

Hattat İsmail Zihni Paşa: Life and Death of an Ottoman Statesman and an Inventor

*Kabraman Şakul**

Hattat İsmail Zihni Paşa: Bir Osmanlı Devlet Adamı ve Mucidinin Hayatı ve Vefatı

Öz ■ Bu makalenin ana meselesini 18. asır sonlarında Osmanlı İmparatorluğu'nda bir devlet adamı kimdir sorusu oluşturmaktadır. Bu devir bir dizi siyasi ve diplomatik buhranların sonucunda kimliklerin ve bağlılıkların masaya yatırıldığı bir azim karışıklık devriydi. Makale Osmanlı İmparatorluğu'nda teknoloji transferi ve söz konusu teknolojinin adaptasyonu ile yönetici ricalin yeniliklere karşı tutumları hakkındaki genel geçer görüşleri sorgulamaktadır. İzlenen yöntem bir Osmanlı devlet adamının, İsmail Zihni Paşa'nın, tahsili, bürokratik kariyeri ve mucitliğine yoğunlaşmak olacaktır. Sonuç olarak, belge ve metinsel kaynaklar sayesinde gördüğümüz hizip siyasetine dahil oluşu ve tereke kayıtlarının ifşa ettiği mal varlığı edinme yolları açısından İsmail Zihni Paşa devrinin tipik bir Osmanlı paşasıydı. Ne var ki, teknolojik yeniliklere ve mekanik eşyalara karşı duyduğu heyecan açısından pek de tipik bir paşa değildi. Umulur ki, bu makale "Osmanlı kimdir?" sorusunun ne kadar karmaşık cevapları olabileceğinin bir göstergesi olsun.

Anahtar kelimeler: İsmail Zihni Paşa, Halil Hamid Paşa, Osmanlı Askeri İslahatları, Seri Atışlı Tüfek, Galatasaray, Tereke

The principal concern of this paper is to shed light on the question of what it took to be an Ottoman for a statesman in the 'Age of the Great Ottoman – Russian/Habsburg Wars.'¹ This was an age of significant turmoil caused by a series

* İstanbul Şehir University.

I am most grateful to Assoc. Prof. Fikret Sarıcaoğlu, Prof. Dr. Victor Ostapchuk and Prof. Dr. Kemal Beydilli, for generously sharing ideas and sources with me. I would like to thank Ass. Prof. Ahmet Arslantürk for his assistance in deciphering some of the documents used in this study.

¹ This definition is from Kemal Beydilli, "Küçük Kaynarca'dan Tanzimat'a İslahat Düşünceleri", *İlmi Araştırmalar: Dil, Edebiyat, Tarih İncelemeleri* 8 (1999), 25-64.

of diplomatic and military crises that changed the empire forever. The times demanded the questioning and redefining of identities and allegiances by the ruling elite as well as various subject populations –Muslim and non-Muslim alike.² The essay will explore İsmail Zihni Paşa’s educational background, factional networks, and his inventive mind. While membership to a faction and accumulation of wealth were typical in the career of an Ottoman statesman, his passion for technological invention and taste for artifacts of wonder were not. The present paper will call into question our notions about transfer of military technology and the nature of Ottoman ruling elite based on the example of İsmail Zihni Paşa.

The history of innovation and invention in the Ottoman Empire has been covered in a mist in Ottoman studies. Thus, it is no surprise that the Ottoman statesmen of the period in question have been associated with a conspicuous lack of curiosity for the outer world and of inventive mind in historiography. While no longer constituting the mainstream approach in academic circles, this approach still looms large in popular histories.³ İsmail Zihni Paşa challenges such conventional definitions. When he died in July 1785 as the governor of Bosnia, he left an odd weapon behind –a carriage with many musket barrels fixed on it, fired by a central mechanism, namely a volley gun (similar to the European organ gun, *ribauldequin*).

Career and Life Story

İsmail was born in 1739 to a middle-class family in Istanbul; his father was an artisan. Reaching puberty, he was accepted to the Galata Palace School. He evidently underwent a vigorous education embodying martial arts, military sciences, and calligraphy. During his training, he attained proficiency in a number of calligraphic styles used in the Ottoman chancellery, which proved to be his golden opportunity for entering the scribal bureaucracy at the palace. Upon recommendation for his beautiful handwriting, Sultan Mustafa III appointed him

2 The imperial geopolitics of the rivalry over the loyalties of Christian souls in the Balkans is discussed in Virginia H. Aksan, “Locating the Ottomans Among Early Modern Empires”, *Journal of Early Modern History* 3 (1999), 21-39 [reprinted in idem., *Ottomans and Europeans: Contacts and Conflicts* (Istanbul: ISIS, 2004)].

3 Several works of B. Lewis and J. Goodwin propound such views that mystify and exoticize the Ottomans in European history. See, B. Lewis, *What Went Wrong? The Clash Between Islam and Modernity in the Middle East* (Oxford University Press, 2002); J. Goodwin, *Lords of the Horizon* (New York: 1999); among many criticisms see Virginia H. Aksan, “Ottoman Military Matters”, *Journal of Early Modern History* 6/1 (2002), 52-62.

to the chamber of Treasury. As a young palace scribe, İsmail Efendi followed the established patterns of the Ottoman political culture based on household politics by attaching himself to the household of Silahdar Mehmed Paşa.⁴

A protégé of Silahdar Mehmed, İsmail Efendi served as the pipe warden and wardrobe master (*duhâni ve haftânî/kaftânî*) of the Silahdar Ağa [the arms bearer of the Sultan]. He quickly transformed himself into a counselor of his benefactor in matters of some political importance. His insights and suggestions on such occasions earned him a good reputation in palace circles. Nevertheless, his close confidence with his master caused an unwelcome rivalry with Silahdar's brother, who intrigued against İsmail to fall him from favor. It was a fortunate coincidence that the post of vice chief-secretary of Sultan Abdülhamid I was vacant at the moment. Silahdar Mehmed avoided further rift in his entourage by having İsmail Efendi appointed to that respectable position in the palace hierarchy.⁵

A brief discussion of Silahdar Mehmed Pasha is necessary, as sources seem to confuse the two grand viziers bearing the same name and title in the period under discussion. The first was the brother-in-law of Sultan Mustafa III; the second was a close associate of Sultan Abdülhamid I from his princehood: Kara Silahdar Seyyid Mehmed Efendi [later, Karavezir Silahdar Mehmed Pasha]. The royal bridegroom was a strong vizier due to his marriage to Ayşe Sultan, sister of Sultan Mustafa III. He held the grand-vizierial post after the routing of the Ottoman army at Kartal [Kagul] (25 October 1770) for slightly more than a year. He died at his late 70s in 1788. Several sources designate him as the benefactor of İsmail Efendi.⁶ Nevertheless, Mehmed Pasha was rotated from a provincial governorship to another during the years that witnessed the rise of İsmail Efendi in the palace service. Thus, he could not be the pasha who is said to have enjoyed prudent advices of İsmail on important political affairs. Furthermore, Sultan Abdülhamid I believed that he was one of the grand viziers responsible for the defeat at the hands of the Russians and rejected at once the proposal to appoint him as the deputy grand vizier on one occasion. Neither could he have approved of the appointment of one of this pasha's protégés as his deputy chief-secretary. Finally, İsmail Efendi's

4 Ahmed Vastif Efendi, *Mehâsinü'l-Âsâr ve Hakaikü'l-Âhbâr*, ed. Mücteba İlgürel (Ankara: TTK, 1994), 280.

5 ed., İlgürel, *Mehâsinü'l-Âsâr ve Hakaikü'l-Âhbâr*, 280; *Sicill-i Osmânî*, I, 370 [SO].

6 SO mentions him as the governor of Kars – a possible confusion with nearby Erzurum – and the sponsor of İsmail Efendi, see *Sicill-i Osmânî*, I, 370. İlgürel also implies him as İsmail's benefactor, see ed. İlgürel, *Mehâsinü'l-Âsâr*, 429 [index]; for his biography see, Mehmet Arslan ed., *Tayyâr-Zâde Âtâ Osmanlı Saray Târîhi: Târîh-i Enderûn*, vol. II (İstanbul: Kitabevi, 2010), 131-5.

later promotion to the office of the intendant of the Imperial Treasury (*Hazine-i Hümayun kethüdası*) occurred during the term of the grand vizier Yeğen Seyyid Mehmet Paşa. An archenemy of Silahdar Mehmet Paşa, he showed unrelenting hostility towards him only to cause his own downfall in the end. It would have been out of question that Yeğen Paşa would appoint a man closely affiliated with his enemy to such an important post.⁷

By contrast, Kara Silahdar Mehmed Efendi was a palace creature. He was an intimate of Abdülhamid I, heir apparent; whose coffeemaker was his brother, Helvacı Mustafa Ağa. Known in chronicles as Karavezir, Mehmed Efendi/Pasha became the maker of grand viziers after Abdülhamid's succession, finally himself coming to power in August 1779. When he died in February 1781 in his late forties, as a renowned reformer, he was only a few years older than İsmail Efendi.⁸ Some time in the eighteenth century it had become a palace tradition to choose the 'wardrobe master of the sultan's arms-bearer' (*silahdar ağa kaftancısı*) from among the graduates of the Galata Palace School. Some of these men advanced from this post to that of the sultan's chief secretary. Hattat Mehmed Hıfzı Efendi, for instance, was a graduate of the same school, a calligrapher, and the chief secretary of Sultan Mahmud I at the beginning of his reign. Among the graduates of this school that held the title of the wardrobe master of the sultan's arms-bearer were Hafız Ali Efendi (1813), his predecessor Rasih Efendi, and Esebeyzade Emin Ağa (1826). The graduates of this school were known to have a strong sense of solidarity and given preferential treatment in the palace bureaucracy. As a matter of fact, selection of the Galata graduates for higher education in the Enderun was a prerogative of the wardrobe master of the sultan's arms-bearer, who was a former graduate of the same school.⁹ This is further evidence that İsmail Efendi's benefactor was Karavezir.

7 Mehmed Paşa's long career in provincial governorships is impressive: Trabzon (1772-4), Selanik (1774-5), Bosnia (1775-6), Bender (1776-8), Bosnia (1778-?), Anatolia (1780-2), Erzurum (1782), Egypt (1783), Hanya (1785), Crete (1786-8). His appointment to Erzurum was forced by Yeğen Seyyid Mehmed Paşa who contemplated to execute him in his new post so as to settle an old account from the days of the Russian War (1768-74), see İsmail Hakkı Uzunçarşılı, *Büyük Osmanlı Tarihi*, v. VI (Ankara: TTK, 5th edition), 416, 431; for Abdülhamid's opinion about him see, Fikret Sarıcaoğlu, *Kendi Kaleminden Bir Padişahın Portresi: Sultan I. Abdülhamid (1774-1789)* (İstanbul: TATAV, 2001), 132.

8 For his biography see, ed. Mehmet Arslan, *Tarih-i Enderun*, vol. II, 131-5; Uzunçarşılı, *Büyük Osmanlı Tarihi*, v. VI, 428; He is also mentioned as 'Silahdar-ı Şehriyari es-Seyyid Mehmed Ağa', see Ahmet Özcan, "Kethüda Said Efendi Tarihi ve Değerlendirmesi", (MA thesis, Kırıkkale Üniversitesi, 1999), 28 [24^a].

9 Fethi İsfendiyaroğlu, *Galatasaray Tarihi*, v. I (İstanbul, 1952), 534-7, 553.

Consequently, should the senior Silahdar Mehmed Pasha really have played a role in İsmail's career, it would not have gone beyond employing him in the palace as a young scribe owing to his amicable relations with Sultan Mustafa III as a royal favorite. Nevertheless, İsmail Efendi must have then joined the same palace faction as Kara Silahdar Mehmet Efendi during the reign of Abdülhamid I. In this case, the audience of his good counsel was Kara Silahdar rather than the senior Silahdar who was not present in the palace at the time. This also explains the story about the jealous brother of the silahdar mentioned above. This person was Helvacı Mustafa (later, Pasha) in all likelihood. He held the title of *nişancı* (chief chancellor: affixer of the imperial signature) when his brother Karavezir was made the grand vizier. Curiously, Karavezir removed his brother from the office in favor of el-Hajj Mustafa Efendi. This was actually a promotion that roughly coincided with İsmail's appointment as the deputy chief secretary of the Sultan.¹⁰

İsmail seems to have been quick in cultivating good relations with Sultan Abdülhamid owing to which he was further promoted to the chief secretary of the Sultan. There are two official diaries (*ruznâme*) for the reign of Abdülhamid I. The one that exists in rough draft and records the events of 13 May 1778 – 16 December 1779 was by and large kept by İsmail Zihni Efendi.¹¹ Thus, *zihni* had already become one of his sobriquets in recognition of his sharp and inventive mind. It was a palace tradition to give scribes nicknames suggestive of their skills and competencies. His beautiful handwriting, for instance, earned İsmail Efendi the sobriquet *hattat*. It helped him tremendously climb up in the palace hierarchy as well; 'Es-seyyid' İsmail Efendi was made the intendant of the Imperial Treasury (*Hazine-i Hümayûn kethüdâsı*) on 10 December 1782 on the eve of the downfall of Yeğen Seyyid Mehmet Pasha.¹² A graduate of the Galata Palace School could be

¹⁰ Uzunçarşılı, *Büyük Osmanlı Tarihi*, v. V, 474; Abdülhamid had granted Helvacı Mustafa the title of vizier and married him to Şah Sultan, the daughter of Mustafa III. Then Karavezir abruptly dismissed him from the office, while appointing another of his brothers Halil Ağa as the 'silahdar', Sarıcaoğlu, *I. Abdülhamid*, 142-3.

¹¹ This is kept in the Topkapı Palace (T SMA, nr. E.12360/1-17), see Sarıcaoğlu, *I. Abdülhamid*, XVIII. *SO* states that İsmail Efendi was once the tutor of Prince Mehmed, son of Abdülhamid. However, he was sent to Sofia before the birth of Mehmed Nusret who died at three years old (September 1782 - October 1785), see İlgürel ed., *Mehasinü'l-Âsâr*, 292.

¹² *Ruznâme-i Sultan Abdülhamid Han* (Topkapı Sarayı Müzesi Arşivi [T SMA] E. 12360/17), 1a; *SO* gives the dates January 1781-10 December 1782 for his term of office, but *Ruznâme* is very meticulous about the dates, giving the exact time of his appointment (*kâtibü's-sırr es-Seyyid İsmail Efendi hazîne kethudâsı nasb sâ'at akrebî sekiz, dakika ellî*). One document refers to him as 'the former Sipahiyân Ağa and the deceased Governor

promoted to this post after serving his term as the wardrobe master as in the case of Emin Efendi who filled these posts in 1814 and 1817, respectively.¹³

Apparently, İsmail Efendi recommended Halil Hamid Pasha for the vacant post to Karavezir who, in turn, suggested his name in an unofficial deliberation to Sultan Abdülhamid I.¹⁴ This was the singular political achievement of “Es-seyyid Hattat İsmail Zihni Efendi” –to use his full name and title- in his otherwise typical scribal career. Once in power, Halil Hamid Pasha returned the favor by raising İsmail to pasha of three horsetails¹⁵ and appointing him to a provincial governorship as related in *Sicill-i Osmani*. However, Vasıf Efendi gives an immensely unfavorable version of this story. According to Vasıf, the grand vizier demonstrated a perfect case of perfidy by plotting against two individuals to whom he owed his position: İsmail Efendi and Hajji Mustafa Efendi, the chief treasurer. He alleged that Halil Hamid Pasha was a power monger who attempted to impose his personal rule on the palace bureaucracy. İsmail was simply one of the victims of the schemes of the rapacious grand vizier. He was convinced that İsmail and Mustafa were plotting to replace him in office. Afraid of İsmail’s influence on the aging Sultan, Halil Hamid Pasha aimed to torment this potential rival by rotating him between provincial governorships. The execution of Halil Hamid meant the end of the sufferings of an anguished İsmail who was later appointed the Governor of Bosnia. Vasıf’s determination to revile Halil Hamid on every occasion may have accounted for his unfavorable interpretation of his intentions. Actually, Halil Hamid Pasha had appointed İsmail to the governorship of Bosnia a few weeks before his own demise.¹⁶ The *Ruzmerre*, by contrast, hints that a more cordial relation-

of Bosnia’ with no mention to the date for the former appointment, Başbakanlık Osmanlı Arşivi [BOA], D.BŞM.MHF 75/48.

- 13 İsfendiyaroglu, *Galatasaray Tarihi*, 534. He was also the tutor of princes in 1814. *SO* states that İsmail was once the tutor of prince Mehmed, but this is not supported by other sources.
- 14 Uzunçarşılı, *Büyük Osmanlı Tarihi*, v. VI, 433, 436 and his “Sadrazam Halil Hamid Paşa” in idem. *Osmanlı Tarihinden Portreler - Seçme Makaleler*, vol. I (İstanbul: YKY, 2010) ed. Nuri Akbayar, 128-30.
- 15 His probate inventory features three horsetails with a silver niche to fix the standard as well as a silver knob. It was taken from ‘Ömer’ –probably one of his servants- and sold to a certain ‘İbrahim Ağa, kullukçu’ for 23,505 akçes (195,86 kuruş): “Ömer sim babalı ve sim koğanlı tuğ 3, 23,505 akçes İbrahim Ağa kullukçu”, see TSMA, D.2302, p. 132.
- 16 ed. İlgürel, *Mehasinül-Âsâr*, 244, 280; Uzunçarşılı agreed with Vasıf concerning the ingratitude of Halil Hamid Paşa towards İsmail Efendi, see Uzunçarşılı, *Büyük Osmanlı Tarihi*, v. VI, 435, but challenges him on the dismissal of Mustafa, see “Sadrazam Halil Hamid Paşa,” 170-1.

ship may have prevailed between the two pashas. During the official ceremony of promotion, İsmail was given the robe of honor (*kürk*) sent by the Sultan, signifying his vizieral rank. On that occasion, Halil Hamid Pasha, however, gave him an additional one, signifying his appointment to İnebahtı on 16 October 1783.¹⁷ As for Hajji Mustafa, the grand vizier had initially appreciated him by making him his deputy. The two fell into disagreement soon over foreign policy in the heat of the crisis with Russia over the annexation of the Crimea. A resentful Halil Hamid dismissed his deputy because of his adamant opposition to preparation for a possible war with Russia and its Habsburg ally.¹⁸

A cursory reading of Vasif's history reveals that İsmail's promotion to the rank of pasha and appointment to a provincial governorship was part of a general policy concerning border security. Halil Hamid Pasha's conviction that an armed conflict with Russia was imminent in the near future and his war preparations are too well known to repeat here. However, it can be quickly noted that he wanted to have trustworthy and able governors in the Danubian theatre of war. Thus began Hattat İsmail Zihni Pasha's career in the provinces. He immediately reorganized his household and rushed to his post as advised by Halil Hamid Pasha during the official appointment ceremony. On his way to İnebahtı in late 1783, İsmail Zihni Pasha received the official notification that he was now the Governor of Anatolia and the Commander (*serasker/başbuğ*) of Sofia. This required him to stay in Sofia rather than in Kütahya.¹⁹ Alerted by the Russian-Habsburg rapprochement, the Ottomans had decided to appoint two commanders to Sofia and İsmail, respectively. They would monitor the enemy forces across the border and organize the military mobilization. The first Commander of Sofia was the Governor of Rumelia, Eğribozlu İbrahim Paşazâde Vezir Mehmed Pasha. He, however, abused his authority as the governor of the region by imposing heavy taxes to feed his troops. The Sublime Porte attempted to prevent oppression by taking administrative authority away from military commanders; thus the commander of Sofia and İsmail could not be the governor of the same province. It was hoped that commanders had less opportunity for extortion when their military command fell outside of the limits of the provinces where they were in charge of taxation.

17 *Ruzmerre*, Türk Tarih Kurumu Kütüphanesi, Yazma nr. 1001, 21. İsmail Paşa was appointed to İnebahtı on 12 October 1783.

18 Sarıcaoğlu, *I. Abdülhamid*, 146-7.

19 He was appointed to the post on 1 December 1783, see İlgürel ed., *Mehasinü'l-Âsâr*, 57; *Ruzmerre* misreported the name of the post as the 'Commandership of Manastır' (*Manastır Muhafızı*), see p. 21; *SO* also wrongly states that he held the commandership of İsmail when serving in Sofia (p. 370).

Thus, Abdi Pasha, the new Governor of Rumelia, was made the Commander of İsmail while İsmail Zihni Pasha, the Governor of Anatolia, held the Commandership of Sofia.²⁰

Relations with Russia were strenuous at best on the eve of the ratification of the Aynalıkavak Convention by which the Sublime Porte recognized the Russian annexation of the Crimea. Prior to the official ceremony of the exchange of ratifications in Istanbul on 4 April 1784, the Ottomans considered decreasing the tension with Russia by a gesture of goodwill. This plan envisioned the withdrawal of Abdi Pasha from İsmail to Sofia and ordering İsmail Pasha back to Kütahya, his gubernatorial seat. This plan was only partly realized and only in the spring of 1785. The Porte was never satisfied with İsmail Paşa's performance in Sofia. His lack of popularity among his troops, his dismal performance in military operations and various other shortcomings were all subjects of consultative meetings held in Istanbul. By the autumn of 1784, the Sublime Porte prioritized the border with the Habsburgs since it believed that Russia would procrastinate to honour the terms of its alliance with the Habsburgs should Vienna attack the Ottoman territories. Convinced that the real fight would occur in the Danubian basin, decision was made to send a stronger pasha to Sofia. Therefore, relocation of Abdi Pasha in Sofia had emerged as a distinct probability in the meeting held on 11 September 1784. According to this proposal, İsmail Zihni Pasha would fill the post of the commandership of İsmail fortress.²¹

The relocation of Abdi Pasha in Sofia and İsmail Pasha in İsmail took place on 15 March 1785. They were still the governors of Rumelia and Anatolia, respectively. Probably, İsmail Pasha was never to go to his new post, as he was appointed to the governorship of Bosnia shortly after, on 13 May 1785.²² This turned out to be his last post. A terrible plague outbreak was ravaging in Bosnia as testified by local sources. Başeski Şevki Molla Mustafa from Bosnasaray (Sarajevo), noted in his diary the immediate death of the new governor with the words²³:

20 ed. İlgürel, *Mehasinü'l-Âsâr*, 57; Mustafa Öge, "Vaka-i Hamidiyye: Mehmed Sadık Zaim-zâde. Tenkidli Transkripsiyon," (MA thesis, Balıkesir Üniversitesi, 2001), 60-7 [15a-21a].

21 Aydoslu Mehmed Paşa was the other candidate for this post, ed. İlgürel, *Mehasinü'l-Âsâr*, 187-91.

22 *Ruznâme*, 10b, 11b; ed. İlgürel, *Mehasinü'l-Âsâr*, 215,254; *Ruzmerre* gave the date of appointment to İsmail commandership as 17 March 1785 (pp. 26, 29).

23 Kerima Filan, "Başeski Şevki Molla Mustafa. Ruz-Name. Metin-Sözlük-İnceleme," (Ph.D diss., Ankara Üniversitesi, 1999), 90-1, 231.

“Afore-mentioned İsmail Paşa came down with illness for about a week and died right after he had arrived at Yeni Pazar. A strange incident indeed! Never happened before in Bosnia that way. It occurred in the year of 1199, between the *Petrov* day [July 12] and *Aligün* day [August 2].”

Poor İsmail Pasha most probably died some time before July 28, as the post-mortem bureaucratic routines such as confiscation were already underway by 28 July 1785.²⁴ Assuming that the order of his appointment could not have arrived before the first days of June, he possibly stayed in Sofia at least until mid-June, preparing for the journey to his new post.

İsmail was known for his humility. His demeanors were fitting for his vizieral rank. He was appreciated for his comprehensive knowledge of the sultanic laws and legislation that was part of his education at the Galata Palace School. Vasıf was of the opinion that he would have been a valuable statesman had he led a long life so as to gain experience in his career in provincial bureaucracy.²⁵ Clearly, İsmail followed the career path of an ordinary palace scribe of his age. A combination of calligraphic skills, strong patronage, prudence and good luck made him a typical example of ‘efendi-turned-pasha.’²⁶ What was distinctive about him was that he was a practicing expert in firearms technology.

²⁴ BOA, D.BŞM.MHF 75/29. When exactly the news of his death reached İstanbul is unclear. *Ruzmerre* cited the date 26 May 1785, but this is certainly impossible. Morali Ahmed Paşa, the governor of İnebahtı, was appointed to Bosnia on 30 May 1785 according to this source (p. 31); he reached his post only on 6 September, see Filan, “Ruz-Name,” 91; Vasıf dated the arrival of the news to 24 August 1785 (p. 280).

²⁵ “*etvârı müstahsen dâna-yi şân-ı vezâret ve ârif-i kavânin-i saltanat bir vezir-i rûşen-zamir idi. Füşat-ı ecel ve vüsat-ı ömr-i müstelzimül-emel ile bir zaman taşrada geşt ü güzâr ve ahvâl ve etvâr-ı halkı bi’n-nefs tecrübe ve ihtiyâr etse idi Devlet-i Aliyye’nin katı çok işine yarayacağı zahir idi*”, see ed. İlgürel, *Mehasinül-Âsâr*, 280.

²⁶ Among the examples of similar career paths were Ahmed Resmî Efendi, Halil Hamid Paşa, and Ebubekir Ratıb Efendi, see Virginia Aksan, *An Ottoman Statesman in War and Peace: Ahmed Resmi Efendi, 1700-1783* (Leiden: Brill, 1995); Uzunçarşılı, “Halil Hamid Paşa,” Fatih Yeşil, *Aydınlanma Çağında Bir Osmanlı Katibi: Ebubekir Ratıb Efendi (1750-1799)* (İstanbul: Tarih Vakfı Yurt Yayınları, 2011), 13-51 and his piece in this volume; for the expression, ‘efendi-turned-Paşa’, see Norman Itzkowitz, “Eighteenth-Century Ottoman Realities,” repr. in *Identity and Identity Formation in the Ottoman World: A Volume of Essays in Honor of Norman Itzkowitz*, eds. Baki Tezcan and Karl Barbir (Madison: Center for Turkish Studies at the University of Wisconsin, 2007), xvii-xxxii.

İsmail Pasha as Polymath: Making of an Ottoman Volley Gun

İsmail had a natural disposition towards applied sciences and mechanics. He was capable of figuring out the method of construction and principles of operation of a mechanical instrument at the first sight. He was also competent in inventing weapons of different sorts which made him a polymath (*bezarfen*); hence his nickname *Zihnî*.²⁷ His probate inventory may stand witness to his genuine interest in mechanical gadgets. Among his belongings there were seventeen clocks of different sorts, six binoculars, two astrolabes and a compass.²⁸ The educational reforms of Sultan Mahmud I was probably as influential in his parents' decision to send him to the Galata Palace School as his professed talent. Reverting back to a palace school in the 1720s, the school had three classrooms of different grades, a library and a hospital in addition to various other facilities such as bath and mosque. The school then underwent yet another renovation in 1753. Sultan Mahmud I transferred many valuable books from the palace library to the library of the new school. Apparently, this school became quite popular among the Muslim families of Istanbul, as they competed to have their sons enrolled. No fees were required for room and board. To the contrary, students were served free meals in copperwares, provided with free lodging as well as education. Moreover, they had a good chance of employment in the civil bureaucracy upon graduation. Among the employed in the school were imams, calligraphers, doctors, and surgeons.²⁹

The curriculum embodied body training, martial games, music, calligraphy, language, grammar, and the traditional madrasah courses on religious disciplines. Apparently, masters and craftsmen from different lodges also taught various arts at the school, which may explain İsmail's training in principles of firearms technology.³⁰ Unfortunately, my research in the archives has turned up only three documents about the volley gun he invented. It is, nevertheless, possible to retrieve the technical specifications of the weapon from these documents. Musket

27 "Müşâriün-ileyh ihtira-ı âlât-ı harbiyyede mâhir ve görüb işitdiği sanayii icrâda misli nadir bezar-fen....", see ed. İlgürel, *Mehasinü'l-Âsâr*, 280.

28 T SMA, D.2302, see Table VI in the Appendix.

29 Traveller accounts and Ottoman documents suggest that there were about 400-500 students at a time in the school, İsfendiyaroğlu, *Galatasaray Tarihi*, v. I, 280-1, 297, 301, 305, 428. For more on the reforms of Mahmud I in the school see pp. 267-88.

30 "Galatasaray'na çerâğ ve bazı maarif tahsili ile ateş-endâz-ı hirmen-ı batâlet ve ferâğ olub...", ed. İlgürel, *Mehasinü'l-Âsâr*, 280; "Müteaddid ders hâceleri ve hattatlar ve haste-hâneye tabibler ve hüdmetçiler ve Pars kethüdâları ve sanayi ve saire için üstadlar tayin buyurulmuşdur", ed. Arslan, *Tarih-i Enderun*, v. I, 176.

barrels without stock and firing mechanism were fixed on a carriage in a group of 20 in two rows. Their calibers were large, ranging between 57.73 - 64.14 gr. (18-20 *dirhem*). Made of iron, these barrels were fired by a single wheel lock mechanism (*zenbüreklü*). Each carriage was rested on an axle so as to be drawn by a horse. There were two of these carts and they were deemed to be quite maneuverable.³¹

İsmail Pasha must have been fully convinced that his weapon would be truly useful in real battle conditions. Thus he decided to construct more of them. As he failed in Sofia to find 'longish, bare iron barrels of 18-20 *dirhem* calibers', he requested 200 of them to be sent from the Imperial Armory after being tested and inspected. A simple calculation would suggest that it is possible to construct 10 more carts with the requested barrels. Apparently, the Imperial Armory did not have the kind of barrels requested by İsmail Pasha. All it had were 40 plain barrels each of which was 154 cm (7 *karış*) long, 31.5 mm (*birer parmak enlü*) thick, and fit for bullets of 64.14 – 80.18 gr (20-25 *dirhem*). The Porte decided to send them all to Sofia, but İsmail Pasha would have to pay the unspecified price.³²

It should be noted that the relevant imperial decree was sent to İsmail Pasha in late August 1784 when he was still the Commander of Sofia. It is likely that he received these barrels and had time to construct more volley guns. There is a relevant entry in his account book recording the expense of musket barrels (*tüfeng timurları*) sent to Zihni İsmail Pasha. The date of this expenditure is 11 March 1785. Thus, he had about three months to construct his new volley guns in Sofia before leaving for Bosnia in mid-June.³³ The number of the volley guns at his disposal is unknown; yet all of them seem to have been confiscated and put in the stores of the Imperial Armory.

31 BOA, Cevdet Askeriye Kataloğu [C.AS] 1118/49528 (22 April 1784). Draft of the imperial decree that was sent later before mid-September; C.AS 2059 suggests that one cart had 20 and the other 24 musket barrels and that they were fired by a wheel lock mechanism.

32 C.AS 1118/49528; I follow the equations: 1 *dirhem* = 3.207 g; 1 *karış* = 22 cm see, Gábor Ágoston, *Guns for the Sultans: Military Power and the Weapons Industry in the Ottoman Empire* (Cambridge: Cambridge University Press, 2005), 242-47; 1 *parmak* = 31,5 mm, see, Ünal Taşkın, "Osmanlı Devleti'nde Kullanılan Ölçü ve Tartı Birimleri" (MA thesis, Fırat Üniversitesi, 2005), 143.

33 TSMA, D. 2789. The total expense is 328,5 kuruş. It is not certain if this includes the transportation expenses as well. His probate inventory features three separate entries on the sale of nine musket barrels. Prices are highly fluctuating; a group of four was sold at 610 akçe (152.5 each) while another group of four was sold at 1310 akçe. On the other hand a single musket barrel was worth 1900 akçe, D. 2302, p. 132.

These weapons attracted the attention of both the grand vizier and Sultan Abdülhamid I both of whom examined them separately on two different occasions. They communicated with each other their views on how to improve the design. The grand vizier described these carts as having ‘big’ musket barrels fixed skillfully in groups of 10 and 12 and fired by a wheel lock mechanism (*zenbürekli*). He was convinced that they would ‘do a good job in battle since they are fired by a single match.’ However, he was also concerned about the difficulty of reloading them on the battlefield. The muskets were attached to one another in a row and could not be handled individually. Once discharged, the volley gun had to be withdrawn from the battlefield for safe reloading. This would invite the enemy attack. Thus, the grand vizier ordered the Head of the Imperial Armory to re-design one of the carts. The new design was to allow each barrel to move up and down on a vertical axis so that the volley gun could be reloaded in combat position. Therefore, it was hoped to maintain a continuous barrage of fire. Kağıthane was declared the testing field for the volley guns. The experts were to test both the modified volley gun and one of those with the original design in order to compare their combat effectiveness. Sultan Abdülhamid I approved of this suggestion since he also suspected of their usefulness after examining them himself. He related his observations to the grand vizier as in the following:³⁴

“I have seen the muskets the late İsmail Paşa had constructed on a cart with a wheel-lock mechanism. They are ingenious things (*sanatlı*). But are they fit for shooting on the battlefield? That I can’t know. Discuss with the experts and, if they are so, let me know about the results after trying them.”

Unfortunately, neither the total number of the volley guns nor the test results are clear. However a document dated 5 July 1786 suggests that the initial trials were probably unsuccessful. According to this document six wheel lock muskets in total were delivered to the Imperial Armory. It declares İsmail Zihni as the possessor of these muskets. Half of them were recorded as iron barrels of wheel lock muskets without a stock and flint. This may indicate that they were parts of the volley gun.³⁵

In fact, such multi-barreled non-automatic volley guns have a long history. Many inventors including Leonardo da Vinci had been fascinated with the idea of producing such a superior, battle-winning weapon since the fourteenth century. The obvious theoretical advantage of this weapon was the devastating firepower. Many loaded barrels fired by a single matchlock would produce a deadly barrage

³⁴ C.AS 2059.

³⁵ C.AS 38589.

of fire on the enemy. *Ribauldequin* (rabauld, ribault, ribaudkin, or organ gun), used by the English army of Edward III in 1339 during the Hundred Years War, was presumably the ancestor of this type of weapons. Many inventors then were fascinated with the idea of volley fire delivered by a single weapon. For instance, a contemporary of İsmail Zihni Paşa, the British engineer James Wilson, invented the nock gun in 1779. This was a seven-barreled flintlock smoothbore musket intended to be an anti-personnel weapon in the British Royal Navy. It too suffered from the basic flaw of the non-automatic volley gun: slow reloading and powerful recoil. A continuous barrage of fire by a single piece would not be possible until the upgrading of the gunpowder technology that led to the invention of cartridge bullets and thereby breech-loaders. This was a new departure for the firearms technology hailed by the full automatic Maxim gun in 1884 –the single barreled self-loader.³⁶ Consequently, there is nothing surprising in the failure of İsmail Zihni Paşa's musket cart in the 1780s, which was still a precipitous endeavor by the standards of that epoch.

İsmail Zihni Paşa in Light of His Probate Inventories and Account Book

Following the usual Ottoman practice, the authorities confiscated İsmail's estate after his untimely death. The sale of his effects yielded a modest sum with respect to his rank. The total value of his goods sold in auction was close to 95,590.4 kuruş (11,470,848 akçe).³⁷ Of this sum, 29 percent (27,874.4 kuruş [3,344,930 akçe]) came from the sale of his firearms, swords, daggers, bows and harnessing equipment. Most of these weapons are ornamented, symbols of status of their possessor. Bows and swords in his possession are also signs of the value system of a typical Ottoman statesman that attached high importance to personal gallantry in warfare.³⁸ While these glittering swords and embroidered bows were definitely used by his retinue during public processions, he must have regularly practiced

³⁶ More on the history of this weapon see, John Ellis, *The Social History of the Machine Guns* (Baltimore: The Johns Hopkins University Press, 1986), 9-47; Howard Ricketts, *Firearms* (London, 1962).

³⁷ An order sent to Abdi Paşa (the Governor of Rumelia) and the kadı of Berkofça speaks of İsmail's 'plentiful stuff' (*külliyetlü eşya*) in Berkofçe, BOA, Cevdet Maliye [C. ML] 23193 (12 November 1785). The probate inventory of Silahdar Abdullah Paşa, the former governor of Bosnia who died on 9 February 1785, records the value of his goods sold as 1,848,650 akçe; that is, one-tenth of the value of Zihni İsmail Paşa's effects, see D. 2302, p. 132.

³⁸ 760,860 akçes; 89 muskets, 9 musket barrels and 54 pistols; 284,195 akçes: bows and arrows; 1,726,535 akçes: 17 swords, 38 daggers and knives; 573,430 akçes: harnessing equipment, D.2302, see Tables I-V in the Appendix.

archery as a Galata graduate as well, as suggested by the existence of numerous arrows in his probate inventory.

İsmail Zihni Paşa's sudden death has left us with scanty archival documentation concerning his career in the provinces. Little is known about his activities as the Commander of Sofia except for Vasıf's brief remark that he was unpopular among his troops and considered to be feeble as a commander. The number of men assembled under his command is not available. Nevertheless, a register of the daily rations offers us a glimpse into his household. The observation force in Sofia under İsmail Zihni Paşa consumed 113,367.5 double loaves of bread, 30,596 kg of meat (23,903.5 *kıyye*), 236,670 kg of barley (10,209 *kile*), and 17,223.6 kg of fodder (13,456 *kıyye*) in 29 days between 16 October and 14 November 1784 (*Zi'l-hicce* 1198).³⁹ A hypothetical calculation based on one double loaf of bread per soldier per day would suggest that İsmail Zihni Paşa had 3,900 troops at most in his army. Obviously, this figure needs to be revised down to roughly 2,500 since daily rations for officers and high-ranking functionaries were much higher. This was a small-scale army composed of five Janissary companies (600 men), a company of armorers (120 men), two companies of gunners (120 men), two companies of wagoners (240 men), perhaps 1236 mercenaries, roughly 100 sipahis with a number of officers, patrolling *çavuşes* (*kol çavuşanı*: 12 men), army scribes (Osman, Emin and Mehmed efendis), the army sheikh (Seyyid Emin Efendi), three surgeons, and finally at least 116 horses servicing the artillery.⁴⁰

When he received the orders to go to Bosnia, İsmail Zihni Paşa departed from Sofia with a small retinue, entrusting most of his men and baggage train in the town with his kethüda, Mehmed Agha, to follow him soon. The small army under Kethüda Mehmed Agha had received the news of his death in the day after arriving in Berkofçe (Berkovitsa) on the road from Sofia to Vidin. This village had been given to İsmail Pasha as a *malikâne* estate. Kethüda Mehmed Agha sent a letter to Abdi Pasha in order to inform him on the situation in Berkofçe upon the death of İsmail. Accordingly, as of the summer 1785, the household of late İsmail Zihni Paşa included roughly 70 Enderun aghas as well as an unspecified number of *sekbans* (mercenaries) and *karakullukçus* (servants/attendants). When he died, he owed an equivalent of 1.5-month pay to his mercenaries, and 2-month pay to his servants. He had not yet paid the *Mekkari-başı* for the horses he had provided whereas the Enderun aghas were expecting to receive their 3-month pay. The pay in arrears

39 C.AS 53719 (2M199/15Nov1784): I follow the equations, 1 kıyye = 1.28 kg and 1 kile = 23 kg (for barley and fodder). My own calculations yield a slightly different figure for bread consumption: 103,367.5 double loaves of bread.

40 C.AS 53719 (15 November 1784), see Table VIII in the Appendix.

may have accounted for his troops' resentment against him. Abdi Pasha forwarded all the communication to Istanbul and ordered the voivodes, the kethüda and the kadi of Berkofçe to store İsmail's belongings and take care of the soldiers and animals until orders from Istanbul arrived. Nevertheless, some of his belongings had already been sent to Sofia under the custody of Osman Agha, one of the *birün* aghas, a few days before the arrival of Abdi Pasha's *buyuruldu*.⁴¹

Initial orders concerning the process of confiscation and investigation of the rumors about his wealth had actually been dispatched by the end of July 1785 to the kadi of Saraybosna and the deputy kadi of Travnik. According to the rumors İsmail had entrusted 600 purses of kuruş with his treasurer Ali Ağa. This man was a close associate of İsmail. They were classmates in Enderun and graduated at the same time. Upon the death of İsmail, he and İsmail's divan scribe Mehmed Emin Efendi led his retinue from Yenipazar to Berkofçe with the intention of returning to Istanbul.⁴² The Porte devised a secret plan to confiscate this sum. A kapucıbaşı, Sakızlı Mehmed Ağa, was sent to Berkofçe on 5 August 1785 to escort these men in a speedy travel to Istanbul so that they would not have the opportunity to embezzle the money and other belongings of İsmail Paşa. The kapucıbaşı would not disclose that the Porte knew about the money. Yet, should they grow suspicious and attempt to run away, he would have to arrest them.⁴³

The afore-mentioned probate inventory of İsmail Pasha does not include 600 purses of kuruş or its equivalent in gold coins except for a number of jeweled rings, embroidered weapons and clocks. Nevertheless, if he really had 300,000 kuruş in cash, it would be safe to conclude that he was quite well to do.⁴⁴

It was very common for the members of the Ottoman elite to die in debt. When he succumbed to plague, İsmail Pasha left a total debt of 61,438.5 kuruş to be paid back to the state. The claimants included the Imperial Stables that hired out mules to him (*esteran bahâsı*: 6130 kuruş), the Treasury and the Endowment

41 BOA, D.BŞM MHF 75/30 (5) and (2) communication of Kethüda Mehmed Ağa and Hazinekar Ali Ağa; 75/30 (4) from Divan Kâtibi (chancellor) Mehmed Emin Efendi to Kethüda Mehmed Ağa.

42 D.BŞM.MHF 75/48.

43 D.BŞM MHF 75/30 (5), (3); The kadi of Berkofçe informed on 1 October 1785 the Porte that İsmail's properties were sent to Istanbul along with the inspector, BOA, D.BŞM MHF 75/50.

44 Another of his probate inventory of four-page long is retained under C.ML 481/19623. This document is in poor condition and closed to research. The catalogue date is 2 November 1785, which may not agree with the document date. For a list of jewels and selected luxury items in his possession see Table VII in the Appendix.

of the Holy Cities that owned certain tax farms (*Hazine ve Haremeyn mukataaları*: 11,308.5 kuruş; *mukataat-ı miriye havalesi*: 4,000 kuruş) as well as the Imperial Mint that extended a loan to him (*Darbhâne*: 40,000 kuruş).⁴⁵ Yet, revenues at his disposal and his expenditures as required by his post were considerable. His account book recording the transactions between 30 October 1784 – 24 July 1785 reveals that his total spending amounted to 247,143.5 kuruş, whereas his revenues did not exceed 143,111 kuruş. Thus, the net deficit in his accounts for this period of nine months was equal to 104.032.5 kuruş. Four major items of his debts were the loan from the Imperial Mint (*Darbhâne*: 40,000 kuruş), appointment fee to the governorship of Anatolia (*rikâbiye*: 25,000 kuruş), office-holding fee for this post (*ibka rikâbiyesi*: 15,000), and finally appointment fee to the governorship of Bosnia (*Bosna rikâbiyesi*: 25,000 kuruş).⁴⁶

It is noteworthy that a large portion of his expenditures was related to the practice of sale of offices. He had to pay a multitude of fees to high-ranking officials as the price of his appointment to and retaining of his post and rank. In the last two months of 1784, he paid 47,000 kuruş as the promotion (*tevcih*) and office-holding (*ibka*) fees (*caize* and *boğça-bahâ*) to Halil Hamid Pasha and his steward as the Governor of Anatolia. Interestingly enough, 3000 kuruş of this sum was paid 'in return for the bestowal of the vizieral rank [*mirimiranlık*] to Tepedelenli Ali Paşa' on 31 October 1784. His relation to Ali Pasha of Janina remains to be explored. As the governor of Bosnia, the fees he paid were 17,750 kuruş in three months (May-July 1785) with Dürrizâde, the former Sheikh al-Islam, on the list of recipients. The Reis Efendi also had his share (500 kuruş monthly [*avâ'id*]) as did the Imperial Naval Dockyard. In brief, fee-related payments amounted to more than 80,000 kuruş in nine months, almost equaling the deficit in his budget.⁴⁷ In the same period of time, his expenses concerning the tax-farms in Berkofçe and various governorships cost him roughly 90,000 kuruş including courier services, the wages of the inspectors and local men (*müsellemler*) running his tax-farms. A breakdown of his revenues shows that the largest sources of revenues were the taxes from Anatolia (*seferiye ve hazariye*: 68,966 kuruş), treasury bonds (*esham*: 35,000 kuruş), and his tax-farms in Berkofçe (33,645 kuruş).⁴⁸ Besides the Berkofçe tax-

45 D.BŞM MHF 75/29.

46 D. 2789.

47 Dürrizâde received 3000 kuruş on May 16 in addition to 6,950 kuruş he had already received on April 7 and 20 as *boğça-bahâ*. Halil Hamid Paşa had also received 10,500 kuruş on 21 March 1785 in gold coins. The former chief treasurer received 2000 on 12 May 1785, see D. 2789.

48 D. 2789

farms and his salary İsmail Paşa also owned vineyards in the Morea. Not much is known about this property as the related document has decomposed.⁴⁹

At the time of his death, the *sipahiyân* (timariots) of Berkofçe owed him 5000 kuruş.⁵⁰ Nevertheless, the real fiscal challenge for İsmail Paşa was the accumulated debt of the *reaya* of Berkofçe tax-farms from the fiscal years of H. 1197 (1782/3) and H. 1198 (1783/4). The taxes had long fallen in arrears, reaching 60,599.5 kuruş.⁵¹ This in turn might explain the delay of the pay of his troops. By November 1785, the Porte devised a payment plan that envisioned the paying off the arrear taxes in installments in a few years.⁵² After assigning the collected sum to several expenses, the Sublime Porte was to have a surplus of 9557,5 kuruş.⁵³ Nevertheless, this sum was left unpaid as of September 1792 due to upheavals in the region.⁵⁴

The account book has entries that provide a glimpse into his intimate life as well. Apparently, he had rented a mansion in Istanbul probably for his wife for 57 kuruş a month. On 21 May 1785, he forwarded 1095,5 kuruş for repairing the walls and apartments of his mansion. He had at least one brother named Feyzi Bey to whom he gave 360 kuruş on 25 March 1785. He also had at least one son and he gave him 1400 kuruş as *boğça-bahâ* on 20 April 1785. On September 29, long after his death, an allotment of 1530 kuruş was made for repairing the house of his sister. She was also given a monthly allowance to cover her food expenses amounting to 1875,5 kuruş. Another postmortem expense is the allowance made

49 BOA, Cevdet Dahiliye Kataloğu [C.DH 244/12190] (16CA1200): “Müteveffa Zihni İsmail Paşa'nın bağlarına dair Mora kaymakamı Ahmed'e hüküm” [the catalogue summary].

50 D.BŞM 75/30 (2) from Kethüda Mehmed Ağa.

51 TSMA, D. 2057, p. 3 and D. 2052, p. 8.

52 C.ML 23193. The sum is recorded as 52,967 kuruş of which 3000 kuruş was due for the spring (*ruz-ı hızır*) and 2000 kuruş for fall (*ruz-ı Kasım*) of H. 1200. Then, this would rise to 10,000 kuruş a year. C.ML 23387 states that the total debt amounted to 40,590,5 kuruş to be paid in four installments: 12,500 (spring installment of H. 1200), 7500 kuruş (fall installment of H. 1201), 12,500 kuruş (spring installment of H. 1201), 8090,5 kuruş (fall installment of H. 1202).

53 D. 2057, p. 3 and D. 2052, p. 8: (1) 5900 kuruş: delivered for the cost of army animals and his retinue; (2) 15,000 kuruş: delivered to the Enderun treasury in return for the debt of the deceased; (3) 12,500 kuruş: transferred to the Janissary guards of the fortresses in Bosnia as the spring installment of their pay for H. 1201 [30 July 1786]; 12,500 kuruş: the spring installment of the loan taken from Halebli-zâde Ahmed Ağa; 5142 kuruş: delivered to the Treasury [1 November 1786]. The surplus is recorded as 9598,5 kuruş in C.ML 23387.

54 C.ML 23387.

for those in charge of brushing Ka'ba (*müşârinileyhin ferâset-i şerîfesiçün*). Presumably, his family gave the equivalent of 1095.5 kuruş in gold coins on 26 August 1785 as redemption for the soul of the diseased. İsmail Zihni Paşa hired a room in Vezir Han at least for 13 months for 8 kuruş a month (104 kuruş in total). This was one of the biggest khans at the heart of the old city that is still functioning.⁵⁵ A separate probate inventory kept for his belongings in this room only listed domestic items such as 12 comforters, cushions, and kitchen utensils. This suggests that he kept this room for the messengers he sent to Istanbul or his men staying in Istanbul.⁵⁶

Conclusion

There is only circumstantial evidence to determine how İsmail Paşa viewed his identity and career. In light of early studies on the Ottoman statesmen of this period, we can conclude that he had taken the usual path to build up a career in Ottoman palace bureaucracy.⁵⁷ His 'Ottoman' identity was contingent on education in the reformed Galata Palace School; entrance to palace service; and, joining the right palace faction. We can identify him and his faction as the proponents of military reform along the Western line. This point of view can be traced back to the beginnings of the eighteenth century, but it gradually became the mainstream political position only during the period under discussion owing to the policies of several statesmen including Halil Hamid Paşa. This grand vizier owed his sudden rise to power to İsmail Efendi. Halil Hamid rekindled the faltering attempts at military reform by inviting the official French military mission to renew their military industrial plants, reinforce the fortresses and reform the technical corps. Acceptance of official military assistance from another state was a novelty in Ottoman politics. One of the concrete achievements of Halil Hamid was the re-establishment of the Rapid-fire Artillery Corps (*Sûrat Topçuları Ocağı*) composed of 2,000 gunners.⁵⁸ İsmail Paşa surely had an inventive mind and a natural disposition to engineering as suggested by his nickname 'zihni' and his fame as a polymath. However his political stance and intellectual motivations must have been just as decisive in his experimental studies in firearms technology. It should

55 D. 2789. He also granted 250 kuruş as dowry (*cibaz*) to the daughter of his warden of the headdress (*ser-destari*).

56 D.BŞM MHF 75/48. Two small chests made of plane tree (*çınar çekmece*) originally in this room was taken by İsmail's wife (*kadın efendi*) so that the officials could not find it. This suggests that he had a wife and the mason he hired was intended for her stay.

57 Refer to footnote 25 for a list of these studies.

58 Virginia H. Aksan, *Ottoman Wars, 1700-1870: An Empire Besieged* (Harlow: Pearson Education Limited, 2007), 186-206.

be noted that there is a general belief that Sultan Selim III also experimented with artillery and wrote a manual on artillery tactics. İsmail Paşa had his volley guns constructed in the early 1780s when war with Russia over the Crimea was imminent. As we have seen, he was the commander of the observation force deployed in Sofia. He probably contemplated that his volley guns might undo the Russian and Habsburg superiority in firepower in the likely possibility of war.

A study of his probate inventory reveals that the faction in power was aware of the redistribution of power and wealth inherent in this period of transformation. Halil Hamid Paşa granted İsmail a solid financial base by appointing him as the Governor of Anatolia. One of the criticisms directed against the grand vizier was nepotism; he had an explicit aim to strengthen his faction by monopolizing influential posts in bureaucracy.⁵⁹ İsmail exhibited the typical consumption patterns of the group he participated in. Neither did his sources of revenue and investment patterns change. His salary and investment in tax-farms were his principal sources of wealth. What made this 'efendi-turned-pasha' exceptional, as an Ottoman statesman in the final analysis was his enterprising endeavor to invent things.

⁵⁹ Uzunçarşılı, "Halil Hamid Paşa," 171.

APPENDIX: TSMA, D.2302

Table I: Cold-steel weapons

Ömer Sımlı gaddâre 2 3100 akçe Mustafa Külâhi tâbî'-i kilerci ağa	Ahmed Sımlı gaddâre 2 1830 akçe Esad Ağa seferli	Osman Sımlı şâtır gaddâresi 2 aded 25.300 akçe Hacı Yahya	İbrahim Sımlı şâtır gaddâre 1 13.000 akçe Uzun Tahir Ağa hazîne	Musa Sımlı şâtır gaddâresi 3 34.500 akçe Kapı kethüdâm ağa	Ahmed Sımlı bel gaddâresi 1 12.000 akçe
Musa Sımlı bel gaddâresi 1 1700 akçe Ak çukadâr ağa	Ahmed Sımlıce bel? gaddâresi 2 2230 akçe Hacı Yahya	Musa Sımlıce bel gaddâresi 2 5000 akçe Derviş Ali Çelebi	Salih Sımlı av gaddâresi 3 4330 akçe Hacı Yahya	Ahmed Sımlı av gaddâresi 3 4350 akçe Küçük Hâfız	Süleyman Sımlı pala 1 12.000 akçe Tüfenkci Ahmed Ağa
Musa Sım hançer 1 3020 akçe Eskici Said Ağa hazîne	Abdullah Oyma çiçek kabzalı mücevher hançer fi 1532 183.480 akçe Kullukcu İbrahim Ağa	İbrahim Kehribâ kabzalı mücevher altın hançer 1 50.100 akçe Haseki Hacı Mehmed	İbrahim Sım şâtır kuşağı ma'a hançer 2 61.050 akçe Haseki Hacı Mehmed	Mücevher bıçak 1 aded 2020 dirhem 962.400 akçe Düzöğlü	Salih Sım kabzalı namluca sağır bıçak 1 3300 akçe
Salih Bıçak-ı kebîr-i kopar 1 1500 akçe Arif Ağa kiler ve bostancıbaşı bekci	Abdullah Mücevher bıçak 1 (?)	Musa Çift meç 1, Şamkârî balta 10260 akçe Hazinedâr ağa Kolcusu Ali	Salih Mardini bıçak 4, yeşil sandal bıçak 1, bıçak 4, nühâs baba 1, alem 10 24.000 akçe Kullukcu İbrahim Ağa	Osman Seyf 6 2005 akçe Müezzîn İbrahim mir seferli	Hüseyn Örme sim kabzalı kılıç 1 9200 akçe Haseki Hacı Mehmed
İbrahim Sım mühürlü sımlı kılıç 1 12.000 akçe Haseki Hacı Mehmed	Musa Polad donanmalı kılıç 1 4800 akçe Haseki Hacı Mehmed	Ömer Polad donanmalı kılıç 1 13.100 akçe Dülbend ağası ağa	Ahmed Sım donanmalı kılıç 1 9500 akçe Haseki Hacı Mehmed	Abdullah Altın donanmalı kılıç 1 84.000 akçe Başçukadâr ağa	Abdullah Altın donanmalı kılıç 1 84.000 akçe Başçukadâr ağa
Musa Yılkavî kılıç 1 12.510 akçe Haseki Hacı Mehmed	Osman Sım donanmalı sevadkârî kılıç 12.010 akçe Hacı Yahya	Ahmed Sım donanmalı sevadkârî kılıç 1 18.000 akçe Hayfâlî Emin ağa kiler	Ömer Sım donanmalı kılıç 1, gaddâre 7350 akçe Mustafa Sadık Ağa	Ömer Sımlı balta 2 6000 akçe Haseki Hacı Mehmed	Musa Hâzâb (?) mızrak 1 1060 akçe Ser-huddâm-ı hazîne

KAHRAMAN ŞAKUL

Hâzâb (?) mızrâk 1 1060 akçe Kaftanî	Musa Sîm kalkan 14.310 dirhem, fî 33 472.230 akçe Anton zimmi	Ömer Sâde kalkan 1 1000 akçe Koltukcu Emin	Ahmed Simli topus 2 7410 akçe Karbiyık	Osman Sîmlice topus 3 3050 akçe Uzun Tahîr Ağa hazîne	Zırh 1 10.050 akçe Kapı kethüdâm ağa
<p><i>Total value: 1,726,535 akçes</i> <i>Gaddare: 20</i> <i>Pala: 1</i> <i>Hançer: 5</i> <i>Bıçak: 12</i> <i>Meç: 1</i> <i>Balta: 3</i> <i>Kılıç: 17</i> <i>Mızrak: 2</i> <i>Kalkan: 2</i> <i>Topuz: 5</i> <i>Zırh: 1</i></p>					

Table II: Bows and arrows

İbrahim Sîm karalı (?) tırkeş ma'a okluk 1 6000 akçe Selim Ağa hâs oda	Süleyman Sîm karalı (?) tırkeş ma'a okluk 1 4500 akçe Üsküdarî Emin Ağa kilârî	Abdullah Sîm karalı (?) tırkeş ma'a okluk 2 9050 akçe Mü'ezzin İsmail Ağa kiler	Ömer Sîm karalı (?) tırkeş ma'a okluk 1 3755 akçe Salih Ağa	Salih Sîm karalı (?) tırkeş ma'a okluk 2 12.600 akçe Üsküdarî Emin Ağa kiler	İbrahim Tîr 84 memlû kubûr 1, sâde kemân 2 2000 akçe Şileli Hüseyin Ağa
İbrahim Halka-i kemân 6 3050 akçe Musâhib Bilal Ağa	Salih Tîr 60 410 akçe Hâfız Ömer Ağa hazîneî tâbi'-i bâkî	Altın tırkeş ma'a okluk 1, 499,5 dirhem, 333 miskâl, fî 5,5 219.780 akçe Düzoğlu	Osman Sîm karalı(?) tırkeş ma'a okluk 2 13.000 ake Hayfalı Emin Ağa kiler	İbrahim sim karalı(?) tırkeş ma'a okluk 2 10.050 akçe Hayfalı Emin Ağa kiler	<i>Total value: 284,195 akçes</i>

Table III: harnessing equipment

Süleyman Zincir enselikli at rahtı ma'a başlık ve reşme (?) 1 32.000 akçe İznikmidî Ahmed Ağa hâne-i hâssa	Abdullah Zırh enselikli at rahtı sagır ma'a başlık ve reşme (?) 1 36.000 akçe Gönüllü ağası teberdâr	Musa Zırh enselikli sım kemer raht ma'a başlık 1 aded 31.000 akçe Salih Ağa kilerci	Zırh enselikli at rahtı ma'a başlık ve reşme (?) 1 64.000 akçe Haseki Hacı Mehmed	Salih Zincir enselikli at rahtı ma'a başlık ve reşme (?) 1 23.000 akçe Lütfullah Bey hazîne	Musa Zincir enselikli at rahtı ma'a başlık ve reşme (?) 1 40.050 akçe Kullukcu İbrahim Ağa
Ahmed Zincir enselikli at rahtı ma'a başlık ve reşme (?) 1 36.600 akçe Salih Ağa	Abdullah Zırh enselikli at rahtı ma'a başlık 1 26.005 akçe Salih Ağa	Ömer Zırh-ı enselikli sım at rahtı ma'a reşme (?) ve palaslık 1 44.000 akçe Teberdâr-ı gönüllüler ağası Hüseyin	Osman Zırh enselikli sım kemer raht ma'a başlık ve reşme (?) 1 aded 40.810 akçe Salih Ağa	Ahmed Zincir enselikli sım at rahtı ma'a başlık 1 aded 20.050 akçe Ağa çırağı İsmail Ağa	Musa At gömleği ve pûşidesi 4 1400 akçe Ser-huddâm-ı kılar
Ahmed At gömleği ve pûşidesi 1 2000 akçe Kiler berberi Halil	Ahmed At gömleği 6 1355 akçe Ağa çırağı İsmail Ağa	Musa Mercanlı sım kemer raht ma'a başlık ve reşme(?) 1 72.010 akçe İbrahim Ağa kullukcu	Salih Mercanlı sım at rikâbı 1 çift, 790 dirhem, fi 45 35.550 akçe Anton zimmî	Ömer Sım at rikâbı 1 çift, 680 dirhem, fi 40 25.840 akçe Anton zimmî	Abdullah Sım at rikâbı 1 çift, 575 dirhem, fi 34 19.500 akçe Anton zimmî
Musa Sımlice at rikâbı 1 çift 1400 akçe Haseki Hacı Mehmed	İbrahim Rikâb demir 2, tombak 1 1330 akçe İbrahimpaşalı Ahmed Ağa	Ömer Tombak rikâb 1, bıçak 1 1350 akçe Haseki Hacı Mehmed	Salih Tombak-ı rikâb 1 çift, temr 2000 akçe Esad Ağa destârî	Ahmed Tombak-ı rikâb 1 çift 2505 akçe Kaftanî	Musa Tombak-ı rikâb 1 çift, pirinç 1 m. 950 akçe
Salih Sım kaplama eğer 1 3820 akçe Şerbetci İbrahim Ağa	Ömer Sımlı eğer 3 4005 akçe Mustafa tâbi'-i kilercibaşı	Salih Sımlı eğer 2 3400 akçe Mustafa tâbi'-i kilercibaşı	Musa Sımlı eğer 1 1500 akçe Dellâl Musa	Total value: 573,430 akçes	

Table IV: Muskets and rifles

Ömer Sım kakmalı filinta tüfenk 1 42.000 akçe Ali Teberdâr tâbi'-i baş ağası	İbrahim Sımlı tüfenk filinta 1 19.000 akçe Hanımhanım İbrahim Ağa	Salih Filinta tüfenk 1 12.500 akçe Salih Ağa	Musa İngilizkârî filinta 1 aded 9305 akçe Kaftanı	Osman Filinta tüfenk 1 5000 akçe Kaftancı	İbrahim Filinta 1 5000 akçe Kaftanı
Salih Sagır filinta 1 4900 akçe Haseki Hacı Mehmed	Osman Amele Musa şeshâne tüfenk 1 38.000 akçe	Kebîr şeshâne tüfenk 1 aded 20.050 akçe Şileli Hüseyin Ağa	Ömer Şeshâne tüfenk 1 13.400 akçe Haseki Hacı Mehmed	Salih Şeshâne tüfenk 1 13.100 akçe Haseki Hacı Mehmed	Ahmed Şeshâne tüfenk 1 11.140 akçe Haseki Hacı Mehmed
Abdullah Şeshâne tüfenk 1 8510 akçe	Musa Sımlı şeshâne tüfenk 1 7400 akçe Teberdâr Musa tâbi'-i Ahmed Bey	Ömer Şeshâne tüfenk 1 5525 akçe	Süleyman Şeshâne tüfenk 1 5120 akçe Hayfalı Mustafa tâbi'-i ağa-yı çukadâr	İbrahim Şeshâne tüfenk 2 ()	Ömer Sırçalı alay tüfengi 14.025 akçe Salih Ağa
İbrahim Sırçalı alay tüfengi 1 10.000 akçe Haseki Hacı Mehmed	Süleyman Sırçalı alay tüfengi 1 5700 akçe Hayfî Emin Ağa	Abdullah Sırçalı alay tüfengi 2 19.005 akçe Haseki Hacı Mehmed	Salih Sırçalı alay tüfengi 2 18.100 akçe Havcı Halil Ağa	Abdullah Sırçalı alay tüfengi 2 18.005 akçe Haseki Hacı Mehmed	Süleyman Sırçalı alay tüfengi 2 18.005 akçe Haseki Hacı Mehmed
Salih Sırçalı alay tüfengi 2 17.100 akçe Havcı Halil Ağa	Salih Sırçalı alay tüfengi 2 17.100 akçe Havcı Halil Ağa	İbrahim Sırçalı alay tüfengi 2 16.600 akçe Külâhî Bektaş tâbi'-i aşıcıbaşı	Ahmed Sırçalı alay tüfengi 2 16.005 akçe Külâhî Mustafa tâbi'-i kilercibaşı	Musa Sırçalı alay tüfengi 2 15.250 akçe Salih Ağa	Süleyman Sırçalı alay tüfengi 2 15.200 Haseki Hacı Mehmed

HATTAT İSMAİL ZİHNİ PASHA

Süleyman Sırçalı alay tüfengi 2 15.005 akçe Salih Ağa	İbrahim Sırçalı alay tüfengi 2 15.000 akçe Haseki Hacı Mehmed	Osman Sırçalı alay tüfengi 2 14.100 akçe Haseki Hacı Mehmed	Ahmed Alay tüfengi 2 15.015 akçe Havcı Halil Ağa	Ömer Bel tüfengi 1 11.600 akçe Havcı Halil Ağa	Musa Stimli tüfenk 1 40.010 akçe Haseki Hacı Mehmed
Süleyman Mercanlı Cezayirkârî tüfenk 19.500 akçe Hâfiz Ali Ağa çukadar-ı kiler	Abanos kundaklı şeshâne 1 aded 8000 akçe Çavuş Hasan Ağa hazîne	Ahmed Sım kaplama tüfenk 1 7000 akçe Bektaş tâbi'-i aşcıbaşı	Abdullah sim kaplama tüfenk 4 aded 14.000 akçe Haseki Hacı Mehmed	Musa Sımlice karabina 1 4550 akçe Hazinedâr ağa Kuşcu Ali	İbrahim Karabina tüfenk 1 aded 3000 akçe Hürşid Ağa
Abdullah Karabina tüfenk 1 2700 akçe Koltukcu Emin	Salih Karabina tüfenk 1 1650 akçe İznikmidî Ahmed Ağa hâs oda	Ahmed Karabina 1 aded 1530 akçe Hâfiz Mahmud tâbi'-i ser-kâtib	Ömer Karabina tüfenk 2 5160 akçe Kaftanı	Süleyman Karabina tüfenk 2 3300 akçe Teberdâr Abdullah	Ahmed Karabina tüfenk 2 2740 akçe Koltukcu Emin
Ahmed Karabina tüfenk 2 2405 akçe Teberdâr Abdullah	İbrahim Karabina tüfenk 2 2350 akçe İbrahim Mîr mü'ezzin seferli	Osman Karabina tüfenk 2 1230 akçe	Salih Karabina tüfenk 1 ()	Musa Tüfenk 2 8210 akçe	Süleyman Kaval tüfenk 1 aded 2905 akçe Hayfalı Hüseyin tâbi'-i ser-huddâm-ı hazîne
Süleyman Kaval sağır tüfenk 1 2705 akçe	Ömer Kaval tüfenk 1 aded 2105 akçe İsmail Ağa çırağı	Musa Kaval tüfenk 2 4700 akçe Haseki Hacı Mehmed	Süleyman Kaval tüfenk 2 3405 akçe Hayfalı Hasan Berber	Musa Kaval tüfenk 2 3050 akçe Çukadar Feyzullah Ağa hazîne	Musa Kaval 1, karabina 1 3000 akçe Teberdâr Bağdadî
Musa Tüfenk demiri 1 1900 akçe Haseki Hacı Mehmed	Abdullah Tüfenk demiri 4 1310 akçe Hayfalı ömer tâbi'-i baş ağa	Musa Sâde tüfenk demiri 4 610 akçe Mü'ezzin İsmail Ağa kiler	Ömer Sım harbî demiri 1, sim vezne 1, ... 5130 akçe Salih Ağa kilerci	Abdullah Sımlı vezne 2 1005 akçe Hazinedârbaşı çırağı Mehmed Ağa seferli	<i>Total value: 649,925 akçes 89 muskets and 9 musket barrels</i>

Table V: Pistols

Ömer Piştovlu bıçak 1 15.000 akçe Haseki Hacı Mehmed	Salih Simli piştov tek 6010 akçe Haseki Hacı Mehmed	Ömer Simli piştov 1 aded 5200 akçe Hüseyn mir seferli	Salih Çift demirli piştov 1 7000 akçe Hacı Mehmed Haseki	Ömer İngilizkârî piştov 1 çift 13.100 akçe Haseki Hacı Mehmed	İbrahim Sim kaplama piştov 1 çift 11.000 akçe Haseki Hacı Mehmed
Salih Sagîr piştov 1 çift 4900 akçe Haseki Hacı Mehmed	Osman Piştov 1 çift 3610 akçe Eyüb Ağa seferli	Ömer Piştov 1 çift 3300 akçe Hüseyn Mir seferli	Ahmed Çift piştovu 1 çift 3200 akçe	Osman Piştov 1 çift 1310 akçe Hayfalı Süleyman tâbi'-i peşkîr ağası	İbrahim Piştov 2 çift 2300 akçe Haseki Hacı Mehmed
Musa Piştov 2 çift 1250 akçe Mustafa Külâhi tâbi'-i kilercibaşı	Süleyman Piştov 2 çift 1200 akçe Dellâl Süleyman	Ömer Sim kaplama piştov kubûru 2 çift 4050 akçe Lütfullah Mir hazîne	Ahmed Sim kaplama piştov kubûrû 2 çift 4260 akçe Hacı Yahya	Süleyman Sim kaplama piştov kubûru 2 çift 4060 akçe Hacı Yahya	Musa Sim işleme piştov kubûru 2 çift 4060 akçe Uzun Tahir Ağa hazinei
Salih Sim işleme piştov kubûru 2 çift 4020 akçe Nevbetcibaşı ağa hazinei	Abdullah Sim kaplama piştov kubûru 2 çift 12.105 akçe Karabıyık	<i>Total value: 110,935 akçes 54 pistols</i>			

Table VI: Clocks, binoculars, astrolabes, and compass

Ahmed Mücevher sâ'at ma'a köstek 1, fi 1515 dirhem 181.800 akçe Salih Ağa	Abdullah Taşlıca basma sâ'at 1 44.000 akçe Baş çukadâr ağa	Salih Mücevher basma altın sâ'at ma'a köstek 1 34.000 akçe Hâs odabaşı ağa	Salih Kebîr sâ'at 25.900 akçe Çukadar Feyzullah Ağa	Salih Çalar altın koyun sâ'ati 1 17.050 akçe Kapı kethüdâm ağa	Osman Yalancı taşlı altın sâ'at 12.090 akçe Ahmed Bey kiler
Abdullah Taşlıca sapı altın sâ'at 1 10.000 akçe Halil Ağa havcı	Süleyman Sim sâ'at 1 8800 akçe Haseki Hacı Mehmed	Salih Sim sâ'at 1 8300 akçe Çavuş Mehmed Ağa kiler	Süleyman Altın koyun sâ'ati 1 7030 akçe Ömer Bey bâbü's-sa'âde	Ömer Sim sâ'at 1 6650 akçe Ağa çırağı İsmail Ağa kiler	Osman Sim sâ'at 1 5200 akçe İsmail mir hâs oda
Osman Asma köhne sâ'at 1 5175 akçe Kapı Çukadârı İbrahim	Osman Altın koyun sâ'ati 1 4910 akçe Kaftanı	Musa Çekmece sâ'ati 1 3200 akçe Selim Ağa hâs oda	Ahmed Sim sagır koyun sâ'ati 1 2515 akçe Nevbetcibaşı-i hazine	Çekmece sâ'ati 1	
Musa Dûrbîn 1 5500 akçe Hâfiz Mehmed Ağa seferli	Abdullah Kaval dûrbîn 1 5000 akçe İbrahim Ağa kullukcu	Osman Kebîr dûrbîn 1, sagır 1, palaska kubûr 2 aded 910 akçe Kağıdıcı efendi	İbrahim Kaval, dûrbîn 1 1750 akçe Hâfiz Ali Ağa hazîne çukadârı	Osman Dûrbîn 2 ma'a hurdavât 120 akçe Dellâl osman	Ahmed Kible-nümâ 1 3050 akçe Hacı Mehmed haseki
Abdullah Ustûrlop 1 1200 akçe Havcı Halil Ağa	Ahmed Usturlop 1 1055 akçe Selim Ağa kiler	<i>Total value: 395,205 akçes</i>			

Table VII: Jewels and selected luxury items

Musa Kol başları elmaslı pırlanta yüzük 1, 1313 dirhem 157.560 akçe Hazine vekili ağa	İnci 42 miskâl, fi 22 110.880 akçe Derzioğlu	Abdullah Tepesi zümrüdlü mücevher altın tatlı hokkası 96.000 akçe İbrahim Ağa kullukcu	İbrahim Mücevher altın tatlı hokkası 1 84.000 akçe Haseki Hacı Mehmed	Musa Elmas ve yakut ile müzeyyen altın zarf 1 72.000 akçe Düzoğlu	Osman Yirmi beş adet elmas pırlanta 15, roza 10 66.000 akçe Aşçı Said Ağa hazine
Abdullah Elmas ve yakut ile müzeyyen altın zarf 1, sahan 1 54.000 akçe	Abdullah Pırlanta elmas yüzük 1 50.100 akçe İbrahim Ağa kullukcu	Süleyman Mücevher çeşm kapaklı altın kutu 1 45.000 akçe Ali Külahî tabî'-i baş ağa	Ömer Zümrüd yüzük 1 44.000 akçe, fi iki bin Düzoğlu	Salih Kol yeri elmaslı zümrüd yüzük 42.160 akçe İbrahim Ağa kullukcu	Süleyman Kebir zümrüd yüzük 1 30.100 akçe Hurşid Ağa
Salih Mücevher sim zarf, fincan 1 27.200 akçe Haseki Hacı Mehmed	Süleyman Kırmızı yakut yüzük 1 18.550 akçe odabaşı ağa	Kırmızı Yakut yüzük 1 8400 akçe Kaftani	Ömer Sâde zümrüd 2 7550 akçe Ser-huddâm-ı hazine	Ahmed Kırmızı yakut yüzük 1 6000 akçe	Ahmed Siyâh kuşlu yüzük 1 2160 akçe Hayfalı Emin ağa-yı kiler

Table VIII: Monthly rations delivered to the army of İsmail Zihni Paşa (based on C.AS 53719)

29 days (16 Oct- 14Nov1784)	Bread (<i>Nan-ı aziz</i>) [çift] (daily rations)	Meat (<i>Guşt</i>) [kıyye] (daily rations)	barley (<i>şarır</i>) [kile] (daily rations)	fodder (<i>saman</i>) [kıyye] (daily rations)
İsmail Paşa	17,400 (600)	4350 (150)	4350 (150)	0
Abdullah Paşa	2610 (90)	652.5 (22.5)	652.5 (22.5)	0

HATTAT İSMAİL ZİHNİ PASHA

The Janissary commander (<i>başbuğ</i>)	1450 (50)	290 (10)	116 (4)	0
The commanders of gunners (Hüseyin, Abdi, Şahin, Sadullah, Emin aghas)	7250 (250)	1450 (50)	(20) 580	0
The Janissary scribes (Osman, Emin, Mehmed efendis)	2827.5 (97.5)	565.5 (19.5)	(6) 174	0
(a) Haseki Feyzullah Agha (b) Çorbacı-yı cedid Ahmed Ağa (c) Ser ... sabık (d) Ser saksoni-yi sabık serdâr-ı Sofya	(a) 25 (b) 25 (c) 25 (d) 15 2610	(a) 5 (b) 5 (c) 3 (d) 3 522	(a) 2 (b) 2 (c) 2 (d) 0.5 196.5	0
Patrol sergeants (<i>kol çavuşanı</i>): 12	4350 (150)	870 (30)	246.5 (8.5)	0
The Janissary <i>çorbacı</i> s: 5	3635 (125)	725 (25)	290 (10)	0
(a) Ordu şeyhi Seyyid Emin Efendi (b) Şatır İbrahim	(a) 6 (b) 20 754	(a) 1 (b) 4 145	(a) 1 [<i>şennih?</i>] (b) 4 [<i>şennih?</i>] 36.5	0
Janissary companies: 5	9280 (320)	1856 (64)	609 (21)	0
<u>Mercenaries</u> (<i>sekbans</i>) (a) 21 commanders (<i>başbuğ</i>) (b) 11 standard-bearer (<i>alemdar</i>)	(a) 210 (b) 55 7685	(a) 42 (b) 11 1547	(a) 9 (b) 0 261	0
Mercenaries (<i>sekbans</i>)	20819 (1203)	6168.5 (241)		0

KAHRAMAN ŞAKUL

Terakkilü <u>sipahiyân</u> , beşyüzbaşı, yüzbaşı, alemdaran, sakayân, çavuşân etc.	(40) officers (50) soldiers 2610	(19.5) officers (10) soldiers 855.5	(9) officers (10) soldiers 551	0
Terakkilü <u>silahdarân</u> , beşyüzbaşı, yüzbaşı, alemdaran, sakayân, çavuşân etc.	(40) officers (50) soldiers 2610	(19.5) officers (10) soldiers 855.5	(9) officers (10) soldiers 551	0
Company of Armorers: 1	3499 (131)	638 (22)	181 (6)	0
Company of gunners: 2	7772 (268)	1256.5 & 57 <i>dirbem</i> (43 & 133 <i>dirbem</i>)	290 (10)	0
Company of wagons: 2	6119 (211)	1073 (37)	261 (9)	0
Surgeons	87 (3)	43.5 (1.5)	21.5 (3)	0
Artillery horse: 116 excluding horses from Fethül-İslam	0	0	841 (29)	13,456 (464)
TOTAL	113,367.5	23,903.5	10,209	13,456

Hattat İsmail Zihni Paşa: Life and Death of an Ottoman Statesman and an Inventor

Abstract ■ The principal concern of this paper is to shed light on the question of what it took to be an Ottoman for a statesman in late 18th century. This was an age of significant turmoil caused by a series of diplomatic and military crises when identities and allegiances were recast. The present paper will challenge the conventional views about the adoption and adaptation in the Ottoman Empire and the attitudes of the Ottoman ruling elite towards innovation in this period. Based on the Ottoman archives and narrative sources, the essay will focus on the educational background, bureaucratic career, and inventive mind of an Ottoman statesman: İsmail Zihni Paşa. While his membership to a faction and accumulation of wealth were typical in the career of an Ottoman statesman, his passion for technological invention and taste for artifacts of wonder were not. It is hoped that this essay will contribute to the question of “who is an Ottoman?”

Keywords: İsmail Zihni Paşa; Halil Hamid Paşa; Ottoman military reforms; volley gun; Galatasaray; probate inventories

Bibliography

Archival Documents:

BOA, Başmuhasebe Muhallefat Defterleri (D.BŞM.MHF), 75/29; 75/30; 75/48; 75/50.

BOA, Cevdet Askeriye Kataloğu (C.AS) 2059; 38589; 1118/49528; 53719.

BOA, Cevdet Maliye Kataloğu (C. ML) 481/19623; 23193; 23387.

BOA, Cevdet Dahiliye Kataloğu (C.DH) 244/12190.

TSMA, *Ruzname-i Sultan Abdülhamid Han*, E. 12360/17.

TSMA, nr. E.12360/1-17.

TSMA, D.2302.

TSMA, D. 2057.

TSMA, D. 2789.

Ruzmerre, Türk Tarih Kurumu Kütüphanesi, Yazma nr. 1001.

Published Works:

Ágoston, Gábor: *Guns for the Sultans: Military Power and the Weapons Industry in the Ottoman Empire*, Cambridge: Cambridge University Press, 2005.

Ahmed Vasıf Efendi: *Mehasinül-Asar ve Hakaikül-Abbar*, haz. Mücteba İlgürel, Ankara: Türk Tarih Kurumu, 1994.

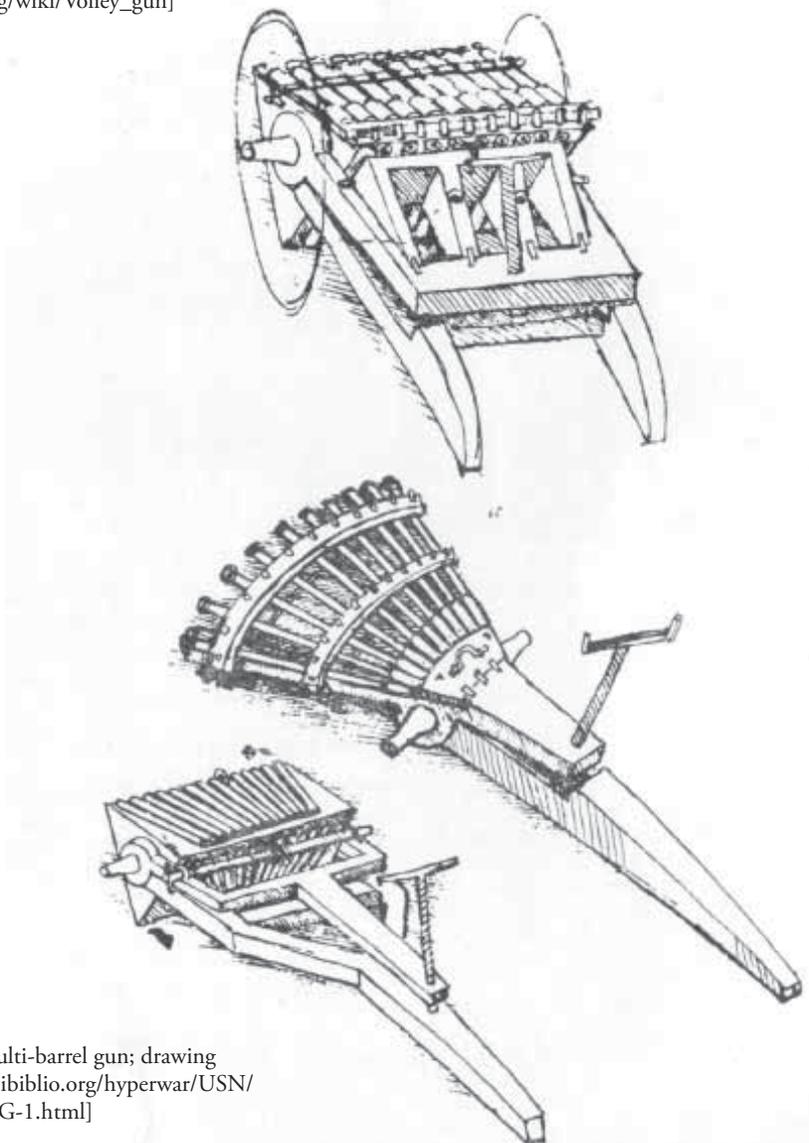
Aksan, Virginia H.: *Ottoman Wars, 1700-1870: An Empire Besieged*, Harlow: Pearson Education Limited, 2007.

- Aksan Virginia H.: "Ottoman Military Matters", *Journal of Early Modern History*, 6/1 (2002), 52-62.
- Aksan, Virginia H.: *An Ottoman Statesman in War and Peace: Ahmed Resmi Efendi, 1700-1783*, Leiden: Brill, 1995.
- Arslan, Mehmet (ed): *Tayyar-zade Ata Osmanlı Saray Tarihi. Tarih-i Enderun*, c. II, İstanbul: Kitabevi, 2010.
- Beydilli, Kemal: "Küçük Kaynarca'dan Tanzimat'a Islahat Düşünceleri", *İlmi Araştırmalar: Dil, Edebiyat, Tarih İncelemeleri*, 8 (İstanbul 1999), 25-64.
- Ellis, John: *The Social History of the Machine Guns*, Baltimore: The John Hopkins University Press, 1986.
- Filan, Kerima: *Başeski Şevki Molla Mustafa. Ruzname. Metin-Sözlük-İnceleme*, (Yayımlanmamış Lisansüstü Doktora Tezi) Ankara: Ankara Üniversitesi, 1999.
- Goodwin, Jason: *Lords of the Horizon: A History of the Ottoman Empire*, New York. Henry Holt & Co., 1999.
- Itzkowitz, Norman: "Eighteenth-Century Ottoman Realities," Baki Tezcan and Karl Barbir (ed.), *Identity and Identity Formation in the Ottoman World: A Volume of Essays in Honor of Norman Itzkowitz*, Madison: Center for Turkish Studies at the University of Wisconsin 2007, xvii-xxxii.
- İsfendiyaroglu, Fethi: *Galatasaray Tarihi*, c. I, İstanbul: Doğan Kardeş Yayınları, 1952.
- Lewis, Bernard: *What Went Wrong? The Clash Between Islam and Modernity in the Middle East*, Oxford: Oxford University Press 2002.
- Mehmed Süreyya, *Sicill-i Osmani*, c. I, İstanbul: Matbaa-i Âmire, 1893-1897.
- Öge, Mustafa: *Vaka-i Hamidiyye. Mehmed Sadık Zaim-zade. Tenkidli Transkripsiyon*, (Yayımlanmamış Yüksek Lisans Tezi) Balıkesir: Balıkesir Üniversitesi, 2001.
- Özcan, Ahmet: *Kethüda Said Efendi Tarihi ve Değerlendirmesi*, (Yayımlanmamış Yüksek Lisans Tezi) Kırıkkale: Kırıkkale Üniversitesi, 1999.
- Ricketts, Howard: *Firearms*, London: Putnam, 1962.
- Sarıcaoglu, Fikret: *Kendi Kaleminden Bir Padişahın Portresi. Sultan I. Abdülhamid (1774-1789)*, İstanbul: TATAV, 2001.
- Taşkın, Ünal: *Osmanlı Devleti'nde Kullanılan Ölçü ve Tartı Birimleri*, (Yayımlanmamış Yüksek Lisans Tezi) Elazığ: Fırat Üniversitesi, 2005.
- Uzunçarşılı, İsmail Hakkı: "Sadrazam Halil Hamid Paşa" *Osmanlı Tarihinden Portreler - Seçme Makaleler*, c. I, haz. Nuri Akbayar, İstanbul: Yapı Kredi Yayınları, 2010, s. 128-30.
- Uzunçarşılı, İsmail Hakkı: *Büyük Osmanlı Tarihi*, c. V, VI, Ankara: Türk Tarih Kurumu [5. baskı].
- Yeşil, Fatih: *Aydınlanma Çağında Bir Osmanlı Katibi: Ebubekir Ratib Efendi (1750-1799)*, İstanbul: Tarih Vakfı Yurt Yayınları, 2011.



Ottoman volley gun; early 16th century
(Musée de l'Armée, Paris) [http://en.wikipedia.org/wiki/Volley_gun]

Zaporozhian Cossack multi-barrel gun [courtesy of Victor Ostapchuk]



Da Vinci, multi-barrel gun; drawing
[<http://www.ibiblio.org/hyperwar/USN/ref/MG/I/MG-1.html>]