IMPLEMENTING OBLIGATORY LABOR IN ROAD CONSTRUCTION DURING THE TANZIMAT PERIOD

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DECLARATION OF ORIGINALITY

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ABSTRACT

Implementing Obligatory Labor in Road Construction during the Tanzimat Period

This thesis makes several claims. First, it demonstrates that the Ottoman state and local elites initiated the road construction campaign as part of the broader Tanzimat reforms. Due to the Empire's financial limitations, road construction techniques, and the methods these elites used to exert control over the population, they arrived at a particular solution: the use of forced labor. While this solution initially proved successful in various regions, the legal framework to formalize this obligation was implemented later. The legal foundation for this arrangement was embedded in modern law. In increasingly bureaucratic and complex ways, the obligation was established as an individualized in-kind tax. The state's justification for this was the argument that the roads constructed through the labor obligation would benefit the workers themselves, making it both legal and just. This reasoning also distinguished this form of obligation from other types of forced labor, including corvée. In practice, however, the obligation still involved extralegal and coercive practices. The treatment of the subjects did not always adhere to the individualized in-kind tax model. Working conditions were poor and detrimental to the workers' health. The state sometimes struggled to provide necessary accommodation services, and when provided, these services were often of low quality. Work-related accidents, including injuries and exploitation, were common at the road construction sites. Finally, the state elites, through the modern bureaucracy, used charity as a means to strengthen the patrimonial bond between the Sultan and his subjects.

ÖZET

Tanzimat Döneminde Yol Yapımında Zorunlu Çalıştırma Uygulaması

Bu tez birkaç temel iddiayı öne sürmektedir. İlk olarak, Osmanlı devleti ve yerel elitlerin, Tanzimat reformlarının bir parçası olarak yol yapım seferberliğini başlattığını ortaya koymaktadır. İmparatorluğun mali yetersizlikleri, yol yapım teknikleri ve elitlerin halk üzerindeki denetim yöntemleri nedeniyle, zorunlu iş gücü kullanımı bir çözüm olarak benimsenmiştir. Bu çözüm, çeşitli bölgelerde ilk başta başarılı olsa da, bu zorunluluğu resmileştiren yasal çerçeve daha sonra oluşturulmuştur. Bu düzenlemenin temelleri modern hukukta yer bulmuş, bürokrasinin giderek karmaşıklaşmasıyla birlikte yükümlülük, bireyselleştirilmiş ayni bir vergi olarak şekillendirilmiştir. Devlet, bu yükümlülüğün işçiler için faydalı yollar inşa edeceği ve dolayısıyla hem yasal hem de adil olacağı savunmasıyla bu uygulamayı meşrulaştırmıştır. Bu gerekçe, zorunlu iş gücünü diğer angarya türlerinden ayıran en önemli faktör olmuştur. Ancak uygulamada, zorunlu iş gücü hâlâ yasa dışı ve baskıcı yöntemlerle gerçekleştirilmiştir. Reayanın gördüğü muamele, her zaman bireyselleştirilmiş ayni vergi modeliyle uyumlu olmamıştır. Çalışma koşulları ise genellikle kötü olup işçilerin sağlığını olumsuz etkilemiştir. Devlet, gerektiğinde konaklama hizmetleri sağlamakta zorlanmış, sağlandığında ise bu hizmetlerin kalitesi düşük olmuştur. Yol yapım sahalarında iş kazaları, yaralanmalar ve sömürü yaygın bir şekilde görülmüştür. Son olarak, devlet elitleri, modern bürokrasi yoluyla hayırseverliği Sultan ile tebaası arasındaki patrimonyal bağı güçlendiren bir araç olarak kullanmıştır.

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CHAPTER 1

INTRODUCTION AND A REVIEW OF THE LITERATURE

1.1 Aim and scope of the thesis

It is well-established in the scholarly literature that one of the promises of Tanzimat reforms in the 19th-century Ottoman Empire was to abolish the *corvée* (*angarya*). In line with attempts to standardize and individualize the taxes, state documents repeatedly indicated this matter starting even before the formative Gülhane Edict declared that "the State, which in the defence of its territory is forced into various expenses, can not procure the money necessary for the army and other branches of the service, save by contributions levied on its subjects."[1]

In a one-and-a-half-month earlier edict sent to provinces, Sultan Abdülecid again warned the bureaucrats not to levy any corvée on the public.[2] Abolishment of corvée was a persistent concern for the state, which was visible in both the 1875 Edict of Justice (*Ferman-ı Adalet*) of Sultan Abdülaziz[3] and the First Ottoman Constitution (*Kanun-i Esasi*).[4] Being traceable in the legal or legislative documents, the intention to abolish the corvée was constantly stressed out in actuality.[5]

For the Ottoman legal and bureaucratic language, corvée as the term was associated with the use of unfree labor by big landowners or notables. It is not surprising that therefore its translation into scholarly literature discussions were also started regarding whether or not serfdom was an explanatory concept for the

[1] Hamlin, *Among the Turks*, 48–54.
[2] Akyıldız, "Tanzimat," *TDV İslam Ansiklopedisi*
[3] Fettahoğlu, "Bir 'Ölü Doğum' Hikâyesi," 195.
[4] *Osmanlı'dan Günümüze Türk Anayasa Metinleri*, 33.
[5] İnalcık, "Tanzimat'ın Uygulanması ve Sosyal Tepkileri," 630.

Ottoman realm.[6] Whether an imposition by the state could be labeled as corvée has been a matter of discussion as well, appearing in the various contemporary primary sources. The 19th century, on the other hand, also witnessed various novel applications of the forced labor imposed on the Ottoman subjects, including a new system of obligation (*mükellefiyet*) to work in road construction for a limited time every year.

Hence, this thesis explores the legality and practicality of the obligation system in road construction in the Late Ottoman Empire. In a legal normativity that corvée was banned, the emergence of this new unfree type of labor demonstrates a contradiction at first glance. Centering around this supposedly contradictory feature of the obligation, this thesis aims to demonstrate that Tanzimat's modern and rationalized legal system was not necessarily opposed to the use of every kind of unfree labor.

On the contrary, modern law could work to increase and diversify the opportunities for the state to use unfree labor. Therefore, this thesis demonstrates both the legality of the obligation with its legitimization mechanisms and rationale. Furthermore, it shows that the obligation was a result of non-legal practical necessities, which channeled both the state actors and local elite to use it first *de facto*.

Practicality did not only construct the legality. It also diverged from the legal framework when obligation came into reality. Indeed, the working conditions that obligatory laborers faced did not always conform to the legal framework that the Tanzimat bureaucrats presupposed. Rather, obligation brought certain mechanisms that involved extralegal ways of controlling the labor force. Moreover, the material

[6] Işıl, "Çiftliks, Landowners and Rural Producers: Class Relations in the Balkans (18th-19th Centuries)," 336–37.

conditions of the workers frequently were poor, which occasionally led to injuries or even deaths. Therefore, not surprisingly, those who were subjected to obligation consistently tried ways to evade it.

In short, this study centers on the obligation system, the formation of which arguably was a result of practical necessities. It examines how the state carefully designed it as an in-kind tax, which had a rationalization assuming that it would benefit the ones who were obliged. Then, it turns its angle to what was going on in the worksite, for the actual experiences of the workers. The legal focus is important as it demonstrates the simultaneousness of modern legality and unfree labor while the latter is branded with the former. Practical focus, on the other hand, makes it clear that legal norms are translated as altered into the practical sphere. Moreover, practicality shows both the vulnerable conditions of the workers on the worksite and their means of resistance to participation in obligatory labor.

As the subjects of matter are the practical reasons, legal framework, and working conditions of state-imposed compulsory labor, the concentration and practicalities of the study necessitate some limitations regarding the scope of the thesis, both temporally and spatially. The timeframe covered starts from the early 19th century, when the Tanzimat reforms related to infrastructural needs began to be initiated. This corresponds to the dates of the first available documents regarding the road construction intentions, techniques, and gathering the necessary workforce.

Determining an end to this study is more difficult. For the legal sphere, the year 1890, when a monetary form of the tax was permanently introduced as an alternative to the in-kind obligation, marks the endpoint beyond which this study's claim does not reach. While it should be noted that the in-kind option of road tax

survived through the Second Constitutional Era[7] and Republic until it was abolished by the Democrat Party Government in 1952,[8] determining 1890 as the endpoint makes this thesis's period of interest the Long Tanzimat.[9] However, 1890 cannot be applied as an ending date for the working conditions. Due to the nature of the available primary sources, relevant examples from after 1890 are still used in Chapter 4.

Geographically, the thesis concentrates on regions where Tanzimat reforms were implemented. As this study is interested in the application of the reforms, regions that were only nominally under the control of the Capital are not considered within the geographical scope. Hence, Egypt under Muhammad Ali and later Khidivate, where corvée was used heavily for both infrastructure and agricultural production, is treated as a different polity. As a thematical study, archival sources have dictated that highways of greater political and economic importance are emphasized more.

1.2 Chapter outlines

The remaining two subchapters of this chapter are about the global modern history of the use of obligatory labor in road making and the obligation in Ottoman studies. For that purpose, the first part of this discussion is reserved for the European states' use of obligatory laborers in different forms. There are two main focuses of this discussion. First, discussing the British and French systems, to what extent the initial

[7] The Committee of Union and Progress Government initiated labor battalions during the Balkan Wars and the First World War. See Beşikçi, *The Ottoman Mobilization of Manpower in the First World War*, 129–39.
[8] Özdemir, "Cumhuriyet Döneminde Türkiye'de Yol Vergisi."
[9] This term has started to be used more in scholarly literature to imply an extended definition of Tanzimat. Unlike the strict approach assuming the Tanzimat period began with the Gülhane Edict and ended with the dissolution of the Ottoman Parliament in 1878 by Abdulhamid II, the "Long Tanzimat" denotes that the modernist reform agenda had already started by the 1830s and survived the Hamidian Period. See Toledano, "Late Ottoman Concepts of Slavery (1830s-1880s)," 478.

road-making in these two states is examined. Then, the persistence of various forms of obligation is considered. The second part is about the colonial forms of obligation, indicating that colonial authorities overwhelmingly used this kind of labor for the infrastructural development of colonial territories. A literature review on the obligation in Ottoman history is necessary to see how the current scholarship treats the obligation. Therefore, scholarly works in Ottoman studies that either center the obligation or other studies that discuss obligation considerably are presented.

Chapter 2 treats the origins of applying compulsory labor in road making. As an intersection of infrastructural and labor histories, this chapter covers the developments from the early 19th century until 1853, when the first Regulation regarding compulsory labor was issued. To do that, first I discovered the structural changes in political, economic, and technological realms that happened in the 19th century, which required a campaign for highway construction in a new form called *chaussées*. In this way, I discuss the actors of this process and their intentions.

Relying on the reports produced for Supreme Council of Judicial Ordinances (*Meclis-i Vâlâ-yı Ahkâm-ı Adliye*) by local or invited foreign engineers, directives sent to the provinces from the Capital, and requests made by local councils to the center, I inquiry whether the whole operation was orchestrated by the center or local actors did play a role. Chosen highways to build, in this regard, were related to the economic interests of these actors along with their preferences in both internal and external politics. While the state documents discussed potential ways of financing these highways, it appears that insufficient funds were a primary obstacle to completing them. Related to this issue, the next subchapter is about labor, showing the cases when the local authorities used the general populace for the necessary labor force.

Commenting on the technicalities of chaussées construction, the next subchapter argues that the labor-intensive nature of the chaussées paved the way to use the populace in several regions. In this way, two arguments are made in this chapter. First, it shows that later codifications from 1853 had some practical bases already tried in the earlier period. Moreover, Discussing the decision-making process of this use, I suggest that not only the appointee bureaucrats but also the local elite have effectively used people in work.

Chapter 3 centers on the legality of compulsory labor. The first subchapter analyzes the interest of Ottoman state officials concerning foreign road regulations. This section argues that the legitimization of compulsory labor on the roads includes categorizing it as an in-kind tax, distinguishing it from corvée, and justifying it through the benefits derived from the roads. The subsequent subchapters examine the regulations, highlighting their commonalities and differences of them. The second subchapter, in this regard, describes the rules and their change over time for the obligation. In a related way, the rationale and ways of legitimization of the obligation are discussed in that subchapter.

The third subchapter, then, demonstrates the increasing bureaucratic complexity in the implementation of obligation by showing the necessary personnel and their duties to oversee the obligation. In the final subchpter, a discussion is done to comment on the relationship between rules, rationale, and bureacracy of the obligation. Sources used for this chapter are predominately legal documents produced by the state organs. Therefore, as normative as they are, practical applications of the obligation diverged from them occasionally.

To examine this divergence, Chapter 4 is about the actual labor conditions of obligatory road construction. Therefore, it first examines the bigger picture of the

uses of obligation in the field. This perspective is about the extent and frequency of the use of obligatory workers in various infrastructural projects of the Empire, predominantly road construction. The other dimension of this bigger picture is the financial conditions of the workers, which provides a complex story.

The second subchapter is about the draft process and several ways of resistance to be drafted for the obligation. This discussion is important to show workers had a certain agency while structural changes happened around them. Petitions written by the workers demonstrate that they used both the legal framework and its rationale to abstain from the work.

Then, the discussion involves a description of the worksite, including the accommodation of the workers. This part of the discussion is vital to show the vulnerable conditions that the workers faced. Vulnerability, though, is not limited to their accommodation. Hence, the chapter finals with a discussion about the work-related accidents that workers had. With this final chapter, then, practical reflections of the obligation become visible from the angle of the workers themselves.

1.3 A global history and historiography of obligatory labor in road construction

> The "Road-tax" system, of personal service and commutation, though nearly universal among us, is unsound in its principle, unjust in its operation, wasteful in its practice, and unsatisfactory in its results. Borrowed from the "statute-labor" of England, and the "*Corvee*" or "*Prestation en nature*" of France, like them it is a remnant of the times of feudal vassalage, when one of the tenures by which land was held was the obligation to make the roads passable for the troops of the lord of the manor.[10]

The passage above, from the last chapter of *A Manual of the Principles and Practices of Roadmaking*, criticizes the involuntary labor regime in roadmaking in the United States. This criticism, labeling the work as both unjust and inefficient, was

[10] Gillespie, *A Manuel of Principles and Practice of Roadmaking*, 341.

not unique to the author, W. M. Gillespie. Indeed, France had already abolished the corvée, and private turnpike trusts were in their heyday in the 1830s in the United Kingdom. However, the 19th century still saw the continuation of obligatory work on highways in different parts of the world, including the aforementioned ones, France and the United Kingdom. Considering this persistence, this subchapter aims to provide a global history of obligatory labor in road making, focusing on the 19th and 20th centuries.

First, one needs to clarify what these terms mean to argue for the use of obligatory labor for the state's infrastructural power. As the *mükellefiyet* (obligation) to work in road construction here refers to an involuntary, non-commodified, and, if necessary, coerced form of labor, according to the taxonomy of the International Institute of Social History, it needs to be classified as "obligatory labor" as a type of "tributary labor."[11] This definition holds some truth. For the state, as will be explained in Chapter 2, roads meant the necessary logistical advancements for the expansion of the state. This involved allocating fiscal resources, bureaucratization, and controlling and penetrating the lives of the subjects that lived in its territory. Hence, with Michael Mann's conceptualization, it was the infrastructural power of the state that was increased via the use of unfree labor.[12]

Besides its importance to the infrastructural capacity of the state, the road itself had value as an end product. According to the labor theory of value, this value equals the time spent on the work. Karl Marx categorizes the road as fixed capital

[11] The full definition of obligatory labor according to this taxonomy: "Obligatory laborers: those who have to work for the polity, and are remunerated mainly in kind. This category includes those subject to civil obligations (corvée laborers, conscripted soldiers, and sailors), and work as punishment, i.e. convicts. Yet obligatory work can also be an entitlement that enjoys middle or high social standing, such as the European or Indian nobility, the samurai in Japan, or banner people in Qing China." See Hofmeester et al., "The Global Collaboratory on the History of Labour Relations, 1500-2000," 19.
[12] Mann, "The Autonomous Power of the State," 185–213.

since it embodies the labor time invested in its construction. Although the work was non-commodified and the state possessed the work produced by workers, the road as a product still represented a form of accumulated labor. Marx defines the unpaid infrastructural work in communal societies as not surplus-generating because it is necessary labor for the reproduction of the society. This value was not immediately realized in the form of exchange but became essential for the broader economic system by facilitating the circulation of commodities and enabling further production processes. If laborers in transportation work more than the necessary time for their subsistence but are only paid for the necessary time, surplus value is created for the capitalist, similar to direct production. Thus, the road contributed indirectly to creating surplus value within the economy.[13]

On the one hand, modern-state-directed obligatory labor on roads as a tax resembles Marx's definition of communal labor, as it contains a necessary use value for the commune. However, the obligation to build highways, while realizing the necessary fixed capital, also facilitated global trade in Anatolia, as will be further explained. Therefore, this form of obligatory labor, in one sense, worked for the benefit of capitalists rather than being purely necessary labor for subsistence. Hence, it is possible to define the surplus value extracted from this labor as benefiting both the state's infrastructural goals and the broader capitalist interests by enabling more efficient trade routes and increasing the flow of commodities.

Scholarly literature on labor history has undergone a direction questioning the relationship between modernity and free labor. Not only the clear-cut dichotomy between the free and unfree forms of labor has become questioned but also the uses of various kinds of unfree labor including slavery. This questioning is based on a few

[13] Marx, *Grundrisse*, 524–33.

levels. First, some colonial administrations did not give up chattel slavery and if so, various other forms of unfree labor including indentured labor, sharecropping, or convict labor substituted slavery. While many waged labor opportunities to switch jobs were limited, modern law also functioned to promote forced labor as in the example of vagrancy laws. Finally, political conjunctures did rebirth various forms of forced labor occasionally.[14]

Therefore, this thesis does not assume a linear shift from free to unfree kinds of labor. On the contrary, unlike the classical economic approach, this argument asserts the presence and utilization of coercive mechanisms within capitalist production relations. In fact, unfree forms of labor are not only compatible with capitalist production but can also play a dominant role in the creation of fixed capital. Unlike neoclassical economic theory, which does not distinguish between free and unfree labor and claims that the use of the latter would not negatively affect productivity, the system of obligation demonstrates that unfree forms of labor, driven by coercion rather than choice, can exist within capitalist production.[15]

As will be explained in this thesis, the Ottoman compulsory labor system played a significant role in the construction of Macadam roads throughout the empire. This was achieved through a coalition of the state and local elites, utilizing both legal and extralegal methods. Those most affected by this system were the laborers, who could be said to have been under coercion, suffering not only from the exploitation of their labor but also from injuries or even deaths. As documented, workers often sought ways to avoid compulsory labor.

To contextualize it in a global history, within the modern legal scheme, practices of various kinds of obligation in Europe as well as its colonial reflections

[14] van der Linden, "On Coerced Labor," 1–2.
[15] Pektaş, 197–234.

will be examined. This discussion can be a base for making some conclusions on commonalities and trends in the Ottoman use of obligatory labor too. Furthermore, by generalizing these trends, the global history of unfree labor can lead to a better understanding of the relationship between modern law and unfree labor, as well as question the already established explanations of these practices. In this way, locating obligatory road construction in the Empire within a broader perspective of modern legal and state-making practices is possible.

Early Modern British road construction and maintenance were based on the responsibility of parishes. Property tax and statute labor were these roads' monetary and labor means. For the latter, it was demanded six days of work on the roads It was also possible to lend horses or carts. This system, which was found to be ineffective due to the lack of capital and coordination has started to be altered by turnpike trusts, a phenomenon seen in the late 17th century first. It became a predominant form of road construction in the age of the Industrial Revolution due to increased commercial volumes as well as the increasingly dense urban centers.[16]

The common way to form a turnpike trust was a petition written by inhabitants. Organized by landowners of the region and using external sources such as bonds and creating these new roads as privatized tolls, these turnpike trusts could spend more. Consequently, tolls constructed by this turnpike trust network increased transportation efficiency in 18th and 19th-century Great Britain by reducing freight charges and traveling times. Privatization of roads did not mean a total adaption of waged labor. Indeed, turnpike trusts were able to claim statute labor on their routes.[17] It was in 1835 that statute labor, which was deemed ineffective, was changed for a

[16] Bogart, "Turnpike Trusts and the Transportation Revolution in 18th Century England," 3–5.
[17] Bogart, "The Turnpike Roads of England and Wales," 6.

highway rate for the newly constructed roads. However, it was maintained for the repair of already constructed roads until the Highway Act of 1959.[18]

In France, *corvée royale* was in effect from the Early Modern Era, particularly from the late 17th century. While it was generalized during the 18th century, it became one practice regarded as a burden to the peasants. Based on the 18th-century discussions on corvée royale, Anne Conchon demonstrates that criticisms regarding the corvée were centered on both productivity and freedom. Arguments of physiocrats[19] highlighted the economic inefficiency of this type of work compared to paid labor, emphasizing the loss of productive time and its negative impact on agricultural output as it diverted peasants and animals from agricultural production. Moreover, corvée royale, likened to the feudal servitudes or *corvée seigneurial* and criticized with an anti-slavery discourse, became a synonym for forced labor.

One main reason for this criticism was that people couldn't pay their obligation as a monetary tax. Therefore, physical contribution to the work was deemed as coercive. It was expected that men older than sixteen would fulfill their obligation for a certain number of days. While it was a maximum of thirty days, this was mostly exceptional; 12 working days became the norm eventually.

Among one of the famous Six Edicts, Turgot abolished the corvée in his Chief Ministry in January 1776. He proposed to initiate a monetary tax on the landowners as they were the ones who benefited from the road construction most. While the abolition of corvée was seen as the most radical and was opposed most

[18] Butcher, "Private, or 'unadopted' Roads in England and Wales," 5.
[19] It was the dominant school of political economy in France in the 18th century. Physiocrats asserted that the value was coming from agricultural production. See Stathakis and Vaggi, *Economic Development and Social Change*, 6–9.

harshly, it was deemed popular within the public.[20] While corvée was reinstated in August 1776, both criticisms and administrative intentions to find a solution continued. In several généralités, intendants tried to transform that into a fiscal form. Eventually, corvée was redeemed as a monetary tax in 1787 for all généralités. For some provincial states in the administrative system of the Ancient Regime, the Duchy of Britanny, for example, though it survived until the Revolution.[21] Criticisms of road corvée by physiocrats were not limited to France. In the reign of Charles Frederick, Baden underwent a similar experiment under the influence of physiocrat advisors.[22]

This back and forth regarding the obligatory work did not come to an end with the Revolution in France. Oppositely, the 19th-century history of obligation was not less complex. While the corvée was abolished with the Revolution, in 1802, a new measurement was introduced in the name of *prestation en nature*. While this gave municipalities a right to request their citizens to work on the local roads, for some historians like Guy Arbellot, *prestation* was nothing more than the rebranding of the old corvée.[23]

A report from the retired Inspector General of Bridges and Roads of France on prestation in 1883 demonstrates its dynamics in the late 19th century. Léopold Marx, in his presentation of the detailed analysis and defense of the labor service system, demonstrated that in 1880, the number of labor service providers to the population was 18.52%. As the prestation was being conducted at the municipality level, the local roads were subject to be performed. From 1837 to 1842, 81% of the labor service was fulfilled in kind. It was 76% of the labor service was still fulfilled

[20] Maxwell, "The Life and Work of Turgot," 225–26.
[21] Conchon, "La corvée royale au xviiie siècle," 45–58.
[22] Bowler, "Demonstrating the Natural Order," 219–21.
[23] Arbellot, "Les problèmes de la route française à l'entrée du XIXe siècle," 13.

in kind between 1851 and 1856 and then 69% from 1857 to 1861, remaining roughly stable at 60% in the following years until the 1880s. He explained this decrease that during the early years, less work was demanded.[24]

Consequently, while prestation was reformed and relieved occasionally throughout the century depending on legitimization concerns and practical needs,[25] it survived by the early 20th century, within Imperial, Restoration, and Republican political administrations as a tool.[26]

One study focusing on 19th-century Estonia shows that obligatory road construction outlived the Russian Empire despite the opposition of peasants and several reform attempts made. In Estonia, it survived until 1959, which according to the author demonstrates that besides the colonial or absolutist regimes, forced labor in road construction still was observable.[27]

Indeed, various scholars tend to regard 19th or 20th-century continuations of tributary labor on roads as remnants of an archaic practice. Besides these examples from 19th-century Europe, extensions of the obligatory road work are commonly associated with colonial settings. Indeed, there are several examples of colonial administrations' benefiting from various types of unfree labor in infrastructure including compulsory road work by the indigenous people in different regions. Although it is impossible to generalize all the colonial regimes and their effects on the infrastructure and local populace, it is still possible to make certain comments.

There is a bulk of secondary literature about the use of various forms of forced labor in colonies in the Americas. The Spanish Kingdom used it for the major

[24] Marx, "Statistique de la prestation en nature sur les chemins vicinaux," 11–27.
[25] For example, the Bourbon Restoration suspended the prestation occasionally. See Goger, "Le temps de la route exclusive en France," 605.
[26] Renaud Bueb discusses the 19th-century applications of prestation, considering it similar to corvée. See Bueb, "La Corvée Des Routes Au XIXe Siècle," 101–36.
[27] Muide, "The Road Corvée."

highways in Mexico, for example.[28] In Canada, the French administration used corvée to construct the necessary infrastructure.[29] When Canada became independent from France, statute labor continued there for parishes until the 20th century.[30] Several states passed obligation laws in the United States.[31]

Although different colonial authorities chose various forms of labor, for road construction, forced labor was the dominant form. Its institutionalization changed regarding the temporal and conjectural conditions. French West Africa was the most notable example of the early 20th century as forced labor was institutionalized in the forms of *prestation* and the second portion of military service. Prestation, which was codified in 1912, due to pressures from the International Labor Organization to revoke the earlier arbitrary forms of forced labor, required eight to 13 days per year to work of every taxpayer. Depending on the colonial entity, the number of days that the populace needed to fulfill for road construction was changeable.[32] In Madagascar, corvée was one of the earliest implementations of the French colonial administration in 1893.[33]

The German colonial administration also used various forms of forced labor in East Africa. In Tanzania, they initially enlisted 300 residents in exchange for famine aid to work on two highways in Dar es Salaam and Tanga. At the same time, station commanders of the colonial authority implemented corvée labor, which included women and children, for road construction and maintenance. However, it was difficult for the German colonial administration to control whether corvée duties were fulfilled in inland areas, which eventually caused a temporary end to the road

[28] Castleman, *Building the King's Highway*.
[29] Tomczak, "Corvée Labour and the Habitant 'Spirit of Mutiny' in New France, 1688–1731."
[30] Summerby-Murray, "Statute Labour on Ontario Township Road."
[31] Lay, Metcalf, and Sharp, *Paving Our Ways: A History of the World's Roads and Pavements*, 56.
[32] van Waijenburg, "Financing the African Colonial State," 17.
[33] Thomas, "The River, The Road, and The Rural–Urban Divide," 373.

construction campaign. In 1898, when a hut tax was increased from 3 to 12 percent, those who couldn't pay were given the alternative of working in road construction, a practice that some contemporary missionaries described as corvée.[34] This tax labor system, as put out by Juhani Koponen, also worked for these inhabitants directly working for the European employers in exchange for their tax debts.[35]

Despite the efforts of the German colonial authorities, road construction remained limited in the early 20th century due to a lack of direct control over taxpayers. In 1904, a significant influx of investment from metropolitan Germany enabled the planning of a larger project. As a solution to the labor shortage, authorities again resorted to forced labor, decreeing that any man could be drafted for road construction free of charge. This, along with other grievances, led to the Maji Maji Rebellion. Consequently, although the colonial administration intended to use penal labor for highways after the war, the focus shifted to railways. As a result, highways remained neglected and unfinished in Tanzania during this era.

Maji Maji Rebellion not being an isolated incident, forms of unfree labor including the one for road construction were a common cause for distress and on occasion uprisings. Colonial administrations mostly relied on intermediary actors for recruiting the labor force. German colonial administration in Tanzania, for example, relied on local intermediaries to draft the workers, who were expected to work on the roads twice a year.[36] It was village chiefs who drafted the locals for road construction in Indonesia for the colonial authority of the Dutch.[37]

[34] Greiner, "Colonial Schemes and African Realities," 338–39.
[35] Koponen, *Development for Exploitation*, 347.
[36] Greiner, "Colonial Schemes and African Realities," 337.
[37] Manse, "Coerced Labour and Colonial Governance in Nineteenth and Twentieth Century Indonesia," 506.

One commonality in these colonial forms of forced labor was a discourse of civilization. However, the purpose of road construction did not align with the economic interests of the locals. One benefit of the highways for the colonial government by connecting the cash-crop-producing plantations to the center, like in the example of Niger. Road construction also worked for transportation from the mining sites.[38] In Southern Ghana, again, it was both increasing the international trade volumes and domination for the reason of road construction and thus for the use of forced labor.[39]

Therefore, locals did not extensively use these highways. In Tanzania, the local population primarily continued to use their established vernacular transport systems.[40] Road construction meant both a memory of the violent colonial past and a signifier of development as well as its disillusionment of modernity for local populations. This was the stark contrast that two generations of Niger experienced.[41] Furthermore, on certain occasions, roads did not create enough advancements in trade. In Madagascar, French Colonial Administrator Deschamp of the 1930s was complaining that roads did not become as effective for commerce as hoped.[42] For the locals, while it was a symbol of development culturally, they also could regard them as an embodiment of negligence, lack of opportunities, and underdevelopment.[43]

The work itself was fatiguing while no food or wages were provided and caused suffering for the cultivation of the locals due to negligence according to contemporary German missionaries in Tanzania.[44] Similarly, increasing days for the

[38] Masquelier, "Road Mythographies," 835.
[39] Akurang-Parry, "Colonial Forced Labor Policies for Road-Building in Southern Ghana and International Anti-Forced Labor Pressures, 1900-1940," 1–3.
[40] Greiner, "Colonial Schemes and African Realities," 341–47.
[41] Masquelier, "Road Mythographies," 836.
[42] Thomas, "The River, The Road, and The Rural–Urban Divide," 379.
[43] Thomas, 380–81.
[44] Koponen, *Development for Exploitation*, 344–45.

obligation resulted in negligence of cultivation and famine in the Ivory Coast.[45] According to accounts of workers, it was an unpaid job and no food was provided to the workers.[46] It was not always unpaid. In Ghana, the early 20th-century French colonial administration provided cash, food, and drinks to the local intermediaries to pay the workers.[47]

To summarize the use of forced labor in 19th and 20th-century colonies for road construction, British, German, and French colonial authorities benefitted from various institutional forms of corvée. Branded with a developmental and civilizational discourse, the use of forced labor worked for the political or economic benefits of the colonial authorities. Legal and extralegal means for recruiting and forcing people to work on roads happened simultaneously. As the time spent on obligation was inconstant, it led to negative effects on the cultivation of the locals and occasionally was a reason for famines. While intermediary actors, mostly local chiefs were used for both recruitment and enforcement, it mostly included ways of coercion and was resisted in various ways changing from silent resilience to uprisings.

One problem, perhaps, of writing a global history of state-imposed corvee for road construction, or more generally for infrastructural reasons, is that various historical literatures use their terminology for the work, which essentially can be generalized by a few common features. Having differences based on the geography and based on the statuses of people who were obliged, These varying terms often mask the underlying similarities in the work.

[45] van Waijenburg, "Financing the African Colonial State," 29.
[46] Thomas, "The River, The Road, and The Rural–Urban Divide," 379.
[47] Akurang-Parry, "Colonial Forced Labor Policies for Road-Building in Southern Ghana and International Anti-Forced Labor Pressures, 1900-1940," 5–6.

Although its name was changed and its application was narrowed, involuntary use of people's labor on roads was a continuous practice for the European states in the 19th century. Especially in France, where corvée had a connotation associated with the ills of the ancient regime, a constant effort to differentiate prestation from corvée was visible. Despite being seen as a continuation of corvée and criticized for inefficiency, the obligation for road construction and maintenance continued in colonial and non-colonial settings well into the 20th century. Therefore, it is possible to make a few conclusions.

First, the frequency of the use of obligatory labor to construct roads was a result of a combination of the already established roads, the necessity of new highways due to increasing commerce, the lack of waged laborers to fulfill this job, and the lack of monetary capital in the hands of constructing parties. It was the political arrangement that shaped its prevalence and severity. Moreover, privatization was not equal to free labor. Rather, state actors and state laws worked for the extraction of unfree labor for private road construction companies.

1.4 Obligation in the Ottoman studies

Scholarly literature on Ottoman labor history has been distinguished within the realm of Ottoman social history after the 1970s.[48] In recent decades, unfree labor has become a topic that got attention from Ottoman historians. Early Modern forms of enslavement, corvée, or penal labor but also 19th-century applications of unfree labor are studied with its various forms. One group of academic scholarship is about the unfree labor in the hands of de-facto private property such as large estates (*çiftlik*s) or

[48] Quataert, "Labor History and the Ottoman Empire, c. 1700–1922."

sharecropping.[49] The use of various forms of unfree labor in these estates happened with the indebtedness of the peasants, legal applications, and administrative decisions.[50] Therefore, the relation between unfree labor and modern legality was visible out of the state-directed uses of the former as well.

Among these, there is already a bulk of scholarly literature to talk about the use of unfree labor by the state. Adoption of universal conscription,[51] forced labor in mining sites,[52] transforming penal labor,[53] and compulsory civilian work in factories for the state were the kinds of unfree labor from which the 19th-century Ottoman State benefitted.[54]

Few studies center their focus on obligation as their subject. One of these rare studies is a comparative study of obligatory labor in the Ottoman Empire and the globe by Yakup Akkuş and Kadir Yıldırım.[55] In this study, the authors focus on both the legal and practical aspects of obligatory labor in the Ottoman Empire, demonstrating the challenges of its application. While the article provides some examples about the areas of application and problems observed for the application, the examples it uses remain few to grasp the conditions of the workers. The article surveys the different applications of obligatory labor for a wide geography and

[49] To see a summary of the *çiftlik* debate in Ottoman Balkans of the 18th and 19th centuries: Işıl, "Çiftliks, Landowners and Rural Producers: Class Relations in the Balkans (18th-19th Centuries)," 10–41.
[50] Kaya and Terzibaşoğlu, "19. Yüzyılda Balkanlar'da Toprak Rejimi ve Emek İlişkileri," 49–105.
[51] Zürcher, "The Ottoman Conscription System, 1844–1914"; Bolat, "Redif Askeri Teşkilatı (1834-1876)"; Şimşek, "The First 'Little Mehmeds': Conscripts for the Ottoman Army, 1826-53."
[52] To see a monograph on the rotational labor system implemented in Zonguldak Coalfield: Quataert, *Miners and the State in the Ottoman Empire*.
[53] Yıldız, *Mapusâne: Osmanlı Hapishanelerinin Kuruluş Serüveni (1839-1908)* shows the general transformation of the penal system in the Ottoman reformation era. Adak, "Central Prisons (Hapishane-i Umumi) in Istanbul and Izmir in the Late Ottoman Empire." focuses on production in workshops in two central prisons in Istanbul and Izmir. To see the implementation of the rehabilitative penal labor: Schull, *Prisons in the Late Ottoman Empire*, 127–33.
[54] Kabadayı, "Working for the State in a Factory in Istanbul."
[55] Akkuş and Yıldırım, "Dünyada ve Osmanlı'da Zorunlu Çalıştırma."

timespan. However, this makes it difficult to draw conclusions or compare these applications with those of the Ottoman case.

Similarly, an article by Emrah Çetin briefly discusses the obligation in road construction to assess the main changes in its legal framework including acceptance of monetary road tax after the 1890s rather than the in-kind obligation.[56] Ali Rıza Gönüllü's article on "Road Tax in the Late Ottoman State" focuses on the collection of the tax in the Second Constitutional Era in its monetary form while touching upon the in-kind obligation as well.[57]

One group of studies touches upon the institutional and legal histories of the obligation while discussing relevant institutions or specific case studies. An article by Nesimi Yazıcı on communication and transportation in the Ottoman Empire in the 19th century provides the reasons for the necessity of road construction in the 19th century and discusses the relevant institutional and legal changes in infrastructural modernity of the Empire.[58] Writing on the councils of public works (*İmar Meclisleri*), Mehmet Seyitdanlıoğlu demonstrates the relationship between the Tanzimat reforms and public works focusing on the early Tanzimat reformers' intentions.

Ph.D. dissertation of Şenay Atam on the Ministry of Public Works (*Nafia Nezareti*), for example, while giving some information about the administration of the ministry from its foundation until the end of the Empire also shows the road construction works performed under the supervision of this ministry.[59] In doing this, Atam also provides relevant information about the state officers who performed the use of obligatory labor and the legal features of the obligation.

[56] Çetin, "Osmanlı Devleti'nin Son Döneminde Zorunlu Çalışma Uygulamalarına Dair Bir Örnek."
[57] Gönüllü, "Osmanlı Devleti'nin Son Döneminde Yol Vergisi (1866-1921)."
[58] Yazıcı, "Tanzimatta Haberleşme ve Kara Taşımacılığı."
[59] Atam, "Osmanlı Devleti'nde Nafia Nezareti."

Selahattin Tozlu, in the first chapter of his Ph.D. dissertation on the Trabzon-Erzurum-Bayezid Road, similarly, surveys the legal regulations on road construction in the 19th century, including the legal conditions of the obligatory laborers.[60] The same discussion also constitutes a chapter in the volume about the economic history of a co-authored survey on Ottoman history, titled *Osmanlı*.[61] Focusing on the 1869 Regulation and Instructions regarding road construction, Musa Çadırcı describes the legal aspects of it including the use of obligatory labor.[62]

For the sake of infrastructural history, various studies focus on the construction process and finances of particular roads or roads in particular regions in the 19th-century Ottoman Empire. Another Ph.D. dissertation on the same Trabzon-Erzurum Road by Fulya Özkan discusses its importance in the modern state-making and infrastructural history of the Late Ottoman Empire.[63] In the chapter titled "Laboring The Road: Forced Labor and the Localism of the Modern State" where she focuses on the use of obligatory labor in the construction of roads, she demonstrates the conditions of the labor, especially with a perspective that focuses on the relationship of the central and local administrations and treatment of the laborers and agency of the latter on participating and abstaining the work.

Besides the Trabzon-Erzurum Road, the other route that got a considerable amount of scholarly attention is İzmid-Ankara Road. Şenay Atam discusses protocols made with the German contractor Human for the construction of this road which eventually failed and was finished by the state.[64] In her article focusing on the roads in Ankara Province, Eylem Tekemen Altındaş also discusses İzmid-Ankara Road,

[60] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)."
[61] Tozlu, "Osmanlı Yol Düzenlemeleri."
[62] Çadırcı, "Tanzimat Döneminde Kara Yolu Yapımı."
[63] Özkan, "A Road in Rebellion, A History on the Move."
[64] Atam, "Osmanlı Devleti'nde Bir Yol Çıkmazı."

describing its construction process from the state's perspective.[65] Emrah Çetin discusses the same road from the Tanzimat Era to the Second Constitutional Era, indicating the local intentions and agency to finish the road.[66] Based on his Ph.D. dissertation on road construction and transportation from Tanzimat to the Second Constitutional Period,[67] Çetin has articles on the development of roads in Hudavendigar,[68] Izmir,[69] Trabzon,[70] Ankara, and Kastamonu.[71] As another case study, an examination of the construction of Izmir-Usak Road by Sadiye Tutsak provides a successful example to show the interplay between local politics and the intentions of the central government in road construction.[72]

[65] Tekemen Altındaş, "XIX. Yüzyılın İkinci Yarısında Ankara'da Karayolu Ulaşımı."
[66] Çetin, "Tanzimat'tan II. Meşrutiyet'e İzmit Mutasarrıflığında Karayolu Çalışmaları."
[67] Çetin, "Tanzimat'tan Meşrutiyet'e Karayolu Ulaşımı."
[68] Çetin, "Tanzimat'tan II. Meşrutiyet'e Hüdâvendigâr Vilayetinde Karayolu Yapım Çalışmaları."
[69] Çetin, "Tanzimat Döneminde Yol Yapım Çalışmalarına Bir Örnek."
[70] Çetin, "Tanzimat'tan II. Meşrutiyet'e Trabzon Vilayeti'nde Karayolu Yapım Çalışmaları."
[71] Çetin, "II. Abdülhamid Döneminde Kastamonu ve Ankara Vilayetlerinde Karayolu Yapım Çalışmaları."
[72] Tutsak, "Batı Anadolu'nun Ulaşım Meselesinde Usak-Izmir Yolu Yapım Çalışmaları."

CHAPTER 2

INTENTIONS, AGENTS, ECONOMY, AND LIMITS OF EARLY TANZIMAT'S ROAD CONSTRUCTION PROJECTS UNTIL 1853

2.1 Intentions for a road construction campaign of the state and local elite

When Mustafa Reşid Pasha announced the famous Rose Chamber Edict (*Gülhane Hatt-ı Hümayunu*) on November 3, 1839, the Ottoman administrative reform age had already been underway for a few decades. Reorganization in legal, bureaucratic, military, and economic spheres of state-making was visible since the early 19th century and intended to centralize governance by allocating political power and economic resources into the hands of the imperial center, rather than dispersing them across peripheral authorities.

Interacting with global transformative forces, these reforms corresponded to the emergence of 19th-century state-making projects worldwide, eventually transforming the state apparatus and ideology, and redefining its relations with its subjects over the century. Within this transformation, infrastructural reforms were a vital component of the reform agenda, not only because they enhanced the state's penetration into all dimensions of urban social life but also because they strengthened the center's control over the periphery.

The early Modern road system of the Ottoman Empire was based on the delegation of responsibilities. Means of information and communication systems and related transportation necessities including construction and maintenance of the highways were taken care of by either contractual agents or particular villages that

benefitted from tax exemptions in exchange for these duties.[73] Later 19th-century reforms marked the state's assuming this role directly from these intermediaries.

Thus, in addition to urban expansion and transformation, the development of transportation and communication means, as well as maintaining constant control over these systems, gained prominence from the early 19th century. That explains the rationale behind the postal service's reform, aligning with the introduction of travel permits for the public during Mahmud II's reign, as both initiatives corresponded to broader efforts to modernize and regulate the empire's administrative and communication systems.[74]

Indeed, the infrastructural capacity of the state correlated with its fiscal, commercial, and bureaucratic capacities. For fiscal capacity, centralizing the tax system was seen as crucial, necessitating a secure transportation system for the travel of tax collectors.[75] Indeed, Vedat Eldem demonstrates how railroads dramatically increased the state's ability to collect tithes when they reached particular provinces throughout the century.[76]

Road security was a constant problem for commerce. In the early century, merchants had to negotiate agreements with either nomadic tribes or local notables to secure commerce in Anatolia, especially against brigands. Hence, road construction became an element of security discourse in the 19th century.[77] However, it did not work as expected in all regions. For example, the Trabzon-Erzurum Road not only

[73] Koh, "The Ottoman Postmaster," 113–52.
[74] Hanioğlu, *A Brief History of the Late Ottoman Empire*, 62.
[75] Schoenberg, "The Evolution of Transport in Turkey (Eastern Thrace and Asia Minor) under Ottoman Rule, 1856–1918," 353.
[76] Eldem, *Osmanlı İmparatorluğu`nun İktisadi Şartları Hakkında Bir Tetkik*.
[77] Quataert, "The Age of Reforms," 815–17.

facilitated increased trade and smuggling but also attracted highway robbers, further increasing the region's militarization.[78]

This increase in fiscal and commercial capacities was possible only with enhanced state coercion, necessitating both the establishment of a centralized law-enforcement system and the expansion of bureaucracy in the provinces.[79] Increasing state control over the highways also secured commerce. Consequently, with the development of transportation and institutional infrastructure, the central government could better monitor and intervene in fiscal processes, as well as govern more directly and efficiently over the century.[80]

Besides the central reform-centric explanations, two other dimensions of this process can be found in the effects of the global setting and the motivations of the locals. For the former, the 19th century constitutes the heyday of the expansion of global trade into the Ottoman domains. Having roots in the early modern period, the mid-18th century became a turning point for the commercialization of agriculture. The period after 1815 marks the second significant shift in the increase of the Ottoman Empire's global trade volume.[81]

With protectionist policies taking effect in continental Europe, both import and export volumes with Great Britain drastically increased during this period. From 1815, exports from Great Britain to the Ottoman Empire tripled in British pounds over two decades. The accelerating effect of free trade treaties further amplified this volume, which consisted mostly of raw materials. Consequently, the export rate increased progressively, along with a significant rise in imports of manufactured

[78] Özkan, "Gravediggers of the Modern State: Highway Robbers on the Trabzon-Bayezid Road, 1850s-1910s," 238–46.
[79] Özbek, "Policing the Countryside," 51–53.
[80] Özbek, "Tax Farming in the Nineteenth-Century Ottoman Empire," 219–45.
[81] Pamuk, *The Ottoman Empire and European Capitalism, 1820–1913*, 27–33.

goods. After the 1840s, other industrialized Western nations entered the scene, further increasing the total trade volume of the Empire.[82]

State expansion over its territories, the acceleration of global trade, and local demands to develop the infrastructure are three visible reasons for the earliest road construction attempts. Indeed, the earliest directive for chaussée construction found in the Ottoman Archive is for the Üsküdar-İzmit Road, which was due to the establishment of the modern postal system on this very route.[83]

Çadırcı argues that in the early 19th century one of the reasons for Ottoman peasants not producing agricultural goods for the market and mostly conducting substantial agriculture was the insufficiency of roads.[84] Indeed, when the representatives from the regions were asked for their complaints and suggestions, one common request was the construction of roads. Sultan Abdulmecid affirmed that this was also his wish.[85]

Hence, the background for a campaign to develop the infrastructure had several tiers in the early 19th century Ottoman Empire. A need to construct and renovate highways appeared as a necessity to strengthen state authority via the means of transportation, communication, and bureaucracy to the state elite. In this way, the intention was to develop the commercial capacity of the Empire, especially during an age when global trade had expanded on Ottoman soil.

Having these structural changes constructing the context, the motivations and rationale of the state elite behind these initiatives become clear when examining some initial directives for road construction in 1847.[86] According to one detailed

[82] Pamuk, 27–33.
[83] Çetin, "Tanzimat'tan II. Meşrutiyet'e İzmit Mutasarrıflığı'nda Karayolu Yapım Çalışmaları," 1774–75.
[84] Çadırcı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapısı*, 8.
[85] Çadırcı, "Tanzimat Döneminde Türkiye'de Yönetim (1839-1856)," 622–23.
[86] BOA, İ.MSM, 7/135.

report prepared by the Supreme Council of Judicial Ordinances discussing the necessity of road construction in the Empire, the state's prosperity and wealth hinged on two primary pillars: agriculture and trade, as well as the advancement of craftsmanship.

Given the abundant shores and fertile lands within Ottoman territories, prioritizing agriculture aligned with the population's essential needs. Concurrently, the progress of crafts and, thus, the promotion of the products produced within the Empire were deemed paramount for ensuring the happiness and prosperity of both the state and its subjects. Consequently, organizing efficient means of transportation for goods emerged as a crucial aspect of this enterprise.

Thus, this earlier report argued that although one of the ways to develop transportation was developing railways because these would be constructed by foreigners, the state should have had a long thought before doing that. The other way, leveling roads and building them in chaussée style, was the one that the Council thought was appropriate. Considering these intentions, they proposed Edirne for Rumelia and Izmir and Samsun for Anatolia, all known by their commercial capacity regarding which highways should have been constructed in the first place. Based on this report, in a memo sent to the Chief Secretary of the Sultan, Grand Vizir Mustafa Reşid Pasha approved this report only with slight differences including that the roads between Edirne and Istanbul for Rumelia and either the Trabzon or Samsun road for Anatolia should be prioritized for construction as chaussées.

Presented to the Sublime Porte (*Bab-ı Ali*) in early 1850, another report from the French Embassy regarding the necessity of road construction between Edirne and Istanbul repeated the importance of agriculture and ports for the prosperity of the

state and its subjects.[87] Moreover, it pointed out that proper routes between these two cities were important for security purposes for two reasons, both related to Russian interests in Ottoman soil: First, Christian populations of the Empire, necessarily Greek and Bulgarian people, could hope for a Russian annexation hoping for prosperity with the infrastructural advancements, religious-rooted sympathy aside. Second, during the Russo-Turkish War in 1829, the French Embassy suggested that clear roads would have been beneficial for logistic purposes, especially in wartime.

Demonstrating this line of reasoning can be generalized, another report from 1856 by Colonel von Malinowski, one of the Prussian officers employed by the Ottoman Empire,[88] gives the same reasoning for constructing chaussées throughout the Empire.[89] Accordingly, von Malinowski suggested that roadmaking would improve both the economic conditions and the well-being of its inhabitants, along with the level of commerce. As a military man, he also pointed out the strategic importance of roadways for military purposes. Respectively, decent roadways would enable faster and more efficient movement of armies, giving an advantage in times of conflict.

The other road construction initially planned in the 1840s was the Trabzon-Erzurum-Bayezid road connecting the Black Sea region with the Iranian border. Its necessity and requirements had already been discussed before 1847. The introduction of stream-powered vessels gave importance to the Trabzon Port for connecting Iranian and Russian trade with Istanbul since the 1830s. With the development of both road and maritime transportation, the importance of the Trabzon Port increased significantly, which survived until the mid-1880s.[90] Indeed, the necessity of

[87] BOA, HR.TO, 192/71.
[88] Cantemir, "Osmanlı Prusya Münasebetleri (1808-1871)," 31.
[89] BOA, HR.TO, 423/31
[90] Issawi, "The Tabriz–Trabzon Trade, 1830–1900," 21–24.

renovating the road from the Iranian border to Trabzon became more visible to contemporary observers.[91]

Another reason was the increasing rivalry between Iran and Russia after the war in 1822 and deliberate attempts of the Iranian government to bypass Russian territory in trade.[92] Therefore, commercial purposes again played a vital role in prioritizing this road. In this case, however, international rivalry in trade also involved no less.

Indeed, according to a memo conveyed by the British Embassy, Russia was aiming to receive a higher percentage of revenue as transit duty from the Georgian Route to Iran. As the roads between Bayezid and Trabzon were imperfect, merchants would use this route to import or export from Iran. The embassy stated that although highway construction could be seen as expensive at first sight, it would be beneficial in the longer term. Furthermore, it would be beneficial for the people who live on the route and servicing the merchants.[93] Therefore, the Supreme Council decided to investigate this route to make a chaussée-style highway construction between Trabzon and Balahor and necessary leveling between Erzurum and Bayezid.[94]

Last but not least, Western Anatolia appeared as the other region in which two main highways were planned before 1853. Bursa-Gemlik Road in Hüdavendigar was one highway that started to be constructed in the 1850s. Local demand initiated the project first. In 1847 At the request of the local elite who lived around Gemlik and Mudanya,[95] the Supreme Council inspected Gemlik Road and Mudanya Port and

[91] Özkan, "A Road in Rebellion, A History on the Move," 10.
[92] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 35.
[93] BOA, İ.MSM, 87/2460; Tozlu, 187–88.
[94] BOA, İ.MSM, 87/2460; İ.MSM, 44/2188; Tozlu, 59.
[95] Supreme Council report refers to them as "populace" (*ahali*). However, as the request was made by the District Council (*Memleket Meclisi*), it should be noted that these councils were made of notables of the district as a rule. See Çadırcı, *Tanzimat Dönemine Anadolu Kentleri'nin Sosyal ve Ekonomik Yapıları*, 216.

concluded that although the road would be beneficial, it shouldn't have been the priority while the Imperial budget was allocated to Edirne Road and Enez Port.[96] It seems, however, only one year later, in 1848, the state's attitude began to change. An order was given to Hüdavendigar Governor-General (*Müşir*) Mustafa Nuri Pasha,[97] asking to repair roads to Gemlik which were used to carry timber from Ahı and Sündiken mountains to be used in Gemlik Shipyard.[98]

As the actual work for construction started in December 1850,[99] Governor Sarim Pasha informed the Capital about the letter of gratitude given by the local elite, more specifically the Provincial Administrative Council (*Eyalet Meclisi*).[100] Besides the logistical reasons of the Empire, the commercial importance of the Gemlik-Bursa road also was considered.[101]

In Western Anatolia, another project was for the Izmir-Usak-Afyon route. As *Takvim-i Vekayi*[102] praised in April 1851, this was also initiated by the populace living in Afyon as they committed to providing the necessary labor for the chaussée-style highway construction between Afyon and Usak. The newspaper suggested that the lack of roads was harmful to the people because of its negative effects on selling their grains and the difficulty of buying grains in cases of bad harvest season.[103]

Hence, although Tozlu attributes the relative success seen in Trabzon solely to the local administrators, there might be a further dimension. Accordingly, in Trabzon,

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[96] BOA, A.}MKT.MVL, 5/61.
[97] For a list of Hüdavendigar governors see Kuneralp, *Son Dönem Osmanlı Erkân ve Ricali (1839-1922)*. Müşir was acting as a governor administratively in 1848. See Değirmendere, "Osmanlı Devleti Taşra İdaresindeki Dönüşümün Valilik Kurumu Üzerindeki Yansımaları (Hudâvendigâr Eyaleti Örneği, 1839-1908)," 123.
[98] BOA, A.}MKT, 135/7. In the document, these mountains are called "Ahu" and "Somdöken."
[99] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 231.
[100] BOA, I.DH, 225/13471.
[101] BOA, C..NF, 38/1892.
[102] The first Ottoman-language newspaper, issued by the Government. Its direct translation means "Calendar of Events." See Shaw, *History of the Ottoman Empire and Modern Turkey*, 2:35.
[103] Tutsak, "Batı Anadolu'nun Ulaşım Meselesinde Usak-Izmir Yolu Yapım Çalışmaları," 309.

it was the first Local Council to ask for the construction of the Trabzon-Erzurum Road. Therefore, it is possible to think in terms that local actors were active in the campaign. Similarly, in both Afyon and Gemlik roads, the first ones who demand road construction are the local councils.

This discussion is a contribution to the scholarly discussion about the decision-making process of Tanzimat reforms. As can be seen in this case study of road-making, a policy that aims to obligate the regular villagers in roadmaking relied on more than the political agenda of the Center or its bureaucrats. Rather, practical necessities to be able to control this labor force required an alliance between the local elite and the central authority. Moreover, the local elite, who would benefit from an accelerated trade over the road, also had a skin in this game. Therefore, while saying that it was not a top-down mechanism solely, it is still important to remember about inner power asymmetries within the local. Further, perhaps the most difficult relationship in this story is between the local elite and local villagers.

To exemplify this, Ion Ionescu de la Brad wrote on September 9, 1851, that some landowners, along with Reşid Pasha, made "stubborn efforts" to introduce carts and improve transportation in Thessaly.[104] This example, particularly the existence of Reşid Pasha as both a state bureaucrat and a landowner demonstrates the transitivity of these roles and occasional commonalities between the interests of these two groups. Therefore, while it is important to stress the role of the local elite, it is crucial to remember that local and state elites were not necessarily opposite parties on every occasion as the centralization paradigm assumes. Rather, as recent studies show in the Ottoman field, it was quite possible to see some coalitions with the local elite and the state, especially in the infrastructural development.[105]

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[104] Kaya, *Coup-d'œil Sur Les Conditions de La Production de La Richesse En Turquie*, 318.
[105] Köksal, *The Ottoman Empire in the Tanzimat Era*, 98–125.

While the trade capacity of these roads was related to the importance of relevant ports, namely Izmir, Gemlik, and Mudanya, this can be generalized as earlier road construction projects almost without exception were connected with ports, reflecting the increasing importance of maritime trade. For Edirne, there was Enöz Port, a construction project that started simultaneously with the Edirne-Istanbul Highway.[106] As explained above, the importance of the Trabzon-Erzurum-Bayezid route was directly related to the Trabzon-Tabriz trade which was developed after the commencement of the steam navigation between the Capital and Trabzon. Hence, the construction of a new port to Trabzon coincided with the planning of this road.[107]

That was why the authorities discussed, although did not implement, constructing the highway from Batumi rather than Trabzon using the former as the main trade dock.[108] Again, it was the same period when the road that connected Samsun Port with Sivas was planned to be repaired.[109] In the Mediterranean, the Tarsus-Mersin road was being planned simultaneously with the construction of the Tarsus Port. İskenderun Port was thought of as the starting point for the Haleb Road as well.[110]

In summary, this subsection shows that the initial road construction campaign in the Tanzimat period relied on some pilot area applications. The state's main concern was developing commerce in a context where the Ottoman economy was incorporated into global markets. The other considerations were the security aligning with the military logistics and inner stability along with state interests in foreign affairs. it is important to note that the demands of the locals were effective as well as

[106] BOA, İ..MSM, 84/2405; MVL, 56/56.
[107] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 34–36.
[108] Tozlu, 60.
[109] BOA, A.}MKT, 38/58.
[110] BOA, A.}MKT, 44/71.

the central authority to decide which roads would be constructed. Although in some cases the Center had to power to decide among the priorities, it was the local notables who had the actual power to utilize the labor force in construction. Therefore, they also directly engaged with the politics of roadmaking.

2.2 Technicalities and labor of chaussée construction

Technical aspects played a vital role in determining the finances and labor regime of road construction projects. To understand this, one first should examine the terminology that Ottoman bureaucrats used. Arguably, the two most common words to express road-making projects in the 19th century were leveling (*tesviye*) and chaussée (*şose*) construction. Although "tesviye" sometimes was used as a more general term for adjustment, in most cases it also specifically meant the process required to make the surface flat.

Minister of Public Works Ekselans İsmail Pasha in 1850 explained that "the thing called leveling involves, as much as possible, flattening areas with hills, depressions, rocks, and crevices, and improving marshy areas." However, only the leveling did not make it durable most of the time. Hence, İsmail Pasha continued: "When a flood happens, it is expected that the condition will deteriorate and perhaps due to the extensive excavation and upheaval of soil that has become hard like stone, more mud will be produced than before. Therefore, the money to be spent on this will be considered wasted." Because of that reason, he was an advocate of constructing chaussée.[111]

Reports that were prepared in advance and continued to be prepared during the construction process of the Edirne-Istanbul road, offer significant details

[111] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 60.

regarding both the planning and the implementation processes in the construction of chaussée. For instance, a preliminary report from the Commission in 1847 shows that it required both an excavation of the soil to level it and filling it with stones.[112] From this definition and later investigation reports for the Edirne-Istanbul road written by Giovanni Lucchini, an Italian engineer sent at the request made by the Empire to Austria and proposed by the Ottoman Ambassador to Austria,[113] it comes out that chaussées in this context explicitly meant Macadam-type road construction, which was based on an artificial elevation of the road in a few layers through cut stones.[114]

Ways in which the road construction would happen dictated the labor regime. Breaking stones for macadamized road-making, as well as continually maintaining the roads, were vital. Therefore, the labor-intensive nature of this work created a demand for laborers from the late 18th century throughout the 19th century for both construction and maintenance. Stone breaking became a way of income for the unemployed and convicts in 19th century England.[115] The proportion of laborers to materials increased seven times in France since 1835 according to an engineer report in 1845.[116] Correspondingly, various states in the United States and Canada legislated

[112] BOA, İ.MSM, 84/2397; Atam, "Osmanlı Devleti'nde Nafia Nezareti," 195.
[113] BOA, HR.TO, 408/35; İ.MSM, 84/2403; İ.MSM, 84/2409.
[114] Early Modern roads, because of a necessity due to increasing traffic of animal-drawn carriages with the growing level of long-distance trade, were improved by new methods. Inspired by Roman pavement, the Telford method, introduced in the early 19th century, involved an artificial elevation of the road, laying a foundation of large, flat stones. These handmade stones were used to form a robust base, which was topped with layers of smaller rocks to create a pavement and designed with a convex shape for efficient drainage. As a later revision, the Macadam method applied the same logic with slight differences: Importantly, the stoned foundation was given up to make the roads more economical for compacted crushed rocks directly put on top of a stable subgrade. To see a detailed explanation of road construction evolution's technicalities: Lay, Metcalf, and Sharp, *Paving Our Ways: A History of the World's Roads and Pavements*, 59–86. For a contemporary manual: Gillespie, *A Manual of the Principles and Practice of Road-Making: Comprising the Location, Construction and Improvement of Roads and Railroads*,194-215.
[115] Lay, Metcalf, and Sharp, 69–70.
[116] Affleck, "The Beginnings of Modern Transport in France: The Seine Valley, 1820 to 1860," 142.

and benefited from statute labor[117] and convict labor.[118] The Ottoman case was no different, in terms of needing a bigger number of laborers to conduct this operation.

Lucchini's report in November 1847, defined laborer's work for chaussée-type road construction. Accordingly, it involved excavating cut stones and transporting them to a vehicle, leveling the road by filling in the mud or by leveling elevated areas in mountainous regions by building an embankment, digging the solid soil, collecting and breaking stones when there are no cut stones available, executing the leveling of two footpaths, envisaged as one cubit (*zir'a*)[119] wide on both sides of a twenty cubits wide carriageway, and pouring hot water over it.

Lucchini, who presupposed one to a fourth of a day should be spent on work by the laborer gave also a working structure and an estimation for the number of laborers. Accordingly, The half-hour of the road was calculated as 3750 cubits. For every cubit, one laborer would spend ten working days.

In a hierarchical organization, each worker team would consist of ten workers and would have a team leader. It was planned to assign a foreman (*çavuş*), who should have been wise and prudent, to lead a total of ten teams consisting of 100 workers. Apart from these ten teams, another group of ten teams of workers would be responsible for quarrying the stones, transferring them to carts, and transporting them. While every year ten hours of road would be completed, a total of four years would be sufficient to finish the whole road.[120]

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[117] Lay, Metcalf, and Sharp, *Paving Our Ways: A History of the World's Roads and Pavements*, 56.
[118] Ireland, "Prison Reform, Road Building, and Southern Progressivism: Joseph Hyde Pratt and the Campaign for 'Good Roads and Good Men,'" 125.
[119] *Zir'a* on James Redhouse's *A Turkish and English Lexicon* is defined as the following: "A cubit measure of four or more distinct sizes, viz." Redhouse, *A Turkish and English Lexicon*.
[120] BOA, HR.TO, 408/67; İ.MSM, 84/2403.

In short, chaussée style road construction required a simultaneous use of workers for several works which necessitated a greater number of individuals be employed. These workers were planned to be used in the parts of the job that did not require any specialty. Finding the necessary labor force, though, was one of the biggest obstacles in the road construction campaign. Furthermore, budget-sake, spending on workers became the most important expense item, as will be shown in the next subchapter.

2.3 Financing the road construction

One issue after deciding on the places, there would be a need for an allocated budget for these constructions. In 1847, for the budget of Edirne, Izmir, and Samsun roads the Council indicated that spending about 2.500 purses of aspers (*akçe*)[121] would expedite the process. Three sources of budget initially thought for this were external borrowing, the use of people as workers, and auctioning. While external borrowing could be the fastest solution, it was eliminated for being harmful in the long run. Alternatively, the Council stated that local people could be used as laborers. This suggestion came with the note that it was prohibited in some places, probably referring to the abolishment of corvée. Auctioning the road construction to some companies functioning in the Empire was the final idea.[122]

Both the Report of the Council and the following correspondence between the Grand Vizier and the Chief Secretary of the Sultan stated several problems with the auctioning method. First, the local companies were not strong enough to undertake

[121] One purse of aspers was equal to 50,000 aspers in 1822 and 60,000 aspers in 1872. See Çakır, "Kese", *TDV İslâm Ansiklopedisi*. BOA, MVL, 56/44 shows that one purse was equal to five liras in 1848. For the 19th-century Ottoman monetary system and reform attempts, see Eldem, "Chaos and Half Measures."
[122] BOA, İ.MSM., 7/135.

the construction of roads through auctioning. Moreover, if companies were to do it, individuals not belonging to these companies would not donate. Although foreign companies could be strong enough, they should not be allowed to undertake this job due to the problems associated with foreign debt.[123]

As discussed one year earlier for the Trabzon-Erzurum road, auctioning in this context should mean a private model. Accordingly, several shareholders who participate in the necessary budget for the road construction would share the revenue for twenty or twenty-five years after which ownership of the road would be returned to the state. For that reason, toll roads were planned in which the toll for a carriage is ten, for a loaded wagon it's two and a half, and for a pedestrian, it's one piastre (*guruş*), with an additional, slightly higher tax for maintenance.[124] While it is uncertain that this road would be performed in a build-operate-transfer model, this method was given up due to the unfamiliarity and hence unwillingness of the merchants with infrastructural construction projects and lack of investors in the villages who could undertake this kind of work.[125]

Another potential solution could be to fund the construction through cash donations from the public. However, this option is deemed impractical as it would be unreasonable to expect the people of Anatolia to pay for roads in Rumelia and vice versa. Therefore, this alternative is also dismissed. The final solution was to find the necessary budget from those who live near the construction sites. Legimitzation for this was that people would be more willing to donate for roads that would be beneficial for themselves.

[123] BOA, İ.MSM., 7/135.
[124] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 59.
[125] BOA, A.}MKT, 43/29.

Notably, this correspondence omitted to discuss physically enforcing people to work on the sites, unlike the report of the Commission. Instead, the word donation (*iane*) was used more ambiguously, most probably indicating a local tax.[126] Consequently, the initial proposal indicated that requesting monetary or physical contributions from locals, who arguably would also benefit from these constructions, was deemed more practical and feasible by the political elite than relying solely on the Empire's fiscal capacity and the state budget.

For deploying laborers, Lucchini envisaged waged employees on a per diem basis.[127] Similarly to Lucchini's report, the French Embassy's report in 1850 also presumed that waged laborers would be used for the road construction between Edirne and Istanbul. Further, the Embassy regarded this as an employment opportunity for the subjects. In this report, though, soldiers also were considered as a potential workforce.[128]

After examining the reports from Giovanni Lucchini, the Council proposed to postpone the project due to its burden on the state budget.[129] As the shortage in the budget was a problem, the fate of İskenderun-Aleppo Road was the same.[130] It is deducible that the highest portion of the budget was for labor expenses. Dated 1835, a budget demonstrates the expenses for the postal road to be constructed from Yenibahçe to Küçükçekmece. Hence, the expenses for the construction of the postal road were divided into three categories: bridge construction costs, equipment and tool costs, and labor costs. It was calculated that the total expenses amounted to

[126] BOA, İ.MSM, 7/135.
[127] BOA, HR.TO, 408/67; İ.MSM, 84/2403.
[128] BOA, HR.TO, 192/71.
[129] İ.MSM, 84/2409.
[130] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 326.

295,481 piastres, and a significant portion of this amount, 225,000 piastres, was allocated to labor costs.[131]

However, it is possible to see some relatively successful examples regarding the state's intentions. The relative success of the Trabzon case can be exemplified. As explained, actioning was deemed inconsiderable as a financing solution. Indeed, in Trabzon, the Ottoman government rejected an offer proposed by British Erzurum Consular James Bratt, of making the road by Joint Stock Company.[132] Hence, the Route's construction was to be financed by the state. To achieve this, engineers conducted inspections and prepared sketches for the road.[133] A preliminary study by the British Empire's Erzurum Consulate in 1848 concluded that a road from Trabzon to the Iranian border, spanning 300 miles, would require 102 hours to traverse. It was estimated that one worker could prepare one fathom (*kulaç*) of the road in a day,[134] meaning that 1760 workers could complete the road in 300 days. The consulate's estimate put the cost at 100 lira per mile, totaling 300 liras. This was equivalent to 6000 purses. However, Governor İzzet Paşa[135] anticipated additional expenses, suggesting a total cost of 6,300 purses.[136]

The use of unpaid labor is documented in several regions. According to one report from Ekselans Ismail Pasha, in 1850, the populace from Trabzon committed to constructing the road. Moreover, the grading of the twenty-four-hour-long road between Bayburd and Erzurum was completed through the conscripted labor of

[131] BOA, HAT, 700/33725
[132] Larpent, *Turkey*, 122; Yılmaz, "Tanzimat Döneminde Trabzon," 324.
[133] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 59.
[134] As one fathom is approximately double that of one cubit, which Lucchini estimated as the potential daily output of one worker, comparing this calculation to Lucchini's for the Istanbul-Edirne road highlights the approximate and uncertain nature of these estimations in planning.
[135] Kuneralp, *Son Dönem Osmanlı Erkân ve Ricali (1839-1922)*, 40.
[136] BOA, MVL, 56/43

approximately 3,400 workers mobilized from the Bayburd population without compensation.[137]

An article published in Journal de Constantinople dated February 19, 1852, by Ion Ionescu de la Brad detailed the use of forced labor in Gemlik-Bursa Road. First of all, it appears that forced laborers were used simultaneously with the paid workers. Ionesco pointed out that the work done by forced laborers was much less efficient compared to paid workers. Although forced labor was intended to reduce costs, Ionesco mentions that the quality of work suffered, making the potential savings much less impactful. There was a savings of about 300,000 piastres due to paying forced laborers only 2 piastres per day instead of 5, but this was counterbalanced by the poor work quality.[138]

The forced laborers lacked the experience, intelligence, and physical capability necessary for such tasks. Many of them were children or elderly people, unable to perform heavy physical labor. Due to the inexperience and lower strength of the forced laborers, the amount of work they were able to complete was less than half of what an ordinary, well-paid worker would accomplish. Ionesco suggests that once the population becomes more accustomed to this type of work and with better oversight, forced labor may become more efficient.[139]

A memo sent to İsmet Bey, who was an inspector officer to Anatolia, and Karahisarısahip District Governor, and District Council indicated that due to its value to agriculture and commerce, people should have been encouraged to work on the road between Karahisarısahip and İzmir. As this road would constructed in a way that carts could use, people living beyond Usak would benefit from its construction.

[137] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 60-1.
[138] Kaya, *Coup-d'œil Sur Les Conditions de La Production de La Richesse En Turquie*, 82–87.
[139] Kaya, 82–87.

Therefore, people who live near Usak and Karahisarısahip would have to be mobilized and encouraged to participate in the road's construction.[140] Eventually, the people committed to organizing the road from Afyonkarahisar to Usak.[141] Consequently, these experiences in various geographies contributed to addressing the financing problem by introducing the practice of forced labor.

To summarize, The use of compulsory labor is a result of various phenomena that the Ottoman Empire was facing during the Tanzimat period. First, the practical incapabilities of the state in fiscal administration, particularly tax collecting, and the urgent need for infrastructural development led the state authorities to use a relatively easier resource: the labor force of society. Moreover, the first local successful cases of road construction demonstrated the relative success of compulsory labor. Besides the budget for necessary materials, tools, and skilled workers, as labor-intensive work, road construction would require the recruitment of a large number of unskilled workers as well.

For these cases before any codification was prepared, ways of use of labor were heterogeneous. These mostly relied on the enforcement capacity of the local administrators, the cooperation of the local elite, and the willingness of the locals. It's still generalizable that using compulsory labor rather than wage labor gave relative success in the result during this period. Hence, arguably this became the basis of later insistence on compulsory labor to be implemented state-wide.

In short, the preferred method for road construction was chaussée during this period. The state planned to collect money from those who live near the construction site for its expenses rather than relying on introducing an Empire-wide tax, reflecting its limited fiscal capacity. Although auctioning was considered and discussed, state

[140] BOA, A, MKT, MHM. 46/71.
[141] Tutsak, "Batı Anadolu'nun Ulaşım Meselesinde Usak-Izmir Yolu Yapım Çalışmaları," 308.

funding became the primary solution to create a budget for these projects due to mistrust and reservations about foreign companies and the lack of domestic ones who can undertake these.

Regardless of the construction method, such projects were labor-intensive and required a substantial workforce. Examples from this period demonstrate that the state relied on corvée labor to fulfill this necessity. Although state bureaucrats legitimized this application as it would benefit the people forced to work, the state elite and foreign observers seemed to regard this application as corvée and, therefore, a contradiction to its earlier forbid.

2.4 Conclusion

To conclude this chapter, Tanzimat's road construction campaign was a multifaceted initiative shaped by central state ambitions, local demands, global influences, and technological developments. For the state, the main intention was to centralize power and enhance control over the various resources of the Empire. It was possible by facilitating commerce, increasing military capabilities, and governing its subjects more directly. The construction plans of the initial routes reflected these goals. At the same time, the local elites, who had several benefits from the improved infrastructure also played a significant role in supporting this campaign, showing a more general trend for the Tanzimat reformation.

Despite discussions around external borrowing and auctioning contracts to private companies, the state ultimately relied on a combination of local contributions and forced labor to finance and execute the construction. Regarding the finances of road construction, expenses of labor were the biggest item to spend. The technical aspects and related labor requirements of chaussée construction further shaped the

road-building efforts. The preference for Macadam-style roads, which involved significant excavation and stonework, necessitated a large and organized labor force. Therefore, the use of drafted unfree labor as a practical solution started to become a norm in the Empire before 1853.

CHAPTER 3

A LEGAL AND INSTITUTIONAL HISTORY OF OBLIGATORY LABOR IN THE 19TH CENTURY

3.1. Introduction: A necessity to obligatory labor

The previous section demonstrates that the main reasons for the insistence on compulsory labor after 1853, when the first Regulation emerged, and the expansion of its use through other regulations, were practical. The commercialization of agriculture, driven by external and internal trends, increasing trade volume in both imports and exports, and the state's deeper penetration into its rural areas necessitated the development of better roads in the Empire.

The most common problem, as explained, was the lack of financial means for this development between the proclamation of the Tanzimat reforms and 1853. This, combined with the labor-intensive nature of the procedure, led to the utilization of the general male populace as laborers without charge on an occasional basis for several construction projects. This approach was successful enough to form the basis for later codifications.

These regulations became important as they set the legal framework for this project, defining its legitimizations and limits. Therefore, examining these regulations individually provides a vital perspective on how the state constructed the legality of compulsory labor. Moreover, as one of the most important promises of the Tanzimat was the abolition of corvée, this demonstrates how the Tanzimat state attempted to redefine the concept of forced labor and the compulsory use of laborers in road construction on a legal basis.

Before examining the codifications individually, it is imperative to summarize the institutional history of public works in the 19th-century Ottoman Empire. Due to the aforementioned practical necessities for highway construction and improvement, these institutions were already seeking solutions. Along with this institutional history, two cases—Mustafa Sami Efendi's report from Austria and the Ottoman interest in the Wallachian Roads Regulation—will be examined in this subsection. Subsequently, regulations issued in 1853, 1861, 1867, and 1869 will be explained, along with related administrative regulations issued in the relevant period. This discussion will cover the rules for the conscription of laborers, the ideal working conditions for them, the hierarchical structure envisioned for the work, and the state's approach to mandating work through its legitimization mechanisms as seen in the legal texts.

3.2 Ottoman interests in foreign road regulations

Caused by the intentions for a road construction campaign, from the very early days of the foundation of the Ministry of Public Works, the political elite of the Ottoman Empire was interested in the technical and administrative aspects of roadmaking. Therefore, there are two cases the Ottoman Archive demonstrates that the state intended to have some knowledge about administrative and legal features of road construction outside of its governance. The first one was a bureaucrat, Mustafa Sami Efendi, who played a role in the establishment of the postal service administration in the Empire, was sent to Austria to write a report on the administration of road making there. The other one was a translation of a regulation regarding road construction in the Wallachian Principality, dated 1851.[142]

[142] BOA, HR.TO, 415/28.

In the document dated January 29, 1846,[143] Mustafa Sami Efendi presented one of the earliest reports on road construction.[144] After traveling to Austria, he summarized the road construction system there. The reason he was selected to be sent was that he played a role in the foundation of the new postal system, according to him. His travel was more than just observing the Austrian road system but implied establishing such a system in the Ottoman Empire as well. Thus, he proposed that an Armenian from Beyoğlu, named Oskanyan, be in charge if such a project were to be undertaken in the Empire. While Mustafa Sami Efendi's report did not provide any technical explanations of roadmaking, it gave some administrative information about it in Austria. Accordingly, there were three types of roads: state roads, commercial roads, and village roads. These were also labeled as public, private, and the most private respectively.

Given the current situation and frequent use for various reasons, the construction and maintenance of this first type of road fell under the state's responsibility. If there is a deficiency in its upkeep, the state would provide the necessary resources from surplus funds. Additionally, these were tolls; a charge was collected for the total repair costs incurred, based on every mile, which corresponds to the distance covered in two hours. This fee was collected per round for each horse or carriage, half the fee was charged for every group of cattle or other animals passing, and for larger groups, a quarter of the fee was levied. These fees, as sanctioned by the state, were meant to cover the repair expenses and were expected to suffice for the intended purpose.

Regarding the second type, roads outside the main city routes served provincial towns and benefitted the inhabitants of these towns. Every town had its

[143] BOA, A.}MKT, 34/71.
[144] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 195.

council responsible for maintaining the roads, either physically or financially. The materials needed for these routes were sourced from local properties and estates, and the repair costs are covered by the fees collected on the first type of routes. The third type of road connected villages with irregular pathways, where residents, depending on their needs, constructed and repaired these routes without any enforced labor. When a pathway sufficient for the passage of two carriages side by side is extended to cover a distance equivalent to an hour's travel, it results in costs ranging from 50,000 to 100,000 florins, depending on the availability of workers and their daily wages.

Besides being the first example of a report from abroad solely focusing on the administration of road-making, Mustafa Sami's work holds importance for several reasons. First, it depicted the Austria-Hungarian system as it divided the roads based on their function and who was responsible for them. This type of classification points to a specific administrative epistemology, which will become the basis of later regulations prepared by Ottoman authorities as well. The very same classification was being used for several geographies including France as will be explained in the last subchapter.

The rule that the state should provide the necessary equipment resembles the later Ottoman regulations. It points out the state as the responsible party for operating construction and maintenance processes on the highways. This attitude can be considered a reflection of the extension of state responsibility and control over its highways, which correlated to the concerns of the political elite of the Ottoman Empire as explained in the first chapter.

Moreover, the document uses the same legitimization mechanism to use obligatory laborers in road construction. The idea is that those who benefit from the

road should contribute to its labor, as will be repeatedly seen in reports prepared by the Ottoman bureaucracy and in regulations. Although it might be a hasty conclusion to say that this particular document is the basis of later regulations, it is convincingly apparent that the Ottoman bureaucracy was interested in how the infrastructural needs of the state were addressed.

One other document showing that the Ottoman state was interested in the developments outside of its direct realm was a translation of Regulations on the Construction of Pavements and Roads in Wallachia consisting of 12 clauses was translated into Ottoman Turkish in 1851.[145] The original French document sent by the Prince included a report prepared by a commission, seemingly composited by the Wallachian political elite.[146] In this report, authors argued for a retraction of the six days obligatory in-kind road construction contribution, enacted with the earlier 1843 Code.

Their reasoning for proposing quiting forced labor included the inefficiency of the peasant labor due to their lack of relevant skills. Moreover, it had detrimental effects on agriculture. Commitee also believed that the recruitment of skilled laborers for road construction would become easier over time and benefit the state providing employment opportunities outside agriculture. The monetary system, further, could help allocate resources more efficiently as well as provide equality in the distribution of costs among the subjects, according to the report.

The regulation itself stated that road tax would be effective for fifteen years, starting from when the law was promulgated. The payment would be made in two installments and equal parts, namely: the first during the first month and the second

[145] BOA, HR.TO, 415/28.
[146] Signatures in this report are of Constantin G. Ghika, Alexandre Ghika, Catardji, Arsaky, and Alexandre Philippesko.

during the third quarter of each year. All individuals whether having possessions or not should have made their payment, indicating that it was an individualized tax. The regulation itself did not explicitly state arguments related to benefits derived from the improved infrastructure. However, the underlying rationale for the varied contributions where landowners pay according to the number of peasants on their lands, and all residents contribute to the construction and maintenance of roads and bridges implied a benefit-based approach to financing public works. In the report, developing the trade was explicitly mentioned by the Commission.

One observation from this document in the report is that the Commission differentiated the corvée from in-kind obligations. While the Principality was designed to abolish corvée too, it is important to note that it was used for the obligatory work of the peasants under the large landowners. Therefore, the Principality's differentiation within the unfree labor categories, being a corvée and in-kind tax, echoed in the Ottoman context as well, indicating that for the central political elite, abolition of corvée was related to limiting the political authority of big landowners rather than conceptualizing that regarding being free or unfree labor. In other words, the state's right to use the labor force of the populace for free was reserved and the counterarguments for this were only related to the quality or efficiency of the work.

Together, Mustafa Sami Efendi's report from Austria with the report from Wallachia show two elements. First, the Ottoman state was already interested in what was done in other legal frameworks to improve the infrastructure. Both documents have the same benefit-based argumentation for the in-kind or monetary contribution to the work, which reveals a pattern. which was also visible in the Ottoman reports as discussed and Ottoman legal documents as will be discussed.

3.3 Legal Codes on Obligatory Labor in the 19th-Century Ottoman Empire

As discussed in Chapter 2, road construction became vital for the Ottoman State's concerns among the relevant infrastructural reforms in the 19th-century reformation campaign. Hence, the institutions regarding the infrastructural well-being of the Empire predated the first Code.

A discussion regarding the language, origins, and authors of these regulations is important as these both represented already established conventions initially and showed their evolution over time. Analyzing the institutions and individuals who played a part in preparing these regulations sheds light on the broader Tanzimat reforms, demonstrating the bureaucratic tendencies of the period as well as the interactions between the central authority and local power structures. Examining their articles regarding the road-making technique shows how spatial reorganization was possible through not only advanced technology but also the use of unfree labor. Draft process, bureaucratic hierarchy, and rules for the obligation help to understand the dynamics of the work site. This dynamics involves both the concerns of statesmen particularly related to the means of legitimization of imposition of obligatory labor for road construction. Finally, it demonstrates the legal framework that workers abided by and occasionally used for their interests.

The first available regulation for road construction was issued in November 1853.[147] As discussed in the second chapter, it was the already established conditions and necessities that led to the use of forced labor in road-making projects. Therefore, it is not surprising that this regulation involved a lengthy discussion about the use of obligatory labor. Indeed, while it consisted of two sections, one of them was reserved

[147] This code was revealed and summarized by Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 9–13. It is on pages 55-61 in the document cataloged in BOA, A}, 2.

for "The recruitment and employment of the people who will serve." Approved by Sultan Abdülmecid, this Regulation was a pilot area application. It was initially prepared for implementation in Izmir, Kütahya, and İnebolu.

The regulation was drafted by a certain Roads Commission (*Tarik Komisyonu*). While there were no references to that commission before 1853, it is still possible to detect its members. [148] Many of these people including the Chief of the Supreme Council and several ministers were among the military-bureaucratic elite of Istanbul. There were also some local powerholders from provinces, such as Tavaslızade Mehmed Agha, and experienced governors who had performed in various provinces such as Ahmed İzzet Pasha. This fact can be explained mainly by two reasons. First, the experiences from the provinces that already road construction happened before, like Edirne, would be considered. Second, road construction was naturally relevant to local conditions and required local knowledge and a certain amount of influence on the local subjects.

Although it might be considered a decree rather than a regulation due to its limited application area, three features qualify it as legislation. First, the document was discussed and approved by central legislative organs of the state, the Supreme Council of Judicial Ordinances along with the General Council (*Meclis-i Umumi*).[149] Second, as discussed in the first chapter, road construction was considered vital by the central authority during this period, and the problems encountered were common. Hence, using this limited area as a pilot for application, it is plausible to argue that

[148] There is a list of the invitees of this commission:
"Reis Paşa, Hassa Müşiri, Ticaret Nazırı, Hazine-i Hassa Nazırı, Kapudan Paşa, Kamil Paşa, İsmet Paşa, Yakup Paşa, Trablus Valisi Sabık İzzet Paşa, Hüseyin Bey Bey Efendi, İsmail Adil Paşa, Abdülkadir Paşa, Levazımat Mutasarrıfı Sabık Osman Paşa, Edirnelizade Emrullah Ağa, Tavaslızade Mehmed Ağa." See BOA, A.}TŞF, 16/50
Tavaslızade Mehmed Agha was influencal in Menteşe during 1850s. See Çoban, "Âyan Ailesi Tavaslızadeler ve Sultan II. Abdülhamid Döneminde Denizli'de Yerel Yöneticilerin Yolsuzlukları," 463–65. For Ahmed İzzet Pasha see Kuneralp, *Son Dönem Osmanlı Erkân ve Ricali (1839-1922)*, 57.
[149] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 10.

there was an attempt to standardize both the technical practices and the labor regime by exemplifying this. Finally, with its structured division into two main sections and several articles organized according to their focus, the document resembles modern codification.[150]

The second one, "Regulation Regarding the Organization and Arrangement of Roads in the Well-protected Domains" was approved by Sultan Abdülaziz in November 1861. These regulations were discussed and prepared by the Council of Bridges (*Meclis-i Meabir*). This institution, which had a bigger realm of responsibility regarding various infrastructural projects, was founded in 1858. This council consisted of the Minister, the Deputy Minister of Finance, Ottoman bureaucrats, and several foreign experts.[151]

Regulation of 1861 involved 31 articles in six sections,[152] making it more detailed than the previous one. It was also another pilot area application, although referring to the Empire as a whole in its title. Indeed, it said that with immediate effect upon its enactment, the regulation would be immediately sent and executed in the coastal provinces of Rumelia and Anatolia in which people engaged in trade, such as Edirne, Selanik, Hüdavendigar, Trabzon, and Kastamonu. The other provinces would also be included later. In 1867, an addendum was prepared for this Regulation due to many complaints being received.[153]

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[150] Regulation of 1853 was not included in *Düstur*, defined by Sarkis Karakoç as 'A corpus containing the laws and regulations.' However, it is noteworthy that the second publication of Düstur, which included the 1861 Regulation, was issued in 1867. Therefore, the exclusion of the 1853 Regulation can be attributed to the fact that it omits regulations that had been repealed by the day it was published. Arguably, the inclusion of the 1861 Regulation in Düstur may suggest that those who prepared Düstur perceived continuity between the two. See Yazıcı, "Tanzimatta Haberleşme ve Kara Taşımacılığı," 362. For general information on Düstur, see Aydın, "Düstur", *TDV İslâm Ansiklopedisi* and Saraçoğlu, "Economic Interventionism, Islamic Law and Provincial Government in the Ottoman Empire," 61.

[151] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 91–95.

[152] BOA, İ.MMS, 24/1021. Selahattin Tozlu summarizes its articles in Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 13–17.

[153] BOA, İ,MVL, 575/25822. Tozlu, 17–18.

Two years later, in 1869, the "Regulation of Roads and Bridges" and "The General Instructions on the Construction and Management of Roads and Bridges in the Well-Protected Domains" based on this regulation were approved by Sultan Abdülaziz.[154] While these were prepared without any geographical limitations on application, they served as the basis for the following regulations regarding road construction. Hence, the 1869 regulations also stand out as the one that secondary literature mostly discussed.[155] It was prepared by the Directorate of Roads and Bridges, specifically drafted by Director Ritter. While the Regulation had 28 articles in four sections, [156] the following instructions consisted of 27 articles in three sections.[157]

Two provincial reform laws dated 1864 and 1871 both involved articles regarding the bureaucratic system of public works construction, including roads. The former, modified in 1867, was affected by Midhat Pasha, who then was the Governor of Niš. While the 1864 Provincial Reform Law was first applied in the Danube Province, Midhat Pasha was appointed as the governor.[158] As his administration in Niš Province included road construction with the aid of the populace,[159] this also became a norm in the newly organized Danube Province.[160]

In 1877, a certain "Law of the Roads and Bridges" was applied as a more detailed one than the 1869 regulations. Its second and third sections were about the obligatory laborers' duration for the work and their draft, respectively.[161] Finally, in 1890, as its name suggests, "the imperial decree regarding the abolishment of the

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[154] *Düstur: I. Tertip*, 2:302–17.
[155] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 200–201; Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 18–23; Çadırcı, "Tanzimat Döneminde Kara Yolu Yapımı," 155–67.
[156] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 20.
[157] Çadırcı, "Tanzimat Döneminde Kara Yolu Yapımı," 161–67.
[158] Çadırcı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapısı*, 250–51.
[159] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 197.
[160] Kılıç, "1864 Vilayet Nizamnamesinin Tuna Vilayetinde Uygulanması ve Mithat Paşa," 107.
[161] BOA, T, 3125/22.

method of constructing the roads with obligatory labor and the imposition of a monetary substitute in the provinces," provided a choice to fulfill the obligation in a monetary form, which makes it relevant to the discussion.[162]

Most of the regulations discussed in detail about the road construction techniques, classification of roads, and administrative features of road construction. For instance, the first section, "the necessary condition and the requirements of the location for the roads to be leveled," of the 1853 Regulation was about the technical details. It clearly said that roads would be made as macadamized. For that, it gave details about the use of cut stones, its pavement, and the drainage system. All of the further regulations also involved the chaussée as the type of road. The requisite tasks for this included excavating or filling necessary areas, constructing sidewalks and bridges, and ensuring the maintenance of completed projects according to the 1861 Regulation. It indicated that new highways would be constructed on those already established routes if not too expensive. Besides the technical details of bridge construction, the 1853 Regulation mentioned that the priority of construction would be decided according to the frequency to be used by carts.[163]

Unlike the previous one, the 1861 Regulation involved an administrative classification of roads. According to the first section of the Regulation, roads were divided into four classes. The first-class roads were the ones leading from provinces to Istanbul, ports, and railway stations. Second-class roads connected provinces and led from provinces to sanjak centers. Third-class roads were the ones connecting villages, connecting local roads to main roads, and linking to ports and railway stations. And finally, fourth-class roads connected villages but were not proper for

[162] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 208.
[163] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 10–11.

carriages to use all the time. The logic of this classification remained in the 1869 Regulation[164] and Law of 1877.[165]

In short, regulations directly about road construction and laws regarding the administration of the Empire mentioned the obligation after mid-century. One feature of these regulations was the use of local experiences and already-established conventions. The trend was towards a specialization regarding the preparers of these; while it was the political elite for the earlier regulations, technical experts also gained importance for the preparation of the later ones.

3.4 Rules and Rationale of the Obligation

Regulations starting from 1853 discussed the conditions to be eligible for the obligation, its rules, and the legitimization of the work. Rules of the draft were clearly defined in the 1853 Regulation. All males above fifteen years old were obliged to work, including Muslims, non-Muslims, and those from the tribes, the Regulation specified.[166] The gender necessity for obligation remained in all regulations in this era. The minimum age requirement was 18 in the 1861 Regulation.[167] In 1869, it decreased to 16. The regulation of 1890 expressed that 20-year-old males should have worked.

The 1853 Regulation implied that soldiers were exempt from obligations, but no other exemptions were mentioned.[168] In 1861 it was more detailed about those subjected to the obligation and the duration of the work. First of all, the obligation was based on the residence, not wealth or the condition of having properties. Thus,

[164] *Düstur: I. Tertip*, 2:302–303.
[165] BOA, T, 3125/22
[166] BOA, A}, 2. pp. 58-59.
[167] BOA, İ.MMS, 24/1021.
[168] BOA, A}, 2. pp. 58-59.

households and servants were obliged to do the road work. Exempted ones were the religious functionaries including imams, priests, and rabbis along with the state officials.[169] In 1869, teachers, police officers, and soldiers were also added to the exemption list along with disabled people.[170] However, servants of the exempted people were obliged to work too.[171]

Besides the exempted ones, some individuals could perform their professions in exchange for the obligations. Artisans useful for road construction, such as carpenters, stone masons, and blacksmiths were to practice their crafts throughout their period of obligation, according to the 1853 Regulation.[172] Similarly, in the 1861 Regulation cart drivers would drive carriages during the obligation for not doing construction work.[173] 1853 Regulation enforced that those who owned a cart would work half the normal working hours, yet it was also mandatory for cart owners to report this. Those who did not report were required to work twice the normal working hours. Owning a horse or a donkey subjected individuals to a similar practice; a person obligated to work 12 days would only need to work eight days if they owned a horse, and for a donkey owner, the duration was set at ten days.[174]

The rationale of the obligation was based on the very same assumption that was seen in the 1840s state reports as shown in Chapter 2: People who lived near the roads to be constructed would have been responsible for the construction. Legitimization of the rule also would function in practical terms to determine who would be sent to work in road construction. One who would select those to be drafted would be among the local council or from notables of villages to consider the local

[169] BOA, İ.MMS, 24/1021.
[170] *Düstur: I. Tertip*, 2:304.
[171] BOA, İ.MMS, 24/1021; *Düstur: I. Tertip*, 2:304.
[172] BOA, A}, 2. pp. 58-59.
[173] BOA, İ.MMS, 24/1021.
[174] BOA, A}, 2. pp. 58-59; Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 11–12.

conditions when sending laborers. Accordingly, as the same populace would benefit from the construction, "it would not be a kind of burden and trouble."

The benefit in question here was subject to change for every region. The introductory statement of 1861 was more clear; all routes where the construction would initially start were important for different reasons for both the state and the people who lived there. While it was commerce for the Trabzon-Erzurum Road, the importance of the road from İnebolu Dock to Kastamonu was its closeness to Küre-i Nühas Mine. Passed through "some important locations." Samsun-Sivas Road was counted as another example. The officers needed to explain to people the importance of these constructions.

It was also noted that just like how the European states used soldiers for construction work, soldiers could also be used for road and redoubt construction. [175] This reference to Europe was also visible regarding the use of obligatory labor of civilians. In 1887, a state-led periodical about public works and agriculture, *Umur-ı Nafia ve Ziraat Mecmuası*, stated that obligation was according to the European system until 1880, after which indirect beneficiaries of the works were exempted and only those benefitting directly were started to be obliged.[176] While it was ambiguous which European state's system here was the point of concern, it was most likely the French presentation as a considerable amount of engineers at the time were French.[177] As explained in the Introduction, however, in the 1880s prestation was being applied only on local roads in France.

Accordingly, with the benefit-based rationale, the 1853 Regulation legalized that those who are five hours away from the road would work for 20 hours, those

[175] BOA, İ.MMS, 24/1021.
[176] "Memalik-i Osmaniyede Yolların İnşaasında Müttehiz Olan Usul," 36–37.
[177] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 14.

who come from a distance of 5 to 10 hours would work for 10 hours, and those coming from a distance of 10 to 15 days would work for 8 hours. Furthermore, the regulation stipulated that individuals located 15 to 20 hours away could also be drafted if the provisions mentioned above proved insufficient.[178]

Although these numbers were standardized in further regulations, the essence that those who lived near would be drafted as prioritized remained. For instance, the 1861 Regulation stated that individuals should have worked 20 days consecutively within five years. Those who did not fulfill their obligation although being drafted would have worked two times of it.[179] In the 1869 Regulation, this rule remained with a nuance that it was up to the Provincial Council to extend this duration to ten days every five years.[180] Yearly schedule for the construction work was defined as between mid-May and mid-October.[181] Fridays and Sundays were the weekly holidays.

According to the second section of the 1861 Regulation, based on the aforementioned classification of roads, first-class and second-class roads, along with their sidewalks, would have been collaboratively constructed utilizing both the state and the public. However, third-class and fourth-class roads were to be leveled by the general populace, considering that these would be smaller. Still, these were objected to occassional checks by the state-appointed engineers to verify that they were constructed according to the Regulation.

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[178] From Lucchini's report, it was calculated that half an hour on the road equaled 3750 cubits. The Erzurum Consulate of the British Empire, in 1848, determined that a road from Trabzon to the Iranian border would take 102 hours, which corresponded to 300 miles. Therefore, it can be inferred that one hour on the road would cover between 3,40 to 4,74 kilometers. Based on this, it can be concluded that laborers were expected to cover distances of around 100 kilometers on rare occasions, and around 70 kilometers under ideal conditions, as the maximum.

[179] BOA, İ.MMS, 24/1021.

[180] *Düstur: I. Tertip*, 2:304.

[181] It was from the beginning of May to the beginning of *Teşrin-i Sani* according to *Rumi* Calendar.

The cooperation of the state of people here meant that while the workforce for the basic work was based on obligatory labor, necessary equipment, except draught animals and carts, were expected to be provided by the state. Obligation was not designated free of charge either. Indeed, the 1861 Regulation mentioned some daily wages to be provided for the workers.[182] This was repeated in the 1869 Regulation, indicating that the necessary budget for this would be allocated from the Province.[183]

This rationale was considered important by the Ministry of Public Works as well. In 1867, the Administration of Roads and Bridges proposed to make a six-article long addendum to the 1861 Regulation, intending that those who wouldn't benefit from the road would be exempted from working in its construction. While the state had received several complaints and petitions from the populaces of villages and sub-districts, it would be against the "justice of the Highness," indicating the Sultan.[184] Therefore, those who couldn't directly benefit from the road wouldn't be drafted.[185]

The solution for workers' constructing the roads "with utmost satisfaction and contentment"[186] problem was similar to the 1853 Regulation. Accordingly, while the residential areas were classified according to their distances to the roads in five zones. The labor zones were organized by distance: the first zone was within six hours, the second zone was within nine hours, the third zone was within 12 hours, the fourth zone was within 15 hours, and the fifth zone was for distances beyond 15 hours. The recruitment of workers would start from the nearest zone and proceed

[182] BOA, İ.MMS, 24/1021.
[183] *Düstur: I. Tertip*, 2:306.
[184] It is "mugayir-i muadelet-I seniyye" in the original text.
[185] "Doğrudan doğru" and "doğrudan doğruya" were used multiple times in the introductionary statement of this addendum. See BOA, İ,MVL, 575/25822.
[186] In Ottoman Turkish, it was "kemal-i hoşnudi ve memnuniyetle."

towards the farthest. Draft from the fifth zone, labeled as the reserve zone, would be dependent on a permit by the Sublime Porte.[187] Reserve zone became 12 hours with the 1869 Regulation.[188] Workers from other zones wouldn't replace workers brought from the zone closest to the road until they had completed 15 of the 20 days of obligatory labor they were required to complete in five years.

One clarification of this addendum was that the duration that workers spent going to the road would be considered as working days. It also ordered the provision of tents for the obligatory workers on working sites. Furthermore, food items such as bread should have been ready there for their purchase.

3.5 Draft and State Appointees

Road construction projects and the subsequent use of obligatory workers involved various state appointees for the draft, enforcement, and overseeing of the process. In other words, the work created a bureaucracy, the duties of which were defined by the regulations. This bureaucracy was less specialized and less complex in the initial regulations than the later ones. For instance, in 1853, the state's involvement in road work was limited to sending several officers from the center. In technical terms, the engineers, either Ottoman or foreign experts,[189] were there to plan and supervise the construction. The other two were the protection and bookkeeping of the materials that were sent, namely supply officers and accounting clerks. It was the governor's

[187] BOA, İ,MVL, 575/25822.
[188] *Düstur: I. Tertip*, 2:306.
[189] In the 1850s, both were visible in several road construction projects. For example, see three Wallachian engineers' wage raise request in BOA, MVL, 151/7. Engineer Mehmed Agha was responsible for Tarsus-Mersin Road as demonstrated in BOA, A.}MKT.NZD, 88/19. Additionally, see BOA, A.}MKT.NZD, 60/7 for appointments of engineers Edhem İbrahim and Mustafa along with a Hungarian engineer and a certain Avramich for Samsun Road.

responsibility to protect the materials in the work site via local mayors (*muhtar*) and police (*zabtiye*).

This relatively unsophisticated chain of bureacracy was extended with the later regulations. Accordingly, in 1861 each *sancak* should have had one engineer and one deputy engineer along with foremen, ideally one for every district. Engineers would select the foremen either among their fellow workers or from engineering units of the military. While these foremen also were to be categorized into three, a wage difference was envisaged between these hierarchies. According to Regulation, all individuals assigned to the road work would execute their duties in a structured manner, akin to military organization. Under the supervision of the district chief, two groups of officers engineers and registration officers were assigned to the workers, who ideally would work in groups with a foreman. As mentioned above, the governor was responsible for ensuring and occasionally forcing the laborers to finish their once-assigned work. [190]

Thanks to the following instructions involving the duties of state officers, the 1869 Regulation gave the most detailed scheme about the responsibilities of individuals in the process. This was also quite hierarchical, on top of which state's administrative officers sat. Therefore, the Governor was responsible for overseeing the road construction process administratively in his province. Every province should have at least one head engineer. One conductor (*kondüktör*) and one worksite supervisor (*işbaşı*) needed to be assigned to the province. It was the Governor's decision and responsibility to increase the number of engineers, conductors, and worksite supervisors.

[190] BOA, İ.İMS, 24/21.

Engineers were responsible for determining the routes of roads, creating detailed maps, and overseeing the construction process to ensure it followed the planned specifications. They also supervised the implementation of projects, coordinating closely with other personnel such as conductors, worksite supervisors, and road guards. Additionally, engineers were accountable for the technical aspects of the projects, required to report progress and adapt to any directives from regional authorities, ensuring that the work aligned with both technical standards and local needs. Conductors were planning and distributing work among obligatory laborers, ensuring the availability of necessary materials and tools, and overseeing the allocation and direction of labor at the worksite Finally, worksite supervisors were responsible for assisting conductors by checking the presence of workers at the worksite and ensuring that they were performing their assigned tasks.

According to the Provincial Reform Law of 1864, one public works officer was responsible, along with the engineers under his command, for the inspection, discussion, and execution of matters related to roads, bridges, and buildings.[191] In the 1871 Provincial Reform Law, the duties of the road overseers included summoning and gathering the obligatory labor force at the designated times, managing the allocations and expenditures of the roads, overseeing the financial and administrative matters related to them, and submitting the necessary registers and reports on the labor force's work, remaining tasks, and the balance of the services to the governor at the specified time. They were also responsible for procuring the necessary tools for engineering tasks related to road construction, communicating in writing to the governor their assessments on the proper execution of the works, and handling the

[191] Seyitdanlıoğlu, "Yerel Yönetim Metinleri III," 67–81.

technical matters related to both public and private roads, as well as overseeing the technical and construction personnel, except for matters under the jurisdiction of the provincial chief engineer, which were governed by regulations.

The duties of the district councils included overseeing the construction of public works and private buildings within the villages, funded by contributions in kind or cash from the local population. Matters such as the leveling of private roads and the establishment of public buildings and beneficial works, once approved by the district governor and verified by technical investigations under the district administration, were implemented. The sub-district council did not interfere with these matters but only reviewed and reported on issues referred to them by the district authorities, and communicated their findings to the district via the sub-district director.

The councils of elders were not authorized to issue judgments or carry out any penal actions. Similarly, matters related to agriculture, trade, and the shared interests between the residents of the village and neighboring villages—such as fields, pastures, and winter grazing areas—or the construction and repair of private roads, bridges, fountains, and water channels, which connect or facilitate relations between villages, were required to be discussed in the municipal council that convened at the sub-district center. These matters were subject to the approval of the district governor through the sub-district director. The responsibilities of the Council of Elders included preparing a list of the exempted ones from the obligation.[192]

[192] *Düstur: I. Tertip*, 2:304.

3.6 Discussion: Legal Ways of Forced Labor

This section focused on the legal framework created for the application of obligatory labor in road construction in the 19th-century Ottoman Empire. Based on the discussion made about the origins, rationale, and norms of this framework, it is possible to reach some conclusions. These conclusions are important not only for describing the legal conditions of the obligation, they are also important to understanding the legality of using forced labor from the state elite's perspective, especially in an era when corvée labor was abolished. There are three main points to make for the discussion.

First of all, the main rationale for the state was the argument of benefit to legitimize the use of forced labor. This benefit was mainly measured by the distance from where the people lived to the road. Therefore, while the exact rules changed over time, the essence of it remained. While the Regulations did not directly mention the difference between the corvée and obligation, the legal difference between the two was about this benefit argument. Accordingly, work spent on the road was not necessarily for the gain of somebody else but the individual.

Second, these legal regulations constituted a fair example of that the modern legal systems did not necessarily contradict the use of unfree labor. Rather, the latter was embedded in the former with a legal language. State and local elites managed to this legality for their benefit while preparing this legal framework and its language.

Finally, the increasing and complex role of the state-appointed individuals in overseeing and enforcing these regulations underscored the increasing centralization of bureaucracy. The detailed hierarchical structure established for road construction projects indicates the state's intention to ensure the efficiency of labor usage. This

envisaged bureaucracy, however, needed to rely on the more traditional mechanisms of control as will be seen in Chapter 4.

CHAPTER 4

WORKING CONDITIONS OF OBLIGATORY WORKERS

4.1. Introduction: An economy of obligation

"It seems quite strange to me that while in the past when no monetary fee was being asked as today health of the compulsory laborers was preserved and they were provided in bread; now 40,000 or 50,000 piasters from the fee is not spent for a tent," wrote Kadri Bey, Governor of Trabzon, in his visibly harsh-toned letter to Ministry of Trade and Public Works on June 23, 1892.[193]

In this letter, dated two years later than the re-implementation of monetary choice for the obligation, the main criticism concerned the ignorance of the region's peculiarities. He asserted that although workers on some other private roads between districts and villages could spend the night in a khan or coffeehouse, the Erzurum route was not like these, implying the scarcity of villages in the region. The Governor also directed his criticisms at the Army, which did not accept the return of borrowed, once-used tents, claiming they were worn out, and got monetary compensation in the amount of 28,000 piasters.[194]

Governor Kadri Bey's remarks show not only the evaluation of a state bureaucrat on the subjects that he takes care of but also encapsulate the dynamics that are effective on the worksite where the compulsory roadmaking played on. These comments demonstrate that state actors did not treat the compulsory roadmaking in a monolithicly pragmatist way, and neither could the legal framework be applied to all worksites in the same manner. Understanding the everyday realities of the workers requires a comprehensive view of the particularities of the worksites and actors. In

[193] BOA, ŞD, 1196/7.
[194] Ibid.; Özkan, "A Road in Rebellion, A History on the Move," 74–75.

other words, it is imperative to look at the differences between the legal framework and actuality that compulsory laborers face. Hence, this section examines the interplay between legal framework, bureaucratic mentality, structural conditions, and actual intentions to grasp the experiences of compulsory laborers.

For this purpose, the section which deals with the actuality of the obligation follows a particular order. It starts with providing the bigger picture, of what extent and in what ways the obligation was used for the infrastructural development of the Empire. Then, the draft process is examined with a special focus on the extralegal mechanisms involved. Petitions written by the compulsory laborers enlighten both about the extralegal played in draft and working days as well as the resistive actions of the workers. This is also an attempt to recover the voices of the subjects, focusing on how the workers grasp and act on what they experience. Finally, a depiction of the dynamic and temporary workplace, the road, is provided. This depiction involves capturing the objective working conditions of the laborers, and the particularities of these conditions based on localities.

As the legal structure on which the obligation was based became established, it is necessary to discuss to what extent obligatory laborers were used for the Empire's infrastructural projects after 1853. Indeed, while they were primarily employed in highway construction, their use in these projects varied significantly. Moreover, other public works occasionally benefitted from this already available and legalized workforce. Therefore, the first concern of this subsection is to demonstrate the extent to which the Ottoman chaussés were products of obligatory labor. Then, it is important to note the other types of public works where this labor was utilized. Finally, the varying economic conditions of the obligatory laborers provide a clearer view of the practical aspects of how the obligation functioned.

As discussed in Chapter 2, Tanzimat bureaucrats preferred state-built roads over private initiatives. Therefore, with few exceptions, highways were built solely under the direction of and funded by state authorities, specifically the Ministry of Public Works until 1884.[195] This approach addressed situations where obligatory laborers were difficult to find, and the responsible villages did not secure a contractor themselves. The obligation did not end with the introduction of contractors. Indeed, contractors and their waged laborers often worked alongside the obligatory workers throughout the 1890s.

In the 1880s, road labor obligations were carried out through the division of operations (*taksim-i ameliyat*) system, implemented after 1882. Under this system, each settlement had designated areas of responsibility along the highway and was required to collectively fulfill its obligations as a village or sub-district.[196] Contemporary sources cited this system as a key factor in the success of road construction.

Indeed, this decade can be evaluated as a success story from the state's perspective. By 1890, over 10,000 kilometers of chaussés had been constructed throughout the Empire, with 90 percent of these roads built in the past decade. Except for Baghdad, Basra, Hejaz, Yemen, and Tripolitania, where the obligation was not implemented, obligatory labor continued to play a significant role in this success. To provide a concrete example, in 1884-1885, the technical value of the construction projects was calculated at 964,000 Ottoman liras, while the budget spent that year amounted to about 140,000 liras.[197] The Ministry of Public Works cited this in its report as proof of the effective management and utilization of obligatory labor

[195] Tozlu, "Trabzon-Erzurum-Bayezid Yolu (1850-1900)," 28.
[196] BOA, A.}DVN.MKL, 82/1.
[197] Atam, "Osmanlı Devleti'nde Nafia Nezareti," 208.

for road construction. This discrepancy directly reflected the equivalent value of the unpaid labor provided by the workers.

In December 1892, the center sent an inquiry into the provinces, asking how many piasters the workers got from contractors as daily wage. The answers came from the provinces, which showed that the variety of wages changed according to the local conditions. The responses provided indicate that compulsory labor and contractual road construction occurred simultaneously. Just as Ion Ionescu demonstrated for the Gemlik-Bursa road, the laborers working on the road under compulsory labor were paid a daily wage from the Ministry of Public Works budget, though at a lower rate compared to waged workers.

Another conclusion drawn from these responses is that local councils also played a role in determining workers' wages. The wages, which could vary by up to 100% depending on regional conditions, were found to be highest on the Mediterranean islands. For instance, on the island of Chios, wages ranged from 7 to 9 piastres, while on Lesbos, they varied from 7 to 8 piastres.[198] In Van, where there was no possibility of a contract with a contractor, the local council calculated that, if such a possibility existed, workers could be hired for 3 piastres.[199] In Erzurum, it was reported that workers employed by the local population were paid 4 piastres.[200] Wages in other regions varied within this range.

Aside from regional differences, it is understood that wages could also vary depending on the nature of the work and the season, although specific details were not provided. For example, in Bitola, wages were reported to be 7 piastres in the summer and 5 piastres in the winter. Similarly, in Karabiga, wages were said to vary between

[198] BOA, ŞD, 2348/58.
[199] BOA, ŞD, 1880/4.
[200] BOA, ŞD, 1512/20.

6 and 8 piastres depending on the season.[201] Nevertheless, it is observed that in 1892, there were many places where no roads were contracted to contractors. In some of these places, such as Van, only compulsory labor continued to be used.[202] In others, like Basra, it was reported that neither the public works allocation nor compulsory labor was available.[203]

Although the initial codes declare that obligatory workers were not used only for road construction. One particular example that was constantly seen and unfree labor used for its solution was locust infestation. Similar to the development of the obligation, this process also started de facto, with the applications of several bureaucrats.[204] It was noted for Ödemiş, for example, people were not exempted from the obligation on roads in exchange for working for locust extermination.[205]

Finally, a "Provisional Law on the Extermination of Locusts" dated 1912 made the process more systematic. According to the third article of this law, residents of villages where locust eggs were buried, who were already responsible for fulfilling road work obligations, were required to plow or dig those areas within their village using their own equipment, free of charge. They had to uncover and collect the eggs. Each individual tasked with this duty was required to collect and deliver a specified amount of eggs to warehouses, as determined by a special commission.

The next article stated that if the locust eggs were too numerous and it became clear that the residents of a village could not fully plow and collect the eggs in the areas within their boundaries, then the residents of neighboring villages within a three-hour distance—who were also obligated to perform road work—would be sent to assist

[201] BOA, ŞD, 1512/17.
[202] BOA, ŞD, 1880/4.
[203] BOA, ŞD, 2162/76.
[204] BOA, DH, MKT, 1801/107
[205] BOA, DH, MKT, 1975/17.

with their equipment. In 1913, this distance was increased to five hours. In cases where even this was insufficient, the law stipulated that farmers from other villages, deemed appropriate by the special commission, would be sent to help. These farmers, however, would not be unpaid. A suitable daily wage, determined by the provincial commission based on the local commission's report, would be provided to the laborers and for each pair of oxen.[206]

According to the law, it was required that the workers plow the land, collect, and deliver the specified amount of eggs. The places where the populace would be sent and the number of eggs they needed to collect was determined by a special commission. After the locust eggs had been destroyed, if in the spring any larvae or caterpillars were observed, the respective commissions would immediately send the residents obligated to road work to that area, where they would work to exterminate the larvae completely. If obligatory workers did not participate when called upon, they would be required to pay a monetary fine.

It is still noteworthy, however, that the use of obligatory laborers was deemed inappropriate occasionally for matters not codified. For example, The employment of compulsory labor in the construction of embankments to address the damages occurring to fields and vineyards due to the overflow of the Komotini and Deliibrahim meadows is deemed inappropriate as their duties were limited to the construction of roads.[207] On the contrary, though, In Latakia, there was no road construction, and the laborers were employed in the gardens.[208]

[206] Bukarlı, "XIX. Yüzyılda Osmanlı Devleti'nde Çekirge İstilaları."
[207] BOA, BEO, 684/51298.
[208] BOA, ŞD, 2280/17.

4.2. Draft and resistance to the work

Although some daily wages were granted to compulsory laborers, they were not always eager to work in road construction. From the very early instances of obligation throughout the early 20th century, people seemed to constantly find ways to not participate in road construction. Therefore, it was one of the main problems as early as the 1830s for the state elite that people being deserters. As mentioned in the first chapter, Istanbul-Edirne was one of the first roads to be planned for chaussé construction due to the establishment of the modern postal service. For this road, drafting workers from the peripheral towns and villages between Edirne and Istanbul were ordered with a daily wage. Even in this earliest case, according to the survey showing "the amount of laborers who have escaped or have not yet arrived" for each town, the rate of non-participation in road construction appears to be quite high.[209]

As discussed in the previous chapters, the main legitimization of the obligation was the benefit to the state and the people. It is possible to trace this in certain cases during the draft process. The rationale of the work could overrule the legal framework occasionally. In one example, in 1888 people from surrounding villages of Gaza demanded not to work in a road construction between Gaza and Hebron. They claimed that their villages were far more than 12 hours from the work site.[210]

Ministry of Internal Affairs decided to refuse their request. Although the Ministry was aware that the people were referring to the 15th Article of the 1869 Regulation which indicated that people living more than 12 hours couldn't be drafted as obligatory workers, the road would enhance commerce in the region while

[209] BOA, C.NF, 7/312
[210] BOA, DH.MKT, 1543/120; DH.MKT, 1556/7. This case is also mentioned by Akkuş and Yıldırım, "Dünyada ve Osmanlı'da Zorunlu Çalıştırma," 522.

connecting the highway to the port. Therefore, as the people would benefit from this construction, they should have been conscripted too.

This case was solved one month later when a contract was signed with a certain Yusuf Nabut Efendi to construct and operate a railway line between Jaffa to Nablus, which would get through Gaza.[211] Therefore, with a reevaluation, the Ministry concluded that it was not extremely important to construct the road and Gazans could be freed from this obligation.[212]

The petitions submitted by the inhabitants of surrounding villages who were employed in the construction of the Sinop-Boyabat road in 1866, and the criteria for the decisions made regarding these petitions, provide a detailed insight into both the legitimacy of employing unpaid road laborers and the arguments of the populace, who were not always willing to work under such conditions. One of these petitions was submitted by the inhabitants of Gerze and Saray villages.[213] According to it, an order was issued to collect material aid equivalent to the cost of water buffalos, carts, and riding animals, or to work for four days with these animals. The villagers claimed that although working for four days might seem insignificant, the twenty-hour round trip to the road meant a total of twenty days, thus preventing everyone from their work, agriculture, and commerce. These villages, which were engaged in producing timber for the Imperial Arsenal, were unable to do so due to the road service, leaving them in a state of poverty. For these reasons, these villages requested an exemption from this obligation.

Receiving these two petitions, the Supreme Council of Judicial Ordinances ordered Kastamonu District to investigate the situation by examining the distance of

[211] BOA, MV, 36/36; A.}DVN.MKL, 30/13.
[212] BOA, DH.MKT, 1570/72
[213] BOA, MVL, 515/12.

them from the road and their number of population.[214] The evaluation by the Council was unfavorable to the villagers' request. This decision was based on two main arguments. The first was the legal basis. According to this, the distances from both Gerze and Saray to the road were 12 hours, contrary to the villagers' claim. The law published in the *Düstur* did not include an exemption for villages 12 hours away. Therefore, it would not be right to fulfill the villagers' request, who believed that they would be exempt from the service if they submitted a petition based on a rumor. The second argument concerned the benefit of the road. Indeed, once the road from the Sinop Port to Boyabat was completed, trade would flourish in Sinop, and thus both the villages in Sinop and the entire Anatolia would benefit from it.

Although the Council was unfavorable to those seeking an exemption from road construction, this kind of petition, especially from timber-producing villages was common. Indeed one document the Council sent to the Ministry of the Navy indicated that this phenomenon was not limited to Sinop; one certain Salih from Gönen also wrote a similar petition. Arguing that road construction was of vital importance to the state, the Council requested to temporarily lift the timber-producing obligation of these villages.

The draft process involved various means of extralegal practices including coercion. In 1865 a petition was sent to the Sublime Porte via the Paris Embassy claiming that although all religious groups should have worked in Serres-Thessaloniki Road only Jews were working there. As they rightly objected to this practice which was controversial to the Sultanic laws, twenty-three of them were incarcerated.[215] When the Porte asked about the situation the Governor of Thessaloniki, Mehmed Akif Pasha, defended his decision by falsifying the accuastion. According to him, both

[214] BOA, MVL, 499/131
[215] BOA, HR.TO.., 447/44

Muslims and Christians also were working on this road. He further claimed that more permission was granted to the Jews, although did not specify its details. Therefore the aforementioned incarceration was necessary so that those who object to work wouldn't be encouraged.[216] Porte concluded this case indicating that Mehmed Akif Pasha's decision was justified as in such matters that benefit everyone, it was a patriotic duty for all types of people to assist equally, and it was also necessary for the government's actions to proceed within the scope of equality for the sake of public interest and requested that the Paris Embassy properly explain this.[217]

Although the obligation was designed as an individual tax, state officers communicated -or treated- the minorities via their community traditional community leaders occasionally. According to another petition written by some Christian people of Maras complaint about coercion to draft people for obligation. Moreover, this case demonstrated that state officers were communicating with the religious head of this community first to draft the individuals.[218]

4.3 On the worksite

As Kadri Efendi hints in his letter at the beginning of this chapter, concerns regarding the accommodation of compulsory workers in road construction has a long history. Finding shelter for those working in remote areas has been an issue since the first implementation of the obligation. The state commonly provided tents due to their mobility, which was necessary given the nature of the work. Indeed, forty years before the Governor's complaint, 300 tents were requested for workers, with one tent assigned for every ten workers, specifically for the Trabzon-Erzurum Road.[219]

[216] BOA, A.}MKT.MHM., 339/69.
[217] BOA, HR.MKT., 527/50.
[218] BOA, ŞD, 2212/75.
[219] BOA, A.}AMD., 24/94.

Although there were no established norms for how many people should stay in a tent, it is plausible to assume that this was the standard arrangement for workers' tents. Non-dated technical plans for both workers' and engineers' tents confirm this arrangement, as engineers were allocated two-person tents, while ten workers shared one tent.[220]

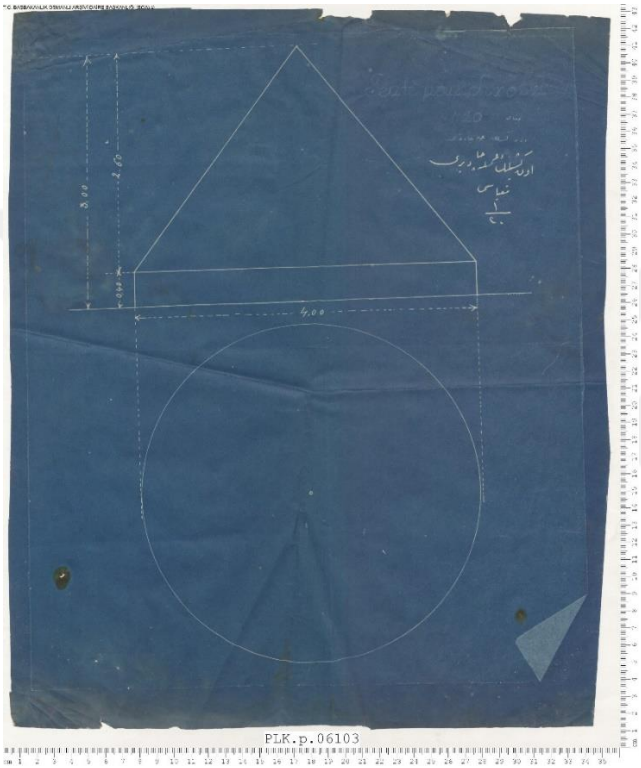


Figure 1 A workers' tent for ten people. Source: BOA, PLK.p, 6103.

[220] BOA, PLK.p.., 6103.

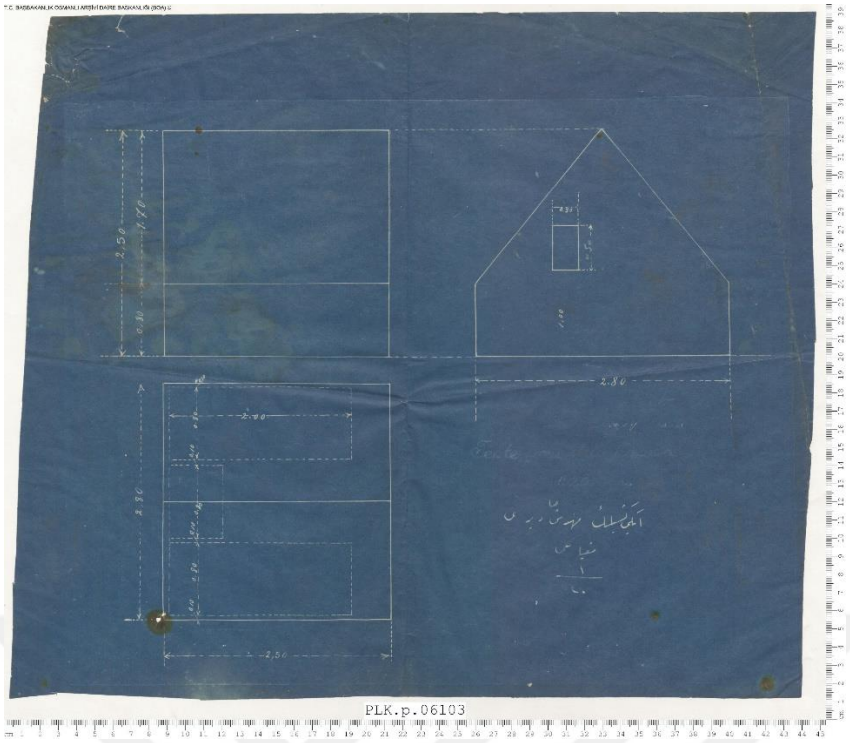


Figure 2 An engineers' tent for two people. Source: BOA, PLK.p, 6103.

The difference between the tents for these two groups was not limited to the number of people per tent; the material quality also varied. In 1850, in addition to the aforementioned 300 workers' tents, six units of another type, the Ufak Abdi Pasha tent, and one coated tent were ordered for Trabzon. It appears that the "Ufak Abdi Pasha tent" (sometimes referred to simply as the "Abdi Pasha tent") was of higher quality, as fewer of these tents were ordered when needed. [221] Since the document distinguishes between tents for workers and various officers, it seems that the types of tents were also differentiated based on this criterion. [222]

In 1863 six units of workers' tents and four units of *Abdi Pasha* tents were asked for Gemlik Road, detailing this time as the latter for the officers.[223] Therefore,

[221] There is no available secondary literature about this type of tent or where its name comes from. One document about the need for tents for Izmir Railroad construction indicates that it must have been of lesser quality than "the tents designated for the viziers." See: BOA, A.}MKT.NZD, 236/67.
[222] BOA, MVL, 327/22.
[223] BOA, A.}MKT.MHM, 262/48.

workers' tents appear as the most economical solution for accommodation.[224] Indeed, when it was asked whether *salaş* (wooden shack)[225] could be built for the obligatory workers who constructed the road in Tekirdağ, the Military found this suggestion too costly. The solution was to buy workers' tents. The terminology used for workers' tents as *nefer çadırı* (tent of the rankless)[226] and *köhne çadır* (worn tent) by the end of the century suggests that its conditions more or less remained the same. For most cases, though, only "tent" was used to indicate the same type of common tents.[227]

Providing tents was a solution; indeed, most of the available archival sources about accommodation are about asking for tents from the Military. Generally, local appointees wrote to the Center, specifically to the Ministry of Trade and Public Works about the needs. As it was the Imperial Arsenal (*Tophane-i Amire Müşirliği*) where the military equipment, including tents, was manufactured, it was them to decide and provide tents to those who asked for them. Hence, it was the provincial budget's public works item to spend and buy from the Imperial Arsenal.[228] Tents were sent from the nearest military warehouses if available. For example, tents required for İnebolu Road were sent from Samsun and it was the Fourth Army who was asked for tents to be used in Trabzon-Erzurum Road.

Similar tents were used for the temporary residence of those affected by natural causes such as earthquakes or newly settled refugees. Indeed, the tents that were earlier

[224] In the 1850s, each tent was priced at approximately 100 piasters. For the Gemlik Road, 292 tents cost 22,211 piasters. This appears consistent with the calculations made for Trabzon, where 43,200 piasters were spent on 300 workers' tents and several higher-quality tents and service tents for medical or toilet purposes. See BOA, İ.MVL, 27/10454; A.}AMD, 24/94.
[225] *Salaş* means "makeshift (structure) built in a flimsy manner without a foundation using light construction materials such as wood or zinc" in Kubbealtı Dictionary. See "Salaş" entry in *Kubbealtı Lugatı*.
[226] *Nefer* refers to both an individual and private soldier in Ottoman Turkish. "Nefer çadırı" has a connotation to differentiate this particular kind of tents from higher quality tents that are used by officers or higher-ranked personnel.
[227] For uses of "köhne çadır" see BOA, A.}MKT.MHM, 383/82; A.}MKT.MHM, 417/97. "Nefer Çadırı," appearing in 1850s documents was still in use in 1892. See BOA, BEO, 327/24454.
[228] BOA, A.}MKT.MHM, 471/97.

used by refugees and remained in the Canik were sent for the Samsun-Sivas Road.[229] However, when there were no available tents in the local warehouse, these were sent by the Imperial Arsenal, from Istanbul.[230] In some cases, it was expected to return the tents when there would be no need for them. According to a document sent by the Ministry of Internal Affairs in 1895, when the tents that were taken from the Harput Reserve Army Battalion's depot for the accommodation of officers during the road construction could not be returned to their original condition, Mamuratulaziz Governorate would make a payment for their public works item.[231]

In response to Trabzon Governor Kadri Efendi's complaint about the lack of tents, the Minister of Trade and Public Works, Hüseyin Tevfik Pasha, indicated that workers had been building shelters for themselves.[232] Hence, it is reasonable to suggest that this might be a common phenomenon outside of Trabzon too. As Kadri Bey emphasized, settlement practices varied depending on the region. It is also plausible that obligatory workers stayed within nearby villages when the geography and distances between villages permitted. The commonality in all these practices was their non-durable nature. Whether in worn tents or makeshift shelters, the living conditions contributed to significant health problems. On one occasion, workers on the Trabzon-Erzurum Road fell ill because they had to sleep in the open without shelter.[233]

Indeed, the health of the workers was a concern for the state. This is why, in addition to residential tents, the Trabzon Road project in the 1850s required three medical and eighty toilet tents.[234] lthough it is unclear what these facilities specifically entailed, they were likely the same tents used by the military. A set of documents

[229] BOA, A.}MKT.MHM, 266/87.
[230] BOA, A.}MKT.MHM, 471/97.
[231] BOA, DH.MKT, 342/37.
[232] BOA, ŞD, 1196/7.
[233] Özkan, "A Road in Rebellion, A History on the Move," 74.
[234] BOA, A.}AMD, 24/94.

concerning a military purchase of medical tents from the London-based "Military Equipment Stores and Tortoise Tent Company Ltd." in 1892 provides some insights into how these particular tents functioned.[235] The company advertised high-quality "tortoise tents" for the military, designed to come with a comprehensive set of equipment. These tents were 55 square meters wide and included bedsteads and waterproof sheets, indicating that they were intended for the recovery of sick and injured individuals. The package also included a 37-square-meter surgery tent and a 6-square-meter surgeon's housing tent, along with heating, cooking, transportation, and sanitary equipment, including a one-square-meter toilet tent.

While these "tortoise tents" represented the ideal, high-quality version of mobile tents, those manufactured by the Imperial Arsenal likely had inferior conditions. Nevertheless, many features of the military setup were applied to road construction sites as well. For instance, amputation procedures were performed at worksites, and road construction ideally involved doctors, surgeons, and pharmacists. In 1850, the Supreme Council of Judicial Ordinances requested four individuals for each of these professions for the Trabzon Road project.[236] Memoirs of British naval commander Frederick Walpole, along with records of doctors requiring various pharmaceuticals, indicate that workers were treated at these sites.[237] In 1865, the Trabzon Road Commission requested one individual for each profession from the Supreme Council.[238]

However, there were not always enough doctors for the workers. In 1909, Rumelia Deputy Inspector Halil informed the Ministry of Internal Affairs that although 12 doctors had been requested for military road construction projects in

[235] BOA, HR.SFR.3, 394/8.
[236] BOA, İ..DH, 219/12891.
[237] Özkan, "A Road in Rebellion, A History on the Move," 69.
[238] BOA, MVL, 713/12.

Bitola, Thessaloniki, and Kosovo, only three arrived from Istanbul. As there were many ill workers in Thessaloniki, these three doctors were assigned there. The ministry then urged the military to rapidly send nine more doctors from Istanbul to meet the urgent need.[239]

The obligatory workers occasionally suffered from malnutrition. In 1860, a petition signed by four individuals from the "farthest borders of Stolac" in Herzegovina, addressed to the "paternal wisdom of the Sultan," requested either bread or monetary compensation for their forced labor, as they were suffering from hunger and fatigue.[240] While it is uncertain whether the state authorities granted their request, the distribution of bread to obligatory workers was highly dependent on the region's geography and local administrative initiatives. On the Trabzon-Erzurum Road, for example, Kapıcıbaşı Esad Ağa, a local notable from İspir, provided bread to the workers, while Osman Bey did not, as the workers' villages were close enough to the road for them to feed themselves.[241] By the 1860s, bread distribution became a norm on the Trabzon-Erzurum Road due to the mountainous and agriculturally infertile region.[242] However, in 1869, there was still only a miserable pittance of bread provided, according to a report by Sukhumi Consul of the United Kingdom, Gifford Palgrave.[243]

Archival sources reveal that workers, especially in regions with ethnic minority uprisings, sometimes feared bandits. In a 1905 telegram sent to the Inspectorate of Rumelia Provinces, a colonel of the General Staff, inspecting Skopje, stated that for road construction works to proceed quickly, measures were needed to protect

[239] BOA, DH.MKT, 2899/76.
[240] BOA, HR.TO, 447,40.
[241] Özkan, "A Road in Rebellion, A History on the Move," 81.
[242] Özkan, 85–86.
[243] Özkan, 70.

workers—whether obligatory or contractor-assigned—and officers from both weather conditions and Bulgarian bandits. The colonel, who had already informed the Governor of Kosovo, urged the Inspectorate to write to the governorate to ensure these issues were taken seriously.[244] In another report from 1905 detailing the number of workers and materials needed for road construction in Macedonia, 15 soldiers were requested for protection from bandits. Hasan, an officer overseeing several road constructions in Macedonia, wrote that workers could not be protected from bandits and requested soldiers for the Kumanovo-Kriva Palanka and Kocani-Cerovo roads.[245]

While there is no documentation of actual bandit attacks on road workers, it is notable that there were few incidents. The rarity of these attacks may be due to the fact that road construction did not involve valuables that would attract bandits seeking monetary gain. Moreover, as Fulya Özkan demonstrates for the Trabzon-Erzurum Road, the development of roads did not necessarily lead to increased state control. On the contrary, local bandits used these roads for ambushes and robberies.[246] Therefore, it is plausible that attacking road workers would only serve political motives. Even then, attacking obligatory workers, who were often locals, would not have been constructive for these political motives. This may explain why the only documented bandit attack was on a military road.

In early 1903, 17 obligatory workers were killed by bandits while working on a military road between Razlog and Kresna. Their families were granted salaries worth 300 piasters. The Razlog District Council prepared a table listing the workers who had died and their families, revealing that all 17 of the deceased were Muslims. Fifteen of these individuals were from the same Muslim Pomak-populated village, Babyak, and

[244] BOA, TFR.I.KV, 83/8262.
[245] BOA, TFR.I.ŞKT, 63/6270
[246] Özkan, "Gravediggers of the Modern State: Highway Robbers on the Trabzon-Bayezid Road, 1850s-1910s," 244–45.

the remaining two were from Yakoruda, a town where both Muslim Pomaks and Christian Bulgarians lived. Since Bulgarian separatist bandits killed them, they were labeled as martyrs.[247] Given that Razlog was still predominantly populated by Bulgarians in the early 20th century, drafting only Muslims for this military road was likely a conscious decision. Therefore, for the bandits, this incident was likely motivated by the type of road and the ethno-religious identity of the obligatory workers.

Aside from accommodation and health-related concerns, there are few sources about socialization among workers or their performativities at the worksite. In one rare instance worth mentioning, Frederick Walpole describes three individuals at a worksite in Trabzon playing "a species of rude violoncello," likely referring to the kemenche, bagpipes, and a flageolet. The workers in this scene sang while carrying stones.[248]

4.4 Work-related accidents

Health-related problems or military threats were not only related to accommodation but also to the nature of the work and the relatively vulnerable conditions that workers faced, which are traceable in primary sources. A similar study on mines, where non-voluntary labor was predominant, conducted by Donald Quataert, shows that Ottoman mine workers were subjected to injury or death at significantly higher rates compared to those in the Western world during the 19th century. Moreover,

[247] Names of the deceased workers were Ahmed, Bekir Mehmed, İbrahim, Ali, Hasan, Ali, Hüseyin, Ahmed, Ömer, Salih, Ahmed, Arslan, Ali, Salih, Hüseyin, Abdi, and Ali. See BOA.İ.ML, 53/24.
[248] Walpole, *The Ansayrii and the Assassins, with Travels in the Further East, in 1850-51; Including a Visit to Nineveh*, 2:223.

healthcare conditions were worse for compulsory workers in the mines than for wage laborers.[249]

Work-related accidents in road construction often resulted in irreversible injuries and occasionally fatalities. However, as Fulya Özkan rightly argues, there are relatively fewer primary sources that discuss injuries in road construction. [250] Most of these sources come from the Hamidian era, which, while not reflecting a difference in road construction practices, may demonstrate certain bureaucratic or ideological tendencies. These sources generally focus on major accidents that required monetary compensation either to the individual or their relatives or investigations to determine whether the incident was intentional or accidental. The scattered nature of the data, coming from a wide geographical area, prevents conducting a statistical study of the demographics or geography-related accidents. Additionally, it is difficult to determine whether those who were injured or killed due to working conditions in road construction were waged or obligatory laborers. Nonetheless, it is possible to analyze individual cases and draw some analytical conclusions.

In one rare case, for example, Sipahioğlu Şükrü from Eğirdir, Hamidabad, injured his foot in 1892 and was specifically identified as an obligatory worker. While working on the chaussé road, he accidentally injured his right foot with a falling stone and became unable to work. He was entitled to compensation due to his disability. A letter from the Ministry of Finance indicated that those who became disabled due to such accidents were to receive 36 piasters in compensation, which was the amount granted to Şükrü.[251]

[249] Quataert, *Miners and the State in the Ottoman Empire*, 150.
[250] Özkan, "A Road in Rebellion, A History on the Move," 70.
[251] BOA, BEO, 7/525.

In another case involving an obligatory worker, Halil Can, who became disabled when his right arm ceased to function, a letter from the Internal Affairs Correspondence Office to the Aleppo Governorship in 1899, concerning the Birecik-Urfa road, stated that Halil Can should be granted a salary in line with comparable cases. Although the specific amount is not mentioned in this document, it indicates that obligatory workers were affected by such accidents and were entitled to compensation.[252] In the same month and on the same road, a worker named Mıgırdiç died after accidentally igniting gunpowder while working in a tunnel. Mıgırdiç was not an obligatory worker, earning 12 piasters daily for his job. His widow, Manuş, and his children were deemed destitute after his death and started receiving a salary of 30 piasters per person monthly.[253]

Gunpowder explosions, as in the case of Mıgırdiç, were common accidents during chaussé-style road construction. For example, in an earlier case in 1864 in İnebolu, Ömer the digger became blind in both eyes, and İmamoğlu Recep's left arm had to be amputated after gunpowder they were placing to break stones for road construction exploded. Previous similar injuries had resulted in compensation of 180 piasters in one case and 120 piasters in another. Consequently, Ömer was granted a salary of 90 piasters, and Recep received 60 piasters. Although the document does not specify the basis for the compensation or why it was lower than in previous cases, it is inferred that both workers were initially considered for 180 piasters, but this amount was later revised. Similarly, in Rhodes in 1895, Pavli Triandafilo lost his right eye and arm in an explosion.[254] As he became "unable to work or engage in commerce," he was granted a monthly salary of 100 piasters.[255]

[252] BOA, BEO, 1276/95668.
[253] BOA, DH.MKT, 2175/24.
[254] BOA, MVL, 684/27.
[255] BOA, BEO, 636/47680.

It is deducible that these salaries were insufficient relative to the cost of living. This is evident in the case of Necib from Ankara, who was sentenced to penal labor for homicide in Rhodes Central Prison. Necib lost both eyes due to an explosion while working on the Ialysos Road in 1884 or 1885 (1302 in the Hijri Calendar) and received a salary of 30 piasters. He repeatedly petitioned for an increase in his salary, asking for 40 piasters in June 1895,[256] 100 piasters in December 1895, [257] 200 piasters in December 1896,[258] and finally 500 piasters in 1903.[259] In this period observed in relatively stable prices,[260] The Grand Vizirate, considering comparable cases like that of Pavli Triandafilo, decided that the salaries of the two should be the same. [261] Therefore, Necib's salary was raised to 200 piasters, similar to Hüseyin Hurşid from Lazistan, who also lost both eyes in a gunpowder explosion and petitioned for a salary increase in 1896. [262]

In 1892, Koçhisarlıoğlu Ali from Çankırı, who lost his hands and became blind due to a gunpowder explosion, had his salary increased from 50 piasters to 100 piasters, as mentioned in his petition, citing the size of his family. [263] In another case, Köseoğlu Ahmed from Trabzon, who became blind in both eyes due to a digging explosion in 1901, petitioned for an appropriate salary because of his large family and financial need.[264]

Besides explosions, another common cause of worker injuries or deaths was being crushed by stones. In 1901, it was deemed appropriate to grant a total pension of 100 piasters, with 20 piasters each for the wife and four daughters of Hacı Agop,

[256] BOA, BEO, 628/47083.
[257] BOA, BEO, 716/53666.
[258] BOA, BEO, 883/66167.
[259] BOA, BEO, 2098/157350.
[260] Pamuk, "Prices in the Ottoman Empire, 1469-1914," 468.
[261] BOA, BEO, 716/53666.
[262] BOA, BEO, 865/64873; BEO, 879/65925.
[263] BOA, BEO, 115/8583.
[264] BOA, BEO, 1739/130423.

who was temporarily employed as a foreman on the Elmalı-Finike road and died after being trapped under a stone. [265] In another instance, Mahmud, the father of Ali from Hayırbey village in Sivas, died in 1905 due to a falling rock on the Sivas Road, [266] and Ali petitioned for a salary because of his old age and infirmity. The Grand Vizirate Office allocated him a suitable amount. [267]

One account narrates the story of an Albanian worker, Mehmed from Debar, in more vivid detail. In 1908, he was injured while excavating rocks for a bridge between Strumica and Pehcevo. Although his fellow workers rescued him from the rocks, he did not survive. The gendarmerie investigated the incident to determine whether it was intentional or accidental and concluded it was an accident. [268] In another case in 1909, the telegraph from the Dojran District Chief's Office reported that a worker named Yuvan, from the village of Forka, died after falling and being run over by a cart loaded with stones while working on bridges on the Dojran-Rabrovo road. [269]

A commonality in these cases was the need for petitions. To receive a salary, the injured worker or the relatives of a deceased worker had to submit a petition. The state assessed whether the petitioner had the means or property to survive without financial aid. These salaries were viewed as acts of charity by the benevolent Sultan. This was not always the case in neighboring regions. When Mladen from Presevo traveled to Bulgaria to work on a bridge and died in Sokolovtsi, his wife petitioned for compensation, stating that she and her four children, the oldest of whom was seven, would be left destitute. However, the Ministry of Foreign Affairs investigation

[265] BOA, BEO, 1634/122478.
[266] BOA, BEO, 2799/209923.
[267] BOA, BEO, 2646/198394.
[268] BOA, TFR.I.SL, 175/17472.
[269] BOA, TFR.I.SL, 213/21289.

revealed that Bulgarian laws did not provide compensation in such cases, as "they wouldn't give it even to their own people."[270]

The reference for Ottoman workers was not any codification when their invalidity contributions were granted, although it was written that the Bulgarian law did not allow such compensation demands in the case of Mladen who died as a migrant worker in Bulgaria. On the contrary, in all cases seen from the 1860s to the end of the Hamidian era, wages were given as charity with the discourse of the ruler's generosity. Although it was not codified, granting disability support appears as a practice already systematized in the Hamidian regime along with this patrimonial language. Disability supports were already designated as a charity in the 1860s "from the head of grandeur, the crown of royalty," referring to Sultan Abdülaziz.[271] Documents regarding salary grants in the Hamidian era used variations of this phrase extensively, for example, "charity from the exalted head, the refuge of the Caliphate"[272] which refers to Abdülhamid II.

Besides the language of donating, its bureaucracy also was developed to form a bond with the Sultan and his subjects. In the Hamidian bureaucracy, the Ministry of Trade and Public Works obtained the necessary information from local sources. While the Grand Vizirate made the final decisions, the Ministry of Finance was responsible for allocating the budget. [273] This was due to a trend that began in the early Tanzimat period, during which social care, previously managed by foundations,

[270] BOA, HR.SFR.04, 550/34.
[271] The original phrase is "*sadaka-i ser-übbehet efser-i mülükane*."
[272] The original phrase is "*sadaka-i ser-şevket efser-i hilafetpenahi*" in BOA, BEO, 2646/198394. It could be "noble head" (*ser-meali*) like in BOA, BEO, 2799/209923 or "Sultanic" (*Padişahi*) like in BOA, BEO, 2646,198394.
[273] For several relevant examples that were already mentioned for this bureaucratic chain of the Hamidian regime for granting salaries see BOA, BEO, 2799/209923; BEO, 1606/120386; BEO, 1739/130423; 662/49614. The exceptionally earlier source from 1864 demonstrates that this bureaucratic chain was similar in the 1860s Tanzimat period as well, with a notable exception that the decision-maker was the Supreme Council of Judicial Ordinances. See BOA, MVL, 684/27.

was centralized through the Ministry of Finance. As part of this process, the revenues of the foundations were directed to the Capital and became part of the ministry's budget. The redefined relationship between the state, embodied by the Sultan, and its subjects was enacted through the Sultan's direct charitable efforts. [274] Therefore, charity for injured workers and the families of deceased workers became an extension of this novel system of social care-based, secular, and patrimonial relations between the state and its subjects.

This systematization not only involved the institutional bureaucracy and patronage of the Sultan but also included certain standardizations in practices. Therefore, it is important the note that even the patriarchial forms of pensions relied on the homogenizing tendencies of bureaucracy. As explained above in several cases, pre-determined salary rates were used as references for setting or increasing compensation. The financial situation of the families of injured or deceased workers, along with the degree of disability affecting a worker's ability to continue working, were important factors in determining compensation. In addition to petitions, local sources of information, such as in the cases of Gürcüoğlu Hüseyin and Kavaklıoğlu Ahmed, were crucial for assessing the needs of workers or their families.

These two workers were the subjects of a comprehensive report written by the Havza District Council to the Sivas Province in 1902. While working on road construction at the Karadağ pass in the Havza District, a landslide buried them. Gürcüoğlu Hüseyin, from Bekdiğin village in Havza, died, while Kavaklıoğlu Ahmed survived with injuries to both legs. Gürcüoğlu Hüseyin, a migrant from Lazistan, had no income or income-generating property. He left behind a family deemed deserving of mercy and favor by the District Council: a mother over seventy

[274] Özbek, *Osmanlı İmparatorluğu'nda Sosyal Devlet*, 55.

years old, his wife Zeyneb, a two-year-old daughter, and a six-month-old son. In contrast, despite having to care for his sixty-year-old mother Dudu, his wife Emine, and their four-month-old daughter, Kavaklıoğlu Ahmed had property worth 24,250 piasters under his father's name, with a quarter belonging to him. Additionally, although he was unable to move his legs for the first fifteen days, he regained mobility within three days. Consequently, the Ministry of Internal Affairs informed Sivas Province that the family of Gürcüoğlu Hüseyin would receive a salary in line with similar cases.[275]

A document from the post-Revolutionary era demonstrates how the language of social care evolved, while practices remained the same. In 1910, Yakub, an immigrant, died in a landslide while working on the Babaeski station road. Yakub was survived by his parents, an eight-year-old brother, and a twenty-year-old sister. Since his father wished to open a grocery store, the government informed the Edirne Governorate that financial assistance of sixty liras should be provided to Yakub's family. Upon assessment by the Ministry of Trade and Public Works, it was noted that providing this amount from the road project's budget savings would be "a sign of patriotism and the honor of the government."[276] Thus, while the honor of the state was no longer embodied in the Sultan during the Second Constitutional Era, the treatment of accident victims, criteria for compensation, and the political intentions behind granting salaries remained the same.

In short, the most common types of accidents for a road worker were gunpowder explosions and crushing and entrapment of workers by rocks and soil. Although in most cases it is ambiguous whether the individuals were obligatory laborers, if one remembers the duties of a regular and unskilled worker in the worksite,

[275] BOA, BAO, 575/10.
[276] The original phrase was "*şime-yi hamiyet ve şan-ı hükumetten*." See BOA, ŞD, 1229/48.

based on Giovanni Lucchini's report, digging the soil and breaking the stones were among these duties. Therefore, it is assumable that these depicted types of accidents applied to the obligatory laborers. Moreover, in certain cases, it was directly stated that the victims were obligatory laborers. State aid to those affected by accidents was branded as charities, properly to the dominant political discourse of the period.

CHAPTER 5

CONCLUSION

This thesis is formed around a few questions on the meaning and practices of obligatory labor in road construction in the 19th Century Ottoman Empire. Due to the nature of its implementation in the modern legal system, the relations of its application to modern state practices, and its connection with the broader reform agenda, the main focus of this thesis is the Tanzimat Era, as the title suggests. The first question that it deals with is the seemingly contradictory feature of the obligation, being an unfree type of labor, and the fact that one of the promises of Tanzimat reforms was the abolishment of corvée.

Related to this question, the first chapter of this thesis involved a section discussing the global applications of similar obligations, again for road construction. The mainstream scholarship tends to see unfree labor as a byproduct of absolutism or colonialism. Therefore, 19th or 20th-century applications of the corvée are seen either as ahistorical remnants of the ancient regimes or limited to the colonial realms. Although the obligation, or state corvée for the Early Modern Period, began to be systematized in the Early Modern absolute monarchies and their colonies, it did not come to an end with modernity. From the Republican France of the 19th century to the United States, several forms of obligation survived for road-making depending on the infrastructural development and the regime's ability to mobilize people.

In a legal sense, codifications regarding the obligation were modern. Necessities that made a better transportation infrastructure vital were inherent to modernity with its political and economic faces as well. Increasing volumes of global trade and political tendencies of modern polities via bureaucratic apparatuses to

penetrate the everyday lives of their subjects were commonalities. Therefore, applications of obligation seen in modern colonies or modern states were not deviations from modernity; rather they were, both in legal and practical senses, a result of it. This approach, therefore, directly challenges the long-lasting assumption of togetherness of the capitalist economy and free labor.

To turn the angle to the obligation in road-making in the Ottoman Empire, Chapter 1 also involves a discussion regarding the scholarly literature on this subject. Arguably, this bulk of literature can be divided into three. First, several histories of infrastructure-related institutions mention the obligation when discussing road construction in the 19th-century Ottoman Empire. In addition, studies focusing on road construction efforts in various regions occasionally mention compulsory labor, either through individual case studies or by discussing decision-making processes.

The main focus of these geographically specific studies, however, is not on labor history but rather on the relationship between the state, its institutions, and infrastructural modernization. Lastly, although there are a few studies that directly address the topic of compulsory labor, these works tend to focus more on the legal and institutional aspects rather than the practical, on-the-ground implications. Furthermore, due to the lack of comprehensive research, these studies do not provide any significant temporal or geographical nuance regarding the conditions of compulsory labor.

Road construction campaign was a result of larger changing dynamics, embodied in the Tanzimat Reforms. The necessity of a better-quality infrastructure of transportation reflected both the global structures and local conjunctures. First, it was due to the increasing volumes of global markets in the Empire with the development of global capitalism. The construction of chaussée-style and therefore roads was

essential to facilitate the movement of goods, enhance communication, and secure the state's fiscal interests. The road construction campaign aimed to increase the Empire's capacity to compete in the global market while strengthening internal control. The road-building campaign also served the state's strategic needs, improving military mobility, fortifying its ability to project power into provinces, and conjunctural foreign interests.

These reasons were evident in the early writings and reports penned by members of the Ottoman state elite, as well as in the reports of foreign experts brought in for consultation. Therefore, it can be said that one of the key actors in the road construction efforts of the 19th century was the state bureaucracy. However, this was not limited to them alone. The second important group consisted of local actors, who played a leading role due to their influence in local councils and their sway over the population.

It is important to emphasize here that chaussée-type roads were a product of the new era, which required the strengthening of transportation infrastructure in response to the increased volume of trade. In terms of construction techniques, these roads required a large amount of unskilled labor. A significant portion of the financial resources spent on road construction went directly to cover labor costs. As a result, some of the early road projects were canceled or postponed because they could not bear this financial burden. More importantly, successful road construction projects took place in areas where forced labor was utilized. The results of this compulsory labor, which was sometimes gathered through the efforts of local actors and other times by state-appointed bureaucrats, arguably laid the groundwork for the codifications that would come in the following period.

This discussion is directly related to debates about Tanzimat modernization in two key ways. First, the inclusion of local actors in the use of compulsory labor, which began de facto, presents a counterexample to the top-down centralization narrative often associated with Tanzimat modernization. Local actors and the state elite could not only share the same intentions and advocate for the same goals, but in some cases, they were the very same individuals. The second point is the reality that legal frameworks follow practice. This demonstrates that, although compulsory labor would later be justified as a natural duty through various forms of legitimacy, it was the conditions and necessities that paved the way for the emergence of such practices. The legality and the arguments that would later be used to justify this legality came after the fact.

Before 1853, the Ottoman Empire was already examining similar examples from abroad. Two documented cases of this are Austria and Wallachia. Notably, some of the classification systems and legitimizing rhetoric used in these regions later appeared in Ottoman laws. The de facto implementation of compulsory labor, as described before 1853, was first formalized in 1853 as a pilot project. Following this, various laws were enacted up until 1890, and in practice, participation in road construction was established as a norm in regions where Tanzimat reforms were implemented.

The primary justification for this norm was the principle of benefit, which was frequently mentioned in pre-1853 texts. According to this principle, it was logical that the people living near the roads, who would benefit from their construction, should be the ones to work on them. This explanation also served as a means for the state to distinguish compulsory labor from forced labor. Within this framework of legitimacy and rationale, the laws shared a common feature: they

prioritized labor from people living near the construction sites. With some exceptions, it was mandatory for able-bodied men, excluding children and the elderly, to physically participate in the work. The bureaucracy required to establish the compulsory labor system became increasingly complex, as can be observed through the evolving legal framework. In addition to engineers, other state officials and law enforcement officers were organized to actively participate in the recruitment and management of the laborers.

The legality surrounding compulsory labor, as previously discussed on a global scale in relation to the connection between unfree labor and the beginnings of capitalist production, serves as an example of its application in the Ottoman context. It also demonstrates that modern law, much like ancient regimes, could enforce physical compulsory labor under the guise of taxes or responsibilities. Furthermore, unlike earlier methods, the relationship between the subject and the state was now based on written law, and the enforcement of these regulations grew stronger in line with the state's capacity.

The compulsory labor system, grounded in legality, was utilized in a significant portion of Ottoman road construction and thus its infrastructure. In fact, almost all roads built until 1890 were constructed through this system. While compulsory laborers (mükellefler) were also employed in other tasks, such as locust collection, first on a de facto basis and later legally, their objections sometimes led the state to prevent them from taking on duties outside their primary tasks. Although these workers received wages and, from the 1880s onwards, bread in a more systematic manner, their pay remained lower compared to that of waged workers.

The petitions submitted by the villagers subjected to compulsory labor, often through a community representative, indicate that there were many times when they

were unwilling to fulfill this obligation. They often cited reasons such as harvest time or other work they were performing for the state. In cases where they believed they had been drafted in a way not stipulated by law, they attempted to use legality to their advantage. The drafting process did not occur purely as a bureaucratic and personalized form of tax collection, as it appeared on paper; it also involved extralegal methods where coercive mechanisms were employed.

The work environment for compulsory laborers typically meant roads, which often lacked any form of secure shelter. As a result, the places where laborers spent the night were either tents provided by the state or makeshift huts they built themselves. It can be said that neither option was durable or comfortable: the tents typically housed around ten people, and such shelters often led to health issues. Despite being irregular and insufficient, the state made efforts to provide doctors and medicine for the laborers. In a few instances, there were even surgeons present at construction sites, who performed amputations on injured workers.

Accidents were an inherent part of road construction and, consequently, of the lives of compulsory laborers. According to archival documents, the most common types of accidents involved crushing or entrapment due to stones or soil, as well as explosions from gunpowder used to break rocks. Assistance was provided to injured workers or, in the case of fatalities, to their families, depending on the worker's financial situation, the presence of family, and the precedents set in similar cases. As demonstrated, this aid was often couched in hegemonic language that reinforced state ideology, either by glorifying the Ottoman Empire or by exalting the person of the Sultan.

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