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WHY MILITARY INSTITUTIONS MATTER FOR MING HISTORY*

Abstract

Systemic attention to military institutions sharpens our understanding of the Ming dynasty in comparative, global terms and yields a fuller perspective on the state and its role in people's lives. First, the Ming dynasty devoted more resources, in absolute terms, to its military enterprise than any other contemporary power. It maintained enormous standing armies that drilled regularly, empire-wide logistical systems, welfare provisions for military dependents and retired or injured military personnel, and multi-tiered, standardized arms productions under state supervision. Western European states were just starting to achieve such capacity in the sixteenth and seventeenth centuries. Second, focused on civil administration, such as taxes, labor service, magistrates, land surveys, tithing communities, and mutual responsibility organizations, past scholarship has largely ignored how the state's extensive military institutions both shaped society and served as resources that people used to advance their personal, family, and community interests.

Keywords

Ming dynasty, military institutions, garrisons, military households, identity

INTRODUCTION

Attention to military institutions enhances our understanding of Ming history (1368–1644) in two ways. First, it helps put Ming history in a broader, comparative, global light. Despite persistent assumptions in some quarters that Confucianism committed China to a peaceful orientation,¹ the Ming dynasty devoted more resources, in absolute terms, to its military enterprise than any other contemporary power. That was not simply because the Ming government controlled more, and more productive, subjects; rather the

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¹Scholars of diverse orientation endorse such views. Some, like Geoffrey Parker, the eminent military historian and specialist in early modern European history, in his magisterial *Global Crisis: War, Climate Change and Catastrophe in the Seventeenth Century* (New Haven and London: Yale University Press, 2013), offer an implicit contrast between “prevailing Confucian ideology [which] aimed to promote harmony and peace” and the guiding values of Western Europe (p. 117). In his *East Asia Before the West: Five Centuries of Trade and Tribute* (New York: Columbia University Press, 2010), David Kang, a political scientist, sharply distinguishes between what he describes as long-term stability and peace of early modern East Asia, which he attributes to its embrace of Confucianism, with the tumultuous Westphalian order of Western Europe. Such a contrast underpins much explicitly and implicitly comparative scholarship on the early modern period.

Ming state was more expansive and intrusive than others. The Ming state maintained enormous standing armies that drilled regularly, empire-wide logistical systems, welfare provisions for military dependents and retired or injured military personnel, and multi-tiered, standardized arms production under state supervision. Western European states were just starting to achieve such capacity in the sixteenth and seventeenth centuries.²

Second, attention to military institutions more fully reveals the true extent of the Ming state's reach. Focused on civil administration, such as taxes, labor service, magistrates, land surveys, tithing communities, and mutual responsibility organizations, past scholarship has largely relegated other major elements of state activity to the margins. The early Ming state devoted nearly ten percent of cultivated land to military farmlands to feed imperial soldiers and their families.³ It set aside uncultivated horse pasturelands that were as much as five times the size of military farmlands in some areas.⁴ The state created military households, which commonly comprised ten to twenty percent of total registered households, and in some localities exceeded fifty percent.⁵ The state leaned heavily on military personnel in the creation and operation of the empire's communication and transportation systems, including its postal relay stations, highways (which were sometimes fortified), and the transportation of tax grain along the Grand Canal from the dynasty's economic center in Jiangnan to its political center in Beijing. The state committed itself to a massive series of fortifications along much of the northern border, known popularly as the Great Wall, an enormous, sharply contested, colossally expensive project.⁶

²For insightful comparative discussion of how these developments (which constitute central elements of the Military Revolution debate) unfolded in Western Europe and China, see Tonio Andrade, *The Gunpowder Age: China, Military Innovation and the Rise of the West in World History* (Princeton: Princeton University Press, 2016).

³More precisely 8.5%. This follows an estimate of 5 million *qing* 頃 of total cultivated, taxed land and 425,000 *qing* used by military farms in the Hongwu reign (1368–98) proposed in Zhang Dexin 張德信 and Lin Jinshu 林金樹, “Mingchu juntun shue de lishi kaocha” 明初軍屯數額的歷史考察, *Zhongguo shehui kexue* 中國社會科學 5 (1987), 187–206. They reject the argument by Gu Cheng 顧誠 that the early Ming state controlled 8.5 million *qing* in taxable lands, half of which were supervised by military authorities. Gu Cheng, “Ming qianqi gengdishi xintan” 明前期耕地數新探, *Zhongguo shehui kexue* 4 (1986), 198–213. Synthesizing a wide body of secondary scholarship, including important Japanese studies, Martin Heijdra similarly rejects the 8.5 million *qing* estimate. See “The Socio-economic Development of Rural China during the Ming,” in *The Cambridge History of China, Volume 8, the Ming Dynasty (1368–1644) Part 2*, edited by Denis Twitchett and Frederick Mote (Cambridge: Cambridge University Press, 1998), 443–50. Two late sixteenth-century compilations give the figures of approximately 900,000 and 670,000 *qing* as the prescribed original and actual amounts of military farm lands in 1562. Wang Yuquan 王毓銓 estimates that during the late sixteenth and early seventeenth centuries, there were about 620,000 *qing* of military farmlands. See Wang, *Mingdai de juntun* 明代的軍屯 (Beijing: Zhonghua shuju, 1965, rpt. 2009), 102. As Wang Yuquan notes, all these figures represent serious problems of interpretation and transmission (97–113).

⁴Liu Jingchun 劉景純, *Mingdai jiubian shidi yanjiu* 明代九邊史地研究 (Beijing: Zhonghua shuju, 2014), 65.

⁵Cao Jishu 曹基樹, *Zhongguo renkoushi Mingshiqi* 中國人口史明時期 (Shanghai: Fudan daxue chubanshe, 2001), 375–77 (chart 10.2). Cao (380) suggests 15% to 20% of the overall population was registered in military households.

⁶Arthur Waldron, *The Great Wall of China: From History to Myth* (Cambridge: Cambridge University Press, 1990); Jōchi Takashi 城地孝, *Chōjō to Pekin no chōsei—Mindai naikaku seiji no tenkai to henyō* 長城と北京の朝政—明代内閣政治の展開と変容 (Kyoto: Kyōto daigaku gakujutsu shuppankai, 2012).

In ignoring all this, we not only understate the Ming state's capacity but, equally important, we impoverish our understanding of people's daily lives. Military institutions were a vital part of the wider dynastic institutional framework that both shaped people's lives and served as a resource for pursuing their interests. The hereditary military household system deeply conditioned the lives and aspirations of millions of people, not just active service military personnel but their wives and children, brothers, cousins, and more distant kin. Military authorities and personnel influenced urban governance, resource allocation, and patronage along the northern border, eastern coasts, and interior regions. Border garrisons both protected Ming territory and served as the first point of diplomatic contact, vetting credentials, organizing border markets, and integrating new subjects, including Mongolians, Jurchens, Koreans, Tibetans, and others, into the Ming polity. Finally, military institutions broadly influenced the Ming economy. The crippling military expenditures of the dynasty's final decades are well known, but military institutions exercised a far more multifaceted influence. Military imperatives led to opening of new agricultural lands, expansion of trade and financial networks connecting border garrison cities with production centers, repopulation of war-torn regions, and quickening of transregional trade, both overland and maritime. Thus, systematic attention to military institutions sharpens our understanding of the Ming dynasty in comparative, global terms and yields a fuller perspective on the state and its role in people's lives.

This essay highlights adaptation over decline and individual agency over structural hegemony. Much past scholarship paints deviation from the institutional architecture of the founding Ming emperor (Zhu Yuanzhang 朱元璋, 1328–98, r. 1368–98) as decline or collapse. As a result, the story of the Ming state, including its military, is often told as a tale of failure, a polity in terminal decline nearly from its inception. However, changing policies and institutional arrangements were flexible if imperfect responses to evolving challenges. The court in the capital and more especially local government officials repeatedly experimented with ad hoc measures to address new issues created by wider socioeconomic and military changes.⁷ Such experiments were sometimes acknowledged as policy change but oftentimes they were not. Some adaptations were ineffective, none proved efficacious indefinitely, and this surprised no one. Government officials and educated observers understood that while overarching principles might endure, specific policies changed over time in response to new demands. In economic, social, cultural, and political terms, the Ming dynasty in the mid-seventeenth century was a very different place from what it had been in the late fourteenth century. It would be strange if military institutions alone had remained the same.

In many areas of history, scholars think about the interaction of individual agency and hegemonic structure, and there is no reason that the vast and complex military system of the Ming dynasty should be different. Individuals, families, and larger social/ethnic groups often saw state institutions as resources to be exploited in pursuit of their own interests. Rather than cast state and society in antagonistic terms, with "the people" clandestinely or openly resisting the state or attempting to elude its embrace entirely, more

⁷Heijdra, "Socio-economic Development," and Thomas Nimick, *Local Administration in Ming China: the Changing Roles of Magistrates, Prefects, and Provincial Officials* (Minneapolis: Society for Ming Studies, 2008), make the same case in the context of Ming administration.

useful is to imagine a wide array of actors (whether individuals, families, or communities based in location, belief, or lifeways) navigating a complex socioeconomic, cultural, and political landscape shaped by formal and informal institutions. Such institutions changed over time and were used by those inside and outside the government. Dynastic institutions provided access to the economic, political, and ideological (cultural) resources of the imperial state. Thus, while the state used institutions to extract resources, regulate behavior, and impose penalties, those same institutions, when successfully appropriated, were powerful tools for individuals and families.⁸

This essay first briefly surveys Anglophone scholarship on the military and martial during the Ming period before turning to three overarching topics, governance, movement and transformation, and finances. I have selected these three because they provide a sense of the range of military institutions' influence rather than out of a belief that they exhaust critical questions of historical inquiry. Investigation into other topics, such as technology and manufacturing, information and cultural production, gender construction, and environmental history, to name just a few, would prove similarly revealing if in different ways. The following discussion of Ming military institutions is meant to be illustrative rather than exhaustive, an invitation to further exploration rather than the last word.

MILITARY AND MARTIAL HISTORY OF THE MING PERIOD: A BRIEF REVIEW OF THE FIELD

In 1969, Charles Hucker, doyen of Chinese institutional history in the United States, observed, "few aspects of the Ming state system have been as neglected as its military aspects."⁹ The situation is better today. Almost single-handedly, the prolific Kenneth Swope has revitalized the genre of Ming military narrative history, chronicling the dynasty's war against Hideyoshi's armies in Korea during the 1590s and the campaigns that ended the Ming dynasty in 1644.¹⁰ Much has been done to illuminate the intellectual, cultural, political, and economic underpinnings of Ming grand strategy.¹¹ Recent work

⁸Landed, educated elites exploited their ties to the state to protect local socioeconomic interests (Heijdra, "Socioeconomic development," 554–64). Government posts, whether civilian or military, were also understood as avenues to personal enrichment (Nimick, *Local Administration*, 128–29).

⁹Hucker, "Preface," in *Chinese Government in Ming Times: Seven Studies*, edited by Charles Hucker (New York: Columbia University Press, 1969), ix.

¹⁰Kenneth Swope, *A Dragon's Head and a Serpent's Tail: Ming China and the First Great East Asian War, 1592–1598* (Norman: University of Oklahoma Press, 2009); *The Military Collapse of China's Ming Dynasty, 1618–1644* (London: Routledge, 2014). Also Ray Huang, "The Liao-tung Campaign of 1619," *Oriens Extremus* 28 (1981), 30–54. Swope has recently turned his hand to the Ming military intervention in Vietnam. See his "Causes and Consequences of the Ming Intervention in Vietnam in the Early Fifteenth Century," in *Ming China: Courts and Contacts 1400–1450*, edited by Craig Clunas, Jessica Harrison-Hall, and Luk Yu-ping (London: The British Museum, 2016), 37–45.

¹¹Waldron, *The Great Wall of China*; Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton: Princeton University Press, 1995); Zhang Feng, *Chinese Hegemony: Grand Strategy and International Institutions in East Asian History* (Stanford: Stanford University Press, 2015); Kenneth Swope, "Manifesting Awe: Grand Strategy and Imperial Leadership in the Ming Dynasty," *Journal of Military History* 79.3 (2015), 597–634; "Ming Grand Strategy and the Intervention in Korea," in *The East Asian War, 1592–1598: International Relations, Violence, and Memory*, edited by James Lewis (London and New York: Routledge, 2015), 163–96; Geoff Wade, "Engaging the South: Ming China and Southeast Asia in the Fifteenth

has shown the importance of wartime logistics, with particular attention to Northeast Asia.¹² Military technology during the Ming, especially the rapidly expanding use of firearms, has been an active and productive line of inquiry, reshaping our understanding of both domestic dynamics and the place of the Ming experience in wider regional and global narratives.¹³ In the cultural realm, scholars have explored, first, patterns of patronage and personal interaction between military officers and literati and, second, the place of the martial writ large and military men in broader cultural and literary traditions.¹⁴

Work on military institutions per se is more limited. Charles Hucker provides a clear organizational review of the Ming military, including the Capital Garrisons, provincial garrisons, and permanent tactical commands.¹⁵ Based on conditions in Fujian, Michael Szonyi

Century,” *Journal of the Economic & Social History of the Orient* 51.4 (2008), 578–638; “The Zheng He Voyages: A Reassessment,” *Journal of the Malaysian Branch of the Royal Asiatic Society*, vol. 78, part one, no. 228 (2005), 37–58; “Domination in Four Keys: Ming China and Its Southern Neighbors 1400–1450,” in *Ming China: Courts and Contacts*, edited by Clunas et al., 15–25; Wang Yuan-kang, *Harmony and War: Confucian Culture and Chinese Power Politics* (New York: Columbia University Press, 2010), 101–80.

¹²Hasegawa Masato, “Provisions and Profits in a Wartime Borderland: Supply Lines and Society in the Border Region between China and Korea, 1592–1644,” (Ph.D. diss., Yale University, 2013); “War, Supply Lines, and Society in the Sino-Korean Borderland of the Late Sixteenth Century,” *Late Imperial China* 37.1 (2016), 109–52.

¹³Andrade, *Gunpowder Age*; Kenneth Chase, *Firearms: A Global History to 1700* (Cambridge: Cambridge University Press, 2003); Sun Laichen, “Chinese Gunpowder Technology and Dai Viet: c. 1390–1497,” in *Viet Nam: Borderless History*, edited by Nhung Tuyet Tran and Anthony Reid (Madison: University of Wisconsin Press, 2006), 72–120; “Military Technology Transfers from Ming China and the Emergence of Northern Mainland Southeast Asia (c. 1390–1527),” *Journal of Southeast Asian Studies* 34.3 (2003), 495–517; “Chinese-style gunpowder weapons in Southeast Asia,” in *New Perspectives on the History and Historiography of Southeast Asia*, edited by Michael Aung-Thwin and Kenneth Hall (London and New: Routledge, 2011), 75–100; Kenneth Swope, “Crouching Tigers, Secret Weapons: Military Technology Employed during the Sino-Japanese-Korean War, 1592–1598,” *Journal of Military History* 69.1 (2005), 11–41; “Bringing in the Big Guns: On the Use of Firearms in the Ming-Manchu War,” in *Chinese and Indian Warfare From the Classical Era to 1870*, edited by Peter A. Lorge and Kaushik Roy (Abingdon and New York: Routledge, 2015), 134–45; “Gunsmoke: The Ming Invasion of Dai Viet and the Role of Firearms in Forging the Southern Frontier,” in *Forging the Fiery Frontier: Two Millennia of Encounters on China’s South and Southwest*, edited by John K. Whitmore and James Anderson (Leiden: Brill, 2014), 156–68.

¹⁴Craig Clunas, *Empire of Great Brightness: Visual and Material Cultures of Ming China, 1368–1644* (Honolulu: University of Hawai’i Press, 2007), 160–87; Ray Huang, *1587, A Year of No Significance: The Ming Dynasty in Decline* (New Haven, Yale University Press, 1981), 156–88; James Millinger, “Ch’i Chikuang: A Military Official as Viewed by His Contemporary Civil Officials,” *Oriens Extremus* 20 (1973), 103–17; Barend Noordam, “Qi Jiguang: The Soldier as Sage?,” in *Image: Proceedings of the 2nd Rombouts Graduate Conference (2015)*, edited by Hanna Li and Gina van Ling (Leiden, 2016), 44–61, edited by H.N. Li (Leiden, 2016); David Robinson, *Martial Spectacles of the Ming Court* (Cambridge, Mass.: Harvard University Asia Center, 2013); “Wu: The Arts of War,” in *Ming: 50 Years that Changed China*, edited by Craig Clunas and Jessica Harrison-Hall (London: British Museum Press, 2014), 112–55; Kathleen Ryor, “Regulating the *Qi* and the *Xin*: Xu Wei (1521–1593) and His Military Patrons,” *Archives of Asian Art* 54 (2004), 23–33; “*Wen* and *Wu* in Elite Cultural Practices during the Late Ming,” in *Military Culture in Imperial China*, edited by Nicola di Cosmo (Cambridge and London: Harvard University Press, 2009), 219–42; Felix Siegmund, “Qi Jiguang’s *Wujing qishu zhaiti*: A Few Notes on a Synopsis of the Military Classics,” *Ming Qing yanjiu* 19 (2015), 9–43; Maggie Wan, “Enshrining the Dark Troops: The Printing of Daoist Books in the Early Ming Dynasty,” in *Ming China: Courts and Contacts*, edited by Clunas et al., pp. 134–42.

¹⁵Charles Hucker, *A Dictionary of Official Titles in Imperial China* (Palo Alto: Stanford University Press, 1985), 78–80; “Ming Government,” in *The Cambridge History of China, Volume 8*, edited by Twitchett and Mote, 54–72.

fruitfully explores what he calls everyday politics, that is, how soldiers and their families pursued their interests in the context of the hereditary military household system.¹⁶ Finally, Liew Foon Ming analyzes one key institution, military farms.¹⁷

East Asian language scholarship on Ming military institutions is even richer. For nearly a century, scholars have analyzed military farms, military expenditure, the size of the army, the establishment and unfolding of hereditary garrisons, the provisioning of the northern border garrisons, and the expanding use of mercenaries and attendant socioeconomic consequences. Recent studies have diversified to include the ramifications of military garrisons on migration, cultural transmission, and economic development, especially commercialization and trade. The following draws on a portion of this vast and rapidly expanding body of scholarship without any pretense at comprehensive treatment.

GOVERNANCE

Anglophone scholarship frequently omits military personnel, including garrison authorities, from analysis of local administration, inadvertently perpetuating a narrative that privileges civil officials, literati, and the landed elite.¹⁸ Such a perspective ignores twenty percent of the dynasty's total population, the largest single component of government personnel, and major factors in local and national government. This section shows that relations between local military and civil authorities shaped Ming governance and that military institutions such as garrisons and farmlands influenced local administration. This section also demonstrates that although civil officials increased administrative control of military resources and personnel, military authorities remained prominent in urban life. By widening our analytical gaze to include military personnel, we gain a much fuller picture of the Ming state's operations at the local level. This in turn sharpens our understanding of the kinds of institutional resources available to people in their daily lives.

For most of its duration, the Ming dynasty administered its broad territory through approximately 150 prefectures, 240 subprefectures, and 1,100 counties.¹⁹ Governing the empire was a relatively small formal imperial bureaucracy of perhaps 20,000 men, who generally had passed one or more levels of the civil examinations. They oversaw a far larger subbureaucracy of local clerks and staff.²⁰ However, as Hucker observed,

¹⁶Michael Szonyi, *The Art of Being Governed: Everyday Politics in Late Imperial China* (Princeton: Princeton University Press, 2017).

¹⁷Liew Foon Ming, *Tuntian Farming of the Ming Dynasty (1368–1644)* (Hamburg: Gesellschaft für Natur- und Völkerkunde Ostasiens, 1984).

¹⁸Nimick's otherwise excellent *Ming Local Administration* does not include military authorities and the military officer corps among the actors with whom magistrates had to come to terms. Likewise, Yang Lien-sheng ("Ming Local Administration," in *Chinese Government in Ming Times*, edited by Hucker, 1–21) omits interaction between civil and military administration at the local level. Timothy Brook consigns military households, garrisons, camps, farmlands, and pastures to a single footnote, noting that the military administration requires a separate study, effectively removing it from consideration. See Brook, "The Spatial Organization of Ming Local Administration," *Late Imperial China* 6.1 (1985), 1n1.

¹⁹Hucker, "Ming Government," 15. Numbers varied over time.

²⁰David Robinson, "Banditry and the Subversion of State Authority in China," *Journal of Social History* 30.33 (2000), 527.

“the largest single component of Ming governmental personnel” was the military establishment. In 1392, the Ming throne commanded some 16,000 military officers and 1.2 million soldiers. Rough estimates for the mid-seventeenth century run as high as 100,000 officers and nearly 4 million soldiers, although the real number is perhaps half that much.²¹ Ming military personnel served in garrisons (or guards) 衛 (nominally 5,600 men), battalions 千戶所 (nominally 1,120 men), and companies 百戶所 (nominally 112 men). The number of Ming garrisons varied over time but hovered in the neighborhood of 300 for much of the dynasty. In each province, a Regional Military Commission oversaw garrisons’ administration. Finally, supervision, based broadly along regional lines, of all these units was shared among the capital-based Five Chief Military Commissions, established in 1380 as part of a broad effort to prevent any one man or group from wielding sufficient power to challenge the throne.

Following precedents established by the Mongols and their Yuan dynasty (1271–1368), the Ming state used hereditary military households to organize (or extract, as one influential historian put it) the bulk of its military labor.²² Responsible for supplying one able-bodied male for active military service at all times, these military households were subject to extensive state supervision, which documented the deployments, promotions, demotions, and performance on the battlefield of each soldier in the household from the time it became a military household (usually in the fourteenth century) to the present. Sets of such records were held both in the capital ministries and in local garrisons’ administrative offices headed by commanding officers. These local military authorities were responsible not only for training and fielding troops but for monitoring soldiers’ tax status, providing financial support to old and infirm soldiers and their widows and orphans, tracking military personnel’s land holdings, adjudicating criminal matters, and interacting with civil administrators in the region. We can hardly ignore their work if we wish to understand how the Ming state governed its people or how those people experienced the Ming state.

One pioneering scholar of Ming military institutions, Yu Chih-chia 于志嘉, has drawn attention to a pattern of interlocking civil and military jurisdictions and oversight that formed part of a more general strategy of dynastic governance. It grew from a deliberate policy of dividing power between military and civil administrations to keep each in check and both subordinate to the throne.²³ In many locales, military administration ran parallel to civil administration; in fact, garrison administrative offices frequently were located within the same city walls as those that housed civilian authorities. Civil officials appointed by the central government administered civilian households, civilian communities (whether rural villages or urban neighborhoods), and taxable civilian lands.

²¹Hucker, “Ming Government,” 54.

²²Romeyn Taylor, “Yüan Origins of the Wei-so system,” in Hucker, *Chinese Government in Ming Times*, 23–40. Wang Yuquan stresses that the military household was merely one instance of the many ways the Ming dynasty extracted labor from its subjects. See Wang Yuquan, “Mingdai de junhu” 明代的軍戶, *Lishi yanjiu* 歷史研究 8 (1959), 21–34, rpt. in his *Laiwu ji* 萊蕪集 (Beijing: Zhonghua shuju, 1983), 324–61.

²³Yu Chih-chia (Yu Zhijia) 于志嘉, “Ming Beijing xing dudufu kao” 明北京行都督府考, *Zhongyang yanjiuyuan lishi yuyan yanjiusuo jikan* 中央研究院歷史語言研究所集刊 79.4 (2008), 331–73; “Quan ya xiang zhi: yi Ming Qing shidai de Tongguanwei wei li” 犬牙相制——以明清時代的潼關衛為例, *Zhongyang yanjiuyuan lishi yuyan yanjiusuo jikan* 80.1 (2009), 77–135.

Running in parallel were hereditary military households 軍戶 organized into garrisons, forts, and camps 屯堡 (屯寨), and military lands 軍田 (more on these below) that were supervised by local garrison commanders, provincial-level Regional Military Commissions, and the Chief Military Commissions in the capital, as noted above.²⁴

One unintended consequence of jurisdictions that physically overlapped was frequent litigation between civilian and military households resident in the same place. Dual authority created jurisdictional overlaps or interstices and increased the potential for conflict between military and civil administrators, thus complicating daily governance. The likelihood of tangled jurisdiction increased over time, as soldiers moved out of military barracks and lived alongside civilians in the same neighborhoods. Jurisdictional distinctions grew less important in daily governance, with both civilian and military residents in Beijing and Nanjing, for instance, falling under the purview of the metropolitan police.²⁵ We cannot understand civil administration if we ignore military personnel.

Dynastic law stipulated that civil and military authorities should jointly adjudicate civil and criminal legal cases that involved members of both civilian and military households.²⁶ The high level of cooperation required for joint adjudication proved challenging, and updated compilations of recent individual imperial decisions from the fifteenth and sixteenth centuries reveal points of tension. Seventy-eight of 279 decisions in the *Itemized Precedents for Trying Penal Matters* (*Wenxing tiaoli* 問刑條例), imperially promulgated in the year 1500, and 91 of 385 decisions in the 1555 revised edition—roughly a quarter—related to military personnel.²⁷ To address new social and administrative questions not covered in the 1397 version of the *Great Ming Code*, in 1429 the imperial government promulgated a compilation of individual imperial decisions specifically related to military administration (*Itemized Precedents of Military Administration* [*Junzheng tiaoli* 軍政條例]). The compilation was further updated in 1436 and 1439. The interplay of broad socioeconomic transformations and change within military institutions

²⁴To highlight the significance of local military authorities and the vast human and physical resources they oversaw, much (but not all) Sinophone scholarship describes military garrisons as substantive administrative units. Perhaps the earliest articulation of this view is Tan Qixiang 譚其驤, “Shi Mingdai dusi weisuo zhidu” 釋明代都司衛所制度, *Yugong banyuekan* 禹貢半月刊 3.10 (1935), 459–64. Fuller development may be found in Gu Cheng 顧誠, “Mingdigu de jiangtu guanli tizhi” 明帝國的疆土管理體制, *Lishi yanjiu* 歷史研究 3 (1989), 135–50, rpt. in his *Yinni de jiangtu: weisuo zhidu yu Ming diguo* 隱匿的疆土：衛所制度與明帝國 (Beijing: Guangming ribao, 2012, 2nd imprint 2013), 48–71. Guo Hong 郭紅 and Jin Runcheng 靳潤成 provide a detailed treatment in their history of the administrative divisions of the Ming dynasty, *Zhongguo xingzheng quhua tongshi Mingdaijuan* 中國行政區劃通史明代卷 (Shanghai: Fudan daxue chubanshe, 2007), 249–710. Explicitly building on the works above is Li Xinfeng 李新峰, *Mingdai weisuo zhengqu yanjiu* 明代衛所政區研究 (Beijing: Beijing daxue chubanshe, 2016).

²⁵Luo Xiaoxiang 羅曉翔, “Soldiers and the City: Urban Experience of Guard Households in Late Ming Nanjing,” *Frontiers of History in China* 5, no. 1 (2010): 30–51. My thanks to Michael Szonyi for drawing this article to my attention. For a similar phenomenon in Beijing, see Robinson, “Images of Subject Mongols under the Ming Dynasty,” *Late Imperial China* 25.1 (2004), 81.

²⁶Article 364, “Coordinating Litigation Involving Military Personnel and Civilians,” *The Great Ming Code*, trans. Jiang Yonglin (Seattle and London: University of Washington Press, 2005), 201.

²⁷Yang Chenyu 楊晨宇, “Ming zhonghouqi de weisuo yu falü” 明中後期的衛所與法律, *Sanxia daxue xuebao* 三峽大學學報 (renwen shehui kexueban 人文社會科學版) 38.4 (2016), 97.

generated an ongoing series of administrative and legal issues of keen concern to officials in both the capital and the provinces.

In these compiled cases, civilian officials repeatedly expressed dissatisfaction with garrison authorities for their failure to cooperate in the resolution of legal cases. Garrison authorities, according to civil officials, were slow to travel to distant localities to investigate problems on military farmlands. Their reluctance was troubling enough in disputes over land but disastrous with homicides because corpses decomposed to the point that examination was impossible.²⁸ One late fifteenth-century official wrote that even when garrisons bothered to send someone for conferences with civil authorities, they sent military officers rather than the presumably better educated and administratively adept civil officials who worked within the garrison, such as the registrar. These military officers, the official insisted, were corrupt, ignorant of law, or both.²⁹

Senior court ministers, members of the capital bureaucracy, and field administrators offered a variety of suggestions for improvement. Why did they feel military personnel in particular were so disruptive? Details from a 1481 legal statute point to a basic structural problem. The land and personnel of nine different garrisons and associated horse pastures and hay fields were all located within the jurisdiction of the single county of Quanjiao 全椒 in the Southern Metropolitan Region. This was one facet of a broader question, as forty-eight garrisons and their associated military farms lay interspersed “like a canine’s teeth” through the prefectures and counties of Xuzhou 徐州, Hezhou 和州, and Yangzhou 揚州.³⁰ Although the number of active duty soldiers and family members varied greatly according to region and time, dynastic regulations prescribed 5,600 troops for each garrison. Forty-eight garrisons then would mean something like 270,000 active duty soldiers and even greater numbers of family members. As a result of the large military population, the official complained, “there is not a day that goes by without some incident involving marriage, land, feuding, banditry, and the like.”³¹

In another case, the prefect of Luanzhou 灤州 to the north similarly noted that several garrisons were interspersed through his territory. “Aggressive soldiers bully common subjects, hefting spears and swords. No one dares cross them.” He complained that when civil officials sent men to arrest suspects, the soldiers organized themselves into bands to resist arrest.³² The same official reported that civilians too exploited jurisdictional limitations; those behind on tax payments or guilty of other crimes hid in military

²⁸*Da Ming jiu qing shi li an li* 大明九卿事例案例 (Ming manuscript held at Fu Sinian Library, Academic Sinica), accessed through Scripta Sinica 33.2b–34b.

²⁹Dai Jin 戴金, compiler, *Huang Ming tiao fa shi lei zuan* 皇明條法事類纂, juan 40 (rpt. *Zhongguo zhenxi falü dianji jicheng* 中國珍稀法律典籍集成, edited by Yang Yifan 楊一凡 et al., [Beijing: Kexue chubanshe, 1994], series 2, 5.631).

³⁰Dai Jin, compiler, *Huang Ming tiao fa shi lei zuan*, juan 40 (*Zhongguo zhenxi falü dianji jicheng*, series 2, 5.631–32).

³¹Dai Jin, compiler, *Huang Ming tiao fa shi lei zuan*, juan 40 (*Zhongguo zhenxi falü dianji jicheng*, series 2, 5.631–32).

³²For discussion of banditry and other violent behavior by garrison personnel in Nanjing and the Northern Metropolitan Area, see Luo, “Soldiers and the City,” 42–48, and David Robinson, *Bandits, Eunuchs, and the Son of Heaven: Rebellion and the Economy of Violence in Mid-Ming China* (Honolulu: University of Hawai‘i Press, 2001), 45–68, respectively.

camps, which shielded them from agents of the local yamen.³³ These examples illustrate why harried local civil administrators felt military personnel disrupted governance.

If banditry, intimidation, and violent crime stole the headlines, conflicts over land probably occupied more of the typical local magistrate's day. In a bid to reduce the central government's costs of maintaining a large army, the Ming founder, building on previous dynasties' examples, ordered that military families receive lots of lands from the state, which they were to farm. A portion of the harvest was to be turned over to the garrison to cover its operating expenses, and the rest the military household used to support itself. Over several generations, land tenure became complex: soldiers and family members might farm the land; they might lease it to others to cultivate; they might sell parts or all of the land; or they might do all three. Adding to the complexity were the tax waivers that military households enjoyed in exchange for their service to the state. The editors of one mid-sixteenth-century gazetteer note that military households often claimed ownership of farmlands held by civilians, presumably with the idea of extending their preferential tax status to newly acquired lands. In other cases, civilians with wealth and influence expropriated military lands to exploit their tax-free status.³⁴

The net result was a reduction in tax revenue available to local administrators, which impeded the successful performance of their duties and endangered their careers. Thus, the writer Lü Kun 呂坤 (1536–1618) counseled new magistrates to act promptly if their jurisdiction contained military farms or princely lands.³⁵ Failure to clarify tax issues immediately was bound to result in controversy down the road.³⁶ As the following sections will show, control over land, its tax status, and its exploitation were recurring issues closely tied to military objectives and personnel.

These were the sorts of problems that prompted civil officials to argue that they were more qualified to oversee military institutions than their military counterparts. In the late sixteenth century, Yuan Huang 袁黃 (1533–1606) wrote a book on local governance based on his experiences as magistrate in Baodi 寶坻 county, near Beijing. Yuan Huang criticized his military counterparts, garrison officers, whose corruption, abuses, and overall administrative incompetence drove soldiers of all stripes to desert.³⁷ Historians use such complaints, rife in memorials of the sixteenth and seventeenth century centuries, to illustrate problems in the Ming military. However, rather than neutral observers, men like Yuan Huang were frequently speaking as careworn administrators who believed

³³Dai Jin, compiler, *Huang Ming tiao fa shi lei zuan*, juan 40 (*Zhongguo zhenxi falü dianji jicheng* series 2, 5.635).

³⁴*Taiping xianzhi* 太平縣志, 3.15a (*Tianyige cang Mingdai fangzhi xuankan*, vol. 17). For discussion of the privatization and preferential tax status of military lands near Beijing, see James Geiss, "Peking under the Ming (1368–1644)" (Ph.D. diss., Princeton University, 1979), 53–56. For Yunnan, see Lu Ren 陸韜, *Bianqian yu jiaorong: Mingdai Yunnan Hanzu yimin yanjiu* 變遷與交融：明代雲南漢族移民研究 (Kunming: Yunnan jiaoyu chubanshe, 2001), 264–82.

³⁵Princely lands were another highly fraught category of land associated with members of the imperial family, who enjoyed special tax status and a measure of administrative autonomy.

³⁶Lü Kun, *Shi zheng lu* 實政錄, 4.10a–b (*Beijing tushuguan guji zhenben congkan* 北京圖書館古籍珍本叢刊 [Beijing: Shumu wenxian chubanshe], 48.117).

³⁷Yuan Huang 袁黃, "Bian fang shu" 邊防書, *Baodi zheng shu* 寶坻政書, 10.23a–25b (*Beijing tushuguan guji zhenben congkan*, 48.410–11).

that they were left to clean up messes created by military officers. In places with high concentrations of military personnel and powerful military authorities, civil officials often felt put upon.³⁸ One 1490 report alleged that not only were garrison authorities unmoved by local civil officials' entreaties to investigate legal cases properly, they repeatedly humiliated clerks who carried the magistrate's messages.³⁹ Early in the sixteenth century, the magistrate of Zunhua 遵化 on the northern border complained that it was regional military authorities and generals who really called the shots.⁴⁰

Yuan Huang repeatedly proposed expanding the ambit of local civil officials at the expense of garrison authorities. Yuan was far from alone in this view. By 1600, such a trend was nearly 150 years old and already commonsensical to contemporary observers. The editors of an important 1587 compendium of government statutes wrote, "Early in the dynasty, military affairs were exclusively entrusted to military officers, but later civil officials were put in charge."⁴¹ To revitalize dynastic military efficacy after the disastrous Ming defeat at Tumu Fort 1449 to Oirat Mongols, the expansion of civil officials' responsibilities into military affairs accelerated.⁴² Decades earlier, in fact, the newly enthroned Xuande emperor (Zhu Zhanji 朱瞻基, r. 1426–35) was already complaining about military personnel's deficiencies. Because "military men are not familiar with accounting, not conversant with paperwork, and unable to ensure security," the emperor announced, "thus malfeasance is common."⁴³ The emperor was talking about the myriad abuses surrounding the collection, storage, and disbursement of grain produced on military farms, a cluster of processes that brought together labor, taxes, record-keeping, and food. His solution was to transfer control over garrison granaries first to civilian personnel such as registrars and Assistant Granary Supervisors who worked within garrisons; later, responsibility for garrison granaries was transferred to local civilian administrators such as magistrates and prefects. Places that lacked civilian administration, like the northern border regions of Liaodong and Gansu and some coastal garrisons, were exempted.⁴⁴

Another instance of ceding important administrative duties to bureaucrats is the emergence of the "troop purification censor" (*qingjun yushi* 清軍御史). During the early dynasty, garrisons commonly supervised their own rolls. When soldiers deserted, disappeared, died in battle, or grew old, infirm, or otherwise incapable of performing their duties, garrisons sent out men to track down another male family member from the

³⁸Yu Chih-chia (Yu Zhijia), "Quan ya xiang zhi"; Yi Longju 李永菊, "Cong junshi quanguo dao shijia dazhi" 從軍事權貴到世家大族, *Henan daxue xuebao* 河南大學學報 (shehui kexue ban 社會科學版) 53.4 (2013), 9–11.

³⁹Dai Jin, *Huang Ming tiao fa shi lei zuan*, juan 40 (*Zhongguo zhenxi falü dianji jicheng*, series 2, 5.640).

⁴⁰Mark Elvin, *The Retreat of the Elephants: An Environmental History of China* (New Haven and London: Yale University Press, 2004), 288.

⁴¹Shen Shixing 申時行 (1535–1614), compiler, *Da Ming hui dian* 大明會典 (rpt. Taipei: Dongnan shubaohe, 1964), juan 128, 4.1827.

⁴²Kai Filipiak, "The Effects of Civil Officials Handling Military Affairs in Ming Times," *Ming Studies* 66 (2012), 1–15.

⁴³*Ming Xuanzong shilu* 明宣宗實錄, 44.6a, 1087 宣德二年六月壬寅.

⁴⁴Peng Yong 鵬勇, "Mingdai qijun jingji shenghuo tanyan—yi banjun wei xiansuo" 明代旗軍經濟生活探研——以班軍為線索, in *Dishiyijie Mingshi guoji xueshu taolunhui lunwenji* 第十一屆明史國際學術討論會論文集, edited by Tian Tao 田澍 et al. (Tianjin: Tianjin guji chubanshe, 2007), 171–72.

military household as a replacement, sometimes traveling to distant locales. The process lent itself to abuse, as the garrison's men sometimes brought back the wrong man or let the right man go for a price. This arrangement not only left the rolls "unclear" (*buqing* 不清) and thus military units understaffed. It also incurred considerable social resentment among those unjustly forced into military service. In response, early in the fifteenth century, the central government ordered major reforms. Garrisons were ordered to send lists of their missing men to the bureau of personnel, which then dispatched a civil official, usually a censor who would act as a liaison with the provincial-level civil authorities (the administration and surveillance commissions) and prefectural, sub-prefectural, and county governments to conduct the "purification of troops." Placing such duties in the civil officials' hands did not eliminate abuses.⁴⁵ Each update of new dynastic statutes included cases related to maintaining the rolls, suggesting that problems continued.

Yielding control over military resources, in this case military labor, to civil authorities was also a favorite answer for issues of corruption and inefficiency. Yuan Huang, the former magistrate of Baodi mentioned above, wanted court approval for civil officials to expand their role in recruiting soldiers. To prevent what Yuan Huang called "private substitution" by military officers, he suggested that civil officials should complete registers of local men fit for military service that would then be presented to military officers. Because military officers were indiscriminating in their recruiting, hiring unreliable, opportunistic men who were likely to desert, Yuan Huang insisted, it was much preferable to put more control of what was essentially an administrative matter of personnel management in the hands of men most qualified to carry out such duties efficiently, local civil officials. Yuan Huang believed that putting more military personnel under administrative supervision of local civil officials would reduce runaway rates of desertion, because it was garrison officers' predatory behavior that drove most soldiers to flight in the first place.⁴⁶

Yuan Huang's example shows that Ming civil officials understood military institutions not only in terms of dynastic defenses and war but also as organizational facets of local administration that impinged on daily governance. Hiring and paying troops, management of farmlands, and registration of military personnel directly influenced local magistrates' performance of their duties, which in turn helped determine their career prospects. Not everyone, however, believed that expanding the role of civil official in military affairs was wise. In the immediate wake of widespread pillaging by Mongol armies near Beijing in 1550, Grand Secretary Xu Jie 徐階 (1503–83) argued that military commanders should recruit their own men, because "if the task was exclusively delegated to students [that is, inexperienced civil officials], one fears that the men they hire may not be usable."⁴⁷ Xu Jie's comments should caution us against seeing an unquestioning consensus about civil officials' superior fitness for military management and oversight.

⁴⁵Yu Chih-chia (Yu Zhijia), *Mingdai junhu shixi zhidu* 明代軍戶世襲制度 (Taipei: Xuesheng shuju, 1987), 50–108.

⁴⁶Yuan Huang, "Bian fang shu," *Baodi zheng shu*, 10.23a–25b (*Beijing tushuguan guji zhenben congkan*, 48.410–11).

⁴⁷Xu Jie, *Shi jing tang ji* 世經堂集, 2.4a–b (*Siku quanshu cunmu congshu* 四庫全書存目叢書, ji 集 79.370).

The trend towards civil control of military personnel was not limited to daily governance; beginning in the fifteenth century and increasing in the sixteenth and seventeenth centuries, the Ming state often appointed civil officials to supervise important military campaigns.⁴⁸ Filipiak suggests that during the late fifteenth and most of the sixteenth centuries, with their more integrative approach to governance, civil officials improved the dynasty's security. In contrast, Swope argues that much responsibility for the dynasty's fall should be laid at civil officials' door. Lacking practical experience in military campaigns of suppression, Swope reasons, such officials advocated ineffective and counter-productive strategies for both domestic rebels and the growing Jurchen threat during the 1630s and 1640s.⁴⁹ More systematic research is needed before a balanced assessment of the impact of civil officials' expanded role in military command positions is possible. The long-term diminution of military officers' role in local governance and expansion of civil officials' responsibilities over military personnel and property reminds us, however, that Ming military institutions changed in important ways over the course of the dynasty. At the same time, periodic debate about those shifts shows that such issues remained live and contingent on political and military exigencies.

Local society studies have enriched our understanding of Chinese history with thick description of local actors built up from genealogies, stele inscriptions, funerary epitaphs, poetry, and personal letters. Such studies seldom focus on military authorities or personnel.⁵⁰ In addition to supervising military personnel and local defenses, they also funded infrastructure, religious life, and cultural activities. Let's start with a snapshot from the western border. A 1381 stele inscription from Minzhou garrison 岷州衛 (today's Min county, which is now part of Dingxi city 定西市 in southwestern Gansu province) relates that on the emperor's orders, military commanders mobilized several tens of thousands of soldiers to construct city walls, four gates, "war towers," and several hundred watchtowers. They also established granaries, collected "more than 500,000 piculs of grains," set up three military farms, opened "more than 8,000 *mou* (1,120 acres) of land and harvested 10,000 *shi* (31,000 bushels) of cotton. Three years later, Minzhou garrison authorities received an order to manufacture "several million" bricks to construct brick faces for the garrison walls' four gates.⁵¹ A 1383 inscription inscribed on a bronze bell to commemorate the establishment of the Minzhou Regional Military Commission of Military and Civilian Households and the completion of the garrison walls mentions more than two hundred men by name and title but not a single civil official.⁵² Such examples remind us that the face of the Ming state was not limited to civil authorities.

⁴⁸For perhaps the most famous instance of a Ming civil official appointed to pursue military campaigns, see Leo Shin, "The Last Campaigns of Wang Yangming," *T'oung-pao* 91.1-3 (2006), 101-28.

⁴⁹Filiapiak, "The Effects of Civil Officials"; Swope, *Military Collapse*.

⁵⁰Exceptions for the Ming period include Geiss, "Peking under the Ming"; Luo Xiaoxiang, "Soldiers and the City"; Robinson, *Bandits*; Szonyi, *The Art of Being Governed*.

⁵¹*Minzhouwei jiancheng beiwen* 岷州衛建城碑文, transcribed in Wu Mu 武沐, "Minzhouwei: Mingdai xibei bianfang weisuo de suoying" 岷州衛: 明代西北邊防衛所的縮影, *Zhongguo bianjiang shidi yanjiu* 中國邊疆史地研究 2 (2009), 31-32.

⁵²Wu Mu, "Minzhouwei," 32-34.

Military commanders' influence was especially pronounced along the borders, when they were the state's most important representatives at the local and regional levels. Donor inscriptions from Yuzhou guard 蔚州衛 (near today's Zhangjiakou 張家口) show that from the fifteenth to seventeenth centuries, military officers routinely worked with magistrates to raise funds to maintain city walls, the City God Temple, the Confucian Temple, the Confucian Academy, and the Jade Emperor Temple.⁵³ Elsewhere along the northern border in Yansui 延綏, military officers similarly worked with civil officials in the creation, expansion, and maintenance of both irrigation infrastructure and religious sites.⁵⁴ The same can be said of another strategic garrison city, Xuanfu, where military officers were instrumental in the construction and repair of city walls, Confucian academies, Buddhist and Daoist monasteries, and pavilions.⁵⁵

Military officers' prominence was not restricted to the northern border. In 1387, an assistant commander in Jinshan garrison 金山衛, located near today's Shanghai, built a City God Temple just east of the garrison headquarters, and in the fifteenth century, military officers installed statues, constructed additional halls, and added gates. Other, presumably smaller, City God Temples were built in battalion forts subordinate to Jinshan garrison. As a 1491 commemorative account put it, "wherever there is a garrison, there are walls, moats, and a deity to oversee them." Temples for Battle Pennants, the Celestial Consort, and the True Warrior were constructed in the garrison and subordinate forts.⁵⁶ Military officers were the predominant patrons in temples dedicated to the deity of battle pennants, (a dynastic rather than a local cult), which were found in most garrisons.⁵⁷ Far to the southwest in today's Dali 大理, a battalion commander (*zongqi* 總旗) revived a long abandoned monastery, contributing funds and convincing other officers to donate lands to maintain the monastery.⁵⁸

In at least four ways, ignoring military institutions means distorting the reality of Ming governance. First, military institutions such as hereditary households and garrisons formed a key element of local governance and municipal life that is often neglected. Second, because military and civilian populations often shared the same physical space, military and civil administrators interacted on a regular if not entirely happy basis. Third, both civilian and military personnel attempted to use jurisdictional interstices to advance their interests. Finally, attention to the place of the military officers

⁵³Deng Qingping 鄧慶平, "Weisuo zhidu bianqian yu jiceng shehui de ziyuan peizhi" 衛所制度變遷與基層社會的資源配置, *Qiushi xuekan* 求是學刊 34.6 (2007), 151, 153.

⁵⁴*Yansui zhenzhi* 延綏鎮志 (rpt. Shanghai: Shanghai guji chubanshe, 2011), *juan* 2, 161; *juan* 4, 275–80.

⁵⁵*Xuanfu zhenzhi* 宣府鎮志 (rpt. *Nanjing tushuguan guben shanben congkan* 南京圖書館孤本善本叢刊, Beijing: Xianzhuang shuju, 2003), *juan* 10, vol. 6.

⁵⁶*Jinshan weizhi* 金山衛志, *juan* 2 (*Shanghai tushuguan cang xijian fangzhi congkan* 上海圖書館藏稀見方志叢刊, Beijing: Guojia tushuguan chubanshe, 2011), 30.753–64.

⁵⁷Hebeisheng wenwuju changcheng ziyuan diaochadui 河北省文物局長城資料調查對, ed., *Hebeisheng Mingdai changcheng beike jilu* 河北省明代長城碑刻輯錄 (Beijing: Kexue chubanshe, 2009), 2.438–41. The general Qi Jiguang 戚繼光 (1528–88) composed reports and prayers to the deity of military. See Qi, *Zhi zhi tang ji* 止止堂集 (rpt. Beijing: Zhonghua shuju, 2001), 212–14, 193–95. On the banner cult, see Yamamoto Sakura 山本さくら, "Mindai no kitōbyō: chihōshi ni okeru kitōbyō no kōsatsu" 明代の旗纛廟—地方志における旗纛廟の考察, *Shigaku ronsō* 史学論叢 34 (2004), 58–74.

⁵⁸"Chongxiu Bai XX tang shenmiaojibei" 重修白XX堂神廟堂記碑, in Zhang Shufang 張樹芳, *Dali congshu jinshi pian* 大理叢書金石篇 (Beijing: Zhongguo shehui kexue chubanshe, 1993), vol. 1, 125–26.

and other personnel in municipal life broadens and deepens our understanding of urban history during the Ming by adding new social actors and new manifestations of state authority.

MOVEMENT AND TRANSFORMATION

During the Ming period, military institutions frequently moved and transformed individuals and communities. In some cases, this directly resulted from deliberate state policies, such as coercive resettlement to populate wartorn regions or establishing border garrisons to integrate new subjects into the polity. In other cases, this was the secondary consequence of dynastic measures, such as changes in relocated military communities and the regions that hosted them. The following section shows how military institutions moved people and transformed identity.

Despite the founding emperor's commitment to social stability rooted in self-supporting rural communities, the early Ming period was an age of transformative movement and migration. Military institutions played a central if underappreciated role. As a result of first the widespread warfare during the Yuan-Ming dynastic transition of the 1350s and 1360s and then the destructive civil war of 1398–1402 that brought the Yongle emperor (Zhu Di 朱棣, r. 1403–24) to the throne, much of North China experienced widespread population loss and economic depression. To repopulate such regions, the Ming state relocated approximately two million subjects over the course of several decades.⁵⁹ Military garrisons served as the single most important institutional vehicle through which these people were resettled.

Far to the southwest, the Ming state also forcibly relocated as many as 270,000 military households to garrison Yunnan, setting in motion permanent changes in the economy, culture, and political status of what had been a distant border region and the rise of a Yunnanese identity.⁶⁰ The Ming state used military personnel and institutions to integrate Yunnan more tightly into the Ming polity. The campaign to win Yunnan directly influenced neighboring Guizhou, where large numbers of Ming military personnel were organized into twenty-four garrisons and sent to open agricultural lands, which would contribute to the wider goal of securing control of the southwest.⁶¹ Such demographic transformations produced broad and lasting consequences.

Coercive, state-driven resettlements reshaped families, communities, and culture. Large-scale relocations often resulted in enclaves of people whose language, clothing, social customs, and religious practices differed from the local majority. To give just one example, soldiers and their families who manned the Ming outposts (*tunzhai*

⁵⁹Xu Hong 徐泓, "Ming Hongwu nianjian de renkou yixi" 明洪武年間的人口移徙, Zhongyang yanjiuyuan sanmin zhuyi yanjiusuo 中央研究院 三民主義研究所, ed., *Diyijie lishi yu Zhongguo shehui bianqian (Zhongguo shehuishi) yantaohui* 第一屆歷史與中國社會變遷 (中國社會史) 研討會 (Taipei: Zhongyang yanjiuyuan sanmin zhuyi yanjiusuo, 1982); "The Internal Migration Policy during the Early Ming Period," *Guoli Taiwan daxue wenshizhe xuebao* 國立台灣大學文史哲學報 36 (1989): 51–76.

⁶⁰Lu Ren, *Bianqian yu jiaorong*. Discussion of the estimate of 270,000 military households appears on 36–48.

⁶¹Wu Bin 吳斌, "Shixi Mingdai Guizhou juntun ji tunbaoren de xingcheng" 試析明代貴州屯田及屯堡人的形成, *Guizhou shehui kexue* 貴州社會科學 10 (2008), 129–30.

屯寨) (which in time become hamlets) under the jurisdiction of Hezhou garrison 河州衛 (in western Shaanxi during the Ming period) likely introduced elements of religious practices such as the cults of the Dragon King (*Longwang* 龍王), Wenchang 文昌, and Erlang 二郎 into highland Tibetan communities.⁶² Recent regional studies have begun to trace similar issues of cultural transmission through garrisons in many parts of the empire.

Relocations directly influenced families' prospects and strategies to secure prosperity, such as marriage alliances. In 1368, Zhao Huijing 趙惠敬, then an infant, accompanied her parents from Dongchang 東昌, Shandong, to Yuzhou 蔚州 (near today's Zhangjiakou) on the northern border. In time her family decided on a marriage alliance with a family that had fled from Henan during the chaotic 1350s or 1360s to Dongchang, from whence they too had been moved to Yuzhou to serve in the local garrison. Under the banner of the Prince of Yan (the future Yongle emperor), the young bride's husband, Zhu Zhen 朱真, saw combat from the northern border at Datong to south of the Yangzi River and back, winning a series of promotions culminating in his becoming Vice Commander of a Fengyang 鳳陽 garrison. His son (Zhu Qian 朱謙) inherited his post and ended up serving in the military detail of the Yongle emperor's grandson, the future Xuande emperor, perhaps when the prince was undergoing military training in Fengyang. Later, in recognition of his meritorious service while on campaign and then during 1440s as a commander in Wanquan 萬全 garrison (Xuanfu), Zhu Qian was eventually promoted to Assistant Commissioner-in-Chief. These assignments may help explain why Zhu Qian married his daughters to officers in the capital garrisons and his granddaughters to officers from more local garrisons.⁶³

Such examples illustrate both spatial and social connections. Families of the officer corps often married amongst each other, especially for the first several generations after relocation to a new home. Garrison commander was both a military rank and a social status. Members of the merit aristocracy, especially those who had originally gained their privileged standing through military service to the dynasty, often married other families from the merit aristocracy or those from the households of military officers.⁶⁴ In time, however, the lines between officer and soldier households on the one hand, and between transplanted military and local civilian households on the other, blurred as intermarriage became more common.⁶⁵

In addition to the massive relocations of the dynasty's early decades and the use of garrisons to integrate new communities into the Ming polity, other military institutions regularly put men into motion on a more short-term basis. Perhaps the most obvious is wartime mobilization. Like many of its predecessors the Ming state possessed considerable administrative capacity, which allowed it to mobilize large armies and transport them great distances, both within the empire and beyond, as the campaigns in northern Vietnam and northern Korea showed in the early fifteenth and late sixteenth centuries, respectively.

⁶²Xianba 先巴, "Mingdai weisuo zhidu yu Qinghai gaoyuan tunzhai wenhua de xingcheng" 明代衛所制度與青海高原屯寨文化的形成, *Qinghai minzu daxue xuebao* (shehui kexueban) 青海民族大學學報 (社會科學版) 36.3 (2010), 89–93.

⁶³Luo Hengxin, *Jue fei ji*, 4.47a–49a (*Beijing tushuguan guji zhenben congkan*, 103.135–36).

⁶⁴Luo Hengxin, *Jue fei ji*, 4.4b–5a (*Beijing tushuguan guji zhenben congkan*, 103.114).

⁶⁵Szonyi, *The Art of Being Governed*.

Several other enduring institutions put men into periodic motion. First, especially during the early Ming period, soldiers received their monthly wages at granaries located in their garrison of registration. When soldiers were deployed, for instance to the northern border or to fight in the south, someone had to travel to pick up their wages, which if paid in grain, were cumbersome and costly to transport.⁶⁶ Second, the state mandated that soldiers from garrisons in northern China report to the capital each spring and fall for regularly scheduled training. In 1426, for instance, 160,000 troops rotated through Beijing; a century later the number was perhaps half that. Officials complained that these soldiers were ill disciplined and often preyed on local civilian populations.⁶⁷ Third, like their better-known civil counterparts, military examinations sent young men to the capital to demonstrate their competence to hold imperial posts—in this case, to succeed to military appointments, sometimes inspiring poems of parting that marked the occasion.⁶⁸ Finally, like many previous dynasties, the Ming state exiled convicts, from both military and civilian households, for criminal and political offenses to serve in military units, carefully distinguishing among nearby garrisons, border garrisons, distant border garrisons, miasmatic regions, beyond the passes, and extremely distant units. Total numbers are unclear, but the prominence of military exile in fifteenth and sixteenth century compilations of legal statutes strongly suggests that it was a familiar feature of Ming life.⁶⁹ It was sufficiently obvious that in the sixteenth century, based on his sojourn in Guangzhou, an outsider like the Portuguese Dominican friar Gaspar da Cruz (1520–70) referred repeatedly to “certain condemned criminals wearing red caps, who are sentenced to serve as men-at-arms in the frontier regions.”⁷⁰

In addition to moving those already within dynastic borders, the Ming court used military units and titles to transform communities and individuals into dynastic subjects, a process that often institutionalized ethnic difference. Let us look at a few illustrative examples from 1371, the dynasty’s fourth year. First, several former Yuan commanders arrived at Dongsheng 東勝, along the northern border, where they offered their allegiance to the Ming (or “surrendered,” as Ming period documents put it). There, the Ming state established five battalions and 42 companies under the command of former Yuan officers.⁷¹ At nearly the same time, it similarly created several battalions along the western border to integrate Tibetan leaders and their communities who transferred their allegiance to the Ming dynasty.⁷² In a final example from 1371, the vice commander

⁶⁶Okuyama Norio 奥山憲夫, “Mingun no kyūyo shikyū ni tsuite—Seitō-Keitai ki o chūshin ni shite” 明軍の給と支給について—正統—京泰期を中心にして, in *Wada Hironori kyōju koki kinen Min Shin jidai no hō to shakai* 和田博徳教授古希記念・明清時代の法と社会 (Tokyo: Kyūko shoin, 1993), 133–52.

⁶⁷Peng Yong 彭勇, *Mingdai banjun zhidu yanjiu: yi jingcao banjun wei zhongxin* 明代班軍制度研究：以京操班軍為中心 (Beijing: Zhongyang minzu daxue chubanshe, 2006); Kawagoe Yasuhiro 川越泰博, *Mindai Chūgoku no gunsei to seiji* 明代中国の軍制と政治 (Tokyo: Kokusho kankōkai), 117–230; Robinson, *Bandits*, 39, 62–63.

⁶⁸Luo Hengxin, *Jue fei ji*, 8.8a (*Beijing tushuguan guji zhenben congan*, vol. 103, 197).

⁶⁹Wu Yanhong 吳艷紅, *Mingdai chongjun yanjiu* 明代充軍研究 (Beijing: Shehui kexue wenxian chubanshe, 2003), 14, 51–61.

⁷⁰See *Tractado das cousas da China*, translated in *South China in the Sixteenth Century*, edited by Charles Boxer (Second Series, no. CVI, The Hakluyt Society, 1953), 204, 207, 208.

⁷¹*Ming Taizu shilu* 明太祖實錄, 60.7a–b, 1179–80 洪武四年正月癸卯.

⁷²*Ming Taizu shilu*, 60.6b–7a, 1178–79 洪武四年正月癸卯.

of Wujing Garrison 武靖衛, Budnara 卜納刺, brought his former subordinates to the capital in Nanjing, where they offered horses to the throne.⁷³ Budnara was a Chinggisid noble and distant descendant of Qubilai who had held the title of Prince of Wujing 武靖王 under the Yuan dynasty. In 1371, he transferred his allegiance to the Ming dynasty, which created the Jingwu garrison in Hezhou 河州 (southeast of today's Lanzhou 蘭州), where he had been based.⁷⁴ Budnara became an intermediary between the Ming dynasty and men outside the polity who wished to establish alliances.

Perhaps the best-known example of the Ming court using military titles and units to make individuals and communities administratively legible occurred in today's Liaoning, Jilin, and Heilongjiang provinces. The Ming court appointed Jurchen leaders as Commanders, Vice Commanders, and Assistant Commanders (complete with letters of patent and official seals), and labeled hundreds of Jurchen communities as the Jianzhou garrison, Maolian garrison, and so on.⁷⁵ Likewise, Regional Military Commissions were nominally established along the western border and local leaders given military titles.⁷⁶

In distant border regions, garrisons often represented the main form of Ming dynastic authority. Their success hinged on integration of non-Chinese populations. After several military campaigns in today's northwest Sichuan province, in 1379 the founding Ming emperor ordered the establishment of military outposts in Songpan 松潘, a mountainous region located along a key transportation route between the Tibetan plateau and Ming territory. Distant from major Chinese populations, lacking arable lands for farming, and home to a complex mix of Tibetan, Qiang, Mongolian, Miao, and Hui communities, Songpan posed enduring challenges to the Ming court. To reduce the logistical difficulties of supplying Songpan garrisons, the Ming state established new postal relay stations and constructed a series of stockades along the main highway connecting Songpan to Sichuan. To build suspension bridges in mountainous terrain, open roads, and maintain patrols, Songpan garrison authorities relied on local manpower. Garrison authorities also contracted local Tibetan and Qiang leaders as protection to ensure the smooth flow of grain supplies and the safety of tribute missions passing through the region. Such arrangements, however, suffered periodic disruptions, occasionally resulting in suppression campaigns by Ming forces. Such campaigns in turn could not succeed without support from at least a portion of local Tibetan, Qiang, or Miao communities, who supplied grain, horses, guides, translators, soldiers, and porters. The Ming state attempted to secure local support through formal recognition of locally prominent families, some of whom had held power during the Mongol period and some of whom had leveraged

⁷³*Ming Taizu shilu*, 62.1b, 1196 洪武四年三月戊子. This tentative Mongolian reconstruction follows a suggestion by Christopher Atwood, who notes that Budha was a standard Mongolian transcription of the Sanskrit word for Mercury and that Budnara probably meant "protected by Mercury" (personal communication July 24, 2016).

⁷⁴Hok-lam Chan 陳學霖, "Mingchu dudu Ning Zheng fuzi zhuanji jibu" 明初都督甯正父子傳記輯補, in idem, *Mingdai renwu yu chuanshuo* 明代人物與傳說 (Hong Kong: Zhongwen daxue chubanshe, 1997), 44–46.

⁷⁵Henry Serruys, *Sino-Jürceid Relations during the Yung-lo Period* (1403–1424) (Wiesbaden: Harrassowitz, 1955); Morris Rossabi, *The Jurchens in the Yuan and Ming* (Ithaca: China-Japan Program, Cornell University, 1982).

⁷⁶Tan Qian, *Guo que*, juan 22, 2.1466 宣德九年四月癸丑.

the needs and resources of the Ming state to improve their standing.⁷⁷ In border regions like Minzhou, the dynasty favored military garrisons as the institutional vehicle to incorporate new allies.⁷⁸

Likewise, far to the northeast in Liaoyang (in today's Liaoning province), Dongning garrison 東寧衛 had been used by the Ming state to expand dynastic control and integrate new subjects in the fourteenth century.⁷⁹ Its staff of multi-lingual Mongol, Jurchen, and Koreans facilitated diplomatic practice,⁸⁰ as garrisons along the northern and western borders were often the first point of contact between neighboring polities and the Ming state. More than two centuries later, Ming authorities continued to differentiate personnel along ethnic lines, which directly influenced wages and tax status. Early in the seventeenth century, a regional inspector serving in Liaodong identified three varieties of military officers in the region: Han officers 漢官, local officers 土官, and Tatar officers 達官. Han officers had been deployed to Liaodong from other garrisons within the empire; he defined local officers as Koreans who had submitted to the dynasty and were under the jurisdiction of Dongning garrison 東寧衛; Tatar officers were men from Jurchen lands who had submitted to the dynasty. In the regional inspector's view, growing numbers of men passed themselves off as members of local officers' households to exploit exemptions from military service and miscellaneous *corvée* duties. Tatar officers' household had also enjoyed exemptions from *corvée* labor and land taxes. The regional inspector felt that that Tatar officers' illegal use of soldiers for private labor was even more egregious than that of Chinese and local officers.⁸¹

The point here is that the Ming state categorized its officers in Liaodong according to ethnicity, that such categories determined salaries, taxes, and *corvée* labor responsibilities, and that differences were institutionalized (and exploited) for well over two centuries. Even when our regional inspector attempted to reduce distortions and abuses, he suggested neither the abolition of three different categories of officers nor the complete harmonization of their fiscal status within the dynasty. At the same time, we again see how both civilian and military personnel attempted to turn imperial institutions to their own advantage. The regional inspector may have denounced such efforts as corrupt, but garrison populations likely felt it only sensible to make good use of the potential advantages conferred by their position within imperial institutions.

⁷⁷Zou Libo 鄒立波, "Mingdai Chuanxibei de weisuo, bianzheng yu biandi shehui" 明代川西北的衛所, 邊政與邊地社會, *Xizang daxue xuebao* (shehui kexueban) 西藏大學學報 (社會科學版) 27.1 (2012), 102–7; Ran Guangrong 冉光榮, "Lüeshu Mingwangchao zai Songpan Zangqu de tongzhi cuoshi" 略述明朝在松潘藏區的統治措施, *Zhongguo lishi wenwu* 中國歷史文物 (1986), 79–84; Ren Shumin 任樹民, "Mingdai Songpanwei 'fan ren'" 明代松潘衛“番人”, *Xizang yanjiu* 西藏研究 1 (2001), 80–84.

⁷⁸On efforts to integrate local men in Shaanxi, including Minzhou, into military garrisons, see Sō Inbōm 徐仁範, "Eijō to eijogun—gunshi no senjū hōhō o chūshin ni" 衛所と衛所軍—軍士の選充方法を中心に, *Mindaishi kenkyū* 明代史研究 27 (1999), 5–29.

⁷⁹Kawachi Yoshihiro 河内良弘, "Mindai Ryōyō no Tōneiei ni tsuite" 明代遼陽の東寧衛について, *Tōyōshi kenkyū* 東洋史研究 44.4 (1986), 677–715.

⁸⁰David Robinson, "Chinese Border Garrisons in a Transnational Context: Liaodong under the Early Ming Dynasty," in *Chinese and Indian Warfare—From the Classical Age to 1870*, edited by Peter Lorge and Kaushik Roy (Routledge, 2015), 57–73.

⁸¹*Ming Shenzong shilu* 明神宗實錄, 441.13b–14a, 8309–91 萬曆三十五年十二月癸未。

In the capital too, Mongol and Jurchen men were prominent, closely tied to military institutions, serving in the elite Brocade Guard and holding prestigious positions within the upper echelons of the military administration.⁸² Designated as Tatar officers in Ming bureaucratic documents, during the fourteenth and fifteenth centuries, such men enjoyed preferential treatment in terms of wages, housing, titles, and tax exemptions.⁸³ Thus, from the most distant borders to the empire's center, Ming military institutions integrated non-Chinese subjects and often perpetuated their distinct ethnic identities as an element of dynastic governance.

If we broaden our view even further, we can see how the Ming dynasty used military institutions in relations with the rest of Eurasia. During the thirteenth and fourteenth centuries, the Mongol empire had reshuffled ethnic and political identities and communities on a continental scale.⁸⁴ One such example was communities formed around military units created by Mongol fiat and composed of diverse peoples, the *tümen*, a unit of "ten-thousand" or myriarchy (萬戶 Chin. *wanhu*; Kor. *manho*) as it appears in East Asian sources. Such units often survived after Mongol power collapsed. In West Asia, late in the thirteenth century, a group of ten thousand households or tents, the nucleus of the Noghai *ulus*, migrated en masse from the Pontic steppe to Anatolia. This may have been the primitive nucleus of the early Ottoman state.⁸⁵ In the fourteenth century, Tamerlane (Temür/Timur) drew on vestiges of similar communities in building his nascent empire.⁸⁶ Tamerlane himself started his career as the hereditary *amūr-i tümen* of Kesh.⁸⁷ During the late fourteenth century, the Baiyi 百夷 of the Dai polity in Yunnan also used units of ten thousand.⁸⁸ The early Ming government too drew on Mongol precedents to organize its own military population into companies (units of one hundred households), battalions (units of one thousand households), and garrisons.⁸⁹ A portion of Timurid personnel who traveled on missions to China received military titles as a way to make them more legible to the Ming state.⁹⁰ Thus, the Ming court exploited commensurabilities in organization and identity developed under Mongol rule and shared

⁸²Henry Serruys, "Foreigners in the Metropolitan Police during the Fifteenth Century," *Oriens Extremus* 8.1 (1961), 59–83.

⁸³David Robinson, "Images of Subject Mongols under the Ming Dynasty," *Late Imperial China* 25.1 (2004), 75–84.

⁸⁴Thomas Allsen, "Population Movements in Mongol Eurasia," in *Nomads as Agents of Cultural Change: The Mongols and their Eurasian Predecessors*, edited by Reuven Amitai and Michal Biran (Honolulu: University of Hawai'i Press, 2015), 119–51.

⁸⁵Colin Heywood, "Filling the Black Hole: The Emergence of the Bithynian Atamanates," in *The Great Ottoman, Turkish Civilisation*, edited by Kemal Çiçek, editor-in-chief (Ankara: Yeni Türkiye, 2000), volume 1, 113.

⁸⁶Under Tamerlane's son and successor, Shahrukh, "past and present commanders of *tümen*s" occur in a contemporary list of prominent commanders. See Beatrice Forbes Manz, *Power, Politics and Religion in Timurid Iran* (Cambridge: Cambridge University Press, 2007), 15–16n5.

⁸⁷Beatrice Forbes Manz, *Rise and Rule of Tamerlane* (Cambridge: Cambridge University Press, 1989), 31; Jos, Gommans, "The Warband in the Making of Eurasian Empires," in *Prince, Pen and Sword: Eurasian Perspectives*, edited by Maaik van Berkel and Jeroen Duindam (Leiden: E.J. Brill Publishers, forthcoming, 2017).

⁸⁸Qian Guxun 錢古訓, *Baiyi zhuan jiaozhu* 百夷傳校注 (Kunming: Yunnan renmin chubanshe, 1980), 68.

⁸⁹Taylor, "Yüan Origins."

⁹⁰Zhang Wende 張文德, *Ming yu Tiemuer wangchao guanxishi yanjiu* 明與帖木兒王朝關係史研究 (Beijing: Zhonghua shuju, 2006), 109–11.

across much of eastern Eurasia to facilitate the transformation of individuals and communities into elements of the dynastic polity.

To recapitulate the impact of military institutions on mobility and social transformation, the Ming court uprooted millions of soldiers and their families and transplanted them to new places. The process led to conflict and tension, both between newly created garrison communities and locals on the one hand and among those within the garrison community. Such resettlements often resulted in enclaves of language and custom, but the broader, long-term consequence was what Chinese scholars call “localization” (*bentuhua* 本土化 or *tuzhuhua* 土著化) and Szyoni terms reterritorialization.⁹¹ Through extended interaction, not only did relocated garrison communities undergo transformation but local society and culture also changed. At the same time, the Ming state used military organization and titles to integrate new subjects into the dynasty and make men of neighboring polities more understandable or “legible,” another sort of transformation. Thus, again we have seen that attention to military institutions helps place the Ming dynasty in global perspective and sharpens our understanding of the state’s reach and its complex interaction with Chinese society.

FINANCES

Feeding and supplying military forces has been an enduring challenge of central importance throughout history.⁹² This section focuses on the Ming state’s efforts to finance its armies, most especially along the northern border where it had committed itself to a large-scale, long-term military presence. Consideration of military finances provides another way to view the Ming dynasty in a comparative and global perspective. Further, it sheds light on the state’s capacity to mobilize resources, often by appealing to individuals’ self-interest. This section explores how garrison personnel exploited their status as imperial agents to turn military institutions to their own advantage.

Feeding the Northern Border

The financial demands of the Ming military were relentless. Most unusually for Eurasia of the time, the Ming state fed its soldiers in both wartime and peacetime, even though their numbers far outpaced those of European armies. Although we in the China field may take for granted that governments maintain large standing armies supported with robust administrative capacities, the scale of Ming armies and their supporting logistical infrastructure were exceptional in global terms of the time. In 1567, when the Duke of Alba suppressed a revolt in the Netherlands, his force of approximately 10,000 men created a great impression.⁹³ During the sixteenth and seventeenth centuries, the numbers of men under arms in Western Europe may have increased ten- or twelvefold,

⁹¹Szyoni, *The Art of Being Governed*.

⁹²For an influential set of essays on military logistics, based on the historical experiences of Western Europe and the United States, see *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present*, edited by John Lynn (Boulder, San Francisco, and Oxford: Westview Press, 1993).

⁹³Martin Van Creveld, *Supplying War: Logistics from Wallenstein to Patton*, 2nd ed. (Cambridge: New York: Cambridge University Press, 2004), 5.

but France's peacetime army of 22,000 in 1626 was the largest in Europe.⁹⁴ Feeding armies in the field constitutes an enormous logistical challenge, and during those centuries it was common in Europe for such forces to eat off the land, taking what they needed by force. Undefended rural areas were the easiest prey and thus suffered most grievously.⁹⁵ In fact, some have argued that recurring rural destruction contributed to a concentration of manufacturing in better-defended urban areas in Western Europe, which in turn catalyzed the adoption of new technologies and machines, despite their capital-intensive nature.⁹⁶ The consequences of failing to provide adequate supplies of grain to men on the march, engaged in combat, and defending the border were grave. Plummeting morale and starvation not only severely reduced military efficacy in the field, and thus put territorial integrity in jeopardy, but could easily lead to mutiny, even rebellion, which could deeply compromise domestic political control.

To feed and pay soldiers on the northern border, the Ming state drew on historical precedents and experimented with new policies. State objectives stimulated private responses that alternatively satisfied and subverted dynastic goals. The net result was an infusion of wealth into what otherwise would have been a strategically central but economically marginal area. The acquisition, delivery, storage, and disbursement of grain and later silver stimulated dense networks of transportation, finances, administrative oversight, and personal contacts on a transregional level.

State encouragement of agricultural production by military personnel along the northern border had a long pedigree that dated back no later than the Qin dynasty (221–206 BCE). The early Ming version varied by region and time (more below), but the general outline was straightforward. The state assigned land to a portion of its soldiers along the northern border (as well as most of the empire but our focus here is the north). It also supplied seed, farm tools, and livestock necessary for plowing. Military personnel used state lands to produce grain to feed garrison populations, lowering costs to the general population.⁹⁷ According to the Ming government's official figures, such military farms produced prodigious amounts of grain each year.⁹⁸ In fact, military farmers seldom met ambitious state quotas. Based on the particulars of farming at the garrisons of Datong (in today's Shanxi province), one study concludes that local authorities submitted falsified reports with the tacit approval of the Board of Revenue.⁹⁹ The same study suggests that the aggressive pursuit of unrealistic production goals severely damaged the environment.¹⁰⁰

⁹⁴Frank Tallett, *War and Society in Early Modern Europe, 1495–1715* (London and New York: Routledge, 1992), 7–9. Parker (*Global Crisis*, 32) writes, "Perhaps one million men served simultaneously in the various armies and navies of seventeenth century Europe." He is, however, focusing on moments (or decades) of intensified military mobilization rather than standing armies.

⁹⁵Van Creveld, *Supplying War*, 5–17.

⁹⁶Jean-Laurent Rosenthal and R. Bin Wong, *Before and Beyond Divergence: The Politics of Economic Change in China and Europe* (Cambridge, Mass.: Harvard University Press, 2011), 99–128.

⁹⁷Liew, *Tuntian Farming*.

⁹⁸Terada Takanobu 寺田隆信, "Minunryō to tondenryō: Mindai ni okeru henshō no ichi sokumen (2)" 民運糧と屯田糧：明代における邊餉一側面, *Tōyōshi kenkyū* 東洋史研究 21.2 (1962), 210.

⁹⁹Zhang Jinkui 張金奎, *Mingdai weisuo junhu yanjiu* 明代衛所軍戶研究 (Beijing: Xianzhuang shuju, 2007), 102–3.

¹⁰⁰Zhang Jinkui, *Mingdai weisuo junhu yanjiu*, 102–3.

Although the Ming founder may have apocryphally boasted that military garrisons cost his subjects not a single kernel of grain, the limited productivity of farmlands (shorter growing seasons, less productive often alkaline soil, limited precipitation) along the northern border guaranteed structural grain shortages that had to be offset by the delivery of grain from more fertile regions of the empire. To appreciate the scale of demand for grain, it helps to keep in mind the number of soldiers stationed along the northern border. One study offers the following estimates: mid-fifteenth century, 380,000 men; mid-sixteenth century, 472,000 men; during the late sixteenth and early seventeenth centuries close to 600,000 men.¹⁰¹ Adding family members brings the total number to between two and three million people. To put such numbers (and thus the scale of the northern border market) in perspective, in 1400 three million was the population of the British Isles, and in 1500 the entire population of Europe was approximately sixty million.¹⁰²

The dynasty used several methods to ensure the delivery of sufficient grain to the northern border. During the late fourteenth and most of the fifteenth centuries, the primary burden of delivery fell on common subjects (“people’s delivery” [*minyun* 民運]), while “merchants’ delivery” (*shangyun* 商運) served as a supplemental source.¹⁰³ As incentives, the former enjoyed tax waivers, and the latter received certificates or vouchers for salt from state-run salt monopolies, which was sold at sufficient profit to offset the cost of transporting grain. Figures from the late fifteenth and early sixteenth centuries suggest that anywhere between 75 percent and 90 percent of grain along the northern border was delivered from elsewhere.¹⁰⁴ The bulk of the grain delivered to the northern borders was grown in the northern provinces of Shandong, Shanxi, Shaanxi, Henan, and the Northern Metropolitan Region. Not the dynasty’s most fertile regions, they were, however, closest to the border. This mattered, because the transportation costs of overland delivery of bulk goods like grain were high.

To stimulate the delivery of grain to the northern border, the state appealed to merchants’ profit motive. As noted above, the state issued certificates to merchants redeemable for salt at dynastic salt storage sites when they delivered grain to designated storage facilities on the northern border. Such programs were sensitive to merchant demands. The Ministry of Revenue periodically met with senior civil and military officials to deliberate about exchange rates, reflecting the importance of such programs and the dynasty’s need to respond to changing conditions.¹⁰⁵ In 1451, the state reduced the amount of grain merchants needed to deliver for a single salt certificate by 30 percent, because merchants had almost completely ceased to participate in the program, claiming that costs were too high.¹⁰⁶ Not only did the capital ministries attempt to coordinate responses to “market conditions,” regional officials

¹⁰¹Wang Zunwang 王尊旺, *Mingdai jiubian junfei kaolun* 明代九邊軍費考論 (Tianjin: Tianjin chubanshe, 2015), 75–76. See charts, 1.1 and 1.2 (78–83) for breakdowns of individual commands.

¹⁰²Russell, *Population in Europe*, 25–71; Edward Peters, *Europe and the Middle Ages* (Englewood Cliffs: Prentice-Hall, 1989), 142.

¹⁰³Zhang Jinkui, *Mingdai weisuo junhu yanjiu*, 96–111.

¹⁰⁴Terada, “Minunryō to tondenryō,” 200.

¹⁰⁵*Ming Yingzong shilu* 明英宗實錄, 200.3b, 4248 景泰二年正月丁未.

¹⁰⁶*Ming Yingzong shilu*, 200.3a–b, 4247–48 景泰二年正月丁未.

repeatedly requested permission to either implement such programs or modify their terms to address local conditions. Significant differences emerged according to region, time, and conditions.

To slash delivery costs, merchants purchased land along the border and grew grain locally. Merchants also purchased grain grown by local producers. In both cases, merchants turned the grain over to border authorities to secure government salt certificates redeemable at imperial salt fields far to the south. In either scenario, merchants became deeply tied to an increasingly complex economic and agrarian environment. As Puk Wing-kin 卜永堅 writes, “Merchants were likely to deliver grain to northwestern border areas such as Shanxi province, to draw salt from eastern coastal areas such as Jiangsu province, and to sell salt in central areas such as Huguang province (present-day Hunan and Hubei). The salt business was a long-distance trade involving heavy costs, a long investment cycle, and strict bureaucratic supervision.”¹⁰⁷ What is often forgotten is that prime driver behind the entire process was the state’s need to pay northern border soldiers.

Perhaps the clearest indicator of the state’s commitment to such a goal is the annual subsidy paid in silver from the Taicang Treasury 太倉 located in the capital to military commands along the northern border. Established in 1443, the Taicang Treasury was the dynasty’s primary silver vault, handling the receipt of taxes received in silver bullion. Beginning early in the fifteenth century, silver exercised an important role in China’s growing commercial economy, including the finances of provisioning soldiers along the northern border. Beginning in the 1430s in more commercialized regions, the state began to accept a portion of tax payments in silver. In later decades, taxes and then corvée labor were increasingly commuted to silver payments, which in turn made possible annual silver payments from the central government to the northern border. This helped convert the northern border economy into what one historian calls “a massive military consumption zone,” which was characterized by the “large-scale development of exchange relations based on state needs” and which led to commercial urbanization.¹⁰⁸ Rather than tax grain being transported to the border, now silver—lots of silver—was delivered to the northern garrisons for disbursement to soldiers as salary to be used to purchase grain locally. However, silver without grain was useless. Before turning to grain, first let us briefly follow the silver trail.

Global historians know that in the late sixteenth century, China had become the world’s largest silver sink, attracting as much as half of all New World silver.¹⁰⁹ Far less appreciated is how much of that silver underwrote the Ming dynasty’s military expenses. From 1570 to 1577, the Taicang Treasury’s annual silver revenue nearly doubled from approximately 86,000 kg to more than 163,000 kg. Its silver deposits remained above 100,000 kg from the late 1570s until the dynasty’s end in 1644.¹¹⁰

¹⁰⁷Wing-kin Puk, *The Rise and Fall of a Public Debt Market in 16th-Century China* (Leiden and Boston: Brill, 2016), 23.

¹⁰⁸Terada Nakanobu, “Mindai ni okeru Hokuhen no beika mondai ni tsuite” 明代における北邊の米價問題について, *Tōyōshi kenkyū* 東洋史研究 26.2 (1967), 179.

¹⁰⁹Dennis Flynn and Arturo Giráldez, “Born with a ‘Silver Spoon’: The Origin of World Trade in 1571,” *Journal of World History* 6 (1995), 201–21. Japanese silver also made its way to China, especially during the second half of the sixteenth and early seventeenth centuries.

¹¹⁰William Atwell, “International Bullion Flows and the Chinese Economy circa 1530–1650,” *Past and Present* 95 (1982), 80, Table Two.

From the 1580s through the 1640s, the bulk of Taicang Treasury was spent on military expenditures, which consumed between 53 percent and 85 percent of the treasury's silver, with a few years rising as high as 97 percent.¹¹¹ Much of the silver went to the northern border. From the mid-fifteenth to the early sixteenth centuries the annual amount was usually under 500,000 taels. By the mid-sixteenth century, the annual subsidies had increased to approximately two million, and during the late sixteenth and early seventeenth centuries they were generally in the neighborhood of three to four million taels of silver.¹¹² Military crises resulted in temporary spikes that exceeded regular subsidies several times over.¹¹³ At the risk of overstating things, the emerging global economy in general and New World silver in particular helped fund China's military.¹¹⁴

The greatly expanded amount of silver flowing to the north during the late sixteenth and early seventeenth centuries provided powerful incentives to participate in the border economy. In fact, the flow of silver stimulated the growth of neighboring polities, including the rise of Nurhaci and his successors who unified Jurchen communities to found the Latter Jin and Qing dynasties.¹¹⁵ Historians' increasing attention to China has much improved our understanding of the emerging early modern global economy.¹¹⁶ Closer attention to military institutions will sharpen our understanding of both the Ming and global economies.¹¹⁷

Ming observers, however, focused on the domestic. The nexus of the northern border military institutions, commercial wealth, state finances, and political influence was clear. Already by 1497 a senior official in the Ministry of Revenue was warning a colleague who had just received an assignment to clean up abuses related to soldiers' salaries in Xuanfu (today's Xuanhua county, Hebei province): "Half of the grain and fodder along the northern border is managed by the relatives of the influential in the capital. You have never gotten along with their likes, and I am afraid that this assignment will end in disaster for you."¹¹⁸ In fact already by the mid-fifteenth century, civil officials

¹¹¹Lai Jiancheng 賴建誠, *Bianzhen liangxiang: Mingdai zhonghouqi de bianfang jingfei yu guojia caizheng weiji, 1531–1602* 邊鎮糧餉：明代中後期的邊防經費與國家財政危機, 1531—1602 (Hangzhou: Zhejiang daxue chubanshe, 2010), 46, chart 2.6.

¹¹²Terada Takanobu, "Mindai ni okeru henshō no ichi sokumen—kyōun nenreigin ni tsuite"—明代いおける邊餉一側面—京運年例銀について—, in *Shimizu hakase tsuitō kinen Mindaishi ronsō* 清水博士追悼記念明代史論叢, edited by Shimizu hakase tsuitō kinen Mindaishi ronsō hensan iinkai 清水博士追悼記念明代史論叢編纂委員會 (Tokyo: Daian, 1962), 278.

¹¹³Terada, "Mindai ni okeru henshō no ichi sokumen—kyōun nenreigin ni tsuite," 274, 277.

¹¹⁴Those who warn against overstating the relative importance of New World silver in the overall Chinese economy of the sixteenth and early seventeenth centuries will view such a claim with considerable skepticism.

¹¹⁵Iwai Shigeki 岩井茂樹, "Jūroku-jūshichi seiki no Chūgoku henkyō shakai" 十六十七世紀の中國邊境社會, in *Minmatsu Shinsho no shakai to bunka* 明末清初の社會と文化, edited by Ono Kazuko 小野和子 (Kyoto: Kyōto daigaku jinbun daigaku kagaku kenkyūjo, 1996), 625–59; "China's Frontier Society in the Sixteenth and Seventeenth Centuries," *Acta Asiatica* 88 (2005), 1–20.

¹¹⁶Flynn and Giráldez, "Born with a 'Silver Spoon'"; Andre Gunder Frank, *Reorient: Global Economy in the Asian Age* (Berkeley: University of California Press, 1998).

¹¹⁷Richard von Glahn's discussion of the Ming period in his magisterial *The Economic History of China from Antiquity to the Nineteenth Century* (Cambridge: Cambridge University Press, 2016) describes the grain-for-salt exchange system, the state's resettlement of the northern provinces, and silver's growing role but passes lightly over their ties to military institutions.

¹¹⁸"Xuanfu lue" 宣府略, *Quan bian lue ji san*, 全邊略記三. Cited in Terada, "Minunryō to tondenryō," 215.

were complaining that Buddhist monasteries and eminent families from the capital used their political connections to secure farmlands along the border to reap rich economic returns.¹¹⁹

Wartime pressures intensified ongoing challenges. As shown above, the Ming state's solutions to feeding soldiers stationed along the northern border profoundly influenced agriculture, transportation, tax structure, commercial policies, and economic development. In times of war, regardless of the region, more soldiers had to be raised, transported, housed, fed, and disciplined. Intensified logistical demands often led to the proliferation of surtaxes and forced contributions.¹²⁰ Supplies of food, fuel, pack animals, fodder, and more were often purchased locally in silver.¹²¹ Rumors of war along the northern border often sent the value of salt certificates spiraling.¹²² Given its need to deliver more grain to the north quickly, the state was forced to offer merchants better terms.¹²³ Similarly, grain prices along the northern border also spiked.

To raise grain, silver, or both to meet urgent needs such as famine relief or military campaigns, the Ming state implemented short-term measures. One program involved the voluntary contribution of rice, wheat, barley, or silver (which could be used to purchase such grains on the local market) in exchange for tax and corvée exemptions, official recognition as an exemplary imperial subject, official titles, and perhaps most commonly, status as a government student at the National Confucian Academy. Another reward was appointment as garrison officers, ranging from the relatively modest Garrison Jailer to Commander. In most cases, such appointments were titular, but sometimes they carried salaries, and occasionally they entailed substantive duties. Military households too made contributions in grain and silver. Through this program, they received gowns and belts of office, won promotions in rank, achieved tax and corvée labor exemptions, and secured exemptions from proficiency tests in archery and swordsmanship that qualified men to succeed to or maintain military appointments.¹²⁴

Some contemporary observers felt such programs not only eroded the quality of military and civilian personnel but also subverted proper social order as wealth trumped status gained through the civil examinations and appointment to the dynastic bureaucracy. Despite such grumblings, quiet acceptance of the pursuit of family and personal interest through state institutions seems to have been more common. The same strategy

¹¹⁹Terada, "Minunryō to tondenryō," 213.

¹²⁰Some complained that officials charged with suppressing coastal piracy in the mid-sixteenth century pocketed much of these surtaxes and exploited the chaos to extort "gold, jade, and jewels." See Kwan-wai So, *Japanese Piracy in Ming China during the 16th Century* (Michigan State University Press, 1975), 100.

¹²¹Hasegawa, "Provisions and Profits"; "War, Supply Lines, and Society." Hasegawa shows that some local economies, like parts of Korea, did not use silver, which presented army purchasers with additional challenges.

¹²²Puk, *Rise and Fall*, 89. In this instance, Puk is discussing black market price fluctuations.

¹²³Puk, *Rise and Fall*, 39.

¹²⁴Sō Inbōm 徐仁範, "Myōng chunggi ūi yōnnapje wa kunnyang chodar" 明中期的捐納制와軍餉調達, *Yōksa hakpo* 역사학보 164 (1999), 165–86; "Myōngdae Kajōng yōn'gan ūi Chaejōng chodar kwa yōnnapje" 명대嘉靖年間の 재정조달과 연납제, *Myōng Ch'ōngsa yōn'gu* 명청사연구 35 (2011), 187–225; "Myōngdae ūi yōnnapje wa kunho" 명대의捐納制와軍戶, *Yōksa hakpo* 역사학보 174 (2002), 141–70. On the military qualifying examinations, including exemptions, see Liang Zhisheng 梁志勝, *Mingdai weisuo wuguan shixi zhidu yanjiu* 明代衛所武官世襲制度研究 (Beijing: Zhongguo shehui kexue chubanshe, 2012), 283–324.

is evident when families invested economic resources to secure enhanced career prospects through purchasing examination eligibility and fast-track positions available through the Imperial Academy in the capital.¹²⁵ They were simultaneously demonstrating dynastic loyalty and advancing family interests. That the state in its various guises was a resource to be exploited was obvious to most social actors.¹²⁶ Government officials' challenge was to structure institutions in ways that simultaneously accommodated both dynastic and personal interests.

Imperial Institutions and Personal Interests

Military garrisons often served as economic incubators, attracting capital, mercantile skill, and consumers, which developed into local, regional, and transregional trade centers. Like the rest of southeastern coastal society, military personnel were often involved in smuggling, exploiting their local contacts and position within the imperial military to broker deals among pirates, merchants, and foreign traders.¹²⁷ One well-informed literatus with deep local connections complained that coastal garrison squad leaders prized their relationship with a well-known smuggler; they helped ship his goods and shamelessly kowtowed to him. Squad leaders from sea-forts, which were small, often relatively isolated bases located on the coast (originally intended to serve as the front line of coastal defenses), too, were frequently accused of acting as guides to smugglers and pirates. Senior officials lamented that units specially assigned to intercept pirates and smugglers at sea instead offered refuge to their ostensible prey.¹²⁸

Smuggling and piracy are terms we use to translate normative categories of behavior that the Ming government and a portion of educated men felt violated dynastic law and undermined the social order. It does not seem much of a stretch to say that many at the time accepted maritime trade and the profits it offered. Soldiers from coastal garrisons likely felt that the gifts and wealth they received for ignoring imperial prohibitions or for helping men who were often acquaintances or even family members were well deserved. Similarly, Ming sources frequently use derogatory terms such as “powerful magnates,” “influential houses,” and “the well-connected” to describe elites along the northern borders. Such expressions usually referred to military officers but could also denote imperial eunuchs or civil officials responsible for investigating salaries, land tenure, and the construction and maintenance of fortifications. These men used their positions and access to resources to pursue individual and family interests.

¹²⁵Wu Yue 伍躍, *Chūgoku no ennō seido to shakai* 中國の捐納制度と社會 (Kyoto: Kyōto daigaku gaku-jutsu shuppankai, 2011), 1–77; *Zhongguo de juanna zhidu yu shehui* 中國的捐納制度與社會 (Nanjing: Jiangsu renmin chubanshe, 2011), 1–73.

¹²⁶Wu Yue, “Ming Qing Zhongguo shehui chengyuan de zhidu xuanze” 明清中國社會成員的制度選擇, *Mingdai yanjiu* 明代研究 26 (2016), 1–41.

¹²⁷James Geiss, “Chia-ching reign,” in *The Cambridge History of China, volume 7, Part One*, edited by Denis Twitchett and Frederick Mote (Cambridge: Cambridge University Press, 1988), 490; So, *Japanese piracy*, 45, 61–62.

¹²⁸Yamazaki Takeshi 山崎岳, “Junbun Shu Gan no mita umi—Mindai Kasei nenkan no enkaieijō to ‘Daiwakō’ zenya no hitobito—” 巡撫朱納の見た海—明代嘉靖年間の沿海衛所と「大倭寇」前夜の人々—, *Tōyōshi kenkyū* 東洋史研究 62.1 (2003), 13–14.

Their activities varied widely, but might be separated into a few basic categories. First, border elites often seized state assets, both immovable and movable. The former included military farm and pasturelands. The latter included horses, grain, fodder, and weapons, ranging from bows, arrows, and swords to firearms and gunpowder, which were often sold or traded, both to local consumers and to Mongols, Jurchens, and Timurid envoys and merchants. A second major way that border elites turned military institutions to their own advantage was using military personnel as labor in farming, construction, hunting, fishing, lumbering, collecting ginseng, mining, and operating stone quarries, mills, shops and inns. Finally, border elites engaged in “white-collar crime.” They embezzled imperial funds earmarked for soldiers’ salaries and benefits, rewards for meritorious military service, and fortifications. They also padded the military rolls to claim extra funds from the central government, and released soldiers from military service in exchange for a fee.¹²⁹

Ming sources almost universally claim that the powerful’s use of personnel was coercive and exploitive, but considerable variation characterized relations between border elites, especially military officers, and their subordinates. Some military personnel suffered exploitation by their superiors, but contemporaries likely often perceived relations in terms of patron and client, arrangements that favored the powerful over the weak but still involved responsibilities, even advantages, on both sides. For instance when in 1431 a prominent military commander sent two dozen men, each with two mounts, from Ningxia in the northwest to the thriving coastal port of Hangzhou (nearly 2,000 km away) to purchase goods with silver, he presumably extended them a modicum of trust.¹³⁰ In this case and others, such men seem to have been acting as agents of a well-connected patron.

The examples above suggest first that military institutions acted as broad frameworks that shaped much social and commercial interaction and second that people understood those frameworks as resources to be used. Although state records depict violation of dynastic law as evidence of moral turpitude or betrayal of the polity, soldiers who patrolled the coasts and officers who defended the northern border likely believed that the pursuit of personal profit and dynastic allegiance were not antithetical. The following section considers another instance of how military institutions could shape personal relations in ways that were thought to both buttress and subvert dynastic interests.

A distinctive element of social life within garrisons was hereditary status. Hierarchical power dynamics are unique neither to the Ming period nor to the military, yet because officers often passed their posts on to their successors, usually sons or other close family members, and soldiers commonly succeeded to their father’s position, some contemporaries believed that deeply engrained patterns of deference and fear governed relations between soldiers and their commanding officers. Swope describes northeastern military families during the Ming period as “a martial caste of sorts.”¹³¹ Writing in the

¹²⁹This paragraph owes much to Liu Jingchun, *Mingdai jiu bian shidi yanjiu*, 59–74.

¹³⁰*Ming Xuanzong shilu*, 76.9b–10a, 1768–69 宣德六年二月壬子. Cited in Terada Takanobu, *Sansei shōnin no kenkyū: Mindai ni okeru shōnin oyobi shōgyō shihon* 山西商人の研究—明代における商人および商業資本— (Kyoto: Tōhōsha, 1972), 211.

¹³¹Kenneth M. Swope, “A Few Good Men: The Li Family and China’s Northern Frontier in the Late Ming,” *Ming Studies* 34 (2005), 40–41.

mid-sixteenth century about problems in Ningxia's military farm colonies, the censor Pang Shangpeng 龐尚鵬 (1523–81) observed that soldiers understood that their officers held command generation after generation, and thus, “unless faced with the imminent demise of family or death,” no one dared speak out against their superiors.¹³² To eliminate such deference patterns and the systemic abuse they facilitated, Pang proposed offering material incentives to subordinates to report abuses, changing the performance standards by which officers were evaluated, and striking hard when military officers stonewalled civil investigators (for instance by conducting separate interviews with chiliarchs and centurions).¹³³ Finally, Pang recommended that to deter future abuses, those who continued to turn a blind eye to such problems should be stripped of their posts and serve as common soldiers.¹³⁴

Here patron-client relations challenge state authority. As noted above, since the early fifteenth century, complaints were voiced about officers “privately” or “personally” using subordinates as everything from servants and commercial agents to farmhands and lumberjacks. Occasionally close associations between individual commanders and their troops had also developed in a military context. During the reign of the Yongle emperor, Tan Guang 譚廣 drilled 5,000 cavalry troops from the Firearms Unit in the capital to a high degree of proficiency. Known as the Steeds of the Tan Family 譚家馬, they served as outriders for the Yongle emperor during his expeditions on the steppe. The sight of their battle pennants reputedly struck fear in the Mongols' hearts.¹³⁵

Military units tightly bound to a single commander, however, worried some Ming observers. Among the most politically sensitive such arrangements were “housemen” (*jiaren* 家人 and *jiading* 家丁) or private retainers that military officers assembled. The state began to hire mercenaries in the fifteenth century, and by the mid-sixteenth century, many effective military commanders actively recruited soldiers with competitive wages, including generous signing bonuses. Mercenaries became the dynasty's principal fighting forces, proving their worth along the northern border, the southeastern coast, and elsewhere, while simultaneously raising military expenditures. Despite their efficacy, mercenaries, especially housemen, were criticized for their greed and uncertain allegiance.¹³⁶ Among the many charges leveled against the powerful Ming commander

¹³²Pang Shangpeng 龐尚鵬, *Pang Zhongcheng chai gao* 龐中丞摘稿, 3.12a-b, in *Huang Ming jing shi wen bian* 皇明經世文編, edited by Chen Zilong 陳子龍 (rpt. Beijing: Zhonghua shuju, 1962; third printing 1997), *juan* 359, 5.3872. In contrast, the editors of the mid-sixteenth century *Taiping County Gazetteer* felt that “military officers are born and raised on this land; they have never been able to get their men to be obedient. This makes them undisciplined.” See *Taiping xianzhi*, 5.13b (*Tianyige cang Mingdai fangzhi xuankan*, vol. 17). Although the authors' interest here was explaining coastal garrisons' failure to eliminate smuggling and piracy, the officers' deep local roots do similarly point to close personal ties that commonly trumped dynastic loyalty.

¹³³Pang Shangpeng, *Pang Zhongcheng chai gao*, 3.14b, in Chen Zilong, *Huang Ming jing shi wen bian*, *juan* 359, 5.3873.

¹³⁴Pang Shangpeng, *Pang Zhongcheng chai gao*, 3.14a-b, in Chen Zilong, *Huang Ming jing shi wen bian*, *juan* 359, 5.3873.

¹³⁵Luo Hengxin, *Jue fei ji*, 5.28a (*Beijing tushuguan guji zhenben congkan*, 103.154).

¹³⁶David Robinson, “Military Labor in China, circa 1500,” in *Fighting for a Living: A Comparative History of Military Labour 1500–2000*, edited by Erik-Jan Zürcher (Amsterdam: Amsterdam University Press, 2014), 43–55. Such criticisms of mercenaries were not restricted to Ming-period China. David Parrott in *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe* (Cambridge: Cambridge

Mao Wenlong 毛文龍 (1576–1629) in the 1620s was recruiting men from among his command as private retainers, who owed ultimate loyalty to him rather than to the dynasty.¹³⁷ To intensify and display their special bond, commanders and their housemen troops often formed ties of fictive kin or adoption.¹³⁸

This section has demonstrated that the Ming state spent more on military costs than any other item in its budget. Grain delivery to the strategically critical northern border posed daunting logistical and financial challenges to the central government and local official, which responded by experimenting with a wide of range of measures. Successful experiments often appealed directly to merchants' self-interest. Similarly, efforts to raise funds to meet the costs of military campaigns or natural disasters succeeded only when they offered tax-exemptions and other perks to potential donors. In their search for profit, military personnel regularly exploited their positions in border or coastal garrisons to engage in illicit trade and smuggling, endeavors loudly condemned in some quarters but widely accepted in local communities. Another tension between dynastic responsibilities and personal advantage was the growth of housemen and mercenaries, which revitalized dynastic fighting power but raised the specter of soldiers more loyal to their commander and patron than to the throne. Consideration of military finances, especially the challenge of feeding soldiers in distant places, provides another way to view the Ming dynasty in a comparative light. Attention to the little appreciated connection between world silver flows and Ming military expenditure puts the Ming dynasty in a global perspective. This section has shown that the state's capacity to mobilize resources often hinged on appealing to individuals' self-interest and that garrison personnel exploited their status as imperial agents to pursue personal advantage.

CONCLUSIONS

Closer attention to military institutions offers insights into the Ming dynasty's place in global history and more fully reveals the true range of the Chinese state with its complex, shifting interaction with a wide range of social actors than does exclusive focus on civil administration. The administrative and logistical capacity of the Ming state, as seen in its ability to raise, train, feed, move, and monitor a military force of approximately one million soldiers, had few if any peers at the time. The Ming state used military organizations and titles both to integrate new subjects into the polity and to establish mutually comprehensible categories in relations with neighbors. Silver from the New World and Japan made possible the annual subsidies to the strategically critical northern border at the same time that it contributed to the rise of the polity that eventually toppled the Ming, the Qing dynasty.

Domestically, hereditary military households, military farms, and the northern grain market conditioned much of Ming life. Local governance, integration of new subjects,

University Press, 2012), 4–8, argues that similarly negative assumptions have deeply shaped perceptions of private military organization in Europe.

¹³⁷Swope, *Military Collapse*, 55. Issues of contending allegiance run through the 1632 Wuqiao Mutiny (Swope, *Military Collapse*, 95–103).

¹³⁸Zhao Zhongnan 趙中南, "Lun Mingdai jundui zhong jiading de tedian yu diwei" 論明代軍隊中家丁的特點與地位, *Shehui kexue jikan* 社會科學輯刊 3 (1988), 146.

dynastic fiscal policy, transregional networks of commerce and finance, and family life all bore the imprint of military institutions. Through military institutions, the state sought to monitor not just the professional competence of military personnel but also the residence, land holding, service obligations, illnesses, and offspring of active service soldiers and their families. Similarly, the state also attempted to control land, animals, and a wide variety of goods through military institutions. Such institutions imposed heavy burdens on individuals and communities, which is how the story is usually told, but they also offered access to security, wealth, and status to those most able to turn them to their own advantage, which this essay has highlighted.

Finally, wider socioeconomic, political, and military developments wrought important changes on military institutions. The initial spread of silver in the economy in the fifteenth century and its rapid expansion in the sixteenth meant that the Ming state would pay and feed its soldiers in new ways, triggering changes in how grain was delivered and the northern border was financed. The growth of mercenary troops in the sixteenth and seventeenth centuries too was closely tied to silver and a widening commercial economy. Changes in political culture, most especially the growing confidence and power of literati vis-à-vis the emperor and military men, facilitated civil officials' ability to win a larger role in the governance of military populations and the supervision of military campaigns. The legacy of the founding emperor and his institutional architecture retained its rhetorical power until the dynasty's very last days,¹³⁹ but China in 1644 was a very different place from what it had been in 1368. Far from being slaves to the founder's vision, imperial authorities and subjects both adapted as best they could to such changes, as attention to military institutions shows.

¹³⁹The essays in *Long Live the Emperor! Uses of the Ming Founder across Six Centuries of East Asian History*, edited by Sarah Schneewind (Minneapolis: Society for Ming Studies, 2008), illustrate the myriad ways people invoked the Ming founder's legacy.