

OTTOMAN FORTRESSES AND GARRISONS IN THE HUNGARIAN AND THE
EASTERN FRONTIERS (1578-1664)

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ABSTRACT

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In this thesis, the fortresses and the garrisons in the Hungarian and the Eastern frontiers of the Ottoman Empire are taken as the main examination subjects. Ottoman military architecture and garrisons are evaluated according to the one of the arguments of the “Military Revolution” debate which suggest that emergence of the *trace italienne* fortresses caused the growth in the size of armies and garrisons. In this context, the Hungarian and Eastern frontiers of the Ottoman Empire are compared between the years of 1578-1664 to discuss that the *trace italienne* fortresses were not the single factor that affected the size of garrisons, the number of artillerymen in garrisons, and the infantry/cavalry ratio. According to findings of this thesis, the size of the garrisons was similar in both of the frontiers, while the infantry/cavalry ratio and the number of the artillerymen was higher in numbers in the Hungarian frontier. Instead of single factor, there were more than one reason that affected these elements. These factors were the topography of the region, the location of the fortresses, wars, and rebellions. Also, Ottoman’s choice of not building *trace italienne* fortresses until the 18th century is discussed and evaluated as a military preference, and the Ottoman goals and strategies and the establishment of the fortress network on both frontiers are discussed.

Keywords: Ottoman Empire, Hungarian Frontier, Eastern Frontier, Military History

ÖZ

MACARISTAN VE DOĞU SERHADLERİNDE OSMANLI KALE VE GARNİZONLARI (1578-1664)

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Bu tezde Osmanlının Macaristan ve Doğu serhadlerindeki kale ve garnizonları incelenmektedir. Bu inceleme yapılırken “Askeri Devrim” tartışmalarının bir argümanı olan *trace italienne* kale mimarisinin ortaya çıkışıyla orduların ve garnizonların büyüdüğü tezi ele alınıp iki serhaddeki kale mimarisi ve garnizonları üzerinden bir değerlendirme yapılacaktır. Bu bağlamda, *trace italienne* kalelerin garnizon büyüklüğünü etkilediği tezine karşı olarak Macaristan ve Doğu serhadleri karşılaştırıldığında garnizon büyüklüklerinin birbirine denk, piyade atlı oranı ve topçu sayılarının ise Macar serhaddinde Doğuya göre daha yüksek miktarda olduğu saptanmıştır. Bunun tek bir sebepten değil, bölgenin topografik özellikleri, kalelerin lokasyonları, savaşlar ve isyanlardır gibi çeşitli nedenlerden ötürü değiştiği tartışılacaktır. Tezin bulgularına göre. Ayrıca Osmanlıların 18.yy’a kadar kadar *trace italienne* kale mimarisine tam anlamıyla geçmemesinin sebebi olarak, bu askeri mimariyi o dönem için bir seçenek olarak görmedikleri argümanı da ele alınacaktır. Bunlara ek olarak Doğu ve Macar serhaddindeki Osmanlı hedef ve stratejileriyle birlikte bu serhadlerdeki kale ağının kuruluşu da bu tezde konu edilecektir.

Anahtar Kelimeler: Osmanlı İmparatorluğu, Macaristan Serhaddi, Doğu Serhaddi, Askeri Tarih

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CHAPTER 1

INTRODUCTION

1.1.Objective of the Thesis

In this thesis, two frontiers of the Ottoman Empire- the Hungarian and Eastern frontiers- are examined by comparing the fortresses and garrisons of the *vilayet* centers of the Hungarian frontier and the fortresses of Erzurum, Van, Tebriz, and Revan in the Eastern frontier, from 1578 to 1664. The selection of fortresses on the Eastern frontier is based on Bekir Kütükoğlu's division of the Eastern Frontier into three parts the Erzurum-Kars sub-frontier which faces Caucasia. The region of Van which faces Tabriz region; and the Shahrizor-Baghdad sub-frontier which faces Nihavend and Pelangan.¹ The thesis focuses only on some of the fortresses and garrisons (Erzurum, Revan, Van and Tabriz) of the first two sub-frontiers due to time limitations and to narrow the scope of the thesis. The period of 1578-1664 was selected so that both war and peace times can be examined for both frontiers.

In recent decades, there has been increased attention on frontier studies of Ottoman Hungary on the part of military historians. Compared to the Hungarian frontier, the Eastern frontier has been neglected to a large extent for the 16th and 17th centuries. Nonetheless, there are significant works on the Eastern frontier in the 17th century, but their numbers are fewer than the works on the Hungarian frontier. Studies comparing both frontiers are even more scarce. This thesis aims to fill this gap in comparative frontier studies between the Hungarian and Eastern frontiers, focusing mainly on the fortress network, military architecture, and garrisons.

¹ Bekir Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*(Istanbul: Istanbul Fetih Cemiyeti, 1993), 223.

In this thesis, the similarities and differences of fortresses and garrisons in the two frontiers and the reasons for those differences are discussed in light of primary and secondary sources with special reference to the concepts of the military revolution. Arguments from the military revolution debate about changing military architecture and growing armies are examined in the context of Ottoman fortresses and garrisons in the Hungarian and Eastern frontiers. This thesis argues that Ottomans conquered new style fortresses in Hungary and they were pretty well-aware of the features of new style fortifications in the 17th century, however they did not chose to build any new style fortifications until the 18th century. Secondly, this thesis argues that the Ottomans had diverse goals and strategies in organizing their fortress network in both frontiers. Lastly, the garrisons of new style fortresses on the Hungarian frontier and old-fashioned fortresses on the Eastern frontier are compared, and this thesis shows that the features of garrisons changed for a number of reasons, rather than just one, which include the topography of the region, the location of the fortresses, wars, and rebellions.

At the beginning of the first chapter, the Ottomans' encounter with the *trace italienne* type of fortresses is examined. The Ottomans encountered with this new style of fortresses in the Hungarian frontier, and conquered some of them, but did not encounter any fortress of this type in the East. Therefore, the Ottomans were familiar with the *trace italienne* type of fortresses, however they did not choose to build their fortresses this style, since they did not deem it necessary in the military context. Also, it is argued that the Ottomans had specific strategies and goals in both frontiers while they were establishing a network of fortresses.

The second chapter is organized into six sections. This chapter contains an evaluation of Ottoman garrisons in both frontiers and shows that the size of the garrison, the types of troops, the number of artillerymen, and the infantry/cavalry ratio changed depending on numbers of factors, such as wars, rebellions, and topography, rather than solely because of the change in the architectural design of fortresses. The first section of this chapter examines the the types of troops in the garrisons and classifies them as cavalry and infantry units. In the second and the third sections, the total projected force of the garrisons of *vilayet* centers in the Hungarian and Eastern Frontiers on paper is given for the period under discussion using only the data of

salaried troops, both local forces, and janissaries, in garrisons. Also, in the same section, the number of artillerymen, and infantry/cavalry ratio is presented. Then the organization of the supply system and the problems that were encountered is considered, followed by a discussion of the methods of payment of garrisons, sources of garrison finance, and difficulties with payments. Finally, the Hungarian and Eastern frontiers are compared with regard to the composition of garrisons and their size, the number of artillerymen, the number of janissaries in fortresses, the infantry/cavalry ratio, supply and finance of garrisons. This thesis finds that the total size of the garrisons was quite similar to each other on both frontiers. The number of artillerymen was slightly higher in Hungary, while the number of cavalry units was greater in the East. In the case of the supply of the garrison, it is seen that maintaining a garrison was harder in the East. However, the financing of garrisons was more commonly based on local treasuries in the East, while sometimes garrisons in Hungary were supported by the central treasury.

1.2. Sources and Literature Review

Mevacib defters (payroll registers) are used as the main source of this thesis. *Mühimme* registers and chronicles are also used as supplementary sources. There are several studies that provides information about payroll registers.² Payroll registers are very valuable sources for the calculation of the size of garrisons, as they includes the salaries of the military groups, the servants of the palace, governmental employees, mosque personnel, and prayers(*duagüyan*).³ The payroll registers that were used in this thesis were kept to pay the salaries of garrison troops which were paid every three months in four time periods, called *Masar*, *Recec*, *Reşen*, and *Lezez*.

² See: Evgeni Radushev and Asparuh Velkov, *Ottoman Garrisons on the Middle Danube : Based on Austrian National Library Ms Mxt 562 of 956/1549-1550*(Budapest: Akadémiai kiadó, 1996); Orhan Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," *OTAM - Osmanlı Teşkilat Tarihi*, no. 31 (2012); Klára Hegyi, *The Ottoman Military Organization in Hungary*(Hungary: Klaus Schwarz Verlag, 2018); Linda T. Darling, "Ottoman Salary Registers as a Source for Economic and Social History," *Turkish Studies Association Bulletin* 14, no. 1 (1990).

³ "Ottoman Salary Registers as a Source for Economic and Social History," 14.

Every payroll register was kept in three copies that were sent to İstanbul to be checked. After validation, one copy was kept in İstanbul, one copy was sent to the place in which they were written, and the last was sent to the related *vilayet*'s treasury.⁴ Generally, payroll registers were kept by the *defterdar* of the province, however, if necessary they could be prepared by other officials.⁵ If the center detected any inconsistency in the records, an inspector of the treasury could be sent to check that inconsistency.⁶

Payroll registers for salaried troops in garrisons generally start with general information about registers. This general information includes the type of troops, which fortress the defter belongs to, and when and in which period it was written.⁷ After the introduction, the following page starts with a *cemā'at*⁸ title such as “*cemā'at-i merdan-ı ka'lā-i Van vācib-i reşen fi 1018*”⁹ and continues with the name of commanders. The names of the soldiers in the *cemā'at* comes afterwards. *Cemā'ats* were divided into sub groups called *bölüks* or sometimes into *orta*, *oda*, or *cemā'at* which generally contain ten or fewer people. The daily salaries of the soldiers are written under their names. Most of the time, the total number of troops and the sum of their salaries are given at the end of the defter.

While sometimes a defter includes several types of troops from the garrison, sometimes it contains the salary of only one type of troops. Defters of different troops from different periods might be found in one larger compilation volume which can be called *defter-i merdan* or *müstahfizan*, *defter-i 'azeban*, *defter-ı gilmān* or

⁴ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 89-90.

⁵ Ibid., 91.

⁶ Ibid., 92.

⁷ MAD 4381 p.3-97, MAD 6409 p. 1-58., MAD 6409 p. 61-76. MAD 4381 register was mentioned for the first time in Kılıç, XVI. Ve XVII. Yüzyıllarda Van.

⁸ Word of cem'at in mevacib defteri is used to define soldiers that belongs to same military group.

⁹ MAD 4822, p.1. MAD 4822 register was mentioned for the first time in Kılıç, XVI. Ve XVII. Yüzyıllarda Van.

müteferrikiyan.¹⁰ In *defter-i merdan* or *müstahfizan*, several different groups such as the *cemā'at* of *merdan*, *müstahfizan*, *cebeciyan*, *topçuyan*, *bevaban*, or *meşalederan* troops could be found. Other defters that were mentioned above contain information about the troops that are written under their relevant title. It is not possible to find any janissary troops in the defters of local troops.¹¹ Unlike the local troops, janissaries were registered in separate payroll registers which were written and kept in İstanbul.¹²

Another source of this thesis, *mühimme* registers are also very valuable documents for frontier studies. In these documents, the state's understanding and evaluation of its frontiers can be understood. The definition of the duties of some troops, and the construction, and repair of fortresses found in the *mühimme* registers. In his introductory article about *mühimme* registers, Geza David explains the diplomatics of *mühimme* registers and uses them to examine relations between the Ottomans and Habsburgs. He also lists the studies that have used *mühimme* registers as a source.¹³ As he states Bernard Lewis, Colin Imber, Suraiya Faroqhi and Kemal Beydilli have written several works based on the *mühimme* registers.¹⁴

This thesis also uses, two Ottoman chronicles, *Tarih-i Selaniki* and the chronicle of Topçular Katibi Abdülkadir Efendi. *Tarih-i Selaniki* provides important information about both Ottoman-Safavid wars of 1578-1590 and the Long War

¹⁰ MAD 4381, 6409, 4822, 223, 7425. MAD 4381, 4822 and 7425 registers register were firstly mentioned in Kılıç, *XVI. Ve XVII. Yüzyillarda Van*.

¹¹ MAD 4822, 2223, 7425.

¹² MAD 6718, 5996, 5538, 6822. MAD 6718 register was mentioned for the first time in Kılıç, *XVI. Ve XVII. Yüzyillarda Van*.

¹³ Geza David, "The Mühimme Defteri as a Source for Ottoman-Habsburg Rivalry in the Sixteenth Century/XVI. Yüzyılda Osmanlı-Hasburg Mücadelesinin Bir Kaynağı Olarak Mühimme Defterleri," *İstanbul Üniversitesi Edebiyat Fakültesi Tarih Dergisi*, no. 53 (2011): 295-349.

¹⁴ Ibid.; Bernard Lewis, *Notes and Documents from the Turkish Archives. A Contribution to the History of the Jews in the Ottoman Empire* (Jerusalem: The Israel Oriental Society, 1952); Kemal Beydilli, *Die Polnischen Königswahlen Und Interregnen Von 1572 Und 1576 Im Lichte Osmanischer Archivalien. Ein Beitrag Zur Geschichte Der Osmanischen Machtpolitik* (München: Trofenik, 1976); Colin Imber, "The Navy of Süleyman the Magnificent," *Archivum Ottomanicum* 6(1980); "The Persecution of the Ottoman Shī'ites According to the Mühimme Defterleri," *Der Islam* 56, no. 2 (1979); Suraiya Faroqhi, *Towns and Townsmen of Ottoman Anatolia: Trade, Crafts and Food Production in an Urban Setting 1520-1650* (Cambridge University Press, 1984); "Political Activity among Ottoman Taxpayers and the Problem of Sultanic Legitimation," *Journal of the Economic and Social History of the Orient* 35(1992).

between the Ottoman and Habsburg Empires. Mustafa Selaniki Efendi gives information about the construction and repair activities during and after the wars, along with the number of some garrisons. The chronicle of Topçular Katibi Abdülkadir (Kadri) Efendi is a very important source as well. His position in the army and the bureaucracy and his presence at most battles from the Long War to the Baghdad campaign of Murad IV makes this chronicle an incredibly valuable source for military history.¹⁵

Rhoads Murphey's book "Ottoman Warfare 1500-1700" is one of the few examples of a general history of Ottoman warfare in the Early Modern period. Therefore, it has a special place in the studies of military history. In this book, Murphey refers to the important aspects of warfare such as finance, provision, motivation, and the constraints of warfare and its social effects.¹⁶

There are several works by historians on the topic of the Hungarian frontier of the Ottoman Empire. Klara Hegyi's three volume " *A Török Hódoltság Várai És Várkatonasága*" and her " *Ottoman Military Organization in Hungary*" are essential sources of information about Ottoman garrisons in Hungary. These books reveal the size of the garrisons stationed in the fortifications of the Ottoman Empire in Hungary from as early as the 1570s to the 1660s using archival documents from both the Turkish National Archives and the Austrian National Library. Also, a revised English version of her three volumes work, " *Ottoman Military Organization in Hungary*" was published in 2018 and filled a gap about garrisons for those readers who do not know Hungarian.¹⁷ In this thesis, Hegyi's studies of garrisons are widely used. Another important study, Claudia Römer's book " *Osmanische Festungbesatzungen in Ungarn zur Zeit Murad III*", also shows the numbers of some troops in garrisons in Hungary

¹⁵ Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003),XXXII.

¹⁶ Rhoads Murphey, *Ottoman Warfare 1500-1700*, Warfare and History (London: Routledge, 2003).

¹⁷ Hegyi, *The Ottoman Military Organization in Hungary; A Török Hódoltság Várai És Várkatonasága*, vol. 1(Budapest; MTA Történettudományi Intézete: História 2007); *ibid.*, 2; *A Török Hódoltság Várai És Várkatonasága*, vol. 3(Budapest; MTA Történettudományi Intézete: História, 2007).

and gives information about the *arzes* and *berats* that were given to soldiers.¹⁸ Gabor Agoston's works on the finance and administration of the frontiers, military technology and its quality in the Ottoman Empire and the strategies of both the Habsburgs and Ottoman empires in Hungary make a great contribution to the literature on the history of the Ottoman Hungarian frontier literature.¹⁹ Caroline Finkel's "*The Administration of Warfare: Ottoman Military Campaigns in Hungary, 1593-1606*" provides useful information and insights about the sources of Ottomans manpower, the supply of the Ottoman army, and the financing of the army during the Long War.²⁰ Sadık Müfit Bilge gives extensive information about the military, administrative, political and social aspects of the Ottoman Empire using archival documents and secondary sources in "*Osmanlı'nın Macaristan'ı*."²¹ Mark Stein has a book related to fortresses and garrisons of Ottoman Hungary in which he focuses on the fortresses and garrisons of Uyvar and Kanije.²² "*Ottomans, Hungarians, and Habsburgs in Central Europe: the Military Confines in the Era of Ottoman Conquest*" edited by Pal Fodor and Geza David is an important contribution to the topics of military organization, the

¹⁸ Claudia Römer, "Osmanische Festungsbesetzungen in Ungarn Zur Zeit Murads Iii : Dargestellt Anhand Von Petitionen Zur Stellenvergabe," Verlag der Österreichischen Akademie der Wissenschaften.

¹⁹ See: Gábor Ágoston, *Guns for the Sultan : Military Power and the Weapons Industry in the Ottoman Empire*(New York: Cambridge University Press, 2004); "Firearms and Military Adaptation: The Ottomans and the European Military Revolution, 1450–1800," *Journal of World History* 25, no. 1 (2014); "Empires and Warfare in East-Central Europe, 1550–1750: The Ottoman–Habsburg Rivalry and Military Transformation.," in *European Warfare, 1350–1750*, ed. Frank Tallett and D. J. B. Trim(Cambridge: Cambridge University Press, 2010); "A Flexible Empire: Authority and Its Limits on the Ottoman Frontiers," *International Journal of Turkish Studies* 1-2, no. 9 (2003); "The Costs of the Ottoman Fortress-System in Hungary in the Sixteenth and Seventeenth Centuries," in *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* ed. Pál Fodor and Géza Dávid(Leiden: Brill, 2000); "Macaristan'da Osmanlı Serhadi (1541-1699) : Bir Mukayese," in *Osmanlı*, ed. Güler Eren(Ankara: 1999); "Habsburgs and Ottomans: Defense, Military Change and Shifts in Power," *Turkish Studies Association Bulletin* 1, no. 22 (1998); "A Flexible Empire: Authority and Its Limits on the Ottoman Frontiers."

²⁰ Caroline Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*(Vienna: JWGO, 1988).

²¹ Sadık Müfit Bilge, *Osmanlı'nın Macaristanı*(İstanbul: Kitabevi, 2010).

²² Mark L. Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*(London: I.B. Tauris & Co., 2007).

Ottoman administration in Hungary and the military revolution debate.²³ Also, another edited book by Geza David “*Studies in Demographic and Administrative History of Ottoman Hungary*” is another good compilation of studies on administrative and demographic aspects of Hungary which focuses especially the topics on *sancaks* and *defters* in the 16th century.²⁴ Another book edited by Geza David and Pal Fodor is “*Hungarian-Ottoman Military and Diplomatic Relations in the Age of Süleyman the Magnificent*” which includes several articles about the military, political, and social aspects of the Hungarian frontier from significant historians in the field.²⁵ Another important work is the edited book “*From Hunyadi to Rakoczi War and society in Late Medieval and Early Modern Hungary*” in which the political, social and economic situation in Hungary from Medieval times to the 18th century are discussed by several historians. A considerable part of this book consists of studies about the establishment of the Ottoman rule and Ottoman-Habsburg conflicts in Hungary.²⁶

Only a handful of secondary sources can be found about the military architecture of the Ottoman Empire in the Early Modern Period. Burcu Özgüven’s “*Osmanlı Macaristanı’nda Kentler, Kaleler*” is full of valuable information about the military and civil architecture of the Ottomans in Hungary in the 16th and 17th centuries. Also, her articles on other military buildings of the Ottoman Empire such as palankas, Yedikule, Kilit’ül Bahr and Rumeli Hisar fill an important gap in the studies of Ottoman military architecture.²⁷ “*Osmanlı Arşiv Belgelerinde Osmanlı Kaleleri*” is

²³ Pál Fodor and Géza Dávid, eds., *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* (Leiden: Brill, 2000).

²⁴ Geza David, ed. *Studies in Demographic and Administrative History of Ottoman Hungary*, Analecta Isisiana (İstanbul: The Isis Press, 1997).

²⁵ G. Dávid and P. Fodor, eds., *Hungarian-Ottoman Military and Diplomatic Relations in the Age of Süleyman the Magnificent* (Loránd Eötvös University, Dept. of Turkish Studies, 1994).

²⁶ J.M. Bak et al., eds., *From Hunyadi to Rákóczi: War and Society in Late Medieval and Early Modern Hungary* (Social Science Monographs, 1982); *ibid.*

²⁷ H. Burcu Özgüven, "Early Modern Military Architecture in the Ottoman Empire," *Nexus Network Journal* 16, no. 3 (2014); Burcu Özgüven, "Palanka Forts and Construction Activity in the Late Ottoman Balkans," in *The Frontiers of the Ottoman World*, ed. A. Peacock (2009); "The Palanka: A Characteristic Building Type of the Ottoman Fortification Network in Hungary" (paper presented at the 11th International Congress of Turkish Art, Utrecht-The Netherlands, August 23-28 1999); *Osmanlı Macaristanı'nda Kentler, Kaleler* (İstanbul: Ege Yayınları, 2001).

a publication by the Turkish National Archives that gives general information and history of specific fortifications all over the Ottoman Empire and provides maps and architectural plans of fortifications.²⁸ However, these maps and plans generally are based on the 18th or 19th centuries, and therefore only a little information could be found about the architecture of fortifications in the 16th and 17th centuries. David Nicolle's book "*Ottoman Fortifications 1300-1710*" gives a general framework about Ottoman fortifications.²⁹ Finally, Ömer Gezer's unpublished Ph.D. thesis about the reorganization of the Ottoman frontier in the West after the treaty of Karlowitz is a valuable source for frontier studies.³⁰

If we compare the two frontiers, it is clear that the eastern frontier has been studied less than the Hungarian frontier. The neglect of this frontier may be caused by the popularity of the Hungarian frontier which overshadows Eastern frontier's importance. Another reason for this popularity could be the abundant archival sources of the Hungarian frontier compared to scarce archival sources about the Eastern frontier. For the Eastern frontier, Rhoads Murphey's Ph.D. thesis and his other works can be evaluated as great contributions to the field of the military history of the Ottoman Empire.³¹ In his Ph.D. thesis, Murphey gives valuable information about the supply of the army during Murad IV's expedition to the east with important considerations about the changes in military organization and technological changes that affected it. Furthermore, Cengiz Fedakar's studies on the fortresses of Anapa and

²⁸ *Arşiv Belgelerine Göre Osmanlı Kaleleri*, (İstanbul: Osmanlı Arşivi Daire Başkanlığı Yayınları, 2016).

²⁹ David Nicolle, *Ottoman Fortifications 1300–1710*(Oxford: Osprey Publishing Limited, 2010).

³⁰ Ömer Gezer, "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)" (Unpublished Ph.D. Thesis, 2016).

³¹ Rhoads Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey" (Unpublished Ph. D. Dissertation, The University of Chicago, 1979); "Ottoman Military Organization in South-Eastern Europe, C. 1420-1720," in *European Warfare 1350-1750*, ed. Frank Tallett and D.J.B. Trim(New York: Cambridge University Press, 2010); "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," in *The Frontiers of the Ottoman World*, ed. A. C. S. Peacock(Oxford ;New York: Oxford University Press, 2009); *Ottoman Warfare 1500-1700*.

Sohum ³² and Mahir Kaynak's article on the fortress of Faş are important studies that contributed to the frontier studies of the Eastern frontier of the Ottoman Empire.

1.3. The Military Revolution

This thesis examines an argument of military revolution debate which suggests that the growth of armies in fortresses was due to alterations in military architecture in the 16th and 17th centuries and its effects in the case of Ottoman Empire, by focusing on the Hungarian and the Eastern frontiers. Therefore, a review of the literature of military revolution debate in general and for the case of the Ottoman Empire in particular, is required.

The military revolution debate was introduced to the field of history by Michael Roberts. He was the first historian to talk about a military revolution for the period of 1560-1660. Roberts emphasized four aspects of changes in the military in this period which are military tactics, the growth of armies, military strategies and the effects of these changes on society. Roberts claims that attempts which aimed to find solutions to tactical problems led to a military revolution. New formations and the standardization of training and discipline were the important tactical changes applied successfully by Maurice of Nassau and Gustavus Adolphus.³³ In order to apply these tactical changes and to make them permanent, it was necessary to train the units. Training peasants was not efficient, and therefore mercenaries were trained. Disbanding these mercenaries after the war and recruiting them again for a later war required huge amounts of money, so standing armies had to be established in order to spare the money needed to retrain new units for every new battle. Moreover, due to the multifront wars, there was a need for bigger armies; therefore the size of the armies

³² Cengiz Fedakar, "Anapa Kalesi: Karadeniz'in Kuzeyinde Son Osmanlı İstihkamı (1781-1801)" (Unpublished Ph.D. Thesis, 2010); "Anapa Kalesi," *Yeni Türkiye* XI, no. 81 (2015); "Kafkasya'da Osmanlı Tahkîmatı: Sohüm Kalesi (1723-1729)," *VAKANÜVİS- Uluslararası Tarih Araştırmaları Dergisi/ International Journal of Historical Researches* 2(2017).

³³ Michael Roberts, "The Military Revolution, 1560-1660," in *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, ed. Clifford J. Rogers (Boulder: Westview Press, 1995), 13-14.

began to grow. This in turn meant the need for more financial resources, and in order to extract these resources, a bigger bureaucratic mechanism was needed. Thus, states emerged as the only power that could support these large armies.³⁴ Hence, a military revolution occurred, which had effects on the administrative, social and economic aspects of life.

Another important contributor to the military revolution debate is Geoffrey Parker. After Michael Roberts, Parker brought the military revolution debate to another level. Even though he criticized some arguments of Roberts, he also supported some of them, and suggested a new base for the debate. Parker asserts that three important developments in Europe changed the art of war from the 16th century onwards. These changes were "...a new use of firepower, a new type of fortifications, and an increase in army size..".³⁵ He suggests that the change in the design of fortifications, which represents an alteration from medieval castles to *trace italienne*, caused a general extension of the duration of sieges which caused an increase in the size of siege armies.³⁶ Most of the men in the armies of European powers were assigned to fortresses, rather than serving in the field armies, leading to huge numbers of troops in garrisons. New design of fortifications needed more men in the garrisons.³⁷ The growth of the armies was also supported by the rivalry between states and led to the rise of the monarchies. The state was the only power that could support the large armies.³⁸ All of these changes contributed to the formation of modern states. Parker interprets the *trace italienne* as the driving force of the military revolution, and the distinctive sign of the military revolution that only existed in Europe.³⁹ Moreover, he

³⁴ Ibid.18-21

³⁵ Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*(Cambridge: Cambridge University Press, 1988).43.

³⁶ Ibid., 13-14.

³⁷ Ibid., 24,39-40,163,68,71.

³⁸ Ibid., 3.

³⁹ "The "Military Revolution, 1560-1660"- a Myth?," in *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, ed. Clifford J. Rogers(Boulder: Westview Press, 1995).45

asserts that supply determined the fate of wars. The importance of cavalry in wars decreased over the years, while the value of gun-bearing infantry was increased.⁴⁰ He concludes his findings by claiming that the military changes in Early Modern Europe had profound effects on various aspects of society and were eventually the reason for the rise of the West.⁴¹

Several objections have been made against Parker's claims. Different timelines and elements have been suggested in the military revolution debate. Parker's point of view on the development of military technology which he considered as progress in history has been criticized by Bert Hall. Hall also criticizes Parker for omitting the contradiction between technology and tactics in the original military revolution theory of Michael Roberts.⁴² Giving examples from the 15th century and the 17th century in which 600 and 100-150 soldiers, respectively, were given as the ideal size of garrisons, he emphasized the overrated role of *trace italienne* in the debate of military revolution.⁴³ He says that the overlapping elements of the increase in the size of armies and spread of *trace italienne* created a false impression that this new style of fortresses were the reason for this growth.⁴⁴ He also writes that the increase in the armies was more apparent in the 17th century.⁴⁵

Jeremy Black approaches to the word revolution rather suspiciously.⁴⁶ He suggests that there may be two different military revolutions, the first one from the 15th century, to the early 16th century, and the second one in the period of 1660-1720.

⁴⁰ Ibid.43-44,169.

⁴¹ "In Defense of the Military Revolution," 356; *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*.3-4.

⁴² B.S. Hall, *Weapons and Warfare in Renaissance Europe: Gunpowder, Technology, and Tactics*(Johns Hopkins University Press, 1997).203

⁴³ Ibid.205

⁴⁴ Ibid.207

⁴⁵ Ibid.209

⁴⁶ Jeremy Black, "A Military Revolution? A 1660-1792 Perspective," in *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, ed. Clifford J. Rogers(Boulder: Westview Press, 1995).111

For the second period, he claims that the replacement of the pike with the bayonet and the prepacked cartridge, and the replacement of matchlock gun with the flintlock were important alterations that caused an increase in the importance of gun-bearing infantry and gave a less prestigious place to the cavalry.⁴⁷ Moreover, he states that the shifting of power between the Ottomans and Habsburg in Hungary drew the lines of the military revolution. With this shift in power, the superiority of European military power became more obvious than before. The reasons for this shift were the changing aspects of European warfare which were based on an increase in firepower and mobilization, and an increased pace and shock power.⁴⁸

John Lynn examines the suggestion of Parker for the case of France . He claims that an increase in the size of armies contributed to the formation of the modern state, but that the *trace italienne* design of fortresses was not effective as Parker claims. Although, he partially accepts Parker's suggestion about the size of garrisons, he indicates that the size of garrisons increased only in peace times.⁴⁹ Lynn adds that even though the *trace italienne* was more effective compared to medieval fortifications, it did not have a fundamental effect on the size of armies.⁵⁰ Lynn also tries to explain the increase in the size of armies. He says that it is possible to assume that while the size of the besieging armies remained the same, the number of sieges might have increased, though he also adds that French army never besieged more than two fortresses at the same time.⁵¹ He asserts that the size of the French army grew only on paper, but not in the field. As most men were stationed in the garrisons.⁵² The new style of fortress design may have been a factor in military growth, however, it was not the only one.⁵³

⁴⁷ Ibid.96,97

⁴⁸ Ibid.102

⁴⁹ John A. Lynn, "The Trace Italienne and the Growth of Armies: The French Case," *ibid.* 171

⁵⁰ Ibid.177-178

⁵¹ Ibid.180

⁵² Ibid., 184.

⁵³ Ibid., 188-89.

Lynn suggests that the correlation between fortifications and the size of armies was related to the increased wealth and population of Europe during the time.⁵⁴

Clifford J. Rogers brings a different perspective to the military revolution debate. He writes that there was not just one military revolution, but four. He explains these revolutions with the theory of “punctuated equilibrium evolution.” He explains it as follows, every revolution creates a sudden advancement, which continues for a time before being cut short by another revolution that balance the previous one. In his article, he talks about four revolution periods. The first is the “Infantry Revolution” in which pikemen ended the superiority of aristocratic cavalry. The second is the “Artillery Revolution” which strengthen the central governments of France and Spain and weakens the strategic defenses. The third is the “Artillery Fortress Revolution” which re-instated the superiority of strategic defenses with *trance italienne*. The last revolution he is talking about is the composition of Roberts’ arguments for the military revolution. Rogers’ point of view on military revolutions place the Western domination from the emergence of cannons and to the infantry revolution of 18th century.⁵⁵

As the military revolution debate has began developed, the Ottoman Empire has also been involved in it. The Ottoman Empire’s involvement was generally about its backwardness in adopting new military technologies. Geoffrey Parker argues that volley fire was one of innovation of warfare in the 17th century, and claims that William of Orange was the inventor of this tactic. However, Günhan Börekçi has revealed that volley fire was used in Mohacs by Janissaries, before the time of William Orange.⁵⁶ This finding raise doubts about the Eurocentric point of view of most of the arguments in the military revolution debate. Geoffrey Parker acknowledges this finding in the preface of his book “*The Military Revolution*”. However, he still insists

⁵⁴ Ibid., 186.

⁵⁵ Clifford J. Rogers, "The Military Revolutions of the Hundred Years War," *ibid.*, 56-76.

⁵⁶ Günhan Börekçi, "A Contribution to the Military Revolution Debate: The Janissaries Use of Volley Fire During the Long Ottoman-Habsburg War of 1593-1606 and the Problems of Origins," *Acta Orientalia Academiae Scientiarum Hungaricae* 59, no. 4 (2006).

that the Ottomans copied that tactic from the Europeans, and denies that this tactic was invented by the Ottomans.⁵⁷

According to Jozsef Kelenik, the importance of Hungarian lands to the innovations of the Military Revolution is not confined to volley fire. In fact, Kelenik claims that Hungary was the birthplace of the military revolution. He says that Geoffrey Parker's most important sign of the military revolution, the *trace italiennes*, were already constructed in the Hungarian frontier by the Habsburgs and soldiers from the Low Countries who had experience with small handguns stationed in that frontier. He suggests that two thirds of the foreign troops in Hungary were armed with small guns, all cavalry units used small handguns, and the Hungarian troops were also armed with firearms. He connects these facts to his argument by saying that the innovations for the military revolution first developed in Hungary, because the theatre of war in Hungary required those improvements. There was a local demand for these innovations, and the experiences of foreign and Hungarian troops in war led to these developments of the military revolution.⁵⁸ Geza Palffy supports the arguments of Kelenik and says that the first distinctive signs of the military revolution could be found in Hungary by the 1570s. He argues that there were transformations in technology and administration, and that the size of the armies on the Habsburg-Ottoman frontier grew.⁵⁹ Palffy explains the partial success of the Ottomans in the Long War through their well-organized logistics, the population difference with the Habsburgs, access to natural resources, the size of the empire and finances. These elements were enough to easily maintain an experienced standing army and fortress

⁵⁷ Geoffrey Parker, *Askeri Devrim : Batı'nın Yükselişinde Askeri Yenilikler, 1500-1800*(Istanbul: Küre, 2006), Preface.

⁵⁸ Jozsef Kelenik, "The Military Revolution in Hungary," in *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* ed. Pál Fodor and Géza Dávid(Leiden: Brill, 2000), 118-57.

⁵⁹ Geza Palffy, "The Habsburg Defense System in Hungary against the Ottomans in the Sixteenth Century: A Catalyst of Military Development in Central Europe," in *Warfare in Eastern Europe, 1500-1800*, ed. Brian J. Davies(Leiden: 2012), 51-53.

network. Even though the Europeans had more efficient guns, modern fortifications, and better maneuvers, these were not enough for the period.⁶⁰

In the military revolution debate, several arguments had been made about the military technology and production of the Ottoman Empire. Keith Krause divides early modern states' military production into three tiers. According to Krause, in the late 16th and the 17th centuries, the lead role in innovation and the production of arms belonged to England and the Low Countries, and later Sweden joined. They constituted the first tier of military production.⁶¹ In the second tier, countries mostly bought arms from the first-tier countries in the period of 1450-1650. These countries created their own industry by recruiting foreign military specialists. France, Spain, Russia and the Ottoman Empire were in this tier, however later the Ottoman Empire dropped to the third tier while the others succeeded in creating their own indigenous military industry.⁶² Krause, evaluates the third tier producers as peripheral. Countries that were located in this tier were consumers that imported technology and arms. These countries did not have the necessary skills to produce the weapons they imported. According to Krause, the Ottoman Empire belonged to this tier.⁶³ Geoffrey Parker supports this idea and writes that the Ottoman Empire's industry was very good at copying, but insufficient in innovation. Also, he claims that the Ottoman Empire was insufficient in metallurgy and that its iron and steel quality and labor were no match for the European ones.⁶⁴

Gabor Agoston has several responses for those claims. First, according to Agoston, the Ottomans had enough resources, fiscal power and organization for military production until the 18th century. Also, due to the lack of the development of a new weapon technology until the end of the 18th century, the Ottomans' logistical

⁶⁰ Ibid., 60.

⁶¹ Keith Krause, *Arms and the State : Patterns of Military Production and Trade*, Cambridge Studies in International Relations (Cambridge; New York: Cambridge University Press, 1992).39.

⁶² Ibid.44.

⁶³ Ibid. 48-51

⁶⁴ Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, 125-28.

power and transfer of European military technology were enough to balance its power with Europe until the end of the 17th century.⁶⁵ Then, he examines Krause's argument and says that even the first-tier countries were dependent on foreign expertise for a long or short time at the beginning of the early phase of the foundation of the military industry. Then, he asserts that the Ottomans also took foreign expertise from those who led the development of military technology. Therefore, the Ottomans were part of the transformation of military technology.⁶⁶ Parker's argument about the metallurgical inferiority of the Ottomans' weapons and cannons also may not reflect reality. Gabor Agoston claims that the Ottomans had the necessary resources to produce weapons and cannons in the empire. The main resource that is necessary for the production of weapons, cannons, and ammunition is iron, and most of the requirement could be met within the borders of the empire. However, tin was imported and from the middle of the 17th century, most of the ingredients of the weapons and ammunitions began to be imported from Europe.⁶⁷ Nevertheless, the casting technique of the Ottoman Empire did not lag behind that of the Europeans until the end of the 17th century.⁶⁸ Also, resources for the production of gunpowder were sufficient in the Ottoman Empire and gunpowder production was enough to supply troops. However, the production of gunpowder was spread throughout the empire, therefore there was no uniformity in its production. Despite this, the ingredients and formula of Ottoman gunpowder was similar to that were produced in Europe. The sufficiency of gunpowder production ceased in the middle of the 18th century and the empire became strongly dependent on European gunpowder.⁶⁹

Moreover, Jonathan Grant claims that, the Ottoman did not use small or medium cannons in the battlefield unlike their contemporaries. He says that the Ottomans' habit of using big, heavy guns in the battlefield continued into the 17th

⁶⁵ Ágoston, *Barut, Top Ve Tüfek : Osmanlı İmparatorluğu'nun Askeri Gücü Ve Silah Sanayisi*. 28-31.

⁶⁶ Ibid. 75-76.

⁶⁷ Ibid. 230-232.

⁶⁸ Ibid. 242-243.

⁶⁹ Ibid. 174-211.

century while Europeans were using field artillery. Therefore, while big, heavy cannons became a disadvantage for the Ottomans in the battlefield, Europeans enjoyed the field artillery's rapid fire power.⁷⁰ Although, Grant links this claim to the Ottoman Russian rivalry by saying that the Ottomans did not need to use light artillery and small cannons until the end of 18th century because their rival in land was not using them either, this does not seem right. According to Gabor Agoston, the Ottomans used small and middle size cannons. There were big cannons that the Ottoman Empire used in the campaigns such as *balyemez* and *şayka*, however they were not always supposed to be big cannons, but came in different sizes. Also, there was light artillery in the Ottoman inventory in the 16th and 17th centuries, such as *kolunburna* and *darbzen*.⁷¹ As a result of the existence of these cannons, it can be said that the Ottomans used light artillery before the end of the 18th century, and therefore that developments in the military technology of the Ottoman Empire was not related to its enemy's position.

The years that are discussed in this thesis were very troublesome for the Ottoman Empire. Multi-front wars against the Habsburgs, and Safavids and the *Celali* Rebellions put the Ottomans in a position of distress. This high frequency of military activities pushed the Ottomans to recruit more soldiers than ever before. However, the rise in the size of the army has been linked to several reasons by Ottoman historians. Halil İnalcık claims that the Ottoman state had to increase the number of gun-bearing infantry during the Long War by hiring *sekban* and *sarıcas* because the number of janissaries who could use guns was not sufficient, and the firepower of the Habsburg army was well beyond the Ottoman capacity. To equalize the firepower, the Ottoman had to hire even more men with guns. Thus, İnalcık links the rise in the size of the Ottoman army to an external factor.⁷²

⁷⁰ Jonathan Grant, "Rethinking the Ottoman "Decline": Military Technology Diffusion in the Ottoman Empire, Fifteenth to Eighteenth Centuries," *Journal of World History* 10, no. 1 (1999). 191-192.

⁷¹ Agoston, *Barut, Top Ve Tüfek : Osmanlı İmparatorluğu'nun Askeri Gücü Ve Silah Sanayisi*. 107-118.

⁷² Halil İnalcık, "The Socio-Political Effects of the Diffusion of Fire-Arms in the Middle East," in *War, Technology and Society in the Middle East*, ed. V.J. Parry and M.E. Yapp (London: Oxford University Press, 1975), 199.

As another point of view on the matter, Gabor Agoston asserts that the increase in military power was caused by internal factors which were socioeconomic changes and the military expansion of the Ottoman Empire. Dynastic struggles and the *Celali* Rebellions contributed to the increase in military power. Newly conquered lands and fortresses led to an increase in the size of the garrisons. Also, multi-front wars increased the demand for more men in the army. Agoston also adds that the modernization of fortresses on the Hungarian frontier by the Habsburgs required bigger armies to besiege⁷³

⁷³ Ágoston, "Firearms and Military Adaptation: The Ottomans and the European Military Revolution, 1450–1800."

CHAPTER 2

FORTRESS AND GARRISON

2.1. Fortress Network and Architecture

During the early modern period, the borders of the states were not as precise as we have today. Borders between states or empires were ambiguous. Ownership of territory and dominance of it were determined by the ownership of fortifications which controlled the nearby area. The political entity that controls the fortifications in the one region could claim the ownership of that area.⁷⁴ The fortress did not have only the responsibility to be the focal point in the defense of the region, but also it had their own value in the fortress network system.⁷⁵ This situation was valid for the Hungarian frontier and as well as for the Eastern frontier of the Ottoman Empire.

The Ottomans had two options for the fortresses they conquered. The first option was to demolish the unnecessary fortresses after the conquest. The second option was keeping the the fortresses and putting a garrison in them. The destruction of unnecessary fortresses was an indication of the purpose to reduce the chance of revolt of local lords and preventing them using fortifications as bases of their revolts.⁷⁶

⁷⁴ Palmira Brummett, "The Fortress: Defining and Mapping the Ottoman Frontier in the Sixteenth and Seventeenth Centuries," in *The Frontiers of the Ottoman World*, ed. A. Peacock(Oxford University Press, 2009).

⁷⁵ Özgüven, *Osmanlı Macaristanı'nda Kentler,Kaleler*.26,27.

⁷⁶ Halil İnalçık, "Ottoman Methods of Conquest," *Studia Islamica*, no. 2 (1954): 107-08.

The fortresses were the implication of central authority in the region. Moreover, they were a threat to the enemy and a guarantee of security of its local population.⁷⁷

The topography was one of the main elements which determined the locations of fortresses in the frontiers. While the Caucasus and Eastern Anatolia were mountainous in general, the Hungarian frontier had swamps, marshes, and large forestry areas. These topographic differences determined the spread of the fortress network in the regions and the composition of garrisons. Also, the road network was an element that embodies the pattern of fortresses along the Ottoman Empire.⁷⁸ The fortresses had strong links with each other, and these links made it easier to defend and support them. However, this network system had an inherent weakness. When one strong fortress in the network falls into the hand of besieging army, it might be easier to take the nearby small fortresses. Grand vizier Köprülü's plan to capture approximately thirty *palankas*(small fortress) easily after the conquest of Uyvar is an example of this situation.⁷⁹ Hence, the protection of every element of a fortress network was important for the safety of the whole system.

The fortress networks of Ottomans in Hungary and in the East were embodied by several variations, and these variations are discussed in the later sections of this chapter. Also, the existence of the *trace italienne* design and other fortress designs and their general features are examined for Hungarian and Eastern frontiers.

2.1.1. The Fortress Architecture

The fortresses remained as an important element in the warfare until the 19th century. During its journey to the 19th century, the design of fortresses has experienced fundamental changes in several periods in history due to everchanging military

⁷⁷ Antonis Anastasopoulos, "Imperial Geography and War: The Ottoman Case," in *Imperial Geographies in Byzantine and Ottoman Space*, ed. Yota Batsaki & Dimiter Angelov Sahar Bazzaz(Washington, DC: Center for Hellenic Studies: Harvard University, 2013), 115-16.

⁷⁸ Özgüven, *Osmanlı Macaristanı'nda Kentler,Kaleler*.

⁷⁹ Ibid., 13-14.

technology and varying necessities. A common medieval fortification had deep ditches filled with water in front of the high walls and the circled towers. The walls of the medieval castle was high as a precaution to laddering of the attackers. After the spread of artillery, its destructive effects on the walls of medieval castles became explicit. Thus a need for a change in the design of medieval castles was born. The destructive results of artillery might be reduced by the defenders by thickening the walls. The reinforcement of walls with earthwork was important. The earthwork had to support the wall against the shots of artillery. It was not the sole effect of artillery that changed the design of fortifications. When defenders realized that they could use artillery for defensive purposes, new changes in the design of fortifications have been made. The new bastions with embrasures for the artillery shots were added, however, at the very beginning, only a bunch of artillery could be placed in bastions. Later, angled bastions allowed the installation of more artillery. Although it is possible to encounter the first -but not broad- examples of the *trace italiennes* (bastion fort or star fort) around the 1450s, it began to fully apply to the architecture of fortresses after the campaign of the French king to Italy in 1494. The fast and effective attack of the French army with the artillery caused the fall of most of the Italian states. Afterward of the campaign, Italian architects began to apply the new design in fortresses. They began to design fortifications as pentagonal shape when it is possible. In order to reduce the blind spots in the regular bastions and to increase the effectiveness of the defensive artillery, they build angled bastions with ravelins to the corners of fortifications. Two opposing bastions left no blind spots for the artillery and the ravelins provided a space to hit the approaching attackers.⁸⁰

While new pentagonal and hexagonal design of the *trace italiennes* became more well-known in the Europe after 1494, Yedikule fortress in İstanbul was built with the pentagonal shape in order to keep the treasury inside of it in 1457.⁸¹ Another fortress, Kilid-ül Bahr in the shores of Dardanelles, was defined as the first materialization of military ideas of early Renaissance by Burcu Özgüven. She

⁸⁰ For the changes in design of fortresses see the classical work of Christopher Duffy and J.R. Hale: Christopher Duffy, *Siege Warfare: The Fortress in the Early Modern World 1494-1660*(Routledge, 1996).; and J.R. Hale, *Renaissance War Studies*(Bloomsbury Publishing, 1983).

⁸¹ Özgüven, "Early Modern Military Architecture in the Ottoman Empire," 743-44.

emphasis its offensive character and claims that Kilid-ül Bahr was an example of progress from tabor to the installment of cannons to fortifications which represents an offensive feature that adopted in general fortress design.⁸² Rumeli Hisar which was built in 1452, had angled bastion in its south-eastern side. Hisar was equipped with large cannons. It was the earliest use of cannons in the Ottoman fortifications for both offensive and defensive purposes.⁸³

The Ottomans encountered with the *trace italienne* style fortresses in Hungary. Gabor Agoston states Habsburgs renovated the fortifications of Györ, Komarom, Érsekújvár (Uyvar), Nagyvarad, Egri, Temesvar, Szigetvar and Szatmar before the Long War by hiring Italian architects and engineers.⁸⁴ The fortress of Kanije had a pentagonal shape with angled bastions in every corner which were designed by Italian architects.⁸⁵ Egri was also designed by Italian architects with angled bastions.⁸⁶ Uyvar was renovated in 1605 by Habsburgs based on a hexagonal architectural plan with angled bastions in every corner which gives a shape of a star to Uyvar fortress.⁸⁷ Györ(Yanık) was a short-lived acquisition of Ottomans in Hungary with the *trace italienne* design . In the chronicle of Mustafa Selaniki, commander-in-chief Sinan Pasha who conquered the Györ from Habsburgs defines the fortress as something he had never seen before in the lands of Ottomans. Also, he states that Ottomans never besieged a fortress like that before.⁸⁸ It was not the first encounter of the Ottoman army with the *trace italienne* fortresses. Therefore, these statements of Sinan Pasha might indicate a sign of exaggeration which was done with the intention of making a

⁸² Ibid., 745-47.

⁸³ Ibid., 741-42.

⁸⁴ Ágoston, "Empires and Warfare in East-Central Europe, 1550–1750: The Ottoman–Habsburg Rivalry and Military Transformation.," 19; "Habsburgs and Ottomans: Defense, Military Change and Shifts in Power," 132.

⁸⁵ Özgüven, *Osmanlı Macaristanı'nda Kentler,Kaleler*, 55-56.

⁸⁶ Ibid., 150.

⁸⁷ Ibid., 143.

⁸⁸ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu,1999), I, 396.

demonstration of his leadership and military skills. A very similar description was also made for the fortress of Egri. Its strength and greatness were praised.⁸⁹ These statements were not the only ones. Similar statements have come after the acquisition of Uyvar. These kind of statements were being told either by commanders or by the men under their patronage to praise the success of commanders.⁹⁰

When the conquests of fortresses with the *trace italienne* style such as Egri, Kanizsa, Győr, and Uyvar by Ottomans are considered, it can be said that Ottomans could not be unaware of the existence of this new architectural design. Although, Ottomans did not choose to build their fortresses as the *trace italienne* style in Hungary or in general for the period that was discussed in this thesis. However, this should not be interpreted as a sign of a lack of knowledge of this architectural design among the Ottomans. The Ottomans hired an Italian architecture to renovate Buda in 1541 and fortress was designed like the ones in Italy.⁹¹ Therefore, lack of Ottoman made *trace italienne* style fortresses in the Ottoman Hungary or in the Eastern frontiers could be a result of preference.

Ottomans conquered *trace italienne* design fortress of Egri in 19 days, Kanije in 44 days, and Yanık in 59 days. The long duration of sieges of the last two was due to an army that came for the help of these fortresses.⁹² Even though a helping army had arrived in these situations, the result has not changed, but it delayed the conquering of fortresses.

Fortresses in the East generally had rectangular-shaped architectural plans in the 16th and the 17th centuries. The fortress of Kars was renovated in 1579. It had a rectangular shape and five walls that protect the inner castle. The fortress of Ardahan

⁸⁹ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), II, 644-645.

⁹⁰ Gezer, "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)," 106-07.

⁹¹ Linda T. Darling, "Nasihatnameler, İcmal Defterleri, and the Timar-Holding Ottoman Elite in the Late Sixteenth Century," *Osmanlı Araştırmaları/ The Journal of Ottoman Studies* XI, no. III (2014).211

⁹² Veysel Göger, "16.Yüzyıl Osmanlı Kale Kuşatmaları(Strateji,Taktik,Kuşatma Aşamaları Ve Teknolojisi" (Marmara Üniversitesi, 2014), 70-71.

had a rectangular architectural plan with many polygonal towers. The bailey of Erzurum fortress was made based on the features of the topography of the region, and its citadel had a rectangular plan.⁹³ Fortress of Erciş near Van had a rectangular shape and a ditch in front of the wall.⁹⁴

The fortress of Erivan was reinforced in 1583, and its wall was extended to 40 *zirā*⁹⁵ long. After the Safavids reconquered Erivan, they extended the length of the wall to 50 *zirā* and its width to 20 *zirā* long. However, Safavids did not find these alterations good enough. Therefore, they built a *palanka* in the east of the fortress of Revan. They also added another small fort to Revan fortress and equipped it with several hundred man and many artilleries.⁹⁶ Süleyman Polat states that even with alterations on the wall of Erivan fortress, it was not seen as durable against artillery fire as it was said by some travelers such as Evliya Çelebi and Jean Baptiste Tavernier. Therefore, a small fort in the northern side of the fortress might be built to support artillery fire support.⁹⁷

Consequently, it is not possible to encounter a fortress that had a design similar to the *trace italienne* in the East. The Ottomans did not feel the necessity to apply the new style in the East, which they were familiar from Hungary. This might be reasonable when lack of the *trace italienne* fortresses in the Safavids side is considered. Jonathan Grants' argument about Ottomans, which should be considered as a regional power that reorganizes themselves based on their rivals could be applied to this situation. Their rival was Safavids in East, Russia in the North, and Habsburgs

⁹³ Ali Boran, "Türk Sanatında Kale Mimarisi," in *Türkler VII*, ed. Hasan Celal Güzel; Kemal Çiçek; Salim Koca(Ankara: Yeni Türkiye Yayınları, 2002).881

⁹⁴ Tom Sinclair, "Administration and Fortification in the Van Region under Ottoman Rule in the Sixteenth Century," in *The Frontiers of the Ottoman World*, ed. A. C. S. Peacock(Oxford ;New York: Oxford University Press, 2009), 217.

⁹⁵ *Zirā* was a unit of length that was used in Ottoman Empire. Although it had several different length measurements based on the field it was used, in the 16th century architectural *zirā* was 73,3 cm long; Erkal, Mehmet. "Arşın." In *TDV İslâm Ansiklopedisi*, İstanbul:(TDV İslam Araştırmaları Merkezi,1991), accessed May 07,2019, <https://islamansiklopedisi.org.tr/arsin>

⁹⁶ Süleyman Polat, *IV. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*(Ankara: ATASE, 2015), 394.

⁹⁷ *Ibid.*, 395.

in the West, for the 17th and the 18th centuries.⁹⁸ Therefore, the design of fortresses in the East may be embodied according to the rival of the Ottomans.

It has been argued that fundamental changes in the architecture of fortresses in the Ottoman Empire were done at the beginning of the 18th century.⁹⁹ It is not possible to say that the angled bastions were a general feature of Ottoman fortifications before the 18th century. In the Western frontier of the Empire, renovation of the fortress of Belgrad in 1690 marked a turning point in the Ottoman military architecture. The building of separate bastions from the wall of fortress reinforced the defense of the fortress.¹⁰⁰ This new design of fortress was based on plans of Sebastian Le Prestre de Vauban. His system was based on separate bastions that establish another defense line in front of the wall of the fortress.¹⁰¹ This new fortress design was learned from the renovation of Habsburgs in the fortress of Belgrad. Later this style was adopted by Ottomans, and Italian architecture of Belgrad fortress was recruited.¹⁰² Fortress of Özi was also renovated based on Vauban's design in 1767.¹⁰³ In the Eastern frontier, the first example of new fortress design, not the Vauban's design, was built in Kars. The fortress of Kars was reinforced with earthworks and bastions around 1720s-1730s.¹⁰⁴ In the 18th century, the fort of Sohum which was a frontier fort in Caucasia and the

⁹⁸ Jonathan Grant, "Rethinking the Ottoman "Decline": Military Technology Diffusion in the Ottoman Empire, Fifteenth to Eighteenth Centuries," *Journal of World History* 10(1999): 179-201.

⁹⁹ Osman Ülkü, "Osmanlı İmparatorluğu'nda Savunma Sistemi Olarak Tabya Mimarisi," *Atatürk Üniversitesi İlahiyat Fakültesi Dergisi*, no. 27 (2007). 248

¹⁰⁰ Gezer, "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)," 116.

¹⁰¹ J.D.G.G. Lepage, *Vauban and the French Military under Louis XIV: An Illustrated History of Fortifications and Strategies*(McFarland, Incorporated, Publishers, 2009). As quoted in Ömer Gezer, "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)" (Unpublished Ph.D. Thesis, 2016), 117.

¹⁰² Gezer, "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)," 118.

¹⁰³ Ibid., 119-20.

¹⁰⁴ Ülkü, "Osmanlı İmparatorluğu'nda Savunma Sistemi Olarak Tabya Mimarisi."257

Black Sea coast against Russia, was reinforced. A new wall, four *zirā* high and ten *zirā* width, together with ditches and bastions were built.¹⁰⁵

Furthermore, the fortress of Faş, which was located close to Batum, was renovated in 1724. A new wall, 12 *zirā* width and four *zirā* high, together with the ditches, and the bastions were built.¹⁰⁶ In the 19th century, bastions began to build as separate buildings from the fortresses. They were started to build around the towns or strategically important places.¹⁰⁷ Osman Ülkü says that some geographical factors affected the type of bastions of Ottomans. For instance, there were different types of bastions in Erzurum and in Thrace.¹⁰⁸ Even though, this is a statement that was made for a later period of the Ottoman fortresses, these geographical differences must always be a variable for the frontiers. The flatlands of Hungary and the mountainous region of the Eastern Anatolia and Caucasia might have required a different kind of designs in architecture of fortresses.

Besides regular fortresses, there were many small forts in the Hungarian frontier. These were called *palanka* or *parkan*. Burcu Özgüven states that there were three types of small fortresses that Ottomans used. The earliest one is called *havale*. *Havale* is the earliest type of small fortifications that had been used for the protection of siege weapons and soldiers. It could be constructed rapidly during the sieges.¹⁰⁹ The other types of small forts are *palanka* and *parkan*. These were very similar to each other and might be distinguished by the place they were constructed. Özgüven indicates that *parkans* were built along the frontier while *palankas* were generally built on the shores of rivers or on the roads that the army used.¹¹⁰ Size of *palankas* were various. While some of the *palankas* were just palisade-like buildings which were

¹⁰⁵ Fedakar, "Kafkasya'da Osmanlı Tahkîmatı: Sohum Kalesi (1723-1729)."

¹⁰⁶ Mahir Aydın, "Faş Kalesi," *Osmanlı Araştırmaları/ The Journal of Ottoman Studies* VI(1986).

¹⁰⁷ Nusret Çam Osmanlı Tabyaları 343

¹⁰⁸ Ülkü, "Osmanlı İmparatorluğu'nda Savunma Sistemi Olarak Tabya Mimarisi."259

¹⁰⁹ Özgüven, "The Palanka: A Characteristic Building Type of the Ottoman Fortification Network in Hungary," 2.

¹¹⁰ Ibid., 3.

made of timber, the large ones supported with cannons in their timber and earth walls.¹¹¹ The timber and earth were generally the main construction materials of *palankas* which were built in Europe.

The *derbends* which were fortified structures that were constructed on the dangerous passageways to check the safety of roads had a similar purpose, architecture, and plan as *palankas*.¹¹² The *Palankas* have also existed in the Eastern frontier. In his detailed Ph.D. thesis, Rhoads Murphey indicates that there were several *palanka* constructions along the Eastern frontier around the 1630s, and building material of these *palankas* were mud-bricks in general. Murphey gives Marivan *palanka* as an example, which was built against Safavids, but could not be held against the attacks of them.¹¹³ The construction material of *palankas* in the East varied. The first fortress that was built in Faş was made of earth and grass.¹¹⁴ As it is explicit from the examples, construction material of palankas might differ from region to region. This situation was caused due to the limited resources of regions.

2.1.2. The Fortress Network in Hungary

According to Pál Fodor, the Ottoman advancement in the Hungary was triggered by the ambition of Sultan Süleyman I to establish a world empire.¹¹⁵ During the reign of Sultan Süleyman I, the Ottomans had one of the greatest armies of the Europe, and had access to large resources. However, after the unsuccessful campaign

¹¹¹ Nicolle, *Ottoman Fortifications 1300–1710*, 21.

¹¹² Cengiz Orhonlu, *Osmanlı İmparatorluğu'nda Derbend Teşkilâtı*(Eren, 1990), 11.

¹¹³ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 175.

¹¹⁴ Aydın, "Faş Kalesi," 70.

¹¹⁵ Pál Fodor, *The Unbearable Weight of Empire: The Ottomans in Central Europe - the Failed Attempt at Universal Monarchy (1390-1566)*(Budapest: Research Centre for the Humanities, Hungarian Academy of Sciences, 2015), 78.

to Vienna to annex the capital of his greatest enemy in the West was failed, Ottomans had to establish a resource consumer defense line in Hungary.¹¹⁶

In addition to that Burcu Özgüven claims that the Ottoman advance in Hungary was limited by the military obligations. After the direct establishment of the Ottoman rule in Hungary, an attack from Habsburg's side was seen inevitable. Therefore, a defense line had to be established against this imminent attack.¹¹⁷ Also, the continuous raids of Zrinyi pushed Ottomans to conquer the necessary fortresses to secure the Drava and Mur river against him. Hence, the expansion strategies of the Ottomans were embodied with the military obligations.¹¹⁸ Rhoads Murphey indicates a similar situation for Hungary. He says that Ottomans were considering Hungary as a buffer zone against Habsburgs and they took measurements based on this idea.¹¹⁹

Whether it was based on the idea of a global domination idea or military obligations, Ottomans had their own goals and strategies in Hungary. The construction of the new fortresses and the conquest of others from Habsburgs were planned based on a strategy of Ottomans. Conquests were not mindless or random acts of the military. The strategy of Ottomans in Hungary was revised according to new situations appeared in the frontier. The reasons for losing of fortresses were considered and some actions were taken in general to compensate the losses.¹²⁰

As Klára Hegyi stated, the Ottoman Empire had two strategies for defense of the Hungarian Frontier. The first of them was to protect Buda. Ottomans materialized this strategy by establishing a circle of the fortresses which enclosed Buda.¹²¹ The

¹¹⁶ Ibid., 86.

¹¹⁷ Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*, 10-12.

¹¹⁸ Ibid., 12.

¹¹⁹ Murphey, *Ottoman Warfare 1500-1700*, 1.

¹²⁰ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 518.

¹²¹ Klára Hegyi, "The Ottoman Network of Fortresses in Hungary," in *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* ed. Pál Fodor and Géza Dávid (Leiden: Brill, 2000), 166-67.

second strategy was to build a defense system along the Danube.¹²² Ottomans knew the importance of the Danube for their conquests in Hungary. It was especially important for the logistics of the Ottomans in Hungary. Therefore, they planned one of their strategies by considering the important role of Danube.¹²³ Estergon was the strategically important fortress for the defense of Buda. It controlled the waterway and the land route to Buda. Therefore, the Ottomans added new bastions to fortify it. Also, two *parkans*, Tepedelen and Ciğerdelen were built for the protection of Estergon.¹²⁴ Vaç, Vişegrad, Hamzabey Sarayı, and Korkmaz were other strongholds that safeguard Danube and Buda.¹²⁵ The defense line that protects Buda and Danube shores were lengthened from Buda to Belgrad. During the early period of the direct Ottoman rule in Hungary, the conquest of Dregely, Arad, Temesvar together with Kaposvar in 1552, guaranteed a safe zone in both sides of the Danube.¹²⁶

The construction of the fortresses and creation of a new defense line along the Hungarian frontier completed around the 1580s, however, it has not survived long. During the Long War, several fortresses changed hand. Thus, the Ottoman defense line had to change again.¹²⁷

During the Long War, the Ottomans lost some of their strategically important fortresses to the Habsburg forces. However, there were also important additions to the Ottoman defense system. The first significant gain of the Ottomans in the Long War came in 1594, with the conquest of Győr (Yanık). Although, it was a short-lived conquest which was recaptured by Habsburgs in 1598, Yanık was one of the furthest acquisition of the Ottomans in the West. When the conquest of Tata and Samartin in

¹²² Ibid.

¹²³ Gábor Ágoston, "Where Environmental and Frontier Studies Meet: Rivers, Forests, Marshes and Forts Along the Ottoman-Hapsburg Frontier in Hungary," in *The Frontiers of the Ottoman World*, ed. A. Peacock (Oxford University Press, 2009), 58-59.

¹²⁴ Ibid., 68.

¹²⁵ Ibid.

¹²⁶ Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*, 10-12.

¹²⁷ Hegyi, "The Ottoman Network of Fortresses in Hungary," 166-67.

the hinterland of Győr in the same year was considered¹²⁸, it can be said that Ottomans were trying to secure Buda and trying to hold an important stepping stone to Vienna. Komarom was also besieged by Ottomans after Győr, in order to secure the road between Buda and Győr; however, Ottomans were not successful in this siege.¹²⁹

In 1596, Sultan Murad III besieged the new-style fortress of Egri. Although the first goal of the campaign was planned as either Komarom or Vienna, the army changed its way to another strategic fortress, to the fortress of Egri.¹³⁰ One reason behind this choice was fall of important fortresses in the northern defense line of the Ottomans to Habsburgs. Ottomans lost the important *livas* of Novigrad, Sečen and Filek and most of their fortresses in the north of fortress of Estergon to Habsburgs. In addition to these, the Ottomans lost Estergon, a very important fortress for the northern defense line, to Habsburgs in 1595. Therefore, the Ottomans had to find a way to secure the northern side of its defense line in Hungary.¹³¹ Another reason could be the proximity of Egri to the important mining areas. Hence, one of the aims of the Egri campaign might have been capturing of important natural resources.¹³² As a result, in 1596 the Ottoman army marched onto Egri. After the conquest of Egri, it became a new *vilayet* of Ottomans in Hungary.

In addition to Egri which was an essential acquisition for the defense line in the Northeast of Buda, fortresses of Kanije was another important contribution to the defense line in the Southwest of Buda. It provided a safe zone around the lake of Balaton and shores of Drava and Mur.¹³³ Kanije was conquered in 1600. It was in the Southwest of Balaton lake. It was a new-style fortress with pentagonal design and with

¹²⁸ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 395.

¹²⁹ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 405, 414.

¹³⁰ Feridun .M. Emecen, *Osmanlı Klâsik Çağında Savaş* (İstanbul: Timaş, 2010), 225--27.

¹³¹ Hegyi, "The Ottoman Network of Fortresses in Hungary," 169..

¹³² Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*, 149.

¹³³ Ibid., 10-12.

strategic importance. It was in a swampy area that encircled with forest.¹³⁴ Kaposvar and Szigetvar were also sharing the same topographic features of Kanije. Together with these three fortresses, Pec, Simentornya, and Sikloş formed the defense line against the forces of Zrinyi who was an important military figure of the frontier. Kanije and Szigetvar were his hereditary lands. The conquest of Kanije aimed to reduce Zrinyi's destructive actions in the shores of Drava and Mur rivers.¹³⁵ Afterward, Kanije became an *vilayet* just like Egri. Thus, at the end of the Long War, Ottomans had a total of four *vilayets* in Hungary. These were Buda, Egri, Temesvar, and Kanije. Even though Yanık(Győr) became a *vilayet* after its conquest, it could not be a long-termed gain of Ottomans. It was lost to Habsburgs again four years later.

The defense line of the Ottomans in Hungary did not remain the same for a long time. Some fortresses that were lost to Habsburg, such as Hatvan, were retaken by the local Ottoman forces after the Long War.¹³⁶ The siege of Siska by Bosna Beylerbeyi Hasan Pasha and his clashes with the local Habsburg forces which caused the Ottoman campaign to Hungary at the end¹³⁷ and conquest of Hatvan by the local Ottoman forces were one of the few examples of continuous warfare in the frontier. This continuous war in Hungary was also called the *Klein Krieg*, and it started with the death of Suleyman I and continued until the second siege of Vienna.¹³⁸

Even though the clashes were continuing in the frontier all the time, the major changes in the Hungarian frontier came in the 1660s. Varad was taken in 1660, and it became a major contribution to the frontier in Transylvania against the Danubian principalities. In addition to Varad, the *trace italienne* fortress of Uyvar was conquered in 1664. It was another contribution to the fortress network in the north of Buda. Both

¹³⁴ Ibid., 55-59.

¹³⁵ Ibid., 12.

¹³⁶ Hegyi, "The Ottoman Network of Fortresses in Hungary," 171.

¹³⁷ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 319-321.

¹³⁸ Murphey, *Ottoman Warfare 1500-1700*, 1.

of them became centers of an *vilayet* which made the number of *vilayets* in Hungary six at total.

The Ottomans had a total of 130 big and small fortresses and palankas in Buda vilayet at its largest times. As a second biggest *vilayet* of Ottomans in Hungary, Temeşvar had 39 fortresses and palankas. The temporary acquisition of the Ottomans, Yanık(Györ) had only two known fortresses in the *vilayet*. Just like Yanık, Uyvar had only two known fortresses. Kanije had 14 fortresses, while Egri had eight fortresses, and Varad had five. The total number of fortresses and *palankas* in Ottoman Hungary was 146.¹³⁹

2.1.3. The Fortress Network in the East

Bekir Kütükoğlu divides the Eastern frontier into three parts. The first part is Erzurum-Kars sub-frontier which faces Caucasia. The second part is Van sub-frontier which faces Tabriz region and the last part is Shahrizor-Baghdad which is located against Nihavend and Pelangan.¹⁴⁰ The fortresses of Kars, Erzurum, Van, and Baghdad were the major strongholds of the Ottoman Empire in the Eastern frontier against the Safavids after 1555. The Ottomans took the important regions and the fortresses during the 1578-1590 war. However, most of the acquisition of the Ottomans which were gained during the war were lost to Safavids again between 1603-1607.

The Ottoman had several goals and targets in the East just like in Hungary. One of them was spreading its sphere of influence to Azerbaijan region and beyond of the Caspian Sea.¹⁴¹ Moreover, attempts for the self-image construction of sultans as Murad III who tried to present himself as the unifier of Islam, and claimant of the lands of

¹³⁹ Hegyi, *The Ottoman Military Organization in Hungary*.

¹⁴⁰ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 223.

¹⁴¹ Murphey, *Ottoman Warfare 1500-1700*, 3-4.

Persia may have affected the Ottoman goals and strategies in the East.¹⁴² When it is considered, it is seen that Ottomans' rivals in the East had similar claims similar to Ottoman sultans, therefore a conflict over this situation might be inevitable.¹⁴³ Also, as Rhoads Murphey asserts Ottomans' neighbor in the East, Safavids, were ideological opponents of Ottomans. Therefore, Ottomans conducted a strategy on Safavids to remove their political entity.¹⁴⁴ However, they were not successful. As Rhoads Murphey states, the Ottomans discovered their limits in the Eastern frontier. The terrain was challenging. The targets were remote. The climate was harsh and fighting with the people from the same religion was confusing.¹⁴⁵ Another motivation of the Ottoman advance in the East might be commercial ambitions. The campaigns in the Indian Ocean against Portuguese in order to secure the spice trade, trying to open Volga canal to reach Central Asian traders and keeping the road open for Muslim pilgrims might reveals this ambition.¹⁴⁶

The Ottomans acted based on different goals and strategies for the every campaign year against Safavids for the 1578-1590 war. While a campaign was organizing for 996/1587-1588, it was ordered that any construction and repair activities were not allowed during this campaign, and the main target should be the lands of the enemy. The main target was determined as Gence for this campaign. However, while the army was on the road, another decree arrived to the *serdar* which orders to change the route of the army to Kazvin. This decree was not followed by commanders, and the campaign was conducted as it was planned before.¹⁴⁷ It is possible to assume that in previous years the construction and repair of fortresses were

¹⁴² Özgen Felek, "Dreams and Visions in Islamic Societies," in *(Re)Creating Image and Identity: Dreams and Visions as a Means of Murad III's Self-Fashioning*, ed. Özgen Felek and Alexander D. Knysh (Albany: State University of New York Press, 2012), 265-66.

¹⁴³ Ibid., 266.

¹⁴⁴ Murphey, *Ottoman Warfare 1500-1700*, 3-4.

¹⁴⁵ Ibid.

¹⁴⁶ Halil İnalcık, *Osmanlı İmparatorluğu'nun Ekonomik Ve Sosyal Tarihi ,1300-1600*, vol. I (İstanbul: İş Bankası Kültür Yayınları, 2017), 400-01.

¹⁴⁷ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 199, 203.

planned and done by Ottomans by looking the decree that restricts the repair and construction activities in fortresses.

The target of Ottomans was Caucasian lands during the campaign years of 1578-1590. The Ottomans probably evaluated the internal disorder in the Safavid dynasty as an opportunity to organize a campaign against Safavids.¹⁴⁸ They conquered the important strongholds in the Caucasia throughout the war. During the years between 1578-1590, several intensive constructions and repair activities were done in the fortresses. In 1578, the residents of Erzurum demanded a new wall around the houses that remained in the periphery of the fortress. According to Selaniki, the residents of Erzurum were responsible for the finance of building the new walls. The constructions began with the purpose of building 10.000 *zirā* length wall with stones and lime.¹⁴⁹ The cost of the new additions of the fortress of Erzurum was around 1.000.000 *akçes*.¹⁵⁰ This wall might be the third wall of Erzurum for 1578, and it was shorter than the other two walls. The new wall was supported with the earth. In addition to the new wall, the bastions were also added. These were the first bastions of Erzurum.¹⁵¹

While the military operations were on going in Caucasia, Kars as another important fortress along the Safavid frontier, was reinforced. The construction activities in Kars started in 1579-80 and ended in 1580-81.¹⁵² These new precautions in Erzurum and Kars stress their strategical importance in the frontier against the Safavids. As it can be seen in Kars and Erzurum examples, Ottomans try to refortify their important strongholds in the frontier region during the first years of 1578-1590 war to secure their positions on the border.

¹⁴⁸Kütükoğlu, *Osmanlı-Iran Siyâsi Münasebetleri (1578-1612)*.

¹⁴⁹ Mustafa Selânikî Efendi, *Tarih-I Selânikî*, ed. Mehmet Ipsirli(Ankara: Türk Tarih Kurumu, 1999), 117.

¹⁵⁰ Murphey, *Ottoman Warfare 1500-1700*, 17.

¹⁵¹ Murat Küçükuşurlu, "Erzurum Kalesi Ve Tabyaları Hakkında Bazı Tespitler," *ETÜ Sosyal Bilimler Enstitüsü Dergisi(ETÜSBED)* II, no. 3 (2017): 72.

¹⁵² Mustafa Selânikî Efendi, *Tarih-I Selânikî*, ed. Mehmet Ipsirli(Ankara: Türk Tarih Kurumu, 1999), 123.

At the very beginning of the war, the fortresses of Vale, Ahıska, Tüyük, Çıldır, and Ahılkelek were taken before the Ottoman and the Safavid armies met in the Çıldır region.¹⁵³ These conquests were made before the battle, and they were done to secure the way of the army to Tiflis. However, two armies were met around Çıldır. The battle was concluded in favor of the Ottomans. Then, the army moved toward Tiflis. David, the ruler of Tiflis, had left the fortress of Tiflis before the arrival of the Ottoman army. Thus, Tiflis, an important fortress in Georgia was taken without any opposition in 1578. The commander-in-chief Lala Mustafa Paşa continued his march into Shirvan region. In a close place to Tiflis, the Ottoman army met with the Safavid army, and the battle was won by Ottomans with the arrival of fresh forces of Crimean Tatars.¹⁵⁴ Then, the army continued his path and took Şemahı(Shemakhe). However, due to harsh weather conditions and capture of Crimean Han by Safavids, the army changed its way to Derbend in order to spend the winter in a secure position. However, most of the soldiers of Özdemiroğlu Osman Pasha run away. Due to the need of more men, 100 *gönüllüs* were enlisted.¹⁵⁵ In 1583 Erivan fell into the hands of Ottomans without any opposition from the Safavid governor. After it was taken, fortress was reinforced by Ottomans.¹⁵⁶ The total length of walls became 40 *zirā* (30,32 m) after the construction of new walls. Later fortress of Erivan was retaken by the Safavids. They extended the length of the wall to 50 *zirā* and width of the wall to 20 *zirā*.¹⁵⁷

In 1585, Ottomans made another significant conquest in the Safavid territory. Tabriz fell into the hands of Ottomans. Immediately after the siege, Özdemiroğlu Osman Pasha gave a start to construction activities. Together with the new citadel, several towers were added to the fortress of Tabriz.¹⁵⁸ These intensive construction

¹⁵³ M. Fahrettin Kırzioğlu, *Osmanlılar'ın Kafkas-Ellesi'ni Fethi*(Ankara: TTK, 1998), 277-78.

¹⁵⁴ Mustafa Selânikî Efendi, *Tarih-i Selânikî*, ed. Mehmet Ipsirli(Ankara: Türk Tarih Kurumu, 1999), 119-21.

¹⁵⁵ Ibid., 122-26.

¹⁵⁶ Rahimizade İbrahim Çavuş, *Kitab-ı Gencine-i Feth-i Gence* (Osmanlı - İran Savaşları ve Gence'nin Fethi 1583-1590), ed. Günay Karaağaç,Adnan Eskikurt (İstanbul:Çamlıca Yayınevi,2010), 18-20.

¹⁵⁷ Polat, IV. *Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*.

¹⁵⁸ Mustafa Selânikî Efendi, *Tarih-i Selânikî*, ed. Mehmet Ipsirli(Ankara: Türk Tarih Kurumu, 1999),162.

activities indicate that the Ottomans considered Tabriz as an essential fortress in their newly drawn Safavids frontier. These improvements in the fortress of Tabriz proved its usefulness during the unsuccessful siege of Safavids in Tebriz in the same year of building of reinforcements. However, fortress of Erivan required even more repair after the siege.

In 1586-1587, the region of Georgia witnessed intensive construction works. Selaniki emphasizes these constructions and says that with the reinforcement and construction of fortresses of Gori, Tomanis, Lori, and Ahıska a strong network of fortresses was established along the frontier.¹⁵⁹ Last important conquest of Ottomans during the war came in 1587-88. Gence was taken without any opposition. New walls and towers were built, and ditches were dug around them. This newly built fortification stood against the siege of former Safavid governor of Gence.¹⁶⁰

The Ottomans concluded the war with the conquests of major and strategically important fortresses of Tiflis, Erivan, Tabriz, Şemahı and Gence from Safavids. A consequence of these acquisitions was an uninterrupted connection of the Black Sea and the Caspian Sea together with total control of the Southern Caucasia. However, these regions would not be permanent. The counterattack of Safavids would come in 1603, when the Ottoman Empire was in the war with the Habsburg Empire.

While the Ottomans were busy in Hungary with Habsburgs, the Safavid ruler Shah Abbas attempted to alter the military. New artillery corps and *gulam*(slave) army with guns were established.¹⁶¹ With this altered army, Shah Abbas began his attack from Tebriz, and it was fallen to Safavids in 1603. Van was besieged, but could not be taken.¹⁶² Later, Erivan was conquered by the Safavids in 1604. Gence, Lori, Tiflis, and Tomanis were lost to Safavids in 1606 and Shemakhe in 1607.¹⁶³ Due to Celali

¹⁵⁹ Ibid, 187.

¹⁶⁰ Ibid. 206,223.

¹⁶¹ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*.

¹⁶² Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003), 392-3.

¹⁶³ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 262-67.

rebellions, the Ottomans were in a distressed position and could not respond to these military operations of Shah. Ottomans could only reinforce some of its holdings such as Erivan to Safavid attacks.¹⁶⁴ However, it did not last long either.

In 1610, a campaign over Safavids was organized by Ottomans. However, it did not result as it was expected. The peace was made in 1612 with the treaty of Nasuh Bey. In 1615, a war declared on Safavids again. The fortresses of Revan and Erdebil were besieged by the Ottoman army. However, no significant gains were made. Finally, in 1618, peace was renewed.¹⁶⁵

In 1624, Baghdad was captured by Safavids due to an internal conflict between Bekir Subaşı and *beylerbeyi* of Baghdad. The *beylerbeyi* had tried to reduce the power of Bekir Subaşı, and overthrow him. However his plan did not work, and Bekir Subaşı revolted and demanded help from the Safavids. The Safavids did not miss the chance and sent an army to Baghdad. Even though Bekir Subaşı did not hand the Baghdad before a siege, the besieging Safavid army capture the fortress in 20 days.¹⁶⁶ In 1625, Baghdad was besieged by the Ottomans unsuccessfully. In 1627, the Safavids besieged Ahıska and conquered it.¹⁶⁷ The Ottoman army was on a campaign to the East, therefore they could not help the Ahıska. They were busy with the siege of Erzurum by Abaza Mehmed Pasha who revolted against the Ottoman state. His revolt ended in 1628 with a besieging Ottoman army in front of the walls of Erzurum.¹⁶⁸ In 1630, the Ottomans took Hamedan without a siege, because Safavids had left the fortress before the Ottoman army arrived. Later, Baghdad was besieged by Ottomans but it was not a successful siege.¹⁶⁹ In 1633, Safavids besieged Van. Although this siege was also not successful, the Safavid penetration into inner Ottoman lands continued and then led to

¹⁶⁴ Ibid., 263.

¹⁶⁵ Sadık Müfit Bilge, *Osmanlı Çağı'nda Kafkasya 1454-1829: Tarih, Toplum, Ekonomi*(Kitabevi, 2012).

¹⁶⁶ Polat, IV. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi, 13.

¹⁶⁷ Bilge, *Osmanlı Çağı'nda Kafkasya 1454-1829: Tarih, Toplum, Ekonomi*, 118.

¹⁶⁸ Polat, IV. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi, 16-17.

¹⁶⁹ Ibid., 19.

a Ottoman campaign over Erivan. In 1635, Erivan was taken with the famous campaign of Murad IV, only to be lost to the Safavids again in the next year.¹⁷⁰ In 1638, Baghdad was retaken by Ottomans. The treaty of Kasr-ı Şirin put an end to constant wars between Ottomans and Safavids for a long period and defined a nearly permanent borders to both of the empires for a long time.

Erzurum and Van always were militarily and strategically very important positions during the conflicts between the Ottomans and the Safavids at the end of the 16th century and in the 17th century for the regions of the Eastern Anatolia and the Caucasia. They were the footholds of the Ottomans in these regions.¹⁷¹

In the Erzurum-Caucasia sub-frontier of Ottomans, many new *vilayets* during the 1578-1590 war were established. These new vilayets and the old ones had several fortresses inside their borders, hereby some of them are located and listed. Erzurum was an vilayet since 1535. It had fortresses of Erzurum, Bardız ¹⁷² Meğinkerd, Keçivan, Oltu, Tortum,¹⁷³ Hasankale fortresses in its borders. Another important *vilayet* on the border was Kars. It was not a separate *vilayet* until 1580. It had Kars, Keçivan, Kağızman, Ani and Magazberd fortresses in its *vilayet* borders.¹⁷⁴ Revan was another *vilayet* in the Caucasia, and it was established in 1583. It had Revan, Şüregel, Talin, Akçakale, Sürmeli, Beceni Bozarçay fortresses in its borders.¹⁷⁵ The *vilayet* of Çıldır was established in 1579. It had Çıldır, Vale, Tümüük, Ahıska, Ahılkelek,¹⁷⁶ Azgur, Hortus, Ardahan fortresses. Later, the fortresses of Tomanis, Kutanis, and Gori were

¹⁷⁰ Ibid., 22-23.

¹⁷¹ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri."

¹⁷² Ömer Lütfi Barkan, "H. 974-975 (1567-1568) Mali Yılına Ait Bir Osmanlı Bütçesi," *İstanbul Üniversitesi İktisat Fakültesi Mecmuası* 1-4, no. 19 (1957): 270.

¹⁷³ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 192.

¹⁷⁴ Bilge, *Osmanlı Çağı'nda Kafkasya 1454-1829: Tarih, Toplum, Ekonomi*, 486-87.

¹⁷⁵ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 137.

¹⁷⁶ Kırzioğlu, *Osmanlılar'ın Kafkas-Elleri'ni Fethi*, 106.

added to the list. They also became a separate *vilayet* for a while.¹⁷⁷ Trabzon/Batum *vilayets* had G ny , Batum, Fa , Sohum, So ucak, Gelincik and Anapa fortresses. *Vilayet* of  irvan had fortresses of Ere ,  emah , Demirkap , Kabala, Salyane, and Bak . There were also separate *vilayets* of Lori and Gence with their fortresses.

In Van- Tabriz sub-frontier, only one new *vilayet* has been established during the 1578-1590 war, and this *vilayet* was Tebriz. Tebriz had Khoy, Tebriz, and Hamne¹⁷⁸ fortresses in its *vilayet* borders. *Vilayet* of Van was established in 1548. It had fortresses of Van, Geva , Bitlis,¹⁷⁹Malazgird,¹⁸⁰Bayazid¹⁸¹Adilcevaz, Ahlat, Erci , Amik (Amuk) and with conquests, fortresses of Selmas, Rumi, G gercinlik became the parts of the *vilayet*.¹⁸²

2.2. The Garrisons

Information about the salaried troops in garrisons could be found from the payroll registers. In this section, these payroll registers are used in order to assess the projected force of the salaried troops in garrisons on paper. The size of the local garrisons in the fortresses can be found from payroll registers. However, the salaries of the local forces and the household troops do not exist in the same payroll register. Their salaries were kept in different payroll registers. Therefore in order to assess the types and the number of salaried troops in one fortress, two different payroll registers should be examined. The salaries of the household troops were registered in different payroll registers than local garrison due to the fact that most of the time their salaries

¹⁷⁷ Bilge, *Osmanlı  a ı'nda Kafkasya 1454-1829: Tarih, Toplum, Ekonomi*, 489,93,95-97,516-17.

¹⁷⁸ MAD 6281, p.13-14.

¹⁷⁹ Barkan, "H. 974-975 (1567-1568) Mali Yılına Ait Bir Osmanlı B t esi," 270.

¹⁸⁰ Sinclair, "Administration and Fortification in the Van Region under Ottoman Rule in the Sixteenth Century," 218.

¹⁸¹ Top ular Katibi Abd lkadir(Kadri) Efendi. *Top ular Katibi Abd lkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: T rk Tarih Kurumu, 2003),575.

¹⁸² Orhan Kılı , *Xvi. Ve Xvii. Y zyıllarda Van*(Abkara: Van Belediye Ba lanlı ı K lt r ve Sosyal   ler M d rl   , 1994).120 122,133.

were sent from the central treasury, while salaries of local troops were paid from the treasury of provinces they were stationed.¹⁸³

Giving salaries to troops was not the only payment method of the Ottoman Empire. Some members of the local troops received their payments as *timars*. Therefore, in order to calculate the exact number of troops in a fortress, troops who receive *timar*, if there were any, should also be known. However, tracking these *timar* holders and salaried groups all together is out of the scope of this thesis.

While calculating the number of troops, it is essential to pay attention to the changes in the payment methods. As Gabor Agoston pointed out, certain increases in the size of the garrison might be related to the changes in the payment methods. In some *vilayets*, exercise of granting *timars* to fortress guards might be replaced with salary payments. Therefore, it might resulted in an increase in the number of salaried troops which might be interpreted wrong if this knowledge is not presented for the researcher.¹⁸⁴

The size of garrisons also might be related to payments. Most of the time, some of the registered soldiers of fortresses could not be found in the fortress due to several reasons. When the payroll register of Van fortress for the Reşen period in 1609-1610 and the muster call for the same year for the Recec period are examined, the payroll register reveals a total of 307 soldiers in garrison for the Reşen period.¹⁸⁵ However, the muster call register for the Recec period shows that only 275 soldiers were present in the fortress.¹⁸⁶ In order to check the number of troops in fortresses, the state requested muster rolls. In these muster rolls, absentee soldiers might be detected, and actions against these soldiers could be taken. When Ferhad Pasha was beylerbeyi of Rumelia, it has been said that there were registered household troops in his province who were absentee, and this situation was not only confined to one province. The absentee household troops in provinces were very common at the beginning of the 17th century.

¹⁸³ "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 93.

¹⁸⁴ Ágoston, "Macaristan'da Osmanlı Serhadi (1541-1699) : Bir Mukayese," 447.

¹⁸⁵ MAD 4822, p.2-11.

¹⁸⁶ MAD 2223, p.1-15.

After the Murad IV ascended to the throne, he made a muster in the Rumelia and Anatolia to assess the correct number of soldiers on duty and to get rid of the absentee soldiers from the registers.¹⁸⁷ As it is seen that muster rolls can provide more accurate information about the size of the garrisons; however, in this thesis only the projected forces of the garrisons on paper are discussed. Therefore, the focus is on the payroll registers.

There could be several variables that caused a rise or a fall in the number of troops in the fortresses. During the campaigns, troops in fortresses might be called in a active duty in the fighting army. This situation might cause a decrease in the number of troops in the fortresses. Also, troops could be relocated to the recently taken fortress or to a fortress which was threatened by the enemy. During the war years the size of the garrisons generally remains higher than peace times. During the peace periods, a rebellion could change this situation. Therefore, in general it can be said that the size of the garrison could change during war and peace times. The fortresses which remained inland generally had fewer soldiers than the fortresses in the borderland.¹⁸⁸ The reason for that was proximity of the fortress to enemy fortresses. The fortress which was close to the border was under a constant threat. In addition to these, topographic differences affected the composition of garrisons. Especially, the cavalry/infantry ratio could change due to the topography.

2.2.1. The Type of the Troops

Type of troops and their numbers in the East and the West could differ based on necessities of the state, topographic conditions, and composition of the population. The type of the salaried troops in the garrisons can be divided into two groups as the infantry and the cavalry. While some of them can be identified as infantry or cavalry

¹⁸⁷ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey." 13-20

¹⁸⁸ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri."

without a doubt, definitions of some of them are controversial. Also, the salaried troops in the garrisons can be distinguished as local forces and household troops. Together with janissaries, artillerymen and armorers from household troops were sent to the guarding duties in fortresses. The composition of the local forces consisted of *müstahfizans*, artillerymen, armorers, gatekeepers, *dizdar*, *kethüdas*, *gönüllüs*, *müteferrikas*, *gilmāns*, *çavuş*, *tüfenkci*, ‘*azeban*, *martolosan*, *fārisan*, and musicians.

2.2.1.1. The Janissaries

The Janissaries were assigned to the guard duty in the fortresses for a limited period. They had to serve in the fortresses for a three years duration. The Janissaries who were assigned to fortress duty were called *nöbetci*. After one *orta*¹⁸⁹ completed its service in the fortresses in the frontiers, another *orta* would replace it, after a three years period.¹⁹⁰ Nevertheless, it is possible to find janissaries who served in the fortresses more than three years.¹⁹¹ Their salaries were paid from the central treasury, unlike the local troops. Therefore, they were registered in a different payroll register than the local troops.¹⁹² In the important fortresses, there was a *yeniçeri agha*(janissary commander) to command janissaries, and their scope of authority reached beyond more than one fortress. In less critical fortresses, there were only *yeniçeri serdarı* to command janissaries.¹⁹³ The number of janissaries in the fortresses changed during the wars and peace times. During the peace times, their numbers were on a minimum level, while during the wars their population in

¹⁸⁹ Small military units that forms the janissary regiment.

¹⁹⁰ İsmail Hakkı Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, 2 vols., vol. I(Ankara: Türk Tarih Kurumu, 1988), 325.

¹⁹¹ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*.73-74.

¹⁹² D.Ynç.d. 33763, MAD 5538, MAD 5996, MAD 7453, MAD 6718, MAD 16411, AE.SMRD.IV. 2 126.

¹⁹³ Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 327-28.

fortresses reached its highest levels. Their number inclined to reduce through the years following the conquest of the fortress.¹⁹⁴

2.2.1.2. Merdan and Müstahfizan

Müstahfizans or *hisar eris* mean literally the guards of the fortress. Klara Hegyi says that *merd*, *hisar eri*, and *mustahfiz* were used as a replacement to each other and meant the same term.¹⁹⁵ Although all soldiers in the garrison were called as *müstahfiz*¹⁹⁶, there was also a separate *cemā'at* of *müstahfizan* in the payroll registers. The introduction of a payroll register of the local troops of Van from 1018/1609-10 describes the register as a *defter-i merdan*. Then, in the next entry in the register name of the *cemā'at-ı merdan* can be found. Furthermore, name of *cemā'at-ı müstahfizan* can be found on the same page of the register. Together with the *cemā'at of merdan* and *müstahfizan*, registers of *cemā'at of topçuyan*, *cebeciyan bevvaban*, and *meşalederan* also can be found in the *defter-i müstahfizan* or *merdan*.¹⁹⁷ Hence, it is possible to say that all the soldiers in the fortress could be called as *merdan* or *müstahfizan*, but also there are separate *cemā'at* and military regiment as *müstahfizan* and *merdan*. These *cemā'ats* are not the same troops. In a decree that was sent to *bey* of Bender, there is a statement that mentions a *cebecibaşı* of *müstahfizans*. This decree addresses all the troops in garrison as *müstahfizan*.¹⁹⁸ Orhan Kılıç claims that *merdan*(plural of *merd*) *cemā'at* includes *dizdars*, *kethüdas* and religious officers of the fortress. In addition to these, it is possible to find janissary *kethüda* and other

¹⁹⁴ See: Table 2, and Table 3.

¹⁹⁵ Hegyi, *The Ottoman Military Organization in Hungary*, 118-19.

¹⁹⁶ Göksel Baş, "Ottoman Serhad Organization in the Balkans (1450s to Early 1500s)" (Bilkent University, 2017), 59.

¹⁹⁷ MAD 4822, p.1-2.

¹⁹⁸ Reyhan Ataç, "66 Numaralı (H.997-998 / M.1589-1590) Mühimme Defteri (İnceleme-Metin)" (Master's Thesis, Marmara Üniversitesi, 2014), 149.

janissary servants in the *merdan cemā'at*.¹⁹⁹ Therefore, discussing these terms inside the same topic is found beneficial.

Müstahfizan was the main component of the fortresses in the 15th century. It is argued that they were stationed in the fortresses that were far away from their hometown. In other words, it is said that *hisar eri* from Rumeli were stationed in East, and vice versa.²⁰⁰ However, this might not have been the regular practice all the time. In the introduction part of "Ottoman Garrisons on the Middle Danube : Based on Austrian National Library MS MXT 562 of 956/1549-1550", Strashimir Dimitrov indicates that it is possible to find fewer men who directly came from Anatolia in the garrisons in Hungary, while men from Balkans and men with "sons of Abdullah" origins were abundant.²⁰¹ About the payments of *müstahfizans*, it can be said that some *mustahfiz*es were holding *timars*, mostly collective *timars*,²⁰² but there were also *müstahfizans* who received salary.²⁰³

There are also controversies about the duties and manpower sources of *müstahfizan* troops. İsmail Hakkı Uzunçarşılı defines *müstahfizans* as the janissaries who were not available for active duty due to their injuries, crimes or old age.²⁰⁴ However, as Orhan Kılıç points out, there are decrees that demanded enlisting of *müstahfizans* for fighting in the battles which proves that *müstahfizans* are available for the active duties.²⁰⁵ They could participate in the duties of the repair of the fortress

¹⁹⁹ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 101.

²⁰⁰ İnalçık, "Ottoman Methods of Conquest," 107.

²⁰¹ Radushev and Velkov, *Ottoman Garrisons on the Middle Danube : Based on Austrian National Library Ms Mxt 562 of 956/1549-1550*, 24-28.

²⁰² Murphey, "The Functioning of the Ottoman Army under Murad IV (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 179; Hegyi, *The Ottoman Military Organization in Hungary*.60-64.

²⁰³ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 115.; MAD 4822, MAD 2223, MAD 6281.

²⁰⁴ Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 327.

²⁰⁵ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 115.

or expanding the ditch.²⁰⁶ In a decree that was sent to the governor of Eğriboz and *dizdar* of Athens, *müstahfızan* of Athens were complaining about the unfair distribution of positions of *müstahfızan* to those who are not *kuloğlu* (sons of janissaries).²⁰⁷ Therefore, it can be said that *kuloğlu müstahfızans* and *müstahfızans* from other manpower sources existed together. There are other explanations for the manpower source of *müstahfızans*. Göksel Baş points out that both *ma'zuls* and *kuloğlus* could be the manpower sources of *müstahfızan* troops.²⁰⁸ Rhoads Murphey says that *müstahfızans* in the fortresses were either men under the patronage of *beys* or *sekbans*.²⁰⁹ When the suggestion of Caroline Finkel about the recruitment of *reaya* to ranks of the *askeri*, and assignments of them to the garrisons during and after the Long War is considered,²¹⁰ together with the complaint in the decree which was about recruiting men other than *kuloğlus*,²¹¹ *reaya* might be count as another source of the manpower of *müstahfızan* units.

Mark Stein points out a link between *müstahfızans* and *yerli yeniçeris* (local janissaries) in garrisons. He claims that these were the same type of troops by referring to Uzunçarşılı.²¹² Uzunçarşılı mentions a *yerli yeniçeri* or *gönüllü* janissary troops in garrisons which were commanded by *dizdar*.²¹³ Stein establishes the connection with *müstahfızan* and *yerli yeniçeri* by emphasizing Uzunçarşılı's statement and quoting

²⁰⁶ Ibid.

²⁰⁷ Muhammed Uğurlu, "73 Numaralı Mühimme Defterinin Transkripsiyon Ve Değerlendirmesi (121-276)" (Master's Thesis, Bitlis Eren Üniversitesi, 2018), 147.

²⁰⁸ Baş, "Ottoman Serhad Organization in the Balkans (1450s to Early 1500s)," 60.

²⁰⁹ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 179.

²¹⁰ Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 35-41.

²¹¹ Uğurlu, "73 Numaralı Mühimme Defterinin Transkripsiyon Ve Değerlendirmesi (121-276)," 147.

²¹² Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*, 87.

²¹³ Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 3-4.

from the Marsigli's statement that defines *dizdar* as commanders of *hisar eri*.²¹⁴ However, Klara Hegyi highlights the point that indicates müstahfizans were not janissaries. Also, she emphasizes that local janissaries were not same as *müstahfizan* troops, because each of them registered as different units in registers.²¹⁵

2.2.2.3. Dizdar

One of the essential members of the *merdan cemā'at* was *dizdar*. *Dizdar* was the commander of the fortress. He was responsible for the management of troops in the fortress, the logistics of guns and ammunition and the repair of the fortress.²¹⁶ However, in some fortresses, there was also janissary agha who outrank *dizdar*. The *Agha*'s responsibility was not limited to one fortress. Generally, their authority expanded into the other fortresses in the region they were stationed.²¹⁷ Fortresses used as a prison for captives and criminals. *Dizdar* was responsible for prisoners that kept in the fortress.²¹⁸ Also, during the changes of beylerbeys in a province, *dizdar* could be a deputy of *beylerbeyi* and could use the authority of his rank when it is necessary.²¹⁹ Moreover, there could be more than one *dizdar* in one fortress. Hierarchy of *dizdars* in the same fortresses was determined according to military places they were responsible for. In Egri, there were four *dizdars* respectively responsible for Nemser Hisarı, Macar Hisarı, Aşağı Varoş, and Baruthane castle. Their hierarchical ranks were determined

²¹⁴ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*, 87.

²¹⁵ Hegyi, *The Ottoman Military Organization in Hungary*, 119.

²¹⁶ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 102-03.

²¹⁷ Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 327.

²¹⁸ Muhammed Samet Kaya, "69 Numaralı Mühimme Defteri'nin

Transkripsiyon Ve Değerlendirilmesi (1-168)" (Master's Thesis, Atatürk Üniversitesi, 2013), 241-42.

²¹⁹ Ibid.

based on this sorting.²²⁰ The salary of *dizdars* could change depending on the strategical importance of fortress they oversaw.²²¹

2.2.2.4. Gönüllüyan

Another important group in the garrisons was *gönüllüs*. There were three different groups in Ottoman military system that were called *gönüllü*, and two different *gönüllü* troops seem to exist in fortresses. The backgrounds of the first *gönüllü* troops were various. Those *gönüllüs* could be the sons of timar holders, mazul sipahis and their sons, the servants of the commanders or officers, the castle guards, *ma'zul* soldiers of garrisons, sons of janissaries and mazul ones, some members of reaya and retainers of the military class.²²² Pal Fodor indicates that those who want to be a *gönüllü* in the army had to have a horse. In addition to that, they should had a proper armor and weapons.²²³ However, the requirements of a horse for *gönüllü* troops became an obligation after the Long War. Those who could not meet the requirement demoted to the rank of *yaya*.²²⁴ As Pal Fodor correctly states these requirements of a *gönüllü* troop could be met by wealthy reaya or by the members of the military class.²²⁵ Successful *gönüllüs* could receive timars or become the member of *gureba* corps; others could be assigned to *gönüllüyan* troops in garrisons.²²⁶ In addition to that, Halil İnalçık states that *gönüllüyan* troops in the fortresses were divided as “*gönüllüyan-ı yemîn* and

²²⁰ Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*, 50.

²²¹ Eftal Şükrü Batmaz, "Osmanlı Devletinde Kale Teşkilatına Genel Bir Bakış," *Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi OTAM*, no. 7 (1996).

²²² Pál Fodor, "Volunteers in the Ottoman Army," in *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* ed. Pál Fodor and Géza Dávid (Leiden: Brill, 2000), 234-43.

²²³ Ibid., 251.

²²⁴ Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 30-31.

²²⁵ Fodor, "Volunteers in the Ottoman Army," 248-51.

²²⁶ Halil İnalçık, "Gönüllü," in *The Encyclopaedia of Islam New Edition C-G*, ed. B. Lewis; CH. Pellat and J. Schacht (Leiden: E.J. Brill, 1991).

gönüllüyan-ı yesār”. In some major fortresses there were two *cemā* ‘at of *gönüllüyan* troops as cavalry and infantry.²²⁷ Pal Fodor points out the resemblance of the names of volunteers (*gönüllü, garib, garib yiğits*) with the names of two cavalry corps of the court (*gariban-ı yemīn and gariban-ı yesār*)²²⁸ . This can be used as a sign for the categorization of *gönüllü* troops.

Rhoads Murphey says *gönüllü* troops in garrisons were cavalry troops who patrol around fortress when it is necessary. Just like Pal Fodor, Rhoads Murphey indicates these *gönüllüs* were related to the military class and were called “*kuloğlu or veledes*” which indicates their relations with their military descendants. *Gönüllüs* were also not meant to serve in fortresses longer than three years. They had to be assigned to cavalry regiments in the household troops. However, this process was not always flawless; there could be some postponed assignments.²²⁹ Klara Hegyi indicates that *gönüllü* troops were prominent cavalry members of the garrisons and were paid better than other troops in garrisons. Also, she asserts that *gönüllü* troops only can be found in some vilayet centers in Hungary such as Buda, Yanık(Györ), Egri, Varad and Uyvar. Their backgrounds linked to pashas and beys as their patrons.²³⁰ Her assumptions about the backgrounds of *gönüllü* troops resemble with the statements of Pal Fodor.

The second type of the *gönüllü* groups seem to have been also called as *yerli yeniçeri* (local janissaries).²³¹ Also this *yeniçeriyan-ı yerlū* troops could be the one that İsmail Hakkı Uzunçarşılı called *gönüllü* janissaries. These troops were the ones that can be called as the volunteers. Uzunçarşılı says that these *gönüllü* janissaries did not receive any salaries and were residents of cities who wanted to benefit from privileges of the janissaries. If those *gönüllüs* become successful in campaigns, they could be

²²⁷ Ibid.

²²⁸ Fodor, "Volunteers in the Ottoman Army," 233.

²²⁹ Murphey, "The Functioning of the Ottoman Army under Murad IV (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 177.

²³⁰ Hegyi, *The Ottoman Military Organization in Hungary*.

²³¹ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 95.

rewarded with a janissary salary.²³² The salary was not the only reward for these *gönüllü* troops. As Halil İnalcık points out these *gönüllü* troops also could be rewarded with a *tımar* and could be recruited to the ranks of *gureba* troops, while others were assigned to fortresses with a salary.²³³ Uzunçarşılı also claims that old *gönüllü* janissaries were assigned to garrison duty. He quotes from Grassi that wealthy *gönüllü* janissaries were part of cavalry regiments of janissaries.²³⁴ *Gönüllü* janissaries that Grassi was talking about should be the first type of *gönüllü* troops in the fortresses, when their origins are considered.

Evgeni Radushev talks about the existence of peasant janissaries. These janissaries seems to be similar to *gönüllü* janissaries that Uzunçarşılı was talking about. They were not recruited with the regular recruitment system of the janissary troops. In other words, they were not *devşirme* janissary troops. Their sons were registered as *kuloğlu*, while sons of elite janissaries in Istanbul registered as *acemi oğlanı*. In this *kuloğlu* groups, sons of peasant janissaries and new recruits that converted to Islam took place. Also, these *kuloğlus* had to participate the wars as volunteers under the list of janissary troops without a payment until they gain a regular place.²³⁵ In some of the Buda's payroll registers, *yeniçeriyân-ı yerlû* and *gönüllü* troops can be found separately²³⁶, therefore, assumption that counts local janissaries and *gönüllü* troops as the same type of troops does not seem true.

There was a third group of *gönüllü troops*. They were auxillary corps in the 17th century. This group was ordered to replace the *sekbân* troops together with the other type of troops such as *'azeb*s, *fâris*, and *divanegans* in the 18th century.²³⁷

²³² Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 330-31.330-331

²³³ İnalcık, "Gönüllü."

²³⁴ Uzunçarşılı, *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*, I, 330-31.330-331

²³⁵ Evgeni Radushev, "'Peasant' Janissaries?," *Journal of Social History* 42, no. 2 (2008): 459-60.

²³⁶ Hegyi, *The Ottoman Military Organization in Hungary*, 340.

²³⁷ İnalcık, "Gönüllü."

As result it is possible to find two types of *gönüllü* troops in the fortresses. Main group of *gönüllüs* in the fortresses were the first group mentioned above. They were prestigious cavalry units. Therefore, counting *gönüllü* troops as a cavalry unit for the next inquiries seems reasonable.

Although, Klara Hegyi indicates that *gönüllü* troops can only be found in certain places mostly in the center of vilayets in Hungary²³⁸, *gönüllü* troops were present in Eastern Frontier either. It is possible to come across *gönüllü* troops in the payroll registers of Tabriz,²³⁹ Revan, and Kars.²⁴⁰

2.2.1.5. Gılman

Another type of troops which definition could be controversial is *Gılmān*(Gulāms). They were part of the household troops. It is known that *gılmān* are in the personal service of the sultans. However, their duties in provinces are unknown.²⁴¹ As Orhan Kılıç points out their names as *gılmān-ı yesār* and *gılmān-ı yemīn* could demonstrate their relations with *ulufeciyan* branch of household cavalries. He cİVIIims that *ulūfeciyan-ı yemīn* and *ulufeciyan-ı yesār* troops were registered as *gılmān-ı Van*²⁴² Also, Kılıç says that name of *sağ ulufeciler* and *sol ulufeciler* were used in two documents from 1611. In the first one, it is said that *canib-i yemīn* and *canib-i yesār* troops were merged and were given under the command of Yusuf. In the other document, Yusuf was mentioned as the *agha* of the *yemīn* and *yesār* troops.²⁴³ Therefore, they could be classified as cavalry units. Although *gılmān* class could be

²³⁸ Hegyi, *The Ottoman Military Organization in Hungary*.

²³⁹ MAD 6281.

²⁴⁰ Bekir Kütükoğlu, *Osmanlı-İran Siyasi Münasebetleri (1578-1612)*(İstanbul: İstanbul Fetih Cemiyeti, 1993), 141.

²⁴¹ Kılıç, *XVI. Ve XVII. Yüzyıllarda Van*, 339.

²⁴² "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 109-10.

²⁴³ *XVI. Ve XVII. Yüzyıllarda Van*, 339.

found in several payroll registers from Tabriz and Van that included in this thesis²⁴⁴, it is not possible to follow the trace of *gilmān* troops in the payroll registers of Hungarian frontier for the beginning of the 17th century.²⁴⁵ Therefore, their existence in the Hungarian frontier at the beginning of the 17th century remains unknown for this study, however their absence in Hungary seems unreasonable.

2.2.1.6. Müteferrikiyan

J.H. Kramer, in the Encyclopedia of Islam, defines *Müteferrikas* as the troops that serve to the sultan. They had various type of missions, and these missions could be political, and public. He indicates that *Müteferrikas* were counted as cavalry troops and their number did not exceed 120 at the end of the 17th century.²⁴⁶ However, at the end of the 16th century, 174 *Müteferrikas* can be found in Tebriz.²⁴⁷ According to another interpretation, the number of *müteferrikas* was subject to change throughout the centuries. Their number rose from 124 to 611 between 1574-1624. However, during the reign of the Murad IV, their number was reduced to 413. Throughout the 17th century, their number increased again, but at the end of the 17th century, their number was around 413 men. This müteferrika troops included sons of bureaucrats, *katibs*, *çavuşs*, *sipahis*, *silahdars*, palace servants for stables, men of Sheik-ul-Islam and *kadiasker* etc.²⁴⁸ Mehmet Zeki Pakalın states that except the *müteferrikas* which served to the sultan, viziers and other bureaucrats had *Mütefferrikas* for their

²⁴⁴ Mad 7425; Mad 6281.

²⁴⁵ Hegyi, *A Török Hódoltság Várai És Várkatonasága*, 2; *A Török Hódoltság Várai És Várkatonasága*, 3; Römer, "Osmanische Festungsbesatzungen in Ungarn Zur Zeit Murads Iii : Dargestellt Anhand Von Petitionen Zur Stellenvergabe"; Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*.

²⁴⁶ J.H. Kramers, "Müteferrika," in *The Encyclopaedia of Islam*, ed. C.E. Bosworth; E. Van Donzel; W.P. Heinrichs; CH. Pellat (Leiden-NY: E.J. Brill, 1993).

²⁴⁷ MAD 6281, p.25-33.

²⁴⁸ Afyoncu, Erhan. "Müteferrika." In *TDV İslâm Ansiklopedisi*. İstanbul:(TDV İslam Araştırmaları Merkezi,2006), accessed May 20,2019, <https://islamansiklopedisi.org.tr/muteferrika>.

services.²⁴⁹ *Beylerbeyi* of Baghdad was warned not to recruit more than 180 *müteferrika* at the end of the 16th century.²⁵⁰ By considering this, it might be said that 174 *müteferrikas* in Tebriz could be the servants of the *beylerbeyi*.

2.2.1.7. Farisan

Fārisan or *ulufeciyan-ı süvari* were cavalry units. They were mostly responsible for the organizing raids in the enemy lands and preventing enemy raids around the fortresses. Therefore their duties was not in the fortress. Due to their role in raids, *Fārisan* troops were generally assigned to the fortresses in the border region.²⁵¹ In the 16th and the 17th centuries, prevailed in fortresses as cavalry units. Some members of this group were *tımar* holders, while other members were salaried troops. There were two possibilities that were discussed for the identity of *fārisan* troops in the frontier regions. As the first possibility, it is claimed that *fārisan* troops were the mounted 'azeb troops. As the second possibility, it is said that levends who served under the household of a high ranked official were the *fārisan* troops.²⁵² Any record of any type of *fārisan* troops in the Eastern frontier could not be found in the payroll registers belongs to the beginning of the 17th century.

2.2.1.8. Martolosan

Martolosan or *Martulosan* were the Christian auxiliary troops of the Ottomans. Their origins were based on Christian landowners in the Balkans. After the conquest of Balkans by Ottomans they became the part of the military class in the Ottoman

²⁴⁹ Mehmet Zeki Pakalin, *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü Iı*(İstanbul: Milli Eğitim Basımevi, 1993), 374.

²⁵⁰ Afyoncu, "Müteferrika".

²⁵¹ Hegyi, *The Ottoman Military Organization in Hungary*, 130.

²⁵² Özcan, Abdülkadir. "Farisan." In *TDV İslâm Ansiklopedisi*. İstanbul:(TDV İslam Araştırmaları Merkezi,2016), accessed May 07,2019, <https://islamansiklopedisi.org.tr/farisan>.

Empire.²⁵³ At the beginning of their organization, they were assigned to the security of passages in the dangerous places, and *derbends*. Later, they were assigned to the fortresses in Hungary and Bosnia as fortress guards. Their duty in *derbends* continued in inner regions of the Western frontier, such as in Bulgaria, Serbia, Macedonia.²⁵⁴ They were Christian guards. However, their commanders had to be a Muslim.²⁵⁵ Martoloses could be both infantry and cavalry class. Therefore, they were mixed units.²⁵⁶ Ottomans used *martolosan* troops in their advancements in the Balkans and in Hungary. Martolosan troops took part in the army. They were stationed in the garrisons in large amounts after the conquest of the fortresses in Hungary. Origin of *martolosan* troops in Bosnia and Serbia were the local community, but in *martolosan* troops in Hungary were generally came from Serbia, Bosnia, and partially from Temeşvar. Over the time, their relations with the state deteriorated and they lost their importance once they had in the 16th century. Organization of *martolosan* troops was abolished at the end of the 18th century, but small *martolosan* groups continued to exist until the Tanzimat reforms.²⁵⁷ Orhan Kılıç gives an example from an order to prove the existence of *Martoloses* in Van. In this order, it is demanded that Diyarbakir treasury should send money for the building of boats in Van Lake. After the building of boats, it was ordered that the boats should be manned with *martolosan* troops. Although this example of Kılıç from Van, there are not any further evidence for the existence of *martoloses* in the Eastern frontier just as he states.²⁵⁸

²⁵³ E. Rossi and W.J. Griswold, "Martolos," in *The Encyclopaedia of Islam MAHK-MID*, ed. C.E. Bosworth; E. Van Donzel; B. Lewis; Ch. Pellat; W.P. Heinrichs (Leiden: E.J. Brill, 1991).

²⁵⁴ Orhonlu, *Osmanlı İmparatorluğu'nda Derbend Teşkilâtı*, 11-22, 85-88.

²⁵⁵ Pakalin, *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü II*, 409-10.

²⁵⁶ Baş, "Ottoman Serhad Organization in the Balkans (1450s to Early 1500s)," 69-70.

²⁵⁷ Vasic, Milan. "Osmanlı İmparatorluğu'nda Martoloslar." (tr. Kemal Beydilli) *İstanbul Üniversitesi Edebiyat Fakültesi Tarih Dergisi XXXI* (1967): 47-64.

²⁵⁸ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 117.

2.2.1.9. Azeban

The dictionary meaning of 'azeb or azab is unmarried man. Pakalın says that the military organization of 'azebs was one of the oldest organizations in the Ottoman military system. Their existence dates back from the establishment of household troops. They were infantry troops. Pakalın also says that 'azebs were *tüfenk- endaz* (soldiers that can use firearms) infantries.²⁵⁹ Azebs were divided into two different types as sea and land 'azebs. Land 'azebs began to be part of the fortress troops around the mid of the 16th century.²⁶⁰ Azabs in the fortresses were depicted as a military unit organized similar to janissary troops. Their role in fortresses consists building bridges, being sappers, and sometimes doing the jobs of armorers. Particularly, 'azeb troops began to take part as armorers in the fortresses after the recruitment of devshirme armorers had stopped.²⁶¹

'Azebs were generally one of the largest troops in the many fortresses after the *müstahfizans* and *gönüllüs* troops. For instance, in 1591, nearly one-third of the garrison troops in Buda were 'azebs.²⁶² In 1611, 'azeb troops Van were the second largest troops in the fortress after the *Gilmān* corps.²⁶³

2.2.1.10. Çavuşan

Çavuşan troops in garrisons were not technically a fighting class. Their primary duties were providing correspondence and acting as messengers between states.²⁶⁴

²⁵⁹ Mehmet Zeki Pakalın, *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü I* (İstanbul: Milli Eğitim Basımevi, 1993), 128-29.

²⁶⁰ Bostan, İdris. "Azeb." In *TDV İslâm Ansiklopedisi*, İstanbul:(TDV İslam Araştırmaları Merkezi,1991), accessed 07 May,2019, <https://islamansiklopedisi.org.tr/azeb>.

²⁶¹ H. Bowen, "Azab," in *The Encyclopaedia of Islam A-B*, ed. H.A.R. Gibb; J. H. Kramers; E. Levi-Provençal; J. Schacht (Leiden: E.J. Brill, 1986).

²⁶² Hegyi, *The Ottoman Military Organization in Hungary*, 338.

²⁶³ MAD 7425, p.1-77.

²⁶⁴ Pakalın, *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü II*, 333.

There are several different places that *çavuşan* class can be found. There are *çavuş* in the household troops, in the provinces and in the palace. Most of the time they had similar duties regardless of the organization they belong to. They had several different duties than being just a messenger; they could undertake other several assignments in the provinces. The enlisting of soldiers and the delivery of the salaries of garrisons were one of their duties. The execution of law and maintaining inspections in the countryside, dealing with the building of ships and equipment of them, management of iron and saltpeter mines, and provision of İstanbul and the army can be count as their other duties in provinces.²⁶⁵ Also as a new term, in the 17th century, the name of *çavuş* began to used as junior officers for some types of troops in Hungary, such as *'azeban, cebeciyân and fârisan*.²⁶⁶

2.2.1.13. Other Types of Troops

Orhan Kılıç talks about a separate *tüfenkci* cemâ'at in Van. In an order that sent to Van beylerbeyi, it is said that more *tüfenkcis* should be enlisted to reach the number of 300 which once the regular number of *tüfenkcis* in Van. However, a record of this cemâ'at in the payroll registers, at least for Eastern frontier, are not known to us.²⁶⁷ Also, in the 17th century, it might be meaningless to search for a separate *tüfenkci* unit, when widespread use of firearms is considered. Most of the troops should be armed with firearms at the time²⁶⁸

In the fortresses, there were artillerymen and armorers. They were important units of the garrisons. The artillerymen (Topçu) were responsible for making and using

²⁶⁵ Ümit Koç, "XVI. Yüzyılda Osmanlı Devleti'nde Çavuşluk Teşkilatı," *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 2, no. 12 (2002).

²⁶⁶ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*, 85.

²⁶⁷ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri."

²⁶⁸ I would like to say thanks to Göksel Baş who drew my attention to this idea.

the cannons.²⁶⁹ There were two types of artillerymen. Artillerymen from the household troops and from the local troops in the provinces. The local artillerymen in the provinces also sometimes called *icareliler*.²⁷⁰ Armorers (Cebeci) were the another auxiliary forces in the garrisons. They were responsible for carrying and making guns and ammunition. There were two types of armorers in the garrisons. The first type of the armorers belongs to the household troops and the second type was local troops of provinces.²⁷¹

There were also entries of *bevvals*, *meşalederan*, *mehteran*, *necceran* in the payroll registers. *Bevvabs* were the gatekeepers. Orhan Kılıç states that these gatekeepers can be registers as cavalry or infantry units in some circumstances.²⁷² *Meşaledar* was responsible for the lightening of the fortress. *Neccar* was carpenter. Registers of these troops can be found in the *defter-i merdan*.

In general, most of the type of troops have *katibs* as part of their *cemā'at*, and they were registered together with officers of those *cemā'ats*. Even though *katibs* were the clerks of *cemā'ats*, it is sometimes possible to find them as acting out of their job definitions. In certain times, *katibs* could be found as the commander of some janissary units.²⁷³ Nonetheless, there was also a unit of *katiban* as a separate *cemā'at* in some payroll registers.²⁷⁴

Although some of the troops could contain both cavalry and infantry classes together, it is needed to classify them into one group in order to calculate the infantry/cavalry ratio in garrisons. Their classifications will be helpful for the next parts of the thesis while calculating the infantry/cavalry ratio of fortresses. Therefore,

²⁶⁹ Mehmet Zeki Pakalin, *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü III*(İstanbul: Milli Eğitim Basımevi, 1993), 512.

²⁷⁰ *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü II*, 17.

²⁷¹ *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü I*, 262.

²⁷² Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 106.

²⁷³ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*, 86.

²⁷⁴ MAD 6281, p. 23.

only *fārisan*, *gūlmān*, *müteferrikiyan*, and *gönüllü* troops are counted as cavalry units since their cavalry features are more visible than other types of troops. Rest of the troops are evaluated as infantry units.

2.2.2. The Size of The Garrisons in the Hungarian Frontier

It is claimed that the Hungarian frontier witnessed the very first steps of the military revolution.²⁷⁵ As it is discussed in the previous sections, Habsburgs had renovated some fortresses in Hungary by changing their designs to the new-style. These fortresses were fortresses of Győr, Komárom, Érsekújvár (Uyvar), Nagyvarad, Egri, Temesvar, Szigetvar, and Szatmar.²⁷⁶ Thus, it might be assumed that the Hungarian frontier had the notions of military revolution during the Long War.

When the fact that Ottomans conquest of some of these modernized fortresses (Győr, Uyvar, Kanisza, Szigetvar, Temeşvar and Egri) is considered, a large number of soldiers that stationed in these fortresses and a general rise in the garrison size throughout the time in these fortresses should be expected. Also, the number of infantry and artillerymen expected to be higher in the modernized fortresses.

After the establishment of the direct rule of Ottomans in Hungary, two *vilayets* were established, Buda and Temesvar. Later, in 1596 Egri, and in 1600 Kanije became *vilayets*. Also, Győr(Yanık) was a *vilayet* from its acquisition in 1594 to lost of it to Habsburgs again in 1598. Varad became a new *vilayet* in 1660 and Uyvar became a *vilayet* in 1663. Therefore, in 1663 Ottomans had a total of six *vilayets* in Ottoman Hungary. The following section does not include information about Győr due to the short term Ottoman sovereignty in Győr, but consists of the data of the other six *vilayets*.

²⁷⁵ Kelenik, "The Military Revolution in Hungary."

²⁷⁶ Ágoston, "Empires and Warfare in East-Central Europe, 1550–1750: The Ottoman–Habsburg Rivalry and Military Transformation.," 19; "Habsburgs and Ottomans: Defense, Military Change and Shifts in Power," 132.

2.2.2.1. Buda

In Buda, there were 2868 local soldiers in 1543, 1897 local soldiers in 1549, 1712 soldiers in 1557-58, 1691 soldiers in 1569, 1757 local soldiers in 1573-74, and 1618 soldiers in 1577-78. In 1577-1578, during the peacetime, the Buda's garrison had 1618 soldiers in its fortress.²⁷⁷ For 1580-1581, there were 1628 local troops, 900 janissaries in Buda.²⁷⁸ In 1599-1600, a sudden decrease in the number of local troops could be observed. While the number of local troops falls to 845, the number of household troops increases rapidly to 2892.²⁷⁹ This change in the number and the balance of local garrison and household troops may have related to the war with Habsburgs. There was a campaign to Kanije to in 1600. However, the size of the garrison in Buda decreased in 1600-1601. In this year there were 840 local troops in Buda, and the number of household troops was 518.²⁸⁰ In 1607, the number of local troops increased to 1018, while the number of household troops without janissaries was 885.²⁸¹ In 1612-13, there were 2274 troops in Buda with a new type of troops which is *yeniçeriyân-ı yerlî*. The number of *yeniçeriyân-ı yerlî* was 1167²⁸² which made them the biggest group in the local garrison for this year.

In 1613, a decree was sent for the abolishment of *gönüllü* troops in Buda due to political conflicts. However, effects of the decree continued only until 1619. From this year on, *gönüllü* troops could be found again in Buda, and in the other Hungarian provinces. Therefore, sometimes the existence of some troops could have depended on the political situations, the sphere of influences and social networks.²⁸³ It can be

²⁷⁷ Hegyi, *The Ottoman Military Organization in Hungary*, 335-37.

²⁷⁸ Ibid.

²⁷⁹ *A Török Hódoltság Várai És Várkatonasága*, 2.450-458

²⁸⁰ Ibid., 459.

²⁸¹ *The Ottoman Military Organization in Hungary*, 339.

²⁸² Ibid., 340.

²⁸³ Ibid., 134.

considered that the emergence of *yeniçeriyân-ı yerlî* was related to this decree; however, in the very same year, *gönüllü* troops can be found in the payroll registers. Klara Hegyi says that janissaries from the household troops were also in the duty in Buda while *yeniçeriyân-ı yerli* troops were taking place in the payroll registers.²⁸⁴ The reason for their emergence remains unknown. In 1628-1629, the size of garrison increases to 3229 with 1943 *yeniçeriyân-ı yerlî*, and 1193 janissaries from the year 1628. Last data from 1662, indicates an increase in the total number of garrisons to 5523 with 3311 janissaries from household troops.²⁸⁵ The decrease in the numbers of the garrison during the Long war, could be related to garrison troops that might have joined the army.

The position of Buda in the Ottoman Hungary was crucial. It acted like a headquarter for the military operations of the Ottomans in the Central Europe. Its importance is explicit when the circle of fortresses that were built around it to protect Buda is considered.²⁸⁶ Therefore, large numbers of the troops in Buda was normal for the specified circumstances.

Table 1: Household Troops in the Buda Garrison²⁸⁷

1580-81	900
1586-87	660
1596-97	2,676(Masar),2,475(Recec), 2,403(Reşen); 2,298(Lezez)

²⁸⁴ Ibid., 341.

²⁸⁵ Ibid.

²⁸⁶ "The Ottoman Network of Fortresses in Hungary," 166-67.

²⁸⁷ Most of the data about the number of household troops in Buda were taken from: *The Ottoman Military Organization in Hungary*, 338-42. Information about the number of janissaries for the years 1580/81,1613,1628,1662/63 were taken from Bilge, *Osmanlı'nın Macaristanı*, 138. Data for 1596-97 years was taken from Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 77.

Table 1: (continued)

1599-00	2892(519 janissaries,212 artillerymen, 381 armorers, 36 arabacı, 838 altı bölük halkı, 873 veledan-I kul)
1607	885(415 sipahi,silahdar, 355 armorers, 88 artilleymen, 27 arabacı, janissaries ?)
06.04.-03.07.1609	1787
04.07-27.12.1609	1889
1613	1276
1628	1193
18.11.1629-13.02.1630	248
14.05.1630-09.08.1630	255
1662	3311
1662-1663	962

The number of Janissaries are not available in Buda until the 1580-81.²⁸⁸ In the Table 1, certain rises in the number of Janissaries for the specific years can be observed. Especially, for the years 1596-1597,1599-1600 and 1662, a visible increase can be distinguished by looking the previous years. As it was mentioned before, the increase in the numbers of janissaries in 1596-1597 and in 1599-1600 can be explained with the Long War and specifically with the campaign to Kaniye in 1600. The situation in 1662 is also related to the war between Ottomans and Habsburgs. As a result, it is possible to say that, during the active military periods the number of household troops in Buda increased.

Infantry/cavalry ratio of Buda fluctuates around the rates of 2,2-2,5 from 1557-58 to 1591 without the addition of the number of the household troops. There is only one available date to calculate the infantry/cavalry ratio for the total of both local troops and household troops until the 1599-1600. It is only possible for 1580-81, and the ratio is 3,95 for that year. For 1599-1600, infantry/cavalry ratio becomes 1,26 with

²⁸⁸ Hegyi, *The Ottoman Military Organization in Hungary*, 335-38.

janissaries if we count *veledan-ı kul* as cavalry troops. For 1612-13, the ratio is 4,6 without the household troops. It is 8,12 for 1628. It remained approximately the same until the 1662 in which slightly changed to 8,72. As it can be seen from the data, infantry troops overwhelmed cavalry troops in Buda every year.

From the 1543 to 1573, the number of the artillerymen in Buda remains over 100. Then, it shrunk to 90 artillerymen in 1591. In 1599-1600, with the requirements of Long War, the number of the artillerymen increased again. There were 212 artillerymen from the household troops and unknown number of the local artillerymen in the garrison of Buda. At the end of the Long War, in 1607, there were 38 local artillerymen and 88 artillerymen from the household troops. Then, the number of artillerymen decreased during the peace times. There were 44 artillerymen in 1612-13, and 50 artillerymen in 1628-29.²⁸⁹ Although, the garrison of Buda hosted over 100 of artillerymen from the time it was conquered to 60 years later, it is inclined to decline after the Long War.

2.2.2.2. Kanije

Kanije was one of the new-style fortresses that Ottomans conquered.²⁹⁰ Therefore, features of modernized fortresses should be followed in Kanije, if they had any effect as it was claimed. When the artillerymen in Kanije were examined, it can be seen that their numbers just slightly changed from 32 to 37 between 1615-1623. However, in 1623-1624, there is a sudden increase in their numbers. It rose to 86-88 artillerymen.²⁹¹ Although, a steady increase in the total number of the Kanije garrison from 1618 to 1626 can be observed²⁹², the number of artillerymen suddenly rises in

²⁸⁹ Ibid., 335-41.

²⁹⁰ See; Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*.; Göger, "16.Yüzyıl Osmanlı Kale Kuşatmaları(Strateji,Taktik,Kuşatma Aşamaları Ve Teknolojisi."

²⁹¹ Hegyi, *The Ottoman Military Organization in Hungary*, 549-51.

²⁹² Ibid., 550-51.

1623-1624. Then, the number of artillerymen changed between 87-92 until the 1660s.²⁹³ The total size of the garrison varied between 1325-1867 from 1615 to 1663.²⁹⁴

Kanije's geographical position affected the composition of the garrison. Kanije fortress was close to Lake Balaton. Fields around the fortress were covered with swamps. Therefore, Ottomans preferred to station infantries in Kanije rather than cavalries.²⁹⁵ The infantry/cavalry ratio was 60:37 in Kanije for the 1650s.²⁹⁶ Based on the data in "Ottoman Military Organization in Hungary," infantry/cavalry ratio is 1,34 for the 1615-1616 without the number of janissaries. When the number of janissaries was added to equation from a close date of 1614-1615, the infantry cavalry ratio becomes 1,64. These numbers become 1,33 without the janissaries, and it became 1,6 with the janissaries in 1617. The ratio is 1.58 with the janissaries between 1617-1618. For 1619, the ratio is 1,2 without the janissaries and it is 1,45 with the janissaries. The infantry/cavalry ratio without the janissaries goes around the rate of 1,30s from 1618-1619 to 1622-1623. In 1622-1623 it became 1,59 and it increased to 1,68 in 1623-1624. The ratio without adding the janissaries remains the same until the 1660s. It is possible to calculate the ratio by adding the number of janissaries for 1628-1630 because both data for janissaries and local troops are available for this years.²⁹⁷ The ratio becomes 1,98-1,99 with janissaries when it is 1,71 without them. When it is compared to the infantry/cavalry ratio of local troops of Buda, ratio of local troops of Kanije seem to have more cavalry units. Even though topographic features of Kanije required more infantry units. This should be caused from the position of Buda as a military center of the Ottoman Empire in the Hungarian lands.

²⁹³ Ibid., 553.

²⁹⁴ Ibid., 550-53.

²⁹⁵ Ágoston, "Where Environmental and Frontier Studies Meet: Rivers, Forests, Marshes and Forts Along the Ottoman-Hapsburg Frontier in Hungary," 71.

²⁹⁶ Ibid.

²⁹⁷ Hegyi, *The Ottoman Military Organization in Hungary*, 551.

Table 2: Janissaries in Fortress of Kanije²⁹⁸

14.03.1603-10.06.1603	1838
11.06.1603-04.12.1603	1785
05.12.1603-29.05.1604	1781
30.05.1604-26.08.1604	1587
27.08.1604-13.05.1605	1437
1608-09	479-730
21.02.1613-20.05.1613	413
21.05.1613-16.08.1613	348/421
17.08.1613-.13.11.1613	421
14.11.1613-10.01.1614	422
11.02.1614-06.08.1614	419
07.08.1614-03.11.1614	412
04.11.1614-30.01.1615	169
02.10.1617-28.12.1617	153
29.12.1617-.27.03.1618	147
1618-19	219-282
1628-1630	170-175
1629	170
1635-36	117
1643-44	70-103
1656-57	58
1662	135

As it can be seen from Table 2, the number of janissaries were high during the period of the Long War. Klara Hegyi says that janissary number in Kanije in 1603 was six times more than Buda, due to the effect of war on the enlisting of local troops which

²⁹⁸ Data about the number of Janissaries in Fortress of Kanije were taken from: ibid. Information about the number of janissaries for 1629 was taken from: Bilge, *Osmanlı'nın Macaristanı*, 138. And janissary numbers for the years of 1017/1608-09, 1028/1618-19, 1045/1635-36, 1053/1643-44, 1067/1656-57 were taken from, Stein, Mark L. *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*. I.B. Tauris & Co. 2007, 71,72.

made enlisting the local troops recognizably difficult. However, after the war, the number of local troops exceeds janissaries.²⁹⁹ The number of janissaries even decreases to its minimum in 1662 despite the war in 1663.³⁰⁰ This should have happened, due to established local garrison troops at the time. Therefore, the state did not require to station more janissaries in Kanije.

2.2.2.3. Egri

After Ottomans conquered it in 1596, Egri became the center of new *vilayet* of the Ottoman Empire in Hungary. In 1005(1596-1597), Egri had 781 local soldiers, but this was not the exact number of the local garrisons. As Klara Hegyi states, because some pages in the register went missing, there should be 300 or 600 more soldiers in the fortress.³⁰¹ Also, in this year there were 3,121 janissaries in Egri.³⁰² It was regular practice for Ottomans to station the janissary troops in large numbers in their newly conquered fortresses. In 1015(1606-1607) it had 1582 soldiers. In 1596-97, there were 141 artillerymen from the household troops while in 1606-07, there were only 18 local artillerymen. These are the only numbers we have for Egri. However, it is possible to say that more artillerymen were stationed in Egri during the Long War. Immediately, after the end of the Long War, the artillerymen from the household troops were withdrawn.

As another aspect, the composition of the household troops differs in 1005/1596-1597, and in 1015/1606-1607. In 1005/1606-1607, there were *müteferrikas* and artillerymen from the household troops in Egri. While in 1015 there were janissaries, armorers from the household troops.³⁰³ The infantry/cavalry ratio for 1596-

²⁹⁹ Hegyi, "The Ottoman Network of Fortresses in Hungary," 548-49.

³⁰⁰ Ibid., 553.

³⁰¹ *The Ottoman Military Organization in Hungary*, 538.

³⁰² Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 77.

³⁰³ Hegyi, *A Török Hódoltság Várai És Várkatonasága*, 3, 1501-09.

97 is not possible to calculate due to missing numbers. However, infantry/cavalry ratio without janissaries for 1606-07 is 1,02 while ratio with janissaries is 1,5.

Table 3: Household Troops in Egri³⁰⁴

1596-1597	3,121 janissaries
1598	184(142 artillerymen, 42 müteferrika)
1605-1606	384 janissaries
1606-07	389 (372 janissaries, 17 armorers)
1613-1615 1. Quarter	354 janissaries
1613-1615 2. Quarter	287/512 janissaries
1613-1615 3. Quarter	478 janissaries
1613-1615 4. Quarter	479 janissaries
1613-1615 5. Quarter	563/474 janissaries
1613-1615 6. Quarter	1,024 janissaries
1613-1615 7. Quarter	1,025 janissaries
1613-1615 8. Quarter	841 janissaries
1617-1618	340
1077(1666-67) Reşen-1078(1667-68) recec	107
1080(1669-70) Masar-Recec	100
1081(1670-71) Masar-Recec	97

As Klara Hegyi stated, the number of Janissaries falls by 1660s. She gives two reasons for this fall in the numbers. First of all, *sipahis* and other soldiers were successful in bringing in the regions in the north of Egri into the Ottoman tax system during the peace time that lasts from 1606 to 1663. Secondly, new acquisitions in 1663

³⁰⁴ Most of the data about the number of Janissaries in Fortress of Kaniye were taken from: *The Ottoman Military Organization in Hungary*, 538-40. Information about the janissary numbers for the period of 1605-1606 was taken from: Bilge, *Osmanlı'nın Macaristanı*, 138. Data for 1596-1597 was taken from Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 77.

required janissaries, therefore some of them should have been sent to these fortresses.³⁰⁵ Therefore, the need for a large number of janissaries disappeared, and their number shrunk.

2.2.2.4. Uyvar

Uyvar was a *trace italienne* fortress.³⁰⁶ There are data of the garrison of Uyvar from two different dates. The first is from 1667 and the second is from 1675. An exact number of local troops are available for both dates. Furthermore, there are also soldiers that were sent from Gradiška fortress to Uyvar. While the distribution of the reinforcements that was sent from Gradiška to the ranks of local troops was done by Klara Hegyi for 1675, it is not done for 1667. Therefore, while calculating the infantry/cavalry ratio, their number is not going to be added to the calculation. Moreover, the number of janissaries were available for 1667, but there is not any information for 1675.³⁰⁷

There are 847 local troops, 1699 household troops, and 218 soldiers from Gradiška in Uyvar in 1667. The total number of forces that exist in Uyvar in 1667 is 2764.³⁰⁸ In 1675, there are 951 local troops, together with 463 soldiers from Gradiška, which makes the total number 1533.³⁰⁹ In 1663-64, there were 1,434-1,442 janissaries in Uyvar. From this date to 1676-77, the number of janissaries gradually decreases.³¹⁰ In 1677-78, 917 janissaries were assigned to Uyvar. This number was 635 in 1679-1680, and it was 2251 in 1681-82.³¹¹ Klara Hegyi asserts that because Uyvar was a

³⁰⁵ Hegyi, *The Ottoman Military Organization in Hungary*, 540.

³⁰⁶ Ibid.; Özgüven, *Osmanlı Macaristanı'nda Kentler, Kaleler*; Ágoston, "Empires and Warfare in East-Central Europe, 1550–1750: The Ottoman–Habsburg Rivalry and Military Transformation.."

³⁰⁷ Hegyi, *The Ottoman Military Organization in Hungary*, 574-75.

³⁰⁸ Ibid., 574.

³⁰⁹ Ibid., 575.

³¹⁰ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*, 68-69.

³¹¹ Bilge, *Osmanlı'nın Macaristanı*, 139.

trace italienne fortress, it might be required to be manned in greater numbers.³¹² The large number of soldiers in garrison of Uyvar also might be related to its position in the border. It is located on the very edge of the Ottoman-Habsburg border. On the south of Uyvar, there is Komarom which is another important fortress of Habsburgs with a modernized fortress. Therefore, it is important to station more man in Uyvar due to its unsafe position.

When the infantry/cavalry ratio for 1667 is calculated by excluding the soldiers from Gradiška, the ratio of only local troops becomes 1,44, while ratio after adding the janissaries it becomes 6,35. For 1675, the infantry/cavalry ratio becomes 2,55 when it is calculated without janissaries, but with Gradiška forces. As it can be seen from the first example, the number of janissaries had great potential to change the balance between infantry and cavalry in garrisons.

The number of local artillerymen in 1667 was 13. In addition to that, there were 60 artillerymen from household troops in Uyvar. In 1675, the number of local artillerymen was 56; however, when forces that were sent from Gradiška were added to the calculation, the total number of local artillerymen increases to 85. Existence of artillerymen from household troops for 1675 is unknown.³¹³ Although, we had only complete number of artillerymen from one year, it is still quite interesting to see a little number of artillerymen in a *trace italienne* fortress.

2.2.2.5. Temeşvar

Temeşvar was the second *vilayet* of the Ottomans in Hungary. It was equivalent of Buda in which was an important headquarters against Habsburgs. Status of Temeşvar was similar to Buda, but it was against Transylvania.³¹⁴ As Klara Hegyi stated only *timar* holders of garrison is known until 1591. For 1591, she estimates the

³¹² Hegyi, *The Ottoman Military Organization in Hungary*, 574.

³¹³ Ibid., 574-75.

³¹⁴ Ibid., 493.

size of local garrison around 600 men.³¹⁵ In the Masar period of 1596-1597, Temeşvar had 1,414 janissaries, in the same year's Recec period it became 1,307, and for the Reşen period number was 1,264. In 1621, the local garrison of Temeşvar had 742 local soldiers and 82 janissaries. In 1629, it had 885 local soldiers and 161 janissaries. In 1631-32, it had 868 local soldiers and 150-160 janissaries based on an estimation, and in 1633-34 the size of Temeşvar garrison consisted of 963 local troops.³¹⁶ As it seems, the janissary numbers in Temeşvar hit the peak during the Long War, then it decreased.

Due to the existence of only *timar* holder troops until 1591, it is not logical to calculate infantry/cavalry ratio for these years. Also, the same deduction is applicable for the year 1591, due to lack of reliable data. The first calculation can be made for the infantry/cavalry ratio of the garrison of Temeşvar in 1621. In 1621, infantry/cavalry ratio was 1,53 without adding janissaries, and it is 1,81 after the addition of janissary number. In 1629, ratio without janissaries increases to 1,86 and ratio with janissaries increases to 2,38. For 1631-32, the ratio with janissaries is 2,26, while the ratio becomes 1,78 without adding the number of janissaries to the equation. The infantry/cavalry ratio is 1,88 for the local garrison in 1633-1634, due to lack of data about the number of janissaries. When infantry/cavalry ratio of Uyvar is compared with Kanije infantry units seem to be more than these fortresses.

When the number of artillerymen is considered, there is available data from 1554 which are based on *timar* registers. In 1554, there were 50 artillerymen. The number of artillerymen was 41 in 1569, and it remained the same for 1579. In 1621, the number of artillerymen was 55, and this number increased to 70 in 1629. For 1631—32 and 1633-34, the number of artillerymen stay between 76-77.³¹⁷

³¹⁵ Ibid., 495.

³¹⁶ Ibid., 496-98.

³¹⁷ Ibid., 495-98.

2.2.2.6. Varad

After it was taken in 1660, the garrison of Varad was planned to have 1979 men in it. However, the plan for the garrison did not work out, and there was only 824 men in Varad in 1661. According to plan, the garrison supposed to have 400 janissaries, and 80 artillerymen. However, instead of these numbers, it had 232 janissaries, 51 artillerymen together with some changes in the ranks of other troops.³¹⁸ Furthermore, the planned garrisons had the infantry/cavalry ratio as 1,47 while in reality ratio was 1,51. Also, the janissary number in the fortress varied around 600-800 men for the second half of the 1660s.³¹⁹

2.2.3. The Size of the Garrisons in the Eastern Frontier

It is not always possible to follow series of data for the size of the garrisons in the East from the archival materials. It is even harder to find the payroll registers of local troops in comparison with the payroll registers of janissaries.

While evaluating the size of garrisons in Eastern frontier, it would be logical to put more stress on the fortresses that Ottomans held for a long time even though these fortresses lost their frontier features for a limited time during the 1578-1590 war. Bekir Kütükoğlu's division of Eastern frontier into three part, which was mentioned in the previous chapter would be useful again while evaluating the garrisons of the Eastern frontier. Therefore, only garrisons of Van, Erzurum, Revan, and Tabriz fortresses with some information about garrisons of smaller fortresses when it is possible were taken into consideration along this section.

³¹⁸ Ibid., 570-71.

³¹⁹ Ibid., 571.

2.3.3.1. Van

Van was one of the strategically important frontier *vilayets* of the Ottoman Empire in the Eastern frontier. Its frontier character and position in the frontier changed along the years that this thesis covers, however, its importance, most of the time, remained the same.

Table 4: Local Garrison of Van(1609-1610)

	Local Garrison in Van in 1018/1609-1610 Masar³²⁰	Local Garrison in Van in 1018/1609-1610 in Reşen³²¹	Local Garrison in Van in 1018/1609-1610 in Recec³²²
Type of Troops	Number	Number	Number
Merdan	13	14	14 present
Topçuyan	35	32	32(30 present)
Cebeciyan	7	10	10 present
Bevvaban	5	5	5 (4 present)
Meşalederan	6	10	10 present
Müstahfızan	301	236	236(209 present)
Merdan-ı Kala-ı Matur	16	15	15 present
‘Azeban	291	294	294(? Present)
Gılmān-ı Yemīn-i Nahcivan	154	282	-

³²⁰ MAD 6409, p. 17-24, 62-76. MAD 4381, p.69-121. MAD 4381 register was mentioned for the first time in Kılıç, *XVI. Ve XVII. Yüzyıllarda Van*.

³²¹ MAD 4822, p. 2-11. ; MAD 6409, p.49-58; MAD 4381, p.14-40, 157-172.

³²² MAD 2223, p. 1-15. ;MAD, 6409 p.1-14.

Table 4: (continued)

Gılmān-ı yemīn-i (?)	130	-	-
Gılmān-ı yesār-ı Nahcivan	24	-	-
Müteferrikiyan-ı Nahcivan	266	-	-
Gılmān-ı yemīn-i Tebriz	-	388	-
Müteferrikiyan	55	54	-
Mütekaid	6	9	-
Çavuşan	78	81	-
Gılmān-ı Van	417	417	-
Total=	1,804	1847	601

Table 5: Garrison of Van in 1020/1611-1612 Masar³²³

Type of Troops	Number
Müteferrikiyan	55
Mütekaid	8
Çavuşan	64
Gılmān-ı Van	307
Müteferrikiyan-ı Tebriz der muhafaza-i Van	34
Gılmān-ı Yesār-ı Tebriz der muhafaza-i Van	172
Gılmān-ı Yemīn-i Tebriz der muhafaza-i Van	269

³²³ MAD7425, p.1-77. Pages between 16-17, and 40-42 are missing in the defter. Also, this register first mentioned in Kılıç, *Xvi. Ve Xvii. Yüzyıllarda Van*.

Table 5: (continued)

Gılmān-ı yemīn ve yesār-ı Nahcivan der muhafaza-i Van	215
Merdan	14
Cebeciyan	10
Bevvaban	5
Meşalederan	10
Topçuyan	32
Müstahfızan	236
‘Azeban	316
Merdan-ı Kī’la-i Matur	13
Total=	1760

Based on the tables of 4 and 5, the total number of local troops in fortress of Van was 1,804 in 1609 Masar period. In 1609 Reşen period, 44 men were added to the garrison and the total number of the garrison became 1,847. For the Recec period of 1609, we only have the muster and payroll registers of certain troops. Therefore, it is not possible to find the total number of the garrison. However, it is reasonable to assume a similar number for this period just as in Masar and Reşen periods of the same year. In 1611 Masar period, Van had 1,760 men in its garrison.

In the tables of 4 and 5, *Gılmān-ı Yesār-ı Tebriz der muhafaza-ı Van* and *Müteferrikiyan-ı Tebriz der muhafaza-ı Van* troops seem interesting, when the years 1609-1610 and 1611-12 are considered. Because Tabriz was taken in 1603 by Safavids, but the name of *gılmān* of Tabriz in guarding of Van can be still found. Orhan Kılıç indicates that *gılmān* troops that relocated from Tebriz and Nahcivan in Van merged into *gılmān* of Van in 1611. Therefore, their existence in Van can be explained with their reorganization under the name of *Gılmān* of Van. After this date, the names of these troops cannot be found in the payroll registers.³²⁴

³²⁴ Kılıç, XVI. Ve XVII. Yüzyıllarda Van, 368-69.

Table 6: Janissaries in Garrison of Van³²⁵

Date	Number
1015/1606-07 (masar-recec-reşen) ³²⁶	562
1015/1606-07 (lezez) ³²⁷	305
1018/1609-10 Masar ³²⁸	797
1021/1612-13 ³²⁹	859
1022/1613-14Reşen ³³⁰	677
1023/1614-15 Lezez ³³¹	788
1023/1614-15 Recec ³³²	265
1024/1615-16 Masar ³³³	999
1024/1615-16 Lezez ³³⁴	823
1028/1618-19 ³³⁵	632

³²⁵ There is a more detailed table for the number of janissaries in Van in Kılıç, *Xvi. Ve Xvii. Yüzyıllarda Van*.

³²⁶ MAD 5538, p.190-196.

³²⁷ MAD 5538, p.200-206.

³²⁸ Kılıç, *XVI. Ve XVII. Yüzyıllarda Van*, 361.

³²⁹ MAD 7453; Also, this register was mentioned in Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 119.

³³⁰ MAD 6718 p.210-216; Also, this register was mentioned in Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 119. And Kılıç, *XVI ve XVII. Yüzyıllarda Van*,361.

³³¹ MAD 6718, p.392-404. Also, this register was mentioned Kılıç, *XVI ve XVII. Yüzyıllarda Van*,362.

³³² MAD 6718, p.616-626. ; Also, this register was mentioned Kılıç, *XVI ve XVII. Yüzyıllarda Van*,362.

³³³ Mad 6718, p. 628-655.

³³⁴ Mad 6718, p.616-626.

³³⁵ MAD 6822, p.62-70. MAD 6822 register was mentioned for the first time in Kılıç, *XVI. Ve XVII. Yüzyıllarda Van*.

Table 6: (continued)

1029/1619-20 ³³⁶	552
1030/1620-21 ³³⁷	310
1622 ³³⁸	261
1623-24 ³³⁹	260
1633-34 ³⁴⁰	1130
1637-41 ³⁴¹	329-390
1641 ³⁴²	1369
1660 ³⁴³	611
1077/1666-67 ³⁴⁴	625

As it can be seen from the tables of 4 and 5, the size of the garrison of Van changed between 1760-1847 for the years of 1018/1609-1610, and 1020/1611-1612. These years were militarily active years for the Ottomans. After losing Tabriz, Revan and Baghdad to the Safavids, Van became an important fortress in the frontier again after 1603. In 1013/1604-1605, it was besieged by Safavids. However, it did not end up as a success for the Safavids.³⁴⁵ Therefore, it was required to station more troops

³³⁶ MAD 6822, p.185-194.

³³⁷ MAD 6822, p.197.

³³⁸ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 119.

³³⁹ Ibid.

³⁴⁰ Ibid., 120.

³⁴¹ Ibid., 119.

³⁴² Ibid.

³⁴³ Hezarfen Hüseyin Efendi, *Telhisü'l-Beyan Fi Kavanin-i Ali Osman*, ed. Sevim İlgürel (Ankara:TTK,1988), 150-151.

³⁴⁴ MAD 5996, p.123-128.

³⁴⁵ Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003),392.

due to its front character. Also, a few years before 1018/1609-1610, Celali rebellions were making a peak. Because of the Celali rebellions, the Ottomans could not respond to the offensive movement of the Safavids in the East. Therefore, the fortresses were in distress position in the East. In 1610, a campaign over Safavids was organized. Hence, the size of the garrison of Van throughout this period should be expected to be higher than normal.

If we calculate the total number of troops for 1018/1609-1610 masar period from the table 4 and the janissaries again for the same period from the table 6, we find the total number of 2,601. Also, if the number of troops in 1020/1611-1612 were added to the janissary numbers from 1021/1612-13, the total size of the garrison is found 2,706. Orhan Kılıç explains the changes in the total number of troops in Van by emphasizing deaths, dismissed soldiers and relocations of the existing men to other fortresses. Their ranks were trying to be filled by enlisting new recruits.³⁴⁶ Also, sometimes some part of the field army stayed for the winter in Van, just like serdar Cigalzade did in 1013/1604-1605.³⁴⁷ Therefore there is the possibility that during the winter periods of campaigns, Van may have accommodated more men than the other periods.

According to Table 5, the number of janissaries in Van remained around 260-552 between 1619-1624, then it increased suddenly in 1633. The small number of the janissaries for 1619-24 caused from the peace period between Ottomans and Safavids from 1618 to 1623.³⁴⁸ The reason of this sudden rise in the numbers in 1633 was the siege of Van by Safavids.³⁴⁹ Orhan Kılıç claims that fluctuations in the janissary numbers in Van cannot be explained only with the political situation. In addition to the political changes, he says that the janissaries could be replaced with other types of

³⁴⁶ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 99.

³⁴⁷ Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003), 391.

³⁴⁸ Kılıç, *XVI. Ve XVII. Yüzyıllarda Van*, 366.

³⁴⁹ "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 119.

troops or they could be sent to another fortress. Therefore their numbers changes depend on these relocations.³⁵⁰

Together with the local artillerymen, the artillerymen from the household troops stationed in the fortress of Van. During 1609-10 and 1611-12, there were 32 local artillerymen in Van.³⁵¹ In 1619, there were 16 artillerymen from household troops.³⁵² Due to military activity around the years of 1609-1612, the artillerymen from the household troops could be expected in Van just like in 1619, but there is not any data for this year.

When the infantry/cavalry ratio of the local garrison of Van is calculated for the year 1609-1610 based on table 4, the ratio becomes 0,72 which indicates cavalry superiority in local troops of the garrison. However, this ratio does not include the number of janissaries. When the number of janissaries were added to the total number of the garrison for the same year, infantry/cavalry ratio becomes 1,04. The infantry/cavalry ratio becomes 0,67 for the year of 1610-11. When janissary numbers were added for this year, the ratio becomes 1,48. Thus, adding janissary numbers changes the infantry/cavalry ratio in garrisons in favor of infantry. However, without the number of janissaries cavalry units overwhelmed among the local troops.

2.3.3.2. Erzurum

Erzurum was a military hub for the Eastern operations of the Ottomans. It was one of the most important cities of the Eastern frontier.³⁵³ Even though, its important position in the frontier, we were not able to find consistent data about the local troops of Erzurum from the payroll registers. Therefore, while discussing the number of the garrison of Erzurum, their number could not be added to find the approximate total

³⁵⁰ XVI. Ve XVII. Yüzyıllarda Van, 366-67.

³⁵¹ MAD 4822, p.3., MAD 7425, p.57.

³⁵² Kılıç, XVI. Ve XVII. Yüzyıllarda Van, 368.

³⁵³ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 362-63.

size of the garrison. Although the absence of local troops, it is possible to find abundant data about the number of janissaries in the garrison of Erzurum through the years.

Table 7: Janissaries in Garrison of Erzurum

1017(Masar) 1608-09 ³⁵⁴	1912
1017(reşen) ³⁵⁵ (1608-09)	2335
1017Recec-Reşen ³⁵⁶ (1608-09)	1319
1021 ³⁵⁷ (1612-13)	1404
1022 ³⁵⁸ (1613-14)	1332
1023 ³⁵⁹ Lezez (1614-15)	1247
1023 ³⁶⁰ Masar (1614-15)	1022
1027 ³⁶¹ Masar	604
1039-1040(1629-1631) ³⁶²	558
1042 ³⁶³ 1632-1633	1747
1660 ³⁶⁴	626

³⁵⁴ MAD 5538, p.100-110.

³⁵⁵ MAD 5538, p.85-100.

³⁵⁶ MAD 5538, p.13-85.

³⁵⁷ MAD 7453, p. 1-27.

³⁵⁸ Mad 6718, p. 89-101.

³⁵⁹ MAD 6718, p.348-365.

³⁶⁰ MAD 6718, p.370-380.

³⁶¹ MAD 16411, p. 1-15.

³⁶² D.YNÇ.d. 33763. D.YNÇ.d. 33763 register was mentioned for the first time in Kılıç, XVI. Ve XVII. Yüzyıllarda Van.

³⁶³ AE.SMRD.IV. 2 126 p.1

³⁶⁴ Hezarfen Hüseyin Efendi, *Telhisü'l-Beyan Fi Kavanin-i Ali Osman*, ed. Sevim İlgürel(Ankara:TTK,1988), 150-151.

Table 7: (continued)

1078 ³⁶⁵ (1667-68)	594
1079 ³⁶⁶ 1668-1669	630

Although data is not available for the local garrison of Erzurum, they should have existed in the garrison of Erzurum for the years that mentioned in Table 7. When Table 7 is interpreted, the large numbers of janissaries can be distinguished for the year of 1017/1608-09. The Celali rebellions in Anatolia and the war with the Safavids could be the cause of this large number of janissaries in Erzurum for this specific time. With the restoration of the Safavid control on the all previously lost fortresses to Ottomans during the war of 1578-1590 by 1606, Erzurum should have been an important frontier fortress again. Also, just like Van, field army sometimes spent the winter in Erzurum during a campaign in the East.³⁶⁷ Therefore the number of troops in Erzurum should be higher than normal during the winters of campaigns.

There is little data about the number of artillerymen and armorers of Erzurum. In 982/1574-75, the number of artillerymen was 49 in Erzurum.³⁶⁸ In 1005/1596-97, there were 23 armorer and 55 artillerymen in Erzurum.³⁶⁹ 1044/1634-35, there were 14 artillerymen.³⁷⁰ The number of the artillerymen is lower than expected from a military hub in the East.

The number of the Janissaries seems to began to decline after 1023/1614-15, and until 1042/1632-33 it remains around 550-600. The decline of the number of the janissaries during this period might be related to Abaza rebellion and unrest between

³⁶⁵ MAD 5996 p.110-114.

³⁶⁶ MAD 5996, p.330-334.

³⁶⁷ Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003),542.

³⁶⁸ MAD 7093, p.23.

³⁶⁹ D.AMH.d. 24521, p. 14-16.

³⁷⁰ D.AMH.d. 24526, p. 30.

local population and janissaries. In 1042, the number of janissaries suddenly rises to 1747. The indication of increasing Safavid threat in the region with the siege of Van by Safavids and raids that reached to Ardahan, Kars, and Erzurum in 1632³⁷¹ should be the main reasons for the rise in the number of janissaries. Also, the campaign of Baghdad in 1630 and resolution of Abaza problem could be other reasons to station more troops to Erzurum in 1042/1632-33. After 1635, Eastern Frontier remained quite for the rest of the 17th century. Therefore, the number of Janissaries declined again and remained low during the 1660s.

2.3.3.3. Tabriz

In the case of Tabriz, we had very little data about the number of its garrison. This is true for both local and janissary troops. This thesis includes only one payroll register about Tabriz, and it belongs to the household troops that was stationed in Tabriz. The other information about the size of the garrison based on the information that was given in chronicles.

After it was taken from the Safavids in 1585, according to Mustafa Ali seven thousand soldiers and according to Asafi, two or three thousands troops were stationed in the fortress of Tabriz with a couple of hundreds of artillery. The fortress was repaired, and new installments were added.³⁷² 105 artillerymen from the household troops in Tebriz in 1598-99 according to Table 8 seems reasonable even though the peace with the Safavids, because Tabriz was in the front line during those years. Also, in a small fortress that located closely to Tebriz, Hamne(Hamane) had 31 artillerymen at the same time.³⁷³ After the retreat of the main Ottoman Army from the region, the Safavids besieged Tebriz for 11 months. It was always under the threat of Safavids.

³⁷¹ Polat, IV. *Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*, 22.

³⁷² Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 161.

³⁷³ MAD 6281, p. 13-14.

Table 8: Garrison of Tabriz in 1598-1599³⁷⁴

Type of Troops	Numbers
Topçuyan (household troops)	105
Mütekaid	15
Katib	41
Müteferrikiyan	174
Merdan?	3
Gilmān	568
Gönüllüyan	387
Total=	1293

The payroll register from 1589-90 shows a total of 1293 troops in Tebriz, and the number of the troops we count as cavalry (*Gönüllü*, *Gilmān*, and *Müteferrika*) constitutes 1129 soldiers.³⁷⁵ Infantry/cavalry ratio for 1589-89 is 0.14. However, it should not be forgotten that this ratio does not include all the local and janissary forces that might be found in the fortress. There is a very high chance that Tabriz also had janissary troops and local troops at that time, due to its location in the frontier. However, because it was taken recently, number of local troops might be less than household troops. These missing numbers have the possibility to change the balance of infantry/cavalry ratio in Tebriz. In addition to these, there are some missing numbers in the payroll register which makes us to count fewer soldiers than the actual number.

2.3.3.4. Revan and the Other Fortresses in Caucasia

After Revan was taken in 1583, 5601 soldiers were left as the garrison forces. The composition of Revan garrison consisted 200 artillerymen, 500 *müstahfızan* 189 *müteferrika*, 550 *gönüllü* and *müteferrika* of Amid, 1004 *gönüllü-i yemān*, 1001

³⁷⁴ MAD 6281, p. 2,6-15,21-96. Pages of 4-5 and 16-21 are missing in this register.

³⁷⁵ MAD 6281, p. 2,6-15,21-96.

gönüllü-i yesār, 505 gun bearing cavalry, 401 *çerakise* soldiers, 1000 *karavişi kul*, 500 *rüesa* and *‘azeban* and 200 armorers.³⁷⁶ With those numbers, the infantry/cavalry ratio in Revan becomes 0,66 for 1583.

In 1000/1591-1592, there were 1,231 men in the fortress of Revan. These 1,231 men consist of *müteferrikiyan*, *gılmān*, *sipahiyan*, *ulufeciyan*, *gureban*, and *tüfenkçiyan-ı süvari* classes.³⁷⁷ Therefore, this number only represents some cavalry troops in Revan in 1591-1592.

The number of the garrison increased even more in 1635, after Revan was retaken by Ottomans. Approximately 10.000-12.000 soldiers were stationed in the fortress, and 2000 of them were janissaries, 300 of them armorers, 150 of them artillerymen and 40 of them were *‘azeban-ı top* troops from the household troops. Later, 799 more janissaries joined the defense of Revan which made the number of janissaries 3,289 for 1635.³⁷⁸

Another important fortress in the region, Lori’s garrison, in 1584, consisted 500 *gılmān-ı yesār*, 500 *gılmān-ı yemīn*, 203 *müstahfizan*, 200 *‘azeban*, 23 armorers, 43 artillerymen. Moreover, later 471 kul from Erzurum, 104 cavalrymen from Geçivan fortress, 412 *kul karındaşı* (brother of corps) or *gönüllü from Kars*, 360 *kul* from Mağazgerd sent to Lori which made the total number of garrison 2,816.³⁷⁹

Another fortress which was a *vilayet* center was Tomanis, and Tomanis had 1000 *gılmān*, 203 *müstahfizan*, 1000 *kul*, 203 *‘azeb*, 23 armorers, and 43 artillerymen, and a total of 2,472 men for the same year.³⁸⁰ Also, Mustafa Ali mentions the size of the garrisons of the small fortresses in the area which were conquered by the Ottomans. The fortress of Şüregel had 50 *müstahfizan* troops, Talin had 49 *müstahfizan* and 70 *‘azeban* troops, Akçakale had 50 *müstahfizan*, Sürmeli had 49 *müstahfizan*, Beceni

³⁷⁶ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 136.

³⁷⁷ TT.d. 637, p. 2-47.

³⁷⁸ Polat, *İv. Murat’ın Revan Seferi Organizasyonu Ve Stratejisi*, 400-01.

³⁷⁹ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 141.

³⁸⁰ *Osmanlı-Iran Siyasi Münasebetleri (1578-1612)*, 141.

had 205 *gilmān*, 100 *müstahfizan*, 100 'azeban troops. A total of 673 men was on duty in these fortresses.³⁸¹

When 7000 troops in Tebriz,³⁸² 5,601 in Revan in 1583,³⁸³ 10-12,000 in Revan in 1635³⁸⁴, are considered it is possible to say that Ottomans left a high number of troops to fortresses after they conquered them from the Safavids. Moreover, most of the troops that assign these fortresses were cavalrymen. After their conquests, fortresses in Georgia had 10,548 men. Repair and construction of new fortresses and the ongoing war in the region were the causes of this large number of garrison forces.³⁸⁵

2.2.4. Supply and the Finance of the Garrisons

2.2.4.1. Supply of the the Garrison

Supply of the armies was and still is the main consideration of the states. An army without something to eat is a crippled army. It was true for the modern armies as well as it was to the early modern states. The Ottoman Empire was not an exception. Although there is a historical argument that says the Ottomans had very little problems with supply, it was not always true as it seems. Geoffrey Parker's arguments indicate that after the growth of the power of central bureaucracy and monarchies caused the establishment of the well-operated supply systems in Europe. The *trace italienne* type of fortresses needed more man for their siege and for their garrisons. Therefore it led to a growth in the European armies according to Parker. Then, growing armies required well-planned supply system in order to maintain the requirements of the armies.

³⁸¹ *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 137.

³⁸² *Ibid.*, 161.

³⁸³ *Osmanlı-İran Siyasi Münasebetleri (1578-1612)*, 136.

³⁸⁴ Polat, *İv. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*, 400-01.

³⁸⁵ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 172.

Therefore, the bigger bureaucracy was needed with powerful central forces.³⁸⁶ Eventually, when we look at the problem of supply in the context of military revolution, it is related to the growth of the armies closely.

The Ottoman supply system was considered as a system that praiseworthy by some historians. Also, it was considered as better planned than Austrians for the 17th century. It is said that storehouses of fortresses of Ottoman Empire in Hungary was full of supply and keeping them full was an important matter for Ottomans.³⁸⁷

The mountainous geography of the Caucasian region was one of the obstacles in the Eastern frontier that prevent easy transportation of the armies and the supply. The Ottomans were dependent on the Crimean support and the Georgian allies for their operations and the preservation of garrisons in the Caucasus.³⁸⁸ In order to ease the supply of regions in Caucasia, several other attempts had been made. Grand Vizier Sokollu's plan to open a canal between Don and Volga was aiming to establish a communication and a transportation channel with Sunni states of Central Asia. With this established relations Ottomans wanted to put more pressure on the Safavids which also some Central Asian states had conflicts with.³⁸⁹ This was the main purpose of the construction of the canal project. Although, this was not solely purpose of Don-Volga project, with this canal, proper supply of Shirvan and Demirkapı was foreseen.³⁹⁰

In the Eastern part of the Empire, the rivers were also important for the supply system. The Euphrates and the Tigris rivers were important rivers for the Eastern Anatolia and Iraq regions. The Ryon river in the Georgia was an important river for the region due to its course which lays through the inner parts of the country.³⁹¹ During

³⁸⁶ Geoffrey Parker, "The "Military Revolution," 1560-1660--a Myth?," *The Journal of Modern History* 48, no. 2 (1976): 45.

³⁸⁷ Hans Georg Majer, "XVII. Yüzyılın Sonlarında Avusturya Ve Osmanlı Ordularının Seferlerdeki Lojistik Sorunları," *The Journal of Ottoman Studies*, no. 2 (1981): 193.

³⁸⁸ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 358.

³⁸⁹ İsmail Hakkı Uzunçarşılı, *Osmanlı Tarihi* 3vols., vol. 1 (Ankara: TTK, 2009), 34-35.

³⁹⁰ İsmail Hakkı Uzunçarşılı. *Osmanlı Tarihi* 4. Cilt 1. Kısım 35

³⁹¹ Aydın, "Faş Kalesi," 67.

or before the campaigns against the Safavids, necessary ordnance and supply were sent to Trabzon port, and from there it was distributed to storehouses of Bayburt and Erzurum. 200,000 *kile* supply could be stored in the storehouse of Erzurum fortress. Other than these storehouses, storehouses of Van and Diyarbakir were also important for the supply of campaigns.³⁹² While preparing for the campaign to East in 1012/1603-1604, it was ordered that provision from Erzurum and Diyarbakır should be collected by using *iştira*³⁹³ method. Also, supply from another part of the empire was ordered to deliver to the port of Trabzon; then it should be delivered to the storehouse of Erzurum.³⁹⁴ Supply that was sent to Eastern frontier's storehouses were coming from various areas of the Empire. Moldovia was one of the sources of supply that was sent to Trabzon port. In addition to that, supply could be collected from the nearby areas' storehouses. For Erzurum storehouse, Karahisar-ı Şarki and Canik were the suppliers.³⁹⁵

Precautions for the supply of the Eastern Frontier was an essential necessity for the Ottomans because the supply of the frontier was a serious problem. The main reason for this was the geography of the region. The mountainous regions of the frontier were not fertile enough, and they were not giving abundant products to its owners. Therefore, the supply of garrisons had to be provided from other parts of the empire. Unfruitful production in lands meant that they were not very good candidates

³⁹² Ömer İşbilir, "XVII. Yüzyıl Başlarında Şark Seferlerinin İaşe, İkmal Ve Lojistik Meseleleri" (Unpublished Ph. D. Dissertation, İstanbul Üniversitesi, 1996), 34-35.

³⁹³ There were three kinds of taxes and obligations for the maintainance of the supply system. These were called Nüzul, sürsat and iştira. Nüzul was collected both in cash and kind, but it only included collection of certain materials; grain, flour and barley. Sürsat was also collected both in cash and kind, but sürsat included the collection of several materials; such as, honey, wood, meat, hay, bread etc. İştira had two kinds of application. The first one was called *serbest iştira*, and it was operated as in free market procedures. The second type of *iştira* was similar to *sürsat*, the state bought necessary materials from reaya from fixed prices

³⁹⁴ Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi* eds. Ziya Yılmaz (Ankara: Türk Tarih Kurumu, 2003). 382-383, 588.

³⁹⁵ İşbilir, "Xvii. Yüzyıl Başlarında Şark Seferlerinin İaşe, İkmal Ve Lojistik Meseleleri," 30-32.

for timar holders. Therefore, burden of timars in this frontier which has limited resource strained the relation between local people and state.³⁹⁶

The trouble of providing provision to garrisons in the frontier, led to some direct conflicts in East during 1578-1590. As Rhoads Murphey states, these conflicts were the products of insufficient resources and happened during peace times rather than war times.³⁹⁷ Tebriz, after Ottomans took it from Safavids, a direct conflict between Ottoman soldiers and people of Tebriz happened, due to insufficient provisions.³⁹⁸ Although it was not so similar to what happened in Tebriz, local people of Erzurum had similar problems in terms of provision with its garrison forces.³⁹⁹ On the other hand, Ottomans put some effort to supply fortresses in an emergency. After the siege of Van in 1633 by Safavids, Ottomans stored 31 thousand *kiles* grain and 10 thousand *kiles* barley in Van which was sent from Harput and Mardin.⁴⁰⁰

When Hungarian plains are compared with mountainous areas of Eastern Anatolia, Caucasus, and Iran, it might have been thought that it is easier to provide Hungarian frontier with proper supply organization, but still, it was not an easy job. At the beginning of the Long War, there were serious problems with the supply of the active army and garrisons in the region. Janissary corps that joined to the active army was complaining about inadequate supply of provisions and guns, and because of this incompetency, those janissary corps preferred to return to İstanbul rather than stay their winter quarters in Vidin.⁴⁰¹ Return of required troops caused to the recruitment of more Kuloğlu in Hungarian frontier, specifically the number of “kuloğlu” that were enlisted was six thousand.⁴⁰² Also, there were some complaints about lack of ordnance,

³⁹⁶ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 354.

³⁹⁷ Ibid., 357-58.

³⁹⁸ Ibid., 365.

³⁹⁹ Ibid., 362-63.

⁴⁰⁰ Polat, *İv. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*, 32-33.

⁴⁰¹ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), I, 345-347.

⁴⁰² Ibid, 347.

supply and payments in the Hungarian frontier around 1593-1594 by some people that come to İstanbul from the frontier.⁴⁰³

The problem of supply of the garrisons even led to the surrender of some fortresses to the opponent's forces. The garrison of Filek that was besieged by the Habsburgs had to surrender due to an insufficient amount of provision and ammunition⁴⁰⁴. Lack of adequate provision even led to a murder in Egri fortress. Janissaries who were furious about the lack of adequate provision killed the samsoncubaşı.⁴⁰⁵

Even though all the problems in the provision of supply, Ottomans were aware of the importance of the supply of garrisons, for both frontiers. Fortress construction strategy of Ottomans that aims to protect Buda and Danube, also a good example that shows the importance of supply.⁴⁰⁶ Defense circle that encircled them was also a precaution to provide the necessary provision and ordnance to garrisons. In the Hungarian frontier, Danube river had the crucial importance for the supply of the armies and garrisons, together with Drava and Sava rivers. However, Rhoads Murphey claims that Ottomans were not fully aware of the great importance of supply for the Eastern frontier by giving significant examples of Tabriz, Erzurum Kars, and Shirvan. He suggests that this was the result of neglect or miscalculation of Ottomans of transport, terrain, and requirements of their troops⁴⁰⁷

2.2.4.2. Finance of the Garrison

Several different methods have been exercised for the payment of salaries of garrison forces. *Ocaklıks* were assigned to some garrison forces. Muqataa (tax-farm)

⁴⁰³ Ibid, 364-365.

⁴⁰⁴ Ibid, 344.

⁴⁰⁵ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu, 1999), II, 690.

⁴⁰⁶ Hegyi, "The Ottoman Network of Fortresses in Hungary."

⁴⁰⁷ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 358-68.

income of certain places was directed to the payment of garrison forces with *ocaklık* assignments. Also, *cizye* taxes were used to pay salaries of garrisons.⁴⁰⁸ The garrison of Van was taking their salaries either from the treasury of Diyarbakir in cash or from other sources as *ocaklıks*.⁴⁰⁹ Another meaning of the *ocaklık* was granting of the land to specific chieftains as hereditary lands, especially in the Eastern frontier, in return for their services against the Safavids, chieftains acquired this kind of *ocaklıks* in exchange for their service.⁴¹⁰ Rhoads Murphey indicates that application of the first type of *ocaklık* system in which income of the certain tax sources were assigned for the payments of the garrisons began to be applied in the 17th century.⁴¹¹ Some problems with *ocaklıks* arose throughout the time. Some *ocaklıks* that were assigned to the fortress guards created problems between them and local *beys*. Sometimes, money that was collected by an *emin* who was responsible for collecting taxes and sending it to garrison soldiers never delivered to their owners.⁴¹² Also, there were some garrison forces that were granted timars for their services in the fortresses other than the ones that were paid either from the local treasury of *vilayet* or as *ocaklıks*.

Financing of the garrisons was one of the most important expenditure items of the treasury of the Ottoman Empire. While salaries of the local troops were paid from the relevant treasury of provinces, the household troops were paid from the central treasury with rare exceptions. Although most of the times, salaries of the garrisons were paid from the treasury of the relevant *vilayet*, sometimes the treasury could not meet the required amount of money, and the necessary money had to be borrowed from the central treasury of the empire. In 1558-59, the expenditure of the local treasury of Buda for the salary of garrison forces in the whole province was around 23 million *akçes* for the total of 10.328 men while income was only approximately 6.4 million

⁴⁰⁸ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 94.

⁴⁰⁹ Ibid.

⁴¹⁰ Murphey, "The Functioning of the Ottoman Army under Murad IV (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 187.

⁴¹¹ Ibid., 187-88.

⁴¹² Ibid., 201.

akçes.⁴¹³ It reveals that expenditure for the maintenance of even one garrison could be very costly for the empire. This deficit was tried to be balanced by transferring money from Temesvar's treasury for a while. Although, this deficit was balanced during the governorship of Üveys Pasha by using only Buda's resources, after his governorship deficit became visible again.⁴¹⁴ On the other hand, it is important to emphasize that the treasury of Temeşvar was giving a surplus which was used to support Buda.⁴¹⁵ Therefore, deficits were not applicable for every treasury of the *vilayets* in Ottoman Hungary.

Transfer of money from the treasury of provinces to the treasury of other provinces was common practice in both frontiers. During the reign of Murad III, approximately 2 million *akçes* were sent for the salary of the Tiflis garrison from the treasury of Tokat province.⁴¹⁶ From the treasury of Haleb, the salaries of the garrisons of Maraş, Zamanti, Kars, Mosul, and Mardin were paid. Also, money from the treasury of Adana province was sent to Kars garrison.⁴¹⁷ Sometimes payments of garrisons of Van and Tomanis were sent from Haleb. Furthermore, payments were sent from the treasury of Diyarbakır to the garrisons of Revan, Tiflis, Tebriz, and Gence.⁴¹⁸ In the 16th century, Basra was able to meet its expenditures from the local treasury; however, during the upcoming years, it began to depend on the money that was transferred from Aleppo.⁴¹⁹ Rhoads Murphey points out that a large portion of local revenues of the Eastern provinces spent in the same place, while revenues of the Western provinces

⁴¹³ Ágoston, "The Costs of the Ottoman Fortress-System in Hungary in the Sixteenth and Seventeenth Centuries." 198

⁴¹⁴ Ibid. 216

⁴¹⁵ "Ottoman Conquest and the Ottoman Military Frontier in Hungary.," in *A Millennium of Hungarian Military History*, ed. Béla Király and László Veszprémy (Boulder, Co.: Atlantic Research and Publications, 2002), 99.

⁴¹⁶ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605."

⁴¹⁷ "The Functioning of the Ottoman Army under Murad IV (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 190.

⁴¹⁸ Kütükoğlu, *Osmanlı-İran Siyasi Münasebetleri (1578-1612)*, 229.

⁴¹⁹ Ágoston, "Ottoman Conquest and the Ottoman Military Frontier in Hungary.," 99.

mostly sent to the central treasury.⁴²⁰ Although, as it was mentioned above in the example of Buda, this statement should not include some of the Hungarian provinces of the Ottomans.

In addition to the payments from the local treasuries of *vilayets*, and *ocaklık* assignments, in the Eastern frontier the local allies of the Ottoman Empire were also contributed to the payments of garrisons. Alexander II, a Georgian ally of the Ottoman Empire was paying 1.2 million *akçes* to Ottomans, and Abubekr Mirza from Shirvanshadids was paying 2 million *akçes* to Ottomans as a tribute which were used to maintain the military presence of Ottomans in the East.⁴²¹

Rhoads Murphey claims that military expenditure for the garrisons increased dramatically in the 17th century when it is compared to the 16th century. He gives figures for the salaries of three garrisons in the Eastern frontier as examples. These fortresses are fortresses of Ahıska, Ardahan, and Kars which covers a small portion of the frontier of Ottomans against the Safavids. These three fortresses had a total of 2,903 men, while their annual payments cover 14,058,040 *akçes*.⁴²² When this figure compared to the expenditures in the 16th century, it nearly equals to half of the military expenditure of whole Rumelia. While the annual salary of 17,487 men in Rumelia was 30 million *akçes* in the 16th century, only 2,903 men in three fortresses in the 17th century took 14,058,040 *akçes*.⁴²³ The numbers from the garrison of Van in 1609, supports Murphey's suggestion. In 1609, 1149 men in Van were taking 4,989,452

⁴²⁰ Murphey, "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey," 189.

⁴²¹ "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 358-60.

⁴²² "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey." 182-184

⁴²³ Ibid.

akçes per year.⁴²⁴ This shows that military expenditure of the Ottomans only for salary of the garrisons increased approximately three times in the 17th century.

The delay in the payments for months, or no payments at all were common situations for the soldiers of the garrisons. In 994/1585-86, soldiers that were in the guarding duty in Demirkapı and Şemahı complains about missing payments for four years.⁴²⁵ Some people that came from the frontier at the beginning of the Long War complained about the lack of ordnance, supply, and delay in payments.⁴²⁶ Serdar Sinan Pasha complains to İstanbul about payments of soldiers in Estergon fortress. Payments of the garrison of Estergon were not made for one year, and it was under siege. Serdar Pasha recommends to İstanbul to make the payments before garrison soldiers leave the fortress to the enemy.⁴²⁷ The garrisons of Nihavend (Hamedan) fortress was complaining about five years of no payments while they were besieged.⁴²⁸ As it is seems, delay in the payments of the salaries of the garrison soldiers could lead serious results in active military situations. Also, these problems with payments of garrison forces were not confined to only one frontier. It was a general problem of the Ottoman Empire during the mentioned period. Moreover, during the Long War, there was a continuous call from the frontier that wants money, soldiers and supply from the sultan.⁴²⁹ These three things were always a problem during the campaigns. Delays in payments might be caused from the increased burden of the salaries to the Ottoman treasury in the 17th century.

⁴²⁴ MAD 4822 p. 2-11. ; MAD 6409 p.49-58. MAD 4381 p.14-40, 157-172. 294 Merdan troops were taking 998,196 akçe per year. 294 azeban troops were taking 948,724 akçe. Mütferrikiyan, Mütেকaid, Çavuşan, and Gilman troops with the total of 561 men were taking 2,993,068 akçes per year.

⁴²⁵ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu,1999), I, 182.

⁴²⁶ Ibid, 364-365.

⁴²⁷ Mustafa Selaniki Efendi. *Tarih-i Selaniki*, ed. Mehmet İpşirli (Ankara: Türk Tarih Kurumu,1999), II, 506.

⁴²⁸ Ibid, 578.

⁴²⁹ Ibid, 602.

2.2.6. The Comparison of the Eastern and the Hungarian Garrisons

2.2.6.1. The Type of the Troops

As it is discussed above, there were several different types of infantry and cavalry units in the Ottoman garrisons. In the fortresses of the Hungarian frontier, the biggest groups were 'azebans, *fārisans*, *müstahfizans*, and *gönüllüyans*.⁴³⁰ In the East, *gilmān*, *gönüllü*, 'azeban and *müstahfizan* troops were the largest groups.⁴³¹ Also, as it was mentioned above, some types of troops can only be found in one frontier. These are *gilmān*, *fārisan*, and *martolosan*. It is not possible to encounter with the name of *gilmān* in the payroll registers of the Hungarian garrisons. However, if assumptions of Kılıç true which indicates that *gilmān* name was used for *ulufeciyan-ı yemīn* or *yesār*,⁴³² lack of name of *gilmān* in registers of Hungarian garrisons could be caused from the registers that were not available for the period. Moreover, the name of *fārisan* troops only can be found in the registers of the Hungarian garrisons, their absence could be explained in a similar way just like *gilmān* troops, inaccessibility of the registers for the period. *fārisan* troops was the largest cavalry units in the fortresses in the Hungarian frontier, with *gönüllü* troops, while there were *gilmān*, *müteferrika* and *gönüllü* troops as the cavalry units of the fortresses in the Eastern frontier. These cavalries on both frontiers were used for offensive moves. Especially, *gönüllü* troops took important parts in the raids.⁴³³ The last different group, *Martolosans* were not shown in the payroll registers in the East. Although, Kılıç claims that *Martolosans* were existed in the Eastern frontier, there is not anymore evidence for their presence

⁴³⁰ Stein, *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*.91.

⁴³¹ MAD 2223,4822,6409.

⁴³² Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 109-10.

⁴³³ Radushev and Velkov, *Ottoman Garrisons on the Middle Danube : Based on Austrian National Library Ms Mxt 562 of 956/1549-1550*, 18.

in the Eastern frontier except one mention in an order so far.⁴³⁴ The reasons for the existence of *fārisan* and *gilmān* in only specific frontiers remain unknown. The general absence of the *martolosan* troops in the East could be explained with the composition of the population. The absence of *martolosan* troops in the East was caused due to their organization which emerged and based in the Balkans.

2.2.6.2. The Size of Garrisons

Both frontiers experienced high-level military activities from the end of the 16th to the mid-17th century. However, the military activities in the Eastern frontier were more frequent than the Hungarian frontier. Other than border clashes between local forces, the Hungarian frontier had witnessed Long War from 1593 to 1606 and another war from 1660 to 1664. On the other hand, Eastern frontier was in a constant war between 1578-1590, 1603-1612, 1615-1618, and 1624-1639. These were not simple border clashes between local forces.

It has been argued that there was an increase in the number of janissaries since the time of Suleyman I. Also, socioeconomic problems and multi-front wars contributed to this increase which gained speed during the Ottoman-Safavid wars at the end of the 16th century and at the beginning of the 17th century.⁴³⁵ According to Rhoads Murphey, for the Eastern frontier, aside from technological improvements that affect garrisons, the main reason for the growth of the garrisons was the annexation of new lands in Caucasia and in Iran from the Safavids during the reign of Murad III.⁴³⁶

These intense military activities and newly conquered fortresses might have required even more soldiers in the theaters of war. During the war times in the frontiers,

⁴³⁴ Kılıç, "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri," 117.

⁴³⁵ Ágoston, "Firearms and Military Adaptation: The Ottomans and the European Military Revolution, 1450–1800."

⁴³⁶ Rhoads Murphey, "The Functioning of the Ottoman Army under Murad IV (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey" (Unpublished Ph. D. Dissertation, The University of Chicago, 1979), 182.

the rise in the number of garrisons could be traced. However, it is sometimes possible to find drops in those numbers. Therefore, it should be considered that all variations that happened in the frontier area should be taken into account in order to distinguish the real reason for the changes. The changes in the size of the garrisons in both frontiers had several reasons as it was mentioned for fortresses of both frontiers in the previous chapter. Size of garrisons tends to reduce during peace periods, and increase in war times. This was especially true for the janissary troops. The number of garrisons could change with the relocation of troops to other fortresses in the border due to the acquisition or losing some fortresses or due to imminent danger. Also, as Gabor Agoston points out, Ottomans adjusted their garrisons' size based on their opponents,⁴³⁷ and this might be another reason. Therefore, it is possible to say that changes in the size of garrisons could not be related to only one reason. There were several variables affecting it.

Table 9: Garrisons of Buda, Kanije and Temeşvar Fortresses⁴³⁸

Years	Buda Fortress		Kanije Fortress		Temeşvar Fortress	
	Local Troops	Household Troops	Local Troops	Household Troops	Local Troops	Household Troops
1543	2868					
1549	1897					
1557-58	1712					
1569	1691					
1573-74	1757					

⁴³⁷ Ágoston, "Ottoman Conquest and the Ottoman Military Frontier in Hungary.," 91-93.

⁴³⁸ Most of the data about the Buda garrison was taken from: Hegyi, *The Ottoman Military Organization in Hungary*, 334-42. Information about the number of janissaries for the years of 1580/81, 1613, 1628, 1662/63 were taken from Bilge, *Osmanlı'nın Macaristanı*, 138. Data about the garrison of Kanije were taken from: Hegyi, *The Ottoman Military Organization in Hungary*, 547-54. Information about the number of janissaries for 1629 was taken from: Bilge, *Osmanlı'nın Macaristanı*, 138. And janissary numbers for the years of 1017/1608-09, 1028/1618-19, 1045/1635-36, 1053/1643-44, 1067/1656-57 were taken from, Stein, Mark L. *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*. I.B. Tauris & Co. 2007, 71, 72. Data for Temeşvar garrison was retrieved from: Hegyi, *The Ottoman Military Organization in Hungary*, 493-99.

Table 9: (continued)

1577-78	1618					
1580-81	1628	900				
1586-87		660				
1591					261	
1596-97		2298-2676				
1599-00	845	2892				
1600-01	840	518				
1603				1785-1838		
1604-05				1437-1587		
1607	1018	885				
1608-09				479-730		
1609		1787-1889				
1612-13	2095- 2274					
1613		1276				195-305
1613-14	2071			412-422		295-305
1614-18				147-169		120-299
1615-18			1325- 1354			
1618-19			1369	219-282		
1619-20			1423			82
1620-21			1443			
1621			1537		742	
1621-22			1587			
1623-24			1665			
1624-25			1665			
1625-26			1661			
1627-28			1656			
1628	1193					
1628-29	3229		1650			

Table 9: (continued)

1629-30			1653		792-815	226-231
1628-30			1692	170-175		
1630		248-255				
1630-31	3293		1653			
1631-32					868	
1633-34					963	
1653			1654			
1656-57				58		
1662	2212	3311		135		
1662-63		962	1654	135		
1666-68						
1669-71						

Table 10: Garrisons of Egri, Uyvar and Varad⁴³⁹

	Egri		Uyvar		Varad	
Years	Local Troops	Household Troops	Local Troops	Household Troops	Local Troops	Household Troops
1596-97		3121				
1596-98	781 (incomplete)					
1598		184				
1605-06		384				
1606-07	1565	389				

⁴³⁹ Data was taken from: *The Ottoman Military Organization in Hungary*, 538-41,70-72,74-76. Information about the janissary numbers for the period of 1605-1606 was taken from: Bilge, *Osmanlı'nın Macaristanı*, 138.

Table 10: (continued)

1613-15		287-1025				
1617-18		340				
1660-61					1579	400
1666-68		107				
1667			847+218	1699		
1666-69						622-817
1669-70		100				
1670-71		97				
1675			951+463			

When Table 9 and 10 are considered, it can be said that number of household troops in the fortresses of *vilayet* centers in the Hungarian Frontier in the 17th century inclined to increase during the war periods. On the contrary, during the peace times, their number seem to decrease to minimum levels. As Gabor Agoston correctly states, the size of the garrisons tended to fall after the first years of conquest.⁴⁴⁰

When it comes to the Eastern frontier, we have little data about the local garrisons of fortresses. However, when we look at the data available to us, it is possible to detect a high number of garrison troops in Revan and Tebriz, after Ottomans took them. Tebriz had 7 thousand men. Revan had 5,601 men in 1583,⁴⁴¹ and approximately 10 to 12 thousand men in 1635.⁴⁴² Tebriz had 1,293 troops in garrison, but this number excludes the number of most of the local troops.⁴⁴³ Lori and Tomanis, other fortresses in the region which can be count as medium fortresses when they were compared with Revan, had 2,816, and 2,472 men respectively in 1584.⁴⁴⁴ Only janissary numbers were available for the major fortresses in Eastern frontier, Erzurum. For the year of 1017/1608-09, the number of janissaries changed from 1,319 to 2,335 in three periods.

⁴⁴⁰ Ágoston, "Ottoman Conquest and the Ottoman Military Frontier in Hungary."

⁴⁴¹ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 161; *ibid.*, 136.

⁴⁴² Polat, *İv. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*, 400-01.

⁴⁴³ Table 8.

⁴⁴⁴ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 141.

Between 1021/1612-13-1023/1614-15, it had 1022-1404 janissaries in its garrisons. In 1027/1617-18, it decreased to 604 and then it decreased to 558 in 1039-1040/1629-31. In 1042/1632-1633, it increases to 1,747, then around 1660s it changes between 594-630.⁴⁴⁵ Van fortress had 2,601 men consisting of 1804 local troops, and 797 janissaries in 1609 Masar period. Local troops for the same year's Reşen period was 1847. In 1611-12, it had 1,760 local troops, and for 1612-13, 859 janissaries. If we assume the same amount for the last year, the total size of garrison becomes 2706.⁴⁴⁶

When the size of garrisons of Revan, Tebriz, Lori, and Tomanis are compared with Buda for similar years, due to the available data which limited the comparison for only these fortresses, Revan, and Tebriz seem to had more garrison troops than Buda by far. However, medium-sized fortresses of Eastern frontier, Lori and Tomanis in this case, had similar number of troops as Buda in their garrisons. This evaluation might be unclear for the comparison of fortresses in Hungary and East, due to the fact that there was a war going on in Eastern frontier, and Hungarian frontier was in peace for the specified years. Thence, comparison of specified fortresses should be done for the years that both frontiers were at war. Therefore, for the same fortresses in the Eastern frontier same years, and Van for the years of 1609-10, and 1611-12 are taken as the subject matter, while in Hungarian frontier, Buda and Egri fortresses for the years of 1599-1600, 1601, and 1606-1607 are the subjects of the evaluation. When these numbers are compared, again Buda cannot reach the numbers of troops in Revan and Tebriz. It had more men than Van for the certain year of 1599-00 but had fewer men for the years of 1601, and 1607. Fortress of Egri even had fewer men in its garrison for the year of 1606-07, than Lori and Tomanis. In the case of the janissary numbers for active war years in both frontiers, comparison of Kanije, Egri, Van, and Erzurum could be useful. For the years between 1603-1605, only janissary numbers are available for the fortress of Kanije. Erzurum had numbers from 1608-09. The numbers were very similar to each other for the militarily active years. Another important fortress, Egri for the years of 1598, 1605-06, and 1606-07 had a very little number of

⁴⁴⁵ Table 7.

⁴⁴⁶ See Table 4, Table 5, Table 6.

janissaries, approximately 184-389 janissaries in its garrison.⁴⁴⁷ The number of janissaries in Egri is close to the number of janissaries in Van. Van had 305-797 janissaries in between 1606-07-1609-10.⁴⁴⁸ Therefore, major centers of both frontiers, Erzurum, and Buda had a similar number of janissaries in their garrisons during the war years, while other important fortresses of frontiers such as Egri and Van also had similar janissary numbers.

The size of the garrison of Buda began to rise drastically in the 1610s and continued until the 1660s. This was not the case for other fortresses in vilayet centers in Hungary. However, most probably, their garrisons should also have had a high number of men for the years of 1660-64, due to military activities. Because data is rather limited for the Eastern frontier, this kind of deduction is very hard to make. However, numbers of janissaries from Erzurum and Van indicates that at least the number of janissaries increased during the times of war.

Table 11: Number of Janissaries in Hungarian Frontier in 1660⁴⁴⁹

	Number of Janissaries
Estergon	127
Eğri	100
Yanova	222
Varad	622
Kanije	200
İstolni-Belgrad	91
Novigrad	48
Budin	159
Uyvar	962
Bosna	663
Nova	119
Total=	3313

⁴⁴⁷ Hegyi, *The Ottoman Military Organization in Hungary*.

⁴⁴⁸ Mad 5538 p. , Kılıç, *Xvi. Ve Xvii. Yüzyıllarda Van*, 361.

⁴⁴⁹ Hezarfen Hüseyin Efendi, *Telhisü'l-Beyan Fi Kavanin-I Ali Osman*, ed. Sevim İlğürel (Ankara: TTK, 1988), 151.

Table 12: Number of Janissaries in guard duty in Eastern Frontier in 1660⁴⁵⁰

	Number of Janissaries
Baghdad	3800
Basra	1200
Kerkük	144
Van	611
Erzurum	626
Ahışa	225
Total=	6602

According to Table 11 and 12 for the year 1660, it can be seen that the total number of janissaries in the Eastern frontier is more than the Hungarian frontier. Number of Janissaries in Konya, Şam, Trablus-şam, Azak, Kefe, Bender, Kamaniçe and Çanak Limanı were omitted from the related frontier's total number of janissaries due to their locations. When other fortresses from other frontiers or inner land were taken into account, a total number of janissaries that stationed in the fortresses as guards were 16,842 and the total number was 54.222.⁴⁵¹ However, when Eastern and Hungarian frontiers are compared directly, it is clear to see that even though Hungarian frontier was about to witness high military activity in 1663-1664, Eastern frontier had more troops than Hungarian frontier in 1660.

In the budget from 974-975/1567-1568 that Barkan published, there is a mention of 12,788 janissaries in the vilayet of Buda. However, as Barkan points out a total number of janissaries in the empire was 12,798 during that time. Hence, it is not possible to have 12,788 janissaries in Buda vilayet.⁴⁵² Also, these 12,788 janissaries that were on the guard duty in Ottoman Hungary were taking 15,573,463 akçes, while

⁴⁵⁰ Ibid., 150-51.

⁴⁵¹ Ibid.150-152.

⁴⁵² Barkan, "H. 974-975 (1567-1568) Mali Yılına Ait Bir Osmanlı Bütçesi."

the total of janissaries which were 12,798 men were taking 34,264,772 akçes.⁴⁵³ These contrary numbers demand different explanations. Janissaries in Buda *vilayet* might be the total number of local troops. Data from 1556 shows that there were 10,402 soldiers in garrisons in Buda province.⁴⁵⁴ This data supports the assumption that soldiers that were showed as janissaries in Buda in the budget of 1567-68, were actually local troops.

In 1076/1665-1666, there was a total of 49,556 janissaries in the Ottoman Empire and 29,088 of them were on the garrison duty.⁴⁵⁵ In 1669-1670, 14,379 janissaries out of 53,849 were on the garrison duty.⁴⁵⁶ In 1670-1671, there were 21,728 janissaries in fortresses, and the total number of janissaries were 49,455.⁴⁵⁷ When it is considered the number of janissaries from 1567-68, it can be said that it is even increased more than four times until the 1660s. Number of Janissaries that were on guard duty in fortresses increases during the 1665-1666, most probably due to military activities in Hungary and Crete. Later, the number decreases by 1669-1670 and increases again in 1670-1671.⁴⁵⁸

Briefly, the size of garrisons in both frontiers resembled during the militarily active years; it is not possible to talk about a huge difference in the size of garrisons for both frontiers. In both of the frontiers, there is a similar pattern. After a fortress was taken, large numbers of men were stationed in these recently taken fortresses. Especially, garrisons of recently taken fortresses in the East, filled with very large numbers of soldiers. In most of the newly taken fortresses, there were also a large number of janissaries. However, these numbers tend to decrease over time. The number of local troops and janissaries changed due to several reasons such as wars,

⁴⁵³ Ibid., 287-90.

⁴⁵⁴ Ágoston, "Ottoman Conquest and the Ottoman Military Frontier in Hungary," 92.

⁴⁵⁵ Ömer Lütfi Barkan, "1079-1080 (1669-1670) Malî Yılına Ait Bir Osmanlı Bütçesi Ve Ek'leri," *İstanbul Üniversitesi İktisat Fakültesi Mecmuası* 1-4, no. 17 (1955): 265.

⁴⁵⁶ "H. 974-975 (1567-1568) Mali Yılına Ait Bir Osmanlı Bütçesi," 262-65.

⁴⁵⁷ "1079-1080 (1669-1670) Malî Yılına Ait Bir Osmanlı Bütçesi Ve Ek'leri," 266.

⁴⁵⁸ Ibid., 265-66.

rebellions, and position of the fortress in the frontier. During the war times, high numbers of men garrisons could be distinguished. On the contrary, the number of men in garrisons, especially number of janissaries drops during the peacetime. Also, when a fortress remained inland of a frontier, the reason to man it with a large number of men disappears. Therefore, fortresses that remain inland had smaller garrisons. In general, there is not a distinguishable difference in the size of garrisons of fortresses of Hungary which were modernized at the time, and with the ones in East that did not have the same architectural design.

2.2.6.3. The Number of Artillerymen

When the artillerymen in the fortresses of the Eastern frontier are considered, a newly conquered fortress, Revan, in 1583 had 200 artillerymen during the war period.⁴⁵⁹ Same Revan had 190 artillerymen from household troops in 1635.⁴⁶⁰ Also, Tabriz's fortress had 105 artillerymen in 1598-99 in which the Ottoman Empire was at peace with Safavids.⁴⁶¹ Erzurum had 55 artillerymen in 1596-1597.⁴⁶² Van had 32 artillerymen in 1609-1610,⁴⁶³ and in 1611-1612.⁴⁶⁴ The garrisons of Lori and Tomanis had 43 artillerymen per fortresses.⁴⁶⁵ Basra had 35 artillerymen in 1591-1592⁴⁶⁶, and 23 artillerymen between 1600-1602.⁴⁶⁷

⁴⁵⁹ Kütükoğlu, *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*, 136.

⁴⁶⁰ Polat, IV. *Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*, 401.

⁴⁶¹ MAD. 6281, p.7-12.

⁴⁶² D.AMH.d 24521, p.14-16.

⁴⁶³ MAD 4822, p.3.

⁴⁶⁴ MAD 7425, p.57-58.

⁴⁶⁵ Kütükoğlu, *Osmanlı-İran Siyasi Münasebetleri (1578-1612)*, 141.

⁴⁶⁶ MAD 16299, p.34-35.

⁴⁶⁷ Salih Özbaran, *Yemen 'Den Basra 'Ya Sınırdaki Osmanlı* (İstanbul: Kitap Yayınevi, 2004), 221-22.

There is a similar pattern for stationing artillerymen in the fortresses of the East. Strategically important fortresses which were taken during the war remained under the constant threat from the Safavids, and they were staffed with a very high number of artillerymen. Numbers of artillerymen in Tebriz and Revan could be a good example for this situation. Strategically less important fortresses in the frontier were manned by an average number of artillerymen, such as Lori and Tomanis. The ones that remain inland compared to these fortresses, such as Erzurum and Van, qualified to have similar numbers of artillerymen with each other and with strategically less important fortresses.

Kanije fortress which was besieged and taken by Ottomans in 1600 had a modern architectural design.⁴⁶⁸ When we look at the number of artillerymen in Kanije, its total number remains around 32-37 between 1615-1623⁴⁶⁹. However, it reveals an increase in 1623 to 86. The number of artillerymen in Kanije remains around 86-92 until 1663.⁴⁷⁰ Another fortress with modern design, Varad had 80 artillerymen in 1660, and 51 in 1661⁴⁷¹. Uyvar fortress had a *trace italienne* design, and it had 60 artillerymen between 1664-1667, and 56 in 1675.⁴⁷² Another fortress with modern design, Egri, had 142 artillerymen from household troops in 1596-97, and 18 local artillerymen in 1606-07. It seems that the number of artillerymen in Egri increased due to a specific circumstance, such as the Long War.⁴⁷³ In Buda, the number of artillerymen changed between 103-128 men from 1543 to 1573. It increased to 212 artillerymen in 1599-1600 with artillerymen from kapıkulu troops, and in 1607 it increased to 126 with some addition from kapıkulu troops again. Then, between 1612-

⁴⁶⁸ Göger, "16.Yüzyıl Osmanlı Kale Kuşatmaları(Strateji,Taktik,Kuşatma Aşamaları Ve Teknolojisi," 66.

⁴⁶⁹ Hegyi, *A Török Hódoltság Várai És Várkatonasága*, 3.

⁴⁷⁰ Ibid., 1532-50.

⁴⁷¹ Ibid.

⁴⁷² *The Ottoman Military Organization in Hungary*.

⁴⁷³ Ibid., 540.

29 it varied between 44-50 artillerymen.⁴⁷⁴ The number of artillerymen in Temeşvar was 55 in 1621, and later it changed between 70-77 for 1629-1634.⁴⁷⁵

In the fortresses of Ottoman Hungary, there is also a similar pattern that resemblance with the one in Eastern frontier. Recently conquered fortresses generally had a large number of artillerymen for the first years of the conquest, such as Buda, Uyvar, Eğri, and Varad. Also, as it can be seen in Buda in 1599-1600, the number of artillerymen could rise due to an ongoing war. Reason of the increase in the number of artillerymen in Kanije after 1623, remains unknown. This situation might have happened due to the physical features of the fortress. However, another modernized fortress in the frontier, Uyvar had 56-60 artillerymen for 15 years period which may indicate reasons in the rise of the number of artillerymen may have caused by different reasons. However, there is an upward trend in the *trace italienne* fortresses of Ottomans in Hungary from the 1620s. Even though trace italienne fortresses that Ottomans had in Hungary had more than average number of artillerymen after 1620s, Revan and Tebriz had even more artillerymen during the war times. Therefore, once again, it can be said that there could be several other reasons, in this case it is war, that affected the number of artillerymen in garrisons.

2.2.6.4. The Infantry/Cavalry Ratio

If the infantry/cavalry ratio is compared for both frontiers, garrisons in Hungarian frontier seem to have a ratio in favor of infantry, while garrisons in East generally had a high number of cavalry troops. Increase in the number of infantries in the Hungarian frontier was a rising trend. Caroline Finkel quotes from Maksay's assessment about Habsburg-Hungarian side, in which he says from the 1550s to Long War, number of infantries has caught up the number of cavalries and later exceed the

⁴⁷⁴ Ibid., 335-41.

⁴⁷⁵ Ibid., 495-98.

number of them. Finkel says that this was a trend in Ottoman Hungary for the same period.⁴⁷⁶

In garrisons of Ottoman Hungary balance never changes in favor of cavalry for the examined years, while in East varying ratios could be found both in favor of cavalry and the opposite with the addition of the number of janissaries, when it is possible. However, while calculating the infantry/cavalry ratio for the East, the number of local troops is generally missing. These missing numbers could change the equation; therefore, it is wise to remember this while comparing the ratio for both frontiers. When approximate numbers of janissaries were added for Van, infantry/cavalry ratio goes from 0,88 to between 1,97-2,4. Therefore, janissaries in garrisons had the potential to change the balance between infantry and cavalry. However, when local garrisons are considered, it is true that Eastern garrisons had more cavalry units than the ones in Hungary. Although data is limited, the fortress of Revan in 1583 had 0,66 percentage for infantry/cavalry ratio, garrisons of Van had 0,88 for local troops and 1,97-2,4 with Janissaries. In 1589-90, Tebriz had 0.14 with some household troops excluding janissaries and local troops. A high number of cavalry units in the Eastern frontier could be the result of terrain. Due to mountainous and barren areas in Caucasia and Eastern Anatolia, it might be reasonable to have cavalry units to move quickly in the terrain. Crimean Khan Sahib Giray recommendation to Suleyman I shows an understanding of this condition. He recommends that armies should be rather small, lightly armed, and highly mobilized in the East.⁴⁷⁷ Also, distances between the fortresses in the East were bigger than the fortresses in the Hungary. This might be another reason to station more cavalry units in the East.

⁴⁷⁶ Finkel, *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*, 37.

⁴⁷⁷ Murphey, "The Garrison and Its Hinterland in the Ottoman East, 1578-1605," 369.

2.2.6.5. Supply and Finance of the Garrisons

In the case of supply, both frontiers seem to have problems. Although sharp differences cannot be seen in the case of a supply of fortresses in both frontiers, it should be more difficult to supply in the East due to several reasons. In the West, the Danube river should ease the burden of transportation of supply. In the East, the mountainous areas, lack of a river similar to the Danube that lengthen along the frontier, infertile terrain, and fortresses in remote areas should make transportation of supply to garrisons harder than Hungarian frontier.

For the finance of garrisons, often, similar methods were exercised in both of the frontiers. The local treasuries of the *vilayets*, and supports from the central treasury to local treasuries when it is necessary were the main sources of payments. *Ocaklıks* were assigned for the salaries of the garrisons in both frontiers. Delay in the payments of the garrison soldiers was common. A deficit in local treasuries of *beylerbeylik*s were experienced in both of the frontiers which were covered with aids from other *vilayet*'s treasuries in the region.

CHAPTER 3

CONCLUSION

The first part asked whether there existed any *trace italienne* type fortresses in the Ottoman empire in the Hungarian and Eastern frontiers, and if they Ottomans know about this type of fortress. According to the findings of the thesis, the Ottomans encountered the *trace italienne* type of fortresses in Hungarian frontier. Therefore, they were familiar with this new modern fortress design in Hungary. They captured several modernized fortresses from the Habsburgs during the 16th and 17th centuries. Therefore, it is not possible to say that the Ottomans were unaware of this new design in fortress architecture. However, in general it looks, as if they never attempted the construction of their own *trace italienne* type of fortress in those centuries. This could be because of the preference of Ottomans. It is possible that they did not think of this new design was an immediate necessity because there was not defensive problem with their old fortress design. Therefore, they did not find it more beneficial than the existing ones. In the Eastern part of the empire, the Ottomans did not encounter this new design and never tried to build it themselves. Their rivals also do not seem to have had any *trace italienne* fortresses. As a consequence, the existence of *trace italienne* design in the east was not even a question in those centuries. In addition to these, small fortresses were examined for both frontiers. These small fortresses which were called palanka or parkan based on their locations could be found in both frontiers. However, their building material changed depending on their region's geographical features.

In the next sections, Ottoman strategies of and reasons for expansion were examined along with construction activities in the fortresses along both frontiers based on these strategies. It is possible to say that the Ottomans had goals and strategies for their expansion and defensive system on both frontiers. Undoubtedly, there are several

examples in which these strategies did not work, but that does not change that the Ottomans had a plan for their actions.

In the second half of the chapter, troops were classified into the classes of infantry and cavalry. Then, the size of the garrisons, the number of artillerymen, and the infantry/cavalry ratio were discussed according to the information given above. Later, the supply and finance of the garrisons were discussed.

The Ottomans had encountered *trace italienne* fortresses in the west, had conquered them based on strategy and necessity, had put a garrisons in them. They did the same thing in the east, except for conquering *trace italienne* fortresses, because there were none in the east until the 18th century. The size of the garrisons on both frontiers were similar and rose and fell based on factors such as wars, rebellions, peace times, topography and the position of the fortress along the frontier. Also, the modernized fortresses of the Hungarian frontier and the old-fashioned fortresses of the Eastern frontier had a similar number of men in their garrisons. Therefore, the *trace italienne* may not have had the suggested effect on the size of the garrisons. Another important point of comparison is the number of artillerymen which was larger in the fortresses in Hungary. However, this difference was slight and the reasons behind it could vary. The number of cavalry troops in the fortresses of the Eastern frontier were higher than those of the Hungarian frontier. As discussed above, this situation might have been caused by the topography of the region. Clearly, the necessities of the flatlands of Hungary and the mountainous landscapes of the Eastern part of the Ottoman Empire must have been different. This thesis has argued that these differences in the size of garrisons and their composition might be due to a variety of reasons rather than the single factor of fortress design. As indicated, these reasons might include the geography and topography of the frontier, the location of fortresses, the relocations of troops, wars, or rebellions.

As discussed, some military classes existed only on one of the frontiers. For instance, *gılmān* troops only could be found in the east while *fārisan* troops seem to have existed in the Hungarian frontier. However, there is no explicit reason for their absence on the other frontier. Most probably documents are not available for the period. However, the absence of *martolosan* troops is related to the composition of the

population of both frontiers. In case of the supply of garrisons, the Eastern frontier seems to have had bigger problems than the Hungarian frontier. In the case of financing of the troops in the garrisons, it seems that the fortresses on both frontiers sometimes experienced a deficit in their local treasuries that had to be supported from other the treasuries of other *vilayets*.

In consequence, this thesis argues that the *trace italiennes* which Geoffrey Parker has described as the distinctive sign of a military revolution that caused an increase in the size of armies existed on the Hungarian frontier of the Ottoman Empire and was conquered by Ottomans. However, their existence seems not to have directly caused a detectable increase in the size of the garrisons. Changes in the the size of the garrisons seem to be based on wars, peace times, rebellions, location of fortresses, and the topography of the region. Other aspects that were expected to be higher in the Ottoman Hungary, such as the infantry/cavalry ratio, was higher, as it was expected, than East, but the ratio seems reflect the necessities of the terrain. The mountainous areas of the east and the flatlands of Hungary seem to have required different units. These differences in topography also affected the supply system of the garrisons in both of the frontiers. The number of artillerymen, another main point, is slightly higher in the garrisons in Hungary. The reason for this situation might be the necessity of the new design of the fortresses, but it is also possible to link the changes in the numbers to the necessities of war times or to other reasons.

Lastly, there are some shortcomings of this thesis for several reasons. First of all, the garrison forces that receive *timars*, and the resources of payments for the garrisons in detail could not be added due to the scope of the thesis. Secondly, the number of artillerymen that were stationed in the fortresses and their types are also one of the shortcomings of the thesis. Thirdly, as stated, the fortresses of specified vilayet centers are the topic of this thesis, and therefore other fortresses in vilayet centers and smaller fortresses in these regions have remained outside of the scope. Finally, only payroll registers (*mevacib defters*) were used as sources. However it is also possible to find information about the fortresses and garrisons and their payments by using *mukataa defters* and *tahrir defters*. If these shortcomings can be compensated for, a more detailed and consistent study of the fortresses and their garrisons in Ottoman Hungary and the Eastern Frontier in the 17th century may be made. Also, there are

chronicles that include important information about frontiers, fortresses, and garrisons that could not be included in this thesis, including the chronicles of Naima, Hasan Beyzade and Peçevi. Also, the *Fezleke* of Katip Çelebi is worth mentioning for the specified period.

BIBLIOGRAPHY

Archival Sources

Prime Ministry Ottoman Archives (BOA)

1.Maliyeden Müdevver Defterler (MAD)

2223, 4381, 4822,5538,6281, 6718, 6822, 7425, 16299, 6718, 5996, 7425, 7093, 7453

2. Bab-ı Defteri Anadolu Muhasebesi Defterleri (D.AMH.d.)

24521

3.Bab-ı Defteri Yeniçeri Kalemi Defterleri (D.Ynç.d.)

33763

4. Ali Emiri-Murad IV (AE.SMRD.IV.)

2 (126)

5.Tapu Tahrir Defteri (TT.d.)

637

Published Sources

Hezarfen Hüseyin Efendi, *Telhisü'l-Beyan Fi Kavanin-i Ali Osman*. edited by Sevim İlgürel. Ankara: Türk Tarih Kurumu, 1988.

Mustafa Selaniki Efendi. *Tarih-i Selaniki*. 2 vols. edited by Mehmet İpşirli. Ankara: Türk Tarih Kurumu,1999.

Rahimizade İbrahim Çavuş, *Kitab-ı Gencine-i Feth-i Gence* (Osmanlı - İran Savaşları ve Gence'nin Fethi 1583-1590), edited by Günay Karaağaç,Adnan Eskikurt İstanbul:Çamlıca Yayınevi,2010.

Topçular Katibi Abdülkadir(Kadri) Efendi. *Topçular Katibi Abdülkadir(Kadri) Efendi Tarihi*. 2 vols. edited by Ziya Yılmaz Ankara: Türk Tarih Kurumu, 2003.

Secondary Sources

Afyoncu, Erhan. "Müteferrika." *TDV İslâm Ansiklopedisi*. İstanbul: TDV İslam Araştırmaları Merkezi, 2006. accessed May 20, 2019.
<https://islamansiklopedisi.org.tr/muteferrika>.

Ágoston, Gábor. "The Costs of the Ottoman Fortress-System in Hungary in the Sixteenth and Seventeenth Centuries." In *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* edited by Pál Fodor and Géza Dávid. Leiden: Brill, 2000.

———. "Empires and Warfare in East-Central Europe, 1550–1750: The Ottoman–Habsburg Rivalry and Military Transformation." In *European Warfare, 1350–1750*, edited by Frank Tallett and D. J. B. Trim. Cambridge: Cambridge University Press, 2010.

———. "Firearms and Military Adaptation: The Ottomans and the European Military Revolution, 1450–1800." *Journal of World History* 25, no. 1 (2014): 85-124.

———. "A Flexible Empire: Authority and Its Limits on the Ottoman Frontiers." *International Journal of Turkish Studies* 1-2, no. 9 (2003): 15-31.

———. *Guns for the Sultan : Military Power and the Weapons Industry in the Ottoman Empire*. New York: Cambridge University Press, 2004.

———. "Habsburgs and Ottomans: Defense, Military Change and Shifts in Power." *Turkish Studies Association Bulletin* 1, no. 22 (1998): 126-41.

———. "Macaristan'da Osmanlı Serhadi (1541-1699) : Bir Mukayese." In *Osmanlı*, edited by Güler Eren. Ankara, 1999.

———. "Ottoman Conquest and the Ottoman Military Frontier in Hungary." In *A Millennium of Hungarian Military History*, 85-110. Boulder, Co: Atlantic Research and Publications, 2002.

———. "Ottoman Conquest and the Ottoman Military Frontier in Hungary." In *A Millennium of Hungarian Military History*, edited by Béla Király and László Veszprémy. Boulder, Co.: Atlantic Research and Publications, 2002.

———. "Where Environmental and Frontier Studies Meet: Rivers, Forests, Marshes and Forts Along the Ottoman-Hapsburg Frontier in Hungary." In *The Frontiers of the Ottoman World*, edited by A. Peacock: Oxford University Press, 2009.

Anastasopoulos, Antonis. "Imperial Geography and War: The Ottoman Case." In *Imperial Geographies in Byzantine and Ottoman Space*, edited by Yota Batsaki & Dimiter Angelov Sahar Bazzaz, 111-32. Washington, DC: Center for Hellenic Studies: Harvard University, 2013.

Arşiv Belgelerine Göre Osmanlı Kaleleri. İstanbul: Osmanlı Arşivi Daire Başkanlığı Yayınları, 2016.

Ataç, Reyhan. "66 Numaralı (H.997-998 / M.1589-1590) Mühimme Defteri (İnceleme-Metin)." Master's Thesis, Marmara Üniversitesi, 2014.

Aydın, Mahir. "Faş Kalesi." *Osmanlı Araştırmaları/ The Journal of Ottoman Studies* VI (1986): 67-138.

Bak, J.M., B.K. Kiraly, B.K. Király, and B. Lotze, eds., *From Hunyadi to Rákóczi: War and Society in Late Medieval and Early Modern Hungary: Social Science Monographs*, 1982.

Barkan, Ömer Lütfi. "1079-1080 (1669-1670) Malî Yılına Ait Bir Osmanlı Bütçesi Ve Ek'leri." *İstanbul Üniversitesi İktisat Fakültesi Mecmuası* 1-4, no. 17 (1955): 225-303.

———. "H. 974-975 (1567-1568) Mali Yılına Ait Bir Osmanlı Bütçesi." *İstanbul Üniversitesi İktisat Fakültesi Mecmuası* 1-4, no. 19 (1957): 225-303.

Baş, Göksel. "Ottoman Serhad Organization in the Balkans (1450s to Early 1500s)." Bilkent University, 2017.

Batmaz, Eftal Şükrü. "Osmanlı Devletinde Kale Teşkilatına Genel Bir Bakış." *Osmanlı Tarihi Araştırma ve Uygulama Merkezi Dergisi OTAM*, no. 7 (1996).

Beydilli, Kemal. *Die Polnischen Königswahlen Und Interregnen Von 1572 Und 1576 Im Lichte Osmanischer Archivalien. Ein Beitrag Zur Geschichte Der Osmanischen Machtpolitik* München: Trofenik, 1976.

Bilge, Sadık Müfit. *Osmanlı'nın Macaristanı*. İstanbul: Kitabevi, 2010.

———. *Osmanlı Çağı'nda Kafkasya 1454-1829: Tarih, Toplum, Ekonomi*. Kitabevi, 2012.

Black, Jeremy. "A Military Revolution? A 1660-1792 Perspective." In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers. Boulder: Westview Press, 1995.

Boran, Ali. "Türk Sanatında Kale Mimarisi." In *Türkler VII*, edited by Hasan Celal Güzel; Kemal Çiçek; Salim Koca, 878-92. Ankara: Yeni Türkiye Yayınları, 2002.

Bostan, İdris. "Azeb." In *TDV İslâm Ansiklopedisi*. İstanbul: TDV İslam Araştırmaları Merkezi, 1991. accessed 07 May, 2019, <https://islamansiklopedisi.org.tr/azeb>.

Bowen, H. "Azab." In *The Encyclopaedia of Islam A-B*, edited by H.A.R. Gibb; J. H. Kramers; E. Levi-Provençal; J. Schacht. Leiden: E.J. Brill, 1986.

Börekçi, Günhan. "A Contribution to the Military Revolution Debate: The Janissaries Use of Volley Fire During the Long Ottoman-Habsburg War of 1593-1606 and the Problems of Origins." *Acta Orientalia Academiae Scientiarum Hungaricae* 59, no. 4 (2006): 407-38.

Brummett, Palmira. "The Fortress: Defining and Mapping the Ottoman Frontier in the Sixteenth and Seventeenth Centuries." In *The Frontiers of the Ottoman World*, edited by A. Peacock: Oxford University Press, 2009.

Darling, Linda T. "Nasihatnameler, İcmal Defterleri, and the Timar-Holding Ottoman Elite in the Late Sixteenth Century." *Osmanlı Araştırmaları/ The Journal of Ottoman Studies* XI, no. III (2014): 193-226.

———. "Ottoman Salary Registers as a Source for Economic and Social History." *Turkish Studies Association Bulletin* 14, no. 1 (1990): 13-33.

Dávid, G., and P. Fodor, eds. *Hungarian-Ottoman Military and Diplomatic Relations in the Age of Süleyman the Magnificent*: Loránd Eötvös University, Dept. of Turkish Studies, 1994.

David, Geza. "The Mühimme Defteri as a Source for Ottoman-Habsburg Rivalry in the Sixteenth Century/Xvi. Yüzyılda Osmanlı-Hasburg Mücadelesinin Bir Kaynağı Olarak Mühimme Defterleri." *İstanbul Üniversitesi Edebiyat Fakültesi Tarih Dergisi*, no. 53 (2011): 295-349.

———, ed. *Studies in Demographic and Administrative History of Ottoman Hungary*, Analecta Isisiana, vol. XXV. İstanbul: The Isis Press, 1997.

Duffy, Christopher. *Siege Warfare: The Fortress in the Early Modern World 1494-1660*. Routledge, 1996.

Emecen, Feridun .M. *Osmanlı Klâsik Çağında Savaş*. İstanbul: Timaş, 2010.

Erkal, Mehmet. "Arşın." In *TDV İslâm Ansiklopedisi*. İstanbul:TDV İslam Araştırmaları Merkezi,1991. accessed May 07,2019, <https://islamansiklopedisi.org.tr/arsin>

Faroghi, Suraiya. "Political Activity among Ottoman Taxpayers and the Problem of Sultanic Legitimation." *Journal of the Economic and Social History of the Orient* 35 (1992).

———. *Towns and Townsmen of Ottoman Anatolia: Trade, Crafts and Food Production in an Urban Setting 1520-1650*. Cambridge University Press, 1984.

Fedakar, Cengiz. "Anapa Kalesi." *Yeni Türkiye* XI, no. 81 (2015): 276-88.

———. "Anapa Kalesi: Karadeniz'in Kuzeyinde Son Osmanlı İstihkamı (1781-1801)." Unpublished Ph.D. Thesis, 2010.

———. "Kafkasya'da Osmanlı Tahkîmatı: Sohum Kalesi (1723-1729)." *VAKANÜVİS- Uluslararası Tarih Araştırmaları Dergisi/ International Journal of Historical Researches* 2 (2017): 163-94.

Felek, Özgen. "Dreams and Visions in Islamic Societies." In *(Re)Creating Image and Identity: Dreams and Visions as a Means of Murad III's Self-Fashioning*, edited by Özgen Felek and Alexander D. Knysh. Albany: State University of New York Press, 2012.

- Finkel, Caroline. *The Administration of Warfare: The Ottoman Military Campaigns in Hungary, 1593-1606*. Vienna: JWGO, 1988.
- Fodor, Pál. *The Unbearable Weight of Empire: The Ottomans in Central Europe - the Failed Attempt at Universal Monarchy (1390-1566)*. Budapest: Research Centre for the Humanities, Hungarian Academy of Sciences, 2015.
- . "Volunteers in the Ottoman Army." In *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* edited by Pál Fodor and Géza Dávid. Leiden: Brill, 2000.
- Fodor, Pál, and Géza Dávid, eds. *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* Leiden: Brill, 2000.
- Gezer, Ömer. "Kale Ve Nefer: Habsburg Sınırında Osmanlı Askeri Gücünün Yeniden Örgütlenmesi (1699-1715)." Unpublished Ph.D. Thesis, 2016.
- Göger, Veysel. "16.Yüzyıl Osmanlı Kale Kuşatmaları(Strateji,Taktik,Kuşatma Aşamaları Ve Teknolojisi." Marmara Üniversitesi, 2014.
- Grant, Jonathan. "Rethinking the Ottoman "Decline": Military Technology Diffusion in the Ottoman Empire,Fifteenth to Eighteenth Centuries." *Journal of World History* 10 (1999): 179-201.
- Griswold, E. Rossi and W.J. "Martolos." In *The Encyclopaedia of Islam MAHK-MID*, edited by C.E. Bosworth; E. Van Donzel; B. Lewis; Ch. Pellat; W.P. Heinrichs. Leiden: E.J. Brill, 1991.
- Hale, J.R. *Renaissance War Studies*. Bloomsbury Publishing, 1983.
- Hall, B.S. *Weapons and Warfare in Renaissance Europe: Gunpowder, Technology, and Tactics*. Johns Hopkins University Press, 1997.
- Hegyi, Klára. *The Ottoman Military Organization in Hungary*. Hungary: Klaus Schwarz Verlag, 2018.
- . "The Ottoman Network of Fortresses in Hungary." In *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the*

Era of Ottoman Conquest edited by Pál Fodor and Géza Dávid. Leiden: Brill, 2000.

———. *A Török Hódoltság Várai És Várkatonasága*. Vol. 3, Budapest; MTA Történettudományi Intézete: História, 2007.

———. *A Török Hódoltság Várai És Várkatonasága*. Vol. 2, Budapest; MTA Történettudományi Intézete: História 2007.

———. *A Török Hódoltság Várai És Várkatonasága*. Vol. 1, Budapest; MTA Történettudományi Intézete: História 2007.

Imber, Colin. "The Navy of Süleyman the Magnificent." *Archivum Ottomanicum* 6 (1980): 211-82.

———. "The Persecution of the Ottoman Shī'ites According to the Mühimme Defterleri." *Der Islam* 56, no. 2 (1979): 245-73.

İnalcık, Halil. "Gönüllü." In *The Encyclopaedia of Islam New Edition C-G*, edited by B. Lewis; CH. Pellat and J. Schacht. Leiden: E.J. Brill, 1991.

———. *Osmanlı İmparatorluğu'nun Ekonomik Ve Sosyal Tarihi ,1300-1600*. Vol. I, İstanbul: İş Bankası Kültür Yayınları, 2017.

———. "Ottoman Methods of Conquest." *Studia Islamica*, no. 2 (1954): 103-29.

———. "The Socio-Political Effects of the Diffusion of Fire-Arms in the Middle East." In *War, Technology and Society in the Middle East*, edited by V.J. Parry and M.E. Yapp. London: Oxford University Press, 1975.

İşbilir, Ömer. "XVII. Yüzyıl Başlarında Şark Seferlerinin İaşe, İkmal Ve Lojistik Meseleleri." Unpublished Ph. D. Dissertation, İstanbul Üniversitesi, 1996.

Kaya, Muhammed Samet. "69 Numaralı Mühimme Defteri'nin

Transkripsiyon Ve Değerlendirilmesi (1-168)." Master's Thesis, Atatürk Üniversitesi, 2013.

- Kelenik, Jozsef. "The Military Revolution in Hungary." In *Ottomans, Hungarians, and Habsburgs in Central Europe : The Military Confines in the Era of Ottoman Conquest* edited by Pál Fodor and Géza Dávid. Leiden: Brill, 2000.
- Kılıç, Orhan. "Teşkilat Ve İşleyiş Bakımından Doğu Hududundaki Osmanlı Kaleleri Ve Mevâcib Defterleri." *OTAM - Osmanlı Teşkilat Tarihi*, no. 31 (2012): 87-128.
- . *XVI. Ve XVII. Yüzyıllarda Van*. Abkara: Van Belediye Başkanlığı Kültür ve Sosyal İşler Müdürlüğü, 1994.
- Kırzioğlu, M. Fahrettin. *Osmanlılar'ın Kafkas-Elleri'ni Fethi*. Ankara: TTK, 1998.
- Koç, Ümit. "XVI. Yüzyılda Osmanlı Devleti'nde Çavuşluk Teşkilatı." *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 2, no. 12 (2002): 395-420.
- Kramers, J.H. "Muteferrika." In *The Encyclopaedia of Islam*, edited by C.E. Bosworth; E. Van Donzel; W.P. Heinrichs; CH. Pellat, 794. Leiden-NY: E.J. Brill, 1993.
- Krause, Keith. *Arms and the State : Patterns of Military Production and Trade*. Cambridge Studies in International Relations. Cambridge; New York: Cambridge University Press, 1992.
- Kütükoğlu, Bekir. *Osmanlı-Iran Siyâsî Münasebetleri (1578-1612)*. İstanbul: İstanbul Fetih Cemiyeti, 1993.
- . *Osmanlı-Iran Siyasi Münasebetleri (1578-1612)*. İstanbul: İstanbul Fetih Cemiyeti, 1993.
- Lepage, J.D.G.G. *Vauban and the French Military under Louis XIV: An Illustrated History of Fortifications and Strategies*. McFarland, Incorporated, Publishers, 2009.
- Lewis, Bernard. *Notes and Documents from the Turkish Archives. A Contribution to the History of the Jews in the Ottoman Empire*. Jerusalem: The Israel Oriental Society, 1952.

- Lynn, John A. "The Trace Italienne and the Growth of Armies: The French Case." In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*. Boulder: Westview Press, 1995.
- Majer, Hans Georg. "Xvii. Yüzyılın Sonlarında Avusturya Ve Osmanlı Ordularının Seferlerdeki Lojistik Sorunları." *The Journal of Ottoman Studies*, no. 2 (1981): 185-94.
- Murphey, Rhoads. "The Functioning of the Ottoman Army under Murad Iv (1623-1639/1032-1049): Key to Understanding of the Relationship between Center and Periphery in Seventeenth-Century Turkey." Unpublished Ph. D. Dissertation, The University of Chicago, 1979.
- . "The Garrison and Its Hinterland in the Ottoman East, 1578-1605." In *The Frontiers of the Ottoman World*, edited by A. C. S. Peacock. Oxford ;New York: Oxford University Press, 2009.
- . "Ottoman Military Organization in South-Eastern Europe,C. 1420-1720." In *European Warfare 1350-1750*, edited by Frank Tallett and D.J.B. Trim. New York: Cambridge University Press, 2010.
- . *Ottoman Warfare 1500-1700*. Warfare and History. London: Routledge, 2003.
- Nicolle, David. *Ottoman Fortifications 1300–1710*. Oxford: Osprey Publishing Limited, 2010.
- Orhonlu, Cengiz. *Osmanlı İmparatorluğu'nda Derbend Teşkilâtı*. Eren, 1990.
- Özbaran, Salih. *Yemen`den Basra`ya Sınırdaki Osmanlı*. İstanbul: Kitap Yayınevi, 2004.
- Özcan, Abdülkadir. "Farisan." In *TDV İslâm Ansiklopedisi*. İstanbul:(TDV İslam Araştırmaları Merkezi,2016), accessed May 07,2019, <https://islamansiklopedisi.org.tr/farisan>.
- Özgüven, Burcu. *Osmanlı Macaristanı'nda Kentler,Kaleler*. İstanbul: Ege Yayınları, 2001.

- . "Palanka Forts and Construction Activity in the Late Ottoman Balkans." In *The Frontiers of the Ottoman World*, edited by A. Peacock, 171, 2009.
- . "The Palanka: A Characteristic Building Type of the Ottoman Fortification Network in Hungary." Paper presented at the 11th International Congress of Turkish Art, Utrecht-The Netherlands, August 23-28 1999.
- Özgüven, H. Burcu. "Early Modern Military Architecture in the Ottoman Empire." *Nexus Network Journal* 16, no. 3 (December 01 2014): 737-49.
- Pakalin, Mehmet Zeki. *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü I*. Istanbul: Milli Eğitim Basımevi, 1993.
- . *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü II*. Istanbul: Milli Eğitim Basımevi, 1993.
- . *Osmanlı Tarih Deyimleri Ve Terimleri Sözlüğü III*. Istanbul: Milli Eğitim Basımevi, 1993.
- Palffy, Geza. "The Habsburg Defense System in Hungary against the Ottomans in the Sixteenth Century: A Catalyst of Military Development in Central Europe." In *Warfare in Eastern Europe, 1500-1800*, edited by Brian J. Davies. Leiden, 2012.
- Parker, Geoffrey. *Askeri Devrim : Batı'nın Yükselişinde Askeri Yenilikler, 1500-1800*. Istanbul: Küre, 2006.
- . "In Defense of the Military Revolution." In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers. Boulder: Westview Press, 1995.
- . "The "Military Revolution, 1560-1660"- a Myth?". In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers. Boulder: Westview Press, 1995.
- . "The "Military Revolution," 1560-1660--a Myth?". *The Journal of Modern History* 48, no. 2 (1976): 196-214.

———. *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*. Cambridge: Cambridge University Press, 1988.

Polat, Süleyman. *IV. Murat'ın Revan Seferi Organizasyonu Ve Stratejisi*. Ankara: ATASE, 2015.

Radushev, Evgeni. "'Peasant' Janissaries?". *Journal of Social History* 42, no. 2 (2008): 448-67.

Radushev, Evgeni, and Asparuh Velkov. *Ottoman Garrisons on the Middle Danube : Based on Austrian National Library Ms Mxt 562 of 956/1549-1550*. Budapest: Akadémiai kiadó, 1996.

Roberts, Michael. "The Military Revolution, 1560-1660." In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers. Boulder: Westview Press, 1995.

Rogers, Clifford J. "The Military Revolutions of the Hundred Years War." In *The Military Revolution Debate : Readings on the Military Transformation of Early Modern Europe*. Boulder: Westview Press, 1995.

Römer, Claudia. "Osmanische Festungsbesatzungen in Ungarn Zur Zeit Murads Iii : Dargestellt Anhand Von Petitionen Zur Stellenvergabe." Verlag der Österreichischen Akademie der Wissenschaften.

Sinclair, Tom. "Administration and Fortification in the Van Region under Ottoman Rule in the Sixteenth Century." In *The Frontiers of the Ottoman World*, edited by A. C. S. Peacock. Oxford ;New York: Oxford University Press, 2009.

Stein, Mark L. *Guarding the Frontier : Ottoman Border Forts and Garrisons in Europe*. London: I.B. Tauris & Co., 2007.

Uğurlu, Muhammed. "73 Numaralı Mühimme Defterinin Transkripsiyon Ve Değerlendirmesi (121-276)." Master's Thesis, Bitlis Eren Üniversitesi, 2018.

Uzunçarşılı, İsmail Hakkı. *Osmanlı Devleti Teşkilatından Kapıkulu Ocakları*. 2 vols. Vol. I, Ankara: Türk Tarih Kurumu, 1988.

Uzunçarşılı, İsmail Hakkı. *Osmanlı Tarihi* 3vols. Vol. 1, Ankara: TTK, 2009.

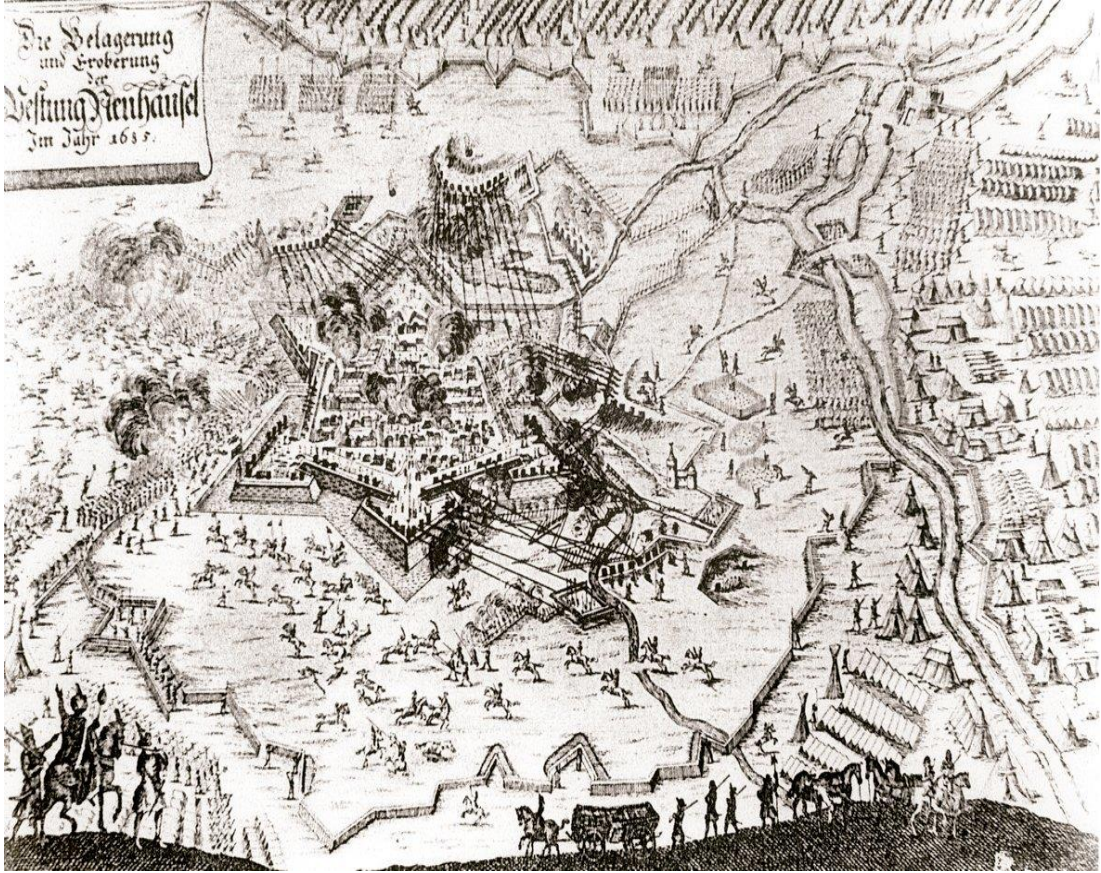
Ülkü, Osman. "Osmanlı İmparatorluğu'nda Savunma Sistemi Olarak Tabya Mimarisi." *Atatürk Üniversitesi İlahiyat Fakültesi Dergisi*, no. 27 (2007): 245-70.

Vasic, Milan. "Osmanlı İmparatorluğu'nda Martoloslar." *İstanbul Üniversitesi Edebiyat Fakültesi Tarih Dergisi* XXXI (1967): 47-64.

APPENDICES

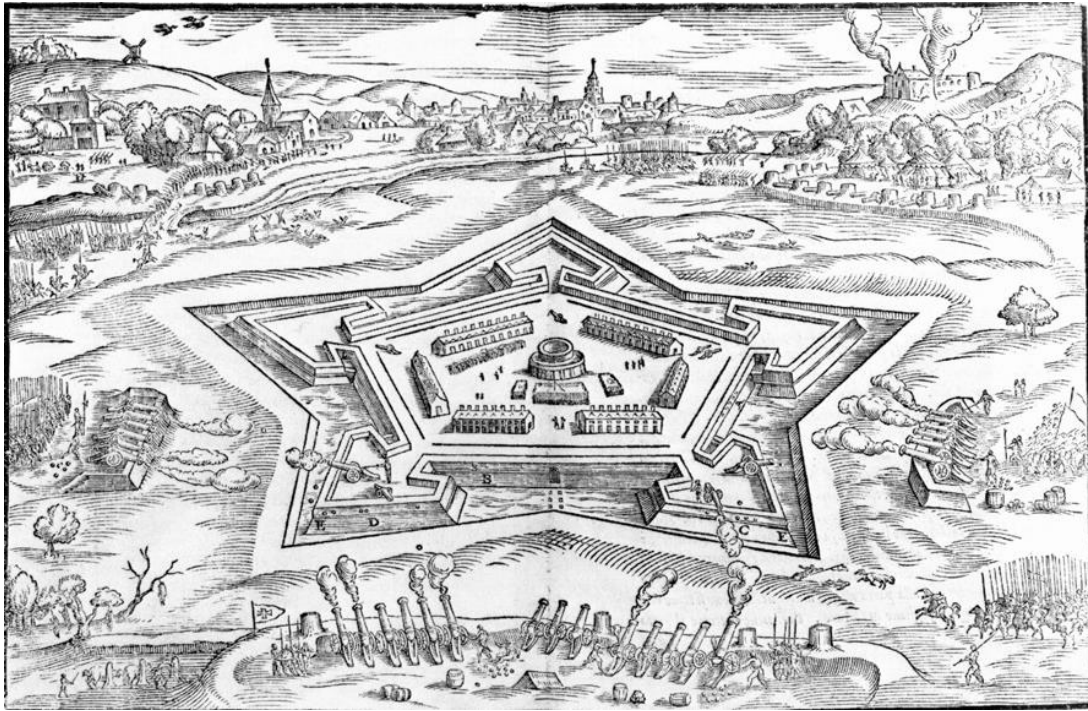
A. FIGURES

Figure 1: The Siege of Uyvar by Ottomans⁴⁷⁸



⁴⁷⁸ Retrieved from: <https://islamansiklopedisi.org.tr/uyvar>

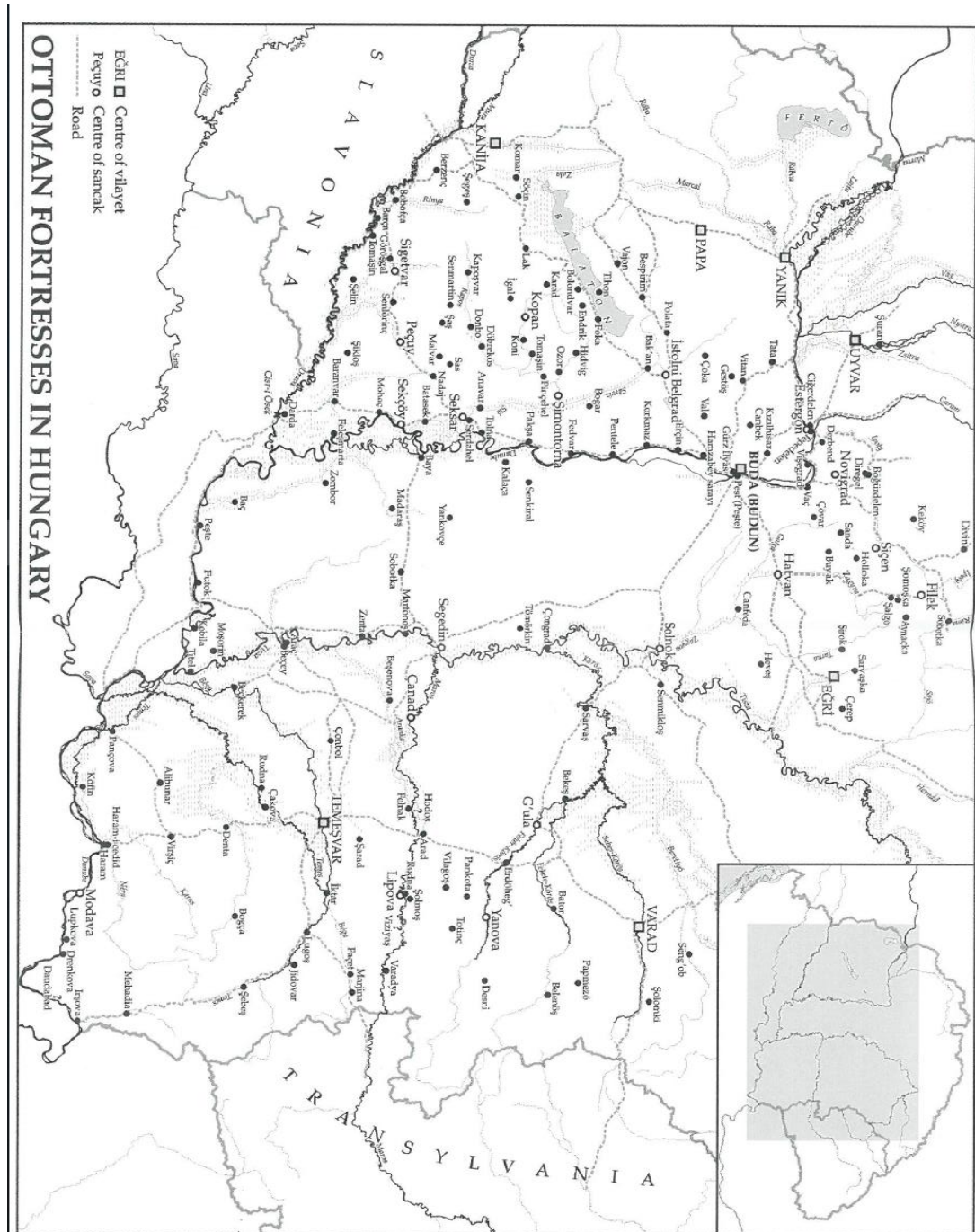
Figure 2:Star-Shaped Fortress⁴⁷⁹



⁴⁷⁹ Retrieved From:Christopher Duffy, *Siege Warfare: The Fortress in the Early Modern World 1494-1660*, 33.

B. MAPS

Map I: Ottoman Fortresses in Hungary



Map is retrieved from the Hegyi, Klára. *The Ottoman Military Organization in Hungary*. Hungary: Klaus Schwarz Verlag, 2018.

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C. TURKISH SUMMARY/TÜRKÇE ÖZET

Bu tezde Osmanlı İmparatorluğunun önemli iki serhaddi, Macar ve Doğu, serhadleri belli başlı vilayet merkezlerinde bulunan kaleler ve garnizonların bir karşılaştırması üzerinden 1578-1664 arasındaki tarihler göz önünde bulundurularak ele alınmıştır. Bu iki serhaddi karşılaştırırken, Macaristan serhaddindeki bütün vilayet merkezindeki kaleler ele alınırken, Doğu serhaddi için sadece Van, Erzurum, Tebriz ve Revan kaleleri dahil edilmiştir. Doğu serhaddi için bu seçim yapılırken Bekir Kütükoğlu'nun yaptığı bölümlendirme dikkate alınmıştır. Kütükoğlu Doğu serhaddini üçe böler. İlk bölüm Erzurum-Kars kısmının karşısında bulunan Kafkasya'dır. İkinci bölüm Van'ı karşılayan Tebriz bölgesidir. Üçüncüsü ise Şehr-i Zor-Bağdat bölgesini karşılayan Nihavent-Pelangan bölgesidir. Bu tezin konusu olarak da bu bölümlerin ilk iki kısmı dikkate alınmıştır.

Bu tezde aynı zamanda bu iki serhaddeki kale ve garnizonların benzerlik ve farklılıkları birincil ve ikincil kaynaklar üzerinden askeri devrim tartışmalarına özel bir vurgu yapılarak incelenmiştir. Askeri devrim tartışmalarının önemli argümanlarından olan askeri mimaride değişim ve orduların büyümesi argümanları Osmanlılar için kaleleri ve garnizonları bağlamında incelenmiştir. Osmanlılar 17.yy. 'da var olan yeni tarz kalelere aşinaydılar. Lakin bu yeni tarz kaleleri 18.yy'a kadar inşa etmemeyi tercih etmişlerdi. Buna ek olarak, Osmanlılar Macaristan ve Doğu serhadlerinde kale ağlarının organizasyonu için çeşitli amaç ve stratejilere sahiptiler. Son olarak bu tezde Macaristan sınırındaki yeni tarz kalelerle Doğudaki eski tarz kaleler karşılaştırılmıştır. Buna göre garnizonların özellikleri bir sebepten ziyade birçok sebebe dayanmaktaydı. Bu sebepler de bölgenin topografyası, kalelerin serhadde göre konumları, savaşlar ve isyanlar.

Bu tezde kullanılan ilk el kaynaklardan bahsetmek gerekirse, mevacib defterleri bu kaynakların başını çekmektedir. Mevacib defterlerine ek olarak mühimme defterlerinden de yararlanılmıştır. Mevacib defterleri kale garnizonlarının büyüklüğünün hesaplanması için oldukça önemli kaynaklardır. Kalelerde bulunan

askeri birlikler bu defterlerde isimleri ve aldıkları maaşlar belirtilerek kaydedilmişlerdir. Bu ilk el kaynaklara ek olarak iki adet kronikten de yararlanılmıştır. Bu kronikler Tarih-i Selaniki ve Topçular Katibi Abdülkadir Efendi Tarihidir.

Askeri devrim tartışmaları bu tezin tartışacağı ana argümanlardan birini ortaya çıkarmıştır. Bu Geoffrey Parker'ın *trace italienne* tarzı kalelerin ortaya çıkışıyla ordu ve garnizon büyüklüklerinin arttığı tezidir. Askeri Devrim kuramı ilk olarak tarih alanına Michael Roberts tarafından tanıtılmıştır. Michael Roberts 1560-1660 tarihleri arasında Avrupa'da gerçekleşmiş bir askeri devrimden söz etmektedir. Bu askeri devrimde öne çıkan dört değişiklik vardır. Bunlar askeri taktiklerdeki değişiklikler, orduların büyümesi, askeri stratejilerdeki değişiklikler ve bütün bu değişikliklerin toplum üzerindeki etkileridir. Michael Roberts askeri devrim kuramında iki tarihsel ismi öne çıkarır bunlar Maurice of Nassau ve Gustavus Adolphus'tur. Bu iki isim önemli taktiksel dehalar olarak tanıtılmaktadır. Ayrıca askeri eğitimlerin ve disiplinin standartlaştırılmasını da bu iki ismin gerçekleştirdiğini belirtmektedir. Paralı askerleri her savaş döneminde kiralayıp eğitmek, savaş bitince işlerine son vermek pahalı ve zahmetli bir iş olduğundan dolayı, kalıcı ordular kurulması gerekmiştir. Ayrıca çok cepheli savaşlar da daha fazla daha büyük ordular gerektirmiş, böylece Avrupa orduları daha büyük bir mevcut kazanmaya başlamıştır. Büyüyen ordular doğal olarak daha fazla kaynak gerektirmiş, bu kaynakları elde edebilecek bir bürokrasi ortaya çıkmış, bu büyüyen bürokrasiyi yönetebilecek kapasitede sadece devletler olduğundan, devletler bu kadar büyük orduları sürdürebilecek tek güç olarak ortaya çıkmıştır. Modern devletin başlangıcı da bu sayılmaktadır. Böylece askeri devrim yönetsel, sosyal ve ekonomik hayata yön vermiş oldu.

Bu tezde tartışılmakta olan argümanın sahibi Geoffrey Parker askeri devrim tartışmalarını Michael Roberts'tan sonra daha ileriye götürmüş, tartışmanın önemli katılımcılarından biridir. Parker, Roberts'ın bazı argümanlarını desteklemekle birlikte bazılarını da eleştirmektedir. Parker ateş gücünün yeni kullanımının, yeni tip kalelerin ve artan ordu mevcutlarının 16.yy'da savaş sanatını kökten değiştirdiğini söylemektedir. Özellikle yeni kale dizaynına atıf yapan Parker, *trace italienne* kalelerin kuşatma sürelerinin artışına sebep olduğunu bunun da orduların büyümesine neden olduğunu söylemektedir. Avrupa ordularının yarısı kale garnizonlarında hizmet vermektedir. Yeni *trace italienne* tarzı kaleler, garnizonların büyüklüğünün artmasına

neden olmuştur. *Trace italienne* kaleler askeri devrimin itici gücü ve sadece Avrupa’da bulunan örnekleridir. Ayrıca Parker büyüyen ordularla birlikte dikkatlice planlanmış lojistik sisteme ihtiyaç duyulduğunu bunun da daha büyük bir bürokrasi gerektirdiğini söylemiş, büyüyen bürokrasinin de modern devletin doğuşuna sebebiyet verdiğini belirtmiştir. Bunlara ek olarak Parker süvari sınıfının silah taşıyan piyade sınıfına karşı önem kaybettiğini söylemektedir. Parker bütün bu değişiklikler ve nedenler sonuç olarak Batı dünyasının dünyanın geri kalanına hakimiyet kurmasına sebebiyet vermiştir diyerek tezine son vermektedir.

Parker’ın argümanlarına karşı çeşitli karşı argümanlar ortaya atılmıştır. Bunların en önemlileri Bert Hall, Clifford J. Rogers , John Lynn ve Jeremy Black’in karşı tezleridir. Bert Hall Parker’ın *trace italienne* kalelerin etkilerini fazlaca abarttığını belirtmiş, *trace italienne* kalelerin yayılımıyla orduları büyümesi durumunun aynı tarihlere denk düşmesini bir tesadüf olarak nitelendirmiştir. Jeremy Black devrim kelimesine şüpheyile yaklaşmış ve eğer askeri devrim oldu ise bunun iki kısımdan meydana geldiğini iddia etmiştir. Bunların ilki 15.yy’dan erken 16.yy’a kadar sürmüştür. İkincisi ise 1660-1720 arasındadır. İkinci dönemde fitilli tüfeklerden çakmaklı tüfeklere geçiş, süngünün icadı, ve paketlenmiş fişeklerin kullanılmaya başlanmış olunması bir askeri devrime sebebiyet vermiştir. John Lynn erken modern dönem Fransa’sını incelemiş orduların büyümesinin modern devletin kuruluşuna katkı sağladığı söylemiş fakat *trace italienne* kalelerin düşünüldüğü kadar ordu büyüklüğüne etki etmediğini belirtmiştir. Ordulardaki artışın sebebinin sadece bu yeni dizayn kaleler olamayacağını belirtmiştir. Ordu mevcutlarının artmasıyla kaleler arasındaki bağlantının Avrupa’da artan refah ve nüfusla alakalı olduğunu iddia etmiştir. Clifford J. Rogers ise daha değişik bir bakış açısıyla konuya yaklaşmış ve aslında dört adet askeri devrim olduğunu iddia etmiştir. Rogers devrimlerin belli sıçramalarla gerçekleştiğini bir süre devam ettiğini ve başka bir devrim tarafından yine belli bir sıçramayla yerini o devrime bıraktığını iddia etmiştir. Rogers’ın ilk devrimi piyade devrimidir. Bu devrimde mızraklı piyadeler aristokratik atlıların yerini almıştır. İkinci devrim toprakların kullanılmaya başlandığı devrimidir. Üçüncü devrim toprakların kullanıldığı kalelerin ortaya çıkmasıyla başlayan devrimdir ki burada *trace italienne* kalelerin stratejik savunmalar olarak öne çıkışından bahsetmektedir. Son devrim ise Michael Roberts’ın ortaya attığı değişikliklerden meydana gelmiş bir devrimdir.

Askeri devrim tartışmaları geliştikçe Osmanlı İmparatorluğu da bu tartışmaların içine dahil edilmeye başlanmıştır. Geoffrey Parker'ın yayılım ateşinin ilk olarak kullanıldığı yer olarak Avrupa'yı ve 17.yy'ı işaret etmesine karşın, Günhan Börekçi yayılım ateşinin Mohaç Savaşında yeniçeriler tarafından kullanıldığını göstermesi askeri devrim tartışmalarında Avrupa merkezli argümanların doğruluğu hakkında bazı şüpheler uyandırmıştır. Jozsef Kelenik Macaristan'ın iddia edilen tarihlerden daha önce askeri devrimin görüldüğü bir yer olduğunu öne sürmüştür. Askeri devrim tartışmaları çerçevesinde Osmanlı'nın askeri teknoloji ve üretimi açısından yetersiz olduğu söylenmiştir. Parker Osmanlı'nın askeri teknolojiyi Avrupa'dan kopyalayan iyi bir kopyacı olduğunu lakin yenilikleri kendi bünyesinde gerçekleştiremediğini söylemiştir. Ayrıca Osmanlı'nın metalürjik açıdan da yetersiz olduğunu belirtmiştir. Parker'ın bu argümanlarına karşı Gabor Agoston Osmanlı'nın 18.yy'a dek yeterli kaynağa, mali güce ve askeri üretim organizasyonuna sahip olduğunu iddia etmiştir. Ayrıca Agoston 18.yy'ın sonuna kadar kökten bir değişim yaşamayan silah teknolojisinin çok fazla bir değişim yaratmamış olduğunu, Osmanlı lojistik sistemi ve Avrupa'dan entegre ettiği askeri teknolojiyle Avrupa'yla 17.yy'ın sonuna kadar dengeli bir şekilde mücadele edecek bir güçte olduğunu belirtmiştir. Ayrıca Agoston Osmanlıların metalürjik olarak geride kalmış olmadığını silah, top ve mühimmat için gereken ham maddelere sahip olduğunu da belirtmiştir. Ayrıca Osmanlı'nın küçük sahra toplarını yerine büyük topları kullandığına dair argümanlara da Osmanlı'nın orta ve küçük boy top üretimine örnekler vererek cevap vermiştir.

Bu tezde konu edilen yıllar Osmanlı İmparatorluğu için oldukça problemli yıllardır. 16.yy'ın sonu ve 17.yy'da Osmanlılar çeşitli cephelerde aynı zamanda savaşmak zorunda kalmış ve Celali İsyanlarıyla da mücadele etmek zorunda kalmışlardır. Bunun sonucunda da yüksek sayıda askere ihtiyaç duyulmuştur. Halil İnalçık Osmanlı'nın Habsburgların artan ateş gücüyle başa çıkmak için yeniçerilerin yetmediğinden bahsetmiş ve bu durumu eşitlemek için Osmanlı'nın sekban ve sarıca diye adlandırılan birlikleri yüksek miktarda askere aldığını belirtmiştir. İnalçık bu durumu dış sebebe bağlarken, Agoston askeri mevcuttaki artışın sosyo-ekonomik değişikliklerden ve Osmanlı İmparatorluğunun genişlemesinden kaynaklı olduğunu ve bu sebeplere hanedan içerisindeki karışıklıkların ve Celali İsyanlarının da katkıda

bulunduğunu belirtmiştir. Böylelikle askeri mevcuttaki artışı Osmanlı İmparatorluğundaki iç dinamiklere bağlamıştır.

Kaleler harbiye içinde önemini 19.yy'a kadar muhafaza etmiştir. Bu döneme kadar ise çeşitli değişimlere uğramışlardır. Orta Çağ kaleleri genel olarak yüksek surlar, surlar önünde bir hendek ve yuvarlak burçlara sahipken, top ateşinin efektif hale gelmesiyle birlikte kale mimarisinde bazı değişiklikler görülmeye başlanmıştır. Top ateşinin surları çabucak yıkmasını önlemek için surlar kısaltılmış ve kalınlaştırılmıştır. Bu surların top ateşine daha fazla dayanmasına sebebiyet vermiştir. Ayrıca bunlar toprak tahkikatlarla güçlendirilmiş bu da top atışının efektifliğini biraz daha düşürmüştür. Topların savunma maksadıyla kullanılmaya başlamasıyla beraber tabyalara top atışı için mazgallar yerleştirilmiştir. *Trace italienne* kaleler altıgen şekli ve açılı tabyalarıyla özellikle 15.yy'da ön plana çıkmıştır. Açılı tabyalar kör noktaları yok ederek her yönde defansif atışlar yapılmasını olanaklı kılmıştır. Ayrıca altıgen şekil ve açılı tabyaların şekillerinden dolayı *trace italienne* kalelere aynı zamanda yıldız kale adı verildiği de olmuştur.

Osmanlılar *trace italienne* kaleler ile Macaristan serhaddinde karşılaşmışlardır. Bu *trace italienne* kalelerin bazılarını ele geçirebilmiş, bazılarının kuşatmasında ise başarısız olmuşlardır. Yine de Osmanlıların ele geçirdiği *trace italienne* kaleleri göz önüne alırsak mimari açıdan Osmanlıların bu kale tipinden haberdar olduğunu söyleyebiliriz. Osmanlılar bu tip modern mimariye sahip Kaniye, Uyvar, Győr, Varad, Temeşvar ve Szigetvar kalelerini ele geçirmişlerdir. Lakin Osmanlılar mimarisinden haberdar oldukları bu kale mimarisini uzunca bir süre diğer kalelerinde kullanmamışlardır. Her ne kadar Buda kalesini İtalyan bir mimara yenilemişseler de bunun tam kapsamı bilinmemektedir. Ayrıca bu kale mimarisine Doğuda da bu yüzden rastlanmamaktadır. Doğudaki kale mimarisi Orta Çağ kalelerinden pek fazla değişmiş değildir. Genellikle dikdörtgen bir şekle sahip kalelerle yuvarlak burçlar bulunmaktadır. Jonathan Grant'ın Osmanlı'yı bir bölgesel güç olarak değerlendirdiği, askeri teknoloji ve organizasyonunda yaptığı değişiklikleri etrafındaki rakiplerine göre yaptığı argümanı kale mimarisi için de geçerli olabilir. Osmanlılar savunma sistemleri dayandığı sürece bunlara dokunmamıştır. Sonuç olarak bu konuda Osmanlıların kale mimarisi ve teknolojisi açısından geri kaldığı söylenemez. Osmanlılar *trace italienne*

tipi kaleleri bu dönemde askeri amaçlarını gerçekleştirmek için gerekli bulmadığından dolayı inşa etmemişlerdir.

Osmanlı Macaristan ve Doğu serhadlerinde belli başka amaç ve stratejilere sahipti. Osmanlılar kaybettiği kaleleri geri almak, yeni kaleler fethetmek veyahut da kaybettikleri kaleler yüzünden savunma hatlarını yeniden düzenlemek için çeşitli stratejilere başvurmuşlardır. Osmanlıların Macaristan'daki stratejilerinden ikisi Buda'yı ve Tuna nehrini güvende tutacak bir kale ağını oluşturmaktır. Ayrıca Osmanlılar önemli bir kayıp yaşadıklarında bunu bölgedeki başka kaleleri alarak dengelemeye çalışıyorlardı.

Osmanlı'nın Macaristan ve Doğu serhadlerindeki amaçları ise birbirinden farklılaşabiliyordu. Macaristan'da Avrupa'daki güçlü bir imparatorlukla mücadele eden Osmanlılar buradaki mücadelelerinde daha büyük bir amaç doğrultusunda ki bu amaç bilinen dünyanın hakimiyeti bile olabilmekteydi. Yani bir prestij sağlama çabası da mevcuttu. Ayrıca Macaristan bölgesi Osmanlı için iyi bir vergi kaynağı olabilirdi. Doğuya dönüldüğünde ise genellikle verimsiz alanlar ve dağlık alanlarla karşılaşmak mümkündür. Bunlar da bölgeden alınacak verimi düşürmektedir. Lakin Osmanlı'nın buradaki amaçları oldukça çeşitli olabilmektedir. Öncelikle Safevi İmparatorluğuyla Osmanlı arasında ideolojik bir çatışma süregelmektedir. III. Murad gibi padişahların kendi öz imgelerini İslam'ın birleştiricisi olarak kurmaya başlamaları da bu ideolojik çekişmelerin bir diğer yansımasıdır. Buna ek olarak ticaret yollarının kontrol edilmesi de bir diğer mücadele alanlarından biridir. Ayrıca Osmanlı'nın Kafkasya'da kale iâşesini daha kolay sağlayabilmek için de Safevilerle mücadele etmesi gerekiyordu. İlaşeyi kolay sağlamak için de Osmanlıların Karadeniz ve Hazar Denizini birbirine bağlama planı vardı. Ayrıca bu planla birlikte Osmanlılar Safevilerin Doğu sınırındaki rakipleri Özbeklerle de daha kolay iletişime geçme imkanına sahip olabileceklerdi.

Tezin ikinci kısmını oluşturan garnizonlara döndüğümüzde ilk olarak garnizonun büyüklüğü, piyade atlı oranı, topçu sayısı ve birlik tipleri gibi konuları tespit etmek için bu tezde kullanılan mevacib defterlerinden bahsetmek gerekir. Mevacib defterleri askerlerin ulufelerini ödemek amacıyla tutulmuş defterlerdir. Yeniçerilerin İstanbul'da tutulan ayrı mevacib defterleri bulunurken, yerli birliklerin bulundukları beylerbeyliği defterdarınca tutulan ayrı mevacib defterleri vardır. Fakat

garnizonlardaki toplam askeri mevcudu tespit etmek için sadece mevacib defterleri yetmemektedir. Daha önce de denildiği gibi mevacib defterleri sadece ulufeli askerleri kapsamaktadır lakin kalelerde tımarlı müstahfızanlar da bulunmaktaydı. Doğal olarak garnizonun tam mevcuduna ulaşmak için yerel birliklerin ve yeniçerilerin mevacib defterlerine ve tımar sahibi kale erleri için de tahrir defterlerine bakılmalıdır. Fakat bu tezde konu ve zaman kısıtlamalarından dolayı sadece mevacib defterlerinden yararlanılmıştır. Bunlara ek olarak mevcutlar hesaplanırken bazı değişimlere de dikkat edilmesi gerekmektedir. Gabor Agoston'un işaret ettiği üzere garnizon mevcutlarındaki bazı artışlar ödeme metotlarının değişimiyle de alakalı olabilmektedir. Tımar almakta olan bazı hisar erlerinin ulufeye döndürülmesi gibi durumlar buralarda dikkat edilmezse garnizon mevcutlarında farklılıklara sebep olabilirler. Ayrıca mevacib defterleri askerlerin ulufe ödemelerini gösterirken direkt olarak kalede defterin tutulduğu dönemde hali hazırda bulunan askerleri göstermeyebilir. Bunun için tutulmuş olan mevacib defterlerine çok benzer olan yoklama defterleri önemlidir. Burada ulufe alan her asker mevcut veyahut da namevcut olarak gösterilmektedir. Lakin bu tezin amacı garnizonlarda kağıt üzerinde var olacağı düşünülen askeri mevcudun ne kadar olduğunu hedef almaktadır.

Garnizonlarda yerli birlikler ve kapıkulu birlikleri olmak üzere iki farklı organizasyona sahip birlikler bulunmaktadır. Yerel birlikler genellikle bulunduğu blgelerden askere alınmış taşra teşkilatına bağlı askerlerken, kapıkulu birlikleri padişaha bağlı merkezde bulunan birliklerdir. Yerel birlikler arasında müstahfızan, topçuyan, cebeciyan, gönüllüyan, gılman, azeban, martolosan, müteferrika birlikleri yer almaktadır. Kalelerde görev yapan kapıkulu birlikleri arasında ise yeniçerileri, kapıkulu topçu ve cebecilerini, gılman, çavuş, müteferrikayan ve bazı altı bölük halkı birliklerini bulmak mümkündür. Bunlardan başka mevacib defterlerinde çeşitli meslek erbabları da yer almaktadır.

Kalelerdeki yeniçeriler üç yıl boyunca kalelerde hizmet verip sonra tekrar merkeze dönmekle yükümlüydüler. Tabi bu süreler uzayabilmekteydi. Önemli kalelerde yeniçeri kumandanı olarak yeniçeri ağası bulunmaktaydı. Yeniçeri ağası sadece bulunduğu kalenin değil etrafındaki kalelerin de hiyerarşik olarak kumandanı

sayılıyordu. Dizdarlar hiyerarşide yeniçeri ağalarından sonra gelen kale komutanlarıydılar. Aynı kalede birden fazla dizdar bulunabiliyordu ve bunlar sorumlu oldukları kaledeki bölgeye göre hiyerarşik sırada oluyorlardı.

Müstahfizan, azeban, gönüllüyan ve farisan sınıfları kalelerde bulunan en kalabalık sınıflardı. Müstahfizanların geldikleri yerler tartışmalı olsa da garnizonların en kalabalık piyade birliklerinden biriydiler. Azebanlar ise kalelerdeki en kalabalık bir diğer piyade birliği idi. Bunların organizasyonu yeniçerilere benzetilmiştir. Gönüllü sınıfı için de çeşitli tartışmalar mevcuttur. Kalelerde oldukça iyi maaş alan bir atlı gönüllü sınıfı bulunmaktadır. Lakin aynı zamanda tam olarak bu gönüllü birlikleriyle aynı olmasalar da piyade bir gönüllü sınıfı olması da mümkün görünmektedir. Bir diğer kalabalık süvari grubu farisanlardır. Bunlar aynı zamanda ulufeciyan-ı süvari olarak da anılmaktadırlar. Macaristan'daki kalelerde bol miktarda bulunan bu birlikler kalelerdeki ileri harekât faaliyetlerine katılmaktaydılar.

Bunlara ek olarak garnizonlardaki birlik tiplerinden bazıları serhadden serhadde farklılık göstermişlerdir. Bu birlikler farisan, gılman ve martolosan birlikleridir. Farisan ve martolosan birlikleri sadece Macaristan serhaddinde bulunurken, gılman birliklerinin mevacib defterlerindeki izine sadece Doğu sınırında rastlanmıştır. Farisan birliklerine Doğu'da, gılman birliklerine Macaristan'da rastlanmamasının sebeplerinden biri bunlara dair belgelerin arşivlerimizde eksik olması veyahut da bulunamamasıdır. Çünkü bu birliklerin diğer serhadde bulunmamasının bir sebebi bulunmamaktadır.

Martolosan birlikleri ise Hristiyan Balkan halkları arasından alındığından dolayı Doğu serhaddindeki kalelerde bulunmamaları normal gözükmemektedir. Çoğunlukla martolosan birlikleri Macaristan'daki sınır boylarındaki kalelerde görevlendirilmişlerdir. Her ne kadar Orhan Kılıç Doğu serhaddinde martolosan birliklerine dair kayıtların bulunduğunu belirtse de yukarıda belirtilen sebeplerden ötürü bunların bir istisnadan öte olmaması gerekir.

Kalelerdeki garnizon büyüklükleri, piyade atlı oranı, topçu sayıları ve garnizonların iâşe ve finansmanında bahsetmeden önce Osmanlıların Habsburglardan aldığı *trace italienne* kalelerden bahsetmek gerekir. Doğu ve Macaristan'daki kalelerin

karşılaştırırken Macaristan'da bulunan bu *trace italienne* tipi mimariye sahip kaleler de göz önünde bulundurulmuştur. Bu kaleler Kaniye, Temeşvar, Uyvar ve Varad'dır.

Osmanlının Macaristan'da 1663 yılı sonunda altı vilayeti bulunmaktadır. Bunlar Buda, Temeşvar, Kaniye, Györ (Yanık), Varad ve Uyvar'dır. Györ vilayeti Osmanlı'nın elinde çok kısa bir süre kaldığı için değerlendirmeye alınmamıştır. Doğuda ise Bekir Kütükoğlu'nun serhad üzerinde yaptığı sınıflandırma esas alınmıştır. Kütükoğlu Doğu serhaddini üç parçaya ayırmıştır. Serhaddin ilk parçasını Kafkasya'ya karşı Erzurum-Kars bölgesi oluşturmaktadır. İkinci parça Tebriz'e karşılık gelen Van bölgesi ve çevresidir. Son parça ise Nihavend-Pelangan bölgelerine karşılık gelen Şehr-i Zor-Bağdad hattı oluşturmaktadır. Konu alınan dönemde yaşanan çatışmalar genel olarak Kafkasya ve Tebriz bölgelerinde gerçekleştiğinden ötürü karşılaştırma yapmak amacıyla Van, Erzurum, Tebriz, Revan gibi önemli kalelerle birlikte Kafkasya'daki daha az öneme sahip birkaç vilayet konuya dahil edilmiştir.

Bu vilayet merkezlerindeki garnizonların piyade/süvari oranları karşılaştırıldığında Batıda piyade birliklerinin bir üstünlüğü göze çarpmaktadır. Her ne kadar Doğu'ya ait veriler yetersiz olsa da eldeki verilerle bir değerlendirme yapıldığında bu oran herhangi bir yıl için piyade sayısının Macaristan'daki garnizonlar lehine olduğu görülmektedir. Bunun sebebini topografik farklılıklar oluşturmaktadır. Dağlık Doğu coğrafyasına karşılık Macaristan genel olarak düzlük ovalardan meydana gelmektedir. Doğudaki dağlık alanlar ve aynı zamanda kalelerin Batıya göre birbirinden daha uzakta yer almaları garnizonlarda daha fazla süvari birliği gerektirmiş olabilir.

Garnizonlardaki topçu sayılarına baktığımızda ise Macaristan'da *trace italienne* tarzı kalelerde 1620'lerden sonra genel olarak topçuların yüksek bir ortalamayla bulunduğunu görebiliyoruz. Lakin Doğu'da da Revan, Tebriz gibi önemli kalelerde savaş zamanlarında Macaristan'daki *trace italienne* kalelerde bulunandan daha fazla sayıda topçu birliği bulunduğu da gözlemlenmiştir. Lori ve Tomanis gibi Revan ve Tebriz'e göre daha az öneme sahip kalelerde de ortalama sayılabilecek sayıda topçu mevcut bulunmaktadır. Buda gibi serhadde önemli bir yeri olan fakat *trace italienne* tipi mimariye sahip olmayan bir kalede de topçu mevcudu yüksektir. Genel olarak savaş zamanlarında kalelerdeki topçu sayılarında genel bir artış göze

çarpmaktadır. Bu sayı kalenin sınıra olan uzaklığına göre de değişime uğramıştır. Bu yüzden topçu sayısı her ne kadar kale mimarisiyle bağlantılı olarak yüksek olabilme ihtimaline sahipse de diğer etkenlerin de buna etki ettiği göz ardı edilmemelidir.

İki serhadde de garnizon büyüklükleri karşılaştırıldığında çok büyük farklara rastlanmamaktadır. Garnizon kuvvetleri savaşlar, barış zamanları, isyanlar ve bölgenin topografik özelliklerine göre zaman içerisinde artmış veya azalmıştır. Özellikle savaş zamanlarında garnizon kuvvetlerinde bir artış göze çarpmaktadır. Genel eğilim alınan kalelerde ilk yıllarda çok yüksek sayıda yeniçeri bulunmasına yöneliktir. Zaman geçtikçe yeniçeri sayısı azalmaya başlar ve yerli birlikler yeniçeri birliklerinin yerlerini doldurur. Savaş zamanlarında da kalelerdeki yeniçeri mevcudu artmıştır.. Bu da garnizonların büyümesine sebep olmuştur.

Macaristan serhaddinde Buda özel bir konumdadır. Buda bu serhadde Osmanlının bir serhad merkezi olarak görülebilir. Buda'yı korumak için oluşturulan savunma hattı da düşünüldüğünde bu durum daha açık bir şekilde görülebilmektedir. Bu yüzden Buda'da yüksek sayıda garnizon mevcudu olması makul gözükmemektedir. Lakin Buda *trace italienne* tipi kale mimarisine sahip değildir. Bu da garnizon mevcudunun yüksek olmasında çeşitli sebeplerin etkin olduğunu göstermektedir. Özellikle savaş durumlarında yüksek öneme sahip kalelerde daha fazla birlik konuşlandırılmıştır.

Garnizonların iaşesi konusunda Doğu'da Macaristan serhaddine göre daha fazla zorlukla karşılaşıldığı görülmektedir. Macaristan serhaddinde Tuna nehri gibi iaşenin sağlanmasını kolaylaştıran bir nehir bulunmaktayken Doğu'da böyle bir nehir bulunmamaktadır. Ayrıca Doğu'nun dağlık ve verimsiz alanları da iaşenin daha zorlu olmasını sağlamıştır.

Garnizon askerlerinin finansmanın sağlanmasında her iki serhadde de benzer uygulamalar mevcuttu. Yerel birliklerin ulufeleri için bulundukları vilayetlerin hazineleri kullanılmış bu yeterli gelmediğinde çevredeki diğer vilayetlerden ve merkezden para yardımı alınmıştır. Ayrıca yerel birliklerin ulufeleri için bunlara ocaklıklar da atanmıştır. Bunlara rağmen ödemelerde gecikmeler iki serhadde de ortak sorun olagelmıştır.

Sonuç olarak bu veriler karşılaştırıldığında *trace italienne* tipi kalelerin garnizon mevcutlarına gözle görülür bir etki bırakmadığı, garnizon mevcutlarındaki artışın çeşitli sebeplere dayandığı söylenebilir. Savaş, isyan, kalelerin lokasyonu ve bölgenin topografyası gibi çeşitli sebepler garnizonların mevcudunun artıp azalmasına sebebiyet vermiştir. Piyade/süvari oranı Macaristan'daki kalelerde piyade lehinedir lakin bunun sebebi Doğudaki kalelerin lokasyonları ve bölgenin topografik özellikleridir. Topçu sayıları ufak bir farkla Macaristan'daki kalelerde ortalamanın yüksek olduğunu gösterse de bu durum kale mimarisinden kaynaklanıyor olabilmesinin yanında savaşlar gibi daha değişik sebeplere de dayanabilmektedir. Garnizonların iâşesi Doğuda Tuna nehri gibi büyük bir nehir olmadığından ve daha verimsiz alanlara sahip olduğundan dolayı daha zor olmaktadır. Garnizonların finansmanında ise iki serhadde de benzer uygulamalar görülebilmektedir.

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