before this time" (...*bundan akdem vefat eden*...). In rare cases, the time of death is given, such as "died five months / two years ago." Court procedures, the appointment of legal guardians, auctioning of estates, registering, collecting, and paying debts, and other processes took an uncertain amount of time. Also, considering why inheritance cases took place, we may guess one's death was around the partitioning of estates, but we can never be sure how close. Death dates might have been included to distinguish deaths that took place way earlier than the date of partitioning, but we cannot know how much time in between was considered enough to specify when the death occurred.¹²³¹

¹²³¹ Without taking these factors into consideration, Establet and Pascual calculated seasonal mortality rates for the eighteenth-century Damascus based on inheritance inventory dates. Colette Establet and Jean-Paul Pascual, *Familles et Fortunes à Damas : 450 Foyers Damasains En 1700*, Études Arabes, Médiévales et Modernes (Damascus: Presses de l'Ifpo, 1994), 43–57.

2) **The inventory of the deceased.** The itemization of moveable and immovable estates follows a generic form. These items were recorded with their worth, and immovable properties included location information. They can be grouped as follows:

- a. Personal and household goods, ranging from everyday items to luxury possessions to slaves, are described. Mainly clothing textiles are introduced with detailed commentary on their type, color, ornaments, and condition (old or used – *köhne* / *müstamel/meksur* or not). Clothing, home furnishing, kitchenware, bath objects, jewelry, books, clocks, coffeehouse utensils, tobacco, weapons, and other items have mostly been treated in the literature as indicators of consumer culture in the Ottoman Empire.
- b. Commercial goods, production tools, agricultural stock (i.e., wheat or barley – no indication of whether the deceased cultivated them), livestock, and cash money. Income and salaries generated by economic activities or charitable institutions are not reported.
- c. Buildings (i.e., houses, shops, barns, inn rooms, storehouses, or watermills). The inventories are usually silent on the size, state, inside, and use of buildings.
- d. Agricultural estates (i.e., fields, farms, trees, orchards, or vineyards). Even buildings, trees, and grains on state and waqf lands were in private property status and, hence, freely transferrable and saleable. On the other hand, tax farms and state- and waqf-owned land to which individuals had usufruct rights were not included in *tereke*s. For this reason, grains cultivated on land are usually specified concerning their collective weight (i.e., “rye cultivated/harvested on the field [*tarlada mezru burçak*] – 10 *kile*”).

The existence of commercial and agricultural assets such as plows or looms can give important leads to assess the level of by-employment, that is, gainful activities in addition to one’s occupation.¹²³²

- e. Outstanding loans (*zimet*) are recorded with borrowers' names and residences (if outside the district center). However, terms of debt and interest rates are not

¹²³² Sebastian A. J. Keibek and Leigh Shaw-Taylor, “Early Modern Rural By-Employments: A Re-Examination of the Probate Inventory Evidence,” *Agricultural History Review* 61, no. 2 (2013): 244–81.

mentioned. Neither do we know if they represent the total and accurate activity, say, of a powerful merchant.

3) **Personal liabilities.**

- a. Debts (*düyun*) are given with the name of the lender and often with two case witnesses (*şuhud-ül hâl*, without disclosing their relationship to the deceased or the lender). Again, terms of debt and interest rates are not mentioned.
- b. In the case of married Muslim females, the unpaid amount of bridal dowry is usually listed as the first type of debt. Marriage contracts were sealed by the transfer of dowry, *mihr*, to the new bride. The dowry was customarily divided into a *mihr* payable promptly and usually a larger installment (*mihr-i müeccel*) to be paid in case of divorce or the husband's death.
- c. Burial expenses (*teçhiz ve tekfin*, [for non-Muslims, *ilka-yı hafr* or *ilka-yı iaşe*] rarely tombstone expenses – *seng-i mezar*) are occasionally given.
- d. Bequests were recorded with their amount and intended destination.
- e. Court fees (*resm* or *harç* or sometimes *ücret*) are specified. Focusing specifically on the nineteenth century, two types of taxes, the court (*kısmetiyye*) and registration (*kaydiyye*) fees, were present in all cases, and their amounts were 025% and around 002%, respectively. Noteworthy is that these taxes were lowered significantly and fixed in the nineteenth century. In the late-seventeenth and eighteenth centuries, high court fees and illegal/extra revenue extraction by court officials received a significant number of complaints.¹²³³

Other than taxes, certain service fees such as the porter's, auctioneer's, market guard's (*didebaniyye/resm-i müstahfiz*), and shopkeeper's (*dükkaniye*) fees are involved depending on the operations performed on the inventoried items. The costs of services usually changed between 1% and 2% of the total value of all estates for urban inventories.¹²³⁴ But transporters demanded higher prices if the inventory was coming from a relatively distant village.

¹²³³ Boğaç A. Ergene, "Costs of Court Usage in Seventeenth- and Eighteenth-Century Ottoman Anatolia: Court Fees as Recorded in Estate Inventories," *Journal of the Economic and Social History of the Orient* 45, no. 1 (2002): 23.

¹²³⁴ Bozkurt, "Tereke Defterleri," 193.

Taxes imposed on estates where the central treasury claimed all the estates were the highest. My examination of the early- to mid-nineteenth-century Bursa inventories indicates that the central treasury taxes (*resm-i beytülmal*) amounted to 5% of the net value (gross amount minus debts and expenses) of the inheritance. This included the payment made to the informants who reported heirless decedents, called *müjdegane* or *ihbariye*, which was around 020%.¹²³⁵ If heirs appeared after the estates were seized, 5% of their share went to the treasury.¹²³⁶

- 4) **The division of inheritance.** After expenses are deducted from the inventory's worth, the net amount of assets is apportioned among heirs according to their shares (*hisse*).
- 5) **Post-inventory note.** If a legal guardian, state treasury official, endowments inspector, debtors, or someone to carry out the decedent's specific bequest is involved, how much money they were given/entrusted with is noted here. Other types of notes, such as "some debts owed to the decedent could not be collected," are also inserted. This section is reserved for the transfer and devolution of usufruct rights over waqf properties, especially when the case involved minors.

4.3.2.2. *The reliability of the inventories as a source for wealth and property-holding*

Valuations of estates and the presence of certain items, plus biographical information indicative of social status in the inheritance inventories, have been used to shed light on wealth accumulation, disparities, and transmission in the Ottoman Empire. Notwithstanding their valuable information, whether the inventories can be used as a proxy for real or household wealth remains at the center of studies employing them. It is uncertain whether one's items were used commonly by the household, inherited from a relative, or intended to be used as a barter item in hard times. A wealthy man's fur might come from his mother, and a high-cost weapon could save a family when finances worsened.

The composition of estates is temporally and culturally contingent. Inventories overrepresent the elderly population. Whether decedents were in their physical prime,

¹²³⁵ Ibid., 191.

¹²³⁶ For an example to this situation from Bursa inventories, see OA. MŞH. ŞSC. 3151 (C / 130), p. 16. (AH. 21-05-1281 / 22-10-1864).

wealthy, or had already outlived their parents (hence had access to their inheritance) when they died influenced their wealth arrangement. Specific items might have been seized by debtors or hidden by families before the inheritance was of legal concern. Good deeds such as the distribution of property to relatives and the needy and the widespread practice of liberation of slaves upon the death of their owners made certain items not appear in the inventories.

Still, despite the comprehensiveness of the inventories, *who* and *what* is included in them constitutes a bigger problem. In a review exchange on Establet and Pascual's quantitative study of Damascene inheritance inventories, Zouhair Ghazzal underlined the context in which they were prepared and cautioned that "first, their textuality needs to be fully reconstructed; then, second, it should be kept in mind that their textuality is primarily legal."¹²³⁷ Indeed, the Islamic inheritance system is concerned with the rights of heirs, not the wealth or status of the decedent. On the one hand, this legality necessitated the courts to have sole jurisdiction over certain cases. On the other, the exact legality encouraged people to circumvent or avoid registration.

As discussed above, insofar as the heirs were adults and present and there was no discord over debts, nobody was legally bound to use the courts for post-mortem property devolution. Evidence from the late Ottoman Istanbul shows the residents largely enjoyed this liberty. Given that the bulk of the inventories was likely drawn up due to legal requirements in all Ottoman provinces, why people refrained from bringing their inheritance cases to the sharia courts may be partly explained in terms of logistical and economic reasons. Not every region and subregion had easily and safely accessible sharia courts. These factors must have diminished the capacity of the courts to supervise the rights and status of the heirs and inventory the decedent's estates. But, as outlined above, the fees the sharia courts charged for their services must have influenced the propensity of Ottoman subjects, most of whom lived on a subsistence level or little above, to resolve their disagreements over inheritance at the court.

¹²³⁷ Zouhair Ghazzal, "A Reply to Andre Raymond," *International Journal of Middle East Studies* 30, no. 3 (1998): 474.

More importantly, various beliefs and local customs and practices throughout the Empire informed the forms of property devolution critical to wealth and power transmission. David S. Powers highlights that “we must not allow contemporary realities to cloud our vision of the past. In pre-modern times, applying the Islamic inheritance law was often the last and least important stage in transmitting property from one generation to the next.”¹²³⁸ Most post-mortem property devolutions went unrecorded, and their outcome must have been presented to and internalized by heirs as *fait accompli*.¹²³⁹ In other cases, unwilling for their *designated* heirs and future generations to be constrained by Islamic inheritance principles' strict and static norms, many individuals preferred to devolve some or all of their properties when they were alive. This was realized through various legal mechanisms. Sharia court registers are replete with notarial notices of *inter vivos* gifts (*hibe* or *nefy-i mülk*) and sales of property (*mübayaa-ı eşya*) that list in detail the items to be transferred (for free) or sold. In fact, the royal decrees (*ferman*) issued in 1707, 1796, and 1804 rigorously prohibited *inter vivos* gifts throughout the Empire on the basis that it was a “sharia trick” (*hile-i şeriye*) and victimized the potential heirs.¹²⁴⁰

Another popular legal *inter vivos* property devolution mechanism, at last among urbanites, to circumvent the Islamic inheritance practices was to establish premortem pious family endowments (*zürri vakıf*, *ehli vakıf*, or *aile vakfi*). The founders of these *vakıfs* endowed the most valuable properties by clearly designating their rightful beneficiaries to

¹²³⁸ David S. Powers, “The Islamic Inheritance System: A Socio-Historical Approach,” *Arab Law Quarterly* 8, no. 1 (1993): 29.

¹²³⁹ We do not know what variety of rules governed such property devolutions. On the other hand, Paul Stirling’s anthropological study of two villages in Kayseri (middle-Anatolia) province from 1949 to 1952 shows that, although the villagers were reluctant to abide by the secular civil code of 1926 (a modified version of the Swiss civil code), “[t]he general claim of the villagers to live by the Seriat [sharia] does not affect their conduct of inheritance. They know that a daughter’s share is in Islamic law half a son’s. I never heard of this provision having being applied nor even seriously suggested...A simple division [of land] is usually achieved by a direct understanding between the brothers. They are left de facto in joint control of the household lands, and if they are not at loggerheads it is relatively simple to present the world with a *fait accompli*...The division between brothers may be complicated by the need to provide for a widow, or even two. The villagers say that the Seriat provides for an eighth-share for a widow and the Turkish Civil Code for a quarter-share, in which they are roughly correct. But neither of these rules seems to be applied... Where women inherit, they often do so because they have no brothers...Decreasing village autonomy, the decline in the power and importance of lineages, and the increase of administrative control and interference have increased the chances of establishing and enforcing a claim to female inheritance.” Paul Stirling, *Turkish Village* (London: Weidenfeld and Nicolson, 1965), 122–31.

¹²⁴⁰ Bilgin and Bozkurt, “Bir Mali Gelir Kaynağı Olarak Varissiz Ölenlerin Terekeleri ve Beytülmal Mukataalar,” 75.

the revenues and, in the case of residential spaces, residence rights. Since, according to Islamic law, the *wakıfs* are sacred as the property of God, cannot be partitioned, and their beneficiaries cannot be changed, the endowers thus secured an inalienable source of revenue in perpetuity to specific kin classes and for particular purposes of their own choosing.¹²⁴¹ From the seventeenth century onwards, the number of family pious endowments in the Ottoman Empire increased and skyrocketed in the eighteenth century. In parallel with the intensification of property confiscations, members of the military-administrative class founded most of these endowments.¹²⁴²

A less common yet important strategy involved joint ownership by several people of (usually indivisible) properties solely for ownership. It is known as *şirket-i mülk* (*sharikat milk*) and is generally created by inheritance, wills, and gifts where family members usually come to hold estates in common to concentrate wealth and resources between and within families. Instead of a contractual partnership (*sharikat 'aqd*) to which fiduciary duty is central, in joint partnerships, a partner cannot dispose of their share without the explicit permission of other partners. In case of the death of one of the shareholders, the ownership passes down to their heirs.¹²⁴³ Kenneth Cuno's works on nineteenth-century Egypt show the tendency of rural notable families to form patrilocal multiple-family (joint) households where brothers, uncles, nephews, and cousins stayed together at least until they had mature sons.¹²⁴⁴ The limitation of most cultivation to state (*miri*) land, its overall scarcity, and dependency of agriculture on artificial irrigation determined these preferences. Usufruct rights over lands were jointly held by family "firms" (in other words, *şirket-i mülk*) that were further supported by marriage choices. By also passing on their inheritance to successive generations through

¹²⁴¹ For a brief treatment of the pious family endowments and their distinguishing features from other types of endowments, see Gabriel Baer, "The Waqf as a Prop for the Social System (Sixteenth-Twentieth Centuries)," *Islamic Law and Society* 4, no. 3 (1997): 264–97; Beshara B. Doumani, "Endowing Family: Waqf, Property Devolution, and Gender in Greater Syria, 1800 to 1860," *Comparative Studies in Society and History* 40, no. 1 (1998): 3–41.

¹²⁴² Hasan Yüksel, "Vakıf-Müsadere İlişkisi (Şam Valisi Vezir Süleyman Paşa Olayı)," *Osmanlı Araştırmaları*, no. 12 (1992): 403.

¹²⁴³ Wael B. Hallaq, *Sharī'a: Theory, Practice, Transformations* (New York: Cambridge University Press, 2009), 251–56; Beşir Gözübenli, "Şirket," in *TDV İslam Ansiklopedisi* (İstanbul, 2010), <https://islamansiklopedisi.org.tr/sirket>.

¹²⁴⁴ Kenneth M. Cuno, "Joint Family Households and Rural Notables in 19th-Century Egypt," *International Journal of Middle East Studies* 27, no. 4 (1995): 485–502; Kenneth M. Cuno, "A Tale of Two Villages: Family, Property, and Economic Activity in Rural Egypt in the 1840s," in *Agriculture in Egypt, From Pharaonic to Modern Times*, ed. Alan K. Bowman and Eugene Rogan, Proceedings of the British Academy (Oxford: Oxford University Press, 1999), 301–29.

inter vivos gifts as an alternative strategy, Ottoman-Egyptian rural families ensured patrilineal inheritance and undivided possession of land, a practice that lasted until the early twentieth century.

Last but not least, the ability to assign one-third of the gross value of all estates as bequests created an opportunity to favor disadvantageous classes, albeit to a limited degree. For instance, if one created a testamentary endowment (*vasiyet*) about bequeathing estates in favor of grandchildren (or even unborn grandchildren) who are generally blocked by the decedent's son(s) and daughter(s) according to Islamic property transmission rules, then s/he could favor some of their offspring.

Iris Agmon stresses that “the patriarchal structure should be seen as a general framework that constituted the rules of the game,”¹²⁴⁵ that is, religious family laws, and property devolution practices dictated by local customs. In light of the legal or other mechanisms discussed above, this argument can be supplemented by considering the dynamic local economies and marriage alliances that produced and reproduced inter- and intra-household relations. All in all, through various strategies of avoidance, modification, or circumvention of Islamic inheritance laws, propertied individuals envisioned and constructed gendered property, family, and kinship relations as much as the laws themselves did. People's socioeconomic position in life and the number and composition of heirs influenced the composition and fate of their wealth. Only a certain number of deaths generated inheritance inventories, most of which were drawn up due to legal requirements and within the capabilities of regional judicial networks. Even if the sharia court undertook an inheritance inventory, not all wealth-generating estates made it to the inventories due to legal or other all-too-human reasons.

4.3.2.3. The reliability of the inventories as a source for family and household structure

Household structure is kin and non-kin relationships within and between households whose configurations are enmeshed in cultural values and political, economic, and environmental realities. Most studies have used the inventories to debunk claims about the incidence of

¹²⁴⁵ Iris Agmon, *Family and Court: Legal Culture and Modernity in Late Ottoman Palestine* (New York: Syracuse University Press, 2006), 136.

extended family and polygamy across time and space in the Ottoman Empire.¹²⁴⁶ In doing so, they usually aggregated the number of children and wives per decedent and presented the results based on sex and ethnoreligious identity. Or, without defining or theorizing the family or household type they are looking for, they calculated family or household size by taking the number of heirs that were related by blood or marriage or thought to be coresident as constituting a type. These approaches are biased because of the norms of Islamic inheritance law. In Margaret Lee Meriwether's words,

In designating which family members had inheritance rights, the *shari'a* (Islamic law) was in effect demarcating the boundaries of the family in the eyes of the law. Regardless of the existence or absence of other economic links among family members, they were tied together through their common legal rights as heirs or heir apparent and their joint interests in the resources involved. The significance of these legal rights, the ties created by them, and their impact on family structure depended, however, on how inheritance were settled in practice, not on a legal abstraction.¹²⁴⁷

As she rightfully points out, Islamic inheritance law envisioned and drew tight borders around the "kin who counted" in terms of entitlement to a deceased's patrimony. This fact may likely lead to scattered analyses of household structure in the Ottoman Empire for several reasons.

- 1) First, as said, most inventories were drawn up because of the existence of minors among heirs and heirless decedents. If a parent died leaving only minor children, there is a great likelihood that s/he left their family prematurely, which implies that the family ended without reaching its final size. Therefore, inventories that include adult children must be preferred to achieve a more realistic quantification of family size. Similarly, the inventories belonging to polygamist decedents or those who had

¹²⁴⁶ For example, Ömer Lütfi Barkan, "Edirne Askerî Kassamı'na Âit Tereke Defterleri (1545-1659)," *Belgeler* 3 (1966): 9–18; Özdeğer, *1463-1640 Yılları Bursa Şehri Tereke Defterleri*, 55–59; Abraham Marcus, *The Middle East on the Eve of Modernity: Aleppo in the Eighteenth Century* (New York: Columbia University Press, 1989), 195–212; Ömer Demirel, Adnan Gürbüz, and Muhittin Taş, "Osmanlılarda Ailenin Demografik Yapısı," in *Sosyo Kültürel Değişme Sürecinde Türk Ailesi I* (Ankara: T.C. Başbakanlık Aile Araştırma Kurumu, 1993), 97–161; Establet and Pascual, *Familles et Fortunes à Damas*, 43–57; Méropi Anastassiadou, *Salonique, 1830-1912: une ville ottomane à l'âge des Réformes* (Leiden ; New York ; Cologne: Brill, 1997), 248–83; Judith E. Tucker, "Ties That Bound: Women and Family in Eighteenth- and Nineteenth-Century Nablus," in *Women in Middle Eastern History: Shifting Boundaries in Sex and Gender*, ed. Nikki R. Keddie and Beth Baron (New Haven ; London: Yale University Press, 1991), 243–47; Abdurrahman Kurt, *Bursa Sicillerine Göre Osmanlı Ailesi (1839-1876)* (Bursa: Sentez Yayıncılık, 2013), 107–38.

¹²⁴⁷ Margaret L. Meriwether, *The Kin Who Count: Family and Society in Ottoman Aleppo, 1770-1840* (Austin: University of Texas Press, 1999), 154.

multiple marriages with children from different wives (their situation is stated in the inventories) must be excluded.

- 2) On the other hand, many heirless decedents in the inventories will distort the results for per-decedent children analyses. Most of them likely had heirs who appeared later. In that case, a new inventory was not taken (as most belongings were already sold), but the investigation processes of the reliability of heirs and partitioning of the cash and estates were entered in the court records.

This is not to undervalue the importance of the information contained in the inventories. Since they include females, they are the only source that can provide insight into the number of children per parent in various corners of the Ottoman Empire throughout the centuries. However, studying household structures based on them is somewhat tricky, if not impossible, because

- 3) Inheritance inventories list only the eligible inheritors. They also do not mention their residential status, which would allow for determining co-residence. Moreover, as they give a snapshot and infant and children inheritances were seldom registered, we are uninformed about children who died before the decedent.
- 4) Spouses, sons, daughters, fathers, and mothers cannot be blocked by someone else and always receive a share as long as they are alive. Brothers and distant relatives can be heirs depending on the composition of inheritors.
- 5) It was enough for a son or father to be an heir to prevent close relatives from inheriting property and their names from appearing in the inventory. The existence of a son in most inventories largely limits the visibility of other kin and family members who might be co-residing.
- 6) As tenants and servants in a house are generally not entitled to family patrimony and slaves might be freed before being recorded as properties, their nonexistence in the inventories must not be interpreted as their absence in reality, or at least before the death took place.
- 7) In a similar vein, as the ages of the deceased or heirs are not given, an adult son or daughter might have already moved out of the house, a situation closely related to

marital status. Examining certain features of Turkish Muslim families in the nineteenth and first half of the twentieth century, Alan Duben highlighted,

The rule for Turkish households ... is that fission should not take place until the death of the patriarch. In theory this could mean large and complex households composed of married offspring and their children before the split... Daughters leave their natal households as they marry; they are replaced by *gelins* [brides] as sons marry. The household is rarely composed of both married daughters and *gelins*... The estate would be divided at [the death of the father], with offspring receiving their customary shares. Married brothers might live together for a short period after that, but it would be highly unusual for them to continue doing so for long; as a result, the division of the estate almost inevitably meant the break-up of the *hane* [household].¹²⁴⁸

Thus, arriving at even an approximate picture of household structure is an elusive task that requires in-depth knowledge of political economy, household formation and partition practices, house types, marriage patterns, and the prevalence of servanthood and slavery in a particular location.

4.3.2.4. *General benefits of the inventories for HLC Purposes*

Like the population registers and tax surveys, the Ottoman inheritance inventories provide a snapshot in time biased by social and legal conventions. As abovementioned, they do not necessarily reflect the time of death, the economic wealth of an individual, actual family size, or household structure. The inheritance inventories have been available since the early years of the Ottoman Empire. Therefore, HLC investigations can be started before, during, and after population registers and tax surveys. Although only a tiny segment of deaths was inventoried, putting these documents in conversation in different configurations enhances their explanatory power.

A helpful rule of thumb is that the larger the time gap between the inventories and the population registers and tax surveys, the harder it becomes to link heirs, explore continuities and ruptures in households, and speculate on other socioeconomic indicators provided in the sources. The following paragraphs consider *all* the benefits that can be achieved through data linkage regardless of whether the inventories were taken before, during, or after the population counts and tax records (i.e., the age of the decedent can only be achieved if he was recorded in the registers.)

¹²⁴⁸ Duben, "Turkish Families and Households in Historical Perspective," 84; He made a similar argument for late Ottoman Istanbul households. Alan Duben, "Household Formation in Late Ottoman Istanbul," *International Journal of Middle East Studies* 22, no. 4 (1990): 423.

While ages in the population registers help us approximate the age of death and that of male heirs, death years recorded in them can indicate the wideness of the gap between inheritance and death dates and the truthfulness of death dates in general. As the inventories mark the end of an individual's life, changes or lack thereof in biographical, occupational, and residential information can be traced. In terms of occupations, the maker/seller problem can be ameliorated by setting someone's occupational history against his properties.

We can document changes or lack thereof in the decedent's household structure regarding males related by blood or other means. Thanks to the registers, we can detect who were present, born and died in, and moved in and out of the household. At this point, the inventories complement the registers by showing female heirs, among whom wife(s) and minor daughters can be regarded as co-residing family members. Besides household structure, the occupational and tax history of male heirs or, more generally, household members can be based on more solid grounds.

A decedent's neighbors, relatives, co-residents, and business associates can be seen in the population registers. This fact enables us to match creditors, debtors, court witnesses, and guardians across the sources. Also, if the decedent owned property, established credit relations, or willed money to be spent in areas other than their domicile, potential socio-economic explanations for these decisions can be speculated on. In addition, the decedent's agnatic kin who lived separately but in the same area can be found as long as biographical information such as family names or uncommon father's names allows.

Incorporating the *temettuat* surveys into the inventories illuminates several aspects of the economic activity of an individual and a household. As they show wealth, the inventories are considered a better indicator of long-term economic achievement than tax surveys. Unlike surveys that document only the income-yielding assets, they demonstrate the value of these assets and show the undocumented wealth in the surveys, such as that generated by belongings and moneylending. On the other hand, the surveys had the advantage of writing down occupational incomes and incomes from rented properties, including pious endowments (such as inns) and the size of state land cultivated and uncultivated. Considering that the inventories tend to show personal and yet unquestionable wealth, choosing

inventories circa 1845 may help determine whether a correlation exists between one's income in the surveys and wealth as recorded in the inventories.

Changes and continuities in biographical, occupational, and residential information since the population registers and tax surveys can be tracked. Based on occupational information and agricultural and commercial estates, whether the decedent was engaged in by-employed can be inferred.

Matching all the male inventories in a year with the population registers and tax surveys serves to substantiate which social (military-administrative/civil), ethnoreligious, occupational, age, resident (temporary/permanent), and (according to the tax surveys) income groups were proportionally over- and under-represented. Specifically, year-by-year matching of all inventories with the population registers in the periods of 1830-1838 and 1839-1844, when the master population registers were completed and updated, can approximately show the ratio of the inventoried to the actual population. Because the inventories are not limited to a specific period, adding those belonging to past and subsequent generations can extend family genealogies.

All in all, the inventories prove valuable for their explicit content and are indispensable sources for linking generations together to understand intergenerational wealth and status transfer.

4.3.2.5. A note on the state of Bursa sharia court registers and their history

The oldest court records for Bursa are available from 1455 (AH. 860) and the most recent from 1931.¹²⁴⁹ The history of the preservation of Bursa court registers is quite eventful. Until the nineteenth century, they were kept in individual courts and, from 1834 onwards, were collated in multiple locations in the city center where the 1855 earthquake damaged them. From the early 1930s on, the registers were preserved in the Regional Directorate of Foundations and, after 1945, in the city's archaeology museum. The sections containing the pious endowments records continued to be conserved in the Directorate and were lost to the great fire of 1958 that burned down the building.¹²⁵⁰ All court registers were brought together

¹²⁴⁹ OA. MŞS. ŞSC. d. 2465 (A / 9) (AH. 851 / 1447/1448); 3394 (E / 146) (AH. 1350 / 1931/1932).

¹²⁵⁰ The story until here is based on Salih Pay, "Bursa Kadı Defterleri ve Önemi," *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi* 10, no. 2 (2001): 90.

in the National Library of Turkey in Ankara in 1991. A large portion of them was microfilmed by 2000. Finally, all records were transferred to the Presidential Ottoman Archives in 2005.¹²⁵¹

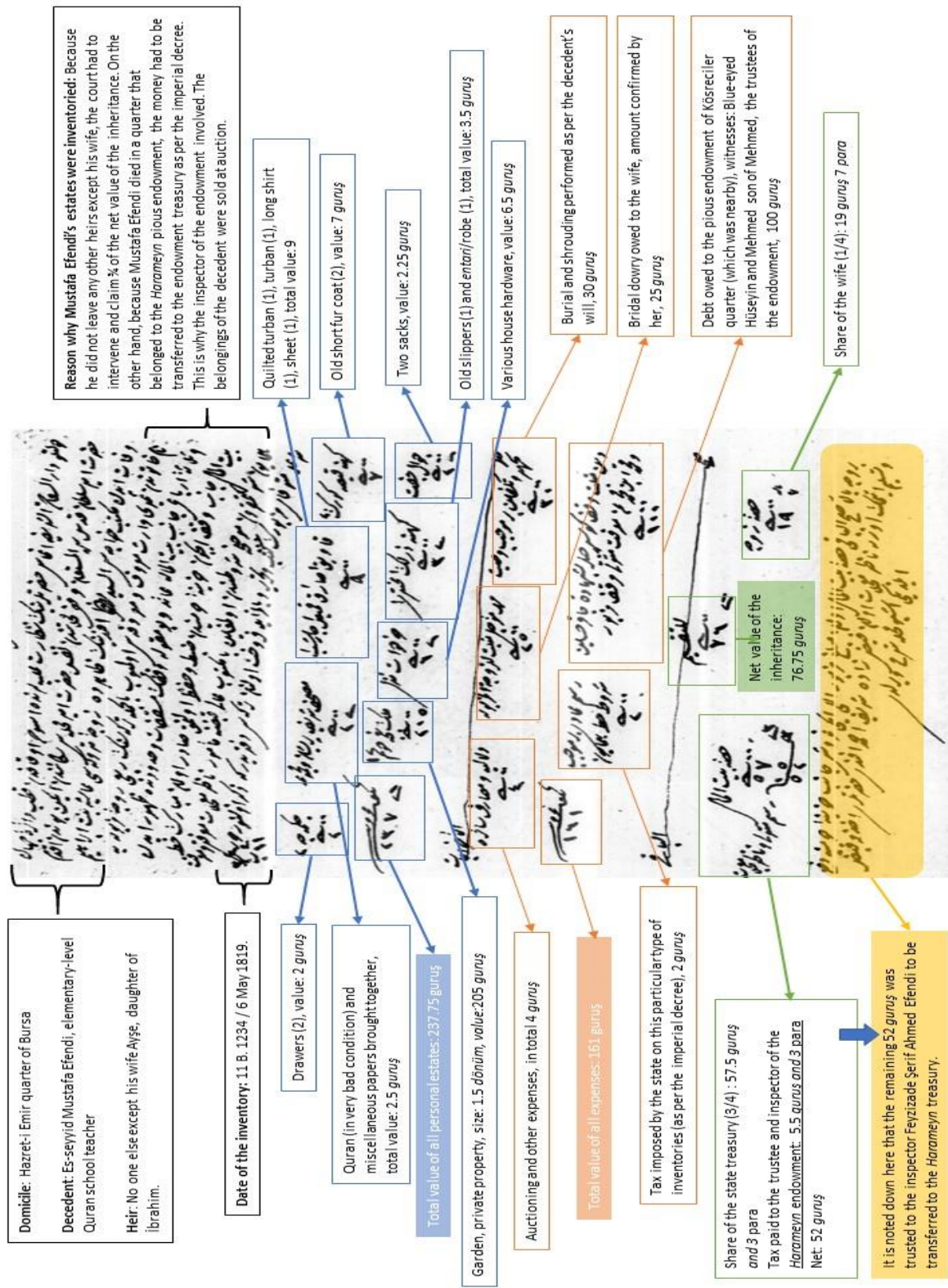
The nineteenth-century city of Bursa had one central court divided into seven deputy-kadi districts with small courts (*naiplik*). Within the larger subdistrict of Bursa, whose jurisdiction encompassed two to three hundred villages, five additional deputy-kadi districts were attached to the central court. It was only the primary court that oversaw inheritance matters.¹²⁵² Although we cannot determine which registers from which court survived every year, for the nineteenth century, there existed multiple registers belonging to the urban center of Bursa and populated with lots of inheritance inventories for each Hijri year, suggesting those belonging to the central court were well-preserved.

An example of inheritance inventory from the Bursa's court records can be seen in Figure 5.

¹²⁵¹ Yunus Uğur, “Şer’iyye Sicilleri,” in *TDV İslam Ansiklopedisi* (İstanbul, 2010), 9, <https://islamansiklopedisi.org.tr/seriyye-sicilleri>.

¹²⁵² The city of Bursa's additional courts were, Altıparmak, Ördekler, Kayabaşı, Murat, Çınar, Kiremitçi, Kuşunlu. Those outside the city but within the subdistrict were Kite (today's Ürünlü), Fledar (today's Gündoğdu), Abulyond (today's Uluabat), Kestel, and Çekirge. Spatially, it can be said that they were homogeneously distributed both within and out of the city. Satıcı, “19. Yüzyılda Hüdavendigâr Eyaleti,” 108–12.

Figure 5: An inheritance inventory from the Bursa court records, 1819 (OA. MŞH. ŞSC. d. 2980 [B/321])



4.3.3. Tombstones (sing. *Mezar taşı* – MZT)

Seeing how the inventories' detailed information can uniquely impact the HLC analyses, including more varied sources is guaranteed to enhance our understanding of and fill in the temporal blanks in life course reconstructions. Possibilities are endless – various types of entries in court records like cases and property purchase entries, commission (*rüüs*) documents, waqf records, jizya registers, as well as private documents.¹²⁵³ Here, I introduce a public and private one – tombstones, which are the most verbal and least formulaic material compared to the other three.

Ottoman urban areas expressed their identity through large cemeteries surrounding them and graveyards formed in small, restricted areas around the foundation of buildings such as mosques, masjids, shrines, and convents, zawiyas, tombs, and churches (graveyards of Muslims were called *hazire*). These cemeteries left behind a vast archive of past communities. Since early Ottoman times, Muslim and non-Muslim graves were marked with a tombstone identifying a decedent's name, family name, status, and death date, with a small passage from holy books and inscriptions asking for prayers.¹²⁵⁴

Regarding Turkish-Muslim tombstones, two traditions coexisted in the Ottoman Empire. First, The Sunni-Islamic tradition required tombstones to be humble and built of perishable material (that can also be recycled for construction) and cemeteries to be

¹²⁵³ A related example is Amy Singer's use of the tapu tahrir (land survey) registers and court records together to study rural administration of Jerusalem in the sixteenth century. Amy Singer, "Tapu Tahrir Defterleri and Kadı Sicilleri: A Happy Marriages of Sources," *Tarih*, no. 1 (1990): 95–125.

¹²⁵⁴ Needless to say, non-Muslim tombstones are extremely understudied in academic literature. For some works on the historical value of Ottoman tombstones and epitaphs, see Jean-louis Bacaqué-Grammont, Hans Peter Laqueur, and Nicolas Vatin, "Les Cimetieres Ottomans Comme Source Historique. Methodologie et Possibilites de Traitement Par l'Informatique," *Erdem* 6, no. 16 (1990): 177–96; Hans-Peter Laqueur, *Hüve'l-Baki: İstanbul'da Osmanlı mezarlıkları ve mezar taşları*, trans. Selahattin Dilidüzgün (İstanbul: Tarih Vakfı Yurt Yayınları, 1997); Kevork Pamukciyan, *İstanbul Yazıları, Ermeni Kaynaklarından Tarihe Katkılar*, I (İstanbul: Aras Yayıncılık, 2002); Ahmet Sacit Açıkgözoğlu, "Mezar Taşı Çalışmaları," *Türkiye Araştırmaları Literatür Dergisi*, no. 14 (2009): 297–314; Merih Erol, "Cultural Manifestations of a Symbiosis: Karamanlidika Epitaphs of the Nineteenth Century," in *Cultural Encounters in the Turkish-Speaking Communities of the Late Ottoman Empire*, ed. Evangelia Balta (İstanbul: Isis Press, 2014), 77–103; Rüstem Bozer and Serkan Sunay, "Kula Meryem Ana Kilisesi Karamanlıca Mezar Taşları," *Belleten* 80, no. 287 (2016): 103–22; Minna Rozen, "A Survey of Jewish Cemeteries in Western Turkey," *The Jewish Quarterly Review* 83, no. 1/2 (1992): 71–125. Rozen directed the project conceived by Bernard Lewis and sponsored by the Annenberg Research Institute that brought together more than 60,000 Jewish tombstones from 1583 until 1990 from various parts of Turkey and the Balkans. Onsite documentation of tombstones, including photographs, full transcriptions of epitaphs, and analyses of stone materials and ornamentations, was carried out between 1988-1990. The database is made available to the public by the Goldstein Goren Diaspora Research Center: <https://jewishturkstones.tau.ac.il>.

temporary places that could be destroyed/repurposed for communal needs (such as road constructions). Second, the pre-Islamic Turkish custom of erecting magnificent tombstones to commemorate and honor the dead resulted in immense investment in ornamental stones for centuries.¹²⁵⁵ Although the repurposing, moving, and obliteration of cemeteries never stopped, especially in terms of the construction of tombstones, the former tradition lost its appeal around the turn of the eighteenth century. Hence, eighteenth- and nineteenth-century tombstones built with more durable material form a majority in most Muslim cemeteries and graveyards around the Empire. Although their recency is undeniably a contributing factor to their numeric dominance, Edhem Eldem argues that from the eighteenth century onwards, the practice of glorifying the dead with a marker was preferred by a larger group of people due less to the presumable affordability of tombstones than to “a common culture that viewed the cemetery as an extension of public space.”¹²⁵⁶

From the eighteenth century onwards, Muslim epitaphs frequently used poetry that often included lines about the temporariness of this world and the permanence of the other. In breaking with the Islamic tradition of revering death as a means of transition to a better life, presumably under Western influence, the epitaphs started to use a more euphemistic language for death and stressed the lament of the living and sorrow of leaving this world.¹²⁵⁷ Tombstones reached their expressive peak in art, design, and epitaphic culture at the turn of the nineteenth century.¹²⁵⁸ They grew larger and adopted baroque styles. Hence, inscriptions lengthened, now including more biographical information such as occupations and birthplace, occasionally mentioning the cause of death, adding lamentations for those who died in their childhood or youth, and some being even concerned with grievances about

¹²⁵⁵ On the contrast between pre-Islamic, Islamic, and Ottoman customs about the use of tombstones, see S. Ory et al., “Makbara,” *Encyclopaedia of Islam, Second Edition*, 2012, https://referenceworks.brillonline.com/entries/encyclopaedia-of-islam-2/makbara-COM_0636; see also Louis Bazin, “Persistances préislamiques et innovations dans les stèles funéraires ottomanes,” in *Les Ottomans et la mort: Permanences et mutations*, ed. Gilles Veinstein (Leiden: Brill, 1996), 19–38.

¹²⁵⁶ Edhem Eldem, “Urban Voices from Beyond: Identity, Status and Social Strategies in Ottoman Muslim Funerary Epitaphs of Istanbul (1700-1850),” in *The Early Modern Ottomans: Remapping the Empire*, ed. Virginia H. Aksan and Daniel Goffman (Cambridge: Cambridge University Press, 2007), 255.

¹²⁵⁷ Hans-Peter Laqueur, *Hüve'l-Baki: İstanbul'da Osmanlı mezarlıkları ve mezar taşları*, trans. Selahattin Dilidüzgün (İstanbul: Tarih Vakfı Yurt Yayınları, 1997), 83.

¹²⁵⁸ Edhem Eldem, “Osmanlı Mezar Taşlarında Gelenek ve Modernlik, Değişen Ölüm,” *Toplumsal Tarih*, no. 110 (2003): 46.

mistreatment during a decedent's career. Jewish, Armenian, and Orthodox Christians shared the popularity and diversity of Muslim funerary art styles.¹²⁵⁹

Muslim male tombstones were commonly topped by a headgear (*serpuş*) that reveals the extreme importance of various meanings attributed to headpieces. They distinguish religious, political, and social status and complement biographical information. On the other hand, female tombstones are sometimes decorated with sculpted veils, garlands, and necklaces that “represented women's purity perhaps but also suggested their limited social identity.”¹²⁶⁰ Since the 1829 clothing laws and its mandatory fez legislation, fezzes (and those with fabric wrappings winded around them) replaced turbans in most tombstones belonging to people from military-administrative and civil backgrounds.¹²⁶¹

Several nineteenth-century Ottoman biographers have consulted biographical information inscribed on Muslim tombstones.¹²⁶² Such data can be operationalized in a multitude of ways for HLC purposes. Although their data size is limited, tombstones are the last piece of evidence that can further validate the content of population registers, tax surveys, and inheritance inventories. Considering that they are erected to perpetuate one's name and status, tombstones document the fame that an individual was known for or enjoyed during their later years. They give the correct death date (usually year) to confirm a time gap between one's death and inheritance inventory. Together with the inventories, tombstones are not time-bound and highly ease the process of finding, or proving the impossibility of finding, the inheritance inventory of an individual who died before or after population registers. This way, they help extend family trees back and forth.

¹²⁵⁹ Edhem Eldem, “Death and Funerary Culture,” in *Encyclopedia of the Ottoman Empire*, ed. Gabor Agoston and Bruce Alan Masters (New York: Infobase Publishing, 2009), 179.

¹²⁶⁰ Madeline C. Zilfi, *Women and Slavery in the Late Ottoman Empire: The Design of Difference* (New York: Cambridge University Press, 2010), 79.

¹²⁶¹ Emine Güzel, “Osmanlı Erkek Mezar Taşlarında Serpuş Biçimleri” (PhD Thesis, Isparta, Süleyman Demirel University, 2016), 140.

¹²⁶² The following published pioneering works are among those that relied on tombstones: Bursalı Mehmed Tahir, *Osmanlı Müellifleri*, ed. Fikri Yavuz and İsmail Özen (1924; repr., İstanbul: Meral Yayınları, 1972); Mehmed Süreyya, *Sicill-i Osmani (Yâhud Tezkîre-i Meşâhîr-i Osmânî)* (1897; repr., İstanbul: Kültür Bakanlığı, Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 1996); Fındıklılı İsmet Efendi, *Tekmîletü'ş-Şakâ'ik Fî Hakk-ı Ehli'l-Hakâ'ik*, ed. Abdülkadir Özcan (1896; repr., İstanbul: Çağrı Yayınları, 1989); Mehmed Şemseddin Ulusoy, *Bursalı mutasavvıflar, âlimler ve meşhurlar: Bahar-ı Şemsi*, Mehmed Şemseddin Ulusoy Bütün Eserleri 3 (Bursa: Osmangazi Belediyesi, 2021).

The paucity of tombstones makes it challenging to match them with an individual. Three reasons contributed to their low availability to a large segment of Ottoman society. First, although much more durable and resistant than paper documents, stones are susceptible to loss, damage, and deterioration caused by environmental factors. Second, the relative paucity of tombstones is caused by high levels of illiteracy in the Ottoman Empire and the expense or relative unavailability of stonemasonry. Most Muslim (and possibly non-Muslim) graves were marked with a piece of wood or stone that could not resist changes in climate or soil for a long time.¹²⁶³

Third, and more importantly, many tombstones were deliberately removed or obliterated. This process was intensified in post-Ottoman nation-states, where the destruction of cemeteries of the “other” enabled the discursive imagination of an ethnically and religiously homogeneous homeland. Radical secular policies in early Republican Turkey shut down, repurposed, and sold religious places, which resulted in the disappearance of tombstones clustered around them.¹²⁶⁴ Radical urban planning policies that accompanied Ottoman and Republican modernization programs did not hesitate to demolish or, to a lesser degree, relocate cemeteries and graveyards to open new arteries, regularize and widen streets, and form new residential areas to settle Muslim immigrants from lost territories.¹²⁶⁵

Due to the abovementioned reasons, the number of Ottoman tombstones in Bursa, where cemeteries made up a large part of the urban area, has significantly diminished over the years.¹²⁶⁶ This result was inescapable for an urban center that has always been central to Ottoman and Republican social and economic policies. The Suphi Bey map shows several Muslim, Orthodox Christian, Armenian, and Protestant cemeteries and graveyards and a

¹²⁶³ Jean-Louis Bacaqué-Grammont, Hans Peter Laqueur, and Nicolas Vatin, “Les Cimetieres Ottomans Comme Source Historique. Methodologie et Possibilites de Traitement Par l’Informatique,” *Erdem* 6, no. 16 (1990): 182.

¹²⁶⁴ On the relationship between religion and Kemalist secular politics in early Republican Turkey, see Hakan Güngör, “Comparative Republican Religion: Eighteenth-Century France and Twentieth-Century Turkey,” in *The French Revolution and Religion in Global Perspective: Freedom and Faith*, ed. Bryan A. Banks and Erica Johnson, War, Culture and Society, 1750-1850 (Cham: Springer International Publishing, 2017), 203–19.

¹²⁶⁵ For instance, during the “remaking” of Istanbul in the second half of the nineteenth century along European lines, municipal and state authorities were always faced with the unavoidable question of whether to remove the cemeteries or to build over them. Zeynep Çelik, *The Remaking of Istanbul: Portrait of an Ottoman City in the Nineteenth Century* (Berkeley: University of California Press, 1993), 49–81, especially pp. 60–69.

¹²⁶⁶ Bedri Mermutlu, “Kaybolan Bursa Mezarlıkları,” *Bursa’da Yaşam*, 2009, 83.

large Jewish and Latin Catholic gravesite. A considerable portion of them was intentionally destroyed during urban renewal projects that started with the inspectorship and governorship of Ahmed Vefik Pasha (respectively, 1863-1865 and 1879-1882). In fact, the destruction of tombs, graveyards, and cemeteries to open roads and migrant neighborhoods and the building of a hospital, a tavern, and coffeehouses over cemeteries were counted among the reasons for his removal from office in 1882.¹²⁶⁷

The lack of heritage management policies during the Republican period has contributed to the vanishing of tombstones. Since the 1950s, new tombstones have replaced old ones due to the reuse of graves. Some were arbitrarily transferred to new sites, surviving graveyards around religious buildings, or archeology museums, which significantly harmed the integrity of family graves. Some stones that stood the test of time were stolen or recycled.

Of Bursa's twelve Muslim cemeteries, only three survived, albeit trimmed in the number of historical stones they used to have.¹²⁶⁸ These are the Pınarbaşı cemetery, with 894 tombstones¹²⁶⁹ (excluding those transferred from here) and Alacahırka cemetery (no stone count yet) in the south, and the Emir Sultan cemetery, with 457 stones¹²⁷⁰ (again excluding those transferred from here) in the east of the city. Eighteenth-, nineteenth-, and early twentieth century-tombstones form the bulk of their surviving historical material (Pınarbaşı 83+431+223, Emir Sultan 14+199+206). Of the 157 Muslim graveyards (*hazire*), 101 survived, with 1188 tombstones (excluding those transferred).¹²⁷¹ 681 stones have dates, and the number of pre-eighteenth-century tombstones is on par with the rest.

Armenian, Orthodox Christian, and Protestant cemeteries and graveyards are no more. Although the Jewish cemetery is still intact, most of it was destroyed when the Bursa-Ankara highway was built, and the earliest surviving material is of early-twentieth-century date.¹²⁷² The Latin Catholic community that was in use until the 1940s is no more, and the number of its tombstones shrank to 32. Most of the materials were used as building materials

¹²⁶⁷ Uslu, "Ahmed Vefik Paşa ve Bursa'nın Modernleşmesi Üzerine Bir Deneme," 94.

¹²⁶⁸ Mermutlu, "Kaybolan Bursa Mezarlıkları," 79.

¹²⁶⁹ Mermutlu and Öcalan, *Pınarbaşı Mezarlığı*.

¹²⁷⁰ Bedri Mermutlu and Hasan Basri Öcalan, *Emirsultan Mezarlığı, Tarihi Bursa Mezar Taşları*, II (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2012).

¹²⁷¹ Mermutlu and Öcalan, *Bursa Hazireleri*.

¹²⁷² Minna Rozen, "A Survey of Jewish Cemeteries in Western Turkey," *The Jewish Quarterly Review* 83, no. 1/2 (1992): 78.

in the surrounding apartments. The surviving stones (the oldest being from 1831, the latest from 1927, and most from the late nineteenth century) were arbitrarily placed next to each other in a children's park.¹²⁷³ Most male stones are from the late-nineteenth century, and none of the decedents appears in the only population register from 1845 that recorded foreign citizens (and hence in the tax surveys). Unfortunately, because they were not subject to sharia law, we only have their tombstones and biographical material from elsewhere (e.g., travelogues and missionary reports).

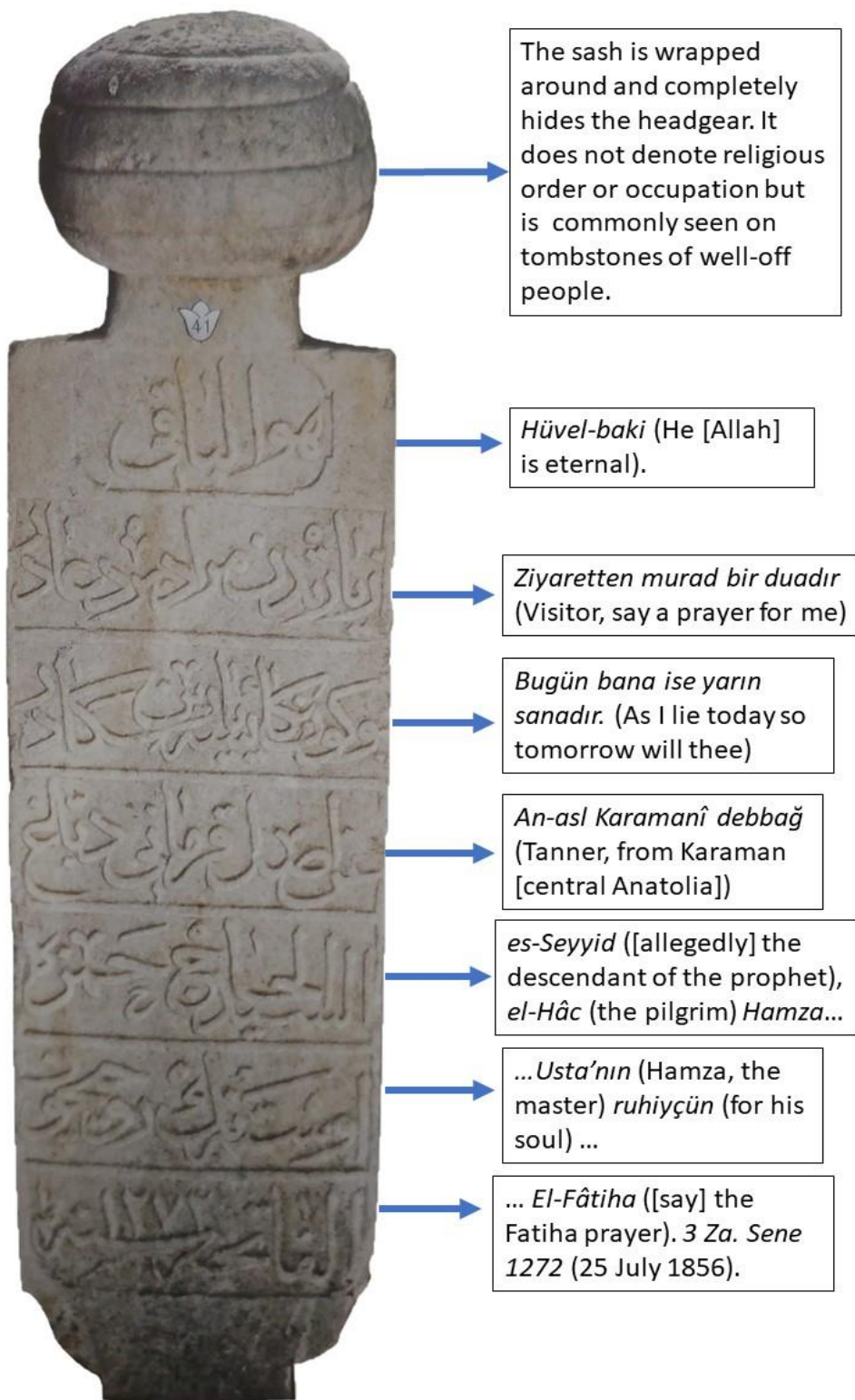
For these reasons, the present thesis is concerned with only Muslim tombstones. The surviving ones carry certain biases. Males, the elderly, and middling- and wealthy classes left far more tombstones than others. Still, though, they are important for showing females. Although those without an occupation outnumber those with them, military-administrative and scholarly occupations are usually in the majority.¹²⁷⁴ In this regard, it can be argued that the incentive of an artisan such as a barber or a timber merchant to underline his fame by having his occupation inscribed on his tombstone is perceivably less than that of a governor, sheik, judge, or someone from a religious order.

To sum up, tombstones are a great visual and informative aid for HLC but are not available for a large segment of Bursa's population. An example of a Muslim tombstone is provided in Figure 6.

¹²⁷³ Although the tombstones belong to individuals from different nationalities (French, Swiss, Italian, Austrian, German, etc.), it is known as the "French cemetery." No academic study has been conducted on it yet. An incomplete survey with photographs can be reached from the Levantine Heritage Foundation's website: <http://www.levantineheritage.com/bursacemetery.htm>

¹²⁷⁴ In a research on Bursa's Muslim tombstones (mostly based on Mermutlu and Öcalan's work on Emir Sultan cemetery and graveyards [hazire]), Halit Çal found that 80 percent of the decedents with an occupation were somehow state-affiliated. The rest 20 percent of the tombstones belonged to artisans. This finding was in conjunction with tombstones from other regions in Anatolia. Halit Çal, "Bursa Şehri Osmanlı Mezar Taşlarında Aile, Hastalık, İş, Kişi, Tarikat, Vakıf, Yapı, Yerleşim Adları," *Türkiye Bilimler Akademisi Kültür Envanteri Dergisi*, no. 14 (2016): 118.

Figure 6: A Muslim tombstone example from the Pınarbaşı Cemetery in Bursa, 1856



4.4: Conclusion

There are more aspects to life than one or two records say. All possible information offered by the primary material for Ottoman HLC reconstructions holds significant clues about transitions that made up trajectories of individuals, households, and certain groups in the Ottoman Empire. Unique and shared features of the main four genres of documents – namely the population registers, tax surveys, inheritance inventories, and tombstones- complement, corroborate and contradict each other. At this point, there are four new important benefits of the HLC approach for Ottoman studies. At the risk of repeating myself:

First, multidimensional aspects of life can be explored using multi-temporal records. Second, it helps the researchers realize the biases and limited nature of the information contained in each source and how cross-sections or snapshots of historical reality constructed using a single source differ from multiple linked data sources. Third, data linkage across the four or at least three sources in the absence of tombstones is replicable for most Ottoman regions. Thus, the HLC perspective not only permits a longitudinal study of social and economic life in the nineteenth century but also renders it possible for the first time to reconstruct the biographies of (seemingly) ordinary and obscure people about whom nothing or only little is known. Different ordering of the HLC material, such as the inventories preceding population registers or tax surveys, yields different perspectives. Fourth, such microanalyses falsify, correct, fine-tune, and benefit from analyses of regional economic and population geography outlined in the first three parts, as well as macroanalyses run with big data comprising population, tax, and inheritance records and tombstones. In the absence of large, linked datasets, they will doubtless be of immense help in developing data-linkage rules.

So far, I have mostly reported on the ideological, bureaucratic, legal, and linguistic context in which the abovementioned documents were produced. Then, I elaborated on the general features of the documents and the multiplicity of ways they can be read together. But the local social- and cultural-spatial context populated them with their substance. In other words, the lives and livelihoods of permanent and temporary residents of a location woven into a complex web of economic, political, social, cultural, and ideological relations created the qualitative and quantitative information attributes in each source. In the next part, I will

move from general to specific and set the scene for my microstudies by examining the city and, relatedly, the region of Bursa in the tumultuous mid-nineteenth century.

Availability, coverage, and general content of the four main HLC materials are outlined and tabulated in Table 16.



Table 16: Availability, coverage, and content of the HLC material

HLC Material	Period	Coverage	Gender	ER (Ethnoreligious Affiliation)	Updated?			
NFS (Population Registers)	1830-1838, 1838-1844	Individual + other household members	Only males	All	Yes (for Bursa, until 1864 for Muslims, 1849 for Non-Muslims).			
TMT (Tax Surveys)	1844-1845	Economically active agents in a household	Usually males, rarely females	All	No			
TRK (Inheritance Inventories)	(for Bursa) 1455 - 1923	Individual + heirs	Males and females	All	No			
MZT (Tombstones)	(for Bursa) since the 14th century until today	Individual and rarely other family members in family burial sites	Males and females	(for Bursa) Muslims and Jews	No			
Code	Contents of individual-level information in each source (green=common red=unique)							
NFS	Name	Occupation	Ethno-Religious Identity	Birth	Migration	Death	Military Service	Poll-tax burden
TMT	Name	Occupation	Ethno-Religious Identity	Income-yielding assets and activities	Tax burden			
TRK	Name	Occupation	Ethno-Religious Identity	Heirs	Wealth	Death		
MZT	Name	Occupation	Ethno-Religious Identity	Family relationship / fame	Socioeconomic status	Death		

Part 5: Historical Life Course of Individuals and Households in the City of Bursa

5.1. Introduction and Some Notes on Data Linkage Methodology

Having provided a glossary of Bursa's population and economic geography in 1820-1870 and introduced the HLC approach and its main sources, this part reconstructs the historical life courses of four households in the city. The main aim here is to offer insights into how the household members' unique trajectories, moving within historical, environmental, socioeconomic, infrastructural, and institutional constraints and situated within a complex web of interactions, made and remade the Bursa region. Our findings in the first three parts will reinforce our explanations, enhance our speculations, and allow for credible stories to emerge. The cases will also provide a testing ground for the benefits of cross-using the HLC material.

The reader should be forewarned that the time and space constraints of the thesis heavily affected the curation process of the following cases. I manually linked hundreds of individuals and their relations across the documents on a separate spreadsheet. However, for the purposes of this thesis, and because no similar studies had been conducted or linked databases had been created before, statistical representation was not sought despite my collection's wide coverage. While temporal, socioeconomic, and ethnoreligious diversity is prioritized, the most crucial selection criteria is that the four cases should allow for micro analyses of the economic and population geography of the Bursa region without losing the macro perspective.

Although the cases are not exceptional in any sense, biographies are unique accounts in many respects and valuable for seeing and emphasizing contingencies at individual, communal, and imperial levels. Keeping this feature in mind, I tried contextualizing the backgrounds of individuals and households in their quarters, the city, and the region to exemplify the richness of data and regional economy. I also did not refrain from using supplementary sources when available to demonstrate how new clues strengthen and change the direction of our accounts. Whenever possible, a section sign (§) is used to refer to the points made in previous sections.

A few notes should be made about the methodology. I preferred manual linkage obligatorily for three reasons. First, the persistent problems of intractable names and migration make it necessary. Because official surnames did not exist until 1934, the widespread adoption of traditional names, titles, and family names, checking each entry is needed. The lack of a standardized way of writing names poses a further problem. While disappearances and appearances of second names, titles, and family names affect all the information, the lack of a regular orthography in the Ottoman script particularly reduces the likelihood of uniformity in non-Muslim identifiers across the sources. In addition, even when we have access to a database, irregularities in the decipherment of the Ottoman stand as an obstacle to reaching perfect automated data linkage. Second, manual data matching mitigates the effect of migration frequently occurring in urban areas. Third, going back and forth between sources ensures the links' strength and sifts good links from the bad, enabling us to discover other possibilities that are not envisaged by automated linkage. As argued, the biographical method is useful at this point to see the harmony between the sources and create rules for matching.

Each case has its own introduction and conclusion, and general concluding remarks are provided in the “Conclusion” part. Before moving to the HLC cases, I admit that the act of *discovering* and *making known* are the essential features of reconstructing life courses. Biographies carry a narrative burden whereby the story is narrated alongside the quest for its traces. In the following HLCs, due partly to the aims of the main materials and the thesis overall, the economic and demographic themes are stressed more than other aspects of life, no matter how surface-level our knowledge is about these themes.

5.2. HLC Case 1: Working for the State: The Households of the Qadi Mehmed Refi Efendi (d. 1834) and His Son Vasıf Pasha (d. 1864)

The city of Bursa was an important judicial and administrative center, with a vast cadre of officials serving in it. That said, members of the notable houses served as qadis and governors throughout the Empire. The following HLC biography is on the household of Mehmed Refi Efendi, the ex-qadi of Plovdiv, and his sons, particularly Vasıf Pasha, who assumed critical administrative posts. It is a story of how political, social, and environmental contingencies played a crucial role in these actors' careers, as well as the fate of their households and immovable properties within and outside the city that constituted the crux of their wealth.

When the Auspicious Incident flared up in Istanbul on the fifteenth of June, 1826, the central administration sought the compliance of the local power groups in the provinces but faced a mixed reaction due to financial problems and social disturbances ensued. While certain regions opposed the abolition of the Janissary corps, like Adrianople, Maraş, and Damascus, some regions, such as Erzurum and Vidin, swiftly declared their support for the event.¹²⁷⁵ Located on the road from Adrianople to Vidin, Plovdiv, an important center of the Bektashi order, closely connected with the Janissaries and thus targeted after the Incident, displayed a total commitment to the destruction of the core power of the Empire's standing army.

The new qadi of Plovdiv, Mehmed Refi Efendi, was behind the declaration of this commitment. On the first day of July, he penned a letter to the Sublime Porte, reporting that people from all segments of the society flooded the sharia court and declared their full backing of the Incident because of the Janissaries' "corruptions and tyranny over the Ottoman society." To further prove the sincerity of his intentions, the qadi recruited a hundred "young and distinguished" boys of 18-20 years old and sent them to Istanbul to join the newly founded army of the Victorious Soldiers of Muhammad.¹²⁷⁶

Plovdiv's decision, stated by the chief judge, must have been relieving to the imperial center. Almost a year prior, the rebellion against Plovdiv's provincial inspector of tax farms (*nazır*) took on a larger scale and spread across the region. It soon turned out that a mufti, a scholar (*müderriş*), and two Janissary chiefs were found culpable of sedition and banished.¹²⁷⁷ As the inspector was removed from office, Elhac Hamid Efendi, then the qadi of Plovdiv, was relocated and replaced by Mehmed Refi. Within this flow of events, the 1826 Incident was truly "auspicious" for the latter, as it brought a most gratifying end to his career, which was wounded during its maturation.

Mehmed Refi Efendi was once a scholar and scribe in the inheritance section of Bursa's military court (*kısmet-i askeriyye*). He bequeathed the honorary "Efendi" (his highness/sir) title from his father Hüseyin Efendi (who got his from his father Salih Efendi),

¹²⁷⁵ Kadir Üstün, "Rethinking Vaka-i Hayriye (the Auspicious Event) : Elimination of the Janissaries on the Path to Modernization" (MA Thesis, Bilkent University, 2002), 45–64.

¹²⁷⁶ OA. HAT. 291 / 17404 (AH. 25-11-1241 / 01-07-1826).

¹²⁷⁷ OA. HAT. 463 / 22674 (AH. 08-1240 / 03/04-1825).

apparently a muderris as noted in his tombstone, and was known as a "Hüseyin Efendizade."¹²⁷⁸ The suffix "-zade," which technically means "descendant of," is "a marker of social and economic privilege, independent of title affiliations and religious markers."¹²⁷⁹ From the tombstone of his mother, Hafize Hanım (d. 1824), who was the daughter of Mehmed Ağa, we understand that a marriage alliance was formed between two notable families.¹²⁸⁰

Mehmed Refi was exiled to Ankara during his scribal activity for an unknown reason in 1811. This might have been related to an infraction of duties in inheritance division in an age when the practice of confiscation was most intense. The sheikh-al-Islam Samanizade Ömer Hulusi Efendi, who ordered his exile, was known for his aggressive behavior and uncompromising attitude toward any misconduct in office.¹²⁸¹ But, on his way east, the scholar fell ill with the common malaria fever in Kütahya and served his time there.¹²⁸² After his recovery and discharge, he returned home.

There is no mention of whether Mehmed Refi Efendi continued as a scribe in the inheritance section. But, upon returning, he became an accountant of Bursa public treasury revenues (*beytülmal mukataası*) in 1814, a duty taken over from his relative Mehmed Murad Halife, who died heirless (i.e., no direct descendant to replace him).¹²⁸³ Meanwhile, as a judge of lower rank in the hierarchy of professorship, "*Mevali-i Devriye*," he taught at Leysizade madrasa at the center of the city's citadel area (§ 3.3.2).¹²⁸⁴ In line with his rank, he assumed

¹²⁷⁸ Pınarbaşı Cemetery, Tombstone, no. 180. Latitude and longitude: 40.181684 – 29.057284. The stone is half-broken, so we do not see a date. Its inscription reads: *Hüve'l-Bâkî / Merhum ve mağfurün leh / Müderrisin-i kiramdan / Hüseyin Efendi / ruhiyçün el-Fâtiha* (Rough translation: Pray a Fatiha prayer for the soul of the religious scholar Hüseyin Efendi). In addition, he had a daughter named Saide Hatun (Mehmed Refi's elder sister, died in AH. 1199 / 1785), whose tombstone (no. 181) is next to him.

¹²⁷⁹ Metin Coşgel and Boğaç A. Ergene, *The Economics of Ottoman Justice: Settlement and Trial in the Sharia Courts*, Cambridge Studies in Islamic Civilization (Cambridge [UK] ; New York: Cambridge University Press, 2016), 55.

¹²⁸⁰ Pınarbaşı Cemetery, Tombstone, no. 178. Latitude and longitude: 40.181684 – 29.057284. Her tombstone reads: *Hüve'l-Hallaku'l-Baki / Rahmet-dâr mağfîret-disâr / Ümmü'r-Refi Hafize / Hanım kerime-i el-Hâc / Mehmed Ağa ruhiyçün / rızâen lillah el-Fâtiha / fi 17 ZA sene 1239 (14-07-1824)* (Rough translation: Pray a Fatiha prayer for the soul of Hafize Hanım, the mother of Refi and the wife of Mehmed Ağa.)

¹²⁸¹ Tahsin Özcan, "Ömer Hulusi Efendi, Samanizade," in *TDV İslam Ansiklopedisi* (İstanbul, 2007), <https://islamansiklopedisi.org.tr/omer-hulusi-efendi-samanizade>.

¹²⁸² OA. C. AS. 445 / 18547. (AH-24-12-1225 / 20-01-1811); 55 / 2711 (05-01-1226 / 30-01-1811).

¹²⁸³ OA. C. ML. 494 / 20091 (AH. 15-12-1229 / 28-11-1814). Mehmed Murad Efendi's tombstone is in the family burial site in the Pınarbaşı cemetery. (No. 187).

¹²⁸⁴ OA. HAT. 1542 / 43. (AH. 1233 / 1817).

the qadiship of Maraş from November 11, 1817¹²⁸⁵ to October 31, 1818¹²⁸⁶, and Baghdad from 1821 to 1822¹²⁸⁷, offices on the lower end of the highest qadi posts. Again, after three years of formal waiting (*mazuliyet*) in Istanbul and Bursa, Mehmed Refi Efendi ascended in the hierarchy and became the chief judge of Plovdiv on May 9, 1826.¹²⁸⁸

The qadi's career in Plovdiv ended on March 28, 1827.¹²⁸⁹ He returned to his hometown Bursa, once again. Mehmed Refi Efendi was recorded in the 1830 population register as a senior ulema (*mevaliden*) and the head of the twelfth household of the Veziri quarter.¹²⁹⁰ This small neighborhood, with twenty-two houses and fifty-three males, was located just outside the southeastern border of the citadel and almost next to the Pınarbaşı cemetery. Bursa's only Mawlawi lodge was also in the same settlement, where twenty-one *dedes* and dervishes stayed. Next to Mehmed Refi's name, the master register inscribed two more: The elder son Ahmed Vasıf *mullah* and the younger son Münib *mullah*. Only Münib's age is specified, and he was five years old. The hereditary nature of the sons' titles supports Madeline Zilfi's finding that, especially from the eighteenth century onwards, higher scholar-jurist positions were concentrated in the hands of a limited "mullah aristocracy."¹²⁹¹

Because those in the higher rungs of the judicial hierarchy undertook and supervised the completion of the 1830 population registers, the retired qadi was appointed to carry out enumerations in the district of Alaiye (roughly larger than today's Alanya subdistrict of Antalya in southwestern Turkey). Mehmed Refi and Ahmed Vasıf *mullah* were therefore annotated as "headed to Alaiye." From a later update register, we also learn that a black slave, Mesud, the son of Abdullah, escorted them.¹²⁹²

Three non-kin male companions to the qadi's journey to southern Anatolia were marked with the same note. One was a Mehmed *mullah* from the Arablar quarter just a street above. He was a 25-years-old scribe in the central court's specific "Bab" (door) branch

¹²⁸⁵ Ibid.

¹²⁸⁶ OA. HAT. 1546 / 21 (AH. 1234 / 1818).

¹²⁸⁷ OA. TS. MA. e. 1139 / 84 (no date) ; HAT. 769 / 36173. (AH. 11-09-1236 / 12-06-1821).

¹²⁸⁸ OA. HAT. 1572 / 12 (AH. 1241 / 1826).

¹²⁸⁹ OA. AE. SMHD. II. 114 / 9664 (AH. 01-09-1242 / 28-03-1827).

¹²⁹⁰ OA. NFS. d. 1393 (AH. 1246 / 1830), p. 76.

¹²⁹¹ Madeline C. Zilfi, "Elite Circulation in the Ottoman Empire: Great Mullahs of the Eighteenth Century," *Journal of the Economic and Social History of the Orient* 26, no. 3 (1983): 318–64.

¹²⁹² OA. NFS. d. 15248 (AH. 1249 / 1833), p. 15.

responsible for preparing administrative-fiscal records. Another was a Hadji Çakır (blue-eyed) Mehmed from the nearby quarter of Şeker Hoca, who earned his living by being the servant (*tebaa*) of Refi Efendi. The last companion was the qadi's neighbor, an es-seyyid Ahmed, who was taking care of his two nephews Mustafa (14) and Abdullah (5), two orphans of a recently deceased tanner named İbrahim Efendi. The tannery region of the city was close to the Veziri quarter, which, together with the adjacent Veled-i Veziri quarter, were alternatively known as "Tanners" (*debbağan/bedbağan*).

The ex-qadi successfully completed his last duty to the state by finishing the registration in early 1831¹²⁹³ and presenting the records to Istanbul himself.¹²⁹⁴ Unfortunately, in the same year, his daughter Hafize Hanım (named after Refi' Efendi's mother) died, adding another stone to the family cemetery in Pınarbaşı, very close to the Veled-i Veziri quarter, overseeing the mansion.¹²⁹⁵ His retinue stayed in Alaiye for other tasks, such as supervising the preparation of copies, updates, and total counts. Alaiye, a strategic port region in the Mediterranean, was occupied by the troops of Ibrahim Pasha of Egypt from 1832 until May 1833.¹²⁹⁶ We do not know if they were there during this event or escaped the situation (apparently by the sea, as the area to Bursa was under attack), but Ahmed Vasıf and Mesud the slave returned home in the summer of 1833, obviously for a cheerful reason.¹²⁹⁷ Mesud came to Bursa to help the household with the birth of the qadi's son Hüseyin Hüsni, registered as born on July 30, 1833 (AH. 12-03-1249). Vasıf arrived three weeks later. Sadly, Mehmed Refi Efendi could not see his youngest growing up, and died in December 1833 or January 1834 (AH. 08-1249).

¹²⁹³ While the earliest register is dated to November 1830, the latest is from March 1831. OA. NFS. d. 3346 (AH. 06-1246 / 11/12-1830); NFS. d. 3352 (AH. 09-1246 / 02/03-1831).

¹²⁹⁴ OA. HAT. 335 / 19235 (AH. 1246 / 1831).

¹²⁹⁵ Pınarbaşı Cemetery, Tombstone, no. 179. Latitude and longitude: 40.181684 – 29.057284. Its inscription reads: *Hüvel-Bâkî / Mevâlî-i kiramdan esbak / Filibe Mollası Refî Efendi / kerimleri merhume ve mağfurün lehâ / Hafize Hanımın / ruhiyçün Fâtiha 7 Sene 1247 (1831)* (Rough translation: Pray a Fatiha prayer for the soul of Hafize Hanım, daughter of the qadi of Plovdiv.)

¹²⁹⁶ Alaiye stood at a critical point for the provisioning of Ibrahim Pasha's army from Egypt so that even during the peace deals in May 1833 the Pasha refused to surrender it. For a thorough review of the impact of his occupation on the region, see Güven Dinç, "Mehmet Ali Paşa İsyanı'nın Antalya'ya Etkileri (1831-1833)," *Belleten* 80, no. 289 (2016): 857–84.

¹²⁹⁷ OA. NFS. d. 15248 (AH. 1249 / 1833).

Mehmed Refi's inheritance inventory was drawn up on March 3, 1834, at least two months after his death notice.¹²⁹⁸ He was announced dead in the Veled-i Veziri quarter, not in the Veziri quarter recorded in the 1830 population register. Because he belonged to the scholarly class, his moveable and immovable properties were auctioned, priced, and distributed under the supervision of the chief judge of Anatolia (*Sadr-ı Vala-yı Anadolu*) Melekpaşazade Abdülkadir Efendi, who was one of the founders of the Beşiktaş Scientific Society (*Beşiktaş Cemiyet-i İlmiyyesi*) in Istanbul and known for his harsh attitude towards the Janissaries and Bektashi order.¹²⁹⁹ Although we do not establish a direct relationship between these two, Melekpaşazade's involvement might be the last gesture for the qadi and the people of Plovdiv, who firmly endorsed the Auspicious Event.

Refi Efendi's inheritors included two daughters. His senior (*kibar*) children were Ahmed Vasıf Efendi and Rahime *Hanım* (lady) and junior (*sigar*) children were Mehmed Münib *mullah*, Hüseyin Hasbi *mullah*, and Raife *Hanım*. No wife is mentioned. Notice the youngest son's second name now changes from Hüsni (حسنی) to Hasbi (حسبی). An individual's name may vary during the life course, which is a significant obstacle to establishing data linkage across sources.

Perhaps the richness of his belongings postponed the inventorying of the ex-qadi's inheritance. The total value of his *private* property and debts was 203.827,5 *guruş* (1959 pound sterling in 1834, £118.356,90 in 2017¹³⁰⁰), making his household one of the richest. Unlike the ordinary Bursans whose houses were priced at a few hundred, or, if better, a few thousand *guruş*, he was living in a large mansion with an interior and exterior court (*dahiliyeli ve hariciyeli konak*), worthy of 25.000 *guruş*. He owned a house (*menzil*) in the Veziri quarter. They presumably resided in one of them during the first wave of population registers. Otherwise, the Veled-i Veziri and Veziri quarters had dead-end streets like most Bursa settlements, and the large mansion must have touched both (§ 3.4.1.2).

¹²⁹⁸ OA. MŞH. ŞSC. 3050 (C / 28), pp. 112-113 (AH. 21-10-1249).

¹²⁹⁹ Özkan Karabulut, "The Rehabilitation of the Bektashi Order (1826-1876)" (MA Thesis, Istanbul, Sabancı University, 2017), 25.

¹³⁰⁰ I used the standard conversion rate of 1 pound-sterling = 110 *guruş*, even if we know that this rate was much higher and unstable in any given year. Then I converted the corresponding pound amount to 2017 pound-sterling. Still, it gives us a reliable estimate of the estates' worth.

Figure 7: Veled-i Veziri Quarter, 1894. Photo by Sebah-Joallier. The quarter's mosque is in the middle. A mansion with an interior and exterior court can be seen in the lower-left corner. However, Mehmed Refi's estate was in the photograph's upper-right section. Behind Veled-i Veziri is the Arablar quarter, where two other houses were located. Where homes end, Mount Olympus starts, and the Gökdere stream flows through the valley in the middle. (Source: Neslihan Türkün-Dostoğlu, *Osmanlı Döneminde Bursa*, v. I, 219¹³⁰¹).



In addition, Mehmed Refi owned two homes priced at 1000 and 520 *guruş* in the neighboring Arablar quarter, only five minutes' walking distance away, where Mehmed mullah, his scribal companion to Alaiye, lived. Because there was no "empty" or "maleless" house in all the mentioned quarters in the 1830 and 1839 population registers, we can assume they were rented or given to known people rent-free. Mehmed mullah was apparently one of them. In fact, this tradition seems to have continued: When Mehmed left Bursa upon an appointment a few months following the qadi's death, his house was occupied by none other than es-seyyid Ahmed, the other companion, now recorded as a shoe dealer (*dikici dellahı*).

¹³⁰¹ Neslihan Türkün Dostoğlu, ed., *Osmanlı Döneminde Bursa: 19. Yüzyıl Ortalarından 20. Yüzyıla Bursa Fotoğrafları = Bursa in the Ottoman Period: Photographs of Bursa from Mid 19th to the 20th Century*, 2 vols. (Antalya: AKMED, 2001).

Exactly one-third of the wealth (67.817 *guruş* [653 pound-sterling in 1834, £39.452 in 2017]) was comprised of the qadi's personal items. As a scholar, he owned 9777 *guruş* worth of sizable and diverse textual corpus comprising Qurans; tafsir, hadith, prayer, and theology books; verdict compilations; poems and dictionaries; commentaries on Islamic legislation procedures and financial exchanges; and many more that give good documentation on book ownership. There is no doubt the second-hand book dealers (*sahaf*), who likely assisted in inventorying the books, and the literati of the city purchased many of them in the postmortem auctions.

Household goods are listed as a whole and demonstrate a traditional house design. Many cushions were encased in costly cases and placed on long, bench-like platforms (*sedir*). Multiple mattresses and pillows made comfortable bedrooms. Expensive rugs (*ihram*, *keçe*, *kilim*, and *seccade*) covered the floors, and some served for prayers. As in most inventories, their origins were not specified, except for a precious *Banaluka seccade*, woven with the unique technique and in a colorful pattern associated with this part of Bosnia. There were no big room carpets yet – Uşak and Gördes regions would start this tradition in the coming decades.¹³⁰² *Mangal* (small stove) provided heating; chandeliers covered in lamp glasses (*fanus*) illuminated the rooms at night. While ornated chests, boxes, and drawers filled the interior and exterior space, two clocks, one being mechanical with a striker, displayed not only time but also his differentiation from most urbanites in terms of wealth and status (§ 3.4.3).

The qadi's consumption patterns mirror his status and bon-vivant character. Expensive and fashionable garments, particularly robes and turbans, were woven from the delicate fabrics of Bursa. While a novel fez (*fes-i cedit*) stressed his non-judicial role and support of the new administrative age, a pearl ornated pistol (*mahmudkari kaval tüfeng* – 410 *guruş*), written next to the fez in the inventory, was likely a gift for his crucial service in 1826. Apart from clothes and sandals of ordinary prices, he distinguished himself with his exorbitant furs, gold belts, and silver shoes (the latter two could also be used as collateral for hard times). Pearl prayer beads with a price of 4555 *guruş* completed his attire for important

¹³⁰² Bozkurt, “Tereke Defterleri,” 282.

days. Bursa's baths were frequented by him as well, as plenty of bath towels and a bath set (*hamam takımı*) point to it. The house also had a few rolls of silk- and silk-cotton fabric – only *Lahori*, *Sivasi*, *Halebkari*, and *basma* ones being ticketed with a kind, and flowery ones (*çiçekli*) with a pattern – waiting to be tailored to clothes. However, these clothes might not be in his estate solely for personal consumption. Some amount of cotton (270 *guruş*), likely from Izmir's hinterland (e.g., Aydın and Denizli regions), also suggests he might have been investing in the raw material trade and weaving business to some degree.

Plenty of traditional cookware, such as pitchers, trays, plates, basins, ewers, pans, and pots of various sizes and prices, suggest they served a community more extensive than a conjugal family. Besides the small amount of chickpeas in the house, ample storage of "grains" (*zahair*) of 2500 *guruş* is suggestive that they were not reserved solely for household and stable consumption. Similarly, the storage of coffee and sugar, two of the most significant imports to Bursa after cotton goods (referred to as "the colonials" in the consular reports), was exceptionally large: 25 *kıyye* (about 32 kilograms) of coffee and 50 *kıyye* (64 kilograms) of sugar were recorded. These large amounts indicate they were stored mostly for commercial operations. At home, coffee was offered to the guests with silver rosewater sprinklers (*gülabdanlık*) and incense burners (*buhurdanlık*) that were hard to find in most houses. Accompanying these items, possibly during quiet sessions of contemplation or in the presence of important visitors, were golden and dark-blue ornamented (auctioned at 2520 *guruş*) and silver (at 1123 *guruş*) hookahs, and amber chibouks (seven of them worth 400 *guruş*). Some items might have been bought/gifted in Maraş, Baghdad, and Plovdiv.

As a marker of his military status, a draft horse (*koşum beygiri*) worth 4550 *guruş* is listed along with his six horses and six mules, main transport animals, especially for short destinations and steep terrains (§ 2.3.4.6), valued at the same amount. 150 *kile* (137,5 imperial bushels, about 3000 kg) of barley (sold at 450 *guruş*) was allocated for their fodder. It would not be surprising, then, to see a barn in the exterior space of the mansion.

At the end of the household property section, the inventory hints at who took care of and managed the house(s) (§ 3.4.3.1). Listed amongst the belongings were five concubines worth 4560 *guruş*: *Arab* (black) concubines Halime (1460), Fatma (800), and mother and daughter (*analı kızlı*) Hadice and Dilruba (1500), and an old (*ihtiyar*) *Rumi* (Orthodox

Christian) concubine named Nevreste (meaning "newly-sprouted," possibly a Morean), with a price of 800 *guruş* can give us a sense of his large mansion's size. Additionally, the 1830 register shows another black slave, Mercan, joining the house. He was bought at age twelve in September 1836 ([*fürüht*/purchase date] AH. 26-05-1252 / 08-09-1836).

Refi Efendi's immovable properties constituted the crux of his wealth and contributed to the regional agrarian and urban economy. He owned two separate and moderately large plots of vineyards of 2,5 and three *dönüm* on the eastern outskirts of Bursa. We now understand why the molasses and jam pans are listed in the inventory (§ 2.3.4.1). A chestnut grove of unknown size was owned in the village of Inkaya on the northern slopes of Olympus and five to ten kilometers above the city. Most villagers of Inkaya cultivated chestnut trees in small plots and owned horses and mules – animals the qadi held in plenty (§ 2.3.4.4).¹³⁰³ In Mudanya, three *dönüm* of olives was registered in his name in the Yörükali village, five hours of horse walk away from the city, where possibly the villagers took care of the olives and sent them to the family's preferred destinations (§ 2.3.4.2). Of course, like most Bursans, there was a huge mulberry field of four *dönüm* just next to the mansion to contribute to the silk industries (§ 2.3.4.3). Perhaps the slaves, concubines, and lowly-paid females from neighboring houses were employed in the cocoon-rearing and vine-harvesting seasons to generate cash out of these trees.

As the qadi raised the most popular fruit trees of Bursa, he was also engaged in the grain business by owning a private mill with two stones in the Kayapa village, 20-25 kilometers west of Bursa on the road to Lake Apolyond, comprising 260 households and close to a thousand people. The mill was turned by the waters of Olympus and rented to the villagers (§ 2.3.4.5). This village's tax survey shows that six wealthy Bursa residents owned a mill in it in 1845.¹³⁰⁴ In fact, Kayapa had the greatest concentration of mills in western Bursa plain until Lake Apollonia, grinding grains cultivated extensively in nearby villages. This mill can partially explain the source of the big storage of grains in the mansion. Another possibility is that the villagers might have paid their debts to the qadi in kind when their cash needs put a significant strain on the producers.

¹³⁰³ OA. ML. VRD. TMT. d. 7488 (AH. 1261 / 1845).

¹³⁰⁴ OA. ML. VRD. TMT. d. 8404 (AH. 1261 / 1845).

Although the size of his agrarian properties did not divert from the small proprietors of the region, the qadi's private (*mülk*) and waqf holdings in the bazaar and *charshi* area made a real difference (§ 3.4.3). The inheritance inventory, by its nature, listed only the privately held ones. In the bazaar area, he had three locksmith and small ironware (*çilingir*) shops and one tinsmith (*kalaycı*) shop in the Bazaar of Coppersmiths, one knifemaker (*bıçakçı*) shop in the Kaygan bazaar (Bursa was renowned for its knives for centuries), one clogmaker (*nalıncı*) shop in the Winders Bazaar, a lumberer's shop (*keresteci*) at the main gate of the citadel, and one unspecified shop in the Çelebiyan Bazaar. In addition to shops, he owned the Lazlar Inn and thirteen houses in the "chambers" (*Odalar*) area in the İshak Şah quarter in the city's eastern section, with 0,75 dönüm of mulberry trees attached to the latter. For centuries, these "chambers" had been a residence for migrant Armenians - families and bachelors alike. Finally, it was noted at the end of the document that the inheritors transferred (*teferrüğ*) the possession rights over a dyehouse around the inns to an unknown party.

A sharia court record from September 19, 1838, or five years after Mehmed Refi Efendi's death, shows expenditures on and revenues from all the inherited properties, including the waqf properties rented through lifelong and inheritable leasehold arrangement known as the *ijaratayn* or "double rent." This arrangement usually pertained to buildings needing repair, and the lessee paid a large advance payment amounting to the asset's real value for a symbolic long-term, below-market-value annual rent. The renter also had to make repairs if further damages occurred, and any modifications to the property were considered donations. As apparent from his private properties, the qadi invested heavily in residential and workplaces. He held seven inns, an unspecified number of rooms in two other, and one shop in a different one. As some of the inns included coffeehouses and some shops sold coffee and delights, the coffee and sugar at home went to these destinations. Similarly, home-stored grains might have been used for serving food to the stayers or selling them at the bazaar. Moreover, they were building a *boza* house (fermented wheat drink – suggesting some of the wheat milled was going here as raw material), a saddlemaker shop in the center, and bachelor chambers in the Altıparmak quarter to the southwest of the city completely anew.

Below are tables of Mehmed Refi Efendi's immovable properties (Table 17 & 18). The 1830 and 1839 population registers help us populate the inns with the stayers. This way, we gain valuable insight into a far-reaching network of migrants, how Bursa's regional economy brought them together, and the social and economic faces of the inns that were more than a mere collection of rooms and shops (§ 3.3.2).

Table 17: Mehmed Refi Efendi's Private Properties

Type of Estate	Amount	Location	Value (guruş)	Innstayers in 1830 (OA. NFS.d. 1391 and 1394)
House (<i>Menzil</i>)	1	Arablar neighborhood	1000	
House	1	Arablar neighb.	520	
House	1	Veziri neighb.	2300	
House w/ 4 dönüm of mulberry trees	1	Veziri neighb.	3000	
Mansion (<i>konak</i>)	1	Veled-i Veziri neighb.	25000	
Vineyard (<i>Bağ</i>)	3 dönüm	Hacı Osmanoğlu's place (At the outskirts of Bursa)	600	
Vineyard	2.5 dönüm	Karaağaç Bağları	500	
Mill (<i>Asiyab</i>)	1	Kayapa	3000	
Olive trees	unspecified	Yörükali (Mudanya)	1500	
Mulberry trees (<i>Hadika</i>)	4 dönüm	Next to the mansion	3000	
Chestnut trees	unspecified	İnkaya	1010	
Shop	1	Suk-1 (Bazaar of) Çelebiyan	500	
Chambers + 0.75 dönüm of mulberry trees	13	İshak Şah neighb.	10.000	Twenty-four Armenian households
Inn rooms (<i>mülk han</i>)	unspecified	Lazlar Inn	1000	Four Muslim agricultural/day laborers (<i>rençber</i>)

				from Mersin; Tosya; Erzurum, and Malatya. Twenty Armenians: mostly <i>rençbers</i> from Muş and Van; two cloth merchants from Cyprus and Istanbul
Tinsmith shop (<i>kalaycı</i>)	4/7 share	Suk-1 Bakırcıyan	150	
Three locksmith (çilingir) shops	4/7 share each	Suk-1 Bakırcıyan	150 each * 3 = 450	
Timber maghaza (<i>keresteci</i>) shop	4/7 share	At the citadel gate	150	
Knife maker (<i>bıçakçı</i>) shop	86/432 share	Suk-1 Kaygan	250	
Clog maker (<i>nalıncı</i>) shop	86/432 share	Suk-1 Çıkırıkcıyan	50	

Table 18: Mehmed Refi Efendi's Waqf Properties

Estate	Rental Income 04.1835 - 08.1841 (AH. 01.1251- 06.1257) (<i>guruş</i>)	Innstayers in the 1830 or 1839 master registers (Sources: OA. NFS.d. 1391, 1394, 1396, 1398)
Karacabey Inn	21.540	Thirteen Muslims: A scribe and his servant; a shoemaker from Izmir; two tobacco dealers from Istanbul and Diyarbakir; a tobacco mincer from Bolu; a retailer in the <i>charshi</i> from Vidin; two merchants from Baghdad; an agricultural laborer from Manisa; a beekeeper from Kayseri; two coffeemakers from Mihaliç and Yenişehir subdistricts. Two Orthodox Christian grocers from Konya and Nevşehir. An Armenian fur trader from Gemlik (on his way to Inegöl). A Catholic Armenian trader.
Timur Inn	10.020	Fifteen Muslims: A porter from Bilecik; six tobacco mincers (<i>kıyıcı</i>) from Bolu; another six from Küre; and a convert aba maker named Abdullah. Three Armenians: An agricultural laborer from Ankara; a servant from Tokat; and a hempen yarn maker/trader (<i>kınnabçı</i>).

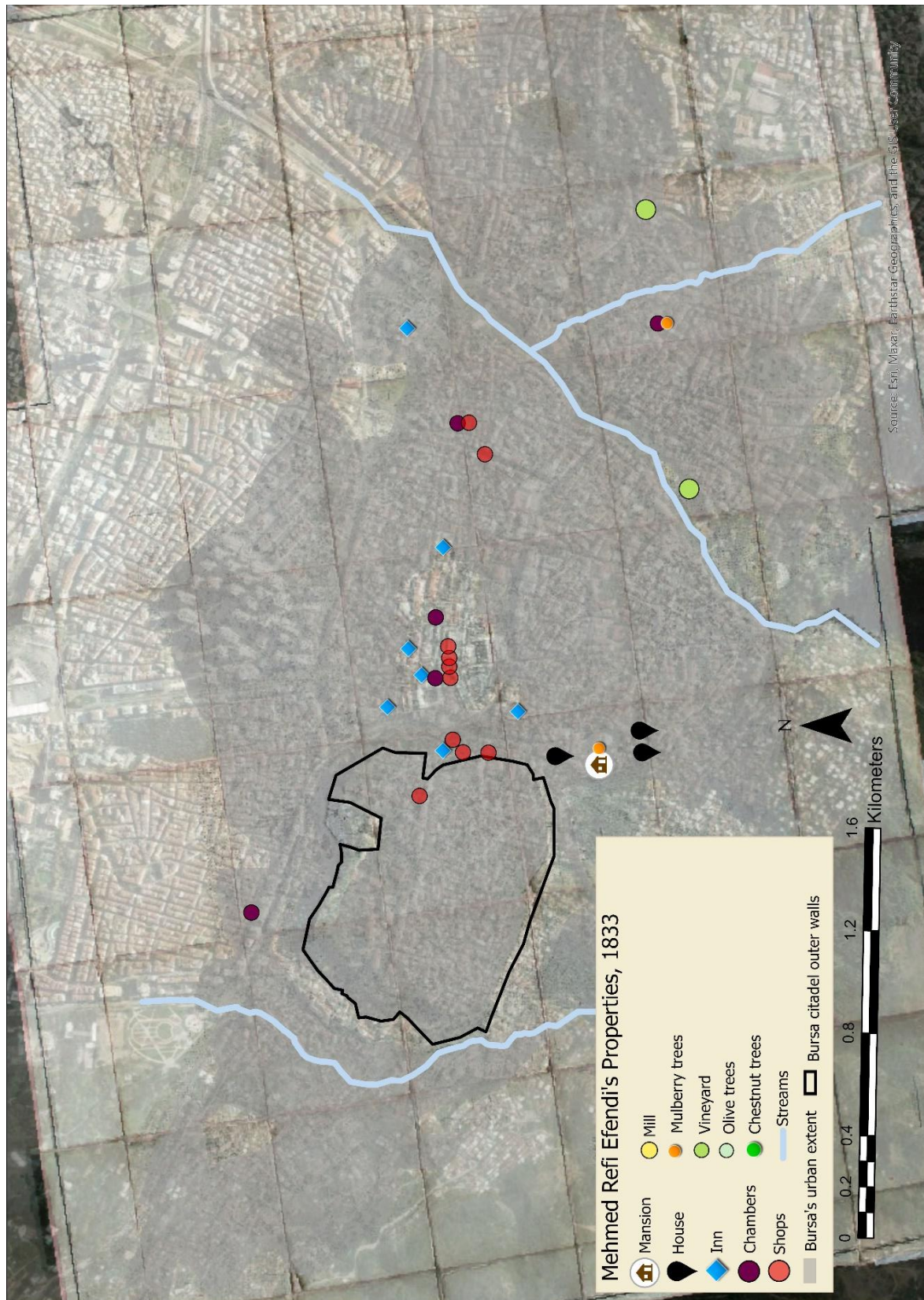
		Fifteen Orthodox Christians: All Bulgarian abamakers/sellers from Plovdiv.
Mudanya Inn	4620	Fifteen Muslims: Nine agricultural laborers - Three from the Eastern Black Sea region (of Laz origin), one Kurdish, one from Mosul, and four from Bursa, one being a manumitted black slave; a Kurdish horse-renter; a coffeemaker from Pazarköy subdistrict; an old Egyptian sheik (who returned home three years later), and a lame beggar. Nineteen Orthodox Christians: Five carpenters - two from Yenişehir-i Fenar (Larissa), one from Enez (in Adrianople), Naslic (Neapoli), Mudanya each; four horse-renters from Salonica and one from Gallipoli; two cloth dealers from Bursa; a gardener from Chios; two tobacco dealers and a baker from Keşan; and a merchant from Yenişehir-i Fenar.
Sandıkçılar Inn	3600	(1839) Two Armenians from Bursa: A beggar and a braided cloth maker/dealer (<i>fermeneci</i>)
Pekmez Inn	7020	(1839) Eleven Muslims: Four dervishes from Bursa and Iznikmid (Izmit), a porter from Beypazarı, an agricultural laborer from Maraş, a flour maker's journeyman from Antioch, and three people from Erzincan: a second-hand cloth dealer (<i>eskici</i>), a roasted chickpea dealer (<i>leblebici</i>), and a madrasa student.
Balibey Inn	4680	Seven Muslims: Occupations unspecified, people from Bursa, Sivas, Gümüşhane, and Bosnia. Three Orthodox Christians: A carpenter and shoemaker from Bursa.
Hançerli Inn	4290	Three Orthodox Christian bakers from Keşan (Adrianople); Nineteen Armenians , all agricultural laborers: Twelve from Iran, one from Bayezid, Van, and Erzurum each, and four from Bursa.
Chambers in the İpek (Harir) Inn	6565	Thirteen Catholics: Two trader communities comprising four "Fermanlı" and five "Europe" merchants from Bursa, Istanbul, Kütahya, and Aleppo; a tailor and his two journeymen and a merchant from Ankara. Six Armenians: The innkeeper from Ma'den (today's Elazığ); four merchants - one from Kastoria, three from Adapazarı; and an Istanbulite Sarraf. Eleven orthodox Christians: This Sarraf's servant from Mihaliç; a trader community from Alaşehir - Two " <i>Beratlı</i> " and a " <i>Fermanlı</i> " merchants; four traders from Kütahya; a snuff (<i>enfiye</i>) merchant and his servant from Kayseri, and his partner from Shkoder (northern Albania).
Chambers in the Geyve Inn	3770	N/A

Shops in Şadırvanlı çarşı	6565	
Some shops and houses	84.240	*In addition, a saddlemaker shop in Ortapazar, a <i>boza</i> shop in Balıkpazarı, and chambers in the Altıparmak quarter were being built entirely anew.

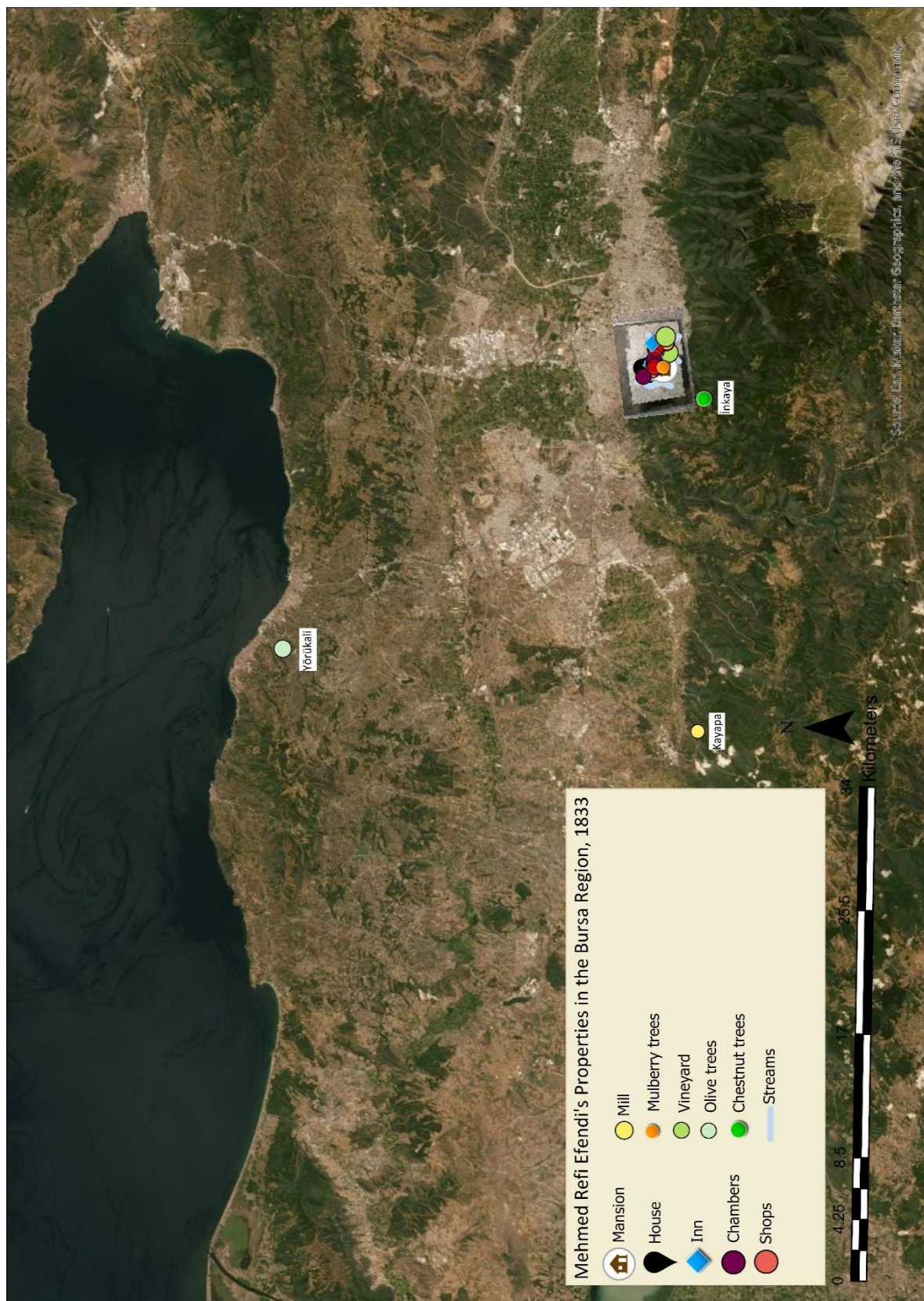
We are informed by the court record that these various establishments' building, repair, and maintenance involved many artisans – such as Jewish tailors, Armenian builders, Orthodox Christian timber merchants, and Muslim quiltmakers. These were the ones with ethnoreligious information, though. We do not know, for instance, who provided the thousands of tiles, made the locks, and operated the coffee and pastry shops in the inns.

A map of the properties layered on the Suphi Bey map and satellite imagery can be seen as follows in maps 11 and 12. Because the locations of most shops are not given, we will assume they were situated in the bazaar area in the city center.

Map 11: Mehmed Refi Efendi's Immovable Properties in the city, 1833



Map 12: Mehmed Refi Efendi's Immovable Properties in the Bursa region, 1833



Let us harken back to the rest of the qadi's *tereke*. A few old silver *akçe* and gold *sultanis*, whose total worth was 271 *guruş*, were his only cash. Yet, 76.005,5 *guruş* was given to a small group of people. Information on where his money went is not as detailed as the rest of his belongings. We may infer some clues in light of the abovementioned evidence and through data linkage. Unlike most inheritance records, Refi Efendi's inventory listed only one location information: A Hadji Bey from Alaiye, who might be an assistant to the qadi during his duties there, got 300 *guruş*. Such modest amounts were given to four destinations that we can determine from Bursa. An İbrahim Efendi of the ulama house of the Hakkızade family, scholar es-seyyid Mehmed Murad Efendi (Mehmed Refi's co-in-law), and the inheritors (*verese*) of Hatibzade (an Aleppo-based *Hayriye* merchant family) received 100, 300, and 677,5 *guruş*, respectively. A Hafız Osman Efendi, carrying scholarly and honorary titles, must have been a relative, scribe, or an important agent in property matters, since he was given 7840,5 *guruş*.

Two innkeepers, Argil, an Armenian keeper of the Lazlar Inn, got 100 *guruş* and a certain Mehmed 500 *guruş*. Innkeepers were more than hired agents, apparently. Following the qadi's death, El-hac Arif Ağa came to the house from the Mudanya Inn and left it almost a year later. When we trace him back to where he came from, he appears as Arif Ağa of Bursa (*Bursalı*), a 40-year-old innkeeper.¹³⁰⁵ He was considered family or active in identifying and selling the deceased's goods in the bazaar. Further examining the sources shows that cordial relations with the "innsfolk" seem to be deeper. The mentioned es-seyyid Ahmed, a member of the group to Alaiye, and a shoe dealer, also became an inn's caretaker in the meantime, as he appears so in the tax survey.¹³⁰⁶

An Osman Ağa got 1950 *guruş*. He was the watchman of the Odunluk area, seven to ten kilometers west of Bursa. "*Odunluk*" means "timber village." This name was not in vain. The timber cutters, shepherds, and nomads felled wood by setting fire to the branches and children of the trees in the mixed beech-spruce-fir forests in the middle and back part of Olympus (§ 3.3.3.5). When the snow melted at the thaw, the peeled and bleached trunks fell in torrents through the valleys whose roaring waters carried them down to the mouth in the

¹³⁰⁵ OA. NFS. d. 1391 (AH. 1246 / 1830), p. 76.

¹³⁰⁶ OA. ML. VRD. TMT. d. 7448 (AH. 1261 / 1845), p. 2.

plain. The felled forests eventually joined a bank of Nilüfer River, and a rake stopped them in Odunluk, making them ready to be taken.¹³⁰⁷ Turning trees into timber required labor and capital. Supply of lumber was also needed for the buildings' and shops' repairs, maintenance, and operations. In addition, knowing that a lumberer's shop was in the inventory and the inns housed carpenters and timber merchants gives a very sound context to the address of this money transfer. Kayapa, where the mill was located, was also renowned for its trees and private groves, which may transgress the economic relations beyond grain grinding networks there.

The remainder of the cash, about three-fourths of the money, was entrusted to three people. While a Yusuf Ağa got a modest amount of 2000 *guruş*, an El-hac Ali Ağa received 27.337,5 *guruş*, and an Armenian named Artin of Tokat had the highest amount with 31.000 *guruş*. Not only do these names not appear in the inns, but they are also impossible to match to single individuals due to a lack of further information. These people were likely intermediaries, with Artin representing the interests of an Istanbulite *sarraf*, assisting in procuring labor and raw material for trade and repair operations, lending cash to the producers on behalf of the qadi, and buying tax farms of some revenue sources through contacts in Istanbul. In any case, this amount of money could be used and invested in the most diverse ways imaginable in an economy where cash shortages were present.

In the expenses and donations section of the inventory, we gain further insights into Mehmed Refi Efendi's personal life. He fell severely ill before his death. 4700 *guruş* was spent on physicians from Istanbul and Bursa and on drugs, a luxury only a few could afford. Burial in the family graveyard in the Pınarbaşı cemetery and prayer expenditure cost 1500 *guruş*. To bring his soul to peace and rest, his inheritors paid a certain amount of alms to compensate for the prayers the qadi failed to perform (*iskat-ı salat*) during his illness and allocated 4000 *guruş* for substitute pilgrimage. As the rich of Bursa cared about the well-being of communal buildings, the family also reserved 500 *guruş* for the repairs of the Veled-i Veziri mosque in their quarter (§ 3.3.1). Finally, the annual payment (*salyane*) to be given to the villagers of Kayapa for running the abovesaid mill was specified as 520 *guruş*. After a few small debt pardons and court expenses are deduced, 184.587 *guruş* worth of movable

¹³⁰⁷ Hammer-Purgstall, *Umblick auf einer Reise*, 78.

and immovable property and collectibles were divided amongst the three sons (46.274,25 each) and two daughters (23.123,875 each). Ahmed Vasıf, now the senior male of the household and referred to as "Efendi," was appointed as the legal guardian of the junior children.¹³⁰⁸

When the inventory was over, a property exchange was inscribed in the court register. Vasıf Efendi transferred a significant portion of the books, furniture, and kitchenware to a woman named Naime *kadın*. She was referred to as the mother of the children except for Vasıf and had a right to custody (*hidane* or *hadana*) over their minor children until boys reached ten and girls twelve, according to the Hanafi school of law (which Ottoman courts usually extended beyond sharia limits).¹³⁰⁹ She would be among the heirs if she had been the qadi's wife. But a concubine or an *ummul-walad* (a slave woman who bears a child to her master) could never be legally qualified for this right.¹³¹⁰ These facts suggest that Naime used to be a concubine and was freed sometime before the qadi's death, possibly long before, when she bore her first child. Certainly, the slave status of at least three women continued. Among the concubines, the old Orthodox Christian Nevreste and mother-and-daughter slaves Hadice and Dilruba now became her property. Naime kadın directly owned 10.935 *guruş* worth of the qadi's property, or one-sixth the value of his personal items.

Apart from the properties, the qadi's family bequeathed a monument to ponder and pray. Included in the burial expenses was a well-decorated tombstone memorializing Mehmed Refi Efendi's personal and intellectual merits. It is topped by a delicately carved quilted turban peculiar to ulama tombstones. The epitaph is uniquely prosed, hard to translate, and includes a chronogram that encodes his death date. Even though only his death year is given, it is still interesting to see subjective remarks on his attributes.

¹³⁰⁸ His guardianship oaths and details are in OA. MŞH. ŞSC. 3050 (C /28). p. 42.

¹³⁰⁹ Amira Al-Azhary Sonbol, "Adults and Minors in Ottoman Shari'a Courts and Modern Law," in *Women, the Family, and Divorce Laws in Islamic History*, ed. Amira Al-Azhary Sonbol (New York: Syracuse University Press, 1996), 252; Hallaq, *Sharī'a*, 287.

¹³¹⁰ An umm-al-walad was not considered property. Ali Hatalmış, *İslam Toplumunda Kölelik ve Cariyelik* (Ankara: Araştırma Yayınları, 2012), 86.

*Only Allah is Eternal,
An elite of the city of Bursa, peerless in his era,
Outstanding in dignity and grace, a man of talent and virtue.
Time has never brought forth a person like Refi Efendi,
Nor can it ever bring, even if a thousand years pass.
Excellent in every aspect, superior among his peers,
Always cheerful, munificent, and hospitable.
When he completed his career in the judiciary,
His soul left the body-garment to join the gathering of the souls.
A chronogram is composed to commemorate his spirit,
Refi Efendi, now a resident of Paradise.
Year 1249 ¹³¹¹*

The example of their father and the inherited books would serve an essential role in the upbringing of the little *mullahs*, who retained their titles in the 1839 register.¹³¹² The household apparently moved to the Veled-i Veziri quarter, where the mansion was located, and was now headed by the oldest son Vasıf Bey who was 25 years old. This means he was sixteen when they went to Alaiye and eighteen when his father died. His title, “Bey,” reflects his administrative position, as he is no longer a *mullah* like his brothers Münib (11) and Hüseyin Hüsni (6). A note on Vasıf’s register entry is explanatory: he was the deputy military commander of the reserve force (*Kaymakam-ı Asakir-i Redife-i Hassa-i Şahane*) of Bursa, a duty he was tasked with since 1836 when he was 22.¹³¹³ Later on, he moved up in rank to lieutenant in 1840.¹³¹⁴ The two slave children mentioned in the previous register were gone. They were most likely manumitted due to age, possible by the family to rest the father’s soul

¹³¹¹ Pınarbaşı Cemetery, Tombstone no. 182. Latitude and longitude: 40.181684 – 29.057284. *Hüve’l-Hayyü’l-Bâkî / Güzîn-i şehr-i Burusa ferîd-i devr-i zaman / Refî’-i kadr ü kadirdân ehl-i fazl ü hüner / Refî’ Efendi cenâbı ki mislini devrân / Getirmede ve getirmez dönerse bin yıl eğer / Cihât-ı sitteyle ma’mûr fâiku’l-akrân / Küşâdedir ni’am-ârâ-yı mihmân-perver / İdince devrini devriyye mesleğinde temâm / Burakdı sevb-i teni bezm-i câna etti sefer / Tecerrüdüne yazıp nezrle kalem târîh / Refî’ Efendi mekân-ı ‘alâyı kıldı makar / sene 1249.*

¹³¹² OA. NFS. d. 1396 (AH. 1255 / 1839), p. 19.

¹³¹³ OA. HAT. 1303 / 50814 (AH. 1252 / c. 1836).

¹³¹⁴ OA. HAT. 1440 / 59179 (AH. 07-05-1256 / 07-07-1840).

in peace. An eleven-year-old black slave Abdullah substituted them. Though unrecorded, we already know the presence of the concubines in the house from the inheritance inventory.

In the six years from 1839 to 1845, the family still stayed together, but the males' titles changed significantly for the better. The tax survey presented Vasıf (no age specified but around 31 if we add six to the register) as a "*Devletlü Pasha*," bearing the title of Ottoman officials of the first rank, and as "*hazretleri*" or "his highness."¹³¹⁵ From 1843 to 1844, he was the governor of Izmid province (next to Istanbul).¹³¹⁶ There, he greeted Sultan Abdülmecid during his short visit to Izmid, Mudanya, Bursa, Mihaliç, Çanakkale Gallipoli, and Mytilene regions and was gifted a bejeweled box.¹³¹⁷ Shortly after the survey, the Pasha was appointed as the governor of Ankara in December 1844.¹³¹⁸ Already observing the lack of snow upon claiming his office, Vasıf Pasha was the main actor during the central Anatolian famine of 1845 and produced plenty of reports detailing the horrors of hunger inflicted upon the locals and organized the grain provisioning of the province (§ 2.3.4.5).¹³¹⁹

During the Sultan's visit to Bursa, the middle brother Mehmed Münib mullah (17) was granted the honorary title of "the Department Chief of the Imperial Chancery" (*Hacegan-ı Divan-ı Hümayun*) and "Efendi," guaranteeing his status as a mid-ranking official in the central bureaucracy. Like their father inherited his title from their grandfather, the tax survey documents this status change and honors the youngest brother Hüseyin *Hasbi* as "Efendi." Lastly, an unnamed sister is referred to as "*muhterem hanım*" or "honorable lady." From the inheritance inventory, we already know that she was Rahime Hanım. Females rarely appear in the surveys, so this case is a valuable contribution to exploring gendered economic relations. At least, this entry confirms that males did not claim a daughter's share after the inheritance process was over. Still, the younger sister Raife Hanım is not mentioned in the survey.

Mehmed Refi Efendi's children earned a favorable annual income of 13.590 *guruş*, easily placing them in the 99th percentile of all earners (§ 2.3.5 & 3.4.3). Their income survey

¹³¹⁵ OA. ML. VRD. TMT. d. 7444, p. 2 (AH. 1261 / 1845).

¹³¹⁶ OA. İ. DH. 79 / 3923 (AH. 05-08-1259 / 31-08-1843).

¹³¹⁷ Şerif Korkmaz, "Sultan Abdülmecid'in İlk Memleket Gezisi (26 Mayıs-12 Haziran 1844)," *Ankara Üniversitesi Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi*, no. 25 (2009): 87.

¹³¹⁸ OA. C. DH. 69 / 3420 (AH. 23-11-1260 / 04-12-1844).

¹³¹⁹ Çelik, "The Rich, the Poor and the Hungry Social Differentiation and Famine in Ankara in 1845," 72–84.

shows important yet limited data about the continuity in the ownership of properties. Vasıf Pasha kept most of them as the household head and held the greatest share of income. He received 6000 *guruş* from shop rents, while the rest of the siblings got 2000 each. The size of mulberry groves shrank from 4,75 to 3 *dönüm* and generated 250 *guruş* in 1844. A similar shrinkage was evident in the total area of the vineyards, which reduced from 5,5 to 3 *dönüm* and left an income of 90 *guruş*.

Other agricultural properties listed in the inheritance inventory were not separately specified in the city's tax survey. In other words, we have to check them by going through each location's survey. The mill in Kayapa, recorded as belonging to the Pasha, made 900 *guruş* annually. The olive field in the Yörükali village of Mudanya was registered in Münib Efendi's name.¹³²⁰ It contained seventy trees and generated 350 *guruş* in 1844. This olive grove was the third-largest in the village, where households mostly owned 10-20 trees. As olive trees were seldom prolific for two consecutive years, the estimated income for 1845 was left blank. Apparently, the chestnut grove in Inkaya village on the slopes of Olympus was sold, since it does not appear in Inkaya village anymore.

Besides the previous year's special tax of 91 *guruş* and the olive tithe of 35 *guruş* incurred on Münib Efendi, and the 20 *guruş* on the mill, the family in Bursa was exempted from taxation and did not pay a dime. For other residents, the ration of income to tax was higher. Mehmed, the son of Abdülkadir, a reeds-basket weaver (*küfeci*) artisan in the same quarter, who earned a modest income of 550 *guruş* from his profession, had to pay at least 30 *guruş*, for example.

Actually, the income disparity between the qadi's household and the rest was much greater. The court record detailing the incomes derived from private and waqf properties proves that the tax survey hid a significant portion of earnings. Between 1834 and 1841 (from AH. 09-1249 till 06-1257), the waqf properties generated a total rent of about 183.000 and private ones 26.000 *guruş* (refer to Table 19 for precise figures.) There were no changes in property composition and no significant annual income fluctuations until 1844, so we can use the following statistics to test the tax survey information. Shops and houses (including chambers) contributed 15.530 *guruş* to the total yearly average of 27.894 *guruş*. This amount

¹³²⁰ OA. ML. VRD. TMT. d. 9081, p. 16, (AH. 1261 / 1845)

is close to the 12.000 *guruş* generated from only shop rentals in the surveys. But the inns and inn rooms procured an additional annual rent of 12.364 *guruş*. Assuming that the family was active in certain trades (at least by providing the means of production), these results mean that more than half of the qadi family's annual income is not reflected in the tax surveys.

Table 19: Annual Income from Mehmed Refi Efendi's Properties (in *guruş*)

Property	In 7.5 years	Annual average
Waqf	182.865	24.382
Private	26.343	3512
Total	209.208	27.894

15.530	Shops and houses (incl. chambers)
12.364	Inns and inn rooms

Until 1864, the household composition had not been edited in the population registers. Domestic servants and slaves likely came and left the house, but the rest of the family stayed in the luxury of their spacious residence, possibly now with their own families, though no birth updates were made. Vasıf Pasha's administrative journey kept him from home for a long time. After three years in Ankara, he became the lieutenant governor (*kaimmakam*) of the Karesi district to the west of Bursa for nine months in 1848 when he was 34¹³²¹, with his twenty-year-old brother Münib Efendi now becoming his chamberlain as a fourth-rank (*rütbe-yi rabi* [captain]) military officer.¹³²² His duties there ended the same year when he took over as lieutenant-governor of the Diyarbakir (southeastern Anatolia) district until 1849.¹³²³ Famine and drought, plague and cholera, brigand marauders, opposition from the landed gentry, and Kurdish revolts against Tanzimat reforms wrought havoc throughout the region in the 1840s.¹³²⁴ So, the administrators' role as arbiters and negotiators was essential.

¹³²¹ OA. A.} DVN. MHM. 5 / 9 (AH. 10-02-1264 / 17-01-1848).

¹³²² OA. A.} MKT. 149 / 6 (AH. 19-10-1264 / 18-09-1848).

¹³²³ OA. İ. DH. 180 / 9872 (AH. 06-11-1264 / 04-10-1848).

¹³²⁴ İbrahim Yılmazçelik, "XIX. Yüzyılda Diyarbakır Eyaletinde Yönetim Halk Münasebetleri," in Prof. Dr. Bayram Kodaman'a Armağan (Samsun: Eser Ofset Matbaacılık, 1993), 371–87.

After his short and successful term Diyarbekir, he governed (as *mutasarraf*) the Canik *sancak* in the Central-Eastern Black Sea littoral until October 1852.¹³²⁵ There, Vasıf Pasha was one of the state's key actors in weakening the local magnate dynasty of the Hazinedarzades and resolving the agrarian conflict that erupted over their seizing of the small peasantry's land and forcing them to corvee. After the Pasha mediated between peasants, local councils, and the Hazinedarzades, the claims of the magnates were vindicated in 1853.¹³²⁶ Mehmed Münib was promoted to the “third military rank,” or major, thanks primarily to his older brother's effective post in Canik.¹³²⁷

Vasıf Pasha's commander status and administration of the agrarian problems in Anatolia motivated his appointment to the hotbed of the Balkans' rural- and political-conflict regions. Until February 1854, in the capacity of *mutasarraf*, he governed Trikala, the district in the Yanya province in north-central Greece, where large-scale *çiftlik* agriculture dominated and powerful local and Istanbul-based landowners (including the grand vizier Mustafa Reshid Pasha) bounded cultivators to their soil through debt bondage.¹³²⁸ However, the crisis of the Crimean War occupied Vasıf's time fully. First, he successfully oversaw the resettlement of Christian refugees from the war-affected areas.¹³²⁹ Then, in late 1853, based on intelligence reports, he alerted the central administration to the piling of arms by pockets of Greek armed resistance near Trikala.¹³³⁰ He was right: The concentration of Ottoman forces in Crimea and general food scarcity due to the war provided ready ground for the Greeks to expand their territory freshly seized from the Empire in the 1820s. By early March, Russian-backed insurgents revolted in Epirus and Thessaly regions in central Greece.

Vasıf Pasha left Trikala in late February, but his blueprint for positioning Ottoman troops and equipment in the region was essential for the military's suppression of the attacks. In fact, his appointment as the governor of Rumelia province, encompassing Shkoder (today's northern Albania), Ohrid (southern Macedonia), and Castoria (northwestern Greece), mainly

¹³²⁵ OA. A.} MKT. NZD. 59 / 61 (AH. 26-12-1268 / 11-10-1852).

¹³²⁶ Aytekin, “Peasant Protest in the Late Ottoman Empire,” 202–3.

¹³²⁷ OA. A.} DVN. 43 / 68 (AH. 01-02-1265 / 27-12-1848).

¹³²⁸ For an overview of property relations in Trikala, see Kaya, “Were Peasants Bound”; Öncel Yusufoglu, “Agrarian Relations and Estate (Çiftlik) Agriculture in Ottoman Thessaly (c. 1780 – 1880).”

¹³²⁹ OA. MVL. 267 / 58 (AH. 03-04-1270 / 03-01-1854).

¹³³⁰ OA. İ. MTZ (01). 9 / 220 (AH. 19-02-1270 / 21-11-1853).

focused on supplying the Ottoman efforts with soldiers and ammunition.¹³³¹ As the last stop in aiding the army in the Crimean War, in 1855, Vasıf became the Guard (*muhafız*) of Varna, a port city in northeastern Bulgaria, strategic for maritime security of the Black Sea, and a key base from which the Allied Powers (of Ottoman-English-French troops) were supplied with manpower and arms.¹³³² In reality, more people came in than were sent. The influx of thousands of refugees and ensuing diseases and fires were other issues to be dealt with. Vasıf prioritized establishing effective communication between Varna and Crimea to carry out these operations. Besides forming a small police force with a command of multiple languages¹³³³, the extension of the Varna-Sevastopol telegraph line to Istanbul through Edirne was realized during his time. His efforts earned the Pasha a Medjidie medal of the third class order.¹³³⁴ However, the flip side of the medal is that the horrible news of the Bursa's two earthquakes and the death of Hüseyin Hasbi's son Mehmed Hüsni¹³³⁵ reached him in this post, but he could not move an inch during the Crimean War. What is more, his distance to Bursa increased since he and his brother-cum-chamberlain Münib Efendi were pulled to Nis in central Serbia, one of the crisis points in the Balkans, in November 1855.¹³³⁶

Nis district (comprising southern Serbia and Sofia, Samokov, and Kyustendil in western Bulgaria) was a fertile region on the route linking the Balkans to central Europe. It saw one of the biggest post-Tanzimat tax revolts in 1841, which pitted the locals against the notables and was brutally repressed. Thus, a careful and peaceful application of Tanzimat was crucial to counter Serbian and Bulgarian insurrectionism and the diffusion of panslavic ideology. As the *mutasarrıf*, Vasıf carefully administered social relations and initiated infrastructure projects such as building bridges and extending the Varna telegraph line to

¹³³¹ OA. A.} DVN. 9 / 51 (AH. 23-05-1270 / 21-02-1854).

¹³³² OA. A.} DVN. 101 / 62 (AH. 05-05-1271 / 24-01-1855).

¹³³³ OA. A.} MKT. NZD. 148 / 28 (AH. 26-08-1271 / 14-05-1855).

¹³³⁴ OA. A.} MKT. MHM. 83 / 59 (AH. 03-06-1271 / 10-02-1855).

¹³³⁵ Although the update registers are silent on the new members, we learn this information from another tombstone in the family burial site which includes the lines "My youngest flew to the garden of Paradise / Now his mother has nothing but to mourn." Pınarbaşı Cemetery, Tombstone no. 186. Latitude and longitude: 40.181684 – 29.057284. *Nev-civânım uçtu cennet bağına / Derdi kaldı vâlideyni yanına / Merhum ve mağfurîin leh Refî' / Efendizade zâdesi Mehmed / Hüsni Efendi ruhiyçün / el-Fâtîha / 5 B. sene 1271* (24-03-1855). This date is only three weeks after the first earthquake, suggesting a possible death cause.

¹³³⁶ OA. A.} TŞF. 21 / 74 (AH. 09-03-1272 / 19-11-1855); A.} MKT. UM. 243 / 39 (AH. 11-11-1272 / 14-07-1856).

Nis.¹³³⁷ The district's local council expressed gratitude for his just, cooperative, and dedicated service.¹³³⁸ Upon such achievements and the Allied victory in the Crimean War, he was awarded the title of "Governor-General of Rumelia" (*Rumeli Beylerbeyi*), which used to designate the highest rank in the hierarchy of provincial administrators in the heydays of Ottoman presence in the Balkans, but was now equivalent in rank to lieutenant-general (*ferik-i evvel*).¹³³⁹

As in Nis, the first mission of Vasif Pasha's next and longest mission as the governor (*mutasarrif*) of Herzegovina was sending provisions to Crimea. However, this *çiftlik*- and the sharecropping-dominated region was suffering from agrarian conflict arising from debt bondage like in Trikala. On top of this, Russian interests, Austrian irredentism, and Serbian and Montenegrin insurrectionism swirled Herzegovina into ethnic uprisings from 1852 to 1862, killing and fleeing thousands of Muslims. During the latter half of this tumultuous decade, the Pasha coordinated war and relief efforts in cooperation with the district and Bosnian provincial council, nearby regional administrations, and Istanbul, almost non-stop, as he authored countless reports, sometimes daily, detailing incidents, operations, and implementation of the measures.¹³⁴⁰

Vasif and Mehmed Münib became brothers in arms in Bosnia, since the latter was elevated to major-general (*rütbe-yi sani, sınıf-ı ula-yı mütemayiz*) and appointed in January 1862 as the lieutenant-governor of Trebinje, a small region at the southern tip of Bosnia bordering the Adriatic Sea to the west and Montenegro in the south.¹³⁴¹ He had to tackle challenging and multidirectional tasks such as building and repairing fortifications along the new Montenegro border¹³⁴², settling Muslim migrants from central Montenegro¹³⁴³, taking land and population surveys in Trebinje and Mostar¹³⁴⁴, settling tax disputes, conscripting Muslim males, and mediating agrarian problems between and among big landowners and

¹³³⁷ OA. HR. MKT. 147 / 28 (AH. 05-10-1272 / 19-11-1855); İ. DH. 346 / 22776 (AH. 28-09-1272 / 02-06-1856).

¹³³⁸ OA. MVL. 314 / 6 (AH. 04-02-1274 / 24-09-1857).

¹³³⁹ OA. A.} MKT. UM. 269 / 19 (AH. 01-06-1273 / 27-01-1857).

¹³⁴⁰ Gölen, "1857-59 Bosna Hersek İsyanı," 488-94.

¹³⁴¹ OA. A.} DVN. 175 / 7 (AH. 15-07-1278 / 16-01-1862).

¹³⁴² OA. TŞRBNM. 9 / 25 (AH. 20-05-1280 / 02-11-1863).

¹³⁴³ OA. A.} MKT. MHM. 242 / 45 (AH. 10-04-1279 / 05-10-1862); 26 / 130 (AH. 03-03-1281 / 06-08-1864).

¹³⁴⁴ OA. A.} MKT. MHM. 287 / 97 (AH. 11-07-1280 / 22-12-1863).

peasants.¹³⁴⁵ But, like his older brother, the persistent threat of Montenegrin insurrection and carrying out intelligence and counterintelligence missions occupied most of Münib's time¹³⁴⁶, for which he was honored by the state.¹³⁴⁷

Münib stayed in Trebinje, but Vasıf was needed on different fronts. Tensions between the Serbs and Ottoman Empire, heightened already by massive mobilizations of armed forces and mass killings and deportations of Muslims in Serbia, hit a boiling point with the bombardment of Belgrade by the Ottoman army in June 1862. The Kanlıca conference convened following this crisis required the destruction of fortresses until today's central Serbia and the deportations of a great majority of Muslims to nearby Ottoman provinces in Bulgaria, Bosnia, and Macedonia. In this favorable environment, the Serbs moved small troops toward areas bordering Nis and Kosovo. Vasıf Pasha's experience had him appointed to the Skopje province (comprising today's northern Macedonia, eastern Montenegro, and almost the whole of Kosovo) as deputy governor (*vali kaymakamı*). Again, he earned the appreciation of the central administration for his contributions to the provisioning and combat readiness of the border forces.¹³⁴⁸

Having served in Skopje for seven months, Vasıf, again as a *mutasarıf*, assumed the governorship of the Shkoder district in northern Albania, reaching Herzegovina through a narrow coastal strip that landlocked Montenegro. A peace agreement signed in the town of Shkoder in September 1862 ended the Bosnian revolts. Shkoder occupied utmost importance in ensuring the implementation of this agreement and countering Montenegrin irregulars' attacks aimed primarily at carving out a shoreline zone. With Münib being stationed on the opposite side of Shkoder, the brothers, in a manner, sandwiched Montenegro. Unfortunately, though, Vasıf was dismissed two months into the new position: Since the early days in Shkoder, the Pasha's overtaxed intellect was worn out, and he had an impaired consciousness at age 47 or 48. His salary was immediately stopped, and he returned to the mansion in Bursa. There, his situation worsened, and, according to a report, he was in a miserable condition but

¹³⁴⁵ OA. TŞRBNM. 5 / 55 (AH. 18-03-1280 / 25-08-1863); 12 / 28 (AH. 29-07-1280 / 09-01-1864).

¹³⁴⁶ For examples to his intelligence gathering operations and combat plans, see OA. A.} MKT. MHM. 283 / 11 (AH. 26-05-1280 / 08-11-1863); TŞRBNM. 1 / 29 (AH. 25-11-1279 / 14-05-1863); 16 / 4 (AH. 09-10-1280 / 18-03-1864).

¹³⁴⁷ OA. A.} MKT. MHM. 287 / 97 (AH. 11-07-1280 / 22-12-1863).

¹³⁴⁸ OA. A.} MKT. MHM. 242 / 34 (AH. 10-04-1279 / 05-10-1862).

unable to afford medical care. Allegedly, he was already indebted, and his dismissal left his family in dire straits (...*familyaca çekilen meşak ve nasb vasıl-ı derece-i nihayet olmasına...*).¹³⁴⁹

Hence, Vasıf had to relive his father's fate: After a successful career in the Balkans, he returned home, and doctors from Istanbul came to the mansion. The father and sons' contributions to the advancement of the Tanzimat resulted in the Pasha receiving modern medicinal treatment. Luigi Mongeri, the chief physician at Istanbul's Süleymaniye and Toptaş lunatic asylums who introduced modern psychiatry to the Ottoman Empire, examined his mental and physical state on March 23, 1863. Dr. Mongeri diagnosed that Vasıf Pasha was near madness (*alamet-i cinnet*) and facing the initial stages of paralysis. Although the chance of recovery was virtually nil, he requested the patient to be immediately transferred to Yenibahçe waqf hospital (opened in 1847) in Istanbul to get proper care and medications. The family followed and rented a house in the Alacamescit quarter of Laleli in the capital.¹³⁵⁰ Münib Efendi was informed about the situation and quickly left his office to see his brother. In the meantime, his family in Bosnia was given a small amount of support money.¹³⁵¹

Given the Istanbul days would be hard, Vasıf's spouse petitioned the Supreme Council for the family's already bad financial position. Considering the Pasha's long, faithful, and strenuous service in military and administrative functions, the state initially considered awarding him a life-term monthly salary of 2500 *guruş* but eventually lowered this amount to 1800. A Mehmed Ağa, who was Vasıf and Münib's special agent (*kapı çuhadarı*) in financial matters, was authorized to provide the salary and manage the younger brother's family finances in his absence. We understand from the response to the petition that the house rented in Istanbul was not reserved only for the kin and was likely a spacious building: Vasıf's salary's recipients were his wife, his son Mazhar Bey and his servant Ahmed Ağa, the Pasha's two concubines, and a harem chamberlain, another Ahmed Ağa.¹³⁵²

¹³⁴⁹ OA. İ . MMS. 26 / 1134 (AH. 22-08-1279 / 12-02-1863).

¹³⁵⁰ OA. A.} MKT. MHM. 261 / 4 (AH. 29-10-1279 / 19-04-1863).

¹³⁵¹ OA. A.} MKT. MHM. 260 / 88 (AH. 26-10-1279 / 16-04-1863).

¹³⁵² OA. A.} MKT. MHM. 261 / 4 (AH. 29-10-1279 / 19-04-1863).

Ultimately, the dim chances of recovery were lost, and the family reunited again in the mansion in Bursa, except Münib Efendi, who returned to his post in Bosnia. A few months later, the persisting financial problems broke the silence in the archives. In the early days of December 1863, Vasıf Pasha was living in the mansion with his "stepmother" and sister, Raife Hanım¹³⁵³, who was married to Rasih Efendi, a member of the religious scholarly class. The stepmother, unnamed but we already know as Naime kadın (who, then, must have been very young when she bore her children), petitioned the governor of the Hüdavendigar province, complaining that the family was not receiving the Pasha's monthly allowance for two months. Furthermore, their money did not reach them at a fixed time in the previous months.

Ahmed Vefik Efendi caught up with the situation and wrote to the Grand Vizierate.¹³⁵⁴ He emphasized that the money barely met their expenses, and the Pasha and his family were now living in misery without it. Rising inflation exacerbated by printing large volumes of paper *kaimes* in 1862 significantly affected the officers who received a part of their income in banknotes since the Crimean War (§ 1.3). Besides financial determinants, regional eccentricities played a significant role. Vefik noted that the family's many immovable properties were destroyed by the 1855 earthquake and the subsequent fire, and now they could not even generate one dime since, figuratively speaking (§ 2.3.7.4). A few hundred *guruş* loaned to them by the provincial treasury was insufficient to work things out.

As the recipient of the cheque for the Pasha's monthly stipend, Mehmed Ağa deputized a Hacı Mehmed in Bursa, who was the chanter (*müezzin*) of the Muradiye mosque, to convert it into cash. Vefik Efendi noted that, although the cheques did not arrive on time previously, this chanter, who used to be a poor man, suddenly turned noticeably wealthy in the past two months. Everyone's suspicions were confirmed after Mehmed Ağa interrogated the chanter. Hacı Mehmed confessed that he spent the last two months' payments, which led the Provincial Council and Vefik Efendi to issue the cheques in Rasih Efendi's name and appoint Naime kadın to cash them. Mehmed Ağa approved this selection but expressed that

¹³⁵³ Actually, the name of the sister is not given in the document. But in three property share (*mübayaa*) deeds from mid-1833, we learn that the elder sister Rahime Hanım was married to Ali Efendi who belonged to the ulama and court scribe household of Mehmed Murad Efendi (NFS.d. 1396. p. 23, household 30), to whom Mehmed Refi Efendi lent money as we mentioned above. OA. MŞH. ŞSC. 3050 (C / 28) p. 52, 54, 55.

¹³⁵⁴ OA. A.} MKT. MHM. 287 / 35 (AH. 04-07-1280 / 15-12-1863), p. 1-3.

he closely supervised the family's finances for years and carefully sent the cheques in the past months. Attempting to clarify his truthfulness, he further illuminated some critical points about the household economy.¹³⁵⁵

First of all, there were almost no savings. The stepmother, introduced as the biological mother of Münib and Hasbi *Efendis* and their sister, unwisely spent the family wealth accumulated through an average annual income of 20.000 *guruş*. Her speculation that the Pasha was indebted was wrong and victimized his family. Here, it is important to remember that they were entitled to pay for major or partial repairs of waqf properties damaged in the earthquake. Secondly, the household income in 1863 was far from the glamorous days of the 1840s. A monthly 693 *guruş* accrued to Vasıf, whereas Naime kadın could contribute only 200 *guruş*. Hasbi Efendi's family moved to the mansion to support the others with his 200 *guruş*. So, his salary of 1800 *guruş* would bring great relief.¹³⁵⁶ In 1857, the British vice-consul Sandison wrote that his family required about 200 pounds or approximately 30.000 *guruş* annually to afford the ongoingly high cost of living in Bursa on the most restricted scale.¹³⁵⁷ Assuming the Pasha and the consul had similar living standards and given the harsher inflation trend of 1862, about 35.000 *guruş* annual income of the mansion was barely enough to feed the household.

Amidst economic and health problems, Vasıf Pasha's body could not carry on any further. His inheritance inventory was finalized on March 24, 1864 (AH. 15-10-1280) and specified the heirs as his senior son Ibrahim Rıza *Efendi* and junior son Mehmed Mazhar *molla*, the latter of whom we know as "Mazhar Bey" from the hospital days at Istanbul.¹³⁵⁸ They were already decorated with titles, like Mehmed Refi Efendi's children in their early years. The Istanbul days also introduced us to Vasıf's wife, who strangely does not appear in the inventory. We do not know her name. Yet, based on the court records, no woman known as the mother of Rıza and Mazhar died between 1862 and 1864 (the existence of a minor would require an inventory to be drawn up). Given the presence of two concubines in Istanbul, Vasıf likely followed his father's example and had his children from a concubine.

¹³⁵⁵ Ibid., p. 7.

¹³⁵⁶ Ibid., p. 5.

¹³⁵⁷ BPP, CP, No. 482, VIII (8), *Select Committee on Consular Service and Appointments*, 1857, 612-616.

¹³⁵⁸ OA. MŞH. ŞSC. d. 3151 (C / 130), p. 14-15 (AH. 15-10-1280 / 24-03-1864).

The private properties were valued at 51.230 *guruş* (about 388 pound sterling or £46.860 in 2017). At one glance, his personal items (13.079 *guruş*) were not as numerous as his father's, given his little time spent in Bursa and the possibility that some things might have likely been sold or distributed before his death, as the lack of specific pieces such as fezzes, shirts, and shoes indicate. Still, they yield valuable insights into the mansion's changing and regular consumption patterns and fashion trends.

The Pasha sported an officer outfit marked by Tanzimat costume reform in the dress uniforms. His garments comprised Ottoman-style frockcoats without collars (*setri*), overcoats, sack jackets, waistcoats, waistcloths, and white trousers. As a man on the move, leather saddlebags and dinner buckets (*sefer tasi*) accompanied his missions in the field and on the mountains of the Balkans. Though his possessions did not include weapons to indicate his military background, no other evidence was needed when he rode his white Arabian horse (450 *guruş*).

Like in the qadi's time, coffee and tobacco smoke filled the air in the mansion. Coffee was prepared in a grinder, boiled in pots, served in silver trays, and drank in cups with silver holders (*zarf*). In addition to expensive and cheap trays, Vasif owned four hand-painted metal *pulat* trays with cityscapes and landscapes (possibly of Istanbul and the Balkans). He contained his tobacco in a metal box and consumed it using several chibouks and a crystal hookah. A backgammon board with bone checkers occasionally brought fun to meetings.

The living space saw little change. Many cushions and mattresses decorated the long benches and made comfortable beds. While expensive rugs, mostly woolen, were the main floor coverings, some served prayers after the household head performed ablution using a copper ewer and bowl. A large European carpet (*Frenk halısı*) sold for 271 *guruş* stood out among them. Large carpets were a prestige item that started to appear in rich houses in the mid-nineteenth century and a change brought about by the Empire's deeper political and commercial integration with Europe.¹³⁵⁹ Silver rosewater sprinklers, incense burners, and chandeliers were the steady luxury home decorations. Ticktocks of a golden grandfather clock (*dolaplı altın saat* 500 *guruş*) and melodies of a musical clock (*örtme rehavili saat* 170 *guruş*) radiated status and wealth. They also supplemented state-sponsored timekeeping

¹³⁵⁹ Bozkurt, "Tereke Defterleri," 295.

mechanisms. A modern heating stove (*soba*) replaced the small stove (*mangal*) and was a scarce item only a tiny segment of Ottoman society could have back then.¹³⁶⁰

It is the tableware that shows an inclination toward European-inspired conspicuous consumption. Crystal cups, bowls, and a jug were novel items, such as spoons and forks and two iron chairs (*demir sandalye*), displaying an attitude change in equipment sophistication. Dozens of large and small copper pots (*helvahane* and *kuşhane*) and pans cooked his and his family's dishes.

Overall, serving the state in different ways and periods resulted in generational differences in materially experiencing the nineteenth century. However, when it came to helping their families, differences between the father and the son were minimal. Shops, inns, trees, and mills turning the wheel of the regional economy of Bursa, continued to keep Vasıf Pasha's household moving, albeit now faltering (see Table 20). He owned a three-eighths share of the joint-owned private properties. Yet, the three-decades-long inflation spike was influential in their pricing. The chambers in the Ishak Şah quarter serving the Armenians rose from thirteen to twenty, twelve being one-story (*tahtani*) and eight having upper floors (*fevkani*), while the small plot of mulberry trees was still there. The mill in Kayapa and olive trees in Yörükali remained intact, while the vineyards were no more, perhaps due to the spread of the vine disease. Two vacant lots, one (a saddlemaker's shop that was built anew according to the 1841 court document) inside and one in the immediate east of the citadel, where shop ruins stood, were attestations to the continuing legacy of the 1855 earthquake.

The mansion with mulberry trees next to it was again the most precious item, and its value corresponding to the Pasha's share was 20.600 *guruş*. Moreover, the Suphi Bey map of 1862 entitled the street leading to the mansion as "Vasıf Pasha's dead-end." Indeed, this location crosses the vertical Veziri and Veled-i Veziri neighborhoods, hence why the house was registered in two different quarters in 1830 and 1838.

Waqf properties were listed in the extra section of the inventory, though without value or income data. Changing times and the earthquake apparently impacted their composition, especially at the expense of the inns. The likely scenario is that the family renounced their

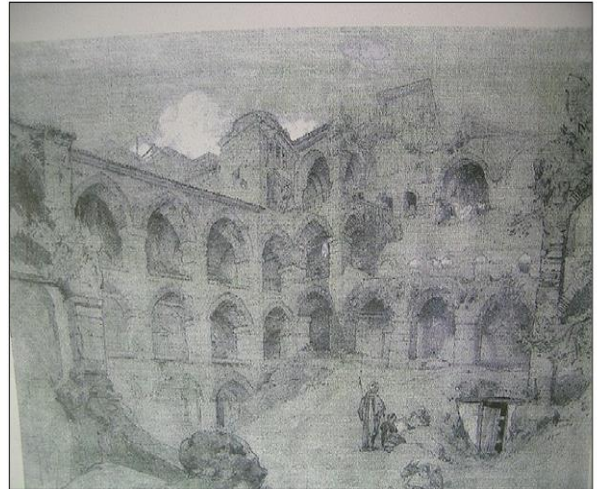
¹³⁶⁰ Ibid., 322.

usufruct rights over some of them after 1855. Almost all inns disappeared, except the Hançerli and Balibey inns. Mudanya inn, formerly operated as a whole, retained only a shop and a stable. The rented inn chambers were entirely gone. Twenty-two rooms and some shops in the Tahtakale Inn were the new properties that Vasıf rented after 1841 (the last year of the mentioned court document), or perhaps after 1855, with the help of his financial agent Mehmed Ağa. Multigenerational ownership of the Balibey Inn (on the northern end of the citadel) enabled the Pasha to put his stamp on urban space again. Bursa's only three-story caravanserai, this inn included three shops and a house and was identified in local memory as "Vasıf Pasha's Inn" on the Suphi Bey Map.

Figure 8: *Vasıf Pasha or Balibey Inn*



"Vasıf Pasha Inn" on the Suphi Bey map, c. 1859



An illustration of the Inn in 1847 by Jules Laurens (*Le Voyage de Jules Laurens En Turquie*).

All privately owned shops were sold before death. But, waqf shops formed the mainstay of the family's wealth. In the inventory, we are given a more detailed breakdown of their quantity and whereabouts as opposed to the "some shops" remark from 1841. Vasıf had 210 waqf shops and probably dozens more, considering some were unquantified. Almost all were located in the central bazaar and *charshi* area. Only six were designated with a function. Four were saddlers' shops, which blended the ingredients of Bursa's regional economy – timber, leather, cloth, wool, special knives, and transport animals that carried goods everywhere. The other was a *basmacı*, a lightweight block-printed cotton fabric shop, which

sold clothes woven of cheap imported cotton yarns and printed with ornaments that Ottoman buyers preferred (§ 2.2.2.2 & 3.3.2). While they were serving (or maybe operating) the last remaining weaving looms, cheap British imitations of "Bursa stuffs" had already inundated the markets by then. Finally, the last one was a "feltmaker's workshop" (*keçeci çardağı*), where Bursa's wool was hardened under moisture and pressure and manufactured into fabrics in traditional western and central Asian ways (§ 2.3.4.6). All segments of society used *keçe* as both clothing and furnishing fabric (our Pasha had a felt carpet, for instance). Most of the remaining shops were likely destroyed, considering their locations (Map 13 & 14) and, according to Ahmed Vefik's commentary, incapable of producing rent.

One waqf property rented during Vasıf's lifetime was unique to a city made of water. It was a mill in the Balıkpazarı area under the citadel that stretched from around the mansion to the Pasha's inn. The Pınarbaşı water followed a favorable downgrade slope and powered multiple mills here (§ 3.4.3.3). In addition, this mill was not necessarily for grains. Bursa's leather industries were established in Balıkpazarı in early Ottoman times. Evidence shows valonia flour was obtained by grinding acorn cups to be used as a tanning agent in the nearby tanneries in the 1950s.¹³⁶¹ This tradition might have existed in the nineteenth century. Another crucial investment was made in an unspecified size of mulberry trees near the factories area along the upper Gökdere stream in the east. Agreements with factory capitalists and the cocoons these trees fed increasingly contributed to the family's budget.

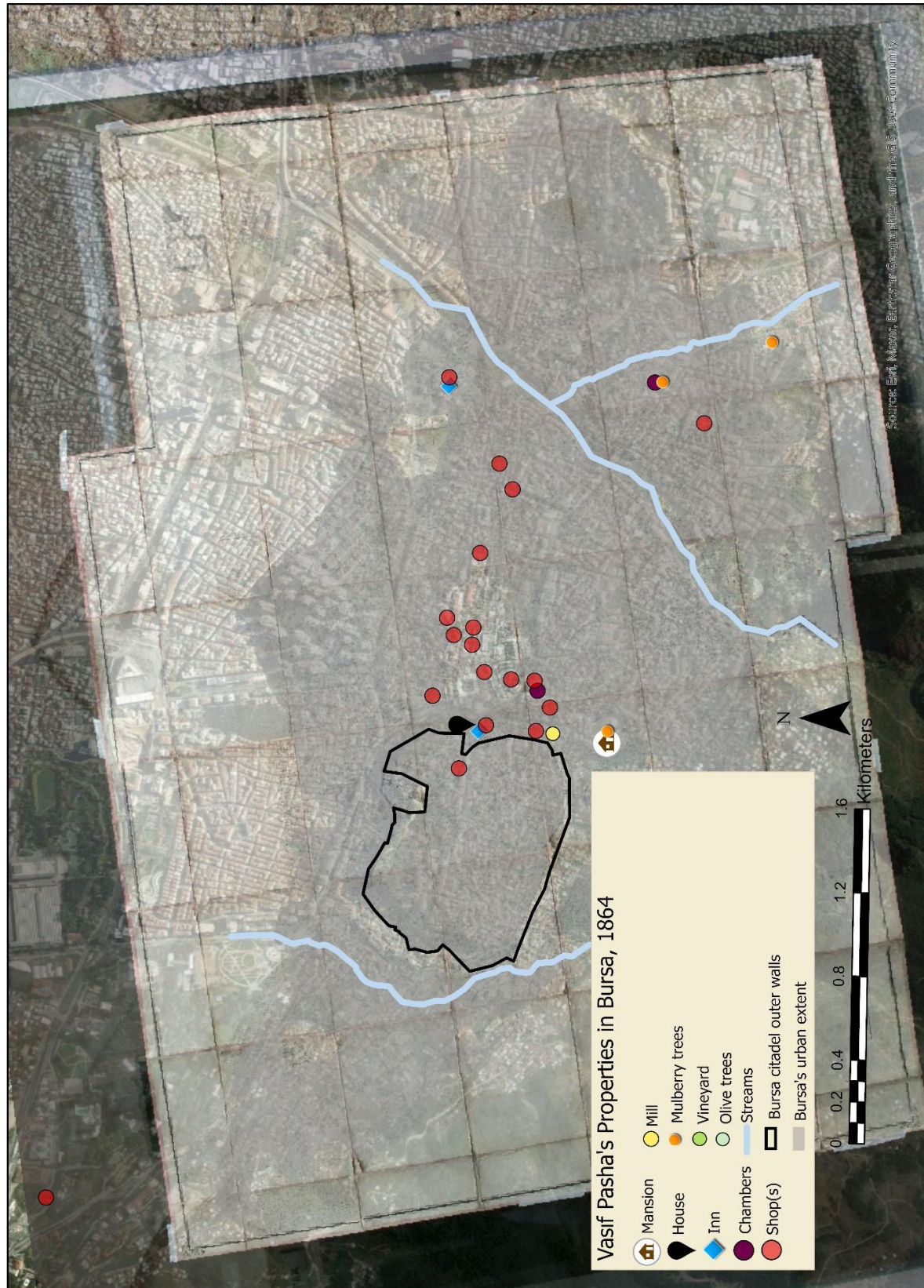
¹³⁶¹ Erhan Yıldızalp, "Erhan Yıldızalp ile Bursa Tarihi, Kültürü Üzerine," Bursa'da Kültür, February 1, 2011, http://www.bursadakultur.org/erhan_yildizalp.htm.

Table 20: *Vasıf Pasha's Immovable Properties*

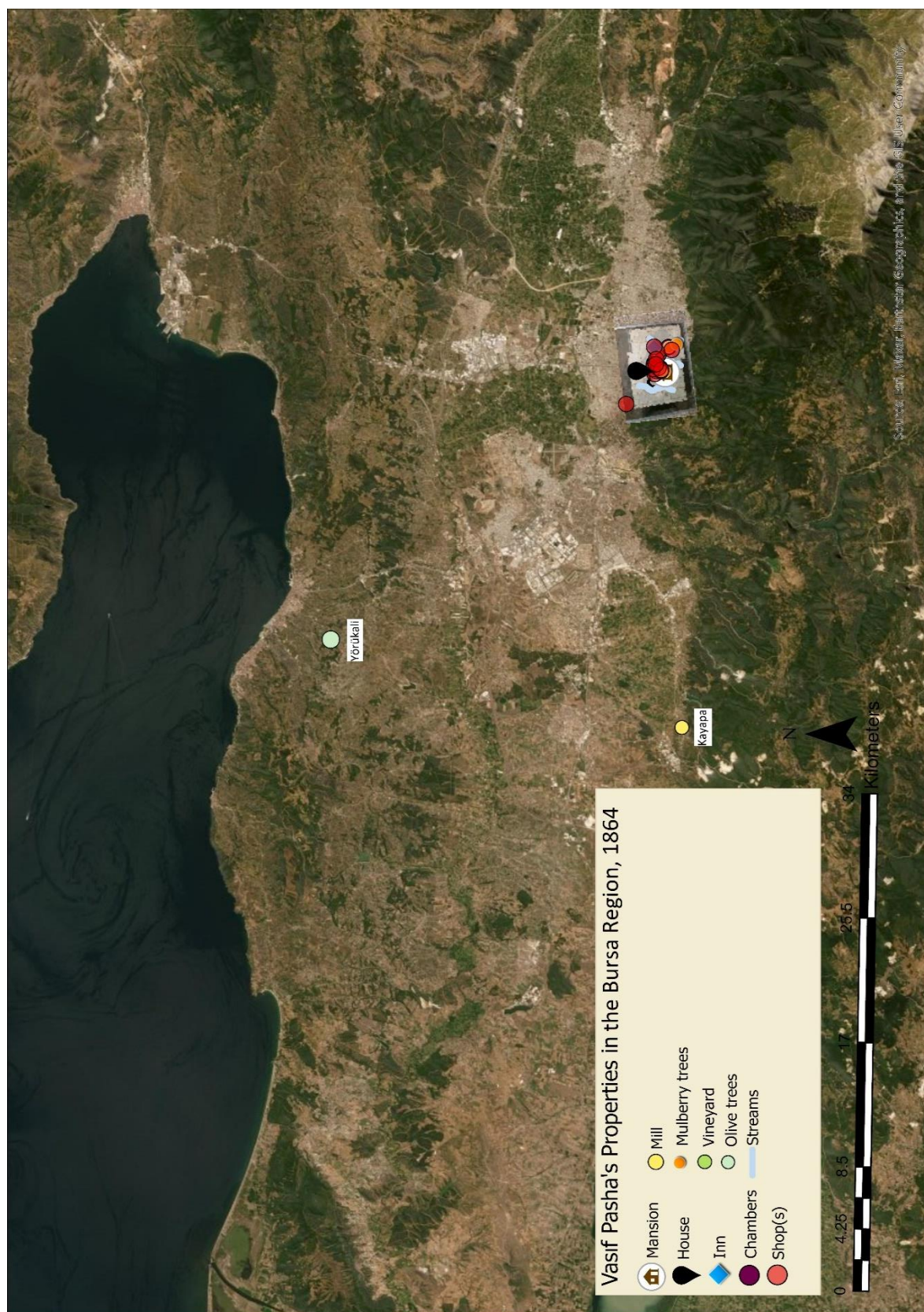
Private Properties	Number	Value in <i>guruş</i>	Location
Chambers (Houses - <i>Menzil</i>)	20 (eight one-story and twelve two-story)	11.475	Mufti chambers in Ishak Şah quarter
Mulberry Trees	3 evlek (0.75 dönüm)		
Mill	1 with 2 stones	7575	Kayapa village
Olive Trees	3 dönüm		Yörükali village of Mudanya
Shop lot	1	1500	Hacı Sevinç quarter
Saddlemaker's shop lot	1		Orta Pazar area in the citadel
Unspecified share in the mansion	1	20.600	Veled-i Veziri quarter
Mulberry trees next to the mansion	Size unspecified, but likely the previous size of 4 dönüm was preserved		
Waqf Properties			
Inn	1		Balibey Inn
Shop	3		Balibey Inn
House			Above the Balibey Inn
Shop	11		Uzun charshi
Chambers	22		Tahtakale Inn
Shops	N/A		Tahtakale Inn
Inn	1		Hañçerli Inn
Shops	N/A		Hañçerli Inn
Saddlemaker's shop	1		Hañçerli Inn
Shop	2		Tomrukönü area
Shop	10		Tuzpazarı bazaar
Saddlemaker's shop	1		Umurbey quarter (east of the city)
Shop	20		Batpazarı suku
Pirnted cotton (<i>basma</i>) (work)shop	1		Debbağhane (Tanneries)
Dükkan	80		Bedesten ve kuyumcuyan suku
Dükkan	2		At the gate of Eski-Yeni Inn
Feltmaker's workshop			Around Kapan Inn

Shop	1		
Shop	1		Mudanya Inn
Shop	34		Sipahi bazaar
Shop	33		Fermeneciyan bazaar
Shop	8		Odunpazarı and Tuz bazaars
Barn	1		Mudanya Inn
Saddlemaker's shop	1		Hacı Sevinç quarter
Mulberry Trees	size unspecified		<i>Büyük bahçeler</i> ("Grand Gardens")
Saddlemaker's shop	1		In front of Yeni Kaplıca bath
Mill	1 - type and size unspecified		Balıkpazarı area

Map 13: Vasif Pasha's Immovable Properties in the city, 1864



Map 14: *Vasif Pasha's Immovable Properties in the Bursa region, 1864*



Once the inventory ended, as the legal guardian of Mehmed Mazhar, Ibrahim Rıza Efendi abdicated his brother's ownership of all waqf and private properties except the chambers in Ishak Şah quarter to buy new estates. Decisions about minors' finances had to be notarized by the court. I did not go through all the court documents from 1864 to 1870, so we are currently uninformed about the state of the properties and Ibrahim Rıza's financial maneuvers. But he likely decided to sell a majority of his share of estates to build a new future within the configurations of Bursa's economy. Arguably, diminishing returns from the urban buildings since 1855 increased the importance of agricultural assets. Sadly, the region's environmental determinants would worsen things, as the pebrine disease that would devastate the silk industry had just arrived (§ 2.3.4.3).

There was no "personal liabilities" section of Vasıf's inheritance, which confirms that he had no outstanding debts and insufficient money to be reserved for personal and communal good. Meanwhile, Münib Efendi's arrival in Bursa relieved the family for some time.¹³⁶² After dealing with the household's financial issues for five to ten days, he went to Istanbul to get his older brother's remaining money kept by Mehmed Ağa.¹³⁶³ However, the Empire's worsening economic situation would not help improve things.

Burial expenses were not recorded either. But this absence should not deceive us. A hundred meters from the mansion, Vasıf Pasha's tombstone stands next to his father's and is the last in the family cemetery. Although his inventory did not include headgear, an Azizi-style fez is inserted on top of the tombstone, commemorating Sultan Abdülaziz (r. 1861-1876)'s reign, during which the Pasha served in Shkoder and died. Actually, it represents more than a timestamp: the two had met long ago when Abdülaziz was in the entourage of Sultan Abdülmecid to Izmid, where Vasıf was serving as the governor in 1843. Abdülaziz also visited Bursa in 1862 to see the ruins after the earthquake. The Sultan's close observation of the Ottoman army's movement in the Balkans and personal companionship with Ahmed Vefik Efendi suggest that the Sultan was informed about the Pasha's achievements and later situation.

¹³⁶² OA. MVL. 984 / 38 (AH. 26-10-1280 / 04-04-1864).

¹³⁶³ OA. MVL. 985 / 37 (AH. 11-11-1280 / 18-04-1864); TŞRBNM. 20 / 109 (AH. 22-12-1280 / 29-05-1864).

In a sense, the fez on the tombstone symbolizes Vasıf Pasha's readiness for a new task since he did not resign but was unfortunately retired from office. Unlike most family members' gravestones, the father and son's tombstones are in good condition (Figure 9 & 10), and Vasıf Pasha's epitaph serves as an excellent introduction to his career paths:

Every soul shall have a taste of death

Of the house of Refi' Efendizade, one of the notable households of Bursa,

Career started in the precious army, and then changed to one in state administration,

Attained the title of "Governor-General of Rumelia"

Ahmed Vasıf Pasha, the ex-governor of Shkoder,

Whose destination will be the paradise,

Pray the Fatiha for his soul

Year 1279¹³⁶⁴

¹³⁶⁴ Pınarbaşı Cemetery, Tombstone, no. 183. Latitude and longitude: 40.181684 – 29.057284. Original epitaph in Turkish: *Külli nefsin zâikatü 'l-mevt / Burusa eşraf-ı hanedanlarından / merhum Refi' Efendizâdelerden / olup silkü 'l-leâl-i Askerîden / neş 'et ve umûr-ı Mülkiyeye tahvil-i / memuriyet ederek Rumili / Beylerbeyi pâyesini / ihraz etmiş olan sâbikan / İşkodra mutasarrıfı / Cennet-mekan huld-âşîyan / Ahmed Vasıf Paşa / merhumun ruhiyçün / el-Fatiha / sene 1279.*

Figure 9: Vasıf Pasha (left) and Mehmed Refi Efendi's Tombstones: Tombstones of some family members are in the middle, resting against a tree (author's own photo, 03/11/2022).



Figure 10: Tombstones of the Ancestors and the Household of Mehmed Refi Efendi



Whereas the epitaph fits well into the biography, the inscribed year 1279 seems confusing at first. The inventory was prepared in the Hijri year 1280. But Vefik Efendi's letter about the Pasha's health and finances was also written in 1280, thereby factually invalidating the tombstone. As a Tanzimat officer, the date was obviously written in the Rumi calendar, which was an adapted Julian introduced in 1840 as part of administrative reforms. So, the Pasha's death was somewhere between December 4, 1863 (Age Rumi 21-09-1279 [Vefik Efendi's letter]) and March 12, 1864 (AR. 29-12-1279). Early March is the likely option, since Münib's request for departure to Bursa was written by that time.¹³⁶⁵

¹³⁶⁵ OA. TŞRBNM. 15 / 56 (AH. 24-09-1280 / 03-03-1864).

The stone is long forgotten, but the name Vasıf remains in everyday Bursans' memory. It is still associated with a dead-end in the Veled-i Veziri quarter (Figure 11), though the connection to the Pasha is unknown.

Figure 11: "Vasıf Pasha's Dead End," Then and Now



In the end, Ahmed Vasıf Pasha died at his 50. The two fezzes he and his father wore represent two eras of Ottoman governance, two faces of the city of Bursa, and two phases of the mansion, all wrapped up in one account. The historical life course of Mehmed Refi Efendi's household over this half-a-century goes beyond the classical confines of individual career accession and declension paths of state agents. It allows the economic and demographic construction of biographies that situate people and regions in their socioeconomic, demographic, and environmental vicissitudes.

The intergenerational story of the protectors of Tanzimat by pen and sword narrates a story of direct status transfer but different career trajectories and one of wealth accumulation generated by the centuries-old stones and trees of Bursa. Keepers of various shops and the mobility of agricultural and industrial laborers, artisans, and traders of different ethnoreligious backgrounds who stayed in the inns and chambers served the domestic needs

of Bursans. Together with the highlights of Bursa's agrarian economy – mulberries, vineyards, chestnuts, olives, timber, grains, and mills that fed, sheltered, clothed, and grew the region and the Empire, they flourished a family whose male members contributed to the Ottoman state's political longevity (see Map 15 for the career trajectory of the household members).

The HLC of the household helps us visualize a multifaceted picture of mansion life in the city. Demographically, the household structure can be seen with all kin and non-kin members (males also with their ages) and provide insights into marriage patterns and the role of females in the house. Consumption patterns based on the personal items of the qadi and the Pasha reflect changes in taste in attire and goods in a traditional Muslim elite house propelled by different career trajectories and western-style reforms. Economically, besides seeing the wealth of the household heads, immovable properties, identities of their renters, raw materials storage, and money distribution in and out of the city show the versatility of Bursa's regional economic dynamics and transgresses the supposed clear-cut distinctions between urban and rural spheres.

Population registers portray a general picture of the quarter within which the family and other houses were situated and demonstrate the dense and interesting socioeconomic networks within inns and chambers, opening the door to investigations into the type of migrants the region attracted in the 1830s and 1840s. In addition, the tax surveys corroborate most items in the inheritance inventory and provide annual revenues from the immovables. But, compared to income-generating private and waqf properties detailed in the court records, they still run short of recording all revenue sources. Lastly, the tombstones of the family members serve as a great epilogue to the HLC and as fact-checkers and map-locators (e.g., the "dead end" associated with Vasif Pasha's name) while offering tangible evidence for the position that historical memory is selective.

This household's story is an excellent exercise in how environmental determinants alter everything substantially in a region. The destruction of the 1855 earthquake halted trade operations within the city and dealt a heavy blow to the economic standing of the Pasha's household. Their situation was exacerbated by the Empire's worsening financial condition, Vasif's deteriorating health, and the mother's mismanagement of family finances. While it

seems that the mulberry trees were clung to as a lifesaver, their impact was about to be changed dramatically for the worse. In other words, state-, regional-, and individual-level contingencies collectively impacted the family's fate. On the other hand, the career highlights of the father and the sons, tainted by a conger of political crisis, internal strife, war, forced migrations, agrarian and ethnic conflicts, conscription, labor bondage, famines, diseases, and so on, strongly suggest that the determinants of regional economies impacted the performance of Ottoman economy domestically and globally.

Map 15: Career Trajectories of Mehmed Refi Efendi, Vasıf Pasha, and Münib Efendi



5.3. HLC Case 2: In and Out of the City, at the Same Time: The Household and Çiftlik of Süleyman Ağa, Ex-Chief Palace Gatekeeper (d. 1833)

In a sense, Bursa was the capital of banishment. This feature became even more pronounced after the Auspicious Incident. The following HLC is on the household of a banished Chief Palace Gatekeeper (kapıcıbaşı) Süleyman Ağa, who owned a large çiftlik in the plain and was an absentee landlord in the city. It illuminates the integrated dynamics of rich city life in Istanbul and Bursa, producing for the urban market, procuring labor, and credit relations. At the same time, it draws attention to how political and environmental contingencies could easily compromise this interconnectedness.

Mahmud II's tight rein on powerful magnates through banishment and confiscation and multifaceted centralization project populated Bursa with many political and social "undesirables." (§ 3.4.2.2). 1826 was a special year, as some top Janissary and palace officers were exiled to the city after the Auspicious Incident on the condition they shall never leave their residence.¹³⁶⁶ Among those setting off for Bursa under the supervision of an armed officer (*kavas*) from Istanbul was the *Kapıcıbaşı* Es-seyyid Süleyman Ağa, the son of Mehmed Ağa.

Kapıcıbaşı means "chief palace gatekeeper" and refers to the heads of the particular Janissary class known as *kapıcı* that guarded the entrance doors of the imperial palace and welcomed the honorary guests of the Sultan. *Kapıcıbaşı* was a special military rank equivalent to general, for they were superintendents charged with the maintenance of the imperial palace, carrying out protocols (*teşrifat*), and sending imperial orders to provincial administrators and executing these orders (*rikab*). Their first-hand experience with diplomatic and economic circles occasionally had them appointed to embassies and financial offices.¹³⁶⁷ In line with fiscal transformations of the Empire, starting from the late seventeenth century, *kapıcıbaşı* also became an honorary yet important and coveted title awarded to members of high-ranking military-fiscal officials and local notables.¹³⁶⁸ For instance, Bursa's governor and market inspector Hafız Ağa (in office 1831-33), Mustafa Bey, the *ayan* of Gemlik, and another Mustafa Bey, the royal purveyor of timber from Inegöl, held this title.

Following the disbandment of the Janissary Corps, the *kapıcıbaşıs'* number was reduced to thirty in the center and countryside. The rest were retired and dispersed within the Empire with a monthly salary.¹³⁶⁹ An es-Seyyid Ali Ağa, who died in exile in Bursa in 1829 and could not leave any inheritance to his family due to confiscation, for example, was a head

¹³⁶⁶ Bilgin, "Bursa Şer'iyye Sicilleri B-317," 203–5.

¹³⁶⁷ The *kapıcıbaşıs* could be appointed to important posts such as senior Janissary officers, governors, and fiscal officers (*nazır*). Abdülkadir Özcan, "Kapıcı," in *İslam Ansiklopedisi*, 30, 2015, 345–47.

¹³⁶⁸ İ. Metin Kunt, "Devolution from the Centre to the Periphery: An Overview of Ottoman Provincial Administration," in *The Dynastic Centre and the Provinces: Agents and Interactions*, ed. Jeroen Duindam and Sabine Dabringhaus, *Rulers & Elites: Comparative Studies in Governance* (Leiden: Brill, 2014), 46.

¹³⁶⁹ Özcan, "Kapıcı."

gatekeeper and a member of the "disbanded corps (*ocağ-ı mülga*)."¹³⁷⁰ So far, I could not locate an imperial order or a notification (*i'lam, ilmühaber*) regarding Süleyman Ağa's arrival in the archives to reveal his identity. The lack of other titles also prevents us from distinguishing him from his namesakes all around the country. But, a house sale deed from the Bursa court record presents documentation about his stay in the city.

On 14 December 1826, six months after the Auspicious Event, Süleyman Ağa and his wife Şerife Zübeyde Hanım, the daughter of Osman Ağa, bought an expensive mansion in the Veled-i Nalband quarter at the city center from a Mustafa Ağa, another *kapıcıbaşı* living in Istanbul's Fatih quarter, for 13.500 *guruş*.¹³⁷¹ The witnesses of the sale included another *kapıcıbaşı* and members of prominent administrative households. Neither these people's presence nor the quarter's choice was coincidental. Veled-i Nalband was in a group of the wealthiest neighborhoods (Ebu Şehme, Şeker Hoca, Veli Şemseddin, Ibrahim Pasha), located compactly within an area just across the Grand Mosque (*Ulu Camii*) (See Figure 12). Mansions were frequent in this zone, occupied by the families of top local military/administrative and judicial officials, political exiles (including all *kapıcıbaşıs*), and guests from Istanbul.

The mansion included in its interior court four rooms and an overhanging roof (*sundurma*) on the upper floor; two rooms, two common rooms (*sofa*), a wood-covered porch that served as an arbor (*sayelik*), and two kitchens on the lower floor; and a basement (*zir-i zemin*), a cellar, and four small running water pools (*habiye-i ma' cârî*) with a fountain (*shadirvan*) underground (§ 3.4). A small garden separated this space from the outer court, which had a building with three rooms in its upper section and a reception room (*divanhane*), a *mabeyn* room (that separated the men's section from women's), two stables, a hayloft, a running water pool, and a courtyard in the lower. In this wealthy portion of Bursa, the neighboring houses belonged to the exiled Hacı Hüseyin Ağa, who was the former *ayan* of Şile region (on Istanbul's Black Sea coast), a Şekerbeyzade Emin Bey, a Hıfzı Efendi who

¹³⁷⁰ OA. MŞH. ŞSC. d. 3079. (C / 57) (AH. 11-10-1244 / 16-04-1829), pp. 44-45.

¹³⁷¹ Bilgin, "Bursa Şer'iyye Sicilleri B-317," 317–18.

was a former scribe in the imperial silk scale, and eminent scholar Nakibzade es-seyyid Mehmed Murad Efendi.

Figure 12: Central Bursa, c. 1892. Photographer unknown but likely Sebah & Joallier. The Grand Mosque of Bursa is at the center of the photograph, showing how minuscule every building around truly was. Of the three closest small mosques on the right, the furthest one was where the Veled-i Nalband quarter and the mansion was located (source: <http://www.eskiturkiye.net/3863/bursa-eski-gorunumu-1892>).



In addition to the immediate neighbors, the 1830 population register gives us a balanced and colorful view of the Veled-i Nalband quarter, which had 105 males in 48 households, comprising grocers, bakers, barbers, cloth, shoe, fez, and saddle manufacturers, book dealers, servants, madrasa instructors, notable Morean families as well as poor residents. Es-seyyid Süleyman Ağa, described as medium height, forty-eight years old with

a black beard, was recorded in the sixth house. Other members of the spacious mansion were his son Mehmed Ferhad (ten years old), son-in-law Mehmed, a mid-sized thirty-year-old man with a black mustache, a black slave named Mercan, another one named Beşir, and the forty-five-year-old servant Mustafa who was from the Ma'den district in Eastern Anatolia. Mercan's demise in August 1832 (AH. 08-03-1248 / 05-08-1832) burdened Beşir and Mustafa with extra work to keep the home fires burning for the coming harsh winter.

Nothing extraordinary happened to Süleyman Ağa's household during his residence. But, on his behalf, the state was secretly preparing measures against a looming threat. In early 1833, Ibrahim Pasha of Egypt's troops advanced on Kütahya, which was "three *konaks*" or 25-30 hours away. If they ever happened to enter Bursa, the exiled state officials and ex-Janissaries were planned to be transferred to Tekfurdağı (today Tekirdağ in Thrace).¹³⁷² Although the army never set foot in the city, death found Süleyman Ağa soon at his fifty-one. A large red line crossed through his register record, showing his passing as AH. 7 *Safar* 1249 (26 June 1833). News of his passing had quickly reached imperial ears.

Hafız Ağa, the governor of Bursa, drafted a letter to the Grand Vizierate declaring that the *kapıcıbaşı* died of natural causes and left behind a family of a wife, a minor son, and an adult daughter.¹³⁷³ Although we are introduced in this sentence to the unnamed females in the household, the proceeding lines take Süleyman's story to a more remarkable level. Allegedly he had no wealth and entirely relied on his *çiftlik* in the nearby village of Balıklı to run his house. Though Hafız Ağa expressed that it was appropriate to leave the Ağa's inheritance to his family, he did not refrain from saying that the estimable worth of the said *çiftlik* was 30 to 40 *kese* (15.000 to 20.000 *guruş* – between £72 to £231 in 1834 or £11.683 to £15.700 in 2017), insinuating its potential contribution to the state treasury if confiscated (§ 1.2). Still, since the deceased served the state, upon the order of the chief Islamic judge of Anatolia (*Sadr-ı Vala-yı Anadolu*), Ali Eşref Efendi, the deputy qadi of Bursa, sealed Süleyman Ağa's moveable and immoveable properties until further notice.¹³⁷⁴ A despatch rider was paid seventy *guruş* to send the news to Istanbul.

¹³⁷² OA. HAT. 362 / 20136 (AH. 05-10-1248 / 25-02-1833); 369 / 20365 (no date).

¹³⁷³ OA. HAT. 520 / 25438. A-2. (no date).

¹³⁷⁴ OA. HAT. 520 / 25438. B-1 (no date).

The awaited imperial order arrived shortly. Mahmud II showed mercy (*merhamet-i celile-i pâdişahî*) to the heirs and allowed their total possession over the decedent's inheritance¹³⁷⁵, valuing at 65.277,5 *guruş* (£741 in 1834 and £50.240,76 in 2017). On AH. 15 Safar 1249 (4 July 1833), the chief military judge authorized the Bursa sharia court to begin inventorying the *tereke*.¹³⁷⁶ The whole process took twelve days. We are reminded in the introduction section once again that Süleyman Ağa's inheritance was not appropriated thanks to the "benevolence and compassion of the Sultan" (*rahm ü şefkat-i şehinşâhî*), whose recipients were *Şerife Zübeyde Hanım*, Mehmed Ferhad *Bey*, and *Şefika Hanım* (the wife of Mehmed). Evidently, as heirs to an important officeholder, all family members kept titles of respect.

Süleyman Ağa's inventory allows us to put clothes on his physical descriptions provided in the population register and place objects in the interior space of the mansion, whose entirety was described in the sale deed. His traditionally designed room was stuffed with furniture and flooring. While regular carpets and prayer rugs covered the floors, the long, low wooden bench (*sedir*) elevated cotton cushions and pillows that amounted to around a thousand *guruş*. Three cotton-filled mattresses with pillows and fine quilts woven from Bursa *kutni* and *yemeni* and European cotton clothes above them made the bed comfortable. A small stove, or *mangal*, heated the room and functioned as a cooker. Although an expensive clock (351 *guruş*) was an item wealthy households had in common, it was the fashionable garments stored in expensive chests that not only clearly distinguished the Ağa from ordinary city dwellers but also presented biographical clues.

Most of the decedent's surviving clothing was likely worn as ceremonial attire. Upon short and long-sleeved shirts (*gömlek*, *mintan*) and fitted (*çakşır*) and baggy trousers (*shalwar*) held up by belts made of fine Lahore shawls, vests, sleeveless coats (*hırvani*), and loose coats sported by dignitaries (*binniş*) were worn. Black and green hoods (*kukuleta*, *kaput*) and felts (*kebe*) protected from rain and cold. Quilted turbans (*destar kavuk*) and novel fezzes, the latter being the mark of the new era, were the headgears. Almost all these items were made out of fine *çuka* or *çuha*, the thin-layered woolen broadcloth produced primarily

¹³⁷⁵ OA. HAT. 520 / 25438. A-1. (no date).

¹³⁷⁶ OA. MŞH. ŞSC. d. 3050 (C / 28) (AH. 15-02-1249 / 04-07-1833), p. 196.

in the Balkans (present-day Bulgaria and the Salonica region) and used in the Janissaries and palace officials' garb. Cotton robes and six furs – made from sable, lynx, bear, and unspecified animal belly (*nafe*) skins and valued over a thousand *guruş* – were arguably the most elegant pieces. The chests stored Bursa-made decorated towels and bath wraps (*futa* and *peştemal*) of pure cotton (and occasionally mixed with silk) used in the house's and the city's public baths. A silver comb kept Süleyman's beard in shape and made the final touch to his outward appearance.

Status indicators were not limited to clothes. A collection of weapons, comprising a rifle with pearl inlays, a musket (*kaval tüfeng*), a pair of pistols, one flintlock *kubur* pistol, and a pala-like *gaddare* sword, over 500 *guruş*, strongly suggest a military class background. The coffee and tobacco ritual was performed with cherry-wood chibouks with an amber mouthpiece (513 *guruş*), silver and brass hookahs (247 *guruş*), and a copper coffee set (40 *guruş*). Close to a thousand *guruş* worth of kitchen utensils included pans, pots, trays, and plates of small and large size, but nothing out of the ordinary catches the eye – unless we delve into who prepared the meals and kept the mansion running. Beşir, Süleyman Ağa's slave who was alive by the time he died, does not appear in the inventory. Despite no update to his population register record, he was likely manumitted, a virtuous act in Islam (§ 3.4.3.1). The only enslaved person in the *tereke* was a black concubine named Seyyare, who was listed for 1000 *guruş*, allowing us to see one more individual in the household.

Slaves were not the only ones who left the house. The whole mansion's composition changed rapidly after Ağa's death. A *yorgancı* (lit. quiltmaker) Ibrahim, the son of Hasan, nearly the same age as Süleyman Ağa (48), arrived at the house on the day death took place. Likely, the ex-palace gatekeeper was bedridden for some time and needed his close companion nearby. This call reached its destination much more easily via sea than land. Ibrahim was a resident of the Kulekapusu quarter of Galata, which included the famous Mawlawi lodge near the Galata Tower.¹³⁷⁷ Given the gradual transformation of this small and ancient part of Istanbul into a "banker street" in the nineteenth century and the variegated nature of social and economic relations there, Ibrahim was much more than an ordinary "quiltmaker." Actually, this term falls short of the functions of this occupation. *Yorgancı*s

¹³⁷⁷ OA. NFS. d. 15247, (AH. 1249 / 1833), p. 5.

sold goods for home furnishing, from quilts to cushions to carpets.¹³⁷⁸ They had firm connections with households of the upper class and palace officials. Moreover, before 1826, some Janissary-affiliated *yorgancı* artisans were manufacturing battle tents.¹³⁷⁹ Besides Ibrahim, Another Istanbul connection was established as the servant Mustafa moved to "Asitane" in August 1834 to help with family matters or seek new employment.

Inventorying and auctioning the stuff of a wealthy house in the city was an easy task for the experienced court scribes. After all the items were precisely ticketed with their market price, the value of the decedent's half share in the mansion was estimated at 7500 *guruş* (making the total market valuation 15.000 *guruş*, which was 1500 more than the purchase price.) But, the scribes and their collaborators' most challenging task was away from the city, as Süleyman Ağa generated his real wealth from agricultural assets and money relations. Except for a small, two-*dönüm* of vineyard worthy of 200 *guruş* in the Misi village, which was ten kilometers west of the city and renowned for its grapes¹³⁸⁰ (§ 2.3.4.1), the *çiftlik* in Balıklı was the epicenter of economic activity, leaving no doubt why the state set its sights on seizing it. We have no evidence about how the deceased owned the estate in the first place. Therefore, whether he was a subcontractor to a large tax farmer and other technical aspects remain unexplored. At least, we have evidence that, before the Auspicious Event, ex-Janissary Aghas were involved in tax-farming, moneylending, and *çiftlik* ownership (where indebted villagers worked),¹³⁸¹ so that Bursa was not a foreign territory for political exiles.

Balıklı was a village in the Bursa plain roughly five kilometers away, reachable in an hour of walk or forty minutes of a trip on horseback on a good day. Seen through population figures, there was nothing unusual. By 1830, it was a mid-sized Muslim settlement with sixty-

¹³⁷⁸ Bozkurt, "Tereke Defterleri," 295–96.

¹³⁷⁹ Nalan Turna, "Tanzimat Öncesi Dönemde İstanbul Esnafının Gedik/Destgâh Uygulamalarına ve Kalfalara Dair Bazı Analizler," *Journal of History School* LVII, no. LVII (2022): 1057.

¹³⁸⁰ OA. ML. VRD. TMT. d. 8407 (AH. 1261 / 1845).

¹³⁸¹ A Hüseyin Ağa, who belonged to the thirty-sixth regiment (*orta*) of the Janissary corps in Istanbul, died in the Alaca Mescid quarter of Bursa with a total wealth of 33.020 *guruş* shortly before the destruction of Janissaries. He apparently lived a luxurious life in a mansion with his family and slaves, and concentrated his business operations in western and northern Bursa, namely near Lake Apolyond (he owned the tax farms of and a *çiftlik* in the Hasanağa village and lent substantial money to villagers there and other places) and in Mudanya's rural hinterland. Hüseyin Ağa's credit relations and witnesses postmortem estate division included other Janissaries. OA. MŞH. ŞSC. d. 2968 (B / 340) (date of the inheritance inventory: AH. 17-10-1241 / 25-05-1826), pp. 55-56.

eight inhabitants living in thirty-two households.¹³⁸² However, aside from its proximity to Bursa, Balıklı's extremely favorable position with fertile soil made it suitable for large-scale cultivation and animal husbandry operations. The Nilüfer River delimited the village's extent to the west, the Cilimboz stream to the east, and the Deliçay stream (that channeled all Olympus rivers and streams to Nilüfer) to the north. It is not in vain that its name means "the village with fishes." High agricultural suitability, easy access to water, and abundant pasturage turned this small place corner into a microcosm of Bursa's agrarian economy.

Using the population registers and tax surveys together reveals that Süleyman Ağa was not alone in picking this location.¹³⁸³ The village, with its small mosque headed by Imam Mehmed Efendi, was surrounded by grainfields of 20-75 *dönüm* owned by the somewhat wealthy villagers and *çiftlik*s of 75 to several hundred possessed by landlords in the city – such as the households of Şahinzade, Hikmetizade, and the famous Ibrahim Pasha's wife – and even a thousand *dönüm* with 600 *dönüm* of pasture – kept by Refet Efendi, the sheik of the Ismail Hakkı convent. The number of animals and the size of mulberry orchards, clover fields, and fruit, vegetable, and cash crop gardens correlated positively with power. Dispersed among these fields were the mid-sized peasantry's small mulberry orchards and vineyards of one to two *dönüm*. Almost equaling the big and small landowners were the landless peasants who had nothing but their labor (*belci*, *rençber*, *ortakçı*, *amele*) and, sometimes, some cattle.

¹³⁸² OA. NFS. d. 1392 (AH. 1246 / 1830), p. 51-52.

¹³⁸³ OA. ML. VRD. TMT. d. 7494 (AH. 1261 / 1845).

Figure 13: A map of villages in the Bursa plain, c. 1888. It is prepared to show the areas where rice cultivation had been banned since the 1840s. The city is in the south, Balıklı is marked with a star, and the neighboring çiftlik village of Köprübaşı with a triangle. Blue lines are the streams, with the one on the westernmost side being the Nilüfer River and the rest being its tributaries (OA. ŞD. 1546 / 23).



In this panorama, Süleyman Ağa stood just in the middle. His *çiftlik* was a conglomeration of separate arable tracts referred to as "gardens" (*bağçe*) due to the wide range of agricultural activities performed on them (§ 2.3.6). It consisted of six parcels of variable size, totaling 75 *dönüm* and valued at 11.950 *guruş*. Judging by its size, it was above the average of small holdings but still a very "small" (< 250 *dönüm*) *çiftlik* by Bruce

McGowan's classification for the whole Empire.¹³⁸⁴ The headquarters of agricultural operations was a large house with an interior and exterior courtyard priced at 4750 *guruş*, which definitely stood out in contrast to the simple mudbrick living spaces of the villagers. A small barrack (*küme*) existed on one of the large field plots to house workers and as a storage space.

Table 21: *Süleyman Ağa's Immovable Properties*

Estate	Size (in Dönüm)	Location	Value (in <i>guruş</i>)
Mansion with interior and exterior courtyard (half share)		Veled-i Nalband quarter, Bursa	7500
House with interior and exterior courtyard		Balıklı	4750
Mulberry trees	1.5	Balıklı	250
Vineyard	1.5	Balıklı	100
Garden with a small barrack (<i>kümeli bahçe</i>)	27	Balıklı	3000
Garden	24	Balıklı (Place of Kirdecioğlu)	6000
Garden	15	Balıklı (Atıcılar, outskirts of the village closer to the city)	2000
Garden	6	Balıklı	600
Vineyard	2	Misi	200
Total	77		24.400 (Balıklı 16.700)

Farming activities were pretty versatile and aimed to utilize most of what nature bestowed most profitably. Because the Ağa died in late June, or about the grain harvest season, we can see the çiftlik's income sources in the inventory. Being near water bodies was

¹³⁸⁴ Bruce McGowan classified establishments between 25 to 50 hectares (250 to 500 Ottoman dönüm) as small and those larger than 50 hectares as large çiftliks. McGowan, *Economic Life in Ottoman Europe*, 72.

a double-edged sword that multiplied agricultural opportunities yet also made Balıklı predisposed to severe inundations (§ 2.3.1 & 2.3.4.5 & 3.3.3.3). I did not encounter a serious flooding event in 1833 in the archives. Although the harsh winter of 1832-1833 might have adversely affected the yield of early spring and cold-sensitive crops of oat and barley and the pollination rate of wheat and rye, it helped moisturize the soil and reduce the harmful impact of insects and diseases.

Examining the average grain prices in 1833 compared to the preceding and following years indicates this year was generally favorable in terms of wheat, barley, and maize and slightly less profitable for oat and vetch.¹³⁸⁵ Had the Ağa lived, the disruptions to grain production by the marching Egyptian armies in Syria and Anatolia would have created a profitable environment for the provisioning of the region. One of Ibrahim Pasha's reasons for galloping towards Bursa was to supply his soldiers. On the other hand, the social disturbance his movement caused and the animosity it created toward the Ottoman central administration had the Sublime Porte to ensure Bursa, which was cut off from its southern and eastern hinterland, was properly fed from its western and southwestern neighbors.¹³⁸⁶

Based on the village's tax surveys from 1845, we infer that relatively small fields were not exhausted, and a cultivated to uncultivated (fallow) land ratio of 1:1 was retained, though the *çiftlik*s tried to cultivate as much as possible, which was the case in large riverborne estates in the village and the plain. If the folks in Balıklı went by winter weather lore in 1832 – like a slightly cold and foggy August followed by hot and thunderous days in fall - available workers might have been called to sow winter cereals (wheat and barley, especially) in plots left to fallow.

¹³⁸⁵ Öztürk, “Bursa’da Hububat Fiyatları (1775-1840),” 176.

¹³⁸⁶ OA. HAT. 368 / 20329 (AH. 1248 / 1833).

Table 22: Süleyman Ağa's Agricultural Produce

Product	Weight	Approx. weight in imperial (Winchester) bushel	Market Value (<i>rayic</i>) per unit	Price (<i>guruş</i>)
Wheat (cultivated)	240 <i>kile</i>	220	5	1200
Barley (cultivated)	194 <i>kile</i>	177,83	3	582
Oat (cultivated)	90 <i>kile</i>	82,5	2	180
Rye (cultivated)	56 <i>kile</i>	51,3	4	224
Vetch (cultivated)	10 <i>kile</i>	9,16	4	40
Broad bean (<i>bakla</i> - cultivated)	10 <i>kile</i>	9,16	4	40
Vegetable and fruits (<i>bostan</i>) and maize (cultivated)				600
Cultivated vegetables				200
Maize flour (in five sacks)	5 <i>kile</i>	4,58	18	90
Maize				225
Fresh (wet) cocoons	230 <i>kıyye</i> (294,4 kg)	10,54		1500
Total		> 565,07		4881

Expectedly, the crop profile of the *çiftlik* consisted of the most popular grains (§ 2.3.4.5). Wheat and barley were more extensively cultivated than oat, rye, and vetch. Because Bursa's bread was made of mixed flours, some portions of the grains other than wheat went to mills rather than fully becoming fodder. There was no mention of millers in the village in the population register, though the water sources nearby suggest otherwise. In addition, Balıklı was a waqf village whose revenues funded the mosque complex of Emir Sultan, a Bukhara-origin scholar who was considered the spiritual patron of the city, which included mills in Bursa and the Hüdavendigâr province.¹³⁸⁷ Perhaps the grains were supposed to be ground in predestined locations.

Had the Ağa not died, about one-sixteenth of the grain crops would be used as seed storage for the next year, and a similar portion for his household's food needs, as understandable from cellar space in his mansion in Bursa. Unlike solely dry farming in other Anatolian locations, rain- and river-fed farming not only improved grain quality but also allowed for raising water-intensive crops, namely broad beans, some fruits, green vegetables, and maize. Maize flour storage is suggestive of food made of this item in the market and imports of Danubian wheat whose flour could be mixed with that of maize successfully (Bursa wheat could not be added to maize flour because of the former's weakness.) (§ 2.3.4.5 for output quality & storage).

Vegetable and fruit gardens were the other actors of the *çiftlik*'s story (§ 2.3.4.4). We are uninformed about the type of vegetables, but they must have included various green and different water-intensive kinds (the latter would necessarily involve sharecropping as they were sown outside grain sowing season). Tobacco, avidly consumed by landowners and workers alike, was grown too. Regarding fruits, we know that melons were preferred in crop rotations, and pears, peaches, apples, and walnuts were grown plentifully in the village in 1845. Because single trees were not likely not counted, we may assume versatility was very high in fruit cultivation, in the estate was as versatile as in nearby villages. Beekeeping also

¹³⁸⁷ Nilüfer Ateş, “Bursa Emir Sultan Külliyesi Vakıfları (Kuruluşundan XVII. Yüzyıl Sonuna Kadar),” *Vakıflar Dergisi*, no. 52 (2019): 9–27.

generated good income for most Balıklı inhabitants in the mid-nineteenth century, so we may also suggest the *çiftlik* had a few beehives that went unrecorded.

Not surprisingly, silk was indispensable for almost all of Bursan's life course. Ağa's impressive wet cocoons storage of 294,4 kilogram (which, in most suitable conditions, would make about 16 kilograms of silk) needs a little explanation (§ 2.3.4.3). Around six dönüm of mulberry trees were normally required for this amount of cocoons, while Ağa had only about a quarter of it registered on his name. The cocoons here were likely the produce of others, a possibility I will elaborate on later. Apparently, they were not merely for sale in the market either. The inventory included a silk-reeling and twisting equipment (*mancınık* – for 150 *guruş*), an item most middle- and upper-income earners owned before the advent of the mechanized filature era in Bursa. Female slaves of the household, or maybe help from women from poorer households, were more than ready to turn them into high-quality silk.

Before delving into the specifics of agriculture and labor, let us first investigate the farm's other cohabitants for whom fodder crops were primarily headed.

Table 23: Süleyman Ağa's Livestock

Livestock type	Total Animal number (re's [head])	Price (guruş)
Gelding (<i>iğdiç</i> [horse])	1	220
Water buffalo (<i>donbay ineği</i>)	1	300
Water buffalo and two calves (<i>malak</i>)	3	250
Water buffalo with a white blaze on its forehead (<i>sakar</i>)	1	150
Black Anatolian cattle (<i>karasığır ineği</i>)	3	250
Heifer calf (<i>düve</i>)	5	150
Young cattle not yet put to breeding (<i>tosun</i> [15 to 24 months of age])	1	60
Young buffalo calf	1	50
Three pairs of water buffalo (oxen)	6	1700
Three pairs of Black Anatolian cattle (oxen)	6	1000
Bay horse (<i>doru bargiri</i>)	1	200
A horse employed in cultivating vegetables (<i>sebze bargiri</i>)	1	350
Total	30	4680

Livestock agriculture in the *çiftlik* focused exclusively on cattle and buffalo farming. There is enough reason to believe it was severely affected by the winter of 1832-33. Charles MacFarlane's vivid account of the season recounts that the sheep perished almost daily during that time. The butchers of the city, having many sheep at their disposal, petitioned the governor (*mütesellim*) to save them from bankruptcy. The sheep were then spread among the city's inhabitants, and sent to quarters, inns, and mosques to be further distributed to other residents. Also, cattle grew thin and were kept "half alive upon chopped straw."¹³⁸⁸

In 1845, villagers and *çiftlik* owners of Balıklı did not keep sheep that were commonly bred in the Bursa plain; instead, most raised bovine farm animals for dairy and beef. Although this feature may explain why the sheep were not in the inventoried livestock back in 1833, the cattle might have been attacked unprepared unless the *çiftlik* took necessary precautions. Valuations in the inventory may be proxied to see the effect of the winter on the *çiftlik*. The presence of many healthy calves, difficulties of cattle and buffalo farming, and relatively good market prices of the animals suggest ranching operations were held seriously. We must never forget that severe winter was as frequent of a calamity as murrain and plague.

Sixteen out of the thirty animals in Süleyman Ağa's ranch were cows and water buffaloes. Balıklı's commons, composed of large clover fields, were much preferred by villages close by to graze their cattle and sheep, which even caused trouble in the past. In 1819, the villagers complained that their commons were being overexploited by trespassing sheep and cattle raisers.¹³⁸⁹ The river and streams encircling the village were perfect for raising water buffalo, which produced the most milk and meat (§ 2.3.4.6). Linseed might have been grown, or its oil might have been used to rub into their hides to protect them from insects and cracked skin.¹³⁹⁰ Who shepherded these animals is unknown. Yet, migrant shepherds from the Balkans or competent Christian shepherds living in the city and crowded Orthodox Christian villages must have assisted (§ 2.3.6 & 3.4.3.3 & HLC case 3).

¹³⁸⁸ MacFarlane, *Turkey and Its Destiny*, 1850, 1:224.

¹³⁸⁹ OA. AE. SMHD. II. 51 / 3345 (AH. 21-07-1234 / 16-05-1819). Clover fields were recorded in detail in the tax surveys. ML. VRD. TMT. d. 7494 (AH. 1261 / 1845).

¹³⁹⁰ Ertuğ, "İstanbul'un İaşesinde," 177.

A pair of oxen was a luxury to many peasants, yet Ağa had six employed in tilling the land. They might have been leased to other landowners in exchange for services or a share of their crops. Horses that were held in high regard all around the region performed multiple functions. But, a bay horse was Süleyman Ağa's precious and likely spent most of its time in the mansion's stable. Decorated crescent-shaped horse trappings (*hilali raht*) and a head harness (*başlık*) contributed to its status. On the farm, a gelding and a "garden" horse were utilized to cultivate the soil and carry people and light goods like Balıklı's silk, Misi's grapes, and animal products to other places.



Figure 14: Water buffaloes of the nearby Köprübaşı çiftlik-village are resting in the Nilüfer River while the rest of the cattle flock and the shepherd are waiting for them. Photo by Sebah-Joallier, 1894 (Source: <https://www.sebahjoallier.com/bursa>)



Obviously, the *çiftlik* needed more than animal labor. A reliable labor organization in an environment where human labor was highly costly had to be supervised to maximize and ensure a steady accrual of profits. But, there was nothing non-traditional about the *çiftlik*'s management. Süleyman Ağa was the absentee landlord living in the nearby town, while his estate in the *çiftlik*, or the business "headquarters" as abovementioned, handled economic matters and exercised close control of farming operations. Some of the household goods recorded in the Ağa's name belonged probably to the farmhouse in Balıklı that provided shelter to several intermediaries and laborers. Having said that, the villagers were no foreigners to the city either. Not only were they paying a visit to shop in and bring their

produce to the bazaars, but three permanent households were also headed by Balıklı day-laborers. In other words, the city was as much in the plain as the plain was in the city.

Let us properly focus on the villagefolk. The 1830 population register and its updates reveal essential clues about the labor organization in the *çiftlik*.¹³⁹¹ A *nazır* or manager named Mehmed Emin, who was a 35-years-old man of medium height with a brown mustache from Istanbul, was the eyes, ears, and arms of Süleyman Ağa in Balıklı and his top man in the *çiftlik* house. His right-hand man was Agob, the son of Kevork, an Armenian from the Laladere village of Yalakabad (today Yalova, north of Bursa), and functioned as the steward (*kahya*). Selim, the son of Ali, a tall man with a dark black mustache at 25 years of age, was a resident of the village and a permanent laborer and servant on the Ağa's estate. His service greatly helped this young man feed his family, which the newborn Ali (born AH. 04.08.1246 / 18.01.1831) recently joined.

Labor was sourced from the village locals, immigrants, and nearby settlements. Sharecropping (*ortakçılık* or *yarımcılık*) was an essential feature of agriculture in Balıklı in which landholders leased about half of their grain lands to others in the village. Soil fertility and limited expansion due to encircling rivers and streams encouraged such a pattern. On the other hand, the update registers from 1832 and 1833 reveal that workers from the Black Sea and Western Anatolian regions were hired (§ 3.3.1.2).¹³⁹² An Ismail joined from the Paşa village of Bolu, a Küçük Mehmed from Trabzon. A Paşalıoğlu Ahmed was from the Vezirköprü subdistrict in Samsun, the midpoint between Ismail and Mehmed. While a Süleyman came from Bergama to labor on the estate of his namesake, the steward Agob's three young brothers, Ohannes, Esail, and Karabet, were earning their livelihoods from the same property as workers.¹³⁹³ Though it is undocumented, laborers from the city and other villages might have worked for daily or weekly hire to fill up vacancies.

Some peasants arrived on the *çiftlik* with their implements such as knives, spades, forks, hoes, diggers, and sickles – or, at least, their activities recorded in the surveys (e.g., *orakçı*, *belci*) would imply their ownership. Others and itinerant laborers were provided with

¹³⁹¹ OA. NFS. d. 1392 (AH. 1246 / 1830), p. 51

¹³⁹² OA. NFS. d. 15244 (AH. 1247 / 1832), p. 45.

¹³⁹³ OA. NFS. d. 15245 (AH. 1248 / 1833), p. 6.

the means of production, some of which were noted down. The most valuable was an oxcart (250 *guruş*) used in transporting goods and people around (§ 2.3.3). An iron plow (75) was advantageous to the simple wooden ones held by the common peasantry. A threshing sledge and miscellaneous tools and goods (200) were used for sowing seeds, maintaining the crops, and cultivating them. The produce was finally gathered together and weighed on a scale (*kantar* – 40 *guruş*), and this process was supervised by the manager Mehmed Emin. Although undifferentiated in the inventory, some household items must have belonged to the *çiftlik* house and the small barrack to offer a fairly comfortable shelter to the managers and workers who spent at least a few months together every year.

Süleyman Ağa's moneylending activity explains his agricultural operations further and suggests a debt bondage relationship between him and the nearby populations. Given the regular extra tax demands of the state and general cash scarcity in the politically and militarily troublesome years of the 1820s and 1830s, moneylending was a very profitable venture for him (§ 2.3.5). A total of 18.576 *guruş* was lent out to twelve destinations, amounting to 28,4 of his inventory's whole value. In addition to Balıklı, three nearby villages were incorporated into the microeconomic landscape: Avdancık, İsabey, and Tepecik (§ 3.3.3.3).¹³⁹⁴

Of these, Avdancık was the furthest and had the highest elevation.¹³⁹⁵ Located on Katırlı mountains, 425 meters from the sea level and 12 kilometers northwest of Balıklı, its population (63 households, 165 Muslim males) cultivated mainly grains, vineyard, and mulberry trees and owned a few goats and a cow to gain a livelihood. Its population register shows the ownership situation as such: 42 household heads were registered as landowners (*sahib-i ziraat*) regardless of land size, and 12 as *rençber*, day-laborers/sharecroppers with no property or relatively small land insufficient for subsistence. But the tax surveys portray the situation in more detail. Only ten households, some of whom also acted as village headmen, had relatively sizeable cultivated grain fields between 20-60 *dönüm*, some leasing a portion of their arable and uncultivated possessions, and many livestock that could create a surplus. In contrast, the rest had small grainfields of a few *dönüm*, except a minority of twelve households who had none and produced for subsistence and earned little from day

¹³⁹⁴ The following population data are from OA. NFS. d. 1392 (AH. 1246 / 1830).

¹³⁹⁵ OA. ML. VRD. TMT. d. 7389 (AH. 1261 / 1845).

laboring and shepherding. They were crushed under taxation – the sum of the special tax and tithe took, on most occasions, more than fifty percent of these small-scale agriculturalists. The community (*ahali*) of Avdancık received 2688 *guruş*, while Mehmed and Elhac Memiş, the former being the richest of the village by 1845 and the latter a rich notable who owned a mill, got 600 each.

The other two villages were in the plain and easily accessible to the *çiftlik*. İsabey, about nine kilometers east of Ağa's estate, was a 59-households-big settlement with 122 Muslim males.¹³⁹⁶ Household heads identified as *rençber* (31) exceeded relatively large landowners (13) in 1830. The *temettuat* surveys portray a typical plain settlement. Watered by streams flowing down Olympus, only eight households had grainfields, with four owning cultivated areas bigger than 25 *dönüm* or above, the other half holding 5-10 *dönüm* barely enough for subsistence. A great majority instead had fruit trees, notably cherries, pears, peaches (a rural gentry owned 1000 of them), and grapes; vegetable gardens where onions were the most commercialized produce; mulberry trees for sericulture; small clover or broomcorn (*süpürge darısı*) fields; and occasionally a cow. Some residents were already noted as by-employed in others' fields. İsabey residents got 1200 *guruş*.

Tepecik was the closest and largest village.¹³⁹⁷ Eight kilometers north of Balıklı, it was a predominantly Orthodox Christian village of 88 households and 230 males. The population registrars recorded 25 household heads as landowners while 48 as *rençber*. Some villagers were already registered as working on different farms nearby. The surveys demonstrate that Tepecik shared a similar fate as its neighboring large Orthodox-Christian village of Demirtaş (anglicized in documents as “Demirdesh”), where the high prices offered for cocoons and grapes had most villagers abandon everything and focus on growing mulberry trees and vineyards. Only a few households had grainfields of 20 *dönüm* or above. Small cultivated grain and onion fields of 3-10 *dönüm* were rented by some villagers from waqfs or others. The most prominent among the “others” was a Bursa-based Armenian *sarraḫ* Aci Karabet, with 120 *dönüm* of field. Livestock husbandry was very limited, with some households owning a cow, a calf, and a water buffalo. Fortunes in sericulture, unavailable

¹³⁹⁶ OA. ML. VRD. TMT. d. 7419 (AH. 1261 / 1845).

¹³⁹⁷ OA. ML. VRD. TMT. d. 7397 (AH. 1261 / 1845).

during Ağa's time of death, filled Tepecik with mulberry plantations owned by twenty-four rich households from the city. At the same time, labor shortages had some villagers work in others' fields, and as shepherds – some must have paid a visit to Balıklı. Tepecik inhabitants received 3000 *guruş*, while two individuals, Petro and Dokor, got 182.

Only one person from Balıklı was recorded. Even though he had no occupation, he was no stranger. Selim, the servant, got 111 *guruş*, likely to help his family or run the *çiftlik* household. His other son Mehmed was born a year later (AH. 12.08.1250 / 19.07.1834).

The elevation difference may explain why Avdancık differed in crop and land ownership profiles. Debts to the "community" of villages stem from the fact that they were taxed collectively, and Süleyman Ağa sent money to their waqf chests or village headmen. Based on the debt bondage literature and commentaries on the state of large estates in the Bursa region, it is very likely that households that had difficulty paying their per capita tax burdens were drawn to labor on Süleyman Ağa's *çiftlik* to pay their debt share (§ 2.3.5). Moreover, they might have compromised their quality cocoons, possibly in Tepecik village, to cancel their debts, which can explain the cocoon storage that cannot be produced solely by the private mulberry trees in the *çiftlik*. Of course, we do not know how peaceful and accurately represented the processes of lending to and collecting debts/goods/labor from peasants were. In any case, the Ağa had greater leverage with his muskets, rifles, and pistols.

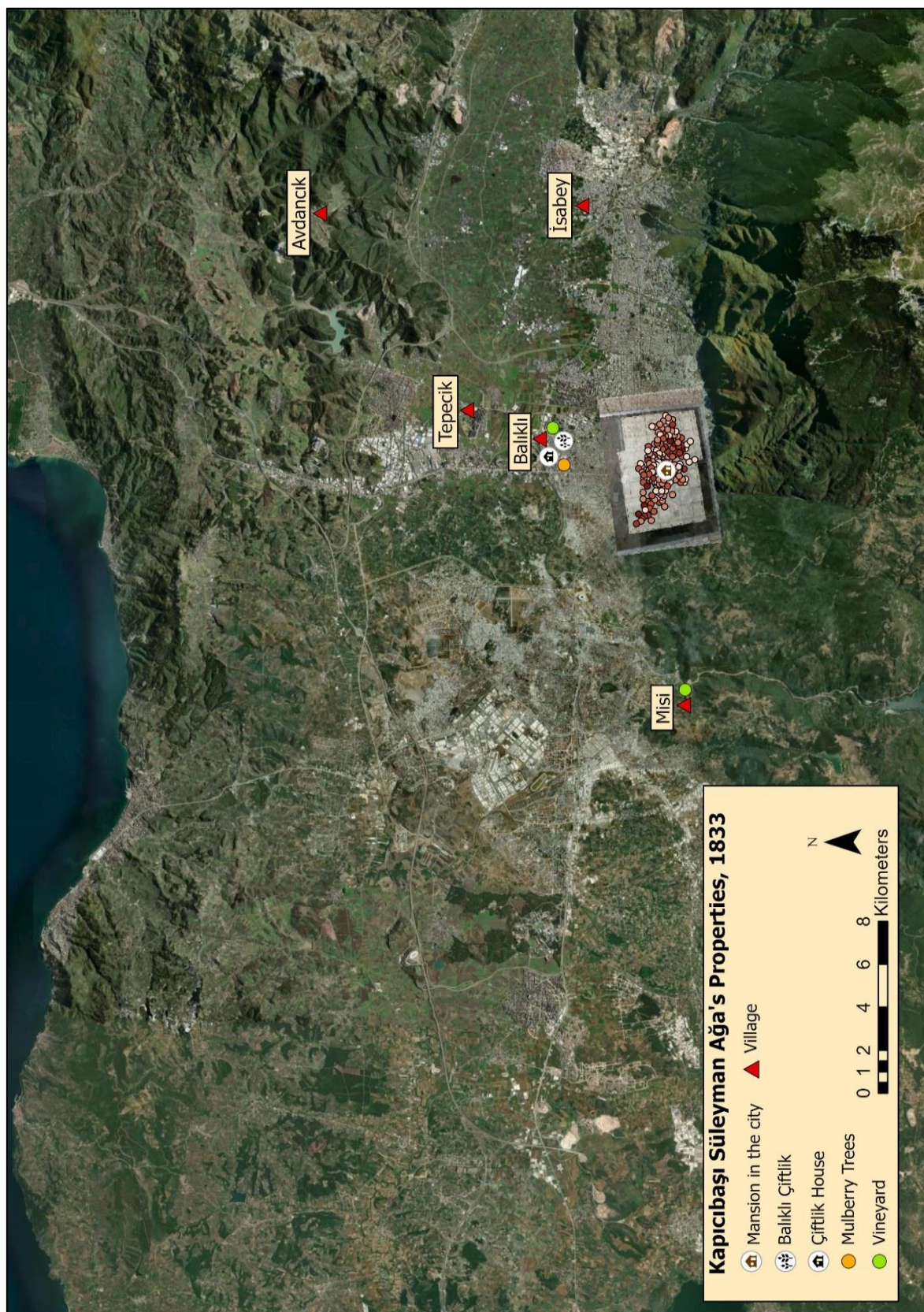
Debt entries without location further complicate the agrarian and moneylending activities in collaboration with the population and tax records. Jordan and Efstratios, two Orthodox Christian *uncu* or flour makers/traders, were given 1200 *guruş*. They were probably tasked with sending the grains to the mills and selling their flour in the market. Also, they might have brought the maize flour to the Ağa's storage space in Balıklı or his mansion. Muslims and Orthodox Christians monopolized flour trade in the city of Bursa, while large Orthodox villages in the plain, such as Kebirsusiğirlik and Demirtaş and had their own *uncu*. Because Süleyman Ağa's business was primarily in grains, there must have been more intermediaries.

A tilemaker (*kiremitçi*) Dimitrios got 720 *guruş* to his share. One tiler, possibly a waqf property, existed in Balıklı. This hardly comes as a surprise because tileries require

running water sources to operate and discharge their waste. Ox carts were also necessary to carry the tiles to all destinations with ease. Orthodox Christians dominated this occupation in the region, and Dimitrios should have come from nearby villages. Süleyman Ağa, the most powerful clique in Balıklı, might have sought profits in the tiling business as well.

The two highest recipients were identified only by name and were impossible to match to single individuals. A barber Ahmed got 5400 *guruş*. Given Süleyman Ağa's Istanbul contacts, Ahmed might be a "barber" as much as Ibrahim was a "quiltmaker." From a different perspective, a barber's local knowledge of who needed and could repay their debt might be why he was entrusted with this amount of money. Aside from him, a non-Muslim named Papasoğlu Mardiros received 2875 *guruş*. Papasoğlu (literally "priest's son") and the name Mardiros were frequently used by both Orthodox Christians and Armenians in Ottoman cities and the countryside, suggesting a wide range of prospects. Still, Mardiros might be a trade intermediary who gave money to necessary people or held cash earned from the agricultural goods marketed in the city or collected from some debtors. These possibilities should not be taken at face value, as Ağa's inventory included 2804 *guruş* of cash – again, we do not know if he received it recently or kept it to invest, distribute, or spend freely. Map 16 visualizes the position of all the properties and traceable debt locations.

Map 16: *Kapıcıbaşı Süleyman Ağa's Property Ownership and Moneylending Network, 1833*



With Süleyman Ağa's demise, the ownership of grainfields, vineyards, vegetable and fruit gardens, mulberry trees, and animals quickly changed hands. As the *çiftlik* house was gone, so was its economic microcosmos. While the manager Mehmed Emin left for Istanbul, the steward Agob and the seasonal laborers went to their places of origin, sought employment elsewhere in the Bursa region, or stayed in the farmhouse, now serving a different master.

The mansion in the city remained intact, though the patriarch's death dissolved the family. Zübeyde Hanım, the wife and mother, now the household's matron, was paid her second installment of dowry (*mihr*) of 1500 *guruş*. She had never married again. Another expense entry in the inventory reveals Süleyman Ağa's emergency plan for his family's well-being if he died. His only debt was to Zübeyde Hanım, and it was 3000 *guruş*. This amount is slightly above the decedent's cash storage. That the quiltmaker Ibrahim was the official witness to Zübeyde's dowry and debt transactions suggests that Ağa might have desired to cash and secure at least a fraction of his wealth for his family because confiscation was foreseeable.

In the 1839 population register, the only males of the household were shown as Mehmed (Ferhad) Bey (now sixteen years old) and Ibrahim, who was now recorded as the "servant" (*tebaa*) instead of a quiltmaker.¹³⁹⁸ Mehmed, the son-in-law of Süleyman, does not appear anywhere in the register. Ibrahim left the house in 1841 to reside in the Karacabey Inn, temporarily or permanently. The available update registers are entirely silent on who entered and left the house. No descendant or relative was mentioned in the Veled-i Nalband quarter's tax survey from 1845, either.¹³⁹⁹ In the meantime, the Balıklı village became a scenery of agrarian change in the Bursa region. Not only did the *çiftlik* operations proliferate, Balıklı turned into one of the largest cocoon production centers in the Bursa plain, with total coverage of 354 *dönüm* of mulberry trees. While these trees sometimes replaced grain fields, many arable (*sabangir*) mulberry groves, where trees were raised amidst vegetable gardens and grazing lands, appeared.

¹³⁹⁸ OA. NFS. d. 1396 (AH. 1255 / 1839).

¹³⁹⁹ OA. ML .VRD. TMT. d. 7541 (AH. 1261 / 1845).

The industrial transformation of Bursa and its reflection in the agroindustries in the ten years following Süleyman Ağa's death likely had the family members thinking about the missed opportunities. But matters only fared worse after the 1855 earthquake shook the households at the city center to the core (§ 2.3.7.4). A document dated a month after the second earthquake in April reported that the mansion was burned down in the subsequent fires consuming the city.¹⁴⁰⁰ Maybe the small stove listed in the inventory was responsible for the calamity. Şefika Hanım, who was the daughter of Süleyman Ağa, her daughter, a relative also named Şefika, and a concubine escaped to Istanbul. The authorities described their miserable situation as "having no place to go," "helpless," and "remediless." There is no mention of the mother Zübeyde Hanım, who had likely died in the meantime. Mehmed Ferhad Bey and Mehmed were not to be heard from. The update registers until 1865 are utterly silent on their whereabouts. In the end, the central administration was advised to extend relief aid to families coming in large crowds to the imperial capital from Bursa.

We do not know if the family received the help, decided to build a new but smaller and less comfortable house, or even considered returning to Bursa. Ultimately, the wealth and comfort created by an exiled gatekeeper were all gone, and not even a gate was left standing. But, a stone stood straight on one of the city's hills and testified to all the bitterness happening around. It is none other than Süleyman Ağa's tombstone in the Emir Sultan cemetery, the most esteemed burial site of Bursa that surrounded the mosque complex and was maintained by its pious foundation. (Figure 15). Since the taxes of Balıklı village were a revenue source for the Emir Sultan waqf, the choice of this site was not accidental.

For an outsider, the most interesting feature of Süleyman Ağa's tombstone is his symbolic quilted turban that tops it. What is more striking is the epitaph which has a story to tell to the past, present, and afterlife.

*Once a chief palace gatekeeper,
He was suddenly exiled to Bursa for some time.
Pity, Fate showed no mercy and took his life,
Alas! All those who came to this world have passed,*

¹⁴⁰⁰ OA. A} MKT. NZD. 149 / 42 (AH. 04-09-1271 / 21-05-1855).

Whether old or in their prime.

Now, Allah seized him by his collar and took him to the afterlife.

May Allah the eternal make your tomb a rose garden of paradise,

After all, does he not make visible all heavens' gardens to the eyes?

Es-Seyyid Süleyman Ağa, the chief palace gatekeeper,

unto whom sin shall be forgiven,

Departed this world when the crescent was in the sky

And now a resident in the garden of Eden.

Pray a Fatiha for his soul.

Date: 5 Safar 1249 [24 June 1833].¹⁴⁰¹

¹⁴⁰¹ Emirsultan Cemetery, Section 1, Tombstone no. 43. Latitude and longitude: 40.180989 – 29.080804.

Original epitaph in Turkish: *Devletde kapucubaşı etmiş iken ol şâh-ı cihân / Şehr-i Burusada hemân eylemiş idi uzlet bir zaman / Kıydı felek ağaya hayf azm eyledi hatf-ı ukbâya / Her gelen dünyâya hayf gitmededir pir-ü civân / Şimdi fenâdan çekdi el tutdu giribânın âhara / Kabrin hudâ-yı lemyezâl kıl sun gülistân-ı cinân / Ukbâda ol Rabb-i ilâhi etmez mi Adeni cilvegâh / Eyyâm-ı mâh-ı rûzda oldu bu âlemden revân / Merhûm ve mağfûrunleh cennet-mekân / Firdevs-i âşiyân Ser-bevvâbin es-Seyyid / Süleymân Ağa'nın rûhiyçün Fâtiha / sene tis'a ve erba'in ve mie-teyn ve elf 1249 / fi şehr-i Safer 5.*

Figure 15: Süleyman Ağa's Tombstone in the Emirsultan Cemetery. (Source: Author's own photograph, 10/06/2022).



Such beautifully constructed prose emphasizing the temporariness of this world yet raging at the suddenness of death was typical of the Ottoman epitaph tradition since the eighteenth century. Still, the stone bestows us with two important pieces of biographical information. While Süleyman Ağa's name, previous career in Istanbul, and exile status in Bursa are indispensable for data linkage, the death date being the fifth day of the Hijri month *safar* enables us to correct his archival record. It means that the decedent's passing was reflected in the update registers two days later. His properties were temporarily confiscated until the fifteenth of *safar* when he was officially pardoned, and the inventorying and selling of his estates were finalized on the twenty-seventh. In other words, Süleyman Ağa's inventory was completed twenty-two days after he died.

The tombstone's shape and inscriptions are, without a doubt, valuable for HLC inquiries. However, its most interesting attribute is that it is *unoriginal* in both content and structure. Actually, the headgear and the epitaph are an exact copy of the abovementioned ex-Janissary es-Seyyid Ali Ağa's tombstone, which is only fifty meters away (Figure 16).¹⁴⁰² The inheritance inventory of Ali Ağa mirrors that of Süleyman. He owned similar personal items (especially luxury clothing and weapons), had agricultural estates on the slopes of Mount Olympus, and lent credit to the residents of the city and villages in the plain and up in the mountain. It should be no coincidence that two ex-palace-gatekeepers exiled to Bursa around the same time and died four years apart had identical tombstones. In this case, the unoriginality of Süleyman Ağa's tombstone did not consign it to oblivion. Instead, it reinforces the possibility that Süleyman was an ex-Janissary Agha and was not a mere title holder.

¹⁴⁰² Emirsultan Cemetery, Section 3, Tombstone no. 47. Süleyman Ağa's tombstone is in the gravesite right-hand side of the main entrance to the Emir Sultan complex, close to the walls of the mosque. Seyyid Ali Ağa's tombstone is on the left hand side, in the larger cemetery area, close to the tomb area. It is currently impossible to take a close photograph. See a detailed one and a decipherment of its epitaph: Mermutlu and Öcalan, *Emirsultan Mezarlığı*, 261.

Figure 16: Tombstone of Ex-Janissary Agha Es-Seyyid Ali Ağa (tilted counterclockwise in the middle) (Source: Author's own photograph, 10/06/2022)



As the political atmosphere of the post-Auspicious Event populated Bursa with high-profile Istanbulites, the city's leading political and religious households opened *çiftlik* neighborhoods in the region's plains. Balıklı was one of the most popular locations, as warranted by its profit-generating capacity thanks to its proximity to the city and the Nilüfer River and agricultural suitability. Süleyman Ağa's mansion in the Veled-i Nalband quarter and farmhouse in the Balıklı village were, therefore, distant yet so close. Profits made from provisioning the city united them. Like their architecture, the former constituted the "inner" courtyard, and the latter the "outer" one. The HLC inquiry provided insight into the organization of the mansion and the *çiftlik*. Using the population registers, tax surveys, and inheritance inventories on the individual, household, quarter, and village levels enables us to view how capital had re-created the Istanbul-based family in Bursa by exploiting the natural endowments of Balıklı as much as possible and by binding families in the countryside and migrant laborers to the *çiftlik* and cultivation.

He carefully created rural spheres of influence through cash and moneylending operations and drew labor from Balıklı, nearby villages, and migrant workers beyond the region. Aggregate use of the population and tax records shows how asymmetric power and labor relations in the Bursa plain made things easier for him. Detailed descriptions in the inheritance inventory give insight into multiple aspects of economic geography and encourage us to consider the labor relations surrounding them. The *çiftlik* was engaged in multiactivity – grains, garden crops, fruit trees, and vineyards (in Misi, one of the best places possible to grow them) that were assisted by cattle husbandry and cocoon production. Stewards, millers, flour traders, transporters, sharecroppers, small and big farmers, shepherds, slaves, silk spinners, and females - all appear here with various degrees of involvement in the *çiftlik* – yet their labor and profits of this fertile and water-abundant corner of Bursa could easily be wasted by a flooding of the Nilüfer River and the harsh winter of 1832-1833, which should be taken as actors on their own, as with other environmental determinants.

The house sale deed marks a crucial turning point in Süleyman Ağa's household and is a reminder of how beneficial the insertion of such records, or clues, is for writing more comprehensive HLC analyses. With the help of the population registers, we understand not

only household composition, luxurious consumption, and the flow of humans and goods but also how the tightly-maintained Istanbul connections and the affluence of being from the military class differentiated the mansion from other simple houses in the city of Bursa.

The Sultan's wrath and mercy granted Süleyman Ağa a prestigious life, exile, and gravesite in the city of Bursa, though neither the *çiftlik* nor the mansion remained intact after him. While his tombstone puts a poetic end to his life, the uncanny similarities between it and another ex-Janissary officer are tempting to dissect the political economy of banishment in the Ottoman Empire and Janissary networks from different angles that can be uncovered through permutations of information from relational HLC databases.¹⁴⁰³ Without such knowledge, Süleyman Ağa's grave would be disconnected from all the deep relations he had forged in the region. In reality, it is, in a sense, a "tomb of the unknown laborers" buried under the soil from which they once earned their lives.

5.4. HLC Case 3: All Sectors Under One Roof: The Economy of the Household of Christodoulou, Bath Attendant (d. 1853)

The inhabitants of the Hoca Cafer quarter, located near the plain and the Cilimboz stream, worked in the agricultural, manufacturing/building, and service sectors and owned fruit trees. The household of Christodoulou, an Orthodox Christian bath attendant (dellak), was no different and had members engaged in all sectors. The following account examines versatile family, gender, and communal dynamics during the opening of factories in the mid-nineteenth century.

The household of Nikola, the son of Konstantinos, was crowded, like those of most Orthodox Christians (§ 3.4.1.1). Hoca Cafer quarter, his neighborhood, had an average household size of 3,5 males, or seven people including females, per household. Families living with other kin and tenants living under the one roof of the two- and three-story mudbrick and wooden houses made up most of them (§ 3.4.1.2). Nikola did not host tenants. Instead, the relatively large size of his household was due to his living together with his two sons, Apostolos (15

¹⁴⁰³ Besides many ex-Janissaries in Bursa, the claims that Bektashis were numerous in the plain in the 1840s (after the Tanzimat) may be an interesting factor that should be considered. Karabulut, "The Rehabilitation of the Bektashi Order (1826-1876)," 37.

years old) and Savvas (6), and son-in-law Christodoulou's family with sons Kostakis (10) and Georgios (6).¹⁴⁰⁴

Located in the city's western section near Murad II's mosque complex, the Hoca Cafer (or Cafer Hoca) was a mixed Orthodox-Muslim quarter that contained forty non-Muslim households with 139 males and ten Muslim families with twenty males by 1830. It brought together the old and new elements thanks to its position. The quarter was at the foot of the citadel and next to the Cilimboz stream going down Olympus. Between it and the stream were mulberry plantations, vineyards, and vegetable gardens. At both ends of it were large grain mills. Around it, after 1845, were many filatures owned by the French and Swiss, and one by the state, in other words, the imperial silk factory (§ 2.2.2.2).

Most Christian household heads of Hoca Cafer were weavers, especially of Bursa's remarked *sandal* and *kutni* fabrics, and tailors who adhered to a weakening yet strict guild organization as they were manufacturing the most precious export articles of the region. On the other hand, Muslim households were getting their raw material ready by spinning silk (as *dolapçısı*) on their wooden spindles. The production must be so intense that villagers from all around the region, mainly from Atranos and Harmancık, relatively poor subdistricts in the south on high elevations, rushed in for help. Excepting some household heads that earned their livelihoods as bakers, millers, flour traders, paviors/builders/water-conduit-servicemen (*kaldırımçı*), and coffeehouse and bath employees, a significant portion of the quarter's workforce, Muslim and non-Muslim alike, was employed as (mostly agricultural) day-laborers (*rençber*), woodcutters (*oduncu*), and guardians of gardens and vineyards (*natır*). A few Orthodox Christian shepherds joined them.

Agricultural laborers and shepherds were an occasional and noteworthy part of the occupational composition, thanks to Bursa's green landscape and wide agrarian variety (§ 3.4.3.3). Not only did the prevalent urban agriculture contribute to households' self-sufficiency, but the proximity to the plain eased the access of urbanites employed in the agricultural sector within and out of the city. The boom in sericulture facilitated this feature even more. In addition, the Orthodox Christians' renowned skills in shepherding put them in direct contact with cattle and sheep raisers in nearby settlements, especially the large

¹⁴⁰⁴ OA. NFS. d. 1394 (AH. 1246 / 1830), p. 127.

Christian villages (§ 2.3.4.6). Particularly those living on the periphery of the city were inclined to exploit the dense vegetation next to them. Known by the locals as "the forests" (*ormanlar*)¹⁴⁰⁵, the residents of Hoca Cafer brought wood and owned trees, be it mulberry, chestnuts, and other fruit trees, and used the less-densely-forested areas for grazing animals.

Taken from the slopes of the citadel, a photograph of the Bursa's western section from the 1880s (Figure 17) adequately demonstrates the diversity of social and economic life in the urban space (§ 3.4). At the center, we see Murad II's mosque complex, which initiated the city's westward expansion in the fifteenth century (§ 2.2.2). In the coming decades, the *türbes* (mausoleums), baths, and madrasa made it into the large Muradiye complex. A little left of the mosque, amidst the multistorey houses with gardens home to crowded households and silkworms, was the city's second-largest Orthodox church of Agion Apostolon (Holy Apostles), with a community cemetery left to it. The Hoca Cafer quarter is not included in its entirety, but a part of it is in the left corner of the picture. Although the Cilimboz stream is invisible, a big mill in the lower right corner is indirect evidence of its flow and a direct one as to why there were millers and flour traders, some being migrants from as far as Akhaltsikhe and Alexandretta, in the quarter. Dotting the landscape are poplars, mulberry trees, and vineyards. Behind and to the right of the Muradiye mosque appear the sulfurous hot springs, visited by Byzantine and Ottoman rulers and subjects. Buildings are but tiny decorations in the grand picture. As soon as they finish, the vastness of the Bursa plain with its trees and grainfields and the initial yet steep elevations of Mount Olympus begins.

¹⁴⁰⁵ We learn this expression from an inheritance inventory. OA. MŞH. ŞSC. d. 3109 (C / 87).

Figure 17: Western Section of the city, with Muradiye mosque complex in the background and the Hoca Cafer quarter being the closest. Photo by Pascal Sebah, c. 1865 (Source: <http://www.eskiturkiye.net/1985/bursa-1865-pascal-sebah-fotografi.>)



In the persistent stillness and “humanlessness” that gave the photo its character, people came and went, and how they earned their lives changed to varying degrees. Nikola lived in a house similar to those half-mudbricks, half-wooden spacious dwellings. His occupation as a tailor's journeyman did not stray from the general tendencies of his neighborhood, which had a large community of weaver and tailor journeymen and apprentices, perhaps related to the then-somewhat-robust internal structure of the weavers' guilds. His son-in-law, Christodoulou, the son of Thanasis, made his living as a coffeemaker. Our population registers show that the Muradiye complex included a relatively large coffeehouse near a *şadırvan* or a water tank with a fountain, which even attracted migrant coffee preparers.¹⁴⁰⁶ Similarly, Altıparmak quarter, the neighborhood down Hoca Cafer, had a coffeehouse of similar popularity. Alternatively, he might have been employed in numerous shops in the city, a temporary keeper of a waqf-owned coffeehouse, or working as an itinerant coffee dispenser around public spaces like mosques and baths. Nikola and Christodolou's income levels were within the same range, as evident from their jizya tax burden being listed at the middle (*evsat*) rate. Besides the old males of the house, none of the kids was recorded with an occupation.

Soon, the household thinned out. Nikola was a tailor, but before everything else, a devout Christian, and most likely a regular attendee and supporter of the Agion Apostolon church. In September 1831, he felt the times were suitable for pilgrimage and embarked on a long journey to Jerusalem with his elder son Apostolos.¹⁴⁰⁷ As long as it was, the pilgrimage was not without risks, especially considering the chance of contracting diseases and the threat of robbery on land. Plus, non-Muslim pilgrims had to pay taxes and fees until the mid-nineteenth century.¹⁴⁰⁸

Pilgrims – or *hajjis* in Ottoman parlance – were accorded exceptional prominence in their communities. Once a status only wealthy merchants could achieve, pilgrimage assumed the form of a great mass movement in the transformative nineteenth century, thanks primarily to the opening of steamship lines connecting the port of Jaffa near Jerusalem to other ports

¹⁴⁰⁶ OA. NFS. d. 1396 (AH. 1255 / 1839).

¹⁴⁰⁷ OA. NFS. d. 15243 (AH. 1247 / 1831), p. 63. The exact date of his leave was given as AH. 14-04-1247 / 22-09-1831.

¹⁴⁰⁸ Valentina Izmirliova, “Christian Hajjis—the Other Orthodox Pilgrims to Jerusalem,” *Slavic Review* 73, no. 2 (2014): 324.

in the Mediterranean. Nikola left his household to Christodoulou and likely went with his son to Istanbul or Izmir port and joined their coreligionists from the Balkans, Black Sea, and Eastern Europe.¹⁴⁰⁹

A year later, Nikola returned home unharmed on August 5, 1832 (AH. 08-03-1248). But he was alone. Apostolos stayed in Jerusalem without knowing he would not reunite with his father. Maybe Nikola knew his end was nigh before leaving for or from the Holy Land. After six months in Bursa, he died in early March 1833 (AH. 15-10-1248). Unfortunately, even though he left a little son behind, his inheritance inventory does not appear in the court records, indicating a missing record. A few aspects of the household's life course remain unexplored, such as the females in the house, Nikola's real wealth and economic relations, and whether he donated to the church. But one thing was sure: Christodoulou now permanently became the household head, and Savvas and other surviving family members were entrusted to him.

Ostensibly, there was no household fission in Nikola's house. All the male members were present in 1839, except for Apostolos. He was neither in the house nor the rest of Bursa. Whether he could return from Jerusalem or where he went from there is unknown. Christodoulou, a mid-height man with a black mustache aged 45 in the register, remained in the service sector with a different identity. He is now recorded as a bath attendant (*dellak*). Bursa's renowned public baths, whose number was around fifty only in the city, were frequented by both natives and foreigners in Roman, Byzantine, and Ottoman times for their hygienic and healing abilities. There were at least twenty-eight self-confessed *dellaks* of all ethnoreligious backgrounds by this year, four of whom were temporary residents. Moreover, thanks to their proximity to the largest baths in Bursa's western environs, most bath operators (*hamamci*) and attendants concentrated in the city's western section.

A public space for relaxation and entertainment frequented by between a few hundred people daily¹⁴¹⁰, the baths' function as a public space cutting across ethnic and social boundaries rose male and female bath attendants, whose jobs involved the performative acts of shampooing, rubbing, and rinsing the body, into exceptional actors in the cultural

¹⁴⁰⁹ Izmirliova, "Christian Hajjis—the Other Orthodox Pilgrims to Jerusalem."

¹⁴¹⁰ Schneider, *Letters from Broosa*, 39–40.

sphere.¹⁴¹¹ However tiresome, the pleasure of a hot spring bath had its benefits – both health and economic-wise. The sociality that defines the bath space formed an economic nexus between different sectors. As William Potter put it in his observations on Ottoman bath culture, "A bath is not a bath if it be solitary – it must be social; this is not only requisite for its use, but also for its economy."¹⁴¹² Indeed, the baths' hot and cold compartments designed for different purposes brought together the presence, products, and services of several occupations under one roof – fine silk-cotton towels of Bursa, soaps imported from the Aegean Islands, copper bowls made by the bazaar's coppersmiths and tinned by the Roman community of the city, wooden clog shoes, horse-, goat-, and camel-hair gloves, barbers, tobacco preparers, and, finally, food and coffee servers. Around the bath were numerous food and drink sellers, musicians, porters, cart riders, and beggars.

The "social" aspect that Potter mentions is not relegated to material tangibilities. An observer noted in 1853 that the Orthodox Christian population revered the baths of Big and Little Kükürdlü (lit. "sulfur baths" – See Figure 18) as the place of martyrdom of Agios Patrikios: Legend has it that the proconsul of Brousse (or Emperor Julian) had the saint thrown in the boiling water reservoir to punish him for not worshipping the temples of Asklepios and Hygea.¹⁴¹³ These bathhouse complexes were situated out of the city, about two kilometers southwest of the Hoca Cafer quarter, and were operated by a forty-year-old Mehmed from the Azeb Bey neighborhood behind the Muradiye mosque.¹⁴¹⁴ Conversely, the Muslims and most tourists held in high regard the Old Bath complex in Çekirge village, about three kilometers northeast up the hill. This ethnoreligious-identity-based preference must have persisted in others, as Muslims and non-Muslims were segregated in baths for centuries.

¹⁴¹¹ Sir Erasmus Wilson's account provide detailed and vivid descriptions of the interior of baths and the nature of the operations of dellaks, especially pp. 55-79. The bath environment and ceremonial acts in it had some British orientalist like David Urquhart open baths in England. Sir Erasmus Wilson, *The Eastern, or Turkish Bath* (London: J. Churchill, 1861).

¹⁴¹² William Potter, *The Roman Or Turkish Bath: Its Hygienic and Curative Properties* (Manchester: Thos. Dinham & Company, 1859), 24.

¹⁴¹³ Çağaptay, *The First Capital of the Ottoman Empire*, 33; Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, 217.

¹⁴¹⁴ OA. 1391 (AH. 1246 / 1830), p. 38, household 9; 1396 (AH. 1255 / 1839), p. 46, household 17.

Moreover, a market inspection regulation from 1826 ordered that Muslim and non-Muslim bath wrappings should be different to identify who's who easily.¹⁴¹⁵

Figure 18: The sulfur baths of Bursa, with the "New Bath" (Yeni Kaplıca) in the foreground. Photo by Sebah-Joallier, 1894. Christodoulou likely worked in the Kükürdlü Bath in the background. Posing for the photograph are the villagers of the plain and their animals. (Source: Türkün-Dostoğlu, Osmanlı Döneminde Bursa, v. I, 471).



Christodoulou's *seemingly* different occupations in 1830 and 1839 might stem from by-employment disguising as the *only* job. In other words, he might be less of a *dellak* than a coffee server, presumably in the Kükürdlü bath, and things have changed in the opposite direction. We do not know the power of the guild of bath attendants in limiting the number

¹⁴¹⁵ Hasan Basri Öcalan, "Şer'îye Sicillerine Göre Bursa'da Sosyal Hayat (XVII. Yüzyıl)," in *Bir Masaldı Bursa*, ed. Engin Yenal (İstanbul: Yapı Kredi Yayınları, 1996), 85.

of available workers. Maybe he replaced somebody in the business. But given his advanced age, it would be unusual for him to start a *dellak* career later in his life.

Other members of the household seem to have taken on different economic pathways. Christodoulou's older son Kostakis (recorded as 22 years old, though he was supposed to be 19 in the nine years from the 1830 record) had no specified occupation. For those with a specified one, the advantage of having all the occupations registered in the city at our disposal helps us put things in perspective. Georgios, now (around) twenty years old, was a *dülger* – a carpenter or builder, a member of a skilled and relatively well-remunerated workforce of 160 people from different ethnoreligious backgrounds. Christodoulou's brother-in-law, Savvas, a black mustached, mid-height man at the age of circa twenty years, did not follow his father's occupation and became a *kunduracı*, a maker and seller of leather shoes in European style in the grand bazaar. *For a long time, Kunduras were a part of Ottoman fashion, but their quality and price were higher than the simpler shoes of ordinary inhabitants* (known generally as *papush*, *pashmak*, and *yemeni*). This factor might explain why there were only six *kunduracıs*, four being Orthodox Christians and the rest Armenians.

Savvas' occupation was likely the reason the household had a tenant. Thanasis, the son of Apostolos, rented a room in the house. A black-mustached man of medium size at twenty-five, he was a maker of *yemeni*, roughly made pointed leather slippers afforded by many in the urban and rural areas. A fifty-year-old Catholic named Kevork was the only other person specified as *yemeni*-maker in the city. This is suspicious, considering the large market for these slippers. We learn by examining the tax surveys that the other *yemenicis* introduced themselves as shoemakers or sellers (*haffaf*, *dikici*, and *pabuşcu* – sectors that employed about 300 people) to the registrars. Savvas' occupation seems to be affected by this specificity bias.

After staying at least three years, Thanasis left the house on July 20, 1842 (AH. 11-06-1258). He was legally considered a "fugitive" (*firari*) for not notifying the authorities of where he went. One aim of the population registers was to designate the annual jizya burden on non-Muslims which had to be paid at the place of residence. He might have even left without telling his co-residents. Speaking of tax burdens, all the household males had to pay medium-rate jizya except one, who did not even have to pay anything but attention to the

world around him. Between the two registration periods (1838 and 1839), Christodoulou had a son named Pantelis, who was one year old.

When the tax surveyors came to the Hoca Cafer quarter in 1845, the jizya rates stayed the same, but the ways the members earned their lives changed. The *temettuat* records also enable us to see their extra economic activities. Christodoulou, still a bath attendant, made 400 *guruş* annually from his occupation. Tips given in the bath probably contributed to this amount or took it to a higher level. His 2,5 *dönüm* of mulberry trees, slightly larger than the average size of one to two *dönüm* the urban households owned, generated an additional 500 *guruş*. High prices of international silk and premium wages offered to home-based silk reelers discouraged his younger son Georgios from continuing his career as a carpenter/builder, an occupation that would be appreciated in an era of factory construction. Instead, he became a *rençber*- a small owner of agricultural assets, a laborer in other's fields, and possibly performing small industrial tasks. Like his father, Georgios owned 2,5 *dönüm* of mulberry trees, either out in the "forests" area or on the way to the Kükürdlü bath, which made 500 *guruş* from the cocoons they fed. By working in others' gardens, be it of mulberries, fruits, or grain fields nearby, he made 360 *guruş* yearly. This could be a calculated move, since entrepreneurs had just started encouraging producers to open up more fields to raise mulberries. He likely received in-kind payments, like grapes for making molasses and wine. Interestingly, Kostakis, the elder son, does not appear in the tax survey. There is no mention or clue about whether he moved to a different quarter.

Savvas' occupational shift from *kundura*-maker to apprentice *sandalcı* (weaver) was also related to the changing silk industry of Bursa (§ 2.2.2.2). The guild of *sandalcıs* experienced remarkable revival and growth in the first two decades of the nineteenth century. While the Napoleonic Wars turned the western producers' attention to the silk and textiles of Bursa, Ottoman buyers' preference for the light and fantasy European silk cloth had the manufacturers quickly adapt to the changing fashion tastes. Lastly, silk cloth weaving technology changed from the so-called fire-finishing to the stone-finishing method at the turn of the century, producing much finer quality and cheaper textiles.¹⁴¹⁶ Once the Bursa's cloth manufacturers' pressure broke the Istanbul silkmakers' guild's monopoly in operating with

¹⁴¹⁶ Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution*, 109–10.

the new technology and constructed more than a dozen stone finishing installations, Bursa's silk cloth output reached record levels in the 1820s and outcompeted its domestic rivals.

The 1830s and mid-1840s were a period of return to production levels of the eighteenth century. European ready- and factory-made cotton cloth transferred over steamships significantly impacted this process. The *sandal* was a light, mixed silk-cotton cloth, just what the markets demanded. The intrusion of cheap European cotton yarn dealt a heavy blow to thread-makers in western Anatolia and the Balkans, but weavers quickly adapted to using it to produce more affordable goods for the domestic market. Plus, Bursa's cloth producers still had easy access to local (and, by that time, abundant) supplies of raw and processed silk. While the leather and shoe industries were not affected by global competition, Savvas quit becoming a *kunduracı* – an occupation that earned its practitioners about 300 to 400 *guruş* yearly.¹⁴¹⁷ But he opted for starting from the bottom in the weaving sector for a mere 180 *guruş* without owning any other income-gathering property (*kunduracı/sandalcı* by-employment should probably not be the case since these occupations are within the secondary sector.) Moreover, upward movement in the guild of *sandalcıs* was dim, if not impossible, because a few masters obtained ownership rights over the means of production. Journeymen and apprentices had little capital to get through the established strong guild hierarchy.¹⁴¹⁸

The vitality and vibrancy of silk industries in his times attracted Savvas to weaving *sandal* cloth that his coreligionists monopolized. Another factor that drew him to this sector might have been his father Nikola's personal connections. It seems like the deindustrializing effect of filatures was not immediately felt in the mid-nineteenth century. 1845 was a critical year in terms of the proliferation of factories and the accessibility of raw materials. The number of filatures would go from one to five in a couple of years to more than twenty in a decade, and they would use almost all the region's silk. Of course, the pouring of cheap British cloths did not automatically make domestic consumers prefer them.

¹⁴¹⁷ OA. ML. VRD. TMT. d. 7430 (AH. 1261 / 1845), p. 7, 7503 (AH. 1261 / 1845), p. 4.

¹⁴¹⁸ Turna, "Tanzimat Öncesi Dönemde İstanbul Esnafının Gedik/Destgâh Uygulamalarına ve Kalfalara Dair Bazı Analizler," 1052–57.

Still, instead of viewing Savvas and Georgios' career changes as pure individual moves, we must consider the household as one big economic unit affected by the positive returns from silk production. They already owned five *dönüm* of mulberry trees, which generated 1000 *guruş*. The whole household raised the cocoons, and females reeled their silk. If unmarried or young females were in the house, they probably worked in the factories for some time and earned relatively good wages in addition to the incomes of the male breadwinners (which amounted to 940 *guruş* in 1845). Surely, inflation, factory domination, international demand for silk, incorporation of the East Asian markets, and the 1855 earthquake would change their economic existence significantly.

The population update registers contain no information about the economic and demographic trajectory of the household. Nevertheless, a woman's death in the Hoca Cafer quarter in late 1852 breaks this archival silence.¹⁴¹⁹ Her name was Panagiota, the wife of the *hajji* (pilgrim) Christodoulou. If this title change was not on paper, the bath attendant continued his father-in-law's legacy and took the journey to Jerusalem, which became cheaper and shorter thanks to developments in steamship technology. But, apparently, he did not continue his marriage with Nikola's daughter, as Panagiota was the daughter of a man named Kaplan. This fact demonstrates that Christodoulou remarried, possibly after *hajji* Nikola died, and can explain why there was a forty-four-year age gap between him and his newborn son Pantelis in 1839. Unfortunately, no death record has surfaced yet in the archives to find his first wife's name and belongings. Apart from her husband, Panagiota's heirs were children whose names we are hearing for the first time: a little boy named Manolis, and two little daughters, Melana and Anastasia. Although Pantelis is not on the list, all her children being minors suggests she might have mothered him.

Panagiota's inheritance inventory is a collection of modestly priced items totaling 1332 *guruş* (10,3 pound-sterling in 1852, £1366,8 in 2017). They first allow us to enter a middle-class female space. Nine quilts covered with one of Bursa's famous textiles called *beledi*, made of cotton, but occasionally silk cloth, and a long pillow were placed on short wooden platforms in her private room and common space of the house. A small rug on the floor made the living space of her room. A quilt and two bed-coverings were enough for the

¹⁴¹⁹ OA. MŞH. ŞSC. d. 3109 (C / 87) (AH. 15-02-1269 / 28-11-1852), p. 55.

bed and stored in a small wooden chest with her nine towels. Two chandeliers made sure that the night did not end with the sunset. Panagiota's clothes and jewels made up most of the inventory's value. Her basic garments were three brocades (*fistan*) made of Bursa's linens. Two headwraps, one being made of British yarn (*değirmi İngiliz şalı*) and another specified as having blue color, show that imported yarns and fabrics dyed with synthetic colors were used in the non-Muslim women's traditional outfits.

Three furs, one specified as Circassian (marten) type and another made of lambskin, reveal the intrusion of another product held in high esteem in the domestic market. On the outer side, all of these furs were covered with *çuha*, or rough woolen cloth. Even though Bursa's wool was preferred widely by domestic consumers for *çuha* production, the Bulgarian Orthodox Christian *aba*-manufacturer and trader colony in Bursa and the subdistricts (notably Gemlik), as in other important markets, monopolized and set the high-quality standards for this cloth (§ 2.3.4.6). As the incorporation into the global economy did not affect their job, the Bulgarians' specialization and ethnic ties enabled them to sell their goods in large quantities to most markets in the nineteenth century. The court records containing Panagiota's inventory demonstrate that almost all Orthodox Christian women with modest wealth owned several cheap furs. Whether this was a trend attributable to the infiltration of the cheap and durable woolen and animal skin or a successful market interaction of Orthodox peasants and shepherds with the urbanites requires systematic research that may deepen analyses of complex market relations within the region.

A pair of diamond earrings for 217 *guruş* was the most valuable item and a status marker. They were much shinier and more expensive than the deceased's collection of a few pans, pots, metallic bowls and plates, and an ewer and basin. Still, we should not take these items for granted as merely personal and kitchen objects. Panagiota's storage included unspecified amounts of cloth (30 *guruş*) and cotton yarn (20) and, besides these, about 1,3 kilogram (one *kıyye*) of silk (205), whose combined value amounted to one-fifth of the inventory's total value. Stitching these materials together, Panagiota was weaving her household's economic fabric. We know that females were spinning factory-reeled silk for towel and bath-wrapping makers¹⁴²⁰ (§ 2.2.2.1), a tradition continuing in the early years of

¹⁴²⁰ Kandes, *Kuruluşundan XIX. Yüzyıl Sonlarına Kadar Bursa*, 129.

the Turkish Republic.¹⁴²¹ Also, a consular report make it clear that most of British cotton yarn was employed in making stuffs for wear, wrappers and other domestic purposes or sale.¹⁴²²

Having a bath-attendant husband and Panagiota's collection of many towels suggest she was preparing raw material for both towel-makers (*havlucu*) – a trade that included 28 people, predominantly Orthodox Christian and Armenian) and *peştemalci* – which fed the households of 68 males who were all Muslims in 1839. The bath service seems to have required lots of these articles - Nikola Nachov was very surprised that he was given ten towels during a mere fifteen minutes of stay in the Kükürdlü bath.¹⁴²³ Some of Panagiota's silk might have gone into the workshops of the mixed-silk-cotton weavers. We should remember the household had a weaver and Orthodox Christians were the leading ethnoreligious group in this sector. Perhaps the young Manolis was destined to become one, too.

Although the number of factories was swiftly rising by 1852, they did not wholly take over the manual reeling operations, let alone the putting out networks using the imported yarn to compete in the market. Some of the pots listed in the inventory might have boiled the cocoons that had been fed on the leaves of the family's mulberry trees. Assuming Panagiota was relatively young, she might have even spent some time in the factories and sharpened her silk reeling skills there. We do not know her daughters' age, but they were likely employed in the factories since young women and children performed most of the work and labored for lower wages than men.¹⁴²⁴ The premium wages offered in the 1840s were fading by the mid-1850s, but the silk factories were still a viable way to bring cash to the household (§ 2.2.2.2. & 3.4.3.2).

After the legal court expenses were paid off, the remaining 1286 *guruş* was distributed among the heirs. Taking his 324 *guruş*, Christodoulou, the father and legal guardian of the minors, decided to give the children's share of 962 *guruş* to a grocer (*bakkal*) Nikola the son of Dimitris from his neighborhood. The city's grocers were predominantly Orthodox Christians (36 out of 44 in 1839¹⁴²⁵), and a sizeable Orthodox grocers' community

¹⁴²¹ Erkan-ı Harbiye-i Umumiye Riyaseti Coğrafya Encümeni, *Cenubi Marmara*, 109.

¹⁴²² BPP, CP, No. 2579, XXX (30), *Abstract of Reports of Trade*, 1859, 476.

¹⁴²³ Mevsim, *Bulgar Gözüyle Bursa*, 24.

¹⁴²⁴ Yıldız, "Parallels and Contrasts in Gendered Histories of Industrial Labour in Bursa and Bombay 1850–1910," 11.

¹⁴²⁵ OA. NFS. d. 1396 (AH. 1255 / 1839), p. 161.

was temporarily residing in Bursa. Beyond personal trust and religious cooperation, the grocers' easy access to money, goods, and people had Christodoulou pick Nikola to work his children's inheritance.¹⁴²⁶

Nikola's being entrusted with cash was not likely motivated by pure financial and friendly incentives. After all, the father could have easily become the legal guardian of the minors. But, in April of 1853, about four and a half months after his wife's passing, death came upon Christodoulou, who might have been sick in his final year.¹⁴²⁷ As heir to his 5299 *guruş* worth of estate (£48,1 in 1853, £5809,3 in 2017), apart from the minors Manolis, Melana, and Anastasia, the only surviving offspring from his previous wife was his elder son Kostakis. This means that Christodoulou saw the deaths of his sons Georgios and Pantelis. Unfortunately, we do not have information as to their life courses in the meantime. Nor did they leave an inventory behind, as far as we know.

Guessing they shared a room, the decedent's family and common room items did not differ significantly from Panagiota's belongings. They comprised cheap pillows, cushions, quilts of Bursa-made textiles, a bed, and a small rug. A lamp and a small stove provided light and heat, while a few old pots and trays were a part of the household's shared kitchen utensils and equipment. Christodoulou's surviving clothes did not deviate from typical modest Orthodox Christian men's outfit: An old shirt and knee breeches were completed with an *aba* waistcoat and a fez.

One coffee cup and a hookah tube were likely for private use rather than indicators of Christodoulou's coffee-serving career. If he was distributing coffee, he used the bath/coffeehouse establishment's properties. But his bath-attendant career was better evidenced by two bath bowls, one described as "large" and the other as made of "stone." There were no towels, though. Maybe they were sold or given, like his shoes that are non-existent in the record, or were stored somewhere in the bath he worked in.

¹⁴²⁶ For studies on the many faces of grocers, see Sümeyye Hoşgör Büke, "Hem Manav Hem Meyhaneci: İstanbul'un Bakkalları," *Toplumsal Tarih*, no. 314 (February 2020): 68–73; Sümeyye Hoşgör Büke, "Bakkal Terekeleri Işığında İstanbullu Mutfağına Bir Bakış," *Kebikeç*, no. 42 (2016): 129–46.

¹⁴²⁷ OA. MŞH. ŞSC. d. 3109 (C / 87) (AH. 01-07-1269 / 10-04-1853), p. 50.

The house, the headquarters of the family's most economic operations, was worth over three-fourths of the inheritance's total value. Because Christodoulou was originally a son-in-law, he was not the sole owner. His majority (13/16) share, contributed to by his previous wife (i.e., Nikola's daughter), was estimated as 4070,75 *guruş* (about 80% of the inheritance). The mulberry plantation, on the other hand, was no more. His money relations may explain why.

Christodoulou gave 640 *guruş* to his son Kostakis, presumably to help his family and business. It might have been "legally gifted" to prevent it from being split among the rest of the shareholders. The source of this money can be traced to his 1075 *guruş* debt to the cash waqf of the Balıkpazarı quarter, an Orthodox Christian neighborhood in the center that included the community's largest church called Agios Ioannis Teologos. As we have covered in the previous chapters, Bursa's quarters raised money from residents to serve their communal needs and lent their savings on interest to others to generate more income, irrespective of creed. Christodoulou's debt patterns revealed the Orthodox Christian hegemony in certain sectors and ethnoreligious solidarity. While the waqf debt was taken under the sworn testimony of Konstantinos and Anastasios, two carpenters/builders, another small debt of 100 *guruş* was received from an agricultural/day laborer named Konstantinos.

Going under a debt burden of 1175 *guruş* can suggest that the income decedent might have sold or hypothecated his mulberry trees to help his family of three minors and his elder son. It also means the annual incomes were not helping as they had used to. The house's labor force significantly and suddenly diminished as the mother, two sons, and maybe other unnamed children died. We must factor in the progressively worsening financial situation of the Empire. With the total income shrinking as Kostakis and, likely, Savvas remained the only elder breadwinners, without additional help from their families, tenants, and other people, looking after large *dönüm* of mulberry trees and cocoons was not easily feasible. Possibly, Giorgios' own mulberry trees were sold when he died, and the house's income from silk was cut off. The benefits of raw silk and cocoon purchases in 1853 were not as bright as in the first years of industrialization. Considering that Christodoulou might have been sick in his last times, the household might have been struck with a new challenge. Family savings from inheritances and debts had to be spent more carefully.

The impact of deindustrialization was growing on the weavers as well. Because the inheritance inventories list only the names of heirs, we do not have a complete picture of the household composition. Savvas' often-changing career that evolved to be a *sandal*-cloth manufacturer could have ended in a different phase had he been trying to raise money for his and his brother-in-law's family.

Christodoulou's debts and court expenses (1284,75 *guruş*) were cleared. The minor's share was entrusted to Giannakis, a carpenter/builder neighbor from the Hoca Cafer quarter. Then, it was time to pay the last tribute to the father, pilgrim, and bath attendant known and respected by many. After a funeral service, possibly held in the Agion Apostolon church, Christodoulou was buried in the nearby Orthodox Christian cemetery, probably somewhere next to other family members. The funeral expenses were 200 *guruş*, which might have included a tombstone.

Kostakis likely became the household's new head. Maybe a split occurred long before, and the children had to move to their stepbrothers' house. While it is unclear whether Kostakis' and Savvas' households remained under one roof, their life course would soon converge with the rest of the urban Bursans: In the coming years, the 1855 earthquake, gradual deforestation due to fuel needs of the filatures, and the pebrine and oidium diseases would adversely impact the quarter's architecture, hinterland, and economic standing. The women employed in the factories, agricultural laborers greatly benefiting from the trees, and many workers in workshops and public baths would face adverse situations in terms of remuneration and finding shelter. The hot water springs of the Kükürdlü bath dried out in the first earthquake of February 1855 but opened up after the second in April.¹⁴²⁸ Like the water finding its way through, these curses would create new junctures and survival opportunities for the remaining family members (§ 2.3.7.3 & 2.3.7.4).

Christodoulou continued a tradition by engaging as actors in the popularity of leisuretime activities – the culture of public baths and coffeehouses that were well-established by the 1600s and energized social and economic relationships in the city (§ 2.2.2).

¹⁴²⁸ Özeydin, "Arşiv Belgeleri," 28; Mevsim, *Bulgar Gözüyle Bursa*, 25.

Finding these two cultures together and in abundance was a luxury to most parts of the Empire – but an ordinary luxury to the Bursans.

Nikola's household carried on economic and religious traditions that were intermingled. Holding the "pilgrim" title had been an important feature of the household heads, though, during the short timespan from the father-in-law's death to the groom's demise, the steamers made the pilgrimage to Jerusalem faster. The Orthodox churches that organized their lives also appear as significant economic actors. The spiritual attachment to the sulfurous baths of Kükürdlü had unconsciously or deliberately guided the descendants of the Byzantine Empire to it.

The tradition of employment in occupations along communal lines persisted from the oldest to the youngest – many Orthodox Christians were engaged in the professions of tailors, carpenters, and shoemakers. We do not know whether Savvas' and Giorgios' quick career shifts, as revealed thanks to the HLC, were as traditional. But the changes were also more spatially bound. At the beginning of an age when cheap cotton manufactures were flooding the world markets, Savvas chose to resist by switching to the sandal-weaving sector. At the beginning of another, when the filatures made silk an "ordinary luxury" for the Europeans and increasingly pushed the Bursans to raise more mulberry trees – Giorgios chose to become an agricultural day-laborer. In the Hoca Cafer quarter, located near the Cilimboz stream, the mountain, and the plain, cutting and taking care of trees, grinding flour at the mills, and shepherding sheep in the hills and on the plains were popular means to make ends meet.

The HLC perspective clearly demonstrates that the activities of individuals appear more meaningfully when viewed in households – that are, vertical slices in a horizontal, colorful economic landscape. At this point, the marrying of Panagiota and Christodoulou's inheritance inventories with population registers and tax surveys not only gives the whole picture of the family but also opens a window to the household as an economic unit. There, the collaborative effort of each and every member working in all sectors – the grandfather, the son, the groom, the wife, the tenant – come together into a meaningful cohesion.

The business of silk cocooned the family. Owning and tending the mulberry trees, spinning at home and factories, and weaving the product into *sandal* and bath wrappings were the vibrations of the worm in it. 1845 does not seem like a sudden rupture, as portrayed

in the literature. Instead, the cocoon was slowly but steadily being boiled by the steams of coffee, bathhouses, filatures, and boats.

5.5. HLC Case 4: The Many Faces of Incorporation: The Household and Networks of Andon Minassian, Cloth Merchant (d. 1839)

Cloth merchants (bezzaz) stood at a critical point in the influx of European textiles and in the survival of domestic weaving industries by funding their operations and bringing their fabrics to the market. Mostly Armenians, the bezzaz's access to capital and European contacts enhanced their social, economic, and political power in the nineteenth century, especially in Western Anatolia. Their mediation between foreign and domestic suppliers and ultimate consumers was thanks to their know-how of a wide trade network. Naturally, the merchants' activities were not limited to trade. As capital holders with a vast network of actors, they owned land and tax farms and lent money to peasants, landholders, petty artisans, and many more. The story of Andon Minassian, an Armenian cloth merchant, exemplifies this trend. His household life course documents his brokering between individuals from different social backgrounds from the city, sancak, and the Hüdavendigar province. At the same time, it is a story of how individual, political, social, financial, and environmental contingencies could and did jeopardize these ties and marked a new beginning for his family.

Incorporation into the world economy was an incremental, patchy, and multifaceted process (§ Part 1). Certain beneficiaries and losers in terms of total output, market share, and earnings began to appear in regions that experienced the early nineteenth-century increase in the total volume of foreign trade. The European markets' dependence on local networks in penetrating the Ottoman market had elevated the socioeconomic status of financial and commercial intermediaries, mostly non-Muslims, especially after the signing of the 1838 Anglo-Ottoman Free Trade Convention.

Prominent cloth merchants (bezzaz), with access to capital and human resources, were leading among these intermediaries. They commissioned household- and small-workshop-based putting-out networks in urban and rural areas and marketed their output.¹⁴²⁹ Depending on their bargaining power, they also purveyed the palace and grandees and met

¹⁴²⁹ Suraiya Faroqhi, "Merchant Networks and Ottoman Craft Production (Sixteenth-Seventeenth Century)," in *Making a Living in the Ottoman Lands, 1480 to 1820* (Istanbul: Isis Press, 2010), 187.

the military's demands. By the nature of their profession, the *bezzazs* were one of the key actors in the Empire's integration with world markets, as their shops offered an impressive variety of fabrics from different regions.¹⁴³⁰ Also, increasingly from the second half of the eighteenth century, they were the principal customers of western (particularly French and British) cloths and circulators of imported textile raw materials in Istanbul and major capitals such as Salonica, Izmir, and Edirne.¹⁴³¹ Thanks to the market, raw material, and capital network they established and expanded, the cloth merchants were counted among the provincial notables, along with officials, moneylenders, and other top artisans.¹⁴³²

Bursa, one of the most important transit centers of the silk trade among Iran, Arab provinces, Istanbul, and Western Europe since the early modern period, was a natural habitat for a large *bezzaz* community who commissioned, purchased, and sold mainly silk and cotton fabrics. As the local and foreign demand for Bursa textiles ceased to expand after the 1820s, these merchants were in a position to both catalyze and mitigate deindustrialization. On the one hand, not only did the *bezzaz* act as the conduit for the influx of machine-produced British cotton yarn and cotton cloth into the region, but they also forged the first partnerships with the "Europe merchants" licensed by the state, played a dominant role in the formation of state- and foreign-initiated filatures, and collected tax-farms of small regions in collaboration with greater capital circles in Istanbul. Ohannes Tachdjian and Boghos Papazian, two leading entrepreneurs in the filature era and later factory owners, were cloth merchants, for example.¹⁴³³ On the other, the *bezzaz* helped the survival of the remaining and diminishing weaving industries by supplying them with capital and raw material like filature silk and cheap cotton yarn and delivering their output to the domestic market that preferred using Ottoman-style textiles (§ 2.2.2.2).

By 1839, the cloth merchants of Bursa formed the largest trader community with 156 males, who were seconded by the *kazzaz* or silk traders of 97 people.¹⁴³⁴ As one of the most active social groups, they were organized along a stricter guild hierarchy than many jobs in

¹⁴³⁰ See the many roles of Bursa's textile merchants from and before the nineteenth century Faroqhi, "Surviving in Difficult Times."

¹⁴³¹ Edhem Eldem, *French Trade in Istanbul in the Eighteenth Century* (Leiden: Brill, 1999), 45–46.

¹⁴³² Mert Özcan, "Âyan," in *TDV İslam Ansiklopedisi* (İstanbul, 1991), 195, <https://islamansiklopedisi.org.tr/ayan>.

¹⁴³³ OA. NFS. d. 1394 (AH. 1246 / 1830); 1398 (AH. 1255 / 1839).

¹⁴³⁴ OA. NFS. d. 1396, 1398, 7140 (AH. 1255 / 1839).

the city. Especially with the rise of cloth production in the early nineteenth century, silk weavers (*sandalcı*) and cloth merchants increased the number of their shops, which was reflected in the rising wages of their journeymen, apprentices, and workers as well as the cloths.¹⁴³⁵ Only the tax surveys of 1845 enable us to put the earnings of the *bezzaz* in context, notwithstanding the alterations to their trade in the thirty years in between. They (132 people) earned an annual average of 900 *guruş*, qualified enough to be the city's highest earners (§ 3.4.3). Among them, a small minority of twelve men made between 2000 and 4500 *guruş* yearly, easily placing them among the richest that constituted the one percent of Bursa's recorded income earners.

A great majority of Bursa's cloth merchants were Armenians (129), followed by a small community of nineteen Muslims and eight Orthodox Christians in the profession. Although the Armenians had a crowded community of cloth dealers before the nineteenth century, their predomination in this trade can be linked to their growing role as intermediaries in the European textile trade from the late eighteenth century onwards.¹⁴³⁶ A more critical link was the Armenians' rapidly growing political and economic muscle in the capital, important provincial centers of Western Anatolia and the Balkans, and industrial capitals in Europe like Paris and Manchester.

Istanbul's becoming the political, economic, and social center of the Armenians throughout the Empire in the nineteenth century led to the proliferation of a powerful bourgeoisie represented by moneylenders, artisans, and merchants. In addition to seasonal workers and war-related migrants, several merchants from the periphery excelled in business in Istanbul, Izmir, Bursa, Edirne, and Izmid and established manufacturing houses there. Bonds of kinship and birthplace were essential to the maintenance, expansion, and transformation of these houses that operated, with varying degrees of impact, within a complex economic network stretching from influential Armenian families in Europe to Istanbul to the provinces.¹⁴³⁷

¹⁴³⁵ Donald Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution* (Cambridge: Cambridge University Press, 1993), 109.

¹⁴³⁶ Eldem, *French Trade in Istanbul in the Eighteenth Century*, 53.

¹⁴³⁷ Bedross Der Matossian, "The Armenian Commercial Houses and Merchant Networks in the 19th Century Ottoman Empire," *Faculty Publications, Department of History*, January 1, 2007, <https://digitalcommons.unl.edu/historyfacpub/130>.

Among the *bezzaz* of Bursa, the house of Andon Minassian of Kütahya, a black-mustached tall man in his early forties, was located in the Karağaç quarter that was separated from the central Bursa by the Gökdere stream and large mulberry plantations and vineyards in its immediate hinterland. Armenians predominantly occupied this quarter, with 362 males living in 108 households (including a tiny Catholic community) and a small Muslim minority of eight houses with sixteen males. Karağaç was the second-largest Armenian quarter and home to the only Euthycian Armenian church in the city, named Surp Asdvadzadzin (Holy Mother of God), dating back to the early fifteenth century. His conjugal household included his three sons, Karabet (aged 9), Ohannes (5), and Kirkor, who was just one year old. Although his household size was just above the average of his coreligionists, many Armenians lived in extended family households and occasionally had a tenant.

Andon's house might be average in demographic terms, but he was doing well economically, as evidenced by his high poll-tax rate (*ala*). The rest of the seven *bezzaz* household heads in his quarter paid the same amount – a testimony to their status in the pre-tax-survey era. Among the other *ala*-tax payers, four Europe-merchants, silk traders, cloth manufacturers (*sandalcı*, *kutnucu*) and sellers (in the market – *yaymacı*, *yağlıkçı*, *kapamacı*), tailors, jewelers, moneylenders, and brokers (*simsar*) took the lead. Priests, coffee traders, locksmiths, watchmakers, carpenters, builders, barbers, scribes, fez makers, fur merchants, agricultural laborers, and beggars pieced together the recorded mosaic of economic and social life. Means of by-employment engaged by these men, vineyards and mulberry trees tended collectively by households, women who looked after the cocoons, spun silk, ran their homes, and lent money, and children who helped their and others' houses constituted the "unrecorded" aspects of the life courses of Bursa's Armenian communities.

Andon Minassian was described as being from Kütahya, the region south of Bursa and one of Armenians' most important economic and cultural centers, where powerful urban Armenian merchant households specialized in faience, carpet, and, more importantly, cloth trade. It was unusual for a person to be identified by his father's or grandfather's birthplace – unless the location was in their family name (like *Kutahyalıyan* or *Kutahyalizade*, for instance). Instead, it is plausible to assert that he came to Bursa from Kütahya on his own before 1830, like other wealthy manufacturers from the periphery who were recognized by

their place of origin, such as Bilecik, Amasya, Tokat, Konya, and Ankara. He was not alone in his movement. It was reported that the Armenian community of the city of Kütahya was declining into the mid-nineteenth century.¹⁴³⁸ On the other hand, the Bursa region was attracting more and more Armenians by this year, primarily due to the escapees of the Ottoman-Russia War of 1828-1829 resettling there and the booming of the silk trade (§ 2.3.7.1).

When the population officials surveyed Andon's house in 1839, they found all its male members alive and economically well. The *bezzaz*, now fifty, made his eldest son Karabet, aged sixteen (not precisely nine years of difference), and paying midlevel (*evsat*) jizya, his apprentice. Ohannes (12) and Kirkor (7), the other sons, passed the most vulnerable ages for childhood mortality, with the former recently encumbered with a low rate (*edna*) of jizya obligation. Contrary to the seeming stability of Andon's household, though, in the nine years, the rhythms of economic and industrial change had speeded.

Continuous debasements and increasing tax burden on the populace to meet the costs of wars and the modernization program of the Tanzimat period made the Armenian moneylenders in contact with financier circles in Istanbul and abroad even more potent economic actors. In the realm of trade, the increasing flow of cheap textile imports had gathered pace and reached a new phase in its development with the signing of the Anglo-Ottoman Free Trade Convention of 1838, which expanded British and other major European states' trade rights in the Empire (§ 1.2). While dealing with the impact of imports, cocoon-rearers, silk-spinners, and weavers of Bursa saw the opening of the first silk factories.

Amidst all these changes, the stability and unity of Andon's family did not last long. The cloth merchant was reported dead on the first day of the Hijri year 1256 (AH. 01-01-1256 / 05-03-1840). This date clearly indicates a late update to the master population register, as the decedent's inheritance inventory was kept more than two-and-a-half months ago, on December 14, 1839 (AH. 07-10-1255).¹⁴³⁹ The total value of his estate was 30,154.75 *guruş*

¹⁴³⁸ Cengiz Ergün, “19. Yüzyıl Seyyahlarının Gözünden Batı Anadolu’da Ermeniler” (MA Thesis, İzmir, Ege Üniversitesi, 2018), 118.

¹⁴³⁹ OA. MŞH. ŞSC. d. 2959 (B / 300) (AH. 07-10-1255 / 14-12-1839), pp. 51-52.

(290 pounds sterling in 1839 and £17,520.93 in 2017), easily placing him among the richest of Bursa.

Expenses of a memorial service in the Surp Asdvadzadzin church and burial in the sizeable Armenian cemetery on the northeastern outskirts of the city cost 150 *guruş*. Among the attendees, who might include a large community comprising the leading Armenian traders of his day, the heirs present were Andon's wife Askohi; senior sons Karabet and Ohannes, and junior son Kirkor, for whose presence the inventory was prepared; and elder daughters Karina and Mariam.

Only a few personal items were listed in Andon's inventory, especially regarding his garments, which seem suspiciously moderate considering his occupation. The only clothes were a shirt, waistcoat, and undergarments (*içlik*). With a *kalpak*, a cone-shaped sheepskin hat that was distinctive to Armenian men, they together were sold for a mere fifteen *guruş*, cheaper than what a poor Armenian might possess. Furs and cloths cut from expensive fabrics he likely owned must have been gifted premortem to other and future family members.

The organization of Andon's living space exhibits a similar level of moderation. Small rugs and carpets covered the floors, and a candlestick and small stove provided lumination and heat. Three mattresses and two quilts with block-printed-silk-and-cotton-fabric (*basma*) covers made a bedroom. Still, the fact that only one pillow (covered with a silk-cotton-mix [*beledi*] fabric) exists in the inventory suggests that many living-room and bedroom items might have also been given out.

Among the kitchen items, which included a dozen cheap pans and pots, metal jugs, and trays, a small wooden table (and maybe an *iskemle* if this term refers to a chair), is the most telling about the use of western-style furniture and changing household consumption patterns, that is usually observed in the nineteenth-century non-Muslim households.¹⁴⁴⁰ Other elements of Andon's inheritance allow us to reconstruct his traditional identity even more vividly. As an avid consumer of the widely used stimulants of his time, Andon sipped his hot coffee run through a small coffee grinder and served in metal cups, accompanied by the rising

¹⁴⁴⁰ Bozkurt, "Tereke Defterleri," 314.

smoke from long and short chibouks and occasionally by the sound of dice rolling on the backgammon board.

The rest of Andon's inventory, corresponding to more than ninety percent of its total value, is inviting to imagine him as a businessman with wide-ranging economic interests and social networks that went far beyond the Bursa region. The cloth merchant's storage of goods represents him as an intermediary between Europe and the Ottoman Empire, Bursa and other regions of Western Anatolia, and different socioeconomic classes. Ottoman inheritance inventories sometimes specify the location of goods other than one's house (i.e., "goods found in [a person's] shop in the inn..."), but this was not the case with Andon's merchandise. His "storage stuff" (*mağaza takımı*), worthy of 450 *guruş*, indicates the existence of a particular place. Its whereabouts are unclear, but we know that most merchants and artisans ran their businesses in shops and workshops rented from waqfs supporting mosques and madrasas.¹⁴⁴¹

The stock in trade, whose total market worth was 9675 *guruş*, comprised a veritable checklist of items to be used for clothing, furnishing, personal care, turbans/headscarves, lining, and bath purposes (see Table 24 below). Judging by their types and per-piece prices, Andon's cloths were mostly cheap, coarse, and undyed, thus dedicated mainly to Bursa's domestic market's low- and middling classes. Cotton and, to a lesser extent, cotton-silk mixes dominated to maintain their affordability. Dyed and finer fabrics were intended for somewhat wealthier customers.

¹⁴⁴¹ Suraiya Faroqhi, "Between Collective Workshops and Private Homes: Places of Work in Eighteenth-Century Bursa," in *Stories of Ottoman Men and Women: Establishing Status, Establishing Control* (İstanbul: Eren, 2002), 235.

Table 24: Andon Minassian's Storage of Cloths

Cloth	Unit	Quantity	Value (guruş)	Description
<i>Fransız şeytan bezi</i>	zira (75-90 cm)	180	360	Cheap cotton cloth imported from France / via French merchants
<i>Basma</i>	zira	198	297	Block-printed cotton-silk fabric, calico, likely manufactured in Bursa
<i>Dimi koton</i>	zira	180	540	Fustian with a linen warp and cotton weft, stronger than cotton or linen homespun (<i>bez</i>). Used for furnishing covering as well as clothes
<i>Şeytan bezi</i>	parça (piece)	780	1267,5	Cloth woven in Ottoman looms using British yarn
<i>Yarım has ve (+) dimi koton</i>	parça	190	475	Soft and closely woven fine calico (+) Fustian with a linen warp and cotton weft, used for furnishing and clothing
<i>İki rabi'li yemeni</i>	top (roll)	25	770	Thin, simple cotton fabric, "four-fold", used for furnishing and women's clothing
<i>Altı rabi'li yemeni</i>	top	13.5	810	Thin, simple cotton fabric, "six-fold", used for furnishing and women's clothing
<i>Karacasu yemenisi</i>	top	4	48	Thin, simple cotton fabric from Karacasu in the Aydın region in Western Anatolia, which was famous for its cotton and cotton-based textiles, used for furnishing and women's clothing
<i>Örtülük dülbend</i>	top	1	130	Thin white muslin woven from either linen or cotton, for head wrappings
<i>Kireçli hasa</i>	top	4	200	Dyed soft and closely woven fine calico
<i>Kaliko</i>	top	1	90	Calico, coarse cotton cloth, usually unbleached or printed with patterns imported from England
<i>Havlu ve peştemal</i>	Çift (pair)	22	176	Silk-cotton towel and bath wrappings

<i>Lahuraki şal</i>		5	457,5	Light woven cotton or linen "Lahore" shawl, likely a copy of Persian designs, usually wrapped around the belt
<i>Kadıköy alacası</i>	top	50	500	Coarse cotton fabric from Kadıköy in the Denizli region in Western Anatolia usually used for women's clothing
<i>Değirmi kuşak</i>		25	325	Square-shaped coarse cotton sash
<i>Kırmızı mendil</i>		6	150	Red-dyed silk handkerchief
<i>Koton çiti</i>		116	368	Chintz (medium weight plain weave, polished coarse cotton)
<i>Buçuklu dülbend</i>	top	7	300	Thin white muslin woven from either linen or cotton, used to wrap around turbans
<i>Asdarlık amerika</i>	top	8	320	"American cotton," Plain white coarse cotton sheeting (some of which might be woven using imported British yarn)
<i>Amerika</i>	top	3	255	"American cotton," Plain white coarse cotton sheeting (some of which might be woven using imported British yarn)
<i>Öküz bezi</i>	top	2	240	Coarse cotton cloth used in women's dressing
<i>Basma</i>	top	6.5	357,5	Block-printed cotton-silk fabric, likely manufactured in Bursa
<i>Elli kalem peştemal</i>	çift	7	105	Silk-cotton bath wrappings
<i>Beledi takım</i>		7.5	187.5	Cotton, occasionally silk, double weave, everyday fabric
<i>Boyalı Amerika</i>	top	3	150	Dyed (likely red and indigo) coarse cotton from America (some of which might be woven using imported British yarn)
<i>Boyalı bez</i>	top	0.5	25	Cotton or linen homespun, used for underclothing and shirts

<i>Frenk gezisi</i>	top	6	330	Lightweight silk French gauze
<i>Boyalı Amerikan</i>		1	50	Dyed coarse American cotton sheeting (some of which might be woven using imported British yarn)
<i>Kırmızı Kastamonu çiti</i>	top	3	207	Red-dyed chintz (polished coarse cotton weave) from the Kastamonu region in the Black Sea
<i>Denizli bogasi</i>		7	70	Coarse cotton twill used for linings. Denizli region was renowned for its long-fibred cotton and cotton textiles
<i>Boyalı dağlı bezi</i>		3	27	Dyed coarse cotton cloth (lit. "mountaineers' cloth").
<i>Al patiska</i>	zira	23	69	Red-dyed coarse cotton sheeting woven using imported British yarn
<i>Yörük kuşağı</i>		3	18	"Nomad sash"
Total			9675	

Andon's cloth storage reveals that British yarn cheap cotton articles imported from France, Britain, but especially America, were slowly undermining the Ottoman weaving sector. This trend is evident from the heavy presence of fabrics woven in Ottoman looms using British yarn (e.g., *şeytan bezi*, *patiska*, maybe *Amerikan bezi* if this designates a type rather than origin) and imported cotton cloths from America, dyed and unbleached, and France (e.g., *Fransız şeytan bezi*). With America entering the competition in world trade as a cotton manufacturer in the second quarter of the nineteenth century, its supplies found acceptance among Ottomans, who preferred coarse and cheap cotton cloth. An American in Istanbul in 1832 commented on the frequency of these fabrics: "A Jew pedlar is shouting under my window, ..., 'Amelikani pagno,' or American cotton. The reputation of our domestic manufacturers, ..., had extended over our own vast southern continent; but I was

not prepared to find that it had penetrated the regions of the grand seignior. They are in great request here..."¹⁴⁴²

Still, the Ottoman interior was largely impenetrable, especially in terms of cheap and coarse cloths, due to the robustness of the existing structures and networks, the advantage of cheap rural labor in lowering prices, and the general preference for Ottoman-produced textiles. Writing in 1833, David Urquhart, confidential agent to Sir Stratford Canning, reported that while the British dominated world markets with cheap, light, and attractive machine-produced stuff and cheap imitations of Indian textiles, real success could be achieved only by producing

the coarse and heavy stuffs, used by the peasantry ... [that] do not figure at all in our first exports. These consisted of jaconets [cheap lightweight cloth], tangibs [figured muslins, *dülbend*], calicos [*basma*, *kaliko*], lappets [velvet, *niche*], dimmities [*dimi*], ginghamms [*alaca*], imitation shawls, handkerchiefs [*mendil*], and chintzes [*çit*]. The Americans were the first to turn their attention to the coarse unbleached cotton stuffs. Plain goods now form one half of our assortments ; but, as I have above remarked, although our handkerchiefs and imitation shawls are commonly to be seen throughout the villages, and at the country fairs, we can scarcely be said to have entered on the branch to which our future commerce will be chiefly indebted. ... We are still far from rivalling in fineness the muslins and chintzes of the East; our red is generally inferior to theirs, and formerly they would look, neither at our cottons nor our hardware. Cheapness, substance, and material value are now more attended to, and turbans and belts are in part thrown aside; still the consumption of eastern articles is immense, and the intricacy of their circulation throughout the country is quite surprising.¹⁴⁴³

The "immense" consumption can be traced from the rest of the cloths, which comprised the Ottoman consumers' much-appreciated and evidently domestically-produced textiles. *Basma*, the block-printed cotton-silk material used in furnishings and women's clothing, from whose production Armenians of Bursa and immigrant manufacturers from Mosul earned their lives, was one of the highlights. *Yemeni*, thin cotton fabric was another. Rolls of *bogasi*, *alaca*, and *yemenis* (light and coarse cotton clothes) of Denizli and Aydın towns, the leading purveyors of cotton manufactures of inner Western Anatolia, and chintz fabric of Kastamonu found their way into the Bursa market thanks to the intermediation of the *bezzazs* like Andon. Bursa's fine silk towels, bath wrappings, and handkerchiefs were

¹⁴⁴² James Ellsworth De Kay, *Sketches of Turkey in 1831 and 1832, by an American* (New York: Harper, 1833), 191.

¹⁴⁴³ David Urquhart, *Turkey and Its Resources: Its Municipal Organisation and Free Trade* (London: Sauters and Otley, 1833), 150.

cheap, widely appreciated in the domestic market, and among the goods that saved the weavers who were also switching to using cotton in their weavings to keep their prices low in the face of European competition. But, as the presence of French gauze shows, improved and cheapened silk goods of France came to the Empire's silk capital.

The stated origins of these cloths reveal only a part of "the intricacy of their circulation throughout the country." As highlighted, cloth merchants run complex putting-out networks in the countryside. They did so mostly through the forward-purchase, or *salam*, moneylending contracts.¹⁴⁴⁴ The absence of yarn among his items does not mean that Andon had no raw materials. For example, an Armenian and an Orthodox Christian *bezzaz*, his contemporaries, owned fair amounts of British and domestic cotton yarn when they died.¹⁴⁴⁵ If Andon had any, unless they somehow found their way out of the inventory, they must have been used in the weaving process depending on local and economic peculiarities. He might have also worked closely with the yarn traders (*kazzaz*, predominantly Jewish in the city) and dyehouses in Bursa and Western Anatolia. In any case, processing, collecting, transporting, and distributing these items would require a trustable network of suppliers, resources, and a convenient and secure road network. For example, the harsh winter and the advancement of Ibrahim Pasha's troops into Western Anatolia in 1833 could easily disturb the flow of these goods between regions. Strict quarantine measures could have disconnected the city from the rest, while catching the plague would mean the network was over.

What was this network like? Following the decedent's loans can offer a wide reading beyond the confines of the textile trade. Like most other rich individuals of Bursa, Andon of Kütahya's moneylending activities tied up most of his capital. A total of 11.623,75 *guruş* was lent to 106 creditors. The spatial distribution of this amount seems to be based on birthplace and work ties, which enriches as much as complicates the social and economic networks he forged in the region and beyond (see Map 17 & 18 & 19). While the Bursa region received 36 percent of the loans, the rest, or about two-thirds of the money, went to mainly Kütahya and its environs and Bilecik, the region east of Bursa. The ethnoreligious profile of the

¹⁴⁴⁴ Halil İncelik, "Türkiye'nin Tekstil Tarihçesi Üzerine Notlar," in *Bir Masaldı Bursa*, ed. Engin Yenil (İstanbul: Yapı Kredi Yayınları, 1996), 65.

¹⁴⁴⁵ OA. MŞH. ŞSC. 3016 (B / 301) (AH. 11-10-1258 / 15-10-1842) ; 3094 (C / 72) (AH. 25-03-1267 / 28-01-1851).

borrowers provides a more interesting picture. Except for Arakil, an Armenian timber cutter/merchant (*ağaççı*) in the city of Bursa who got 60 *guruş*, all of them were Muslims.

The crescent extending from Bilecik and Inegöl in the east to Eskişehir in the southeast and from there to Kütahya in the south, Balıkesir in the southwest, and hilltop villages on the back of Mount Olympus received the bulk of Andon's credit. On the macro scale, this area, especially Kütahya, had access to the goods traded in Izmir's hinterland. Specifically, a portion of the Aydın and Saruhan regions' cotton, which was held in high regard and exported to Europe, had been spun and woven in cottage industries there and in Kütahya.¹⁴⁴⁶ The Kütahya region also had a rich state-owned alum mine (Gediz/Gedos) and was home to various dyeing installations (*boyahane*) that colored the cotton textiles produced in inner Western Anatolia. A significant part of the money went to local weavers who would be obligated to deliver regular supplies to his shop. Moreover, the autumnal fair of Balıkesir, the biggest in Anatolia, was a premier market for European cloths and fabrics from Izmir and the Anatolian towns that appear in the inventory.¹⁴⁴⁷

On the microscale, Andon's business connections can be read off from the list of debts owed to his estate. Outside the central Bursa region, the money was concentrated in a few locations and hands. Kulaca village of Inegöl, which had 153 males living in 76 houses, cultivating grains, mulberry trees, vineyards, tobacco cultivation, raising cattle, and cutting and transporting timber, got a total of 1626 *guruş* that went to fourteen households, enough to make the *bezzaz* a power figure in this locality. While the smallest loan was five *guruş*, the bulk was collected by five males with honorary titles, such as an Imam Agha, who received 400. The tax survey of the village records that most inhabitants were already burdened with the corvee of delivering most of their premium quality timber to the state for free, making it harder for them to meet their needs.¹⁴⁴⁸ His local influence seems to have

¹⁴⁴⁶ Murat Dağlı, "Kütahya in the Eighteenth Century: Transformation or the Persistence of the Old Order?" (PhD Thesis, California, UC Berkeley, 2012), 116; Elena Frangakis-Syrett, "The Trade of Cotton and Cloth in Izmir: From the Second Half of the Eighteenth Century to the Early Nineteenth Century," in *Trade and Money: The Ottoman Economy in the Eighteenth and Early Nineteenth Centuries* (Istanbul: Isis Press, 2007), 171–90.

¹⁴⁴⁷ Vedat Çalışkan and Ali Sönmez, "Anatolian Fairs (Panayırs) in The Ottoman Period: Their Distribution and Main Characteristics," in *The Evaluations and Researches in Social Sciences and Humanities*, ed. Mehmet Sarioğlu and Fatih Sansar (Lyon: Livre de Lyon, 2021), 65.

¹⁴⁴⁸ OA. ML. VRD. TMT. d. 8222 (AH. 1261 / 1845).

stopped there. In Yenişehir, the subdistrict in the immediate north of Inegöl, where abundant and abandoned lands gave way to *çiftlik* agriculture with a highly diverse crop profile (including cotton), received a small loan of 64 *guruş* from three men whose origins were unspecified. Maybe they were some intermediaries or smallholders who bothered to come to Inegöl or Bursa city to seek cash instead of becoming sharecroppers on some prominent landowner's estate.

Andon's money continued to make its presence felt in specific locales past the Bursa region. Ten people from the Gökçedağ township bordering the Harmancık subdistrict obtained 2046,5 *guruş*, most of which went to five rich landlords, while two ironsmiths (the area was also close to iron mines) and three villagers shared the rest. The İnönü village of Bilecik was such a case. An Osman, the son of Emin Agha, held the highest loan amongst all creditors with 1600 *guruş*, almost equal to the total amount lent to the Bursa city's residents. Karacaşehir, another medium-sized locality in Eskişehir comprising a few villages and multiple large-size *çiftlik*s, was represented by two people, Imamoğlu and Ebubekir, who were allotted a sum of 365 *guruş*. Like Karacaşehir, some areas had a small number of borrowers. In the Dağardı subdistrict far west of Kütahya and south of Bursa, a woman, introduced as the wife of a Hüseyin Efendi, was the single borrower entrusted with 497 *guruş*, considering the husband's *Efendi* title implying his status as a notable/headman, this money likely went to other people. An Ali from the Söğüt subdistrict of Bilecik was entrusted a high amount of 930 *guruş*, again possibly to be redistributed, while two other villagers got 50 and 35 *guruş*.

Similar patterns of asymmetric credit distribution where headmen and their relatives were the highest debtors occurred in the villages of Kütahya, Bilecik, Eskişehir, and Karesi regions. By the legal nature of Ottoman inheritance inventories, all the decedent's credit was lent on the official maximum threshold of 15% annual interest (*nass üzere*). But, a trader himself and not the only moneylender in this region, Andon was well aware of the intricacies of charging way above this rate (i.e., more than 25%), which was practiced almost like a norm in Western Anatolia. Mostly grain cultivators and animal herders, the credit relations of the settlements in the periphery of the Bursa region can be explained in four ways.

First, as illustrated, some of Andon's money went to these locations to stimulate weaving activities. Such a scheme might have required the intervention of local headmen as owners of weaving equipment and organizers of rural trade networks. Secondly, the landed rural gentry could bind more cultivators to the soil in an environment of rising tax burdens. From the other end, his cash aided the villagers with their collective annual tax obligations. Third, forward-purchasing *salam* contracts with high interests were one way to profit without interest levels being recorded, especially in predominantly grain-producing areas. Because Ottoman inheritance inventories usually do not record the nature of the transaction between the lender and creditor, we are left to insinuate the motivations of each side by inferring from other social, economic, and physical clues. Still, some evidence implies his agricultural interests. One of the reasons why Ali of Söğüt mentioned above was given 930 *guruş* was thanks to his duties at a mill (*asiyab*). Furthermore, Andon kept thirteen threshing sledges (*döven*), meaning he distributed some means of production or appropriated them in case of crop and debt-repayment failures. Fourth, Andon might have been interested in acquiring and trading different raw materials such as timber and dyes.

Considering the geographical extent of Andon's credit and trade relations in the hinterland of the Bursa region, how he conducted his business affairs requires some speculation. A collective effort including him, his eldest son and official apprentice Kirkor, and, maybe, sons-in-law and some couriers might help deliver money to, collect the debts from, and receive the (ready and woven) merchandise in the immediate proximity of Bursa or at specific locations such as the inns. However, organizing the work in lands beyond central Bursa would require travel, communication, and trade through hilly and varied terrain. The existence in the inventory of a mule priced at an expensive value of 400 *guruş* and a dinner bucket indicates that somebody already had the means to access and distribute money, goods, and raw materials to certain distances and altitudes. Still, reaching the southernmost points of the Bursa region (villages at the bottom of the Harmancık subdistrict) would take a little longer than twelve hours of horse (or, in this case, a mule) ride. Moreover, the impassability and changing of the course of the roads due to snow in winter, the risks of banditry, diseases, and political instability (as in the case of Mehmed Ali Pasha, whose armies came to Kütahya), and usual heavy transport costs could easily hinder or destroy the decedent's commercial operations (§ 2.3.3).

Although non-existent in the inventory as borrowers, a substantial urban and rural Armenian population lived east and southeast of the Bursa region, which, combined with Andon's Kütahya origins, might have eased the circulation of cash and goods. Most likely, his engagements with powerful Armenian Europe merchants both in Bursa and Istanbul contributed to this process too. As in the case that some of his personal properties do not appear in the inventory, we cannot directly prove these aspects of logistics. On the other hand, we have a record of a third identifiable creditor group: the semi-nomads (*yörük*) (§ 3.3.1.3). Just as it was home to Armenians, the periphery of Bursa overlapping with the deceased *bezzaz*'s money network included the migratory routes and temporary concentration areas of many tribes of the Hüdavendigar province, the most prominent being the tribes of Akçakoyunlu, Zahidler, Şehidli, Gündüzlü, Karakeçili, Kızılkeçili, Turfallı, Deliler, Bozoğlu, and Yağcıbedirli, that were also present in other parts of Anatolia.

Before the railroads' arrival, besides the caravans, the *yörüks* were the most significant elements of interregional transportation in western Anatolia, thanks to their extensive knowledge and control over the territories they navigated for centuries in search of summer and winter pastures for their flocks. Five *yörüks* were named in the inventory, though they were unidentified with a tribal belonging. While a Mehmedoğlu Osman from the İnönü village of Bilecik was one of the most important borrowers with 605 *guruş*, an Alagözoğlu from the Kepsut subdistrict southwest of Bursa received 150, and an Ali Bey from the Eskişehir region in the southeast 100 *guruş*. They might have been active in extending cash to distant locations on Andon's moneylending map, such as the Dağardı and Kavacık villages. We should remember that the residents of the southern section of the region were sharecropping in madder root fields in İzmir's hinterland and marketing root extracts (a much-demanded dyeing agent) in Bursa (§ 3.3.3.5). Thought together with the alum mines of Kütahya, Andon might have been involved in the dye trade. Kepsud was near Balıkesir, and its nomads might have been influential in bringing European manufactures and western Anatolian fabrics from there. The business at the fair of Balıkesir, on account of the widespread scarcity of money, was done on credit to dispose of the stocks of goods taken

there. The *bezzaz*, who held a significant amount of cash, might have largely profited from the trade there.¹⁴⁴⁹

The two other *yörüks* were the residents of the city of Bursa. This fact is not surprising, as some of their households lived in urban areas well before 1830 and provided a link to the urban economy. A Hacıahmedoğlu Ibrahim and an Ali Bey got a total of 150 *guruş*. Similarly, in the city, a camel-renter or a small-sized caravan organizer (*deveci*), named Deli Bekir, was given 41 *guruş*, proving the involvement of the decedent *bezzaz* in overland transport networks.

It would be wrong to portray the *yörüks* as mere transporters or road security agents. Women were essential actors in the self-sufficient lifestyle of the semi-nomads by taking care of the animals, preparing animal products, and weaving tents, rugs, and clothes. "Nomad sashes" and, if we can stretch its meaning, "mountaineers' cloth" appeared in Andon's shop thanks to his entanglement with these groups. The cloth exchange between them may have been reciprocal in that the semi-nomad women could tailor Andon's raw textiles and spin his yarn, and at the same time, the *yörüks* might have kept or received European clothes as payment, thereby turning this local interaction into a global one.

Last but not least, we may raise another possibility of why villages outside the Bursa region and semi-nomads are in the picture. As early as the sixteenth century, doing trade on roadside villages or through collaborations with semi-nomads in areas undetected by tax collectors and out of the strictly policed center of Bursa was a calculated move to maximize profits.¹⁴⁵⁰

Moving from the uneven terrains of the Bursa region's periphery to the plainer areas on the northern side of Mount Olympus that were within Andon's reach, credit relations became more complicated and varied. In the city's environs, 763,5 *guruş* was dispersed to nine villages. To the west of the city, seven locations, growing mulberry trees, vineyards, fruit orchards, and grains in small plots and herding sheep and cattle, got a total of 233 *guruş*. Four, namely, Çalı, Fodra, Balat, and Çavuş formed a vertical constellation, aligned on a north-south axis, accessible within an hour of a horse ride, suggesting this area might have

¹⁴⁴⁹ BPP, CP, No. 3054, LVIII (58), *Abstract of Reports of Trade of various Countries*, 1862, 183.

¹⁴⁵⁰ Faroqhi, "Merchant Networks," 177–78.

been targeted more intensely in the previous years for different reasons, e.g., helping taxes and bad harvests, silk spinning and cocoon raising, and weaving. Based on the tax surveys, we can examine their socioeconomic peculiarities.

Balat and Çavuş – the small Muslim villages to the north of the constellation, were near the bank of Nilüfer River and exploited this opportunity well – they had large and mid-sized *çiftlik*s where most of the villagers grew grains as renters or sharecroppers. In the former, three of the eleven local households owned private grain fields of 50, 100, and 150 *dönüm*, while an influential "sharecropper" (*ortakçı*) from the Karahisar-ı Sahib district (also known as Afyon for its renowned opium, the region south of Kütahya), who rented 80 *dönüm* of grainland and had it tilled by the villagers. Their small plots of vineyards, mulberry trees, meadows, and dozens of cattle, sheep, and horses also reaped annual incomes from 1500 to 4500 *guruş*. This was not the end, though. Owing to the favorable soil here, four households from the city of Bursa had interests in Balat. A shoe trader (*haffaf*) from the Kavaklı quarter rented all his 30 *dönüm* of land, a sheik from Çekirge his 60 *dönüm*. Two remaining were notables. Kavuncukzade Hacı Mehmed's plot 205 *dönüm* was nowhere near as large as the enormous piece of 2000 *dönüm* possessed by the male members of the Cizyedarzade family, arguably the most powerful urban notable (*ayan*) household by the time (§ 3.4.1), who also owned 300 sheep and goats and a sheepfold (*ağıl*) here.

In the surveys' description, the rest of the village folks owned "nothing but their houses." Pehlivan Ali, a sixty-year-old sharecropper in multiple fields, was one of them. His twenty-year-old son Hüseyin was drafted into the army, and his thirteen-year-old son Ismail was the only male member who could help him.¹⁴⁵¹ Although Ali's advanced age and the burden on his only son were reasons for borrowing, he was found eligible for credit, presumably thanks to the two old cows in his possession.

The situation was more intense in Çavuş, about three kilometers south of Balat. On paper, the village was comprised of two segments. In the "real" village, six households owned several hundred *dönüm* of grainland, small plots of vineyards, vegetable gardens, mulberry orchards, and many cattle, while the remaining three were merely propertyless servants and laborers. The other part was a *çiftlik* called Dobi, where the city's leading trader, ulama, and

¹⁴⁵¹ OA. NFS. d. 1472 (AH. 1255 / 1839), p. 45.

administrative households (including the famous exile Ispartalı İbrahim Paşa) owned several tens, hundreds, and thousands of *dönüm* of land tilled by workers from nearby villages and hired laborers and dozens of sheep that were taken care of by local and immigrant Orthodox Christian shepherds.

Andon seems to have built a strategic alliance with İbrahim Edhem Bey, an influential absentee landlord in the Dobi *çiftlik*, by giving him a mere 40,5 *guruş*. Given İbrahim Edhem's 1228 *dönüm* of land, including a large vineyard, mulberry plantation, and meadow, and a dozen cattle and about 200 sheep that generated 4540 *guruş* in 1845¹⁴⁵², this small exchange is a reminder that the amount of money does not necessarily imply the borrower's bargaining power. The returns, be it in cash or kind, were largely guaranteed in these two villages, since there were no uncultivated fields, and labor was easily procured by means of debt bondage.

Fodra and Çalı, crowded villages to the north, were situated at slightly higher altitudes. Their position away from the Nilüfer River and elevation profiles changed land ownership patterns. In contrast to the *çiftlik* agriculture of Balat and Çavuş, most villagers had small plots of grain lands, fruit orchards, tree groves, and a few sheep. 22, 5 *guruş* was borrowed by an Ömeroğlu Ömer, a Fodra resident 38-year-old-man with two little sons aged five and one.¹⁴⁵³ By 1845, Ömer owned mulberry trees and a vineyard of two *dönüm* and rented fourteen *dönüm* of wheatland plowed by a pair of oxen.¹⁴⁵⁴ Perhaps his borrowing was to find a means to rent this land or to assist him with cultivating his field without mature sons.

Further west of these four villages was Akçalar, near Lake Apollonia, where two people received 73 *guruş*. To infer the type of relationships formed in the Akçalar village comprising 210 households, let us match one of the debtors, Sünbülüğlu Halil, the son of Hasan, who received 23 *guruş*, across the sources. In 1839, he was a forty-two-year-old man living with his two little sons and the family of his recently conscripted brother (§ 2.3.7.2).¹⁴⁵⁵ By 1845, he owned half-a-*dönüm* of a vineyard, a *dönüm* of mulberry trees, a cow, and a

¹⁴⁵² OA. ML. VRD. TMT. d. 8453 (ah. 1261 / 1845), p. 5.

¹⁴⁵³ OA. NFS. d. 1472 (AH. 1255 / 1839), p. 31.

¹⁴⁵⁴ OA. ML. VRD. TMT. d. 8433 (AH. 1261 / 1845), p. 21.

¹⁴⁵⁵ OA. NFS. d. 1472 (AH. 1255 / 1839), p. 39.

donkey.¹⁴⁵⁶ His estimated total income from these assets was 405 *guruş*, for which he was taxed, in special tax and tithe, 86,5 *guruş*. To alleviate this burden and introduce variation to his family's diet, Halil was engaged in lake fishing and earned an additional 200 *guruş*. Other fees, extraordinary taxes, adverse weather conditions, family matters, murrains, and the annual flooding of the lake might be among the reasons that made him hop on his donkey and seek a small debt from the agents of an Armenian cloth merchant.

The last stop west of Bursa was a credit of 20 *guruş* loaned by an Ismail from Mudanya. Regarding Mudanya being the primary port of Bursa by Andon's death, it is not *how much* but *why* money was sent in this direction. Even if Ismail was a mere townsman or a villager, this region might have had more creditors in the preceding years due to economic and political connections with Istanbul and other minor ports along the Marmara coast.

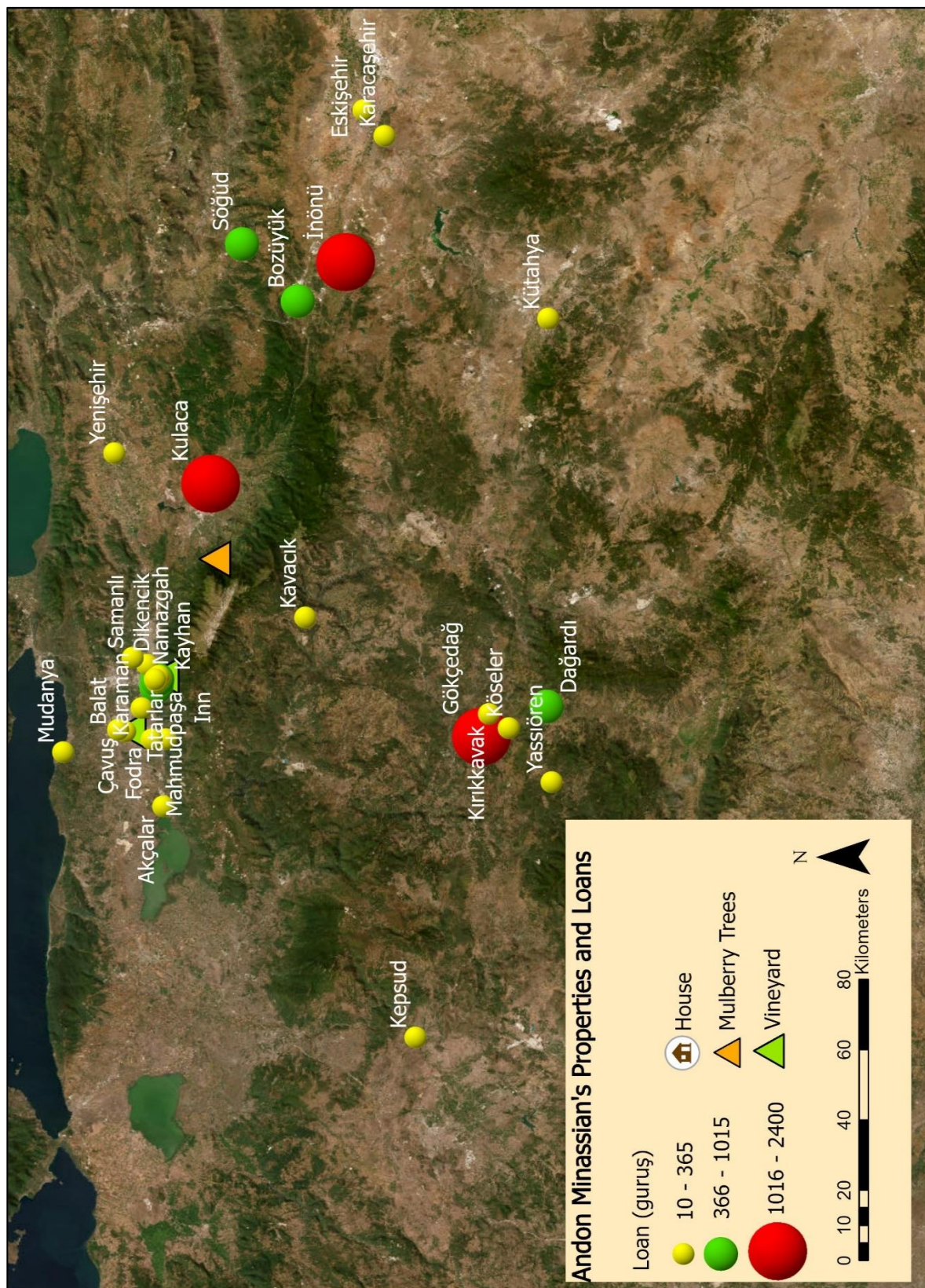
The east of the city was another story. Two men from the closeby villages of Samanlı and Dikencik got 533,5 *guruş*. In these locations, grain, vegetable, and mulberry tree cultivation and animal husbandry persisted, and a significant income and land size disparity between a few households and the rest was observed. In Samanlı, the debtor was a wrangler (*sığirtmaç*) named Habib, who possessed a small mulberry orchard and a pair of cows and worked in the wealthy households' fields.¹⁴⁵⁷ If not for himself, he might have gotten the loan of 273,5 *guruş* for different reasons, such as prepayment for having women tailor the clothes, further dividing this amount among the poor of the village, or looking after the cattle somewhere. In Dikencik, where the *çiftlik* agriculture truly existed, a few possessed lands, and the rest labored on it; an Ali of Amasya received 260 *guruş*. Ali was a temporary resident in a household where members were identified as from "Amasya," the district in the mid-Black Sea region famous for its silk, and a cotton-linen cloth-manufacturing sector along with Kastamonu, Tokat, and Çorum.¹⁴⁵⁸ Ali might be getting textiles from this zone, as indicated by the inventoried chintz fabric from Kastamonu, the district west of Amasya, or he may be an intermediary for the economic interests in Bilecik on his way to northern Anatolia.

¹⁴⁵⁶ OA. ML. VRD. TMT. d. 8422 (AH. 1261 / 1845), p. 9.

¹⁴⁵⁷ OA. ML. VRD. TMT. d. 7437 (AH. 1261 / 1845), p. 5.

¹⁴⁵⁸ OA. NFS. d. 1397 (AH. 1255 / 1839), p. 72; ML. VRD. TMT. d. 7493 (AH. 1261 / 1845), p. 5.

Map 17: Andon of Kütahya's Property Ownership and Moneylending Network in the Hüdavendigâr Province, 1839



Map 18: Andon of Kütahya's Property Ownership and Moneylending Network in the **Bursa Region**, 1839



Let us move from the high altitudes, plains, villages, and small towns to the city of Bursa, where Andon was firmly based and occupational and gender diversity was the highest. The distribution of 1752,25 *guruş* among the twenty-nine men and eight women suggests that these people borrowed petty sums primarily to spend on their immediate necessities. Still, because most of the borrowers' name is hidden, doubt must be reserved as to whether they may be actors involved in agriculture in the city's environs.

Half of this money was concentrated in a small area south of Andon's house. Kayhan quarter, a mixed Muslim-Armenian neighborhood in the eastern extension of the central bazaar area with its own *charshi* and many public buildings, saw the most activity (Figure 19). If we except a halwa-maker (who got 50 *guruş*), baker (10), two reeds-basket weavers (*köfüncü* – 170,5), and two people whose occupations are unspecified (78), the rest of the professions were somehow business-related. A *muytab*, spinner of goathair and maker of articles woven therefrom, borrowed 17,5 *guruş*, while a *külahçı*, a maker of conical hats from felt, got 61,5. They were possibly working with raw materials provided by the villagers or nomads. Two men, one of whom was also the imam of the quarter, were identified as "assistants" (*yardımcı*), indicating that Andon's shop was likely in the Kayhan area and a rental waqf property, given his intense cash distribution there.

Furthermore, the bazaar of the timber cutters/dealers (*Keresteciler çarşısı*) was in Kayhan, which may explain an aspect of the interest in Inegöl, for whose inhabitants timber was an essential source of remuneration. This bazaar was also where Arakil, the Armenian timber cutter-cum-merchant, the only non-Muslim on the list, had a shop. Fifty-five years old, Arakil was no simple artisan. He lived in a household with carpenters and shifted his and his son Boghos' career to become one.¹⁴⁵⁹ In other words, Arakil conducted a multi-partner business. He was likely the only one with regular connections with villages such as Çalı (the southernmost point in the constellation abovementioned) that grew pine and oak trees in private groves and likely showed a persistent interest in the timber of Inegöl. Can we say he was a manufacturer of threshing sledges?

As this question implies, explaining the link of some creditors to Andon is a daunting task that runs the risk of being overanalyzed. We do not even know whether they received

¹⁴⁵⁹ OA. NFS. d. 1394 (AH. 1246 / 1830), p. 23; 1398 (AH. 1255 / 1839), p. 11.

their credit directly from the *bezzaz* himself. Ibrahim, a farrier (*nalband*) who received 145 *guruş*, might have been taking care of the mule and, maybe, horses that were owned before. An herbalist who lived off distributing plants as well as selling coffee in one of the inns was given a small debt of 23 *guruş*, a coffeemaker/coffeehouse owner (*kahveci*) in Kayhan got 25, and a cook (*aşçı*) took 94 *guruş*. They might have been found creditworthy after serving the shop or the decedent one way or another. A specific relation may be attached to a *kavvas* named Feyzi, a special guardsman attendant on officials, certain notables such as European merchants, and ambassadors entrusted with 27 *guruş*. Given Andon's business relations were somewhat related to society's upper echelons, the *kavvas*' appearance may not be without reason.

Returning to the other urbanites who entered a credit relationship with the *bezzaz*, we have already mentioned the city's semi-nomad residents and camel-renters/caravan organizers who likely helped with transport. What is more, our population registers show that all the porters (*hamal*) in Kayhan, like those in the city's eastern section, were Armenians. Bringing goods up the slopes and down in their reeds baskets or on the back of their beasts of burden, the *hamals* might be active in distributing money and raw materials around the city's convoluted streets. If so, the following debtors could be in relation with them. Two fez makers received 69 *guruş*. The introduction of the 1827 sartorial law increased the volume of fez production all around the Empire. Although a state-owned fez factory (*Feshane-i Amire*) was opened in Istanbul, Bursa and Edirne fez manufacturers were tasked with assisting it, with the quality of Bursa fezzes far surpassing those produced in Edirne.¹⁴⁶⁰ The fez manufacturers might have had difficulty carrying out or enlarging their operations. Then came two *eskicis*, or second-hand clothes-and-shoes dealers, who were given 44,5 *guruş*, maybe to buy cheap yet durable clothes to be resold at Andon's shop. The 79 *guruş* lent to two *beledi* manufacturers was probably to ensure a steady and inexpensive stream of this cloth to the *bezzaz*, who might be using their looms to weave other textiles, too. Lastly, a *futacı*, maker of Bursa's fine bath towels, which also appear among the shop's articles, received 55 *guruş* likely to dedicate a portion of his labor and goods to Andon.

¹⁴⁶⁰ OA. HAT. 326 / 18985 (AH. 1250 / 1834/1835).

Figure 19: Artisans of the Uzun Charshi, which constitutes the oldest market section of the Bursa bazaar, and reaches Kayhan, where Andon's shop was located, 1890 (Source: Türkün-Dostoğlu, *Osmanlı Döneminde Bursa*, v. II, 533)



This impressive moneylending activity was not the only source of the decedent's riches. His immovable properties scattered around the region also reflect other socioeconomic relationships. Andon's half share of the house in the Karaağaç quarter was valued at 5000 *guruş*. Assuming that his wife Askohi owned the other half at the same price, the headquarters of the *bezzaz*'s family would be 10.000 *guruş*, which is in the same range as the value of other houses owned by the wealthy in the same neighborhood, based on different inventories from the same court record. Because the size of homes greatly affected their price¹⁴⁶¹, we can assume Andon lived in a comfortable residential space where multiple

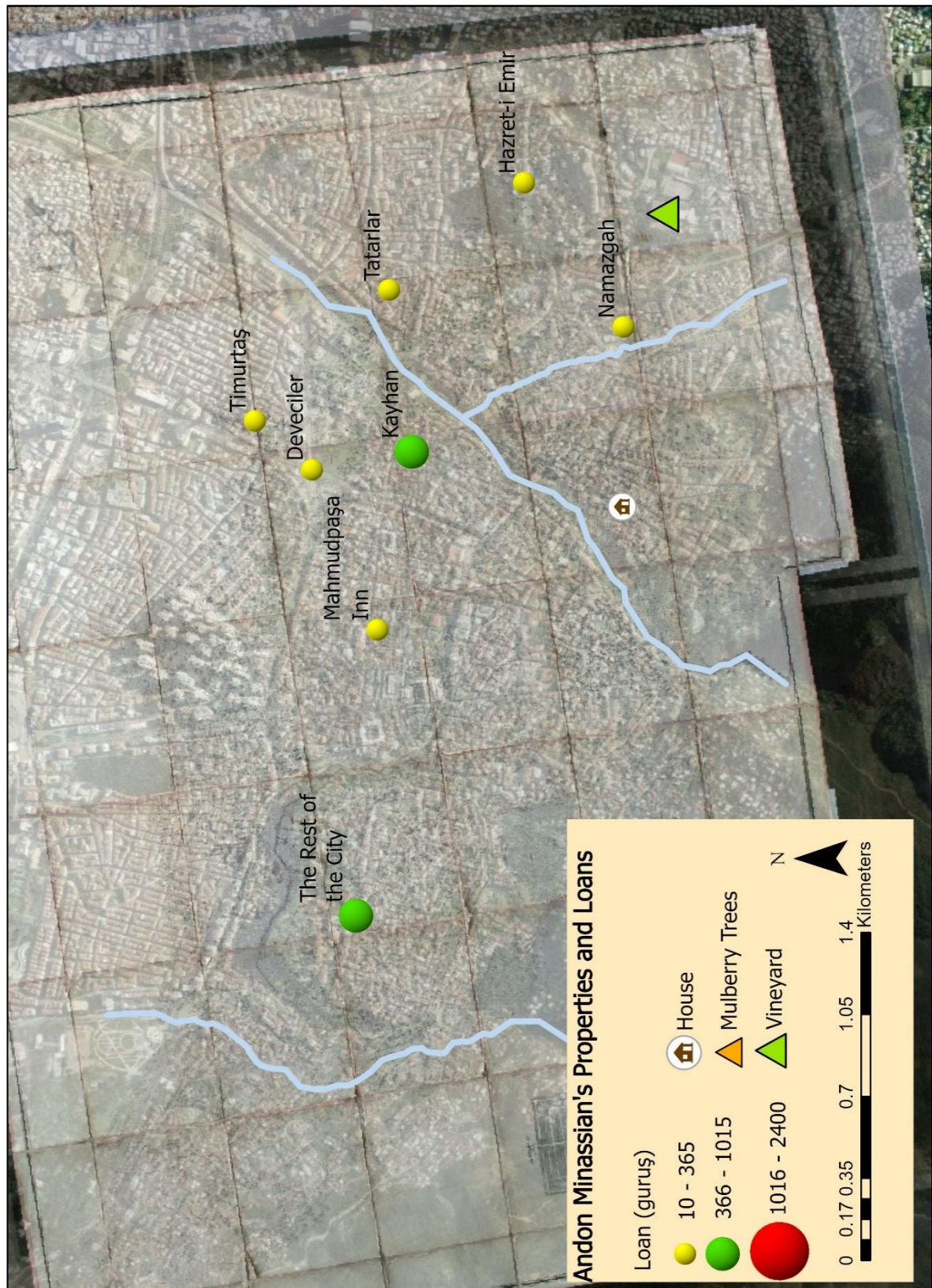
¹⁴⁶¹ Karagedikli and Tunçer, "House Prices."

families could live, the business could be conducted, and goods and animals could be easily stored.

Other properties were of the sort typically owned by a great majority of the region's inhabitants, thanks to the rising raw silk demands and always-present subsistence requirements. Andon had 1,5 *dönüm* of mulberry plantations in two places. The first was in the Işıklar area, on the city's immediate outskirts in the east, about a kilometer from the house and 300 meters higher in altitude. Priced at 200 *guruş*, the site of the trees would soon be occupied by the military school to be opened in 1845. The second mulberry plantation was much further away, in the small Kızık village on the foothills of Mount Olympus, twelve kilometers west of Inegöl, where people were engaged in subsistence farming and by-employed in timber cutting. Considering Andon's influence in the village of Kulaca, these mulberry trees, valued at 400 *guruş*, might be investments or seized from a villager and suggest that Andon might have been heavily involved in the timber trade. In terms of the profits from mulberry plantations, some male borrowers might have taken care of the trees in Işıklar, and some women debtors might have raised the silkworms and spun their silk. Some villagers in Kızık probably undertook these tasks.

Lastly, the location of Andon's vineyard of 1,5 *dönüm* indicates that the politics of moneylending influenced property ownership. Out of all places, it was in the Dobi *çiftlik* where his relationship with the urban notable Ibrahim Edhem Bey is known to us. This vineyard was a monument of the duo's shared economic interests. In order to preserve the high-quality grapes of the *çiftlik*, that the migrant workers likely collected, a large molasses pan was ready in the household.

Map 19: Andon of Kütahya's Property Ownership and Moneylending Network *in the City*, 1839



We do not know if the family's winter molasses last as intended, but Andon Minassian of Kütahya could not make it until the spring, when the opening of the roads after winter and the outcome of the harvests would determine the health of his business. The whole network was broken. This time, the porters carried the *bezzaz*'s personal items, the second-hand dealers traded his garments, and the assistants emptied his shop instead of filling it. Together with other agents who auctioned the decedent's properties, they were remunerated with 119 *guruş*. Usually, a fraction of the wealthy Armenians' estates were donated to the Surp Asdvadzadzin church. Although such was not the case in the inventory, the remaining family members might have done it personally to ease the soul of the household head.

Once the properties were sold, Karabet Papazian, Andon's auctioneer/broker neighbor from the Karaağaç quarter, transferred the amount to the family members, with the mother Askohi chosen as the legal guardian of little Kirkor. The death of the patriarch left the household without a head. But this situation was about to end soon. On the last days of May 1842 (AH. 15-04-1258 / 26-05-1842), about two-and-a-half years after Andon's death, the porters were now carrying the stuff of his son-in-law, a Konyalıoğlu Takvor Bedrossian, to the house.¹⁴⁶² Takvor was a tall, brown-mustached thirty-years-old fur trader (*kürkçü*) living in the Umur Bey quarter, which was a half-Muslim, half-Armenian neighborhood of 124 houses just parallel to Karaağaç.

Before getting married, Takvor was a journeyman to a fur trader in his early twenties in 1830.¹⁴⁶³ His family name, Konyalıoğlu, suggests that he either came from Konya, the province in central Anatolia with a sizeable Armenian community, or, likely, he was the second generation of a family that migrated from this province. As indicated by the high *jizya* burden, tenants in his household supported his seemingly well economic situation. Starting with a barber Vakes and his son Agob, who left in May of 1832, the house became a temporary residence for a sixteen-year-old Kirkor who came from Bandırma in 1835, and shortly after, for an Isak from Istanbul in 1836. The update registers may have failed to fully capture the human movement in Takvor's house. We also do not know the relationship

¹⁴⁶² OA. NFS. d. 15272 (AH. 1258 / 1842), p. 5.

¹⁴⁶³ OA. NFS. d. 1394 (AH. 1246 / 1830), p. 32.

between him and these people. Maybe some of them, like the young Kirkor, were seeking apprenticeships.

Takvor soon rose in the guild hierarchy and became a master fur trader, possibly in 1838. Around this time, he married one of Andon's daughters. His first son Bedros, named after his father, was born in May 1841 (AH. 20-04-1257 / 12-05-1841). A year later, when Bedros survived his first year of life, he moved with his family to his father-in-law's house. Armenians were used to living in extended households, and Andon's house was spacious enough to handle an extra family. Assuming there was no severe problem in the host family, such as the mother Askohi's illness, the strongest possible motivation for Takvor's movement was to bring economic interests under one roof. Despite the cloth merchant leaving behind a large inheritance, his still young and relatively inexperienced sons were deprived of the most valuable legacy – the economic and social networks.

The loss of socioeconomic ties seemingly unfavorably affected the family's financial well-being long before Takvor arrived. The inventory of their next-door neighbor Khachatur Melkonian, a prosperous textile dyer (*boyacı*) who died three months after Andon and left a wealth of over 40 thousand *guruş*, shows that the eldest son Karabet was given a large loan of 1300 *guruş* to help get the family on track.¹⁴⁶⁴ This loan was the smallest among others sent to prominent yarn merchants, brokers, and residents of the large Armenian village of Cerrah in Inegöl, debt relations whose magnitude was larger and whose variation was similar to Andon's.

Khachatur's generosity toward Karabet stemmed perhaps from his friendship and business partnership with Andon, as dyers were closely associated with cloth merchants, and Andon might have been an active agent in bringing dyes to him, given his relations in southern Hüdavendigâr province. Khachatur also seems to have intense dealings with money circles that may have helped the *bezzaz* to reach cash quickly and at lower interest rates.

There might be a cordial reason as well. We learn from the population register that Khachatur's only son, Soukias, died in 1831 and left behind a son, Vrtanes, who was the same age as Karabet.¹⁴⁶⁵ After the death of his beloved son, the old Khachatur and his grandson

¹⁴⁶⁴ OA. MŞH. ŞSC. d. 2959 (B / 300) (AH. 03-04-1256 / 04-06-1840), p. 34.

¹⁴⁶⁵ OA. NFS. d. 1394 (AH. 1246 / 1830), p. 6, household 51.

pilgrimage to Jerusalem. Maybe, Khachatur, now a pilgrim, was upset over the death of Andon, who was around the same age as Soukias, and did not want to leave Karabet, the friend of Vrtanes since childhood, alone. Andon's name was still alive in his networks – this might have been an excellent prospect for Khachatur to keep the contacts intact by supporting his friend's family.

We will never know the true story behind Khachatur's intentions. But his loan nevertheless suggests that the family needed the backing of someone. Neither the leadership of the mother Askohi nor Karabet and his brothers was enough. For Takvor, whose son had just been born, on the other hand, Andon's death and the family's ambiguous economic situation provided an opportunity to turn his business into a kin-based enterprise. The orphans Karabet and Ohannes had a clear sense of the gravity of a family business, and little Kirkor would soon reach an ideal age to be an apprentice. Takvor could also revitalize some key elements of the decedent's economic relations, particularly in the countryside. It is not unexpected, then, to find the household being headed by Takvor, and Karabet and Ohannes earning their lives as his apprentices in the 1845 tax survey.¹⁴⁶⁶

With this career shift, the new male household head threw his nephews into a different network with new actors. Fur had been a luxury item throughout the ages, and the roads taken to bring quality trade articles are very explanatory of the pricing and rarity of this item in Ottoman markets. Ottoman and Polish caravans brought skins of fur-bearing animals from Moscow through Lwow to Istanbul for centuries. But the Black Sea remained the basic pillar of the fur trade, where thousands of agents of Armenian and Orthodox Christian merchants sailed in the "Ottoman lake" to acquire the finest furs trapped by the natives - the most precious sable, otter, and black fox and highly valuable wolf, lynx, sable, ermine, jackal, beaver, bear, and squirrel skins. As the affordability of furs by wealthy classes in Istanbul and major towns increased, so did the demand for these items. The annexation of Crimea by Russia in 1783 put paid to Ottoman dominance in the Black Sea and internationalized the fur trade. Moreover, the favorable export and import duties and unfettered trade rights granted to the Russians put traders of other nationalities in an unfavorable position.

¹⁴⁶⁶ OA. ML. VRD. TMT. d. 7445 (AH. 1261 / 1845), p. 3-4.

From the late eighteenth century onwards, not only did the advancements in maritime transport increase the volume and decrease the price of furs traded along the ports, but they also made the furs more visible among the populace of the towns near them. Depending on the preferences and purchasing power of the locals, the domestic fur trade involved the sheep-fur traders of northern Greece and Bulgaria (Sofia, Plovdiv, Ioannina, and Salonica were the most important), local woolen weavers, hunters of valuable endemic types such as Anatolian foxes and cats, and as well as the regional varieties of wild animals.¹⁴⁶⁷

Like the cloth trade, the fur trade required connections in domestic and international business and a significant amount of capital that enabled survival in the market and involvement in the regional agricultural political economies.¹⁴⁶⁸ Therefore, old structures and networks were critical to maintaining and enhancing professional practice, collaborative partnerships, and keeping resources in one household. Thanks to the high social, financial, and people capital requirements, the fur merchants' guild structure was able to stay remarkably intact in the mid-nineteenth century, albeit not as heavily regulated by the head-furrier (*kürkçübaşı*) and other administrators in Istanbul due to the decentralizing nature of the trade.

The population registers substantiate the importance of networks and home-based firms. In the city of Bursa, furriers (*kürkçü*) were thirty-seven people, all non-Muslims, twenty-seven were Armenian, and the rest were Orthodox Christians. Only six merchants were recorded as the only persons in this profession in their houses, but this was likely not the case, considering the children or non-employed status of their co-residents. In other words, fur dealing largely remained a household-based trade that earned the masters good incomes. We can see this trend in Takvor's house. The trade alone brought him an estimated annual revenue of 2000 guruş, 500 to Karabet, and 360 to Ohannes. These figures are enough to place the household in the top echelons of the income hierarchy. Factoring in his cash

¹⁴⁶⁷ About the particularities of Ottoman fur trade, see Markus Koller, "The Istanbul Fur Market in the Eighteenth Century," in *Living in the Ottoman Ecumenical Community: Essays in Honour of Suraiya Faroqhi*, ed. Suraiya Faroqhi, Vera Costantini, and Markus Koller, The Ottoman Empire and Its Heritage (Leiden: Brill, 2008), 115–29; Elif Bayraktar Tellan, "Osmanlı Gayrimüslim Çalışmaları Çerçevesinde İstanbul Kürkçüleri," *Hacettepe Üniversitesi Türkiyat Araştırmaları (HÜTAD)*, no. 27 (2018): 115–37.

¹⁴⁶⁸ Examine the inventory of Ohannes Gabrielian, a rich fur trader from the city: MŞH. ŞSC. d. 3134 (C / 112) (AH. 05-09-1280 / 13-02-1864), pp. 1-2.

possessions, expensive fur storage, and loans, the household's wealth was much more immense.

The surveyed income-generating assets offer a glimpse of the wealth and business relations of the family. A shop rented for 200 *guruş* per year suggests ownership of more than one workplace. Andon might have used this shop to conduct his business since he did not have specific storage space. Maybe the business relationship in the Kaygan quarter led to Takvor becoming his son-in-law. Agricultural properties symbolize the inseparability of income and subsistence that marked Bursa's economic history. Two *dönüm* of vineyards was likely used to produce molasses and some wine. Although the area of this vineyard was double the size of those possessed by most urbanites and villagers, the mulberry trees of eight *dönüm* were definitely much larger than the small-sized (of about a *dönüm*) plantations in the region. These trees might have existed in parcels on the city's outskirts and included Andon's orchard. In a good season, all these trees could produce about 380 kilograms of cocoons (§ 2.3.4.3). Space and labor required to feed the silkworms might have been partially satisfied by Takvor's house. Likely, some women and men in the city were employed to take care of the trees and cocoons, which would initiate debt relations. It is unlikely that the women reeled all the silk extractable from these cocoons. Rather, using his capital and connections, Takvor might have been one of the first investors in the newly opened and rapidly flourishing silk filatures and sent most or all of his cocoons to them. While the Armenian elite of the city were the first collaborators in opening these establishments, Armenian women were among the first employed.

As exemplified by the mulberry trees and by the nature of his undertakings, Takvor was adaptive and sensitive to changes occurring in the domestic and international scene. For example, the extension of the articles of the 1838 Free Trade Agreement to the Russians in 1846 enhanced their already-extensive trade liberties (including exporting goods like furs to any Ottoman port by ships carrying their flag and dealing them directly with traders). Meanwhile, the famine-provoked scarcity and population movements in the southeastern Bursa region in 1845 were detrimental not only to his possible monetary interests there but also to communications with southern subdistricts and with his ancestral hometown Konya.

On the eve of major changes, Takvor's household enlarged with the birth of his second son Nasib in late 1847 (AH. 01-1264 / 12/1847-01/1848).¹⁴⁶⁹ The available update registers show that Nasib survived his first year, and the whole family escaped the cholera attack that raged through Bursa in 1848 (§ 2.3.7.3). Although the outbreak of the Crimean War in 1853 would halt the fur trade, Takvor's losses would be compensated by the surge in the region's agricultural exports had he lent substantial money to rural areas. The coming years, however, would be testing not only for each family member but also for all Bursans.

On the second week of the Armenian Great Lent, the second day of March 1855, the earth shook a little in the afternoon. After a bit of panic, the people returned to their daily activities. Fifteen minutes later, the real earthquake hit, making thundering sounds that, together with the people's screams and shouts, echoed throughout the region. Vahram Manguni, the chief scribe of Kevork Kerestedjian, the Armenian archbishop of Bursa, was caught in the disaster in the Surp Asdvadzadzin church (Figure 20). The church was in ruins, and the houses of the Armenian quarters were grievously suffering. Streets were impassable, and bridges connecting the city's east to the center were destroyed, as were most public buildings. Among the buildings that collapsed was the small Armenian primary school of Surp Bogossian, where a falling rock blocked the entrance and trapped little children inside. Manguni's nine-year-old cousin Onnik was one of them. With each stone he and Onnik's family lifted, the hopes of finding the boy alive faded, and they eventually reached his dead body.¹⁴⁷⁰

Just as the city was recovering from the effects of the earthquake, the households, whose residences were intact, were getting ready for the upcoming silk season. But misfortunes never come alone. Forty days later, on the night of the twelfth of April, in Manguni's words, the earth shattered with a sound like cannons being fired underground. Already traumatized by each and every aftershock occurring in the past month, the people escaped their residences and swarmed the gardens, praying in their faiths and crying out loud in a scenery resembling the Day of Judgement. This time fires were more devastating, swallowing whole quarters, bazaars, and other public buildings. The stoves of houses and the

¹⁴⁶⁹ OA. NFS. d. 15282 (AH. 1264 / 1848), p. 5.

¹⁴⁷⁰ Özeydin, "Arşiv Belgeleri," 24–25.

ovens and kilns of workshops burned down all the wooden structures. The *charshi* of the Kaygan quarter, which housed the timber, carpenter, and silk-spinning (*çıkırıkçı*) shops as well as the stoves and kilns of the knifemaker and blacksmiths, was the biggest victim of the fires. A powerful southwester with hurricane-force winds spread the fires to the west, devastating over a thousand structures comprising mosques, inns, bazaars, workshops, factories, and houses (§ 2.3.7.4).¹⁴⁷¹

The fires' impact on the life courses of the city's residents was harsh. Manguni's father lost his life in the coffeehouse he owned and stayed, Takvor's furs burned, and Andon's memory was erased from the built space. The Armenians had fewer deaths than the Orthodox Christians and Muslims, no matter how severely the earthquake hit their quarters. Unfortunately, because we lack the real estate surveys and census records of 1858, we are uninformed about the fate of Andon's household. If everything were rebuilt, the continuity of the fur trade would take some time, as his storage likely disappeared and networks suspended. In the meantime, agricultural assets and the interests collected from the countryside would greatly help. Not only would the visitation of the pebrine disease diminish the silk operations in the city, but the great fires of 1863 that consumed the Armenian quarters would threaten the household's unity and economic position once more.

The earthquakes and fires disrupted the social, economic, cultural, and religious role the Karaağaç quarter played for the Armenian community. Now it was time for the political and architectural interests of the Tanzimat state to take over. Under Ahmed Vefik Pasha's close supervision, the centuries-old meandering street network gave way to the orthogonal planned grids that eliminated culdesacs. The opening of a straight avenue, İpekçilik Street, became a prestigious axis connecting the Sultan's pavilion on the north of the street to the central bazaar area. The widened and straightened road and bridge network ended the self-imposed privacy of the quarters. Large and imposing houses replaced the old and burned dwellings. Towards the end of the nineteenth century, the upper eastern part of the city transformed into a western-inspired neighborhood. It is not so strange that this transformation occurred in a section occupied predominantly by Armenians, who, in the nineteenth century, partnered in the establishment of the filatures like Taşcıoğlu Ohannes, marketed industrially

¹⁴⁷¹ Ibid., 28.

produced goods like Andon Minassian, and promoted a luxurious lifestyle like Takvor Bedrossian.

Figure 20: Karaağaç Quarter, post-earthquake. A late 19th Century Postcard. To the right is the Surp Asdvadzadzin Church (Source: Houshamadyan - <https://www.houshamadyan.org/mapottomanempire/vilayet-of-hudavendigarbursa.html>).



Think of Andon's multifaceted economic relations like a very special fabric. Its yarns were spun in a way that each thread is different – from British yarn, French, American, and Anatolian cloths, dyed and plain cotton, silk, wool, goat and camel hair, fishing net, stalks of cereal plants, grape leaf, reeds, fez tassel, nomad sash, a wood splinter, a splash of iron, and many more. When spread out, it covered the plains, mountains, lakes, shores, and towns of the Hüdavendigar province. Once exposed to regional environmental, infrastructural and empire-wide political and financial developments, it extended or shrank from different directions.

The *bezzaz* Andon Minassian of Kütahya stood at the nerve center of economic relations between Europeans and Ottomans, rich and poor, Muslims and Armenians, villages

and towns, peasants and landowners, the nomadic and the sedentary, quarters and the *charshis*, spinners and weavers, and several others, triggered by capital-based production relations. This is why his portrait as a "deindustrializer" for channeling European merchandise to the Bursa market and an "industrializer" for collecting cloths from and energizing the weaving industries of Western and Central Anatolia is not contradictory. The *bezzaz*, for centuries, had organized cottage and textile workshops, kept the local producers in constant contact with urban markets, and dealt in imported textiles. Changes in power dynamics within the Armenian community from the late eighteenth century onwards, thanks to the infusion of European goods and capital, turned prominent Istanbulite and provincial Armenian merchant families into entrepreneurial households. Thus, his role as a moneylender for notables and peasants in the countryside is not surprising. The accumulated wealth of Andon's households was invested in agriculture to create rural bases of patronage, including his hometown Kütahya.

Contrary to his small store of personal stuff, Andon's credit relations within the city show a great variety suggestive of a dense business and social network, with the large house in the Karaağaç quarter and the shop in Kaygan as the center of operations. The patriarch's death introduced a micro-level contingency by disrupting the networks without the sons reaching maturity. Nevertheless, the abovementioned special fabric was patched with fur. Takvor's takeover of the kin-based enterprise added a new network dimension whose roots were founded on the city-hinterland symbiosis, riches of Bursa and Istanbul, and Western and Eastern European merchant cliques.

In the end, the fabric was flammable. The life course of Andon and Takvor's households was subject to a strong test with the 1855 earthquake and subsequent fires. Their story ends with possibilities and hypotheses but does not necessarily have to stop there. The introduction of new data to the HLC databases can recover important bits about their trajectory after the 1850s and enable us to see how bad the damage was and whether there were new patches.

5.6. Conclusion

The Historical Life Course perspective has allowed for juxtaposing modern records – population registers and tax surveys from the mid-nineteenth century - and the traditional

ones – inheritance inventories and tombstones that had existed throughout the Empire's existence – to reconstruct fragments of evidence into whole biographical stories. However, the resultant HLC accounts are far from being as formulaic and systematic as their components' content is.

This part presented four sections from the same urban area that are physically close but had unique and divergent life trajectories, entanglements of mobilities, material and symbolic conditions, and socioeconomic relations and organizations. Whereas the city's complex social, cultural, and economic structures, substantially transformed by industrial capitalism in the nineteenth century, contributed to this diversity, it is the versatility of the regional and heavily agrarian economy and its ever-present determinants that properly contextualized, united, and individualized the HLC cases. The city, after all, was not only the regional economy's greatest consumer and energizer but also its miniature in terms of the concentration of self-sufficient lifestyles and industries.

Contingency has been key in the individualization of life courses. Multiple transition points collected from the said documents and complementary ones enable us to construe history as moving into uncharted terrain where personal, familial, social, economic, institutional, and environmental stability cannot be taken for granted. In order to cope with and navigate the unknown and uncertainty in an age of intensified incorporation into the world economy and deindustrialization, individuals and households moved within the existing structures and networks yet simultaneously tried to adapt to the changing socioeconomic and political environment.

Various production, trade, investment, and borrowing activities were central to gaining leverage as well as furthering one's standing in an environment where self-sufficiency was prioritized, productivity was low, and cash was scarce. Ownership of agricultural and residential properties within and outside the urban area played an integral role to varying degrees in the survival and enrichment of the four households. Particularly, the public buildings in the case of Mehmed Refi Efendi's household and the *çiftlik* of Süleyman Ağa were the highlights of their wealth. In addition, lending out money was a great source to draw labor, establish networks with other capital holders, and yield great profits from high-interest short-term loans, all three most visible in Andon's example. The intricate

patterns of capital accumulation in economic, cultural, social, and symbolic forms, or lack thereof, identified in each case can help develop a sociology of the Ottoman bourgeoisie and amend the historiographic discontinuity between the Ottoman and Turkish Republican eras on the mechanisms governing wealth acquisition and mobility.¹⁴⁷²

On the other hand, the tax surveys, population registers, and inheritance inventories were not only conducive to creating individual HLCs but also reconstructing the material contexts within which debt, social, trade, and property relations developed. In other words, the stories of debtors, the number and situation of coworkers, a snapshot of inn-stayers, the landscape of quarters, and workers in and size of fields in specific locations could be recreated. Christodoulou's households' work and debt relations could be meticulously scrutinized this way, for example. More importantly, the centrality of agricultural activities in the urban area brought a balance to the cities' often non-agriculturally defined spatial economy in whose construction complexity, contingency and diversity are essential.

Uncontrollable and unpredictable external circumstances rerouted life trajectories. The unpropitious environmental conditions – such as the harsh winter of 1832-1833, the vine and silkworm diseases of the mid-nineteenth century, and, more importantly, the 1855 earthquake – joined by the equally significant political and economic ones – i.e., the advancement of Ibrahim Pasha's troops towards Bursa and the opening of the filatures in the city – and the impact of death on households suggest that complex and convoluted social, economic, and population dynamics inherent in regional patterns could be better understood through individual, local, and regional lenses instead of generalizations and conventional dichotomies (i.e., urban-rural division). Surely, introducing new cases from the city, Bursa region, and other regions will amplify and reduce complexities as the data pool grows.

Conclusion

Focusing on a reconstruction of the population and economic geography of the Bursa district in 1820-1870 based on microdata and related archival evidence, contemporary sources, and secondary literature, this thesis hopes to improve the methodological, empirical, and

¹⁴⁷² David Behar pointed to the lack of comprehensive analyses of the uses of the term bourgeoisie in Ottoman and Republican eras. David Behar, “La notion de bourgeoisie dans l’historiographie de la Turquie contemporaine,” *Revue des mondes musulmans et de la Méditerranée*, no. 123 (2008): 205–6.

qualitative basis for our understanding of the spatiotemporal, social, and material dimensions of economic and population characteristics of Ottoman regions in the first half-century of intense interaction with the world economy. The key arguments, findings, and methodological innovations can be identified as follows:

The Ottoman Empire was the sum of its regional economies. This feature of the Empire had always been present, for it was predominantly characterized by agriculture, crafts-based production, and provisionist trade policy, but it had never been more prominent in the long nineteenth century than before. The incorporation of the Empire into the world economy, which gained rapid momentum after 1820, with the ever-growing flood of mass-produced cheap and foreign industrial goods, facilitated by favorable trade concessions granted to foreign traders, and the subsequent deindustrialization of its (mainly textiles) industries, brought certain regions to the fore as foodstuff and agricultural raw material exporters.

The commercialization and export-orientedness of agriculture and the deluge of cheap manufactures had been the most intense in the first half-century from 1820-1870 in terms of demand, profitability, better integration with market prices, relative isolation from the competition by Asian and American markets, and little resistance to imported goods. The costs, advantages, disadvantages, and uncertainties of this period were realized within the existing structures and networks, given the lack of large-scale investment in and uneven outcomes of production and trade and limited European penetration into the interior parts of the Empire. Contributing to this process was the growing insolvency of the Empire, intensified by increasing monetization of the economy, depreciation of the value of the piaster, costly wars and modernization programs, and European control of Ottoman finances and economic sources after 1850. Despite its rising tax revenues, the treasury's expenditures were spent mainly on military modernization, war expenses, and debt payments, which increased nominally and proportionally in the budget. The focus on maximizing tax revenues failed to shift the tax burden to the wealthy and to improve agricultural and industrial efficiency.

Data on exports from and imports to the Empire indicate that Western Anatolia took the lead in many respects concerning demand growth for specific raw materials and the

impact of the influx of cheap import goods. The production and exportation of specific crops, such as silk, valonia, madder root, cotton, wool, and opium, most of which were grown for centuries, increased or decreased based on the boom-bust trajectory of the world markets and despite the host of persistent environmental, infrastructural, financial, and socioeconomic determinants limiting productivity.

Nevertheless, *Western Anatolia was the sum of its regions*. The heightened demand for commodities like the silk of Bursa, the opium of Karahisar, the madder root of Manisa, the wool of Karesi, and the cotton of Izmir has encouraged grouping them into a whole based on their shared export-oriented agrarian production and import and export profiles that differed from the Empire's interior parts. On the other hand, the intensity, temporality, and spatiality of the incorporation process and the said determinants vastly differed across localities. The prevalence of domestic consumption and subsistence smallholders, costly overland transportation modalities, archaic agricultural and industrial technology, labor and cash shortages, diverse geophysical and climatic conditions, and a range of environmental and political crises united and disunited Western Anatolia in many ways.

In most economic histories of the Ottoman Empire, domestic production, consumption, and exchange realms that were essential to the survival and economic well-being of the regions yet lacked a capitalist transformation have been largely downplayed to create a more coherent picture. Besides theoretical orientations, indispensable in this economic portrayal has been the primary reliance on consular/foreign enterprise data on imports to and exports from Ottoman ports and statistics on the most incorporated/deindustrialized sectors. The relative absence of the Ottoman population and economic microdata from the study scope led to the underevaluation of regional demographic and economic peculiarities that served domestic needs and limited exports to a great degree. Similarly, focusing on large and somewhat ambiguous entities such as Western Anatolia has helped identify big structures and large processes and allowed for making big comparisons yet relegated domestic relations and heterogeneity into the background.

Assisted by consular reports, travelogues, Ottoman archives, secondary literature, and geographic information systems, this thesis studied the population and economic

geography of the Bursa region in the period 1820-1870. Bursa has long been identified by raw silk production and silk fabric manufacturing activities, where the city received the most, if not complete, attention and was separated from its hinterland. The present thesis took a holistic approach and studied, first, population and economic geography within geophysical, climatic, and biological diversity on regional, sub-regional and individual levels using Ottoman population and economic microdata, and, secondly, the historical, socioeconomic, infrastructural, and environmental determinants that impacted the characteristics, distribution, and diversity of economic activities and population in the region in an age of accelerated economic change.

In their ascension to hegemony in Anatolia and the Balkans, the Ottomans built their economic and political power on the existing structures and networks of the Greater Bithynia region. A mild climate, plains with highly suitable soil, abundant water, land, tree, pasture, and fish resources, access to the Marmara Sea, proximity to inner Anatolia, Istanbul, the Aegean, and the Balkans, polyculture and multiactivity comprising a rich biodiversity of field and tree crops, livestock productivity, and related industries and services constituted the crux of Bursa's agrarian wealth. The transformation of the small ancient city of Prusa into the commercially thriving, culturally rich Ottoman capital of Bursa with a cosmopolitan population that kept climbing each year pulled laborers and traders and created a ready market for the agricultural surplus. The gravitational pull of the Greater Bithynia, whose capture was completed in the 1330s, attracted the southern mountainous region behind Olympus and Domaniç mountains to form the core of the Bursa region and integrated even faraway regions to it to feed and finance the district.

In addition to the arrival of settled and semi-nomadic Muslims, the infusion of Perso-Islamic administrative practices, and more regular contact with the Greater Bithynia's hinterland, the flourishing of silk industries had the most transformative impact on the lives of Bursa's inhabitants and economic and political longevity of the district and the Empire. Initially a re-exporter of Asian silk and a fine-quality fabric manufacturer, Bursa's position as the terminal on the famed Silk Road brought unprecedented prosperity and cash flow to the city, particularly between the mid-fifteenth to the mid-sixteenth century and incorporated it into the world economy. Disruption of the silk trade due to inner and international political

crises and heightened rivalry with the Safavids from the seventeenth century onwards decreased the upward trend of commercial activity and population of the city and the region. But these tumultuous eras also made Bursa raise its mulberry trees and cocoons, which increased the interdependency of the region's people on each other and initiated a path-dependent process that endured well into the second half of the Turkish Republic.

Far from its heydays, Bursa retained its fame as a silk-manufacturing stronghold in the world economy in the eighteenth century, this time with a different customer base, more domestically oriented, and more cotton input in the weaving process. The decrease in European imports of Bursa raw silk made it cheaper for local viewers, increasing manufacturing activities. This period lasted from 1750 to 1830, also benefitting from increased exports during the Napoleonic Wars. However, from 1830 onwards, the intensifying imports of cheap British cotton yarn and British and American cotton cloth and the proliferation of European-owned filatures as a result of the mechanization of silk weaving and reeling technology in Europe paralyzed domestic silk spinning and fabric production. Silk and mixed-silk cloth output rapidly declined even if the weavers resisted by lowering prices using imported goods and producing more for the lower end of the market. Instead, the whole region simultaneously started to raise cocoons for the filatures. The incorporation into the world economy through silk connection thus peaked; this time, houses (where sericulture was practiced), not looms, took the lead as workspaces.

Undoubtedly, the opening of silk filatures in the city and its periphery was the most important economic change in 1820-1870. In a way, Bursa became one of the highly-industrialized corners of the Empire yet underwent a massive deindustrialization period. Combined with the impact of the inundation of Bursa markets with cheap cotton cloth and yarn, reeling and loom-weaving industries had significantly lost their share in the traditional occupational structure. The incorporation and deindustrialization surely impacted the silk and cloth manufacturing and trade sectors but did not eradicate or significantly impact other crafts. Although cocoons and machine-produced raw silk exclusively dominated Bursa's exports, the share of silk duties in all taxes collected from the region in 1861 was forty percent at the height of factory production.

Truly, silk was indispensable for repaying the large imports into the Ottoman Empire from Great Britain and elsewhere, as the region did not furnish bulky articles to make up for the imports and therefore did not directly participate in export trade except for silk. Thinking that cocoon rearing took roughly a month and was limited to the capabilities of household labor, that mulberry trees were raised on tiny plots averaging one *dönüm*, and that selling cocoons was only a supplementary activity that earned small incomes to households, one is tempted to inquire into general characteristics of ways of earning a livelihood besides silk production.

Considering the shift to cocoon raising was possible thanks to the legacy of the region's agrarian and industrial economy, the mentioned "forty percent" cannot be sufficiently understood without juxtaposing it with the rest "sixty percent" that gave the region its economic character. This thesis highlighted that the making of the Bursa region was the result of multiple processes working together, not despite each other. Geophysical and climatic characteristics, biodiversity, and millennia-old land use and settlement patterns made multiactivity and polyculture essential features of the agrarian sector and influenced population and economic geography.

The legacy of the Greater Bithynia region could be identified in settlement patterns. By 1839, the Bursa region had a settled population of 94.605 *males*, or, if we double this number to include the females, 189.210 people living in 40.218 households in 591 settlements. 57% lived in the plainer section in the middle, 23% in the littoral-hilly subdistricts in the north (close to Istanbul by land and included the main ports), and 20% in the mountainous south (relatively isolated, almost exclusively Muslim, economy centered on grains and animal husbandry). In the general picture, the Muslims comprised about 68% of the region's population, Orthodox Christians 19%, Armenians 12%, and Roma, Catholic, and Jews 1%. In addition to the settled populace, a tiny semi-nomadic population of 1500 to 2000 males (approximately 3000 to 4000 people) roamed in Bursa for summer and pastures.

Cultivation of field, tree, and industrial crops, exploitation of forest resources, and livestock husbandry were the cornerstones of the economy, supported by manufacturing, trade, and service activities, which were carried out most densely in the central city and less in other subdistrict centers. Proximity to water sources, main roads, the sea, and the city of

Bursa, elevation profiles, and local power relations determined the variety and intensity of agricultural operations.

The middle section that included the plains saw the most diverse cultivation profile, with grainfields existing side by side with mulberry, fruit, and vegetable gardens, plots where water-intensive, industrial crops, and trees were grown, and abundant pastures. Olive trees united the northern section, though cultivation opportunities were more diverse in the hinterland of Lake Iznik. Settlements on higher elevations (e.g., the southern section and mountainous parts in the rest of the region) and with limited access to water had a less varied and more subsistence-oriented production profile, usually centered on grain cultivation (where dry farming was more widely relevant), mulberry plantations, and vineyards. Grains (mostly wheat and barley) were abundantly cultivated in the plains and hills, though more commercially oriented and with better yield in the former. Thanks to plentiful waterpower, mill operations were widespread.

The overwhelming majority of agriculturalists were small independent landholders. That said, lots near water sources in the region's agriculturally more suitable plain zones, especially in Mihaliç, Bursa, and Yenişehir plains, saw large estates and *çiftlik*s. Particularly the expansion of marshes due to inundations of lakes and rivers, expansionist tendencies of Istanbul, Bursa, and subdistrict-based landowners in the absence/thanks to the support of the central administration, and dispossession of landowners due to indebtedness saw a trend towards more and larger private *çiftlik* formation in these zones in the nineteenth century.

Livestock husbandry was done all around the region. Cattle and sheep raising was more prominent in large estates for commercial purposes and more frequent in higher elevations and areas in the periphery of the subdistricts for subsistence reasons. Due to the mentioned expansion of marshes (which also expanded pastures) and the ready markets in Istanbul and Bursa, sheepbreeding was more extensively practiced by large landowners and the region's inhabitants from the 1830s onwards. Leather and wool industries largely served the region's needs instead of gearing toward exports. Fishing and beekeeping occasionally brought extra food and income source for households.

The economic activities in towns, or taxonomically non-rural areas with one-third of the total settled population, were heavily characterized by agriculture. Some of their inhabitants were engaged in craftsmanship, trade, and other manufacturing and service sectors that served local needs. The city of Bursa had by far the highest population (with 15.201 males or 30.402 recorded settled people in 1839) and the greatest occupational diversity, with most of its households engaged in manufacturing and service jobs where silk production, reeling, and silk and mixed-silk textile weaving and trade were the highlights of the economy. Owing to its position near the plain and on the mountain slope and its residents' ownership of trees and animals, agricultural employment and by-employment were significantly high. Coupled with constant short-term migration to and from the city, there was no sharp distinction between urban and rural categories, as suggested by taxonomical designations.

Trade opportunities in the city, towns, and on ports, and agricultural employment in coastal areas and the plains (e.g., sowing, harvesting, shepherding) attracted a temporary population of about 6000 people to the region in 1839. Most migrants headed to the Bursa city, where trade and employment were at their highest. The population registers also allowed us to study the issue of tenancy, migrant households, slaves, political exiles, and foreign citizens that came to the city due to its socioeconomic and political importance.

The lack of bulk exports other than silk was inseparably tied to the characteristics and determinants of the agrarian and manufacturing sectors. The first phase of export expansion in 1820-1870 did not generally increase productivity in Bursa. As said, most farmers prioritized self-sufficiency and produced a small surplus almost exclusively for the subdistrict and the city markets. The legacy of polyculture and the resultant varied (usually starch, fruits, and vegetables-based) diet favored this trend, keeping farming areas small, making sharecropping on other's fields, co-cultivating water-intense, and industrial crops, and shepherding others' animals an essential part of agriculture.

Agricultural technology remained archaic and simple, and the yield ratio of agricultural production and animal husbandry was low. Even if large estates expanded and their numbers increased, there was practically no investment in new technology. Sharecropping, migrant labor, and, more importantly, debt bondage had been the only means

of finding labor. The unavailability of *all* necessary agricultural inputs (e.g., seeds, implements, oxen) for most farmers also perpetuated sharecropping and agricultural by-employment.

In the realm of urban crafts, deindustrialization hit the reelers and weavers and severely harmed the export capacity of the city. Yet, the existing and resisting weavers operated on old technology. Generally, most of the city's manufacturers and service providers catered primarily to the city's markets and needs and were contented with daily profits.

The Great Bithynia region's major thoroughfares formed the main arteries of Bursa's transportation network. However, overland transport was prohibitively costly, and the roads were impassable during certain times of the year, causing isolation even within the region. The region had ports, but it was not a port region. The shipping trade was immensely limited to a coasting one carried out by small boat crews. Istanbul had always been the greatest buyer of articles shipped from ports along the Marmara coast, but increased steamer activity did not transform the volume or versatility of exportation from Bursa. The fact that silk was reexported from Istanbul also prevented directing the attention of global and imperial trade to the district. The road from Gemlik to the city center, which provided better and slightly faster access to the main port, was built to facilitate silk exports but could be opened in 1865 when silk operations severely diminished.

There was no significant extra-regional demand for Bursa's agricultural, industrial, and mining output to initiate large-scale exportation. Notable exceptions were livestock and barley demand from Istanbul, small olive trade with the Danube and Russia, the temporary episode of high exports during the Crimean War, chromium bought by the British, and the usual yet secularly lowering demand for loom-manufactured textiles. Especially the generally inferior quality of the grains, the constriction of grainfields in the west and central Bursa due to marsh formation and spread of mulberry trees, and wide domestic use and low quality of grapes further disadvantaged Bursa's position in the world trade.

Studying population geography helped determine the scope of production where human labor was essential, and most agricultural commodities were consumed within the region. Between 1840 and 1870, the region's and the city's population did not significantly

change to create a pressuring demand. Even though migrant laborers flooded the coastal and plain areas during sowing and harvest season, and the growing silk trade and better economic opportunities pulled a population, notably of non-Muslims, the increase in population was chiefly connected to the resettlement of (Russian and Crimean) war-, conflict-, and disaster-related immigrants (mainly Muslims) and, secondarily, to a lesser extent, semi-nomads. The change in the region's population between the mentioned years was eleven percent, and most newcomers were settled in rural areas. We must also consider the implications of the natural decline of the Muslim population, the wide-scale impact of conscription on it, high mortality, and the natural and ecological disasters that kept the population from growing.

The quantity of capital did not noticeably increase in 1820-1870 either. Chronic cash shortage was worsened by currency and price instabilities. The capital accumulated in the hands of the wealthy was primarily utilized in moneylending instead of stimulating agricultural and industrial production. A class of moneylenders, local notables, merchants, and foreign entrepreneurs, who successfully orchestrated tax collection and lending money at high interest, appropriated Bursa's agricultural and industrial production surplus. In the case of silk, the filatures and their shareholders got the lion's share of the profit, leaving cocoon producers only a small income that solely could not meet their expenses. The pressure of non-redistributive high taxation, unchecked high interest rates, and progressively rising costs of living (especially after the 1850s) exacerbated the existing cash shortage and indebtedness.

We can achieve such broad generalizations only by leaving aside environmental determinants that adversely impacted and fragmented Bursa's social and economic trajectory. The region as a whole and subdistricts and localities on their own were volatile to a variety of occasional calamities. Epidemics such as plague and cholera (reigned until 1850), malaria (worsened with the spread of marshes and combatted by prohibiting rice cultivation in the 1840s and attempting to drain dead water and swamps in the 1860s), typhus (1860s) concerned most inhabitants. On the other hand, the lack of health facilities and literacy also subjected people to many diseases and kept mortality rates high. Even though Bursa was politically stable, natural and climatic disasters such as inundations, fires, heavy or lack of

rains, severe winters, droughts, crop failures, animal diseases, and earthquakes (due to high seismicity) posed constant threats to the inhabitants. Bursa was hit by the infamous 1845 Central Anatolian famine in its eastern and southeastern parts but also became a refuge for those in other provinces escaping it.

Especially the period after 1855 was detrimental to the population and economy. The 1855 earthquake killed several thousand people (at least 4300 enumerated), demolished public buildings and dwellings in the city and the region, and shattered factories in the urban area, suspending most trade operations. Combined with the epidemics of the previous decades and persistent unpropitious agricultural conditions, the earthquake had a negative demographic impact on the already-thinly populated region. Oidium, or the vine disease, which naturalized itself in 1852, ravaged the vineyards grown by almost every household for subsistence, increasing sugar imports. Pebrine, the silkworm disease, severely reduced Bursa's cocoon output (by 80% from the early 1860s until the 1880s), quality, and thus silk exports. Attempts at cultivating cotton to compensate for the losses in silk during the American Civil War were short-lived and abandoned after the war.

By using the population registers and tax surveys from the mid-nineteenth century in aggregate and spatially-specific ways, this thesis delimited the region's external boundaries within the enormous Hüdavendigâr province and internal administrative divisions and studied the population and economic geography of the Bursa region in 1820-1870 in the context of the said determinants. In the last two parts of the thesis, I argued that individual and household-level economic and demographic information contained in the registers and surveys, which were prepared for specific and complementary aims, can offer a perspective from the bottom up. The Historical Life Course (HLC) approach, which has been widely adopted in global historical demography in the past half-century, provided an excellent toolbox to put these sources to creative use.

HLC studies rely on longitudinal datasets made up of linked microdata to measure the impact of historical processes and various determinants of production and consumption on demographic, economic, social, and cultural outcomes of populations over time. The more microdata they possess, the more transition points datasets include, resulting in more sophisticated analyses of life course trajectories. Due to the relatively recent opening of and

generally non-creative uses of the population and tax data, Ottoman HLC studies have not been developed yet.

At the same time, the quantitative-orientedness of HLC studies has long suppressed the biographical aspect of individual entries. In other words, the rich and varied information in the linked data has been sidelined in aggregate uses. This thesis highlighted the "life-course" concept's essence of being at the intersection of biography and history. In doing so, it linked the population registers and tax surveys with Ottoman inheritance inventories and tombstones to create HLCs of individuals and households in the city of Bursa. Designed for specific aims, these sources, which are, depending on the region, available for many people, worked in harmony, complemented and sometimes corrected each other, and set out various possible outcomes of cross-utilizing them qualitatively and quantitatively.

The HLC cases of four households exemplified the findings on Bursa's economic and demographic geography in the streets and buildings of the city and beyond. They illuminated that the city's historical importance, economic pull, and the impact of regional endowments and polyculture played a significant role in the unfolding of life courses. Bursa's highly agrarian economy blurred the supposed sharp distinction between the urban and rural areas. The region's relative isolation from world trade except for silk and high levels of domestic consumption increased the interdependence of inhabitants on each other and left its imprint on occupational and social diversity in the urban area.

The exploitation of the forests, agricultural and industrial production, property ownership, trade, moneylending, and a wide variety of social, cultural, and economic relations could be observed in minute detail. Thanks to the individual information of the HLC material, we could see *who* interacted with *whom* and *what*, as well as *where* and *when*. With the help of regional production and consumption determinants outlined in the first three parts, we could speculate *why* and *how*.

Taking households as our HLC units, we examined how their collective social and economic identities and unique trajectories, shaped by historical, environmental, socioeconomic, infrastructural, and institutional constraints, made and remade the Bursa region as we know it. By exploring the transitions household members underwent – e.g.,

birth, death, marriage, migration, cohabitation, household fission, enslavement, career changes, appointment, property ownership, and devolution – we brought contingency to the fore and how it shaped trajectories. Crucial among these transitions were the natural and environmental calamities, notably harsh winters, the 1855 earthquake, fires, and silkworm and vine diseases, which threatened means of subsistence and exchange, complicated the dialectic between elements of change and stability, and initiated new paths for the region's inhabitants.

All in all, *the Bursa region was the sum of its people*. Its economy was a spatial sum of processes, structures, networks, interactions, dependencies, localities, settings, agencies, and institutions that evolved and worked together over centuries. This thesis acknowledged and examined the gravity of the transformation of silk industries for the regional economy yet argued that it is unfair to isolate raw silk and cocoon production from the rest of the agricultural and crafts activities output consumed for subsistence or marketed almost exclusively in the domestic markets. By properly delimiting the region's external and internal borders, it quantitatively and qualitatively demonstrated that the trajectory of Bursa's regional economy was always subject to a variety of socioeconomic, infrastructural, and environmental determinants whose complex temporal and spatial dynamics destabilize, complicate, and complement the seemingly unilinear narrative of export expansion, incorporation into the world economy, and deindustrialization in 1820-1870.

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