

On the Roads: Transportation and Question of Logistics during the National Struggle (1919-1922)

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Declaration of Originality

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Abstract

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Uğurcan Acar, Master's Candidate at the Atatürk Institute for Modern Turkish History at Boğaziçi University, 2022

Assistant Professor Ramazan Hakkı Öztan, Thesis Advisor

This study presents a narrative on road and railway transportation in the years of the National Struggle regarding the transportation legacy from the Ottoman Empire to Anatolia. In addition to great technological revolutions in the field of transportation in the 19th century, the state directly participated in road construction works during the Tanzimat period. Moreover, in this century, the transformation of the nature of war that necessitated the movement of more resources within the country increased the importance of the transportation factor in the context of the war power. Financial and military difficulties in the last period of the Empire prevented the formation of a developed transportation network within the country. Weapons and ammunition freight to the Western Front during the National Struggle took place under challenging conditions and extraordinary measures.

35,000 words

Özet

Yollar Üzerine: Milli Mücadelede Ulaşım ve Lojistik (1919-1922)

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Assistant Professor Ramazan Hakkı Öztan, Tez Danışmanı

Bu çalışma Osmanlı İmparatorluğu'ndan Anadolu'ya kalan ulaştırma mirasını gözönünde bulundurarak Milli Mücadele yıllarındaki karayolu ve demiryolu ulaştırması üzerine bir anlatı sunmaktadır. 19. Yüzyıl ulaştırma alanında büyük teknolojik devrimlere şahitlik ederken, Osmanlı İmparatorluğu'nda da Tanzimat ile beraber devletin bu alana direkt katılımı yönünde gelişmeler yaşandı. Yine bu yüzyılda, savaşların ülke içinde daha fazla kaynağı hareket ettirmesini gerekli kılacak şekilde dönüşmesi savaş gücü bağlamında ulaştırma faktörünün önemi artırdı. İmparatorluğun son dönemindeki finansal ve askeri sıkıntılar ülke içinde gelişmiş bir ulaştırma ağı oluşmasını engelledi. Milli Mücadele sırasında Batı Cephesine yapılan silah ve cephane sevkiyatları zor şartlarda ve olağanüstü önlemler altında gerçekleşti.

35,000 kelime

To my mother and father

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Glossary of Non-English Terms

Şose Macadamized Road

Abbreviations and Acronyms

TBMM	Grand National Assembly of Turkey (Türkiye Büyük Millet Meclisi)
TİH	Turkish Independence War (Türk İstiklal Harbi)

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Introduction

The absence of roads and the terrible condition of the existing roads had been the bleeding wound of the Anatolian geography. This wound, one of the main reasons for Anatolia's economic backwardness, revealed itself most severely way during the days of the national struggle and came to a level that almost caused the loss of the war. Putting a strong army against the Greek forces advancing in Western Anatolia would only be possible by transferring weapons, ammunition, and even food supplies from various regions of Anatolia to the Western front. In Anatolia, where tons of materials can be shipped from east to west in just a few days in today's transportation infrastructure and vehicles, such shipments were continuing for months a century ago. After all, the transportation speed in Anatolia was, at most, the speed of the coachman walking next to his animal. That was the highest speed because the Anatolian roads, many of which were certainly not roads by modern standards, allowed passage only after the rains had stopped and the puddles had dried up. In the days when the Anatolian resistance struggled to stay alive, the quality of transportation was the same as it was centuries ago.

However, 150 years before the national struggle, there was a revolution in roadmaking with the MacAdam technique. Similarly, steam power had started a great transportation revolution on land after water transportation. The steam-powered locomotive and its wagons revolutionized

land transport in terms of speed and capacity that the previous generation could not even imagine. Fifty years before the national struggle, the German state was able to send approximately 250 thousand soldiers with their equipment to the Austrian border in just 10 days.¹ In the 1920s Anatolia, weapon and ammunition freight from the Eastern front to the Western front took 6 months. While transportation opportunities in Europe were taking firm steps towards achieving market and price union, wheat shipment could not be provided even between two neighboring provinces in Anatolia due to transportation barriers (*men-i mürur*) that posed a risk of famine. In short, despite the technological revolution in transportation, Anatolia's transportation facilities had not changed much during the national struggle.

If we exclude the limited contribution of the railways, transportation and haulage activities were the same in the years of the national struggle as they were centuries ago. However, why was this so? This question cannot be answered simply by photographing war days. In order to create a narrative from the photographs of those days, it was necessary to go on a journey in the past. It was necessary to go to the 1869 regulation to fully understand the law proposals submitted by the representatives to change the legal status of roads. In order to better understand the absence of roads that caused the journeys in Anatolia to take months, a time travel to the 19th century had to be made. It was necessary to go back to the days when the railways came to Anatolia in order to understand the causes of the non-Muslim personnel problem in the railways during the days of the national struggle. Here, the second and third chapters serve this purpose. The second chapter offers a panoramic view of the transportation possibilities in the Ottoman Empire. The third chapter focuses on post-Tanzimat occupations on road transportation. Because road construction works had a very exceptional place among the public works reforms shaped by the Tanzimat. During this period, Ottoman bureaucrats made arrangements and prepared plans to create a transportation infrastructure and network in the empire. I refer to these in chapter three.

1 Aysal, "Osmanlı ve Yunan Demiryollarının," 342-343.

In Ottoman historiography, the railways have an overwhelming weight in the studies in the field of transportation. The international character of the railways in the struggle for the influence of the great powers in the empire and the political economy of railways have a wide place in Ottoman historiography. Similarly, the place of steamships in the increasing international trade has been studied extensively. On the other hand, Ottoman history studies neglected or overlooked roads.² The third chapter deals with the road issues in the Ottoman Empire. Of course, the only reason why I included such a chapter is not that this issue is neglected in the literature but that the National Assembly that carried out the national struggle took over the Ottoman roads and road law, so looking at the road works in the Tanzimat period helps us for a better understanding the state of transportation during the national struggle. Indeed, the classification of roads, frequently mentioned in the national assembly, the necessity of working in road construction, the road tax, and the need to centrally plan the roads take their source from this period.

Thus, this thesis study provided continuity between the transportation legacy of the 19th century and the transportation activities in the national struggle and tried to present a better narrative than the existing studies about transportation in Anatolia during the days of the national struggle.

There are studies on the transportation dimension of the national struggle. Many theses have been written in Turkish on this subject.³ The vast logistical problem that the national powers had to solve is exciting as a research topic. This topic has found its place as a separate volume

2 In this regard, Özkan's historiographical criticisms are quite valid and appropriate. See: Özkan, "A Road in Rebellion," 16-51.

3 See, for example: Ezer, Feyzullah. "Batı Cephesi'nin İkmal ve İaşesi (1919-1922)." PhD diss. Fırat University, 2004; Ataman, M. Günel. "Kurtuluş Savaşı'nda Levazım İkmal Faaliyetleri." MA thesis. Hacettepe University, 2007; Şahin, Mustafa. "Kurtuluş Savaşı'nda Ulaştırma Hizmetleri." MA thesis. Dokuz Eylül University, 1999.

under the title of "Administrative Activities" in the "Turkish War of Independence" book series prepared by the Turkish General Staff.⁴ The book covers the military logistics and transportation activities carried out during the war comprehensively based on the history of war archives. Studies dealing with transportation activities in the national struggle are mostly the repetition of the archive documents of this book. This repetition is inevitable in a way because there is no other primary source on the subject. The fourth chapter of this study suffers from a similar problem. On the other hand, my relevant chapter in this study differs from other studies in that it also includes discussions about the roads of the period in the parliamentary minutes. Discussions on various roads in the parliamentary minutes contain essential information about the economic life of the period. My chapter also makes a unique contribution by examining the legal legislation on which military transports were based. The fifth chapter of the study focuses on the railway administration, whose management was undertaken by the national powers during the national struggle. The narrative in this chapter is supported by the discussions in the parliamentary minutes as well as secondary sources. The forest resources, which the national government offered to the war-weary people in order to meet their needs, such as shelter and fuel, and to create an economic resource for themselves, were also provided for the use of trains as fuel. I believe that my study has made some original contributions regarding the fuel problem in this chapter.

Before proceeding, it is necessary to note the word preferences in this study. I use the word transportation to include all activities on the roads (or paths, seas, and rivers). All activities of traveling, carrying, dispatching, delivering, transferring, conveying, or shipping are part of transportation. Another important note concerns the word "road." Today, when we say "road," we think of structures that modern transportation vehicles can pass over.⁵ The connotation of the word "road" is very recent, so it is

4 In 1978, the name of the unit that prepared the book changed to ATASE which is the well-known name among history of war researchers.

5 See for a similar discussion: Lay, Road Technology, 11

helpful to make a distinction. For example, before the 19th century, the *routes* on which the caravans traveled were not roads but *paths or trails* that resembled roads thanks to the continuous traffic on them, and I do not call them “roads.” In this study, the routes that I call “roads” are not formed naturally, but they are structures that have been constructed, although this construction process is simple. Similarly, if the sources used the expression “*şose*” for an Ottoman road, I adhered to that expression. Maybe it could be called macadamized way instead of *şose*, but I did not prefer it.

2

An Overview of Transportation in the Ottoman Empire

In this chapter, I examine the transportation possibilities in the Ottoman Empire, with more emphasis on Anatolia and its surroundings and the late Ottoman era. This chapter aims to reveal the types of transportation in the Ottoman Empire, their characteristics, and their constraints. In the first subsection, there is a summary of the 19th century's great revolutions in transportation in the world. The following subsections summarize the modes of transportation in Ottoman geography. However, the "roads" are not within the scope of this chapter because, as stated in the next chapter, it is more appropriate to examine the developments in the field of the road as a separate chapter in this study.

§ 2.1 Developments in Transportation

Transportation had a very stable appearance all over the world until the technical revolution brought about by the steam engine's invention at the end of the 18th century. Until this technical revolution, land transportation in most of the world was determined by the speed of the carter

walking beside his horse or mule,¹ and water transportation was the only feasible means of transporting goods in bulk since it was both much cheaper² and faster than land transportation. Even the smallest boats of the period could carry 200 times the load by the best land transportation method. A typical sailing merchant ship, very small by modern standards, could carry 50-100 tons of cargo with a crew of only 6 people.³ However, there were great uncertainties in sea transportation due to weather conditions and sea flows. The 900-mile journey between Istanbul and Venice could take 15 or 80 days, depending on wind direction. Steam engines came to the rescue of water transportation from this uncertainty. Steamships could take off from sea flows and winds, which gave stability to sea voyages by clarifying departure and arrival times.⁴ Of course, sailboats were not quickly withdrawn from commercial life.

Fourteen percent of total sea cargo was transported by sailboats in 1840 and 49 percent in 1870. In the last years of the century, this rate dropped to 25 percent.⁵ Steamships began to appear in the Ottoman middle east in the 1820s. Similar to world trade, steamships did not suddenly replace sailing ships in Ottoman trade. In the 1860s, the number of sailboats arriving in the port of Istanbul was four times the number of steamships. By 1900, only 5% of the ships that came to the capital were sailboats. Steam engines contributed to the tonnage as well as the time stability of the ships. These ships could carry an average of 1000 tons of

1 Hobsbawn, *The Age of Revolution*, 9.

2 The transportation cost of shipping a good from London to Galata was almost equal to the transportation cost required to transport the same good from Galata to Beyoğlu (*Türk Ziraat Tarihine Bir Bakış*, 209). It was cheaper to bring coal 3000 miles from England by sea shipment than to carry it 30 miles overland (Issawi, *Middle East and North Africa*, 44).

3 The carrying capacity of camels varies according to the breed of the camel, but assuming that a camel carries 200 kilograms, a typical sailing merchant ship, then, could carry 250-500 camel load. As we will see, only one railroad car would have a capacity of 125 camel loads.

4 Quataert, *Osmanlı İmparatorluğu 1700-1922*, 181-182.

5 Hobsbawm, *The Age of Capital*, 74-75.

cargo. This is an extraordinary capacity in comparison to sailboats. However, the steam engine revolution did not produce any appreciable advances in the speed of water transportation.⁶ In 1851, a steamship from Liverpool could reach New York in 10-11 days. The real revolution in speed was made possible by steam locomotives on the land.⁷

As a matter of fact, significant advances had been made in roads, horse-drawn carriages, and postal services before the railway revolution. The London-Glasgow journey, which took 10-12 days in the middle of the 18th century, was reduced to 62 hours at the beginning of the 19th century, and in 1833, the postal service between Paris and Strasbourg took 36 hours, meaning the postal service operated with a daily range of about 300 kilometers. Despite this, the conditions for carrying passengers and goods on land were inadequate and extremely expensive. In 1830 there were only 50-65 kilometers of railway in the world, the longest being between Liverpool and Manchester. By 1850, there were nearly 40 thousand kilometers of railways.⁸ The size of the investments flowed to the

6 Quataert, *Osmanlı İmparatorluğu 1700-1922*, 182.

7 Hobsbawm, *The Age of Capital*, 69. In fact, marine transportation is still slower than air and land transportation. Today, the sea travel between Liverpool and New York takes 6-7 days.

8 Until the middle of the 19th century, railways were rare outside England. Hobsbawm attributes the fantastic increase in railways to the fortunate conjuncture in England. At the beginning of the 19th century, England was carrying out 90 percent of the world coal production with 10 million tons. The coal industry had stimulated railway construction between the mine site and the embarkation point. The first modern railway was the line from the coalfield in Durham to the coast. The railway had emerged as the most passionate innovation of the industrial revolution. Otherwise, the capital invested to the railways would yield less than 4 percent interest per year. The railway, which found its place in the imagination of ordinary people and in the poems of intellectuals, became the passion of businessmen and investors, despite its low return. Of course, the effect of the large capital accumulated in this was undeniable. The return on foreign investment and lending were both minimal and uncertain. With the effect of the conjuncture, the railway became a sponge that absorbs large capital accumulations and capital goods such as iron and steel. In this respect, the railways were the second leading sector of the industrial revolution after the cotton product sector. See: Hobsbawm, *The Age of Revolution*, 42-47.

railways reached 240 million pounds. This breakthrough in railways in England spread to other parts of the world at different speeds. The first railway line operating in the Ottoman land, excluding Egypt, was the Köstence-Boğazköy line opened in 1860. The first railway line to operate in Anatolia was the İzmir-Aydın line, which was opened in 1866. In 1880, Britain's rail iron and steel exports quadrupled their level in 1850, while machinery exports increased 10 times over the same period.⁹ By 1880, there were nearly 3 million wagons and 100,000 locomotives pulling them. 2 billion trips were made per year by train: 72 percent of these took place in Europe and 20 percent in North America.¹⁰ In the third quarter of the 19th century, the volume of goods and people transported by railways had increased 10 times that of marine transportation. However, except for Europe and North America, the main railways had a function that complemented the international maritime transport network. Goods to be transported by ships to the industrial and urban regions of the world were carried by railways to the ports from production places.¹¹ The developing world economy stimulated the construction of railways, and with the railways connecting the inner regions to the ports, world markets deepened, and international trade increased.

Transportation in Anatolia, like in the rest of the world, had a *longue duree* character until steam power came into play. In fact, 200 years later, during the Turkish War of Independence, the transportation speed in Anatolia mostly depended on the speed of animals. In this section, we try to provide information about transportation in the Ottoman lands by giving more weight to transportation in Anatolia and its nearby regions. Trade activities reveal the form and nature of transportation activities and infrastructure in Anatolia because they are the dominant factor determining the form and quality of transportation. Old and new roads and means of transport come together around trade. Those who built railways in An-

9 Hobsbawm, *The Age of Capital*, 54.

10 Hobsbawm, *The Age of Empire*, 26-28.

11 Hobsbawm, *The Age of Capital*, 70-72.

atolia followed the roads used by caravans for centuries. The three caravan routes running north from Thrace are today railways. The first railways built in Anatolia, Aydın-İzmir, and İzmir-Kasaba, and the Anatolian and Adana railways built after them, also followed the routes used by the caravans.¹²

The Empire exhibited a new mindset in public works with the Tanzimat Edict. Many regulations and works related to roads were made during these years. Therefore, we examine the road issue following the Tanzimat edict in the next section.

§ 2.2 Transportation in the Ottoman Empire

2.2.1 *Water Transportation*

Transportation by water was the only realistic means of long-haul and bulk shipments before steam power was used on land. However, the Empire suffered from a lack of navigable rivers unlike Europe where transportation by river and canal was highly developed.¹³ Even though the Ottoman empire had a long coastline, it was never a naval superpower like Great Britain; It was a land power in every era.

2.2.1.1 River transportation

In Anatolia, Syria, and Iraq, regular transportation was possible only on the Euphrates and Tigris rivers. Although transportation was possible in rivers such as Menderes at different times, this was inconsistent. In the Euphrates, seasonal water level changes made transportation difficult. In addition, the traffic on the Euphrates and Tigris was unsafe, as the empire had difficulties maintaining security in the region after the 17th century.¹⁴ The Euphrates and Tigris rivers played an important role in the

12 Quataert, "The Age of Reforms," 820.

13 Ponting, *Dünya Tarihi*, 623.

14 Faroqhi, "Crises and Change," 483.

Indian and Basra trade entry into Anatolia. The goods in the ships entering Basra were coming to Birecik (Urfa region) by river ships, and from there, they were going to Aleppo, Iskenderun, Tripoli, and other ports by camel caravans. The journey on the river took 15-16 days. Commercial goods coming to Birecik by caravans from Aleppo were also sent to Baghdad by ships. There was a shipbuilding site in Birecik, and according to the documents, there were 300 ships there in 1565. In cases where shipbuilding was risky due to the scarcity or abundance of water in Birecik, timber was sent to Basra, and ships were built there. Apart from shipbuilding, the entire timber supply of the Basra region was provided in this way. The grain requirement of the region was delivered from Raqqa, Diyarbakir, and Mosul via Birecik since wheat and barley cultivation in Baghdad and the Basra region was difficult.¹⁵ On the Tigris, the current was one-way, so it was not as convenient as the Euphrates to operate a ship, but it was possible to transport with *keleks*. After the *keleks* arrived at their destination, they were cut into timber or transported back up the river on hired camels. For example, *keleks*, transported to Baghdad for the needs of the army in 1726-1727, were sent back to Diyarbakir with 2000 camels. It was also a problem that the river arcs were filled with stones, sand, and earth due to heavy rains. Nine hundred people worked for 40 days to clean the arcs in the villages of Baghdad every year.¹⁶

The first attempts to operate steamships on the Euphrates and Tigris rivers were made by the British officer Chesney who got the privilege of operating a steamboat on these rivers in 1834 and started navigating with 2 steamboats brought from England and assembled in Birecik. How-

15 Orhonlu, *Şehircilik ve Ulaşım*, 117-120; 128-131.

16 Orhonlu, *Şehircilik ve Ulaşım*, 124-127. For detailed information on shipping on the Euphrates and Tigris and *keleks*, see: Taştamir, "Klasik Devirde Osmanlı'da," 22-23; Taş, "Osmanlı'nın Son Döneminde Fırat ve Dicle Nehirlerinde Kelek İle Ulaşım," 413-419. Quataert also mentions that the current on Tigris was unidirectional. He states that when *keleks* arrived at their destination, they were dismantled, and their timbers were sold. See: Quataert, *Osmanlı İmparatorluğu 1700-1922*, 183.

ever, Chesney's attempt was unsuccessful, and 4 British steamships belonging to the East India Company engaged in freight and passenger transportation along the Tigris and Euphrates, as well as the Karun River on the Iranian side between 1839-1842. The Lynch brothers¹⁷ who worked with Chesney, on the other hand, established an agency in Baghdad in 1840 and received a concession to operate two steamships on the Euphrates in 1841. Meanwhile, some Ottoman pashas also attempted to operate ferries on the Tigris. The first notable activities took place when Mithat Pasha, who did important work in river transportation during his governorship of the Danube, was the governor of Baghdad. Mithat Pasha considered the river transportation in the region in the context of the increasing influence of the state in the Arabian Peninsula. For this purpose, he tried to establish a ferry fleet that could compete with British companies and established new companies to rival the British Lynch company. With the departure of Mithat Pasha from the governorship, the operations were interrupted. During the reign of Abdülhamit, in 1904, the Hamidiye Ferries Administration started its operations between Basra and Baghdad with 2 ferries and 4 barges in response to the Lynch company's 2 ferries. The ferries, which could carry 230 tons of cargo¹⁸ and 250 passengers, could speed up to 12 knots. Ferries operating on the Tigris could travel from Baghdad to Basra in 3 days and from Basra to Baghdad in 5 days. By 1912, there were three large companies operating ferries between Baghdad and Basra. While the company of the Ottoman State carried 60 thousand passengers and 37 thousand tons of cargo in 1912, its biggest rival, Lynch Company, carried 35 thousand passengers and 60 thousand tons of cargo.¹⁹ The figures reveal that steamships had great effects on trade and mobility in social life in the region.

17 The Lynch brothers were pioneers of British imperialism in the region. They had established a strong monopoly in the Tigris and Euphrates basins and led the British opposition to the Baghdad railway. See: Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 81-82.

18 For comparison, Orhonlu states that a *kelek* could carry 50 *tays* or 6.5 tons. See: *Orhonlu, Şehircilik ve Ulaşım*, 131.

19 Hut, "Buharlı Gemiler Çağında," 131-137.

Another navigable river was the Danube. However, the rocky area called *Demirkapı Strait* was blocking the river, allowing only small boats to pass. Even as late as 1856, more than half of the transportation on the Danube was done by rowing boats. Only the east of this rocky area was suitable for shipping. The middle part of the river was used for military purposes.²⁰ Regular ferry services on the Danube started during the governorship of Mithat Pasha. The expeditions, which started with two ferries, increased to 7 ferries in 1869. In the period of *İdare-i Mahsusa*, the number increased to 9. The company also had freighters carrying grain. Austria's Lloyd company and some Russian companies were also operating passenger, freight, and postal services on the Danube.²¹

Steamships also operated in the Meriç River for a while. At the beginning of 1870, 600 thousand pounds of grain were transported on the river. However, with the opening of the railway in 1873, river transportation lost its importance. The river's water level had decreased a lot because of rice production, and after the Russo-Turkish War (1877–1878), boating and shipping were prohibited in the river.²²

The only waterway other than the seas used during the National Struggle is Lake Eğirdir. During the preparations for the Great Offensive, the shipments that were unloaded to the Akşehir station of the Konya railway line were brought to the pier in the lake and were transported to the north, behind the forces of the western front, by tugboat and barges.²³

2.2.1.2 Sea transportation

Steam power revolutionized sea transportation before land transportation. Of course, the sailboats did not suddenly leave the seas. In fact, although the share of sailboats in tonnage decreased at the end of the 19th century, the number of Ottoman sailboats and crews employed on

20 Faroqhi, "Crises and Change," 483-484.

21 Hut, "Buharlı Gemiler Çağında," 139.

22 Hacısalıhoğlu, "Meriç Nehri," 288.

23 TİH, Vol 2, Section 6, Book 1, 244.

these increased. Between 1879 and 1914, the tonnage of Ottoman sailboats increased from 164 thousand to 202 thousand tons. 529 sailboats arrived in Mersin in 1897, and 626 sailboats in 1906. At the end of the 1880s, 8,000 sailing ships entered Trabzon every year.²⁴ Steam power increased the tonnage of ships tremendously. While the tonnage of ships arriving in Istanbul was between 130 and 530 tons in the 1830s, the average tonnage increased to 1250 tons at the end of the century. Similarly, the average tonnage of ships touching at Trabzon increased eight times between 1830 and 1880, reaching 1005 tons. With the increasing tonnage of the ships, the volumes in the ports rose to extraordinary levels.²⁵ Table 2.1 below shows the total tonnages that entered the important ports of the Ottoman Empire in Anatolia over the years.

Table 2.1 Shipping tonnage entering Anatolian ports

	1830	1860	1890	1913
İstanbul	-	-	800	4000
İzmir	100	600	1600	2200
Trabzon	15	120	500	-

Source: Issawi, *Middle East and North Africa*, 48.

European shipping had dominated the Mediterranean since the 11th century. Thus, it is unsurprising that 90 percent of the traffic in Ottoman ports was in the hands of European companies in 1914.²⁶ While the share of Ottoman ships decreased, their cargo volumes increased thanks to the extraordinarily increased volume. However, Ottoman ports were in a primitive condition despite the increase in volume and number of ships. While cranes were used to unload and embark goods in European ports, things continued in an old-fashioned way in Ottoman ports: Weather permitting, ships anchored offshore, unloaded their cargo onto the lighters, and the lighters took them to patchy sheds on the shore. Except for İstan-

24 Quataert, "The Age of Reforms," 801-802.

25 Quataert, "The Age of Reforms," 799-800.

26 Issawi, *Middle East and North Africa*, 45; Quataert, "The Age of Reforms," 800.

bul, there were no natural harbors. Many of the ports suffered from neglect and silting. For example, in Trabzon, sand brought by the sea could cause ships to run aground. In ports like Bartın, the sand brought by the rivers rendered the port useless. As in Beirut's case, the harbor's depth could also prevent large ships from berthing. The ships rarely visited the Ottoman ports during the winter because they had no safe shelters and breakwaters. Since the middle of the 19th century, efforts were made to modernize the ports, but these were limited to the ports of Thessaloniki, Izmir, Istanbul and Beirut.²⁷

After the arrival of the railway to the port of Thessaloniki, a dock of 1800 meters was built, and then the trains were allowed to unload their cargo directly to the ship. With the construction between 1867 and 1875 in Izmir port, a 4-kilometer quay and 32 hectares of dock space were built. At the end of the 19th century, new quays were built by the French company at the port of Istanbul, thus increasing the traffic by 50 percent in 10 years. In 1894, an 800-meter quay and 21 hectares of dock space were built in Beirut. Despite these improvements, foreign traders complained of delays and inadequacy of warehouses.²⁸

2.2.2 Overland transportation

Road construction and maintenance in Ottoman Empire should be divided into war and peace periods. One of the important pillars of great logistical preparation of a campaign was the maintenance, repair, and cleaning of the roads and bridges that the army would pass through.²⁹ The official institution of the transportation organization in the Ottoman Empire was *menzil* (*stage*). Although the stages were established for

27 Yildız, *Deniz Ticareti*, 115-116; Quataert, "The Age of Reforms," 802; Issawi, *Middle East and North Africa*, 48.

28 Quataert, "The Age of Reforms," 802.

29 For an example of the maintenance of roads during campaign preparations, see: Yildız, *Haydi Osmanlı Sefere*, 27-34; 107-117.

communication, their duties were expanded over time, and responsibilities such as the supply and transportation of the army during the campaign were added.³⁰ The early Ottoman logistics organization had a rather intricate structure that fascinated the Europeans. It was strictly forbidden for the army to make any loot or free purchases along the way. In practice, however, the places where the armies passed were damaged, and the tax resources were decreasing. The solution of the people was to leave their homeland and flee. During the Iran campaign in 1579, for example, the army had to change its marching route because the villagers on the route of Ankara fled and dispersed.³¹

In the empire's early period, the state's role in road construction activities was minor. The state took care of the roads reaching the capital; the road of Istanbul-Edirne especially was constantly being repaired. The opening, maintenance, and repair of roads in the countryside were left to the villagers on the route. Some roads were built by the rich and philanthropists. It would be helpful to mention the early institutions of the Ottoman road system here, as they also played a role in the smooth continuation of the caravan trade. These were *derbendçilik*, *köprücülük*, *gemicilik* and *kaldırımcılık*. *Derbendçiler* were responsible for ensuring road and crossing safety, working as a kind of rural gendarme, and repairing roads where necessary. *Kaldırımcılar* were organized like other tradesmen, settled in cities and towns, and went out when road construction was necessary. To make roads, these road builders used to hammer stones vertically into the embankment, which had been leveled before. In the 16th and 17th centuries, the cost of stones used for road construction was one-third of all costs. However, in the 19th century, this share increased to fifty percent due to the increasing stone prices, and more rubble stones were used. *Gemiciler* were providing the crossing of the rivers where bridges could not be built, and they were ensuring the maintenance, repair and preservation of the bridges. People working in these institutions were exempt from some taxes in return for their services.³²

30 Taştemir, "Klasik Devirde Osmanlı'da," 29-30.

31 İnalçık, *An Economic and Social History*, 137-138.

32 Orhonlu, *Şehircilik ve Ulaşım*, 27-30, 46, 70.

Road transportation in the empire was twofold. Wheeled vehicles and, accordingly, horses were dominant in the European states. In the Anatolian and Arab provinces, on the other hand, wheelless vehicles, that is, camels were dominant.³³ Of course, horses, donkeys and mules were also used for close distances in Anatolia. However, the strength, endurance, and carrying capacity of camels were the reason for preference. Thanks to its ability to tolerate increased body temperature, the camel could travel long distances with little water and feed. In addition, the cost of raising camels was low, as they could be fed with bushes and trees instead of grassland.³⁴ These features made camels the best option for long-haul trade in Anatolia. Shipment by wagon was not suitable for Anatolia's poor and neglected roads; the loads on them were getting more damaged during the journey.³⁵ Moreover, one person was required to operate a wheeled vehicle; but the same person could control 6 camels. While there was a risk of cars breaking down on the road, there was no such risk for camels.³⁶ Thus, the reason such wheeled vehicles were not preferred in Anatolia was not because they were unknown but because of material conditions, geography, and the state of roads.³⁷

Transportation on land was quite expensive, and freight charges for many goods exceeded their production costs. For this reason, the goods

33 Quataert, *Osmanlı İmparatorluğu 1700-1922*, 184-186.

34 In addition to trade and travel, the camel had many uses. It was used in rural areas of Egypt for plowing, digging, and cleaning debris and mud. Its manure was used to increase agricultural production and as an energy source in regions where there was no firewood. Camel owners in Anatolia were very knowledgeable in hybrid camel production for different purposes. The single-humped hybrid Turcoman camel was preferred for its strength and durability. See: İnal, "One-Humped History," 59-61.

35 Quataert, "The Age of Reforms," 837.

36 Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 77. The authors state that the Turks who migrated from Central Asia had a highly developed car technology. Turks could hitch camels to the carriage just like horses. See: Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 79-80.

37 İnal, "One-Humped History," 65. Wheeled vehicles were brought to Anatolia that time by Circassian refugees, after the collapse of the Roman empire. (Quataert, *Osmanlı İmparatorluğu 1700-1922*, 186).

which were "low bulk and high value" were preferred in land transportation. Agricultural products of Anatolia were mostly not subject to long-haul trade. For example, at the end of the 19th century, the price doubled when grain was transported from Erzurum, a fertile grain region, to Trabzon port (314 kilometers), the closest export point. Though there was probably no need for such transport to Trabzon at that time because American flours had begun to enter the Black Sea ports for a while.

Similarly, wheat transported from Ankara to Istanbul (361 kilometers) increased the price by 3.5 times. Istanbul's wheat and flour supply was mainly supplied from Russia, Romania, Bulgaria, and Thrace, and only a small part was supplied from Samsun and Mersin ports.³⁸ In 1857, it had been claimed that a good was sold 7 times its cost in Izmir. In the same year, it was written that the crop was not harvested due to the high caravan prices and that the warehouses were full of the products of the previous two years.³⁹ This effect of transportation costs on prices forced the inner regions of Anatolia to the subsistence level of agriculture, not more. The railways changed that to some extent: By reducing transportation costs, railways allowed the inner regions, which previously produced only their own subsistence, to produce for the market and the uncultivated lands to participate in agriculture. Thus, total production in Anatolia increased over time. The railway caused the caravan transport to be organized with a different strategy, as seen in subsection 2.2.2.3.

The road construction policy in the empire consisted mainly of local administrators activating the opportunities in their own administrative region, depending on military and commercial rationales. This policy worked properly when the empire was strong. However, since the middle of the 16th century, due to the deterioration of the classical Ottoman order, financial problems, abolition of the *timar*-holding system, and

38 Quataert, "Limited Revolution," 141-144. This would slowly change after the Anatolian Railways started operating in 1892. See also on camel transportation: Öztürk, "Demiryollarının Gelişimi," 11-17

39 İnal, "One-Humped History," 66.

changes in trade routes, this policy was dissolved, and the land transportation network consisted of many neglected and broken roads. In the 18th century, land transportation was utterly inadequate.⁴⁰ Since the middle of the 19th century, the empire tried to improve land transportation with the Tanzimat policies.

2.2.2.1 On the caravan's trade and routes

International trade routes, which gained great importance during the Pax Mongolica period, made Asia Minor one of the essential routes of world trade and brought great prosperity.⁴¹ By the 17th century, Aleppo, Bursa's rival a century ago, had become the most important silk export center in the Levant. The revenue flowing from the customs of Aleppo to Istanbul had reached record levels. By the end of the century, the rival of Bursa and Aleppo was İzmir. By taking advantage of the direct trade, thanks to the capitulations, to prolong the cheap sea passage and, thanks to its sheltered harbor against pirates and the sea, İzmir attracted merchants, primarily British and Dutch. Five or six Iranian caravans pass through the Tabriz-Yerevan-Kars-Erzurum-Tokat-Ankara-Afyon-İzmir route every year; by 1670, 3,000 of the 22,000 bales of silk produced in Iran were reaching İzmir for export. In 1671, Aleppo was now in fourth place for the French, after İzmir, Alexandria, and Sidon. This trade was on the verge of Ottoman-Iranian relations. Fortunately, Selim I's full embargo on Iranian raw silk, and about 100 years later, the efforts of the Persian shah to shift the direction of the silk trade from Ottoman lands to the Indian Ocean were not continued by his successors. However, although the silk trade was partially saved, by 1630, the spice trade had left the Ottoman lands.⁴²

The 16th century witnessed the shift of the center of gravity of European trade from the Mediterranean to the Atlantic Ocean. Behind this process, which was expressed as the fading of the Mediterranean in Faruk

40 Kaynak, "Osmanlı Demiryollarına Bir Bakış," 66-67. Quataert, "The Age of Reforms," 818.

41 İnalçık, "An Economic and Social History," 219-222.

42 İnalçık, "An Economic and Social History," 219-230.

Tabak's work, there was a three-layered process that overlapped, complemented each other, and had different durations. The first was the Little Ice Age, which lasted from the 1550s to the 1870s. This climatic event has turned agriculture into an inconvenient and unpredictable endeavor in bottom lands in the Mediterranean with its humidity, cold weather, drought, and uncertain rain regime. Floods and swamps have emptied plains in the Mediterranean. The commercial grain center has shifted further north to the Baltic region. The second layer, which started in 1590 and lasted until around 1815, was the intervention and transformation of the Netherlands and then Great Britain, as a rising hegemonic power, in the division of labor in the world economy in line with their own needs and possibilities. The third layer was the 17th-century crisis that followed a demographic slowdown between 1650 and 1750, which reduced demand for available labor and grain.⁴³ In the Ottoman Empire, this process was experienced much more severely. The pressure on Ottoman resources, which increased with the increase in population, intensified with the inflationary pressures of the period. Ottoman finance was shaken to its roots between 1556 and 1625. The shock of the Little Ice Age on Anatolian agriculture and the Celali revolts in the early 17th century devastated Anatolia. A severe security problem arose on the Anatolian roads.⁴⁴

Faruqhi focuses on 4 main crossroads discussing the caravan routes in the 17th century: Istanbul, Edirne, Aleppo, and Cairo. There were 3 important routes connecting Istanbul to the caravan cities of Anatolia. These were the paths known as the right, middle and left arm.⁴⁵ The right arm connecting Istanbul to Aleppo and Damascus was also known as the pilgrimage route. The route goes around the edge of the Central Anatolian steppe, enters the Çukurova plain, then turns to Aleppo from near the Mediterranean or continues to Damascus. The main warehouses

43 Tabak, *The waning of the Mediterranean*, passim.

44 White, *The Climate of Rebellion*, passim.

45 For very detailed explanations of these paths, see: Taeschner, *Osmanlı Kaynaklarına Göre Anadolu Yol Ağı*, passim.

close to the border regions of Iranian trade were Erzurum and Diyarbakir. However, Erzurum was almost completely deserted due to the Ottoman-Persian wars in the 16th century. On the other hand, Diyarbakir was connected to Istanbul in quite roundabout ways. Aleppo was a meeting point for caravan routes going long distances. A widely used caravan route also followed the Euphrates from Aleppo to Baghdad. Aleppo was also connected to the sea routes in the Mediterranean via the bay of Iskenderun and Payas.⁴⁶

In the 18th century, 4 large caravans continued to travel between Aleppo and Istanbul a year. Silk fabrics from Bursa, Tokat, and Amasya were distributed over Aleppo to the Syrian region; 25 percent of them continued to Egypt. As a result of the transition from silk weaving to cotton weaving, trade in Iran declined drastically in this century. In parallel with this, the port of Iskenderun left its place to the more southern ports of Syria.⁴⁷

2.2.2.2 Railways

Quataert notes that the Ottoman Empire entered the railway age late: there was no railroad in the empire by 1850. On the other hand, railway lines were built even in 2nd class European countries. There were 1357 kilometers of railways in Austria-Hungary, 600 kilometers in Italy, and less than 100 kilometers in Spain.⁴⁸ When railway construction started in the empire after the Crimean war, there were lines of 16000 kilometers in Britain, 11000 kilometers in Germany, 9000 kilometers in France, and 49000 kilometers in the United States.⁴⁹ In fact, Bab-ı Ali was aware of the economic and military benefits of the railways. If railways were constructed, production would be delivered quickly, easily, and cheaply to other regions. They would also provide export revenue as transportation

46 Faruqhi, "Crises and Change," 612-614.

47 McGowan, "The Age of the Ayans," 730-734.

48 Quataert, "The Age of Reforms," 804.

49 Eldem, *Osmanlı İmparatorluğu'nun İktisadi Şartları*, 96.

costs would decrease. In the case of riot, turmoil or war, soldiers would be quickly transferred to regions and fronts.⁵⁰

At the beginning of this chapter, we briefly mentioned the elements that encourage railway investments in Great Britain. First of all, a tremendous amount of wealth had accumulated there. The stimulating effect of railway construction on other industries, especially iron-steel and coal, also supported construction activities. Moreover, the shrinking economic environment after the Napoleonic wars made foreign investment and lending activities uncertain and risky; thus, existing capital flowed to domestic railways. In other words, railways emerged as a result of economic development and formed the basis of the second run of the industrial revolution in developed countries. However, in undeveloped countries, the conditions were different. First, there was no accumulated capital in these countries, and second, their level of development did not have the potential to make the invested capital profitable in the short run. For this reason, in undeveloped countries, the railway requested the support of the state until it enriched the routes it crossed and its revenues could cover the operating costs. This was the case not only in the Ottoman Empire but also in China and Latin American states. On the other hand, Russia was a different example: more than half of the railways there were built with state money.⁵¹

We need to divide the lines in Anatolia into two: the Western Anatolia and the Anatolian-Baghdad line. The privilege of the first line in Anatolia, the İzmir-Aydın line, was granted in 1856 and opened in 1866. It was not without reason that the first rails were laid in this region in Anatolia. İzmir stood out as an important export point in the early 18th century. The region had become an important and fast-growing inhabited by European merchants who met Asian commodities there. The trade value of

50 Özdemir, *Mütareke ve Kurtuluş Savaşı'nın*, 2-3. Quataert refers to a memorandum of the Tanzimat Assembly dated 1854; although it was emphasized in the memorandum that agricultural resources would increase, he finds it noteworthy that the issue of encouraging industry was not mentioned. See: Quataert, "The Age of Reforms," 806.

51 Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 77-78.

İzmir, 53 million francs in 1839, increased to 120 million francs in 1855. Therefore, the construction of a railway in the region was economically rational. However, that was not always enough. The capitalist country needed to gain influence and give itself an advantage in the colonial race of the century.⁵² The fact that the region was located on the shortest India road was the driving force for the British to build a railway in Anatolia. The granting of the first railway concessions in the Empire to Great Britain was also synonymous with the beginning of the first debt relations with Great Britain. In addition, they were unrivaled on the world political and economic scene until the 1870s. Indeed, Britain's search for a shortcut to India seems to have been very decisive in constructing this line. As a matter of fact, after the British dominated the Suez Canal, they were not interested in both the extension of the Izmir-Aydın line and the construction of railways in Iraq and Basra.⁵³ The Izmir-Kasaba line in Western Anatolia was also built by the British. When these two lines are

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- 52 To ask that question in here is highly legitimate: Were the interests of the capitalist and the country to which capitalist subjected one and the same? This is a very difficult question to answer. We can say that during the period we examined, perhaps no foreign capital acted without the knowledge and permission of its government. Because a large amount of capital was in need of the protection of its own government in the country it went to. So, for the period and the examples that we're looking at, we can consider these two as one and the same. However, for example, while German capitalists were building Anatolian railways, chancellor Bismarck warned Deutsche Bank officials that the capital owners were accepting the risk by embarking on the business of building railways in Anatolia. Because Bismarck did not want to get involved in the Near East problem and did not want the government to be dragged into an imperialist policy in Anatolia because of its German capital. As a matter of fact, this is what happened in Africa. But the German King Wilhelm II was completely opposed; he wanted to open up to the Middle East through Anatolia. Bismarck was dismissed in 1890. See: Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 45-47.
- 53 Kaynak, "Osmanlı Demiryollarına Bir Bakış," 68-73. Kaynak cites İsmet İnönü's statement "The Aydın line started in 1856 as the Basra line and India road before the Suez Canal was opened" (p. 72). Özdemir also draws attention to India in the British government's interest in railways in Anatolia. He states that railways in Anatolia lost their importance for the British after the canal was taken over by England in 1875 and Cyprus in 1878 (Özdemir, *Mütareke ve Kurtuluş Savaşı'nın*, 7-8).

examined, it is seen that they form a tree-shaped pattern extending from the export port to the hinterland, just like in the colonial countries.⁵⁴

In the construction and operation of the railways in the Ottoman lands, the influence policies of the great powers and their competition with each other had also decisive. In addition to the Western Anatolian lines, the British also had a short but important Adana-Mersin line. Moreover, the Haydarpasa-Izmit line, which the Ottomans built in 1871, was rented by the British before being sold for 6 million francs to a group established by Deutsche Bank in 1888. Cairo-Alexandria, Constanta-Chernova, and Ruse-Varna lines were also constructed by the British. The Izmir-Kasaba line was purchased by the French in 1894. The French and Germans tried to buy the Izmir-Aydın line, but these attempts were unsuccessful. After Britain lost its interest in Anatolia, having captured Suez Canal, the French-German competition manifested itself, and after each concession given to the Germans, the French also grabbed the concession from Bab-ı Ali. For example, after the Germans were given the Eskisehir-Konya concession, the French were given the privilege of extending the Izmir-Kasaba line to Afyon.

The story of the Anatolian and Baghdad railways is slightly different. First of all, this line was built for potential markets, not existing ones as in Western Anatolia's case. In addition, the administrative and military goals of the Ottoman Empire were also effective in this line. The main motivation of Germany was a terrestrial expansion in line with its imperial goals. That was an inevitable consequence of its economic development. The German Empire became an industrial state and increasingly needed raw materials and markets. The rapidly increasing population increased the demand for agricultural products, and the measures to increase agricultural production within the country were insufficient. The fertile lands of historic Mesopotamia exalted the appetite of the Germans. They had entered the colonial race late, capturing some places in Africa and Asia that were left over from other great powers and were not very

54 Kaynak, "Osmanlı Demiryollarına Bir Bakış," 73; Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 103

fertile. In addition, the German naval force was in the shadow of the British naval force, and keeping the seaways open in a possible conflict was very difficult. For this reason, the only solution was to establish an economic alliance system in central Europe and include the Near East. Beyond the Bosphorus, plenty of oil, mines, cotton, and lands were waiting to be cultivated.⁵⁵

The political and military aspects of the Anatolian Baghdad railways seem to have priority over the economic aspects for the Ottomans. Once united with the capital, the empire would be able to strengthen government power in remote provinces such as Syria, Mesopotamia, and Arabia. Thus, in these provinces, the people who were not coming to the army and often rebelling against the central government, compulsory military service would be enforced. The war mobilization would also modernize as troop movements became easier. Perhaps the most important thing for Abdulhamid II was combining the Baghdad railway with the Hejaz railway and strengthening his caliphate on the Muslim subjects. The railway would also play a major role in the provision of Istanbul. The share of Anatolian wheat production that came to Istanbul before the Anatolian railway was only two percent. The government was spending 1 million liras (approximately 4 million dollars) a year on flour and wheat imports for Istanbul.⁵⁶

In 1886 and 1888, the Ministry of Public Works proposed to the British who operated the Haydarpaşa-İzmit line to extend it to Ankara. Sir Cincin Caillard, the chairman of the board of directors of the Debts Administration, tried to establish a British-American partnership for this project, but the initiatives failed. As a result, a partnership established by Deutsche Bank was granted a concession covering both the operation of the Haydarpaşa-Izmit line and the extension of the line to Ankara. The financial group, led by Deutsche Bank, also acquired shares in the Eastern Railways and owned a 1500 kilometers line in the Balkans. With a very fast construction activity, the Germans laid rails to Ankara, and the first

55 Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 49-56; Kaynak, "Osmanlı Demiryollarına Bir Bakış," 76.

56 Quataert, "Limited Revolution," 143, 151.

train arrived in Ankara in January 1893. As a reward for this rapid construction, the Sultan gave the same group a 444 kilometers line concession from Eskişehir to Konya. This line was completed in 1896, and the first train arrived in Konya.⁵⁷

Earle claims that while the Germans were granted the Ankara line concession, the government stipulated that this line should be extended to Baghdad via Samsun-Sivas-Diyarbakir in the future. However, no attempt was made in this regard after the Ankara section was completed. According to him, the reason for this was that the Russians strongly opposed railway construction in North Anatolia. Indeed, the Russian delegate in Istanbul threatened to inform Bab-ı Ali that the extension of the Anatolian railway to Mosul via Ankara and Eastern Anatolia was a strategic danger for his own Caucasus borders. Upon this, the route was changed from Ankara-Kayseri-Diyarbakir-Mosul to Konya-Adana-Aleppo-Mosul.⁵⁸ On this topic, Quataert states that the railway passed through the Eskişehir-Konya region for strategic and military reasons as the reason for not extending the Izmit-Ankara line to the efficient and relatively densely populated region around Sivas. He even states that this had concerned the capitalists that would build the railway and that the government overcame this concern with the mileage guarantee system.⁵⁹ Quataert does not mention the Russians in this regard, whereas according to the Black Sea Treaty in 1900 if the Turks wanted to build a railway in North and East Anatolia, they would give this job to either Russian citizens or a company that the Tsar deemed appropriate.⁶⁰

In the Syrian region, the first railway line, Jaffa-Jerusalem, was built with the French capital in 1891. Damascus was connected to the fertile wheat lands of Havran in 1894. This line was also connected to the export port of Beirut. In 1906, Aleppo was annexed to Tripoli. The railway net-

57 Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 34-37.

58 Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 34-38, 136.

59 Quataert, "The Age of Reforms," 814; Quataert, "Limited Revolution," 142-143.

60 Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 136-137.

work in Syria was denser in terms of area and population than in Anatolia. However, these lines could not be connected to each other to establish a common network because there were 3 different gauges.⁶¹ This brings to mind the colonial network that the British built in India. Britain had kept the gauges standard width on the main lines connecting the ports to the raw material sources in India. However, the gauges varied on the lines in domestic transportation. In other words, domestic trade was intentionally undermined while export and import goods could reach their destination without any transfer. Delivering coal from a coal-rich region of India to a neighboring region right next to it was more expensive than importing coal from Britain.⁶² Based on this example, it can be argued that France may have built railways in Syria with a similar colonial approach.

In Anatolia, only the gauge of the Bursa-Mudanya line differed from other lines. However, we cannot say that domestic trade has been integrated and a common market has been established in Anatolia. Because even though Anatolia attained railways, the road network was terrible for the whole country. Barriers to transportation (*men-i mürur*) could not be eliminated. We will discuss this in the next chapter.

It is certain that railways contribute to production in Anatolia, but it is difficult to measure how much of the increase in production comes from railways alone. Pamuk states that general agricultural production doubled in Northern Greece, Thrace, and Anatolia between 1860-1914.⁶³ The study of the Kasaba, which examined Western Anatolia, shows that the production volume in Western Anatolia increased 4 times between 1845 and 1876. If we start the time interval with the opening of the Izmir-Aydın railway, we find that the production volume increased approximately twice between 1866 and 1876.⁶⁴ Moreover, while agricultural taxes increased by 63 percent in the whole empire between 1889-1911,

61 Quataert, "The Age of Reforms," 808.

62 Kurmuş, *Emperyalizmin Türkiye'ye Girişi*, 66.

63 Pamuk, "Osmanlı Tarımında," 5.

64 Kasaba, *Osmanlı İmparatorluğu ve Dünya Ekonomisi*, 80-81.

Eldem shows that agricultural taxes increased by 114 percent in the regions where the railways pass through.⁶⁵ Anatolian railways strengthened economic relations between Istanbul and Anatolia. While the share of Anatolia in wheat that came to Istanbul in 1889 was 2 percent, this share increased to 25 percent in 1896, and in the following years, it increased to 90 percent if the wheat harvest in Anatolia was not bad. On the other hand, the transportation of flour was limited because the lack of steam mills in Anatolia prevented the production of high-quality flour preferred by Istanbul. The railroads made transportation very cheap.⁶⁶ In the following subsection, we refer to the price competition of railways between camels. Railways, both in the construction and operation process, which consistently employed more than 10,000 workers, put much money on the market through wages, and triggered the increase in demand. Thanks to the Hejaz railway, a pilgrim's journey from Damascus to Medina fell from 1200 francs to 200 francs. Export volume and export revenues increased. The export volume on all lines except Jaffa-Jerusalem and Mudanya-Bursa lines exceeded the import volume.⁶⁷

The effect of the railways on the military field emerged in the war with Greece in 1897. A work examining the war of 1897, written in 1898 by Staff Senior Captain Osman Senai Bey, sheds light on the importance of railways in the battle. Accordingly, the Ottoman army dispatched a total of 386 trains troops to the front from February to June, with a maximum of 5 trains per day. However, this capacity was undoubtedly very low compared to Europe. The Germans, for instance, sent corps to the front in 1866 with 40 trains a day in 8 days, and the daily capacity increased to 120 trains in 1871. In the war of 1866, the Germans dispatched 197,000 infantry, 55,000 cavalries, 503 firearms, and cannons to the Austrian border in just 16 days, thanks to 5 railway lines in the direction of the battlefield. In the war of 1871, she was able to dispatch 350 thousand of people to his region in just 10 days.⁶⁸

65 Eldem, *Osmanlı İmparatorluğu'nun İktisadi Şartları*, 93-94

66 Quataert, "Limited Revolution," 151, 155-156.

67 Quataert, "The Age of Reforms," 812-815

68 Aysal, "Osmanlı ve Yunan Demiryollarının," 332, 342-343.

2.2.2.3 Coexistence of caravans and railways

After the start of train services to Ankara and Konya, the caravans running parallel to the railway route reduced their prices. On the Ankara-Izmit route, the price of a ton per kilometer, 1.44 piasters in 1889, decreased to 0.65 piasters a ton-kilometer in 1896. On the Konya-İzmir route, the price, which was 1.47 piasters, decreased to 1.01 piasters. Initially, the company overlooked the price flexibility of the caravans and prepared a simple tariff. Accordingly, a ton of grain would be transported at 0.55 piasters per kilometer. However, in this case, the 486 kilometers of Ankara-Izmit haul was 12 percent more expensive than the 361 kilometers of caravan haul. In 1892, the company updated its tariffs and reduced the freight price between Ankara and Haydarpaşa to 0.26 piasters, 60 percent less than the lowest caravan price. The price then fell to 0.18 piasters. On the Konya line, wheat was transported at 0.18 piasters and barley at 0.21 piasters a ton-kilometers. During these years, all goods were transported on the farmer's rail in the United States at 1.2 cents, or about 0.17 cents. In addition, the company started to apply special discounts if the entire railroad car was filled. The discount was even greater with commitments of 100 cars at a time or 1,000 cars throughout the season. These moves of the company completely changed the operation of the caravans. Instead of competing with the railway in the Ankara part, the caravans turned into carriers that fed the railway line, bringing grain to the stations.⁶⁹

The company also tried to persuade local merchants in regions far from the railway line, such as Kayseri, Yozgat, Ereğli, and Karaman, to abandon caravan transport. For example, it provided discounts of up to 40-60 percent to traders in Kayseri. However, these attempts were unsuccessful because the total cost of sending the product to the station by camel and then to Haydarpaşa by train was more expensive than sending

⁶⁹ Quataert, "Limited Revolution," 144-145. The price on "granger railroads" in the US was 1.2 cents a ton-mile which was about 0.17 piasters.

the product directly to the ports by camel. Two-thirds of Yozgat's agricultural products continued to go to Samsun with camels. 60-70 percent of the Kayseri crop continued to follow the Mersin route. The share of agencies established to attract local traders in remote production centers in the annual total tonnage could not exceed 5 percent. The company could also not achieve what it wanted in the Konya section. At first glance, the 0.18 piasters tariff between Konya and Haydarpaşa may seem much cheaper than the 0.7-1.0 piasters caravan tariff, but Konya's distance to the Mediterranean ports was one-third of the distance between Konya and Haydarpaşa. In addition, the Istanbul market was completely new and unknown for the merchants in the Konya region, who found higher selling prices in the south and were afraid of competition in Istanbul. Therefore, the merchants of Konya mostly stayed loyal to their old routes. Anatolian railways suffered from the absence of branch lines in both the Konya and Ankara sections. There were only two branch lines of 9 and 10 kilometers, respectively, extending to Adapazarı and Kütahya.⁷⁰ Even as late as 1905, 1000 camels lined up at Ankara station to unload their cargo.⁷¹

Anatolian railways were also in competition with their Izmir-based rivals. The line in the hands of the French was from Izmir to Afyon, where Anatolian railways also had a station. However, Afyon was 66 kilometers closer to Izmir compared to Istanbul, and the Izmir-Kasaba line carried two-thirds of Afyon's trade. The Anatolian Railways Company opened cheaper tariffs to Istanbul in order to prevent the products of Central Anatolia from going to Izmir, and this caused a price war. This price war ended with the agreement in 1899, and it was decided to combine these two lines in Afyon.⁷²

In the Aegean region, camels continued to exist for a long time after the railroads operated. Because the products still had to be brought to

70 Quataert, "Limited Revolution," 146-148.

71 Kasaba, *Osmanlı İmparatorluğu ve Dünya Ekonomisi*, 65.

72 Quataert, "Limited Revolution," 147; Earle, *Bağdat Demir ve Petrol Yolu Savaşı*, 38, 58-60.

the stations by caravans.⁷³ In 1872, about 10 thousand camels were employed to transport goods to two railway lines in the Aegean region.⁷⁴ Railways also attracted camels from nearby areas. Shortly after the İzmir-Kasaba line was built, it attracted 50 percent of the camel traffic on the Gediz plain.⁷⁵ Camel owners were mostly nomadic tribes. The service they offered gave them a kind of autonomy.⁷⁶ However, the fusion of old and new modes of transportation in the region was quite tense. In the struggle between the Aydın line and the camel owners, the parties had advanced to agreeing with the bandits in order to sabotage each other's work. The rivalry was resolved in 1888 with the compensation payment of the railway company to the camel owners, and the railways and the caravans established a complementary transportation system.⁷⁷

This chapter mentioned transportation in the Ottoman Empire in general terms. This chapter gives us important clues about Anatolia's transportation mode and possibilities of where the National Struggle would take place. It is possible to summarize them as follows.

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- 73 Kasaba, *Osmanlı İmparatorluğu ve Dünya Ekonomisi*, 65. Quataert notes a tremendous increase in the number of animals in the hinterland of İzmir (*Osmanlı İmparatorluğu 1700-1922*, 189-190). Railroads had also increased the demand for animals in Europe and America; more goods mean more traffic. While there were 350 thousand horses in the cities in 1830 in England, this number reached 1.2 million in 1900. 90 percent of the transportation in the city was provided by horses (Ponting, *Dünya Tarihi*, 625). Three quarters of the grain transported on Anatolian railways was exported to Europe, and most of it consisted of barley. The barley of the beers in England and Germany was exported from Derince (Quataert, "Limited Revolution," 149). Most likely, the barleys sent from Anatolia was used to feed the increasing numbers of animals in Europe.
- 74 Kasaba, *Osmanlı İmparatorluğu ve Dünya Ekonomisi*, 85.
- 75 Kaynak, "Osmanlı Demiryollarına Bir Bakış," 73.
- 76 Kasaba, *Osmanlı İmparatorluğu ve Dünya Ekonomisi*, 85. Before the railways, the influence of the camel drivers on the producer was quite strong, because they were taking the producer's goods off to the market and selling them on a commission. Moreover, they were lending money at interest to small producers (Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 103).
- 77 Kıray, *Örgütlemeyen Kent*, 14-15.

The empire was unlucky in terms of water transportation. There was no river with regular water transportation in Anatolia. As a matter of fact, the only lake utilized in the national struggle was Eğirdir lake.

The biggest ports of the empire in Anatolia were Istanbul and Izmir. With the increasing trade volume in these ports, new docks and warehouses were built. The ports of the Black Sea coast used in the National Struggle did not have docks; they were small and unprotected. Mersin port, which would be the window of the National Struggle to the world, was also very modest compared to Istanbul and Izmir.

While wheeled vehicles were standard in the European part of the empire, animal transportation was dominant in Anatolia. Camel caravans did long-distance trade and travel. The reason for this was not that the car was unknown but that the Anatolian geography and conditions were more suitable for the camel.

The railway network was far from forming a central transportation network throughout the empire. The Western Anatolian railways were designed similarly to the colony type, enabling the transportation of agricultural products to the port of Izmir. For the British, the search for a shortcut to India was also decisive for the importance of the railways in the region. As a matter of fact, when the British completely dominated Suez, their interest in Anatolia decreased. The Anatolian-Baghdad railways, on the other hand, were a combination of Germany's desire to reach the Middle East and the Ottoman's desire to reach the remote Arab region and the holy lands. The line could not reach east of Ankara because of the fierce opposition of the Russians.

Railways did not abolish the old mode of transportation with pack animals; on the contrary, the old and new transportation methods supported each other despite the competition in the early times.

Although the railways in Anatolia were similar to the colonial type, they differed from those in India and Syria. Since the lines in India and Syria have different gauges, connecting them was impossible. On the other hand, the Western Anatolian and Anatolian-Baghdad railways have the same gauges, and in 1899, these lines were connected in Afyon.

On Road Regulations and Plans in the Late Ottoman

In the previous section, I sketched out the developments in transportation across the Ottoman lands. Operations on roads in the Empire need to be examined as a separate section, however. There are several reasons for this. The first and most important reason, as we will see in the next section, is that transportation activities were carried out mainly on land during the years of the National Struggle. The government in Ankara needed soldiers and ammunition to be delivered to it from all over Anatolia to create a strong army on the western front. The vast majority of these shipments were made on land. For this reason, it would be helpful to look at the developments related to roadmaking in the 19th century, which formed the basis of the road transportation system in those years. The second reason is this: while the railways only opened specific routes to transportation and goods shipment, the roads were the main initiator of the expansion of these services in the country.¹ The third reason is the direct participation of the state in this field. The Ottoman Empire, independently of the private sector apart from a few small examples, became more involved in this area after the Tanzimat, albeit later than its European counterparts. All of the regulations in this era form the basis of the measures taken by the Ankara government regarding roads and transportation in those years. This chapter, which starts with a short road history and mentions some important Tanzimat era documents related to

1 İlkin & Tekeli, "Araba Teknolojisi ve Karayolu," 63.

roadmaking and road network plans, ends with an overview of the roads in Anatolia.

§ 3.1 Short History of Road

The Romans built important main roads in both Europe and Anatolia. Their roads, made with quite advanced technology, continued to exist for a long time. However, after the Romans left the scene around AD 500, their technical knowledge in road construction disappeared for about 1000 years. In addition, the new political order that emerged after the collapse of the Roman administration did not need advanced roads to connect countries or cities, and the roads deteriorated over time. As a result, car transportation in the Romans was replaced by animal backs. Humanity was, in a sense, sunk in the mud. With the disintegration of feudalism and gradually leaving its place to more centralized states triggered by the increasing volume of trade, road construction, and maintenance activities started again. In the beginning, road works were left to local administrations and organizations, but when this method did not give good results, road construction works were centralized. For example, in France in the 16th century, taxes started to be collected from the roads. A public works organization was established at the end of the 16th century. In 1663, the road obligation was brought to the people. In the 17th century, more than 1 million francs were spent annually on constructing and maintaining roads in France. In 1716, the Ministry of Public Works was established, which forms the basis of what it is today. In order to meet the increasing need for engineers, a higher engineering school was opened in 1747. In the middle of the 18th century, the money spent on roads amounted to 3-4 million francs. In the Napoleonic period, this figure increased to 28 million francs in 1804 and 50 million francs in 1812.²

2 Abisel, *Fransada Münakalât Siyaseti*, 77-80; Lay, *Road Technology*, 14.

At the beginning of the 19th century, great progress was made in roadmaking techniques. Scottish engineer MacAdam developed a construction technique that goes by his name. MacAdam understood that water was the road's worst enemy being that the water accumulating underground after the rains reduced the strength of the topsoil and caused collapses. As the roads deteriorated, the water that could not be removed was filling the road with mud. MacAdam's solution was to make the path slightly higher than the existing floor and slope sideways to allow water to flow through. He used small, crushed stones, which would be well interlocked, as a building material. The custom of the Romans in roadmaking was to have a solid foundation. MacAdam, on the other hand, emphasized drainage and the road's surface. The surface obtained by running a roller over the small and crushed stones directed the rainwater to the ditches on both sides of the road without penetrating the foundation. Thus, both the cost of road construction and the mud were prevented. By 1830 MacAdam's method had spread to France, Russia, Austria, and North America.³ In the Ottoman Empire, the word "*şose*," the French equivalent, was used for such roads. The term is first encountered in the construction of the Bursa-Mudanya, Bursa-Gemlik and Trabzon-Erzurum roads, which were started to be built in 1850.⁴

The demands arising from the nature of the state and the increasing transportation and communication demands of the production system necessitated a better transportation infrastructure. Both road vehicles and construction have been produced as a market good in countries where capitalism has developed.⁵ It is not without reason that the road agenda in the Ottoman Empire intensified with the Tanzimat. The two main reasons are the state's efforts towards centralization and penetration of the market economy into the empire.

3 Lay, *Road Technology*, 20; Abisel, *Fransada Münakalât Siyaseti*, 21-22; Bridges, *Kara Ulaştırma Tarihi*, 67-68. Tekeli and İlkin examined the history of road transportation in 7 periods. See: Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 67-76.

4 Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 109.

5 Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 70-72.

§ 3.2 Tanzimat Regulations regarding Roads and Transportation

In the Ottoman Empire, road construction works with a new understanding and technology started after the Tanzimat. It was stated in the Gülhane Edict of 1839 and the Islahat Edict of 1856 that public works and road construction would be handled. In 1838, during the ministry of Mustafa Reşit Pasha, an Agriculture and Industry Commission was established under the Ministry of Foreign Affairs to develop agriculture, trade, craftsmanship, and art, the welfare of the people, and the development of the country. The commission would be able to exchange information with people from home and abroad to achieve its objectives. Interestingly, the commission was within the structure of the Ministry of Foreign Affairs. According to Şerif Mardin, the minister Mustafa Reşit Pasha influenced the commission's establishment; the idea of such a commission in Pasha must have been formed in 1834 during his duty in Paris as the embassy. Decisions taken by the commission were also recorded in Turkish and French.⁶ The commission's name was changed to the Meclis-i Umur-u Nafia in the same year. It is seen that there was a constant change in the name of the institutions in the infancy of the new era. First, the Ministry of Commerce was established in 1839, and the Meclis-i Umur-u Nafia was attached to it. The Ministry of Agriculture was established in 1846, and the two ministries were merged in the same year. The merged ministries were renamed the Ministry of Trade and Public Works in 1850. In the following period, they sometimes separated and sometimes merged.⁷

6 Akyıldız, *Osmanlı Merkez Teşkilatında*, 258; Cited by Tekeli and İlkin, "İmar Kavramının Gelişimi," 5, The French influence is clearly seen in the relevant regulations of this period. We will mention them when appropriate. The name of the institution that was created was actually expressed with "assembly/meclis". Tekeli and İlkin states that the words "assembly" of that period should be considered as the equivalent of today's word of "commission."

7 Akyıldız, *Osmanlı Merkez Teşkilatında*, 260-263; İlkin and Tekeli, "İmar Kavramının Gelişimi," 6-7.

Akyıldız states that the Meclis-i Umur-u Nafia deviated from its founding purpose, as incompetent persons were employed in it. He also adds that the commission's purpose was unclear; the issues related to public works and construction were going to the Meclis-i Tanzimat. However, public works required expertise, and Meclis-i Tanzimat had much to do. Upon this, the Meclis-i Maabir (Council of Road and Bridge) was established in 1857 under the Meclis-i Nafia in order to carry out construction activities such as roads, bridges, canals, and buildings in the country. Shortly after this new commission, the Meclis-i Umur-u Nafia was abolished.⁸ Moreover, trade, agriculture, and *nafia* affairs were handled by the same administrative unit after being gathered in a single ministry, the Trade Ministry, which caused none to be done properly.⁹

Since the results obtained from the Gulhane Edict to 1845 were not satisfactory, two people from each state were called to Istanbul, and meetings were held. As a result of these meetings, Reconstruction Commissions were established and sent to the provinces, and they were asked to do research on the development of their provinces. As a result of their 7-8 months of work, the commissions, which determined the problems of the people in the cities and villages in the provinces, sent their reports to Istanbul. Based on these reports, a program was prepared in which priority was given to roads, bridges, and waterways. This program was the predecessor of the public works programs that would be prepared in the following years. Bursa-Gemlik and Trabzon-Erzurum roads were within the scope of this program. However, it was stated in the program that the necessary expenses for the projects would be provided from the provinces' tax revenues and the foundations' revenues. Both for this reason and because there was not yet a developed state organization in this field, the projects had been dragged out.¹⁰

In the Ottoman Empire, the road system in Anatolia was organized according to caravan transportation and animal transportation. The only

8 Akyıldız, *Osmanlı Merkez Teşkilatında*, 263-265.

9 Akyıldız, *Osmanlı Merkez Teşkilatında*, 144.

10 İlkin and Tekeli, "İmar Kavramının Gelişimi," 5-6.

engineering structures that could be seen on the routes were bridges. Until the 18th century, cars were very rare on the routes among cities. The only car in Anatolia at that time was the oxcart which continued to exist in Anatolia until the middle of the 20th century. There are some reasons for this. First, these tools were cheap, and the villagers could make them themselves, adjusting their size to suit their animals. It could pass the corners easily and be used on all kinds of roads as it was less immersed in the mud.¹¹ At the beginning of the 20th century, oxcart was tried to be banned by stating that they were causing great damage to the roads. While the province of Trabzon decided to ban it, the province of Erzurum did not take a decision by stating that no vehicle other than an oxcart could operate in rainy weather, especially in swampy areas. In the province of Ankara, it was proposed not to collect road money from wagons (four-wheeled cars) but take 1 piaster road money from oxcarts to reduce their use. It was also proposed to give an interest-free loan from Ziraat Bank so that the farmer could buy a four-wheeled car. In Kastamonu, the farmers stated that they were devastated because they could not transport their products and asked for the ban to be lifted as soon as possible. During the First World War, the Ministry of War also wanted these vehicles to be banned because they destroyed the roads.¹² A similar discussion about oxcarts took place during the years of the national struggle. Some deputies stated that oxcart should be banned for the same reasons. However, in the Turkish War of Independence, the oxcart had an exceptional place. After the war was won, it was even proposed to erect an oxcart statue on the square where the assembly was located in Ankara.¹³

In the empire, four-wheeled cars were more common in Rumelia. This is because the state has given special importance to the road known as Istanbul Street and maintained it regularly. Cars began to appear in Istanbul in the 17th century. Apart from the cars in the service of the Palace, and pashas, there was a four-wheeled cart pulled by two oxen called *koçu*. These were mostly used by women. It was also possible to see these

11 İlkin and Tekeli, "Araba Teknolojisi ve Karayolu," 80-81.

12 Duysak, "Osmanlı Devleti Karayolları," 46-47.

13 TBMMZC, Vol 23, 187: 27.09.1922.

springless, uncomfortable, backward technology vehicles on Istanbul Street. By 1751, there were 665 *koçu* cars in Istanbul. *Koçu* drivers were organized like other tradesmen, and *koçus* could be kept for rent.

In the 18th century, besides cannon carts, cars were also used in the army to transport goods. There were 30 thousand cars in the army on a campaign in this century. The 19th century was a period when the car became widespread in all classes and regions of society with different functions. Mahmud II was the first sultan to always ride a car instead of a horse. A regulation arranging the activities of coachmen in the city was enacted in 1826. At the end of the century, companies that rented cars were established. While slow cars like *koçu* were withdrawn from urban transportation, faster spring cars took their place. In the 1890s, there were 5727 cars in the Erzurum province and 3000 cars in the Elazığ and Adana provinces. On the other hand, cars had not yet entered Baghdad and Mosul. By the end of the 19th century, spring cars became the standard means of transportation in Anatolia.¹⁴

The world economy was in a depression in the last quarter of the 19th century. The crisis in 1873 stopped capital imports, and this caused financially vulnerable countries to go bankrupt. The Ottoman Empire declared a moratorium in 1876. The process led to the establishment of the Public Debt Administration in 1881. In 8 countries of Latin America, Liberia, and Egypt, debts were rescheduled under new conditions.¹⁵ The export of capital to the Ottoman Empire resumed only after 1881. It is also possible to follow this conjuncture of the capital from the construction dates of the railways. After the first lines in Western Anatolia started in 1866-67, it was required to wait nearly 20 years both for the addition of new lines to them and for the construction of Anatolian railways. The İzmir-Kasaba line reached Alaşehir in 1886 (the concession of this line was granted in 1872) and reached Afyon in 1896. The extension of the line from Manisa station to the north, towards Soma and Bandırma, took

14 İlkın and Tekeli, "Araba Teknolojisi ve Karayolu," 83-103.

15 Quataert, "The Age of Reforms," 773.

place in 1890. Similarly, the İzmir-Aydın line was able to start its eastward expansion after 1880.¹⁶ As we will see, the acceleration of road construction in the empire coincides with after 1881.

Thus, the demands arising from the centralization efforts in the empire, the demands increased by trade and social mobility, and the widespread use of the car and its transformations necessitated strengthening the overland transportation infrastructure. Anatolia was very poor in terms of waterways. The route of the railways was clear and fixed. Roads became important. In the remainder of the section, I refer to important regulations and plans related to road transportation and the state of the road network in the Ottoman Empire.

3.2.1 *The 1869 Roads and Bridges Regulation*

Before this regulation, a document (*ilmühaber*) was published in 1839 to make the inner-city roads in Istanbul suitable for car transportation. This document classified the inner-city roads in various widths, determined the height of the buildings to be built on the sides of the roads, stated that no dead-end street could be built, and stipulated that the roads should be in accordance with geometrical principles. It was followed by the Buildings (*Ebniye*) Regulation of 1848, which loosened the rules a little compared to the previous certificates issued for Istanbul. In 1863, the Roads (*Turuk*) and Buildings Regulations were enacted for all urban roads. In 1882, this regulation was replaced by the Buildings Law. These regulations, enacted to put urban roads in order, were applied mainly in the planning after the fires.¹⁷

The first regulation for roads between cities was the 1861 regulation called “*Memâlik-i Mahrûse-i Şâhâne Yollarının Tanzîm ve Tesviyesi Hakkında Nizâmnâme.*” However, this regulation had some deficiencies

16 For a list of lines' concession and construction dates see: Eldem, *Osmanlı İmparatorluğu'nun İktisadi Şartları*, 104.

17 İlkin and Tekeli, “Araba Teknolojisi ve Karayolu,” 107-108.

during its implementation, such as the workload of engineers, the recruitment of workers, the construction of district (*kaza*) roads, and the collection of taxes (*bedel*). When an annex made in 1867 was not a solution in order to solve deficiencies, the Roads and Bridges Regulation (*Turuk-u Maabir Nizamnamesi*) was issued in 1869.¹⁸

Berksan considers the Roads and Bridges Regulation as the cornerstone of the Turkish roads administration.¹⁹ The regulation was divided into 4 parts: a) classification of roads, b) use of obliged workers, c) construction styles of roads, and d) maintenance and repair of roads. Tekeli and İlkin, while citing the İzmir-Aydın railway as an example of a colonial type of transportation attempt, they define the regulation as oriented towards national interests. The İzmir-Aydın line consists of the port and the railway connecting it to its hinterland in the form of a tree. The European powers dictated railway routes in a way that would serve to connect their spheres of influence in the empire, and they avoided forming a network in the empire by connecting them. This prevented the integration of the internal market in the empire. In this context, the regulation aimed at realizing the road construction with local sources, which is not attractive to foreigners.²⁰ According to them, the regulation documents the transition from caravan to car in transportation technology in the Ottoman Empire, although the caravans would keep their existence for a long time; because the road standards of the regulation and the examination of the construction technique show that it was made for car transportation. The car started to be used as a mail car and intercity transportation vehicle when the postal route between Istanbul and İzmit was built in 1834.²¹

18 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 109, 117.

19 Berksan, *Yol Davamız*, 11. Berksan gives the date of this regulation as 1866. İlkin and Tekeli follows him. However, the date should be 1869. Çetin's inquiry bases on the *Meclis-i Mahsus, Düstûr*, and *Takvim-i Vekayi* and giving the date as 1869. (Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 118). Eldem (1994) also gives the date as 1869 (p. 188).

20 Tekeli and İlkin, "Türkiye'de Demiryolu Öncelikli," 372-373.

21 Tekeli and İlkin, "Türkiye'de Demiryolu Öncelikli," 375.

According to the regulation, the roads were divided into four types, and the standards were determined for each. Table 3.1 shows the classification of roads.

Table 3.1 The classification of roads in the 1869 regulation

Type	Explanation	Width (meter)		
		Road	Roadside	Total
1.Sultan's roads	Major avenues from vilayet centers to the capital, ports and railways	7.00	2.00	9.00
2.Vilayet's roads	Avenues in vilayet and elviye centers	5.50	1.50	7.00
3.Sancak's roads	Inter-kaza roads and sancak roads from the kaza to major avenues, railways and ports	4.50	1.00	5.50
4.Kaza's roads	Village roads that are not for cars	0.00	0.00	3.00

Source: Berksan, *Yol Davamız*, 13

While the first- and second-class roads were *turuk-u umumi*, state roads, the third- and fourth-class roads were *turuk-u hususi*, province roads. While the responsibility of making and repairing the state roads was with the central government, the responsibility for the particular roads was left to the local administration.²² Berksan draws attention to the centrality of the Roads and Bridges Administration by emphasizing that the class of roads could only be changed by law. Neither the general manager, nor the minister or the grand vizier could change the class of a road; this was only possible with the law.²³ The detail in the regulation

²² In France, with a regulation dated 1776, roads were divided into four classes according to their width and importance. With a regulation dated 1811, roads were divided into two as state roads and particular roads, with the responsibilities of the state and local administrations, respectively (Abisel, *Fransada Münakalât Siyaseti*, 80).

²³ Berksan, *Yol Davamız*, 56. For this reason, in the 1st TBMM, law proposals were frequently given by the deputies to change various particular roads to state roads. While

that the governors had to have the annual road programs approved by the center also shows the centralist approach of the administration. However, central control was only at the level of control of planning because road construction must be organized in a decentralized manner due to technological constraints.²⁴

According to the regulation, everyone between the ages of 16 and 60 would work physically for 20 days in five years, or pay a tax, or employ animals for road construction. Religious functionaries, school teachers, soldiers, and polices were exempted from this obligation. These drudgery-type obligations are feudal institutions. Governors such as Mithat Pasha and Halil Rıfat Pasha had important roads built using these feudal social relations.²⁵ This type of road tax was inspired by the French law of 1836.²⁶ With the regulation in 1890, the cash payment method was started. According to this, the people, either themselves or the person they hired, would participate in roadworks 4 days a year, or they would pay 12 piasters, that is, three piasters per day.²⁷

We can consider a circular sent to the vilayets on road construction in 1881 and a description on the repair and preservation of roads published in 1887 as annexes to the 1869 regulation.²⁸ Over the years, the failure to achieve the desired results in the construction of new roads and the maintenance and repair of existing roads, complaints from the provinces, irregularities, and corruption in the construction works necessitated the issuance of a new regulation, General Instruction Of Roads and Bridges (*Turuk-u Maâbir Talimat-ı Umumiyesi*) in 1898. This regulation,

the particular roads were repaired and reconstructed from the provincial budget, the state roads were repaired and reconstructed from the central budget. The provinces could not allocate funds for the construction and maintenance of the roads and demanded this from the parliament.

24 Tekeli and İlkin, "Türkiye'de Demiryolu Öncelikli," 375.

25 Tekeli and İlkin, "Türkiye'de Demiryolu Öncelikli," 375.

26 Tekeli and İlkin, "Türkiye'de Demiryolu Öncelikli," 375, citing Daniel Boutet, "*Yol Tekniğinin Bugünkü Durumu*," (İstanbul Teknik Üniversitesi, 1949), 14-30.

27 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 162.

28 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 133-34, 142-45.

which was the most comprehensive regulation prepared in this field, would remain in force until the end of the empire.²⁹ İlkin ve Tekeli states that this instruction documented that the Empire reached a new stage in road construction by adopting MacAdam's way of roadmaking.³⁰ Although the 1869 regulation was a step forward in terms of scope and details, road construction and repairs were subject to long bureaucratic processes. Issues were transferred from the provincial councils to the ministry and the relevant council. The matters that were decided there would be reported to the governors, they would convene the administrative councils and reassess the issue, inform the governors of the decisions taken, and they would convey this to the district governor. Given the transportation and communication facilities at that time, it took a long time to get the work done.³¹

3.2.2 *The 1880 Report of Hasan Fehmi Pasha, The Minister of Public Works*

Before Hasan Fehmi Pasha's report, there was another report prepared by Kolonel Malinowski in 1856. In this report, Malinowski made a list of the roads to be built in the Ottoman country for military and commercial purposes. He stated that 590 hours in Anatolia and 422 hours in Rumelia should be made, but he did not discuss their technical features and financing. The 136-hour road from Izmir, passing through Ankara, Yozgat, Tokat and reaching Sivas, and the 82-hour road from Konya to Kayseri and Sivas are among the roads he recommended.³²

Hasan Fehmi Pasha's report in 1880 is much more comprehensive than Malinowski's. This detailed public works report is in the nature of a development plan that includes roads, railways, ports and piers, and

29 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 145-146.

30 Tekeli and İlkin, "Araba Teknolojisi ve Karayolu," 115.

31 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 127-128.

32 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 186-188.

lands to be dried and irrigated. Pasha discussed the financing of the projects and made estimations about the costs of the projects and the revenues that could be obtained. Pasha is aware that the existence of public works is a prerequisite for increasing national income. Contrary to popular belief, he said, roads are not built and developed after economic activity and abundance of income; instead, the regularity of roads and ease of transportation increase national income by accelerating economic activities. He complained about the lack of interest in public works, indifference, and missed opportunities. Roads facilitate military operations and transportation, help maintain the security and order of the country, and develop feelings of trust and loyalty between the administration and the people. Pasha discussed three methods for financing. The first was to meet the expenditures from the state treasury. He did not recommend this method because both the Ottoman experience and the experience of other countries had shown that it was harmful because in this method, works that cost 10 cents increase to 80-100 cents. In any case, the public works budget was insufficient to carry out these projects. The second method was to cover the capital by the state and the workforce through forced labor. He said it was impossible to create large works with compulsory workers. He also said that money would come out of the treasury to purchase tools, equipment, and raw materials in this method. The third method is to apply to foreign capital owners, which the Pasha believes is the only solution. However, he thinks that not a profit guarantee but facilitation and freedom of work would be enough to attract foreign capital.³³

He suggested 14 roads in various parts of Anatolia. The estimated construction cost of these roads, with a total length of 2535 kilometers, is approximately 1.7 million Ottoman liras. On average, the cost of a 1-kilometer road was 669 liras.³⁴ While the competent governors implemented some of the roads mentioned by the Pasha in some provinces, no work was done in some regions.³⁵

33 Hayri Mutluçağ, "Kalkınma Planı I," 6-11.

34 Hayri Mutluçağ, "Kalkınma Planı II," 11-18.

35 Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu," 188-189.

Şose roads, which were 900 kilometers long in 1881, increased to 10,400 kilometers in 1888. This eight-year was the period in which the most roads were built in the empire. Total şose road length increased to 13,800 kilometers in 1898 and 17,400 in 1908.³⁶ If we look at the speed of road construction, approximately 1,200 kilometers of şose per year was built between 1881 and 1888, while yearly average of şose construction was 340 kilometers between 1889 and 1898 and about 400 kilometers between 1899 and 1908. İlkin and Tekeli give the state's road construction capacity as 1000 kilometers of completed and 400 kilometers of uncompleted şose per year from 1881 to 1889. As the reason for the decline in the following years, they say that due to the low quality of the roads built in the previous years, they mostly deal with repairs and improvements in these years. The annual new road construction capacity for the years 1906-1907 was 350 kilometers of new şose, 300 kilometers of leveling (*tesviye-i turabiye*), and 700 kilometers of repairs. It was assumed that the system had a capacity of 500 kilometers of new road construction and 800 kilometers of repair per year on the eve of the 1908 public work plan.³⁷

3.2.3 The 1908 Public Work Plan

The 1908 plan was similar to Hasan Fehmi Pasha's plan. It was also technically similar, although it was prepared 26 years later.³⁸

İlkin and Tekeli consider the program in the context of the modernity project. Infrastructure programs determine how and in what way the imperial economy will be connected to the world capitalist system and reveal the spatial indicators of peripheralization. In addition, such infrastructure programs reveal the increasing public responsibilities of the

36 Tekeli and İlkin, "Nâfia Programları ve Teknoloji," 159.

37 Tekeli and İlkin, "1908 Tarihli," 182.

38 Tekeli and İlkin, "1908 Tarihli," 212.

state and the requirement of establishing a rational bureaucracy in the context of modernity.³⁹

The government aimed, with the plan, to transport crops to the country and world markets in order to develop agriculture. For this, *şoses*, railways, ports, and river transportation would be made. The plan foresees the establishment of industry in the country and the provision of import substitution in this way, thanks to agriculture's development and income increase.⁴⁰ With an 8-year plan, it aimed to build a road network of 30,000 kilometers. Although this network consists of Sultan's and *Vilayet* roads, another network of 15,000 kilometers was considered for the *kaza* roads, but this second network was not included in the program due to budget constraints. The construction cost of the 30,000 kilometers road network was calculated as 9.6 million liras. For this purpose, the allowance of 400.000 liras allocated for roads every year would be increased to 1.2 million liras. However, the road tax collected from the people was insufficient for this allowance. The bodily working obligation was abandoned in France, Serbia, Romania, and Bulgaria. In the Ottoman Empire, only 10-12 percent of the road tax was provided by bodily working obligation. Road taxes and 5 percent of the *vilayet* of Rumeli revenue allocated to road construction covered only a quarter of the 1.2 million required. Therefore, it was necessary to allocate resources from the government budget.⁴¹ In addition to costs, there was also a shortage of engineers. There were only 136 engineers in the empire, which spread over a very wide geography at that time. For comparison, Romania, which has a much smaller area, had more than 1000 engineers then.⁴² In the budget negotiations of 1910, the Minister of Public Works said that the number of students in the engineering school would be increased to 500

39 Tekeli and İlkin, "1908 Tarihli," 176

40 Tekeli and İlkin, "1908 Tarihli," 178-179.

41 Tekeli and İlkin, "1908 Tarihli," 182-83.

42 Tekeli and İlkin, "1908 Tarihli," 203-204.

and that 10 students would be sent to Europe. In 1911, the School of Science Officers was opened.⁴³

There were major problems in the financing of the plan. A borrowing of approximately 4 million liras was considered for the constructions in 1909-1911, but it could not pass in the *Meclis-i Mebusan*. Upon this, the Ministry took the initiative to have the roads that need to be built immediately by contractors in return for a 10-year road tax.⁴⁴

Although serious efforts were made to implement it, the plan could not be implemented due to the first Tripoli (1911-1912), then the Balkan Wars (1912-1913), and finally the First World War (1914-1918).⁴⁵

§ 3.3 Overview of the Roads in Anatolia

The first şose roads after the Tanzimat were started with the Bursa-Mudanya, Bursa-Gemlik, and Trabzon-Erzurum road constructions in 1850. While the construction of the first two roads of 35 kilometers was completed in 1865, the road of Trabzon-Erzurum of 314 kilometers was completed in 1872. The Crimean War had a great impact on the late completion of these roads.⁴⁶ In addition, there was no experience in road construction at this early date, and important regulations such as working

43 Tekeli and İlkin, "1908 Tarihli," 210.

44 Tekeli and İlkin, "1908 Tarihli," 201-203.

45 Tekeli and İlkin, "1908 Tarihli," 213.

46 Yılmaz, 51. Yılmaz's work is based on the reports prepared by Colonel Mircher, who served in the French Eastern Army during the Crimean War and was assigned to investigate the region after the war. Since it was a very difficult region in terms of geography and climate, this road was built piece by piece. Mircher, who was surprised that no arrangement or maintenance was made on this road, where 80 thousand pack animals pass annually due to the Trabzon-Iran trade, stated that the road could only be used by mules in its current state, and that it was essential to repair the road in a way that would preserve its caravan route character, taking into account the financial situation of the Ottoman Empire (Yılmaz, "Trabzon Erzurum Yolu," passim). Quataert also emphasizes

obligations on roadmaking had not been realized. The real breakthrough in roadmaking began in 1881 when there were only 900 kilometers of şose roads. The road network increased rapidly with the increase in the money spent on roadmaking after 1881. Road investments after 1881 are given in Table 3.2.

Table 3.2 Road investments, million piasters⁴⁷

Year	Spending	Year	Spending
1881	5.4	1892	24.1
1882	22.8	1893	30.0
1883	62.3	1894	22.6
1884	72.2	1895	28.9
1885	81.8	1896	22.3
1886	79.6	1897	28.1
1887	45.4	1907	31.5
1888	35.3	1911	53.6
1889	58.6	1912	117.4
1890	11.9	1916	10.8
1891	20.7		

Source: Duran, "Karayolu Ulaşımındaki Gelişmeler," 486.

As seen in the table, road investment increased until 1885, then decreased, and it exceeded the 1885 level only in 1912. It is understood that the implementation of the 1908 plan was accelerated in 1912. According to the statistical yearbook of the empire for 1897, there were 14300 kilometers of şose in the entire empire in 1897, of which 10160 kilometers were within the borders of Turkey. Their distribution by province is as in Table 3.3.

that the road built between Trabzon and Tabriz in 1860 was very bad, so that the merchants continued to use the old road (Quataert, "The Age of Reforms," 818).

47 Statistics start from 1881 because the first statistical yearbook of the empire belongs to 1897 and observations in there start from 1881.

Table 3.3 Length of şose roads by provinces

Provinces	Kilometers
İstanbul, Edirne, İzmit	819.5
Bursa	1302.3
Aydın	971.5
Ankara	1311.9
Konya	485.5
Adana	559.8
Sivas	1827.6
Trabzon, Erzurum	815.6
Diyarbakır	340.8
Kastamonu	579.9
Bitlis, Van	85.9

Source: Güran, *Osmanlı Devleti'nin ilk istatistik yılı: 1897*, 285.

It is not clear how many kilometers were left from the Ottoman Empire to the TBMM. According to Müderrisoğlu, 9711 kilometers of the Ottoman road, which totaled 48900 kilometers, was within the borders of the National Pact (*Misak-ı Milli*).⁴⁸ Of these 9711 kilometers, 3477 kilometers needed improvement, 3283 kilometers were in constant need of maintenance, and 3026 kilometers needed reconstruction. Berksan states the remaining road amount as 18335 kilometers, of which 13885 kilometers needed maintenance, and 4450 kilometers was graded earth road.⁴⁹ On the other hand, at the beginning of 1921, the Deputy of Public Works, Ömer Lütfi Bey, stated that there were 6-7 thousand kilometers of state roads and twice as many particular roads under his responsibility.⁵⁰ Therefore, there probably were 18-20 thousand kilometers of road. A record of the public work commission in June 1922 states that the total of state and particular roads was 27 thousand kilometers. In the same record, it was stated that there were 38 thousand kilometers of state

48 Müderrisoğlu, *Kurtuluş Savaşı'nın Mali Kaynakları*, 82.

49 Berksan, *Yol Davamız*, 59.

50 TBMMZC, Vol 8, 217.

roads and 648 thousand kilometers of particular roads in France, which was rich in railways, in 1910.⁵¹

The quality of the roads was inferior when compared to European countries. European travelers who visited Ottoman lands before the 19th century often mentioned the bad roads of Anatolia and the Balkans.⁵² Similar narratives continued afterward. In their memoirs, Frunze⁵³ and Aralov,⁵⁴ who were trying to reach Ankara during the national struggle, could not pass without mentioning the terrible condition of the roads. During the Balkan wars, it was understood that the roads specified in the maps as suitable for *şose* and car crossing were not even natural roads.⁵⁵ In World War I, roads were unsuitable for motor vehicles that came with the Germans. Even in the most developed areas, the bridges were not strong enough to withstand the weight of the guns. Liman von Sanders says, "Many of the roads seen on the map in Turkey lacked most of the qualifications required in road construction." He states that the 130 kilometers road between Burdur and Antalya had already ceased to be a road but turned into a path according to German standards.⁵⁶ Before the First World War, when we look to the East, there was a developed road network around it with a railway network extending from the north to Baku in the Russian lands, including Kars, and reaching Sarıkamış with interconnections, while there was only Trabzon-Erzurum road in Ottoman Anatolia. Other roads around were paths that had lost their qualifications as roads.⁵⁷ A view of the transportation network in Anatolia at the beginning of the National Struggle is given in Figure 3.1 below. The sparseness of the *şoses* in Anatolia and the absence of a *şose* extending from eastern Anatolia to Central Anatolia is noteworthy.

51 TBMMZC, Vol 21, 8.

52 Ekin, "Klasik Dönemde," 389.

53 Frunze, *Türkiye Anıları*, 14; 78.

54 Aralov, *Türkiye Anıları*, 81.

55 Kayam and Tokdemir, "Osmanlı Kara Ulaşımı," 122. Citing Belig, "Balkan Harbinde Mürettep 4. Kolordunun Harekatı", 14.

56 Liman von Sanders, *Türkiye'de 5 Yıl*, 133-134.

57 Kayam and Tokdemir, "Osmanlı Kara Ulaşımı," 124; 138.

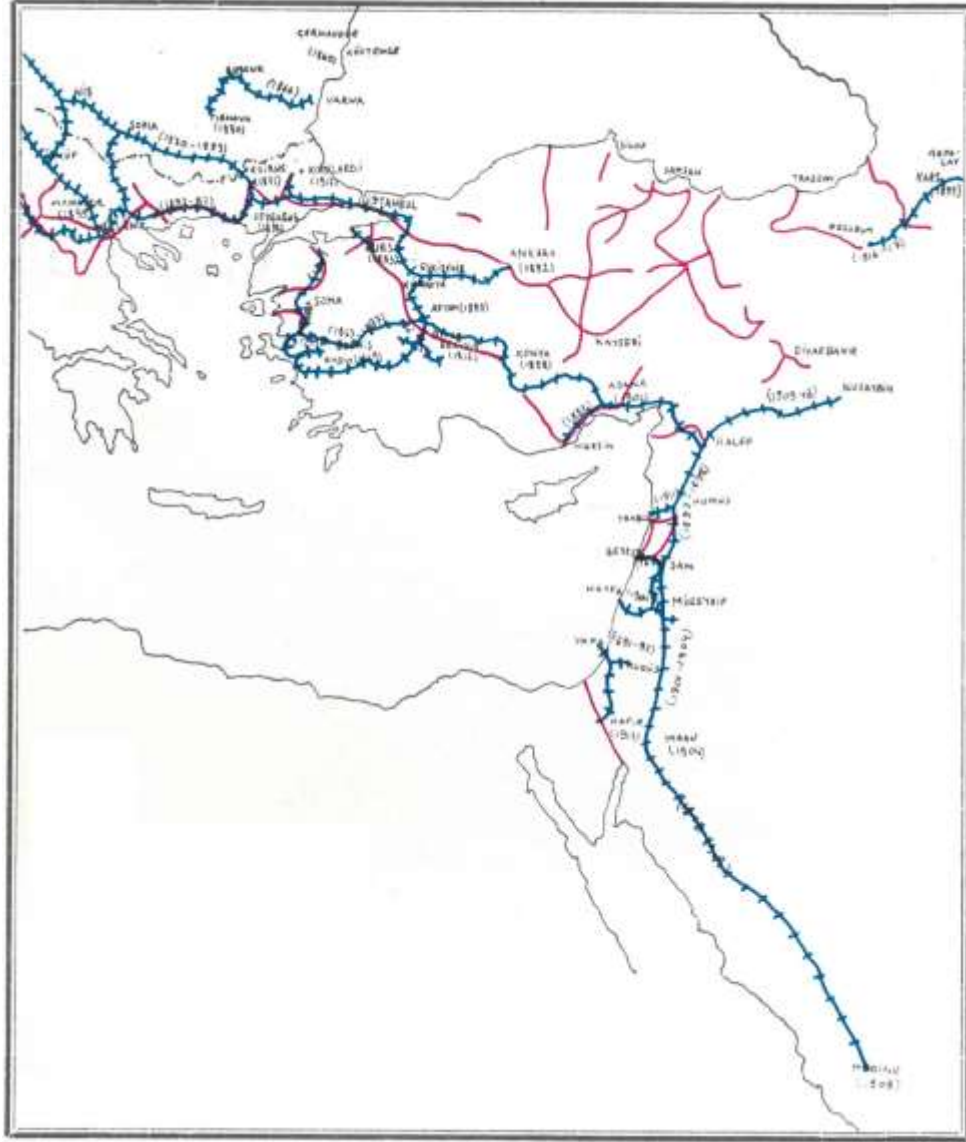


Figure 3.1 Şose roads and railways in Anatolia, 1918 Source: Eldem, *Osmanlı İmparatorluğu'nun İktisadi Şartları*, 266⁵⁸

58 Eldem shows only şose roads. On the other hand, the road map of 1921 prepared by the Turkish General Staff includes roads that were simpler and poorer than the şoses (see Appendix A). I find Eldem's map more coherent. Because, for example, the şose between Antalya and Burdur road, which Limon Van Sanders evaluated it as a path, not a şose, is shown on the map of the Turkish General Staff, but not on Eldem's map.

Finally, Table 3.4 shows the capacity and daily range of transportation vehicles in Anatolia. At the beginning of the national struggle, the number of motor vehicles was very few. There was no motor transport unit in the army in 1919. Of the 1000 automobiles in the country, 800 were in Istanbul, and nearly 100 were in Izmir. The remaining 100 cars were in different parts of Anatolia.⁵⁹ Military transportation was based entirely on animal vehicles. However, after the Ankara Agreement with the French, trucks were purchased from them. 140 of French trucks were in service on the Western Front in July 1922, and that reached 240 in August 1922.⁶⁰ Moreover, buses in Anatolia existed only between Kayseri and Sivas. An American Aid Organization, which was founded to help Armenian women and children, was operating a bus between Kayseri and Sivas in 1919.⁶¹

Table 3.4 Means of transportation in Anatolia, 1920s

Vehicle	Bearing Capacity (Kilogram)	Daily Range (Kilometer)
Tumbrel (two-wheel)	100-150	15-20
Horse cart (one-horse & two-wheel)	180-200	25
Horse cart (two-horse & four-wheel)	300-400	30-40
Bullock cart (two-bullock & four-wheel)	350-400	25
Pack train (hinny or horse)	70-75	25
Camel	120-150	25
Donkey	50-60	20-25
Van	1500-2000	200
Truck	3000-5000	180
Truck with trailer	5000-10000	150

Source: TİH, vol. 7, 193.

59 Çavdar, *Milli Mücadele'ye Başlarken*, 83.

60 TİH, Vol. 2, Section 6, Book 2, 300, 305.

61 Müderrisoğlu, *Kurtuluş Savaşının Mali Kaynakları*, 84.

On Transportation during the National Struggle

The Third Term Ottoman Assembly, which came to power with the 1914 elections, was dissolved by Sultan Mehmet Vahidettin on 21 December 1918, after the war was lost and the Committee of Union and Progress (*İttihad ve Terakki Cemiyeti*) was removed from the administration. The way the Entente powers implemented the armistice, and especially the occupation of Izmir by the Greeks, triggered the local congress processes, and the efforts to unite them in a single national structure with the Amasya Circular and Sivas Congress created a new focus of power in Anatolia. The election of delegates for the Fourth Term Ottoman Assembly resulted in the victory of this new focus of power. Mustafa Kemal was also elected to this assembly as an Erzurum delegate, but he did not go to Istanbul. Because he advocated the need for the fourth term Ottoman deputies to convene in Anatolia, referring to the French who moved their assembly to Versailles in 1871 and the German assembly gathered in Weimar in February 1919, but he could not be approved. However, after the assembly in Istanbul was raided by the British on March 16, 1920, and some of the delegates were exiled to Malta, the Representative Committee called for a meeting in Ankara. As a result of this call, the Ankara Convention, which can be considered an expanded form of the Sivas Congress, was convened, and the election process was started. The de facto convention was transformed into the Grand National Assembly of Turkey

(TBMM hereafter) and a council of ministers was formed.¹ Thereafter, the national government attempted to establish its own sovereignty in Anatolia and established its own administrative order in the regions under its control.

Although the first aim of the national government was to defeat the invaders militarily and expel them from Anatolia, it also worked under the roof of the parliament for the daily and sometimes even medium and long-term affairs of the country. In this respect, the Ministry of Public Works, which would devote most of its work to road construction and repair, was established within the new government. In the first part of this chapter, I evaluate the roadmaking and maintenance discussions in the TBMM during the national struggle. Then I address the negotiations on transferring some roads to the class of state roads. Finally, I focus on military transports.

§ 4.1 Ministry of Public Works and Accounting of Roadmaking

In the government program of the first council of ministers of the TBMM, it was stated that the main roads, which were necessary for the economic life of the country and whose construction had not started, would not be made due to the war conditions, but that the existing roads and bridges would be repaired in a way allowing for going and coming. In addition, measures would be taken to extend the Ankara-Sivas railway to Yahşihan.² The reason for this very limited program of the Ministry of Public Works was due to the limited budget.

After the establishment of the new government, state revenues were tried to be managed by the Ministry of Finance. It was ensured that the taxes, which were more than half of the state revenues, were collected by the Debt Administration as before, but they were given to the newly

1 Akın, *TBMM Devleti*, 41-48.

2 TBMMZC, Vol 1, 241: 09.05.1920. This was the only government program presented to the general assembly.

established Ministry of Finance. The Debt Administration, which collected the tithe of the big cities and the *ağnam* (livestock) tax of the Aydın province in return for its receipt from the state, had established a vast administrative network throughout the country. As a result of the negotiations with the Ankara representative of the Debt Administration, Ali Cavit Bey, it was agreed that the taxes collected would be given to the new government, the expenses of the administration would be covered by the new government, and the debts would be settled after the peace.³ A legitimate question here is how and why this administration, whose managers were the nationals of the Entente States, accepted this issue. It is simply because this agreement was also in the interest of the Debt Administration. The institution did not have military power, although it had a developed administrative organization throughout the country. In other words, as long as the National government did not allow it, collecting taxes from Anatolia was not possible. On the other hand, with this agreement, the national government acknowledged the existence of the Debt Administration and did not reject Ottoman debts, and guaranteed the receivables of foreigners.

Since it was impossible to prepare a budget in a short time, a period began when revenues were collected and expenditures were made on behalf of the public without a budget law. With its circular in May 1920, the Ministry of Finance declared that government departments could spend, provided that they did not exceed the previous year's expenditures. In order to overcome the financial and legal problems of collecting taxes and spending without a budget law, first a six-month advance payment law and then two more advance payment laws were issued until February 28, 1921. For this reason, the first budget law of the national government was a kind of enumeration of the spending made before.⁴ Budgets could not be made for 1921 and 1922, and advance payment laws would manage expenditures.

3 Dabağ, *Hasan Fehmi Ataç*, 84.

4 Akın, "TBMM'nin ilk bütçe yasası," 2-3.

The budget of the Ministry of Public Works in 1920 was 620 thousand liras which were approximately 1 percent of the total budget of 63 million liras. The fact that the budget of the ministry was so low, and most of the allowance was going to civil servants' salaries, even brought up the idea of transforming the Ministry of Public Works into a directorate and connecting it to the Ministry of Economy.⁵ Indeed, it was not easy to build new roads and even maintain existing roads with this budget. The budget negotiations in February 1921 were the scene of various debates, and delegates from all over Anatolia complained about the roads in their regions. For example, Şebinkarahisar delegate Mustafa Bey said:

We have been giving money for these roads for many years. However, this money is spent around Istanbul and in the regions where the railway is located. Out-of-sight areas are never taken into account. (...) A car, even a mule, cannot operate between Karahisar and (...) Our roads, which have been state roads for a long time, have never been hit with a pickaxe.⁶

Similarly, Erzurum delegate Hüseyin Avni Bey said:

"The most important duty of the government is to introduce itself to the villagers. Our villager pays for the road, but cars break down on the roads. If you ask the peasant about the government's foreign affairs, he will say I do not know. He will say I pay for the road; I look at the road; If every road is like this, woe to me for giving money!"⁷

It is possible to increase these examples. However, we have to look at the accounting of road construction and repair. However, before starting the accounting of roadmaking, it is helpful to remind the classification of roads in the country.

5 TBMMZC, Vol 8, 209-210.

6 TBMMZC, Vol 8, 215-216.

7 TBMMZC, Vol 8, 216.

In the previous chapter, we mentioned that the Ottoman roads were divided into state roads (*turuk-u umumiye*) and particular roads (*turuk-u hususiye*). While the general budget covered the construction and maintenance costs of state roads, the construction and maintenance of particular roads were covered by the local budget.⁸ Road taxes were collected by local administrations and included in local budgets, but as we see on the following pages, road tax revenues were not as much as delegates had thought. There is no doubt that the circumstances the country had been in for years had derogated the local budgets just like the general budget. Local administrations could not build new roads in the regions under their responsibility and could not maintain the existing ones. For this reason, law proposals were made to transfer many particular roads to state road status during the period we examined. Because as we mentioned in the previous chapter, this change could only be made by the parliament by law.

According to the Minister of Public Works, Ömer Lütfi Bey, the construction of a 1-kilometer new *şose*, excluding bridges, costs between 5 and 7 thousand liras. On the other hand, the annual maintenance cost of the 1-kilometer *şose* was about a thousand liras. In other words, with the 1920 budget of the Ministry of Public Works, only 100 kilometers of new road could be constructed, or 500-600 kilometers of them could be repaired. Again, in the words of the minister, the existing roads were not built with money but with the governors of the period having the people work.⁹ We have witnessed many times the rapid deterioration of newly built roads. The need for constant maintenance of the roads was related to the low quality of the roads. Labor battalions or locals were mostly

8 For example, the road of Silifke-Karaman was thought to be a state road and 8-10 thousand liras were spent from the ministry's budget for its repair. However, when it was understood that the road was a particular road, the work stopped. The problem was overcome by converting the road to state road. See: TBMMZC, Vol 8, 210-214.

9 TBMMZC, Vol 8, 217: 14.02.1921. In a committee report of almost the same days, it was stated that 1-kilometer road on steep terrain costed 10 thousand liras, and on flat land 5-6 thousand liras. See: TBMMZC, Vol 8, 272.

supposed to the construction of the roads, and high-quality labor could not be expected from them. However, road construction was a job that required technical knowledge. Thus, a committee report of June 1922 in the TBMM drew attention to the technical and scientific aspects of road construction with reference to the International Road Congress and official British reports in 1913, which emphasized the need for good engineers and professionally trained labor.¹⁰

How much were the road taxes that the delegates talked about? In June 1922, the proposal to change the road tax law was discussed. During those meetings, the Ministry of Public Works shared a table of the 1921 road tax realizations for 32 regions. According to this table, the road tax collected in 6 provinces and 26 sanjaks was 151 million piasters or approximately 1.5 million liras.¹¹ If we use the figures given by the minister for road construction and repair cost, 300 kilometers of new roads could be built, or 1500 kilometers of roads could be repaired with 1.5 million liras.

In addition, the road taxes were updated in February 1921 because prices and wages had increased considerably during and after the First World War, and the maximum daily price of 10 piasters, specified in the previous law, was not enough.¹² Before this update, for example, an annual road tax of 24 thousand liras was collected in Ankara province.¹³ In 1921, the road tax collected in Ankara was 83 thousand liras. All these calculations conclude that there was no capital accumulation to undertake large infrastructure investments in the country.

Moreover, the amount of money in circulation was insufficient to realize this. Ünal calculates that there were 20-22 million liras in circulation in 1920, excluding the amounts of money in the Ottoman Bank, Debt Administration, Monopoly of Tobacco, and various government offices. Considering the population of 10-12 million at that time, he states that

10 TMMZC, Vol 21, 9: 24.06.1922.

11 TMMZC, Vol 21, 7: 24.06.1922.

12 Düstur, Array 3, Vol 1, 227-228: 21.02.1921.

13 TBMMZC, Vol 8, 272: 17.02.1921.

there were only 2-2.5 liras per person.¹⁴ Akin, on the other hand, based on the 1918 budget discussions, states that there were 138 million liras in circulation, at least half of which was in banks in Istanbul.¹⁵ As Eldem states, the service system dominated the economy then, and monetization was very limited.¹⁶ The service system that dominates the economy manifested itself most clearly in the National Obligations. We address this in the last section.

In 1921, the Ministry of Public Works did not have a budget. We learn this from the discussion on the road of Diyarbakır-Ergani, which was an endless story. In February 1921, Diyarbakır delegate Kadri Ahmet Bey gave a parliamentary question about why the road of Diyarbakır-Ergani was not repaired.¹⁷ In March 1921, with another parliamentary question, he stated that there was still no work on the road that was said to be interested in 1921 during the 1920 budget negotiations.¹⁸ In its reply, the Minister said that 15 thousand liras had been put into the 1921 budget for the repair of this road and that the work would begin after the approval of the budget.¹⁹ However, in November 1921, Kadri Ahmet Bey asked again about the same road and how much money was spent on the construction and repair of this road from the Public Works budget.²⁰ In the answer given by the Minister, it was stated that the budget of 1920 had to be taken as a basis for the year 1921, and with a second budget, 300 thousand liras was put in the Public Works budget for the construction and repair of the roads, but even 100 thousand liras of this money could not be taken, and the remaining 200 thousand money liras spent on other expenses by the Ministry of Finance. He eventually confessed

14 Ünal, "Milli Mücadelede Ekonomik Durum," 961.

15 Akin, "TBMM'nin ilk bütçe yasası," 4.

16 Eldem, "Cihan Harbinin ve İstiklal Savaşının," 373.

17 TBMMZC, Vol 8, 224.

18 TBMMZC, Vol 9, 101.

19 TBMMZC, Vol 9, 215

20 TBMMZC, Vol 14, 11.

that the work of the Ministry of Public Works was limited to repairing only six roads connecting Anatolia to the sea due to the limited budget.²¹

§ 4.2 From the particular road to the state road: “Turuk-u umumiye meyanına ithal”

As I mentioned above, the conversion of particular roads to state roads was only possible with the law, and during the period we examined, law proposals were given for many roads. Since those who submitted the law proposals were generally the delegates of the region where the road to be converted was located, they gave important information about the situation and economic life of the region during the negotiations. For this reason, I find it helpful to include these proposals here.

4.2.1 *The road of Ankara-Kastamonu-İnebolu*

İnebolu was an important port during the national struggle. Weapons, ammunition, and other materials smuggled from Istanbul were unloaded in İnebolu and transported to Ankara by road. Russian aid was coming to Trabzon and sent from there to other ports, including İnebolu. The Eastern and Elcezire front aids to Trabzon were following the same route. The Council of Ministers itself requested²² the general assembly of TBMM in December 1920 to give the needed money for the repair of the road of Ankara-İnebolu.²³ The economic importance of this 345-kilometer-long road was emphasized in the committee record. Accordingly, the road that connected Anatolia to the Black Sea contained outlets that could provide export and import; therefore, the road had to be suitable for car traffic.

21 TBMMZC, Vol 14, 48-50.

22 As we noted since the 1920 budget had not been prepared yet, expenditures were made in this way. The 1920 budget would be issued at the end of the fiscal year and would be like a record of the expenditures made. Budgets would not be issued for the years 1921 and 1922.

23 TBMMZC, Vol 5, 322.

Nearly 250 thousand liras were required to repair and fortify the road, but 66 thousand liras were requested to be added to the 34 thousand liras²⁴ previously given. As a result of the negotiations, not 66 thousand liras, but 16 thousand liras were given to the Ministry of Public Works to be spent on repairing the road. Amasya delegate Ömer Lütfi Bey (who would be the second Minister of Public Works) drew attention to the road of Samsun during the negotiations. According to his information, the east of Ankara was sending its exports to Samsun via Çorum and Havza. He stated that 400 cars were going to and returning from Samsun every day carrying 200 tons of commercial goods. However, he said that because the roads were devastated, a sack of flour transported to Samsun for 1.5 liras in the summer cost 3 liras in the winter, and the farmers paid the difference.²⁵ Soon, he made a proposal for the repair of the road of Samsun-Havza-Amasya-Yozgat.²⁶ In June 1921, Mersin deputy Salahattin Bey also submitted a proposal for the repair of the road of Samsun-Havza.²⁷ However, issues related to the road of Samsun did not come to the parliament's agenda.

4.2.2 *The road of Merzifon-Çorum-Çalath*

A law draft was sent from the Council of Ministers in January 1921 to change the status of this road into the state road.²⁸ In the response of the relevant committees, it was stated that with the repair of the road, the roads of Sivas-Ankara and Sivas-Samsun would merge and that the goods in those regions could be transported to Samsun, and it was deemed appropriate to change the status of the road into state road, including it in the general budget by doing so, and to give an allocation of 100 thousand

24 It is not clear when this money was given. It may belong to the time of the Meclis-i Mebusan.

25 TBMMZC, Vol 6, 302-305; 309; 329.

26 TBMMZC, Vol 6, 333.

27 TBMMZC, Vol 10, 419.

28 TBMMZC, Vol 7, 373.

liras.²⁹ In May, the law was accepted by the general assembly of the parliament.³⁰

4.2.3 *The road of Ordu-Sivas*

In February 1921, a law proposal was given by Trabzon delegate Recai Bey to change the status of this road into the state road. The proposal stated that the road connected Sivas to Ordu with a shorter distance and the only outlet of the surrounding region was the port of Ordu (Vona). Moreover, the people were ready to work on repair³¹ aside from the liability arising from the road tax law (Tarik Bedeli Nakdisi Kanunu).³² In its reply, the Ministry of Public Works agreed with the importance of the road and stated that the road could be changed to the status of the state road and be upgraded to a şose with 700 thousand liras. However, he also stated that the road could be repaired with the help of the provincial budget staying on the status of the particular road.³³ Recai Bey, who made the proposal, emphasized the importance of roads in developing economic life and emphasized that the port of Ordu was a natural and quiet port, and unlike the ports of İnebolu and Samsun, it was suitable for the coming and going of commercial ships during the stormy times of the Black Sea. As a result of the negotiations, the road was changed into the state road, and a budget of 50 thousand liras was given for its repair. The Minister of Public Works, Ömer Lütfi Bey, drew attention to the fact that

29 TBMMZC, Vol 8, 215.

30 TBMMZC, Vol 10, 281-283.

31 The liva center of Ordu had a population of 160 thousand and there were 360 villages around. It is understood that the people of Ordu had collected 60 thousand liras in time and sent them to the government so that their city could become a liva. Similarly, when Tunalı Hilmi Bey was the district governor there, the people had collected 2500 liras for the telephone. For this road work, they had have already bought 2000 thousand pick-axes. The people of Ordu also had wanted to establish a car company that could travel between Ordu and Sivas in 2 days. See TBMMZC, Vol 10, 177-180.

32 TBMMZC, Vol 8, 81.

33 TBMMZC, Vol 8, 397-398.

the provinces were collecting the road taxes, but they were being repaired by the general budget.³⁴

4.2.4 *The road of Ereğli-Ankara*

The law proposal changing the road's status into the state road, submitted by Bolu delegate Dr. Fuad Bey and his friends in March 1921³⁵, was accepted by the Proposal (Layiha) Committee and discussed in the general assembly. The road following the Ereğli-Devrek-Gerede-Yabanabat-Ankara route was shorter than the road of İnebolu-Ankara and partially constructed. The distance between İstanbul and İnebolu was 240 nautical miles, and the length of the current road of İnebolu-Ankara was 310 kilometers. However, the distance between İstanbul and Ereğli was 105 nautical miles, and the length of the road proposed to be changed into the state road was 265 kilometers. There were many manufacturing workshops on the route, which was also free from natural constraints. Since Ilgazdagi was closed in winter, the road of İnebolu was being disrupted, and the port of İnebolu could not operate during wave and windy times. Besides, since Bolu was utterly forested, its land was unsuitable for agriculture. Anatolia, on the other hand, was deforested but suitable for agriculture. Due to the inconvenient roads, forest resources in Bolu and coal resources in Zonguldak could not be sent to Anatolia, and barley and wheat in Anatolia could not be sent to the Black Sea coast. There was a salient difference in barley and wheat prices between Anatolia and the Black Sea Region. As a result, European flour was being consumed in the Black Sea region.³⁶ The Ministry of Public Works agreed with the advantages of the route and stated that the şose road could be constructed in five years, costing 1.2 million liras, but the budget was insufficient for

34 TBMMZC, Vol 10, 177-180.

35 TBMMZC, Vol 9, 216.

36 Remember that a similar discussion was made for the construction of Anatolian railways.

this construction. The proposal sent to the budget committee did not come to the general assembly again.³⁷

4.2.5 *The roads of Taşucu-Silifke-Mut-Karaman and Afyon-Sandıklı-Dinar*

Negotiations for changing the status of these two roads into the state road were held simultaneously. Since the general assembly agreed that these roads were close to the coasts and were essential both economically and militarily, the law proposals were accepted. During the negotiations, an exciting case emerged in terms of showing the difference between state roads and particular roads. About 10 thousand liras had been spent to repair the roads of Silifke and Karaman, but when it was understood that the road was not a state road, the payments stopped, and the workers did not receive their remaining money. The money should have been spent from the provincial budget, not the general budget. Changing the status of the road into the state road with the proposal of the law would both correct the wrong expenditure of money, and the remaining debts would be paid from the relevant articles of the Ministry of Public Works budget. Discharging this debt appeared necessary, as contractors had complained of not getting their money on time while doing business with the government. It was emphasized that these payments had to be made not to shake the trust of the contractors in the government.³⁸

4.2.6 *The road of Kars-Ardahan-Borçka-Hopa*

In March 1921, Lazistan delegate Esad Bey submitted a law proposal to change the status of the road into the state road. The relevant committee emphasized that the only outlet of Kars, Ardahan, and Artvin was the port of Hopa after Batum was left to Georgia and stated that the changing of the status was necessary both economically and for winning the hearts of the people of *Elviye-i Selase*, who had been in a difficult situation until

37 TBMMZC, Vol 9, 413-414; TBMM ZC Vol 10, 337, 426-427

38 TBMMZC, Vol 8, 210-214.

that time. It has been stated that with a 40 kilometers reconstruction on the road, some of which was already paved, the roads of Trabzon-Hopa and Erzurum-Erzincan and the eastern roads would be merged and completed. In addition, since the Eastern Front would give a laborer battalion of 400 people for help, the committee recommended that the issue be discussed in the general assembly. Committee member İsmail Suphi Bey pointed out the economic importance of the road by stating that although the salt was 7 piasters in Hopa, it was half a lira in the inner regions because of lacking the road. The proposal was accepted at the general assembly.³⁹

Besides the roads mentioned above, law and repair proposals for some other roads were given; but these were not concluded during the first parliamentary term. For Antalya-Burdur,⁴⁰ Kulp-Muş,⁴¹ Salihli-Borlu-Demirci-Simav,⁴² Bozüyük-Bilecik,⁴³ Rize-Erzurum,⁴⁴ Sinop-Bozbat,⁴⁵ Tercan-Erzincan-Sivas,⁴⁶ Alanya-Bozkır,⁴⁷ Erzincan-Gümüşhane,⁴⁸ Elazığ-Dersim-Erzincan,⁴⁹ Yarangüme-Muğla⁵⁰ roads, the proposals were given, but either it was not found appropriate by the commission or the commission's response was not delivered to the general assembly.

§ 4.3 The military transportation

As Kayam and Tokdemir emphasized, transportation activities are a critical factor of war power; this factor creates a binding constraint on the

39 TBMMZC, Vol 18, 52; TBMMZC, Vol 19, 120-121, 126-129.

40 It was a road started by the Italians from the Antalya port area. TBMMZC, Vol 5, 246.

41 TBMMZC, Vol 6, 173.

42 TBMMZC, Vol 8, 37.

43 TBMMZC, Vol 8, 66, 194.

44 TBMMZC, Vol 9, 170, 446; TBMMZC, Vol 10, 337.

45 TBMMZC, Vol 9, 279.

46 TBMMZC, Vol 15, 219-220.

47 TBMMZC, Vol 27, 249-250.

48 TBMMZC, Vol 27, 455-456.

49 TBMMZC, Vol 28, 35.

50 TBMMZC, Vol 10, 337.

combination and use of other factors, such as soldiers and weapons. The mode of warfare in which armies faced each other on battlefields or certain front lines underwent a major change with the expansion of its space since the middle of the 19th century and took on a form that required more intense resource transfer between regions. The biggest problem in the wars that the Ottoman Empire joined since the middle of the 19th century was the inadequacy of the transportation infrastructure and means of transportation. The Ottoman Empire was at a level that we can say adequate in terms of human and weapon factors, even in the last war it joined. However, it was extremely deprived of the transportation factor that would enable these factors to be brought together and used effectively.⁵¹ At the beginning of the National Struggle, besides the transportation factor, the human and weapon factors were also insufficient.

4.3.1 *Organization of the military transportation*

In an ordinary war, there is a domestic supply base from which needs are sent in a planned way on the lines extending toward the fronts. However, in the national struggle, supply and transportation were reversed. Needs were sent from Elcezire, the Eastern front, and occupied Istanbul to Ankara. There was an Expeditionary Regulation (Seferiye Nizamnamesi) dated 1916 and other regulations and directives regarding logistics principles.⁵² However, at the beginning of the national struggle, since the new administrative institutions of the Ankara government did not properly function, logistics support activities could not be carried out as stipulated by the regulations and directives, and there was complete chaos in supply and transportation activities. All the supplies found were being sent to Ankara without any classification.⁵³ After the government was formed in May 1920, the main routes for the army's supply were determined, and a new stage (*menzil*) organization started to be established. In November

51 Kayam and Tokdemir, "Savaşın Zayıf Halkası," passim.

52 TİH, vol. 7, 213-214.

53 TİH, vol. 7, 276.

1920, the organization was expanded, and the Sivas Stage Inspectorate (*Menzil Müfettişliği*) and the Kayseri, Malatya, Pınarbaşı, and Suşehri Line Commands (*Hat Komutanlığı*) were established under its command. Line commands had to establish stage point commands or mansions at 20-30 kilometers intervals. The Stage Line Commands were responsible for providing and speeding up the handling and transportation within their regions, feeding and sheltering the troops passing through their regions, repairing the roads in their regions with their own means, and arranging the security on the roads.⁵⁴

The stage organization was not timely for the conditions of the national struggle. Therefore, in January 1921, the General Directorate of Shipping and Transport (*Sevkiyat ve Nakliyat Umum Müdürlüğü*) was established under the Ministry of National Defense, and the range organization was subordinated to it. The aim was to transfer materials from the East, South, and Istanbul to the western front and use the roads more efficiently. When the new organization was established, line and point commands affiliated with it were also settled.⁵⁵

It is not possible to know the total number of vehicles used in transportation services during the National Struggle. Because apart from the vehicles under the command of the stage and line commands affiliated with the General Directorate of Shipment and Transport, the armies and other stages also had their own means of transportation. Citizens with means of transportation could also be included in these services by leasing. Moreover, by the Law of National Obligations, everyone who had a vehicle was obliged to participate in transport activities. Therefore, it is impossible to know the total number of transportation vehicles and their total load capacity. The load capacity of the stages and lines affiliated with the General Directorate of Shipment and Transport was approximately 1700 tons. However, this was just the tip of the iceberg. Because the Dinar Stage Region Inspectorate, for example, had a total of 431 tumbrels in 9 different tumbrel branches, 448 camels in 5 different camel branches,

54 TİH, vol. 7, 236-239.

55 TİH, vol. 7, 240-244.

and a total of 952 donkeys in 7 different donkey branches. If we consider the figures in Table 3.4, the capacity of the transportation vehicles under the command of the Dinar Stage Region Inspectorate was approximately 155 tons.

Similarly, there were 17 tumbrel and 6 camel branches under the command of the Aziziye Line Command. The carrying capacity of these branches, which has a total of 650 tumbrels and 770 camels, was approximately 180 tons. Considering that there were many organizations, such as Dinar and Aziziye, the extraordinary size of transportation and logistics emerges. In the following subsection, this complex logistics is discussed in another dimension.

4.3.2 *Dispatching weapons and ammunition to the Western Front*

Greek forces occupied Izmir on 15 May 1919. The Representative Committee, formed with the Sivas Congress in September of the same year, came to Ankara at the end of 1919. After the British occupied Istanbul and dissolved the Ottoman parliament on March 16, 1920, the Grand National Assembly was opened in Ankara on April 23, 1920, and Ankara became the center of the resistance movement. In the spring and summer of 1920, the Greek forces marched in Western Anatolia and occupied the regions of Manisa, Turgutlu, Aydın, Ayvalık, Balıkesir, Uşak, and Bursa. Meanwhile, the Treaty of Alexandropol, which ended the Eastern front, was signed on September 20, 1920. The Greek forces, which were stopped by the Battles of İnönü in January and March 1921, captured Afyon, Kütahya and Eskişehir with the attack in July, and the national forces withdrew to the east of the Sakarya River. As a result of the uninterrupted battle between August 23 and September 13, 1921, the Greek advance was halted, and a status quo began on the Western front that would last for about a year. Meanwhile, with the agreement signed with France in October, the Southern front was also closed. In fact, since it was understood from the very beginning that the war would take place on the Western front, logistics activities were also mobilized in this direction.

The Ottoman Empire was defeated in the First World War, and the Armistice of Mudros was signed in October 1918. After the agreement, the

Entente Powers downsized the Ottoman army, and the weapons and ammunition, considered excessive by them, were collected and stored in Istanbul, Izmit, and Gallipoli. Some of the weapons and ammunition were destroyed. More than 650 thousand infantry rifles, more than 3 thousand heavy machine guns, and about 1000 heavy cannons were taken from the army, and only about 120,000 rifles, 1300 heavy machine guns, and less than 100 heavy cannons remained in Anatolia. Apart from these, many war equipment and supplies were also confiscated, and the army was deprived of its combat power. The remaining weapons and ammunition were only enough for one or two field battles. However, in order to fight, the army needed 2 thousand heavy machine guns and 700 cannons in addition to 300 thousand private soldiers and 300 thousand rifles at the front. Moreover, there had to be 150,000 soldiers and 150,000 rifles in the hinterland. It was necessary, for this reason, to collect the weapons and ammunition scattered in different sectors of Anatolia on the fighting fronts, particularly the western front, to start the production of ordnances that could be domestically manufactured and to purchase them from neutral countries and to smuggle the weapons and ammunition stocked in Istanbul by the Entente Powers and bring them to Anatolia. In addition, recruiting activities had to be undertaken, as there were initially 27 thousand of private soldiers and 1700 officers on the western front.⁵⁶ Therefore, excellent logistics and large-scaled transportation organization were required.

The weapons and ammunition needs of the Western front were met from four sources: those smuggled from Istanbul, those sent from the Southern front, those sent from the Eastern front, and Soviet-Russian aid.

It was attempted to smuggle weapons and ammunition from Istanbul in the early stage of the national struggle. Secret groups affiliated with the General Staff were formed for this smuggling. The most well-known of these groups was the Felah.⁵⁷ All materials smuggled from Istanbul⁵⁸

56 TİH, vol. 7, 96-98.

57 TİH, vol. 7, 97-98.

58 For the list of material smuggled from Istanbul see: TİH, Vol. 7, Chart 8 (no page number).

were initially sent to İnebolu by sea by boat, barge, and motorboats. Later on, as a result of the intelligence search, agreements were made with French and Italian shipping companies. In this way, it was possible to dispatch many weapons and ammunition to Anatolian ports. The Entente Powers must have been aware of these activities, so they were shelling İnebolu from time to time.⁵⁹ The aid sent from İstanbul and unloaded to İnebolu was reaching Ankara following the road of İnebolu-Kastamonu-Çankırı-Kalecik-Ankara. Another route from Istanbul was the Karamürsel and Yalova piers by sea from the Golden Horn. The materials unloaded at the piers were reaching Ankara following the roads of İzmit-Adapazarı-Hendek-Düzce-Bolu-Gerede-Ankara or İzmit-Geyve-⁶⁰Nallıhan-Beypazarı-Ayaş-Ankara.⁶¹

One of the supply sources of the Ankara government was the 13th Corps in Diyarbakır, which was in a relatively stable situation in the conditions of that day to be able to send aid. As early as March 1920, the 13th Corps was asked to report on its weapons and ammunition and to prepare to send its excess to the western corps. It was requested that the vehicles of the people of the region be used for transportation. Due to the lack of transportation vehicles and money, not many weapons and ammunition were dispatched from the 13th Corps until mid-April. It is also understood that although there were some trucks, there was no gasoline supply.⁶² At the end of April, after the order declaring the urgency, the

59 TİH, vol. 7, 102, 112.

60 Since Geyve was on the transit route of the railway and telegraph lines and was the transit point for possible forces to come through Istanbul, Kuvayı Milliye had captured this place by the order of the Representative Committee before the Grand National Assembly of Turkey opened. See for details: Arslan, "Milli Mücadele Döneminde Yolların," 236-239.

61 Erat, "Kullanılan Yollar," 224, citing Hergüner, *Denizciliğimizin Kurtuluş Savaşındaki Yeri*, 138; TİH, vol. 7, 414.

62 TİH, vol. 7, 57-59.

unit's vehicles and car branch of the 5th Division in Mardin also participated in the transportation. In addition to the transport battalions, vehicles were rented, and donkey and camel branches were used.⁶³

The weapons and ammunition that the Southern front had taken out of Diyarbakir and its surroundings to be sent to the Western front were gathered in Malatya and transferred to Sivas. From Sivas, they were following either the roads of Sivas-Kayseri-Yahşihan or the Sivas-Yozgat-Yahşihan.⁶⁴ Mules used for transportation could go and return between Diyarbakır and Sivas in a month and between Diyarbakır and Malatya in 15 days. The front was on a large area (including Urfa, Mardin, Diyarbakır, Bitlis, Siirt, Silvan, Muş, Palu, and Elazığ), and weapons and ammunition depots were scattered in the region. In addition, the region was mountainous, roadless, and lacked means of transport.⁶⁵

After the battle was over on the Eastern front, the excess weapons and ammunition were sent to the West. However, dispatching was facing problems due to harsh winter conditions and the mountains that were not allowing cars to pass. Thus, transportation activities were quite complex. Civilian vehicles were used, but due to the inadequacy of the financial condition, the vehicle owners could not be given cash in advance; instead, a payment document was given to be paid later. Although there was a motorized car branch with eight cars between Bayburt and Trabzon, the road was unsuitable for automobile passage due to winter conditions. In April 1921, the first batch of weapons sent from the eastern front reached Ankara. In other words, while the Battles of İnönü were taking place, the weapons and ammunition sent by the Eastern front were still on the road.⁶⁶ The patrols of the enemy ships in the Black Sea were preventing the transportation of weapons and ammunition, which had been sent from the Eastern front and had reached Trabzon and Samsun by

63 TİH, vol. 7, 94-95.

64 TİH, vol. 7, 413.

65 TİH, vol. 7, 247-248, 395, 413.

66 TİH, vol. 7, 251-262.

sea.⁶⁷ After the Kütahya-Eskişehir battles, the aid from the Eastern front became even more critical because a lot of weapons and ammunition were consumed in these battles.⁶⁸ Weapons and ammunition sent from the Eastern Front to the Western Front reached Ankara in four directions. The first of these was the road of Kars-Erzurum-Karabıyık-Aşkale-Bayburt-Gümüşhane-Trabzon. Aids were transferring from Trabzon to Samsun, Sinop, and İnebolu by sea, and they were reaching Ankara by following the roads of Samsun-Çorum-Yozgat-Yahşihan and İnebolu-Kastamonu-Sungurlu-Kalecik-Ankara. The second route was the road of Kars-Erzurum-Karabıyık-Aşkale-Bayburt-Kelkit-Alucra-Suşehri-Sivas, and the third was the road of Kars-Erzurum-Karabıyık-Tercan-Erzincan-Refahiye-Suşehri-Sivas. The fourth route was using the Kars-Tbilisi-Batumi railway. Weapons and ammunition coming to Batumi were shipped to Trabzon by sea and from there to Samsun, Sinop, and İnebolu ports. This last one was designed to alleviate the transportation density on the road of Erzurum-Trabzon.⁶⁹

During the national struggle, the Ankara government tried to get help from Russia in addition to domestic weapon and ammunition resources. The common enemy had brought the two countries closer. In a letter to Lenin in April 1920, Mustafa Kemal asked for money, weapon, ammunition, and war equipment. In June, Çiçerin responded positively to the letter. Immediately after, Osman Bey, the delegate of Lazistan, was sent to Russia. Although the Van and Bitlis problem stagnated the relations, the Moscow Agreement was signed on March 16, 1921. Due to the bombardment of the Russian shores by the French warships, sea transportation was disrupted, and the first batch of aid started to arrive in the autumn months.⁷⁰ Russian aid was coming from Tuapse to Trabzon by sea, and

67 TİH, vol. 7, 311.

68 TİH, vol. 7, 336.

69 TİH, vol. 7, 414.

70 TİH, vol. 7, 113-114.

they were being sent to the ports of İnebolu and Sinop.⁷¹ Three steamboats and two gunboats under the command of the Naval Detachment Command and barges and boats rented from the public were used. However, there were disruptions due to the state-owned sea vehicles worn out and the difficulties in the supply of coal. Until May 1921, a small number of guns and ammunition had arrived in Trabzon, and it only gained momentum after May.⁷² After the Moscow Agreement, aid was sent via Tuapse-Tbilisi-Batumi, and they were sent from there to the port of İnebolu and Sinop by sea.⁷³

The map below (Figure 4.1) provides a representation of the routes used to send weapons and ammunition from different parts of Anatolia. All routes have been tried to be shown on the map. However, not all routes were of similar intensities. For example, the ports of Samsun and Sinop were used much less than İnebolu because the activities of the Greek gangs in the region continued until after the Sakarya Battle. Karamürsel and Yalova piers, which were used for material smuggled from Istanbul, were also not used after the arrival of the Greek forces in the region.⁷⁴

71 In fact, it was desired to unload directly to Samsun or İnebolu. However, cargos were generally unloading to Trabzon in order not to keep the aid waiting in Tuapse due to difficulties in providing sea vehicles. However, there were aids coming directly to İnebolu and even to the port of Ünye. TİH, vol. 7, 265-267.

72 TİH, vol. 7, 262-265.

73 TİH, vol. 7, 313-315.

74 Müderrisoğlu, *Kurtuluş Savaşı'nın Mali Kaynakları*, 390-391.

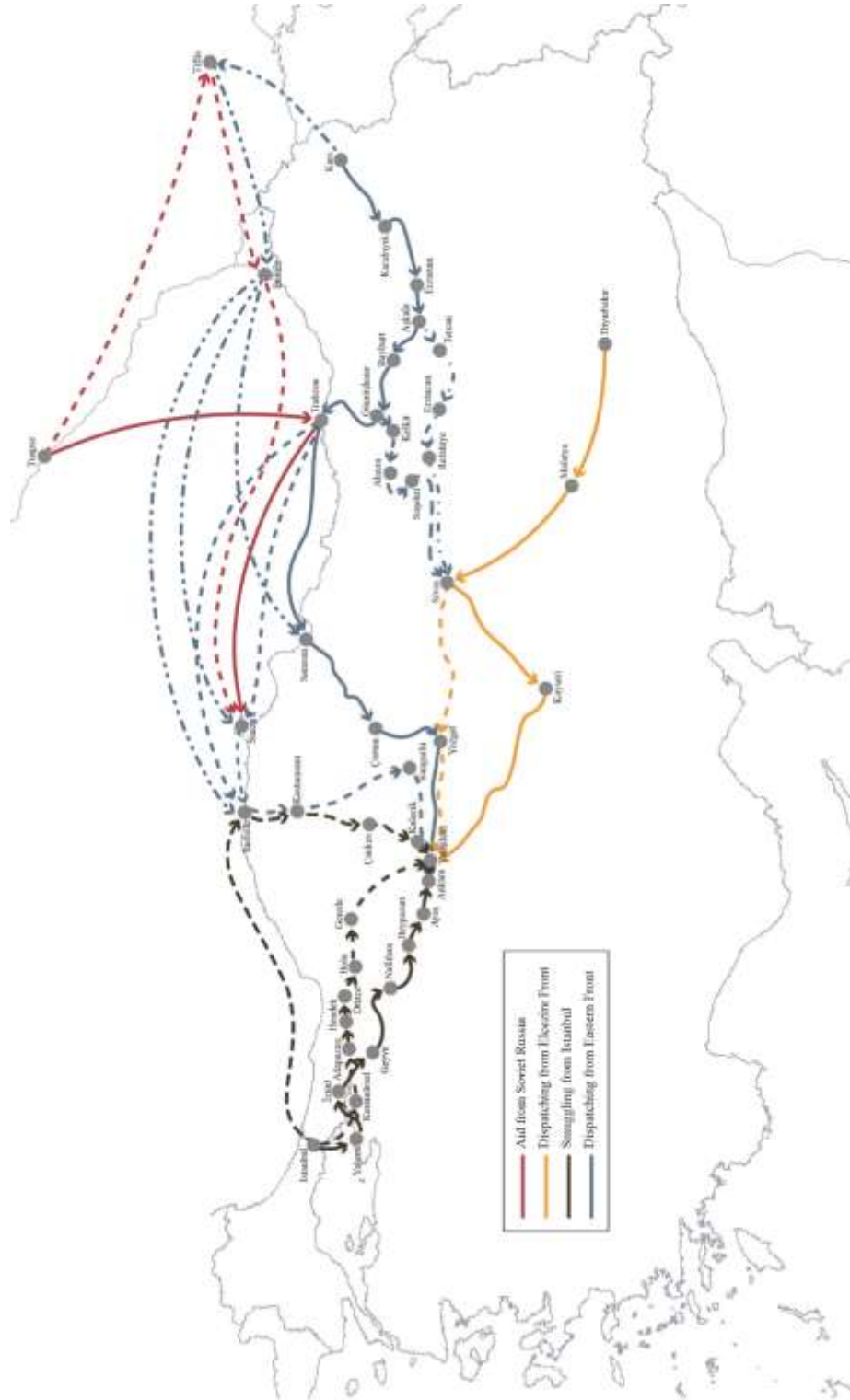


Figure 4.1 The routes of dispatching activities. Note: I would like to thank Master Architect Özge Subaşı who made this map.

4.3.3 *Legal basis of people's participation in the military transportation*

Although the armies had their own transport units and vehicles, these were insufficient. This made it necessary for the army to seize the means of transportation belonging to the people. The Tanzimat Edict had banned drudgery, and this was repeated in the Islahat edict. In addition, both the Kanun-i Esasi, which was made in 1876 and the 1921 constitution made by the parliament in Ankara also preserved this provision. Therefore, if the vehicles in the hands of the public were to be used or the public was to be obligated to transportation, it had to be in the form of a legal obligation. The opposite situation, that is, both gratuitous seizure and free employment of the people, would cause the people to hide their means of transport and further decrease their support for wars.

The TBMM had nearly half a century of constitutional experience in its trunk. The laws, decisions, and regulations of the previous parliaments were inherited by the TBMM. As well as making new laws, the TBMM changed, repealed, or made additions to previous laws when necessary. The Law on the Procurement of Transport Vehicles was one of them.⁷⁵ The law of 1889 regulated how the transportation vehicles in the hands of the people, which the army might need, would be seized in case of a declaration of mobilization by the sultan. The law in question was

75 The law in question was sometimes referred to as the "Law on the Procurement of Transport Vehicles" and sometimes as the "Military Transport Vehicles Law" by the deputies. It is the law of 1889 "Procurement of Military Transport Vehicles" referred to in both statements. See for the law: Düstur, Array 1, Vol 6, 430-44: 27.08.1889.

also applied during the period of national struggle.⁷⁶ The law distributes the costs of confiscated transportation vehicles to the people of the relevant *kaza* by the local government in proportion to their wealth, and the vehicle owner was paid in this way. After the people paid their share, they would get a receipt showing this, and the receipt would be deducted from their tax.⁷⁷ In this way, the vehicle owner would be given the vehicle price immediately, and the liability would be shared among all the people of the region. On the other hand, there was no mention of a service obligation regulating the public's participation in transportation activities in this law. Similarly, the War Obligations law enacted before the First World War states that all necessary materials can be seized by the commissions, but it did not impose a service obligation. The National Obligations issued before the Battle of the Sakarya, on the other hand, specified the materials to be confiscated in detail and brought free transportation services within specific criteria.⁷⁸ Therefore, the legal basis for the participation of military transportation vehicles and the public in transportation activities during the national struggle was formed by the War Obligations, Law of Procurement of Military Transport Vehicles, and the National Obligations. Before the National Obligation orders, if the owners of transportation vehicles participated in transportation activities, they were paid a fee.

4.3.4 *The role of National Obligations*

In June 1921, the firepower of the Western Front consisted of 47 thousand rifles, 326 heavy machine guns, 210 light machine guns, and 137 various cannons. In contrast, the Greek forces had 57 thousand rifles, 750

76 TBMMZC, Vol 22, 486: 04.09.1922. Minister of National Defense, Kazım Pasha, stated that the 100-kilometer transportation obligation introduced by the National Obligations Law was abandoned in April 1922, but the provision of the old law regarding the supplying of transportation vehicles to the army continued to be implemented.

77 Düstur, Array 1, Vol 5, 432, article 8.

78 Cemal Avcı, "Tekalif-i Harbiye ile Tekalif-i Milliye," 11.

heavy machine guns, 2204 light machine guns, and 197 various cannons. Twelve thousand of the rifles coming from İnebolu had reached the Western Front at the beginning of July, and at least the number of rifles was balanced.⁷⁹ The army of the TBMM was defeated by losing most of its ammunition in the Battle of Kütahya and Eskişehir. After the battle, the weapon stock of the Western Front had decreased to 25 thousand.⁸⁰ As of the end of July, the army began to withdraw to the east of the Sakarya river in order to encounter the advancing Greek forces in a more advantageous position. At this stage, the most critical phase of the war was being because the Greek forces had arrived in Polatlı and were preparing to attack Ankara.

Mustafa Kemal, who took the head of the army as the Commander-in-Chief, gave a series of orders under the title of National Obligations on 7-8 August 1921, using his legislative power. In the tenth of these orders, it was stated that 20 percent of all transportation vehicles would be seized. The fifth article, on the other hand, obliged the owners of transportation vehicles to transport 100 kilometers of army equipment every month. The National Obligations orders were issued under the most critical conditions, and in a very short time the orders began to be collected. During the period from the beginning of the withdrawal to the east of the Sakarya river to the Greek offensive on August 23, the necessary weapons were supplied, and the front force was increased to 54 thousand rifles and 825 machine guns. In addition, 32 thousand of animals were under the command of the front.⁸¹

The National Obligation orders played a very critical role in the supply of food, weapons, and ammunition on the Western Front both in the 20-day period until the Sakarya Battle and during the 22 days of the battle. The amount of food collected from the people according to the orders was large enough to feed 100,000 people and 30,000 animals for 20-30

79 TİH, vol. 7, 327-328.

80 TİH, vol. 7, 371-374. The provision of the army was also at a critical level. At the end of August, 4 days of bread and 10 days of food were left.

81 TİH, vol 7, 375.

days.⁸² In accordance with the tenth order, it was requested to collect 20 percent of the vehicles in the region of the military boards of the fourth, fifth, and tenth Corps. The number of vehicles collected in these regions, corresponding to 20 percent, is shown in the table below.

Table 4.1 Accrued and impounded means of transport according to National Orders

Vehicle	20%	Impounded
Ox and cow car	2518	2362
Tumbrel	20599	14738
Spring cart	47	34
Ox and cow	56031	38434
Donkey	28357	17522
Harness and saddle beast	3427	2072
Pack train and hinny	6081	3975
Camel	3240	2334
Horse cart (with two-horse)	573	396
Horse cart (with one-horse)	25	20

Source: TİH, vol 7, 369.

The monetary value of the vehicles collected was close to 3.3 million liras. In accordance with the orders, no money was given for the collected materials, but *kuruşlu senet* was given to their owners to be paid in the future.⁸³ Most of these were paid in cash and a small part in treasury bonds until 1929. 4.3 million of these payments, which amounted to 6 million liras in total, were paid in 1923.⁸⁴ The payments of the seized goods during the Balkan Wars and the First World War were also tried to be paid after the national struggle.⁸⁵

82 TİH, vol 7, 368.

83 TİH, vol 7, 369.

84 Tural, "Tekalif-i Milliye (Halka Borcu Kalmayan Devlet)," 558.

85 Tezcan, *Tekalif-i Harbiye ve Tekalif-i Milliye*, 17; 147.

Administering the Anatolian Railways during the National Struggle

The administration of the railways during the national struggle was a very challenging task. The opposition to non-Muslims exaggerated by the war made this task very difficult. There was a stratification among railway workers in terms of religion and ethnicity in the Ottoman Empire. The highest-ranking, executive part of the workers were European, while Ottoman Christians were in the middle-stage ranks. Muslims, on the other hand, worked in unqualified jobs in the lowest positions. The foreign capital that built the lines had created the boards of directors and essential management positions from Europeans. In this very new area, where the Ottomans did not know the technology, it was necessary to use European personnel during the establishment phases. However, although there were Ottomans who gained experience and trained in railway management in the following years, Ottomans were not employed in high-ranking administration positions. Wages paid to Europeans for the same work were also 50 percent higher than those paid to the Ottomans.¹

1 Quataert, "The Age of Reforms," 931.

The Haydarpaşa-İzmit line was built by the state between 1871-1873 and operated by the state until 1880. However, there was no trace of this experiment from 40-50 years ago. There were very few people in Anatolia among the personnel of the Hejaz railways, as well. Indeed, they had worked in construction works, not in administration. The main problem in the national struggle, on the other hand, was administration.²

Then, why were not Turkish and Muslim civil servants trained in the field of administration? In fact, this issue was mentioned in an article published in Basiret Newspaper in 1874. However, more concrete initiatives began after the Balkan wars. Although it was requested to establish a railway battalion in the army in 1887, this battalion could only be formed in 1900 for the construction and operation of the Hejaz railway. The claims that almost all of the personnel in the Rumelian railways was composed of Greeks in the Balkan wars caused the railways to not be used effectively, accelerated the initiatives. In 1913, a similar railway school in Lausanne was wanted to be opened in Konya in order to train ticket agents, clerks, and conductors. This attempt failed because teachers could not be found, and instead, 3 graduates of Galatasaray High School were sent to Lausanne for education. The issue came up again in 1914 for the better operation of the Hejaz railway, and it was planned to open a 4-year school in Uşak, which would take 50 students every year. However, this attempt did not come to fruition. During the First World War, lines in Western Anatolia were impounded when the concessionaire companies in and around İzmir caused difficulties in the mobilization plans of the Ottoman Army. A railway military unit was sent to İzmir to operate the impounded lines. In 1915, a railway school was opened in İzmir under the directorship of the troop commander, İskender Bey. Forty students in the first semester and 300 people in the second semester graduated from this school, the first two semesters of which were like a 6-month course. In the same year, a school was opened in Istanbul, and a total of 800 people were educated in these two schools until the end of

2 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 3-4.

the First World War. These Muslim workpeople, who were distributed to the lines, were dismissed by the Entente Powers on February 1, 1919, after the Armistice of Mudros.³ Although some of them were assigned to Anatolia during the War of Independence, as we will see, not all of them could be reached, and the personnel problem would continue throughout the war. During the national struggle, a railway school was wanted to be opened, but this school would only be opened in Konya after the war.

With the 15th article of the Armistice of Mudros, the Entente Powers had the right to occupy, use and place their own officials on all railways. The Germans working on the lines were immediately sent to their hometowns. In the early days of the armistice, there was not much difficulty in the operation of the railways because Entente powers wanted the soldiers to be discharged as soon as possible in accordance with the ceasefire. However, from the beginning of 1919, the Entente powers began to occupy the railway directorates and stations for absolute control. This caused the positive atmosphere created after the armistice to dissipate rapidly. The government and bureaucracy in Istanbul stated that it was accepted that the Entente States would take control of the railways according to the ceasefire agreement, and therefore, incoming occupation applications should have been facilitated. The Entente powers invaded the lines one by one and placed troops there.

On the other hand, in May 1919, while he was still in Havza as the 9th Army inspector, Mustafa Kemal sent an order to the 3rd, 15th, and 20th Corps command posts stating that if the Entente Forces advanced within the country, they would be actively opposed with weapons. Meanwhile, some local armed forces had attacked the railways. Kuvayi Milliye forces attacked trains and stations and blew up bridges to cut off Entente powers' transportation. The explosion of the bridges prevented the invasion movements from extending into Anatolia. For instance, the blowing up of the bridge between Çiftehan and Ulukışla in March 1920 prevented the French from hanging in. Some bridges in Bilecik, between Manisa and Afyon, and between Ankara and Eskişehir were also blown up by the

3 Özdemir, "Şimendifer Mektebi," 67-72.

Kuvayi Milliye. In the face of the occupation of Istanbul on March 16, 1920, the Representative Committee immediately took some measures. According to these measures, the Geyve Strait would be occupied by national forces, the railway bridge in the region would be destroyed, the railway lines and materials in Anatolia would be seized, and the Entente powers on the line would be removed. As a result, the British forces in Eskişehir withdrew, and the control in Geyve passed into the hands of the national forces. On March 23, 1920, the British withdrew from the lines outside Arifiye-Haydarpaşa, and the French from Konya and Pozantı. While the British were withdrawing, they took some officers, 13 locomotives, and 100 wagons along with 20 thousand liras in the safe and destroyed the Lefke-Sakarya bridge. The French also dismantled the materials of the 4-5 kilometers line section between Çiftehan and Pozantı. On March 23, the 20th Corps⁴ Command issued an order specifying how the existing lines would be operated. In this order, it was stated that the Anatolian and Baghdad railway companies would operate under the supervision of the military authorities, that their financial affairs would not be interfered with, and that the company employees would carry out their duties in safety, regardless of nationality and religion. It was also reported that Vasfi Bey, Ankara-Sivas Narrow Line Construction and Operations Manager, was appointed as an additional duty to the Anatolian Railways Military Inspectorate and was sent to Eskişehir to establish an operation commission there.⁵

From this stage on, the problem was operating the existing railway line, whose connections with the centers of Haydarpaşa and Aleppo were cut off. Ankara was a supply base during the national struggle. The supply of the western front was carried out along the Ankara-Eskişehir line. However, due to the fall of Kütahya, Afyon, and Eskişehir in July 1921, the connection between the Ankara side of the line and the Konya side was cut. In order to transfer the supplies coming from the Konya line to the

4 Until the parliament was opened, the de facto power on behalf of the Representative Committee in Ankara was the 20th Corps.

5 Arslan, "Milli Mücadele Döneminde," 234-238; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 3-5; Erkin, *Hatırat*, 193-194; Özdemir, *Mütareke ve Kurtuluş Savaşı'nın*, 34; 41; 49-53

Ankara line, a light railway line was planned to be built from Azarıköy to Piribeyli at the beginning of 1922. This line, which was opened in June 1922, was about 50 kilometers and had a daily carrying capacity of 800 tons. The materials reaching Piribeyli by this line were transported to Polatlı by the vehicles of the *menzil* line.⁶

The map below provides an approximate depiction of the railway network used by the national government during the war. While the region between the red lines was in the hands of the national government at the beginning of the war, the controlled region was shrunk back to the east of the blue lines after the summer of 1921. After the Ankara Agreement was signed with the French in October 1921, the parts to the west of the green line, including Mersin and İskenderun, were put into the service of the national government. The line shown with dashed lines is the Azarıköy-Piribeyli light railway line. In the continuation of this chapter, we first examine the establishment of the new administration and then the challenges faced by the new administration.

6 For Azarıköy-Piribeyli light railway line, see: Gürel, *Kurtuluş Savaşında Demiryolculuk*, 119-131.

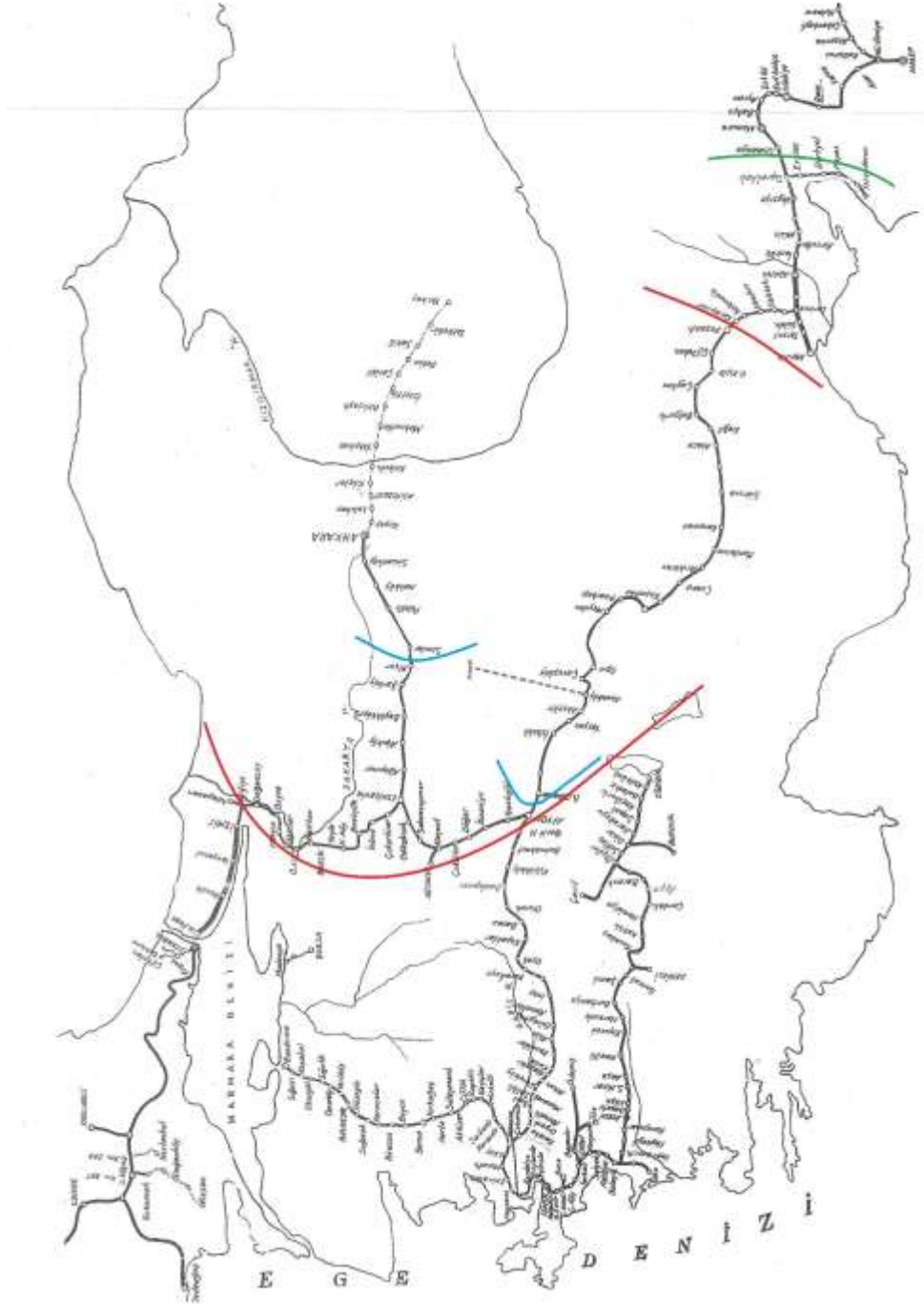


Figure 5.1 Anatolian railway network and lines controlled during the war
Source: Map source is Özdemir, *Mütareke ve Kurtuluş Savaşı'nın Başlangıcında*, 159. The colored lines on the map belong to me.

§ 5.1 The state of the lines and the establishment of the new administration

Military Inspector Vasfi Bey came into the office in Eskişehir on 25 March 1920. Station Command was opened at Ankara, Eskişehir, Bilecik, Afyon, Konya, and Ulukışla stations. According to Vasfi Bey's first report on March 25, 15 large locomotives were operating with coal, two large and three small locomotives operating with oil, and five large locomotives operating with oil were being repaired in the factory in Eskişehir. In addition to the 15 coal and 8 oil locomotives, there were 717 pieces of several wagons. If two trains were moved between the sections daily, 620 wagons would have been used, and the rest would have been regularly repaired. In the same report, it was also expressed that there were 2750 tons of coal in different warehouses, in addition to 4800 cubic meters of oil stored in Eskişehir and Bilecik warehouses, and trains could be operated until January 1921 with these fuels. It was reported that the grease and oil required for the maintenance of the wagons were sufficient for 15 months. There was no demand for the transportation of commercial goods rather than grain between Ankara and Eskişehir; passengers were also few. In his report, Vasfi Bey also indicated that the civil servants' identities and "opinions" of the civil servants were investigated; those from minorities were not associate with foreign states, and they were good at their jobs and worked of their own will.⁷ One of the most significant difficulties faced by the railroad administration during the war was the "irrational anger" towards non-Muslim personnel. We will address this issue in subsection 5.2.1.

It was emphasized in the command issued on 23 March 1920 that the lines' responsibility belonged to the company, and an operating commission responsible to both the government and the company was established. On the other hand, on April 13, with the approval of the Representative Committee, the salaries of the employees working in the

7 TİH vol 7, 197-198; Erkin, *Hatırat*, 197; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 5-6.

railways were requested from the company headquarters in Haydarpaşa, but no response was given to this request. This shows that there was not any connection between the company headquarters and Anatolia. With the decision on 18 July 1920, the lines were impounded based on article 26 of the concession agreement.⁸ On 16 July 1920, Colonel Behiç Bey, who had previously worked on the Thessaloniki-Istanbul railway line, was appointed as the manager of the new administration.⁹ His first title was the Operations Manager, but then it was changed to the General Manager of Anatolian Railways. Behiç Bey specified that it was compulsory to expand the realm of authority of the administration towards the Baghdad Railways section, taking into account the possibility of transporting wood from Pozantı and utilizing the construction materials in the Taurus

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- 8 Erkin, *Hatırat*, 193-194. It is understood that there was also a decision by Council of Ministers dated 19 July 1920. According to that decision, the income and expenses of the railway administration would be included in the government budget as an attached budget, and all materials and tools of the company would be confiscated on behalf of the treasury. This meant acquiring property beyond the impoundment of the lines. Behiç Bey opposed the acquisition of property of the lines in the report he sent to the Ministry of Public Works and stated that it was more appropriate to operate it temporarily. However, the Ministry of Public Works repeated that the lines were confiscated. Then, at a meeting in Ankara attended by Behiç Bey, Mustafa Kemal and some ministers, Mustafa Kemal informed Behiç Bey that the line was only impounded, and that the confiscation of the line was abandoned. However, no new decision was made that changed the old decision of 19 July (Gürel, *Kurtuluş Savaşında Demiryolculuk*, 10-11 and TİH, vol 7, 199). On the other hand, during the parliamentary meetings, Minister of Public Works İsmail Fazıl Pasha, while informing the delegates about the railways, stated that due to the absence of the concessionaire, the government seized the railways as owner, interfering with its finances (See: TBMMZC, Vol 3, 391: 21.08.1920). But we know that the line was not nationalized, and the revenues and expenses of the lines were not included in the ministry's budget during the war.
- 9 Behiç Erkin served as the Guard Inspector for the Istanbul-Thessaloniki Junction Line between 1904-1908, and as Military Inspector for the Istanbul-Thessaloniki Junction Line between 1910-1912. During the First World War, he wrote "History, Use and Organization of the Railway in terms of Military Service" which is a unique Turkish work in railway field. He met with Mustafa Kemal in 1907 and they became close friends and corresponded each other's frequently. See: Dinç, *Behiç Erkin*, 14-24.

Mountains and also considering the possibility of opening the Mersin road in the future. Thereupon, the Ministry of Public Works took over the administration of the Baghdad Railway Administration and the Baghdad Line Construction Company on 11 August. On August 26, the government-controlled part of the Afyon-Uşak line was given to the new administration, and the administration was renamed the General Directorate of Anadolu-Baghdad and Afyon-Uşak Railways and Bağdat Construction Company. Thus, all railways in the regions where the national government ruled (except for the Ankara-Yahşihan narrow line, Aydın line, some parts of the İzmir-Kasaba line, and the Erzurum-Sarıkamış narrow line) were gathered under the command of the new administration. The length of the lines under the responsibility of the administration was approximately 1067 kilometers.¹⁰

§ 5.2 The challenges encountered by the new administration

A new administration was organized, but there were still many problems. The whole order of the line was a total mess. In particular, the Greeks' attack on Bursa and the riots in the Kocaeli peninsula disrupted the operation of the line. All the essential documents for the administration were left in Haydarpaşa. Since non-Muslim officials were in fear due to the attitudes against them, there were some defects in their administrative work. The financial situation was not good because military shipping costs could not be received. The supply of coal and oil was at stake. Many

10 TİH, vol 7, 197-198; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 11-12. The Greek forces, who occupied İzmir and its surroundings on May 15, 1919, expanded the occupation in the spring and summer of 1920, and Bandırma, Mudanya, Bursa, İzmit and Uşak were occupied. The Greek forces taken Gediz and Simav as well and were quite close to Afyon and Eskişehir. After the Greeks occupied a large part of Western Anatolia, the remaining railway line was approximately 1067 kilometers: Osmaneli-Eskişehir (118 kilometers), Eskişehir-Ankara (268 kilometers), Eskişehir-Konya (434 kilometers), Alayunt-Kütahya (10 kilometers) and Konya-Ulukışla (237 kilometers).

officers and individuals were interfering with the administration and breaking the lines' operation.¹¹ We closely examine these problems in the following subsections.

5.2.1 *Non-Muslim staff and language problem*

At the beginning of the national struggle, the number of muslim workers in all Anatolian lines was 1598. There were 459 Ottoman Greeks, 403 Ottoman Armenians, 6 Ottoman Jews, 17 Greeks, and 31 workers from various European and Balkan states. There was not any muslim in the movement department.¹² As a result of the occupations in Anatolia, fervent xenophobia prevailed not only among the people but also in the army and the parliament. In the face of this hazy and dangerous environment, it was notably challenging to protect the non-muslim personnel, who were most in critical positions in the railways, and thus to ensure the operation of the lines. When the lines were impounded, Military Inspector Vasfi Bey pointed out in his report that there were not "malicious" ones among the non-Muslim personnel. The British forces could only take 20 personnel with them when they were withdrawing from Eskişehir. Also, during the Konya mutiny, some non-muslim workers performed courage and helpfulness. The mechanic Hristo Aslanyadis and his two firemen dared to put the train in the line of fire, and the telegrapher Leonyadis readily reported the insurrection to the administration. Two non-Muslim personnel were injured during the events. It had not been seen that Kolaro, who did not go with the British, was brought to the factory directorate by Vasfi Bey, and was stated to be a Greek national by the Western Front Police Organization, had any sabotage and neglect of duty. Although these examples do not prove the unconditional loyalty of non-Muslim personnel, they reveal that they fulfill the requirements of their duties.¹³

Before establishing the regular army, *Kuvayi Milliye* guerillas frequently attacked non-muslim railway workers. Between Osmaneli

11 Erkin, *Hatırat*, 199.

12 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 17.

13 Erkin, *Hatırat*, 197; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 22-23.

(Lefke) and Adapazarı, four station officers and a doctor had been killed, and three road watchmen had disappeared with their families. The dead bodies of two of the Akhisar station officers had been found in the town. The houses of 11 of the civil servants in Eskişehir, along with their belongings, had been seized by the gangs, and four workshop workers had disappeared. In addition to murders and residential occupations, non-Muslim personnel had been frequently investigated and detained. The bridge construction officer, Italian Martiyano, and the bridge expert, Marko, had been killed by the paramilitary forces of Gök Bayrak. These people had been deemed worthy of an award by the Western Front Command for repairing the Lefke Bridge in a short time, which the British destroyed while they were withdrawing. In order to prevent such incidents that intensified between Lefke and Adapazarı, Behiç Bey met with Ali Fuat Pasha, the commander of the Western Front. After the meeting, an order dated 21 July 1920 was issued, and copies of this order were hung in the stations. In this order, it was notified that some of the railway officers were Christian citizens, they were guaranteed to work with integrity, they were promised the safety of their honor, property, and life, and it was stated that everyone was obliged to keep this promise.¹⁴

Non-Muslim personnel working in the railway administration were also on the parliament's agenda. The delegates agreed that the non-Muslim personnel should have been dismissed and that the station officers and machinists should not have been Greeks and Armenians. They also shared some anecdotes on this matter. For example, Esat Bey, the delegate of Lazistan, claims that Christian officers did many evil things in the transportation of trains during the Balkan wars. He narrated that a train, in which he was also included, had escaped at the last moment from colliding with another train at the station because the station clerk had not give notice to the relevant unit. Hamdi Namık Bey and Mustafa Necati Bey reminded the school that was opened in İzmir to train civil servants to be employed in the railways during the First World War and suggested finding the people who studied there. They also suggested opening a similar

14 Erkin, *Hatırat*, 199; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 14-17.

school and training mechanics, guards, and station clerks with a 3-month training. The Minister of Public Works, İsmail Fazıl Pasha, said:

This situation makes my heart ache. Today, we use Armenian and Greek, who are our enemies. This has disturbed my sleep many times and caused my irritability... If it were a random Muslim officer, conductor, guard, or a simple civil servant, it would be no problem. However, they must also be able to perform important tasks. For example, there is a Greek official named Koralı. This man is the workshop clerk responsible for repairing all the trains. He is a very good mechanic but a traitor as far as his dexterity. I am telling you frankly, I will change them now, but I cannot find people to replace them. You say there was a school; it educated many people. I searched but could not find them.¹⁵

Indeed, at that time, advertisements were given in Ankara, Eskişehir and Konya newspapers for the recruitment of Muslim railway officers, but this attempt did not yield any results.¹⁶ Behiç Erkin, on the other hand, describes the situation as follows in his memoirs:

In Ankara, the deceased İsmail Fazıl Pasha was imbued with Christian officials in Ankara; then he came to Eskişehir, talked to me, and agreed with me, but the problem started again when he came back to Ankara. It was a never-ending problem.¹⁷

According to Behiç Bey, if these expert Christian officials were dismissed, they would inevitably encounter significant accidents, or they would be obligated to stop operating the railway. He stated that some ministers told him without hesitation that all non-Muslim civil servants should be fired so that even the operation of trains could be sacrificed.¹⁸

After Behiç Bey left the office in February 1921, Christian personnel in crucial positions were dismissed, novices were hired instead, accidents

15 TBMMZC, Vol 3, 392-393: 21.08.1920

16 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 22.

17 Erkin, *Hatırat*, 201.

18 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 21.

occurred one after another, and the order in the railways was disturbed. In July of the same year, things got even worse when Eskişehir fell into the hands of the Greek forces. The withdrawal from Eskişehir was poorly managed, and many railway materials were left behind. Worse still, non-Muslim workers were also left in Eskişehir. Ömer Lütfi Bey, who took on the duty of Minister of Public Works after İsmail Fazıl Pasha, was obliged to take Kaldis Efendi back to work, whom he had formerly dismissed.¹⁹ After Ömer Lütfi Bey was forced to resign in November, Behiç Bey returned to duty. The reinstatement of specialist Christian staff was among the conditions he offered for re-acceptance.²⁰ However, in this second period of Behiç Bey, due to the fall of Eskişehir, the administrative center was moved to Konya, and the arrival of Christian officials in Konya caused many rumors. Konya delegate Hoca Vehbi Efendi was among those who started the rumors, bearing hostility to Behiç Bey. He presented a list of non-Muslims employed in the administration to Mustafa Kemal, who came to Konya and asserted that Behiç Bey had hidden a Christian staff member in his house.²¹ Behiç Bey acted more carefully during that time to prevent gossip and attacks against non-Muslim personnel. He put Muslim officers between Konya and the front.²² He visited the president of the Independence Court in Konya and said:

Soon, Christian officials will come here, and rumors will spread about them; I beg you, do not listen to them. You see the state of the railways, doing my job in peace depends on the wellness of officers.²³

In April 1922, Mustafa Kemal sent a telegram to Behiç Bey with the list that Vehbi Efendi had mediated to deliver. In this telegram, Mustafa Kemal stated that the most crucial criterion in the selection of railway officers was expertise and experience, but that the condition of complete

19 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 60-62.

20 Erkin, *Hatırat*, 217.

21 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 63-67.

22 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 68.

23 Erkin, *Hatırat*, 220.

trust required by the war must also be met, so it was the basic rule to employ Turkish officers and asked for information on the subject. In the answer given, it was stated that only 99 of the 2000 personnel, half of whom were civil servants, were not Muslim, 2 non-experts, and 3 more people who did not speak Turkish were dismissed, and they would be more meticulous in this regard from now on.²⁴ Thus, in the railways, where approximately 1000 Christian civil servants worked in 1920, this number decreased to 100 by 1922. Discussions on non-Muslim personnel continued after the war ended. At the end of 1922, Minister of Public Works Feyzi Bey gave the "good news" that the share of non-Muslim workers on the line had decreased to 3 percent and that the Anatolian-Baghdad railway line had become a completely Muslim institution.²⁵

The fierce opposition to the non-Muslim personnel also manifested in the language used in the railways. Because the language that dominates the railways was French, it was thought this was the main reason for the absence of Turks in management. The Ottomans' contact with the Western world was in French; the Ottoman intellectuals and ruling class knew French. The French influence was clear in the arrangements made with the Tanzimat; we have revealed this in the road regulations in the second chapter. Therefore, it is not without reason that the language used in railways and other institutions with foreign capital was French. The dominant language in the German-owned Anatolian railways was also French, although they sometimes tried to substitute German language.

On the other hand, the efforts to translate the language used in the railways into Turkish had a history of 20 years. Article 34 of the Baghdad railway concession agreement dated 1902 stated that the company would communicate with government offices in Turkish. The regulation extended this condition to other railway administrations, foreign partnership companies, and internal transactions and communications was made in 1916. In the law, the railways were given a time until 10 July 1919, 8 months before the national forces would impound the railways,

24 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 80-81.

25 TBMMZC, Vol 25, 328: 11.12.1922.

to realize this arrangement. However, it is clear that no attempt was not made in this regard. The national government's orders for the Turkishization of the language were based on this 1916 law.²⁶

Ömer Lütfi Bey, during his ministry of Public Works, wanted telegraph communications to be made in Turkish to start Turkishization in the railways. He was of the opinion that almost all Christian civil servants were literate in Turkish, so it was not difficult for them to get used to this change quickly. Behiç Bey, after stating that he expressed the first idea for changing the language in the railways to Turkish in 1909, and that he explained this important problem in the book he wrote, said:

However, I am in no way inclined to add to the current difficulties of replacing telegraph communications. Because all responsibility for train movements is based on communication. In times of crisis, this responsibility cannot be settled. Trying to realize this purpose, which can be applied more easily in the future, may cause big accidents, God forbid.²⁷

After the fall of Eskişehir and the non-Muslim personnel left there, the Ministry of Public Works, considering them to have fled to the enemy side, ordered Muslims to be replaced and to use Turkish on the railways. In the report he gave after his return to the office in December 1921, Behiç Bey stated that no one could read the regulations in French, so all the calculations at the stations were wrong. Despite the fact that the stations have switched to Turkish, no Turkish tariff had been sent for six months.²⁸ Behiç Bey says in his memoirs:

During the life or death struggle of the homeland, the applause of the former Minister of Public Works, Ömer Lütfi Bey, by claiming that he ensured that the railways operate in Turkish, was nothing

26 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 86-89.

27 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 81-82.

28 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 69, 83-84.

but populism²⁹, and Ömer Lütfi Bey's patronage made the railways this miserable. There were 1000 pages of regulations, instructions, and tables to be translated into Turkish. We tried to do these as well, but it took time.³⁰

Mihail Frunze, who came to Turkey at the head of the Soviet-Russian delegation in November 1921, met the Soviet diplomat Aralov in Samsun during his return in January 1922, and he told him with great anger about the Greek corpses he encountered on the roadsides. Frunze, who did not doubt that the imperialists were responsible for these massacres, asked Aralov to tell Mustafa Kemal what he saw, and he reminded Aralov that:

To not hurt national feelings, it is necessary to talk about these issues very cautiously. Remember Lenin's warning that insulted national feelings are a terrible disease.³¹

5.2.2 Fuel problem

Another big challenge the railway administration faced was fuel. Although trains could be run with wood, the best was to use coal, as more wood must be burned for the same amount of energy.³² In addition, wood must be thoroughly dried before use.³³ Production in Ereğli, the only coal

29 The original expression is “avâm-firiblik”. The word, whose literal translation is folk-hunting, can be translated as “populism” as it is used in modern political science.

30 Erkin, *Hatırat*, 224.

31 Aralov, *Türkiye Anıları*, 35-36.

32 In a telegram sent to the Ministry of Public Works, the railway administration stated that 1 wagon of coal was equivalent to 6 wagons of wood. According to another telegram, it was stated that the daily need was 100 tons of coal or 250 tons of wood (Gürel, *Kurtuluş Savaşında Demiryolculuk*, 102; 104). Therefore, at that time, wood and coal balance in locomotives was 1/6 by volume, while it was 2/5 by weight.

33 The green (wet) wood was damaging the locomotives. Since it could not burn with a good efficiency, the trains were stuck on the slope and the journeys were lengthening out 2-3 times. In addition, locomotives were requiring long maintenance after the journey (Gürel, *Kurtuluş Savaşında Demiryolculuk*, 113).

basin of the Ottoman Empire during the First World War, recorded a tremendous decrease,³⁴ and wood was mainly used as fuel in the railways during and after the war. The demobilization of the Ottoman army after the armistice created heavy traffic on the lines, and there was no longer any coal in the warehouses of the railway company in November 1919. The price of coal increased from 14 liras to 18 liras, from which the state bought 2000 tons of coal. At the same time, there were great difficulties in the supply of wood. Due to the demobilization of the Ottoman army as per the armistice, the railway units were also demobilized. Since there were no labor battalions in charge of supplying wood to the railway site, the supply of wood was tried to be done by the contractors, and the attempt was not successful due to the lack of money. Shipment of the wood in the warehouses to the points of need was impossible due to the current density and confusion. The inability of the trains to run due to lack of fuel caused indignation and anger at the stations. In some regions, the trees, poles, and even the doors of the houses in the station and its surroundings were used as fuel. The Adana-Nusaybin line was operated with coal purchased from the British, and the demobilized soldiers were transported to their hometowns. A new alternative for fuel was developed in February 1921. Modifications were made in the fuel room of the locomotive machines, making the trains possible to operate with the oil at hand, and this change was applied to 7 machines.³⁵

On March 23, 1920, the lines were impounded by the Representative Committee. The first report on the railways stated that there were 2750 tons of coal in various warehouses and 4800 cubic meters of oil in

34 The production, which exceeded 1 million tons in 1912, decreased to 150 thousand tons during the First World War, but then reached half a million tons in 1920 (Ok, "From Wood to Coal," 150-151; Kara, "Ereğli Kömür Havzası," 245-247).

35 Özdemir, *Mütareke ve Kurtuluş Savaşı'nın*, 81-88. After the parliament was established, İsmail Fazıl Pasha, the first Minister of Public Works of the national government, in his answer to a question, mentioned a fuel called "pakūra", which he described as "a kind of frozen mine state of petroleum gas" in Baku. According to the information he gave, the fuel room was covered with bricks and a chimney was added to make it workable with pakūra. The Minister also stated that the British's interest in Baku stemmed from the pakūra. TBMMZC, Vol 2, 5-6: 22.05.1920.

Eskişehir and Bilecik warehouses. However, with the summer months, the advance of the Greek forces in Western Anatolia accelerated, and at the same time, rebellions against the national forces began in regions such as Adapazarı. The increase in military shipments caused the fuel in the warehouses to run out quickly. The Minister of Public Works said to the delegates on August 21, 1920:

Anatolian Railways is asking for 40 thousand liras for fuel. I had promised you before that the fuel at hand would manage until March if nothing extraordinary happens. However, it did not happen... We are going to run trains with wood from now on.³⁶

In those days, the national government was not able to ensure coal supply by extracting from the mines in various places and transferring to the railway lines. The Ministry of Public Works did not have a budget for coal mining. There were no mine masters and workers to work in the mine. The proximity of some mines to the front made it impossible to benefit from them. Work had just begun at the mine in the Seyitömer region of Kütahya. A small amount of coal, 8 tons per day, was being extracted by the soldiers from the mine in the Oturak area. Since the mine in Yalvaç was behind the rock, coal extraction and transportation would cost 30 liras per ton. It was not easy to benefit from the mines in the short term.³⁷

The inability to use the mines revealed the need to rely on forests. In fact, during the national struggle, forests were offered to the use of the army as a fuel for transportation, as well as to the use of the people as an economic resource. It would be helpful to address this issue here. The war situation in Anatolia for many years had devastated many settlements and caused great migration movements. Large quantities of timber were needed to rebuild towns, for the peasants to build houses and use

36 TBMMZC, Vol 4, 391.

37 TBMMZC, Vol 6, 443-445: 20.12.1920; TBMMZC, Vol 7, 357-358: 24.01.1921.

as firewood.³⁸ Under normal conditions, the stamped trees shown by forest officers could be cut according to law, but the Ministry of Economy acted laxly in this regard during the national struggle. It allowed the trees to be cut for trains for 2 months.³⁹ In order for the people to cut the forests freely, Minister of Economy Celal Bey said:

In our investigation, I saw that some difficulties were raised to the villagers (to cut timber from the forests). I was convinced that these were unnecessary things that stemmed from the mentality of ensuring a strict centralization procedure in the country. Although the law of the forest is valid, I gave orders to the administrations by telegraph to abolish this treatment, which only puts the needs of the people in trouble and threatens, and to allow the villagers to work freely. In this way, I did not make any record of the supply of fuel. Additionally, I present a Coppice Law proposal. If the assembly accepts this, we will have ensured the right of the villagers to cut wood and benefit from their income and put it in a valid form.⁴⁰

The Coppice Law that the Minister mentioned is controversial. As the reason for the law proposal, it was stated that the 5th article of the Forest Law could not meet the villagers' needs and that issues such as license

38 In this regard, many law proposals were submitted to the parliament since the first day. For example, see the proposals submitted in the parliament in April 1920 for exemption from forest tax for timber to be cut for the reconstruction of Erzincan and Burdur: TBMMZC, Vol 1, 222, 267, 316, 353. For the proposal to allow the people of Uluborlu to cut timber for free, see: TBMMZC, Vol 4, 386. For the proposal given in the parliament for fire survivors in Sinop, Antalya and Maraş to cut free timber from forests, see: TBMMZC, Vol 7, 350; TBMMZC, Vol 8, 36. In order to respond to all of these demands, a law was enacted in the middle of 1922. Accordingly, free timber could be cut from forests for the repair or reconstruction of dwellings, schools, temples and orphanages damaged by natural disasters or by rebellion and war. See: *Düstur*, Array 3, Vol 3, 87-88: 18.06.1922.

39 Upon a question, the Minister of Public Works stated that the Ministry of Economy had allowed the cutting of trees for 2 months due to the shortage of wood in the trains. See: TBMMZC, Vol 6, 443-445: 20.12.1920.

40 TBMMZC, Vol 4, 322-323: 25.09.1920.

and cutting procedures put the villagers in a difficult situation. According to the Coppice Law, those dealing with forestry and households in villages adjacent to large forests with a maximum distance of 20 kilometers would benefit from a maximum of 18 decares of forest in line with their needs. The villagers could benefit from these forests to meet their simple daily needs, such as timber and firewood, and they would be exempt from tax if they sold the firewood in the marketplaces. According to the Minister of Economy Celal Bey, it was understood from the available statistics that there were 7 million hectares of state forest, and it was calculated that 2 hectares could be allocated to each household to receive up to 10 tons of wood per year. Although there were minor criticisms about the law proposal, it was welcomed in the parliament. For example, the delegate of Izmit, Hamdi Namık Bey, said:

Gentlemants, today is one of our happiest days. Because today I understand with the following law that there is a government that would like to serve the people. No law has ever been made so beneficial to the public.⁴¹

The Coppice Law, which the parliament passed in October 1920, was declared in March 1921 and entered into force.⁴² However, after the war ended, Gaziantep Deputy Yasin Bey asked the Ministry of Economy about the issue that the Coppice Law was not declared and the people could not benefit from the law. Mahmud Esad Bey, the Minister of Economy of the period, stated that the law was announced everywhere, but in some regions, the public could not benefit because civil servants from the Ministry of Public Works and Economy and local officials could not be appointed. He also added:

41 TBMMZC, Vol 4, 522.

42 Düstur, Array 3, Vol 1, 97-98: 11.10.1920. Discussions about the law in the parliamentary minutes are not available after the second article of the law.

I want to take this opportunity to say that I did not find the Coppice Law successful in protecting forests and found it very dangerous. I consider the abolition of this law necessary... I think that if the Coppice Law is implemented, our forests will be destroyed everywhere.⁴³

Therefore, it is necessary to investigate where this law was applied. Yalçın Küçük claims that the Coppice Law was enacted to gain the support of the peasant population, even though the new government knew that the forests would be destroyed. According to him, after the war ended, the law was repealed because there was no need for public support.⁴⁴ The forest was the only economic resource that the Ankara government could give to the people in the national struggle. The operation of locomotives also depended on forest resources. Here we may return to the fuel problem in trains.

In his report dated 15 July 1920, Behiç Bey stated that there was very little coal left, the oil was only enough for 300 train services (estimated 1.5 months), and 1000 cubic meters of wood purchased for 7 thousand liras could not be paid for. He asked the administration for 40 thousand liras for fuel. In the meantime, starting from November 1920, a wood contract was signed with 2 contractors for 3 months, and it was stated in the contract that the administration would resolve the forest tax. The Ministry of Economy stated that there was no military activity that would require the illegal cutting of wood and wanted to take the manager of the administration to court, considering the timber cut by the contractors as illegal. Behiç Bey said:

I do not know the reason and wisdom, but these woods, which were bought to manage military transport, were so severely pursued by forest officials that there was no such activity in this country. Despite this, we continued to store the woods. It is a thousand

43 TBMMZC, Vol 27, 56-57: 29.01.1923.

44 Küçük, *Türkiye Üzerine Tezler*, 21-25.

cubic meters of wood that was able to provide the shipment of the Battle of İnönü.

While the railways could buy coal for less than 5 liras and tax-free when the administration was in the company's control, the new administration had to pay 25 liras in advance for wood in those days.⁴⁵ There was intense forest destruction in the areas close to the front, while forest officials of the Ministry of Economy were making difficulties for the railway administration. İzmit delegate Hamdi Bey stated with regret that he saw during his visit to Konya that the forests of Kütahya and Bilecik had been destroyed and that the trees sent to the stations were centuries old and green.⁴⁶ During the İnönü Battles, although a small amount of coal was extracted from various mines, it was clear that the mines could not be utilized due to distance, war conditions, and transportation difficulties. Ömer Lütfi Bey, the Minister of Public Works at that time, underlined the need to open the waterway of one of the ports as a condition of giving up wood and that Zonguldak coal should be bought and stored in this way.⁴⁷

Well, could not Zonguldak coal be brought by road from the very beginning? This was probably not possible in practice. In theory, transportation from Ereğli to Ankara could be achieved by long, winding, and bad roads, but as we show in the previous sections, transportation costs were enormous in road haulage. It is normal for the government not to incur such an expense while there is huge forest stock. It was impossible to transport coal, shipped between 8-13 liras per ton by sea, even to Istanbul or Ankara by road. On the other hand, the government imposed a tax of 2 to 3 liras per ton of exported coal to benefit economically from the coal of the Ereğli basin. In this way, the government tried to earn 3-4 thousand liras per day from Ereğli coal, which has an average export capacity of 1500 tons per day.⁴⁸

45 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 31-32, 34, 50-53; Erkin, *Hatırat*, 207.

46 TBMMZC, Vol 6, 443: 20.12.1920.

47 TBMMZC, Vol 9, 239: 26.03.1921.

48 TBMMZC, Vol 3, 237-249: 15.08.1920.

The development that relieved the railway administration to a certain extent was the signing of the Ankara Agreement with the French on October 20, 1921, and thus the opening of the Mersin road. By establishing communication with the lively markets of Adana, Tarsus, and Mersin, the coals offered for sale by the traders and manufacturers in these areas were found. For example, 250 tons of coal was purchased from a merchant in Mersin in January 1922. At the same time, 500 tons of coal were borrowed from the French. Behiç Bey said in his memoirs: "While meeting with the Ministry of Public Works to bring coal from Zonguldak, I also supplied more or less coal from Mersin and Adana, as I borrowed from a French company. When the first coal wagon arrived in Konya, it was a feast day for us and especially for the machinists."⁴⁹ Some attempts were made through the Red Crescent's (Kızılay) vice-president, Hamid Bey, in Istanbul to ensure that coal from Ereğli was brought. Henry Franklin-Bouillon stated that the Greeks could not attack in any way when Ereğli coal was transported to Mersin by French ships, and an officer from the French Ship Partnership in Mersin went to Istanbul for this job. The Ministry of Public Works reported that 4 thousand tons (later increased to 8 thousand tons) of coal were purchased from the Zonguldak Ottoman Coal Company at the cost of 15.5 liras per ton (including the shipping fee) to be delivered to the railway in Mersin and 1750 tons were on their way to Mersin port. Despite these developments, there were problems in the transportation of Ereğli coal to Mersin. The Greeks seized a French-flagged ship, and the ship was taken to the Greek port of Piraeus. The Italians seized another ship carrying 2675 tons of coal, and coal was sold in Istanbul.

On the other hand, in March 1922, 2 coal ships were unloaded to Mersin port with 30 thousand liras given by the Ministry of Finance. At the same time, a coal ship from Zonguldak reached Mersin. 1276 tons of Ereğli coal came to Mersin on behalf of the Ottoman Bank with a French-flagged ship. With another French-flagged ship, 2500 tons of coal reached

49 Erkin, *Hatırat*, 223.

Mersin. The daily coal requirement of the railways was 100 tons at that time. The report given in May 1922 stated that if the coal at hand were mixed with wood, it would be enough for 4-5 months.⁵⁰

The good relations established with the French after the Ankara Agreement (1921) was not limited to the coal supply. 5 locomotives and 100 wagons with a monthly rent of 7 thousand liras were rented from them. In the part of the line after Pozantı, the authority was on the French soldiers. In this region, a 50 percent discount was applied to the transports to be made for the railway administration. More importantly, a large number of weapons, clothing, and animals were transported for the needs of the army from the Iskenderun region, which was not under the control of the national government at that time.⁵¹ Before the Mersin road was opened, the port of Antalya was the gateway to Anatolia from the Mediterranean. However, although train materials purchased from Italy entered the port of Antalya, most of these materials remained on the roads. Because, as we always emphasize, road transport was very difficult due to the terrible state of the roads. The war conditions made it completely impossible. There was no vehicle to take materials from Polatlı to Konya, and shipping from Ankara to Konya was more expensive than ordering them from Istanbul or Europe.⁵²

5.2.3 *Financial problems*

The financial difficulties experienced during the national struggle were strongly felt in the railways. There was very little commercial goods transportation on the railways, which could only cover a small part of the expenses. The policy of one-third price in military transports continued, but all military transports were made on credit because the Ministry of National Defense did not give any money to the railways. In February

50 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 96-97; 101-106.

51 Erkin, *Hatırat*, 236. Gürel, *Kurtuluş Savaşında Demiryolculuk*, 94; 120.

52 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 108-112; 118.

1922, the debt of the Ministry of National Defense to the railways increased to 2 million liras.⁵³ Due to the guarantee given at the time of the company, the railways' deficits were covered by the state. On the other hand, the money sent to the railway administration via some state offices during the national struggle could not be collected. In addition, cannon wedges were made for the army in the factories of the railways, but a fee could not be collected for them either.

When the British forces withdrew from Eskişehir, they took the 20 thousand liras in the safe. The first capital of the railway administration, whose safe was completely empty, was 16 thousand liras in total, 10 thousand liras provided by Eskişehir Property Directorate, 1 thousand liras by Kütahya and 5 thousand liras by Niğde. In his report dated 26 July, Behiç Bey stated that 130 thousand liras was needed per month for fuel and requested 150 thousand liras to be given as an advance for one month's fuel, repairs, salaries, and material supply. After the fall of Bursa, the transportation of trade goods between Bursa and Alaşehir ended, and the administration was in a position to be unable to pay its salary payments. Behiç Bey had requested that the tariffs specified in the company's concession agreement be increased 6 times.⁵⁴ Because during the years of the First World War, there was considerable inflation in the Ottoman country, and the cost of living index had increased by 14 times.⁵⁵

In the note he gave to the Western Front Commander Ali Fuat Pasha in October 1920, Behiç Bey stated that the monthly expenses were 200 thousand liras, the deficit in August was 130 thousand liras, and the debts of September and October were 300 thousand liras. On the other hand, an advance of 16 thousand liras, which was given beforehand in August, was enacted, and laws were made to provide 96 thousand liras for the

53 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 95.

54 Erkin, *Hatırat*, 198; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 7; 31. The 6-fold increase in the tariff was made in April 1921 with the law numbered 110. See: *Düştur*, Array 3, Vol 2, 27: 09.04.1921.

55 The index was for İstanbul and calculated by the Debt Administration (Toprak, *Türkiye'de Milli İktisat*, 514).

salaries and expenses of the Baghdad line and 145 thousand liras for the salaries and expenses of the Anatolian line.⁵⁶

At the beginning of 1921, 24 thousand liras, sent to Isparta by the Ministry of Finance to be given to the railway administration were confiscated by the Southern Front Command, and the money was sent to the 12th Corps. Although requested, this money could not be received.⁵⁷ Cases like this have happened frequently. For example, in February 1922, the Ministry of Finance transferred 55 thousand liras to Silifke, Aksaray, Burdur, Menteşe, and Muğla to be given to the railway administration, but these funds did not reach the administration. Konya Revenue Office did not give 10 thousand liras sent from Silifke. After the end of the French occupation, a train was operated for the return of the local people to Adana, but the cost of 7600 liras was not given, either. Similarly, 100 thousand liras, which were sent to the Adana Reji Directorate to be given to the railways administration, did not reach the administration.⁵⁸ At the same time, the salaries of civil servants had not been paid for 7-8 months.⁵⁹

The Ministry of Finance, which did not accept its 1920 debts and did not pay its 1921 debts yet, was to pay the debts arising from military transports regularly every month, according to the decision of the Council of Ministers in March and announced in May. Despite this decision, any financial payment was not made. After Hasan Fehmi Bey became the Minister of Finance, he promised that he would pay 30 thousand liras every month regularly, but then he said that he could not give any money and stated that the administration had to talk to the Ministry of National Defense for the debts arising from military transports.⁶⁰ In any case, Hasan Fehmi Bey's fiscal policy was of "money is only for oily bullet and sharp bayonet."⁶¹

56 Düstur, Array 3, Vol 1, 52-53. Law Number 12, 13 and 14.

57 Erkin, *Hatırat*, 207; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 51.

58 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 94-96; 110.

59 Erkin, *Hatırat*, 217; Gürel, *Kurtuluş Savaşında Demiryolculuk*, 94.

60 Gürel, *Kurtuluş Savaşında Demiryolculuk*, 96-99; 104.

61 Dabağ, *Hasan Fehmi Ataç*, 86.

Conclusion

This study presents a narrative of road and railway transportation in the years of the National Struggle, considering the transportation legacy from the Ottoman Empire to Anatolia. Transportation activities witnessed great revolutions in the 19th century. The Macadam technique partly allowed road transportation to get rid of the mud. Steam power increased sea transportation volume and gave sea transportation great stability. Steam-powered locomotives on land have tremendously increased the mobility of goods and people. All these developments in transportation in the 19th century helped provide the road infrastructure required by the great economic transformation of the age. This change in transportation infrastructure and vehicles had an impact on the military aspect in the changing form of warfare since the middle of the 19th century. When the old type of wars, field or frontal, was replaced by total wars that required resource participation of large regions, the transportation factor became a factor that increased its weight in the war power compared to the past.

Compared to its contemporaries, the Ottoman Empire entered the railway age late. Moreover, just one decade after the first railroads were laid, the empire officially went bankrupt and had to relinquish control of the vast majority of its revenues to an administration made up of repre-

sentatives of foreign creditors. In such a bottleneck, making transportation infrastructure investments that required large amounts of capital was difficult. In fact, railways were built that would increase the flow of economic goods and open the inner regions of the country to international markets. However, the emergence of a common transportation network within the country that would also meet the military needs could not be achieved. The road issue, its military and economic importance recognized even in early times, could not be solved despite many plans, and the *men-i mürur* could not be eliminated. World War I, on the other hand, consumed the transportation resources as well as all the resources of the empire. While the roads completely lost their transport quality due to lack of care, there were significant losses in the animal stock. Under these conditions, Anatolia entered another war: the National Struggle.

With the rapid advance of the Greek forces in Western Anatolia, the Ankara government, which lacked the most economically productive region, tried to finance the war under challenging conditions. Deprived of all war power factors, the national forces tried to quickly bring together these factors, scattered in different Anatolia regions. However, there was a fundamental limitation in front of it: Anatolia's roads that were neglected and lost their transportation feature to a large extent.

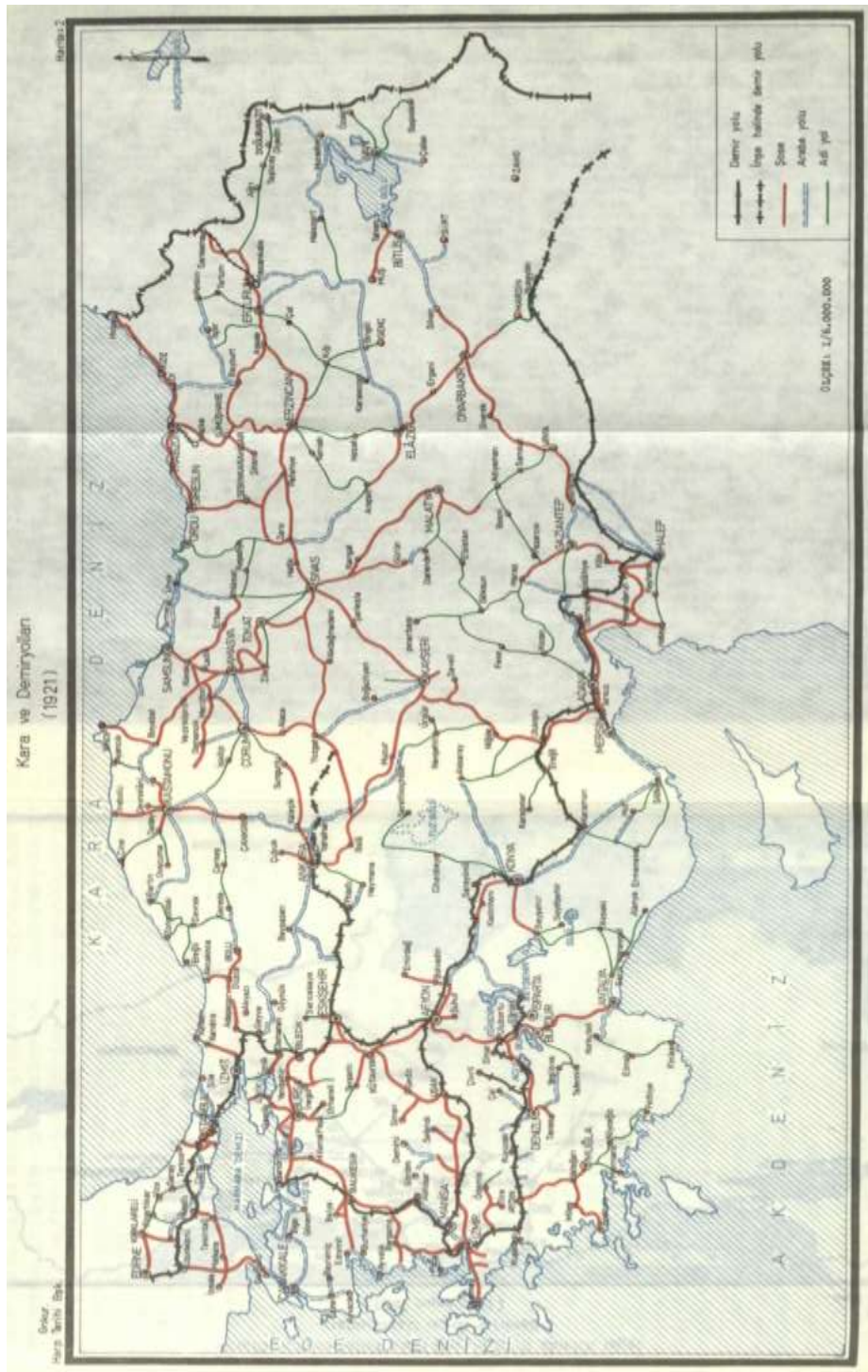
It was impossible to build new roads and maintain existing ones due to the limited budget revenues and the state of war. Local budgets were collecting road tax, but this income was too few, contrary to delegates' belief. Despite everything, the deputies worked in the parliament to improve the roads in their regions.

War materials sendings from all over Anatolia to support the Western Front took months and followed many different routes. With the fall of Kütahya, Eskişehir, and Afyon, railway transportation between the Konya and Ankara sections of the crescent-shaped railway network was interrupted. The army was using the Law of Procurement of Military Transport Vehicles and the War Obligations inherited from the Ottoman parliament for the supply of transportation vehicles. When the army retreated to the east of Sakarya in the summer of 1921, M. Kemal issued a

series of orders under National Obligations by using his law-making authority. One of these orders was the participation of the public in transport activities without pay. With this measure taken at the most critical stage of the war, the Greek forces were stopped in Sakarya. The army, which increased its combat power with the slow arrival of war materials on the roads, was able to start the offensive that would end the war a year later.

In this study, I examined transportation activities from different perspectives during the years of national struggle. I faced many different issues while doing my research. Because transportation activities touch on many issues such as people, animals, natural resources, environmental factors, technology, economy, and law. This inevitably increases the details. But, these details can sometimes open the door to new studies. That is why I find it helpful to touch on a few details before I finish. The first of these is the forest issue, which can be dealt with in the context of environmental history. The war years seem to have had a devastating effect on forest resources. The 39th law of the TBMM, the Coppice Law, is directly related to this issue. It may be worth investigating in which regions the law was applied and whether there were significant environmental impacts due to lumbering in these regions. Moreover, the existence of similar practices in other countries and other wars can be investigated. A second possible research subject could be the relations between the national government and the Debt Administration during the war. Even in the books that research the economy of the national struggle, the subject is not emphasized much. It is expected that there had constant communication between the parties, but there is no detailed information on this subject. Finally, researching the transportation activities of the Greek side during the war might be an integral part of this study.

Appendix A Road Map of Turkey, 1921



Source: TİH, Vol 7, Map 2 (no page).

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