

FACTORY DISTRICTS IN BURSA DURING THE 1860's

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1. Given on the map as "1/1600, 200 Ziraî Osmanlı makyasıdır."

2. The city's structure shortly before this period is given in a description and map prepared by von Hammer-Purgstall, see:

J. von Hammer-Purgstall, *Umblick auf einer Reise von Constantinopel nach Brussa, Pesth: n.p., 1818.*

3. O. Kurmuş, *Emperyalizmin Türkiye'ye Girişi*, İstanbul : Bilim Yayınları, 1974, pp. 136-140.

In 1861-62 a group of surveyors from Erkân-ı Harbiye, the Ottoman General Staff, printed a map of the city of Bursa at approximately 1/2000 scale under the direction of one Suphi Bey.¹ Although available in a number of libraries and partially used by various students, this map deserves to be described in some detail for the wealth of information it yields on the internal spatial structure of this Ottoman city around the middle of the nineteenth century.

When each entry of the map is read the most striking feature is Bursa's extensive factory districts which dominate specific sections of the city to the exclusion of other activities. This spatial characteristic seems to have escaped previous attention and clearly separates the spatial patterns of the city from those that prevailed before the 1830's when factory production did not exist in Bursa.² In fact, the presence of spatially distinct manufacturing activity makes Bursa something of a phenomenon among other cities of Anatolia at this time. Until the Turkish Republic cities in Anatolia were noted for their lack of manufacturing activity and even until the 1950's were thought of primarily as administrative centers and agricultural market places. At İzmir and in its broad hinterland where foreign capital and the export of agricultural products to European and American markets played such a prominent rôle at this time, documents suggest a minor level of factory development in comparison with Bursa.³ As a first step in understanding this peculiar development, the layout of the map as a whole is presented and the distribution of the factories is then examined more thoroughly.

Administrative and structural changes in the later years of the Tanzimat Period brought current European fashions about urban as well as architectural forms to Anatolia, altering noticeably the traditional physiognomy of cities in Anatolia. In many ways these laid the blueprint for much later developments in Turkish cities. A comparison of the Bursa factory districts in the 1860's with quite recent tendencies in the city's industrial spatial structure show that by the mid-nineteenth century Bursa's present manufacturing distribution had already stamped itself on the city's landscape.



Fig. 1 Title Found in the Lower Lefthand Corner of the Map
(Photo : Erkin)

¶ This appears to be an error in the original text and should read "Defterhane-i Hakanî".

The mapmakers themselves summarized their work as follows:

Sâye-i memalik-pirâyeye Hazreti tâcîdarîde emîn-i defter-i hakanî-i hakanî* atufetlu Suphî Bey Efendi Hazretlerinin nezaretiyle ve Erkânı Harbiye-i Şahane ve Mühendishane-i berrî-i hümayun zabitanı marifetiyle bilhendese ahz ve tersim olunup mühendishane-i mezkûre basmahanesinde tab' ve temsil olunan Bursa şehri haritayı mufassaladır. Sene 1278.

They specify that the survey and drawings for the map were carried out by members of the Ottoman General Staff and Engineering Corps under the direction of Suphî Bey, this particular copy of the map being originally registered and reproduced in 1278 (1861-62). It is likely that this work was undertaken to record the city for reconstruction following the disastrous earthquake of 1855 which destroyed much of the city's center.⁴ The actual surveywork appears to have been completed by as early as 1858, because Suphî Bey made a request in that year for the map's reproduction so that it might be distributed to officials in both Istanbul and Bursa.⁵

Ahmet Vefik Paşa, shortly afterwards commissioned as "Anadolu Sag-kol Müfettişi", Inspector for Northeastern Anatolia, may have taken a direct interest in this work as he did in the construction of new roads to the city and the restoration of its historic monuments and markets.⁶ This adds considerably to the map's interest since immediately after its completion large-scale construction, wide, straight roads of European standard, government buildings⁷, and new residential districts on a grid pattern⁸ drastically altered the city's internal physical structure. Thus, the map gives a timely snapshot of Bursa before changes which condemned whole buildings or sections of a complex, amputating part of a traditional entity. The earthquake's damage must have eased the decision to restore or remove a structure in favor of new roads or squares. Apparently Suphî Bey and his team recorded all structures extant in 1855, whether intact or levelled by the earthquake.

When the map was made Bursa's population probably stood between 70 and 80,000, 6,000 of the inhabitants Greeks,

4. V. Guinet, *La Turquie d'Asie*, Paris : Imprimerie Nationale, 1894, v. IV, p. 85.

5. Başvekalet Arşivi (Archives of the Prime Minister's Office), *İrade Dahiliye Tasnifi*, Document no. 28579, H. 1275 (1858). These documents are subsequently given as *Ir-Dah*.

6. F. A. Tansel, "Ahmet Vefik Paşa" *Belleten*, V. 18, n. 109-112, 1964, p. 132.

7. *Ir-Dah*. Umur-i Dahiliye, document no. 35498, H. 1279 (1862).

8. *Ir-Dah*. Umur-i Dahiliye, document no. 34905, H. 1279 (1862) contains Ahmed Vefik Paşa's proposals for the improvement of specific districts (mahalle) in Bursa.

9. A. von Warsberg, *Ein Sommer im Orient*, Wien : n.p., 1869, pp.140-141.

10. E.Z.Karal, *Osmanlı İmparatorluğunun İlk Nüfus Sayımı*, Ankara : Türk Tarih Kurumu, 1943, pp. 93-94.

11,000 Armenian and 3,000 Jewish with the remaining 50 to 60,000 Moslem.⁹ A variety of statistical sources and less reliable accounts suggest that the size of the city's population remained relatively constant between the census of 1831¹⁰ and counts made in the late 1880's. In addition, Bursa's ethnic distribution apparently changed little until 1877 when the city entered a long period of population transfers as the Empire's borders contracted and national independence movements tore asunder the Ottoman multi-national system.

When viewed from a distance, the map appears much like a modern photogrammetric drawing because of the precision with which streets, gardens and buildings are rendered. The legend distinguishes between separate categories of gardens as "hane bahçesi", "hadika", meyva bahçesi" and "zeytin bahçesi", -house gardens, parks, orchards, and olive groves. In addition, the name of the owner or perhaps the local traditional name is noted on each major garden plot. Religious structures are listed in the legend only as "Kilise", "Havra", and "Kabristan"-church, synagogue, and cemetery-while "Köprü"-bridges-are also given a special listing. On the map, itself, however, much additional information for many buildings is given. Structures of the Moslem religious community are distinguished in detail by their individual names, often with each part of a complex recorded separately. Single streets, including minor sideroads, are listed by name and the street numbers of separate buildings are noted in many sections of the city. The city center, where both commercial and religious structures dominate other landuse categories, contains the name of each individual commercial market, "han", and its sections. The great covered market's heart where valuables were sold and kept under tight security, the Bedesten, is also enlarged on a separate section of the map to show the name of each of its streets, indicating in most cases the goods dealt with in that part of the Bedesten. This is shown in (Fig.2), where one can note that the silk trade presumably occupied an important area in commercial activity.

All these notations are ones of traditional importance. Surprisingly, however, one finds individual factories identified as "fabrika" (*فابريكا*) with the same painstaking attention given to public and religious structures. From the size of the individual buildings that can be read on the map presumably only large factories were singled out for separate listing. If this were the case, the areal extension of factory activity dominated two major portions of the city. Judging from the map, many of these buildings were quite sizeable by modern standards and independent records indicate some at least occupied more than one floor. Few, however, are noted by the name of the company, the Hümayûn İpek Fabrikası being an exception. Special attention to this factory by the Sultan's engineers and staff officers is understandable since this "Imperial Silk Factory" operated for the Palace. The construction of the map happened to coincide with a rapid expansion in silk production and silk factories in Bursa. The list of entries from Bursa for the National Exposition at İstanbul in 1863¹¹ and for the International Exposition in Paris four years later¹² testifies to this efflorescence when compared with establishments in the city ten or fifteen years earlier. Since the map probably underestimates the number of factories or refers to a number

11. *Coup d'Oeil général sur l'Exposition Nationale à Constantinople*, Extraits du Journal de Constantinople, Constantinople : n.p., 1863, p.107.

12. Salabeddin Bey, *La Turquie à l'Exposition Universelle*, Paris : Hachette, 1867.



(1) Haffatlar çarşısı (Shoe Market) (2) Kazazlar (Silk Manufacturers) (3) Kuyumcular (Jewelers) (4) Gelincik çarşısı (Poppy Market) (5) Terziler (Tailors) (6) Demirkapı çarşısı (Demirkapı Market); this may refer to the Cilimboz or Demirkapı factory district, its material being handled here, or may simply be a proper name for this section of the Bedesten.

Fig. 2 Plan of Bedesten as Shown separately on the map (Photo : Erkin)

of years before its actual printing, this manufacturing monopoly of large and distinct areas of the city remains undeniable.

Two particularly homogeneous factory districts may be distinguished on the map, one to the west of the fortress extending from its very slopes up the hills to the south along the Cilimboz stream and over as far to the west as Muradiye; the other is visible primarily on the right and left banks of the Gökdere in the eastern section of the city. Occasional factories also appear but more sparsely on the northern fringes of the city towards Bursa's agricultural plain. A few of these are distinctly large undertakings and one seems to be fed by a special canal network. This appearance of factories on the edge of the city where fertile agricultural land merges with urban functions is a tendency which grew more pronounced over time and now is the most prominent feature of Bursa's expanding manufacture. In the nineteenth century this drift to the plain and more sparsely inhabited parts of the city was probably associated with rising land values and the more footloose locational opportunities that steam power had introduced to Bursa.

Unfortunately the map does not distinguish between the types of factories so that other records will be needed to provide more than speculative suggestions about individual sites. Judging from the size of factories, their locations and contemporary technology in silk and textiles these two



Fig. 3 Silk Cocoon Depot, "Kozak", on the Cilimboz
(Photo : Kalenderoğlu)

districts were functionally distinct. The first contained large factories, grouped around the upper forks of the Cilimboz stream. No structures other than factories exist in this section of the city, with the exception of an occasional mosque or "ayazma", a sacred fountain belonging to the Greek community. Large tracts of open land also surround each establishment. Nevertheless, this is not an urban fringe development since residential quarters surround it at a distance on three sides, the sharp slope on the fourth discouraging expansion on that side. Barracks for workers, "bekâr odaları", are also shown near this area, but whether or not they actually housed factory workers is unclear. Since 96% of the factory labor in Bursa at this time was female, these barracks may have provided lodging for only the small number of single male foremen.¹³

13. Details on labor and production were obtained from the Public Records Office in London; these documents are preceded by PRO in the following references.
PR: F083 "Report on Factories and Factory Labor in the District of Bursa". Vice-Consul Maling, Oct. 5, 1872.

Water for boiling as well as waste disposal are vital in the process of extracting silk thread from the silk cocoon. Thus, the proximity of abundant and rapidly running water is an important factor in the site selection for a large silk factory. Cocoons that are to be reeled must be boiled in water, basins being used for this purpose. Reeling whether aided by steam-powered machines or done totally by hand must be performed at the same site while the cocoons are wet. The waste water left after boiling each batch of cocoons must be disposed of immediately. Rapidly running water is vital for this operation if working conditions in and around the factory are to be bearable. This Bursa factory concentration around the Cilimboz suggests that the factories in this area were all filatures, handling this silk-reeling operation. In fact, travellers during the 1860's mention only this district as the area containing steam filatures. Additional supporting evidence comes from our knowledge that the Hümayûn İpek Fabrikası, located near the entrance to this district, was totally a silk-reeling factory.

This imperial filature, like other factories operating for the Palace such as the Basmahane in İzmit and Feshane in İstanbul, had an opportunity to undertake mechanization and large-scale production well before other local investors.

The State held an initiative in the import of machinery and technical know-how from the West because it controlled the mundane but vital formalities that the State required, from permission to open a new enterprise to the marketing possibilities available once established. In addition, it had the means of obtaining the necessary investment capital and could ensure that output would be bought at a price to keep the factory running, even if this essentially meant subsidies.

Although the Imperial Silk Factory in Bursa was the pride of the Ottoman State's achievements in modern silk processing, it could not stand in comparison with two other steam-powered filatures in the same city owned by one Sarım Manass. While the average annual production of the Imperial Silk Factory stood at approximately 180,000 francs in the early 1860's, the Sarım Manass filatures produced an average output in the same years valued at some 920,000 francs¹⁴, more than four times that of the Palace factory. These estimates are based on the Ottoman State's own figures which would be unlikely to play down the place of the Palace relative to that of a private investor. Other evidence of early investment in silk filatures in Bursa leads one to conclude that individual investors were active in applying the new techniques and expanding their activities in Bursa. In the Ottoman system this could take place, however, only with the open consent of the State, supported by official documents at each turn.

In the eastern section of the city factories may also be identified near the banks of the Gökdere. Although their smaller areal extent raises the possibility that they were different types of establishment, perhaps conducting dyeing or weaving, there is reason to believe that some were also filatures. One silk-reeling factory is classified separately on the map and Dalsar has located another farther downstream in other written sources.¹⁵ This second factory became the target of vociferous complaints and even violent efforts on the part of nearby residents to destroy the building because of the objectionable odour it created in the neighborhood. Such resistance implies that filatures could not have been numerous in this more densely populated part of Bursa. Only flour mills can be eliminated from the list of possible production areas for these factories, since mills are identified separately on the map and cluster around the upper reaches of the Gökdere.

Consul reports for the period claim that all Bursa factories were silk-reeling establishments. "Cotton and woolen yarns, and cotton woven and silk woven fabrics, are still produced unassisted by the resources of Factory machinery and Factory labour".¹⁶ No mechanized textile weaving is known to have existed in Bursa before 1910. Cottage industry, however, continued to play a rôle in the city's production for home consumption and the domestic market until quite recently.

Whatever the actual processes involved on the Gökdere, this factory district is spatially distinct from the Cilimboz by the urban distance separating the two, the small size of each individual factory, the lack of open space around each factory building and the more heterogeneous clustering of other structures in the vicinity. For the filatures, it is likely that they had fewer reels and workers and may have been older establishments; they must have been mechanized as well because Maling claimed that organized hand-reeling had totally disappeared in Bursa by 1857, being limited afterwards

14. Coup d'Œil général sur L'Exposition Nationale à Constantinople, Extrait du Journal de Constantinople, p. 107.

15. F. Dalsar, *Türk Sanayi ve Ticaret Tar. Hinde Bursa'da İpekçilik*, İstanbul: Sermet Matbaası, 1960, p.413.

16. PRO F083, Vice-Consul Maling, October 5, 1872.

to cottage production. Since nearly all female factory labor in the city came from the Armenian and Greek communities, the labor composition of these two factories may also have been different. The Cilimboz factory area was situated close to what were Greek quarters in Bursa at the time while the Gökdere banks were inhabited then predominantly by Armenians. Churches may be identified on the map close to both factory districts, although they are conspicuously absent in other parts of the city. Moslems occupied the remainder of Bursa, with the exception of an old, prominent Jewish community at the base of the citadel between the city's commercial center and Cilimboz factory district.

There is growing evidence, however, that the ethnic division of labor presents an oversimplified picture; more complex processes tended to complicate these diagrams in an intriguing way. Consular reports frequently refer to the State's orders forbidding factory owners to hire Turkish women. These orders in themselves are prima facie evidence that such cases occurred. The employment of Moslem women amounted to more than a few scattered instances. A French fitature owner in the Cilimboz district, one M. Marschall, out of preference employed only Turkish women in his factory in the 1860's, claiming that the Armenian and Greek workers demanded exorbitant pay while the Turkish women would work for less and proved every bit as skillful and hardworking.¹⁷ This ploy to raise profits by tapping a new labor source willing to accept lower wages apparently proved successful at a moment when the demand for factory labor soared in Bursa.

17. Wacsberg, *Ein Sommer im Orient*, p. 145.

Figure 6 shows the factory districts as located on the map. Only those buildings which had the name "fabrika" clearly written on them were included in the analysis; a number of possible candidates were eliminated either for lack of a label or because the lettering had faded beyond recognition.

This undoubtedly gives a low estimate for the actual number of establishments since factory lists for the period give 88 silk-reeling factories for 1861 and 90 for 1862. The number had soared from 29 in 1855, remaining at 90 into the 1870's.¹⁸ Size of establishment varied from a working

18. PRO F084/415.



Fig. 4 Demirkapi Church adjacent to the Cilimboz District, Now Used as a Silk Depôt
(Photo : Kalenderoğlu)



Fig. 5 Nursing Room in a Silk Factory on the Cilimbos that Has Survived Unchanged Since the 1860s (Photo : Kalenderoğlu)

capacity of 10 to 132 reels. All reeling establishments used power. One estimate of workers per reel in Bursa reports some 154 workers to operate 100 reels, 100 being winders and reelers and 54 being auxiliary labor; another estimate in the *Salname-i Hüdavendigâr*, Bursa Province Yearbook, gives 180 workers for every 100 reels.¹⁹

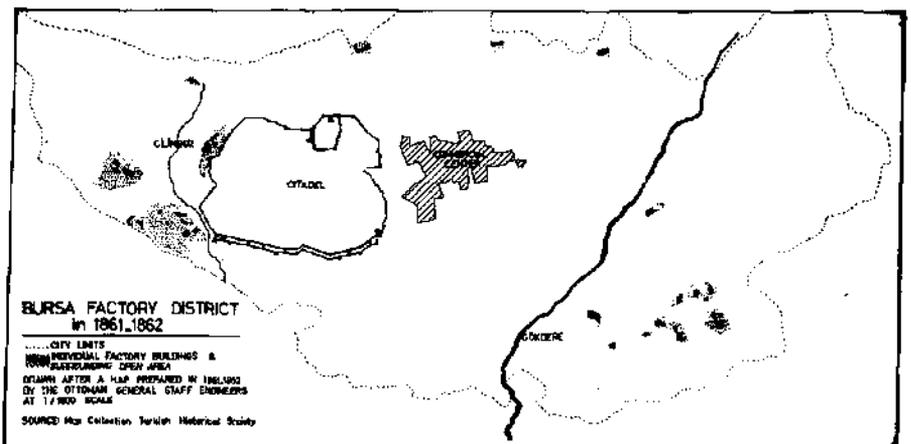
Thus, the number of reels in a factory can be used as a general indicator of the labor employed. Since the 90 factories by Maling's estimates contained 4345 reels, between 6,700 and 7,800 workers may have been employed in Bursa in silk reeling alone when the map was made. With a city population between 70 and 75,000²⁰, some 9 to 11% of the city's inhabitants may have been wage earners in silk-reeling alone, monopolizing the daily work pattern far more than any type of employment does in the city today. In 1970 Bursa ranked above all other Turkish cities for its concentration of textile manufacturing, but only 8% of the city's population was employed in a broad definition of textile activity which included numerous processes such as dyeing and weaving in addition to reeling.²¹ The size of individual reeling establishments in the 1860's varied considerably,

Fig. 6 Bursa Factory Districts in the 1860s as Extracted from the Map (Drawing : Orçun)

19. F. Dalsar, *Türk Sanayi ve Ticaret Tarihinde Bursa'da İpekkılık*, p.410.

20. For sources, estimating techniques and results see: L. Erder, "Patterns of Population Change in Nineteenth Century Anatolia". Princeton University Conference in the Social and Economic History of the Near East, June, 1974.

21. L. Erder, *Bursa Şehri : Şehircilik ve Nüfus*, submitted to the State Hydraulics Works, Nov. 1974, Ankara. (Limited Copy Bound Report.)



the largest employing between 240 and 300 workers. While sizeable by modern standards, this is small in comparison with the largest textile factory in Bursa today. Specialization, however, separates the reeling factories of the 1860's from textile manufacture today since they performed only a small part of the total production process.

Two obvious questions pose themselves. First, what factors induced these factories to explode on the Bursa landscape and secondly, why were these factory operations seemingly confined to silk reeling. The answers lie in the silk production itself, the changing technology of silk weaving in Europe at the time, and the contemporary relationship of Ottoman silk production to foreign trade and investment.



Fig. 7 Silk Reeling in the Former
Romangal Factory on the Cilimboz
(Photo : Kalenderoglu)

Silk production is a labor intensive process, where the time elapsing between certain steps in the production process must not exceed a finely set limit. Selection, grading and the sale of cocoons must take place close to the place where silk worms are raised so that these steps may be completed before the butterfly emerges from its cocoon. If the worm matures, the valuable silk threads are broken, thus completely eliminating the cocoon's market value. Worms are killed within the cocoon either by exposure to the sun, an inefficient method, by steaming or by heating in an oven. The second method was applied widely in Bursa at this period for export market silk. This method was more labor-intensive than the oven system but cheap skilled female labor was locally available.²²

22. PRO FO/334 Vice-Consul Maling. "Report on the position of the Artizan and Industrial classes in the district of Brussa in the year 1869."

Following the sale of the cocoons reeling should begin immediately for obtaining superior silk threads. The weight of silk is another factor encouraging merchants in long-distance trade to have the cocoons go through the weight-losing filature process. During the first part of the reeling operation the cocoons are immersed in boiling water. Once soft, the threads are caught up in strands of three or more and wound on to a reel. When reeling has taken place the raw silk is ready and later steps involving the preparation of thread for weaving and weaving itself may be postponed to be undertaken at points far removed in space from the silkworm farms and filatures. The throwing of the silk on spools prior to weaving, however, must be carried out at the point where weaving is performed. Thus mechanized throwing could not be expected in Bursa unless weaving factories using this quality thread also existed, and apparently they did not. Finally, the high value-weight ratio of the reeled silk means that the intervening distance between reeling and weaving does not concern the silk textile manufacturer sufficiently to encourage investment in production units near the source of raw silk.

23. This dependence was due partly to the silkworm epidemic in Europe between 1843 and 1865 and partly to increasing European demand for silk. See: Bowden, Karpovich and Usher, *An Economic History of Europe Since 1750*, New York: H. Fertig, 1970, p.466.

Since European silk manufacturing depended heavily on the import of raw silk during the mid-nineteenth century,²³ the encouragement of silkworm raising in Bursa where it had been established for centuries is not surprising. As the reeling

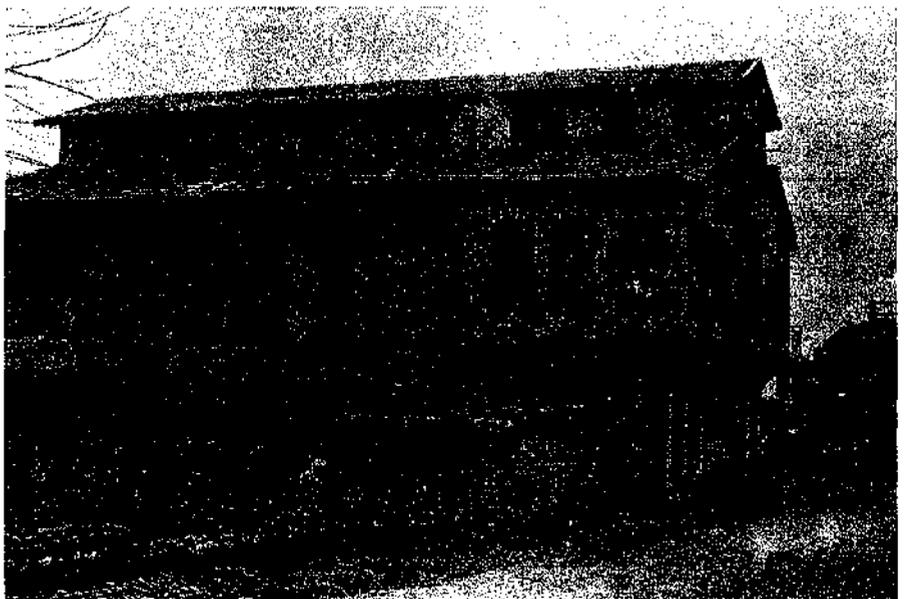


Fig. 8 Bursa House with Second Storey Arranged for Wormraising and Cocoon Storage

operations had to be performed at the raw material production point, it is natural to find filature operations booming in Bursa during just the years when Europe was experiencing a severe silk shortage

"Factory" as the term is used on the map should not imply industry with an integrated production process from raw material to finished product. These silk reeling factories were only performing the last steps in preparing raw material for export. In fact, the reeled silk was referred to as raw silk, "ham ipek". Over 90% of Bursa's silk production was exported to France during the nineteenth century, virtually all of this bound directly for Lyon. All factory-reeled silk was exported from Bursa, except for the reeled silk produced by the Hümayûn İpek Fabrikası which was sent across the Marmara to the Hereke factory.

These Bursa factories cannot be classified, however, as craft shops. They were organized enterprises using power machinery, employing wage earners working under a single roof who were stratified by the specialized operations they performed. This change from manual to machine production in Bursa was confined only to reeling and winding in steam powered factories. Its introduction appears to have been forced by technological developments in silk textile weaving in France rather than by changes related to Ottoman domestic market. By the 1830's a new type of silk weaving loom had taken over silk textile production in France. These looms required threads of standard gauges which even the most skilled manual operators could not guarantee. To meet these standards reeling had to be performed in steam filatures. Until this time all reeling in Anatolia had been done with a hand or treadle reel. As Bursa switched to the steam filature, manual output declined but did not disappear. These traditional reels continued to prepare raw silk for local textile weaving whose products were destined only for domestic market. The spatial distribution of traditional reeling was dispersed, confined to cottage production since collecting the reelers under one roof was unnecessary.

On Suphi Bey's map no indication can be found of a foreign merchant quarter like Pera in İstanbul or Bornova and Buca in İzmir. Like its factory districts, this characteristic at first glance appears to separate Bursa from Turkey's other European-oriented export cities. Other records and accounts show that European consulates and missionary schools existed in Bursa when the map was made. The number of Europeans actually residing in the city, however, was negligible. Again the peculiarities of silk production and export as Bursa's economic base probably determined the difference in the city's residential structure just as it did in manufacturing. Merchants needed to be present in Bursa only for the brief two-week period at the end of the producing season when cocoon sales and transfer to reeling factories took place. Local representatives could oversee transactions during the rest of the year.

Bursa's proximity to İstanbul also must have tended to discourage foreign merchants from settling in Bursa for reasons of both household comfort and business convenience. The Ottoman capital offered all the amenities of its long-established foreign colony and contemporary Levantine society looked down its nose at life in the provinces. Boat

24. X. Heuschling, *L'Empire de Turquie*, Brussels-Paris:n.p., 1860, pp.240-243.

25. Başvekâlet Arşivi. *Cevdet Maliye Tasnifi*, Documents no. 22849, H.1257 (1841), no.996, H. 1256(1840), no. 1298, H. 1216(1801). This collection is hereafter given as *Cev-Mal*.

26. *Cev-Mal*. Document no. 10068, H. 1220(1805).

connections for six days of the week linked Bursa's ports with the capital and the journey across the Marmara Sea was a pleasant overnight trip.²⁴ For commercial transactions, especially in silk, close connections with officials and their go-betweens in Istanbul were a merchant's best stock in trade. 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.²⁵ Furthermore, it set specific quotas each year on the amount of silk that that State would permit sold to foreigners for export.²⁶ All such decisions took place in Istanbul. Another and frequently applied alternative, smuggling, was particularly difficult from Bursa; the Marmara Sea, constricted at one end by the Bosphorus at Istanbul and at the Aegean exit by the Dardanelles made tight control possible for even the weakened Ottoman State as long as it wanted to keep a watchful eye.

Permanent residence in Bursa was thus unnecessary since the city's "hans" or hotels could perform the brief housing function during the short selling period in the city itself. Earlier documents show foreign merchants resided in the "Pirinç Han" close to the city's commercial center; later nineteenth century travel accounts mention representatives keeping their business offices and sleeping quarters in specific "hans" within the commercial center. A few European-style hotels still standing in this same area date from the later nineteenth century when the raw silk trade was flourishing and the Ottoman Public Debt Administration (Düyun-ı Umumiye) had usurped the State's control.

If other primary sources for 1855-1865 such as deeds, single factory lists, building sales and construction records can be collected, Suphi Bey's map may be expanded to show Bursa's urban structure with more social dimension. In itself, however, it stands as superior documentary evidence that as early as 1860 Bursa did not conform to either a "pre-industrial" or an "Islamic" urban pattern. Landuse patterns were dominated as much by manufacturing as traditional administrative and economic functions. They also show the beginning of clear functional differentiation characteristic of the industrial city, with manufacturing emerging on the periphery as a distinct category separate from activity at the center of the city.



Fig. 9 Kozan Han Still Thrives as the Center of Bursa's Business Life; Parking Permitted for only Office-Renting Merchants and Manufacturers. (Photo : Kalenderoğlu)

1860'LARDA BURSA'DAKİ FABRİKA MAHALLELERİ (DISTRICTS)

ÖZET

1861-62 yıllarında Erkân-ı Harbiyeden bir ekibin kadastrocu Suphî Bey yönetimi altında Bursa Kentine ait 1/1600 ölçekte hazırladıkları bir harita İstanbul'da basılmıştır. Haritanın 19.yüzyılın ortalarında Bursa kentinin iç mekânsal yapısına ilişkin zengin bilgiyi kapsadığını düşünerek, bu haritayı başka araştırmacılara tanıtmak yararlı görülmüştür.

Bu çalışmaya 1855'de kent merkezinin büyük bir kısmını yıkan zelzeleden sonra başlanmış ve o anda yıkılmış veya ayakta duran bütün binalar, büyük bir titizlikle tek tek sokak numaralarına kadar kaydedilmiştir. Ticari ve dini binaların hakim olduğu kent merkezinde her han ve külliye'nin ve bunların çeşitli resimlerinin adı harita üzerinde belirlenmiştir. Ayrıca bedestenin büyütülmüş bir plâna yapılmış, bunun üzerinde dükkanların nitelikleri ve sokak isimleri de işaret edilmiştir.

Araştırmamız kentin bilhassa bu döneminde en dikkat çeken özelliği olan yaygın fabrika bölgelerini inceliyor. Kadastrocular geleneksel yapılarına gösterdikleri titizlikle fabrikaları da işlediklerinden fabrikaların mekânsal dağılımı hakkında oldukça ayrıntılı bilgi bulmak mümkün olmuştur. Bu fabrikaların üretimi hakkında bilgi ise İstanbul Başvekâlet Arşivi ve Londra'daki Kamu Kayıtları Dairesinden temin edilmiştir. Son on yılda büyük bir hızla sanayileşen Bursa'nın makineleşmeye dönük başlangıcı haritanın üzerinde bir asır önce ayrıntılı olarak gösterilmesi karşılaştırma nedeninden ötürü önem kazanıyor.

1860 yıllarında Bursa'nın iki kesimine açıkça hakim olan bu fabrika bölgeleri, kentin mekân yapısını sanayiinin henüz kurulamadığı 1830'lardan öncesine göre kesinlikle farklılaştırır. Haritada gösterilen fabrikaların yer seçimi ile gelişmelerini açıklamak amacıyla Bursa'da bu fabrikalardan hâlâ mevcut olanlar incelenmiştir.

İlgiyi çeken ilk sonuçlara göre 1860'larda bu fabrikaların aşağı yukarı hepsinin ipek filâtür (mancınıkhane) oldukları, toplam olarak 8000 civarında kişiye iş imkânı sağladıkları ve işçilerin %90'dan fazlasının kadın oldukları anlaşılmıştır. Bu erken makineleşme ilginç bir oluşma gösterir. Fabrikalar ham ipeği tamamen Avrupa'ya ihraç etmek amacıyla gelişmiş, yerli kumaş ihtiyaçlarının ise, ya ithal veya geleneksel metodlarla yapılarak temin edilmiş olduğu anlaşılmaktadır.

Fabrikaların yer seçiminde bol akar su ile işçilerin bol bulunduğu konut yerlerinin yakın olmasının önemli bir rol oynadığı izlenmektedir. En geniş fabrika alanı Cilimboz deresinin etrafında, ikinci büyük fabrika alanı ise Gökdere'nin kıyılarında görülmektedir. Ayrıca bir kaç büyük fabrika kentin kuzeyindeki alt konut alanlarına ve tarımsal arazisine yakın bulunup sularına aynı derelerden temin ediyorlardı. Kentin artan arazi fiyatlarının bu yerin seçiminde rol oynadığı sanılıyor.

Bu devirde Bursa'da yapılan geniş Fransız yatırımlarına rağmen, yabancıların İzmir ve İstanbul'da olduğu gibi belli başlı koloniler şeklinde yerleşmemiş olduğu da izleniyor. Başkent'in yakın oluşunun etkisi ile Bursa'nın ipek satışına has olan özellikleri bu tür yerleşmelere olanak sağlamadığı kanısı uyandırıyor.

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