UNIVERSITY OF CALIFORNIA
Los Angeles

Taming the Army:
Military Mobilization, Empire-building, and the Mongol Transformation of China, 1264-1644 CE

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in History

by

Yiming Ha

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ABSTRACT OF DISSERTATION

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by

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Doctor of Philosophy in History
University of California, Los Angeles, 2024
Professor Richard von Glahn, Chair

This dissertation studies the relationship between military mobilization and empire-building in China during the Mongol-Yuan (1260/1271-1368) and the Ming (1368-1644) dynasties. Utilizing central-level sources such as court annals, dynastic histories, statecraft memorials, and legal sub-statutes, as well as local sources such as commemorative accounts of local actors, military tracts, and gazetteer records, it traces the rise and fall of hereditary military service, which was introduced by the Mongols to China, between the mid-thirteenth and early seventeenth centuries. Although hereditary military service played an important role in both empires, the Yuan and Ming also ultimately moved away from it in favor of other methods of mobilization. While previous scholarship has often viewed this transition in terms of decline and collapse, I instead argue that we should see changes and adjustments to the military as signs of the state's flexibility and resolve in adapting to new socioeconomic conditions, changing patterns of warfare, and new institutional realities By exploring changing military policies and institutions, this study considers how the late imperial Chinese state mobilized resources to

achieve its military goals and the long-term impact that military institutions had on war-making, fiscal institutions, and the organizational capacities of the bureaucracy.

This dissertation first studies how the Mongol-Yuan adapted their institutions to function in sedentary China and to respond to new challenges. Contrary to the view that the Mongol military machine declined soon after conquering China, I argue that the court's actions were on the whole successful in maintaining the strength of the military, allowing the bulk of the Yuan garrisons to participate in military campaigns and in the suppression of rebels well into the mid-1350s. It was not impoverishment of soldiers or desertion that caused the Yuan's military collapse, but rather the disruption of a powerful patronage network that permeated the civil and military apparatus. This was the result of an institutional shift in which military power devolved into the hands of powerful ministers. This dissertation then turns its attention to the Ming. The Ming military has often been portrayed as a monolithic and static entity dominated by a dynastic constitution from the founding emperor. However, I argue that the Ming state's retention of the Mongol-Yuan hereditary military household system encountered new difficulties in the face of shifting geopolitical conditions as well as recurring old problems that was inherent to the institution itself. To resolve these issues, the Ming leadership responded in both familiar and innovative ways. Nonetheless, the Ming ultimately abandoned the system of hereditary military conscription it inherited from the Yuan and devised new organizational, strategic, and fiscal strategies to cope with the evolving threats it faced along its northern frontier and southeastern coastline.

Finally, by engaging with scholarship with other parts of Eurasia, this dissertation places China within a broader Eurasian context of warmaking and empire-building. It does so by comparing the Mongol-Yuan with its sedentary cousin the Ilkhanate in Persia and the Ming with

another post-Mongol empire, Muscovy Russia. In doing so, it sheds light on how the Mongols adapted their military to function in sedentary conditions and to respond to new geopolitical threats. It also reveals how post-Mongol polities grappled with their Mongol institutional heritage, utilizing both similar and different methods.

This dissertation of Yiming Ha is approved.

Roy Bin Wong

Sixiang Wang

David M. Robinson

Richard von Glahn, Committee Chair

University of California, Los Angeles

2024

To my grandfather,

Chang Fuxue

TABLE OF CONTENTS

ABSTRACT OF DISSERTATION…… ii
LIST OF TABLES…… x
WEIGHTS AND MEASURES…….. xi
LIST OF RULERS……. xii
ACKNOWLEDGEMENTS……... xiv
CIRRICULUM VITAE…….. xviii
INTRODUCTION…….. 1
Chinese Military History Before the Mongol Yuan…… 5
The Military and the Yuan-Ming Transition……... 11
Chinese Military History in Scholarly Literature……... 16
Outline of Chapters (Discussion of Sources) …… 24
Concepts and Definitions……... 28
CHAPTER 1. Garrisoning China: The Mongol Yuan Military, circa 1260-1350…….. 32
The Mongol-Yuan Military: An Institutional Sketch……. 34
A Military in Crisis: Issues and Problems within the Garrisons…… 41
The Court's Perspective on the Military……. 42
The Perspective of the Literati……... 48
The Court Responds……... 55
Simple Responses……... 55
Institutional Adjustments…… 58
Adaptive Responses……... 66
Court Policies and Literati Concerns……. 73
Court Policies and Military Households…… 77
Conclusion……. 82
CHAPTER 2. Garrisons, Patronage, and Recruits: The Late Yuan Military, 1350-1355... 85
The Yuan Military During the Early Red Turban Rebellion…….. 87
Mercenary and Militia Recruitment…..……..... 95
The Empire Strikes Back…… 104
Why did the Yuan Fall?…….. 114

The Yuan Institutional Shift and its Effect on the Military…… 117
Conclusion……..... 131
CHAPTER 3. Hereditary Military in the Early Ming, 1368-1449……. 134
The Military and the Hongwu Agenda……... 136
Ming Military Conscription…… 141
Ming Military Issues…….. 145
Early Ming Policies to Control the Military……... 148
The Hongwu Reign: Centralizing Authority…….. 149
The Yongle Reign: The Height of Control……. 155
From Hongxi to Zhengtong: New Developments…….. 161
Provisioning the Guards: Three Case Studies…… 167
Liaodong……. 169
Guizhou…….. 173
Gansu/Hexi……. 177
Yuan Legacy? …… 180
Conclusion: Transition or Collapse? ……. 184
CHAPTER 4. The Military in Transition: The Mid-Ming, 1449-circa 1500……. 186
Post-Tumu Developments: Rebuilding Border Defenses…….. 188
Restoring the *weisuo*…….. 194
Changing Patterns of Recruitment……. 195
Restoring Past Institutions……. 202
The Hongzhi Transition……. 210
From Divisional Army to Garrison Command…….. 214
The Issue of Supply…… 218
Mid-Ming Liaodong……... 226
How Successful was Restoration?……. 231
The Mid-Ming Reconsidered……. 234
Conclusion…….. 237
CHAPTER 5. A New Era: The Ming Military in the Sixteenth Century……... 240
Changing Patterns of Defense…… 242
The Rise of Professional Soldiers…….. 246

Hired Soldiers in the North…… 247
Housemen in the Sixteenth Century……... 253
Hired Troops in the South…….. 255
Renumerations for Hired Soldiers…….. 259
Building the Great Wall……. 262
The Datong Garrison Command…… 263
The Jizhou Garrison Command……. 266
The Liaodong Garrison Command……. 269
Provisioning the Garrison Commands……... 272
The Datong Garrison Command…… 273
The Jizhou Garrison Command……. 275
The Liaodong Garrison Command……. 276
The Fiscal Impact……... 278
Final Attempts at Restoration……. 284
Conclusion…….. 286
CONCLUSION…….. 289
The Chinese Military, 1260 to circa 1600…….. 290
Towards a Mongol-Eurasian Model of War and Empire…… 296
The Ilkhanate and the Mongol-Yuan…….. 297
Muscovy and the Ming……..... 303
The Yuan-Ming Transition in Chinese Military History…… 314
BIBLIOGRAPHY…….. 319

LIST OF TABLES

Table 1.1 Number of retainers allocated to military officers in 1281……. 67-68
Table 3.1 Punishments for officers responsible for soldiers deserting (1321)……... 151-52
Table 4.1 Officials dispatched by the Chenghua court to oversee military farms…... 224-25
Table 4.2 Officials dispatched by the Hongzhi court to oversee military farms……. 226

WEIGHTS AND MEASURES

WEIGHTS

1 *jin* (斤) = 640 grams (22.6 oz) in Yuan; 596.8 grams (21.1 oz) in Ming

1 *shi* (石) = 100.3 liters in the Yuan (~160 lbs); 103 liters in the Ming (~165 lbs)

1 *hu* (斛) = 50.15 liters in the Yuan (~80 lbs); 51.75 liters in the Ming (~82 lbs)

MEASURES (LAND)

1 *mu* 畝 = 840 m2 (5 *mu* per acre, 12 *mu* per hectare) in Yuan; 608 m2 (6.5 *mu* per acre, 16 *mu* per hectare)

1 *qing* 頃 = 100 mu (20 acres, 8.3 hectares in Yuan; 15.4 acres, 6.25 hectares in Ming)

PAPER CURRENCY

1 *guan* 貫 = 1,000 coins

1 *liang* 兩 = 2 *guan* of paper money in the Yuan, 1 *liang* of paper money in the Ming

1 *ding* 錠 = 50 *liang* of paper money in the Yuan (1 *liang* of paper money in the Yuan was equivalent to 1 *liang* of silver on paper)

SILVER

1 *liang* 兩 = 40 grams (1.4 oz) in the Song

1 *liang* 兩 = 36.9 grams (1.3 oz) in the Ming

1 *ding* 錠 = 50 *liang*

Source: Endymion Wilkinson, *Chinese History: A New Manual, Enlarged Sixth Edition,* 2 vols. (Cambridge, MA: Harvard University Press, 2022).

LIST OF RULERS (REIGN DATES)

MONGOL-YUAN

Chinggis (Emperor Taizu), 1206-1227

Ögödei (Emperor Taizong), 1229-1241

Guyug (Emperor Dingzong), 1246-1248

Möngke (Emperor Xianzong), 1251-1259

Qubilai (Emperor Shizu), 1260-1294

Temür (Emperor Chengzong), 1294-1307

Qaishan (Emperor Wuzong), 1307-1311

Ayurbarwada (Emperor Renzong), 1311-1320

Shidebala (Emperor Yingzong), 1320-1323

Yesün Temür (Emperor Taiding), 1323-1328

Tuq Temür (Emperor Wenzong), 1328-1329, 1329-1332

Qoshila (Emperor Mingzong), 1329

Irinchibal (Emperor Ningzong), 1332

Toghon Temür (Emperor Huizong, Emperor Shun), 1333-1368

MING

Hongwu (Emperor Taizu), 1368-1398

Jianwen (Emperor Hui), 1398-1402

Yongle (Emperor Taizong, Emperor Chengzu), 1402-1424

Hongxi (Emperor Renzong), 1424-1425

Xuande (Emperor Xuanzong), 1425-1435

Zhengtong (Emperor Yingzong), 1435-1449

Jingtai (Emperor Jing), 1449-1457

Tianshun (Emperor Yingzong), 1457-1464

Chenghua (Emperor Xianzong), 1464-1487

Hongzhi (Emperor Xiaozong), 1487-1505

Zhengde (Emperor Wuzong), 1505-1521

Jiajing (Emperor Shizong), 1521-1567

Longqing (Emperor Muzong), 1567-1572

Wanli (Emperor Shenzong), 1572-1620

Taichang (Emperor Guangzong), 1620

Tianqi (Emperor Xizong), 1620-1627

Chongzhen (Emperor Sizong), 1627-1644

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This dissertation represents the culmination of a long journey, which began when I was an undergraduate student interested in state institutions. For that, I owe my thanks to my undergraduate mentors at UCLA, who collectively created a academic environment that inspired and valued interdisciplinary inquiry. I must first thank the late James Tong, who nurtured and encouraged my interest in Chinese history. It was during a conversation with him in a Beijing hotel lobby in the winter of 2015 that the idea for what would ultimately become this dissertation project was born. It was also James who encouraged me to go to Hong Kong to pursue a master's degree, without which this dissertation would not have been possible. I am also grateful to Katsuya Hirano, my undergraduate thesis advisor, whose guidance and encouragement allowed me to complete my first major historical research project.

It was in Hong Kong that this precursor to this dissertation finally took shape. I am eternally grateful to William Guanglin Liu, my first advisor at the Hong Kong University of Science and Technology, who pushed me to study the Mongol-Yuan and Early Ming and familiarized me with many of the sources. He consistently pushed me beyond my self-imposed boundaries, unveiling the vast and diverse world of historical methods and exposing the humbling narrowness of my own perspective. Christian Daniels' unwavering encouragement, genuine care, and invaluable advice has been a cornerstone of my academic journey. His constant support and wisdom not only guided me through my MPhil thesis but also profoundly shaped my growth as a scholar and individual.

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helpful comments, and his broad knowledge not just of Chinese history but of Eurasian history has given the project a much stronger comparative foundation. His discerning eye and meticulous editing also revealed to me the transformative potential of a well-revised draft. Other members of my committee have also challenged me to go beyond my comfort zone and to try to address a wider audience. R. Bin Wong, known for his erudition in comparative history and state-building, has always pushed me to think beyond China. Sixiang Wang has similarly encouraged me to think in a more interdisciplinary manner and has always provided me with support and encouragement. Finally, the scholarship of David M. Robinson (Colgate University) on the Yuan and Ming and on Ming military history have been very inspiring, and his gracious entry into my committee and detailed comments on my chapters have given me a much better grasp of the historian's craft.

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Qianqing Huang, Sunkyu Lee, Xiaowen Hao, Ethan Mefford, Lily Hindy, Jeanette Charles, Rebecca Martinez, Alice Ashiwa, Patrick Stein, and Aadarsh Chunkath for their company and support. I would also like to thank Tessa Villaseñor, Kate Aquino, and Judy Hernandez for helping me with the logistics of being a PhD student. They consistently dealt with my last-minute questions and confusion about paperwork and procedures with patience, providing me with the guidance and help I needed.

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made all the more enjoyable by the company of Cameron Foltz of Columbia University, with whom I shared an office at the IHP.

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My parents have been beyond supportive of my decision to pursue a PhD in Chinese history, and I can never thank them enough for their love and encouragement. My partner, Zichan Wang, has been my best friend and most cheerful and unconditional supporter. I could not have completed my PhD without you.

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Introduction

The content of this document is very clear, and every article is very straightforward. If you continue to abuse the soldiers like before, then it will be as if you are making the same mistake twice, you cannot say you didn't read this document and didn't know. This document is not written in official or scholarly language – how can you not understand it! The reason I am being this straightforward is so that the old and the young, the wise and the ignorant all understand…If they commit abuses and are caught, then the males of their family will be questioned on how many articles they remember. If they still say they don't remember anything, then both the old and the young will be punished.[1]

In 1388, the founder of the Ming dynasty (1368-1644), the Hongwu emperor (r. 1368-1398), issued the *Grand Pronouncement to Military Officials* (*Dagao wuchen* 大誥武臣). In it were thirty-two articles detailing a litany of abuses faced by military personnel and their families at the hands of military commanders – beatings, embezzlement of rations, murder, privatization of labor, and rape – and his punishments for the offenders. For Hongwu, these abuses were causing soldiers to desert, seriously undermining the military a mere two decades after the empire was established. This document was but one tool that Hongwu sought to utilize in interdicting these problems and strengthening his military.

Hongwu had good reason to be concerned about the state of his army. The Ming had only recently pacified the southwest and the northeast, and Mongol forces in the steppes still posed a significant threat to the empire. But more importantly, the military was key to the state's security and the ruler's power, for it not only protected the state against external foes but was also responsible for maintaining internal order. An inability to keep military leaders in check could result in mutinies, rebellions, or even dynastic change. Therefore, Chinese states throughout

[1] Zhu Yuanzhang 朱元璋, "Dagao wuchen xu" 大誥武臣序, in *QMW*, 730-31.

history paid close attention to the military. Moreover, maintaining the military was an expensive affair, and how to pay for military upkeep became a perennial problem for rulers and states. Understanding the military allows us to better understand the construction and maintenance of the state, which in turn is critical to our understanding of Chinese history.

For the Ming, later scholars have largely used Hongwu's words to show instances of corruption and abuse within the Ming military and their negative effects on the soldiers. Officer abuse was indeed a serious problem, one that Ming scholars after Hongwu would continue to bring up, but it was just one facet of the myriads of issues facing the military. A closer look into these instances of officer abuse reveals a deeper issue within the military - hereditary military service. While the aforementioned problems such as embezzlement, abuse, and the delivery of rations to garrisons had existed in some form in previous periods, they were amplified in the Ming by hereditary military service. In this system, soldiers and their households interacted closely with military officers and officials, opening new avenues for abuse and exploitation. The state therefore had to respond with new regulations and institutional adjustments, taking into account current conditions in order to better control the military.

The militarycenturyof China is punctuated by several key transitions, and this dissertation focuses on the Song-Yuan-Ming transition between the thirteenth and the seventeenth centuries. It traces the rise and fall of hereditary military service, an institution premised upon self-sufficient and self-replicating military households, introduced by the Mongols and adopted by the Ming from the vantage point of the state center. I argue this drastic transformation in military mobilization, spanning the three centuries of Yuan and Ming rule, had a profound impact on the development of fiscal institutions and court ideology going forward. It was not just a simple matter of replacing one set of institutions with another – rather, the change in military

mobilization altered the trajectory of China's fiscal and state development. Borrowing Richard von Glahn's paradigm of fiscal regimes in China, I argue the Mongol introduction of hereditary military service played a key role in ending the Song fiscal state and allowing for the creation of the militarist-physiocratic state of the early Ming.[2] Without an expensive military, the state did not need complex fiscal institutions to raise funds. Nonetheless, as was the case with previous periods in Chinese history, long-term socioeconomic and geopolitical changes meant the military had to adapt as well. In both the Yuan and the Ming, this adaptation was a transition to professional soldiers who were voluntarily recruited and received monthly pay.

The hereditary military system was in direct contrast to that of the Song empire's (960-1276), which mobilized its military personnel through market principles whereby the state recruited volunteers and provided them with generous financial incentives. This monetized form of recruitment and mobilization, coupled with the existence of strong enemy powers which necessitated constant military readiness, was extremely costly for the Song state. As such, the Song was forced to develop new institutions and devise new policies to raise revenue. Even after the loss of Northern China to the Jurchens in 1127, the regrouped Song court in the south mounted successful military defenses against the nomads, succumbing only to the Mongols a hundred and fifty years later and even then, after nearly half a century of resistance.[3]

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[2] Richard von Glahn, "Modalities of the Fiscal State in Imperial China," *Journal of Chinese History* 4, no. 1 (2020): 1-29. According to von Glahn, the militarist-physiocratic state of the Qin-Han (a modified version of which was built by the Ming founder Hongwu) had three features: 1) light taxation of the agrarian base of society; 2) strong regulation of commerce and industry and 3) heavy reliance on conscripted labor and military service as the primary obligation of the subjects to the imperial state.

[3] For a detailed study of the Mongol-Song war, see David Curtis Wright, "The Mongol Conquest of the Song Empire, 1234-1279," in *The Mongol World*, edited by Timothy May and Michael Hope (London and New York: Routledge, 2022), 118-56. For the military's impact on Song finances, see William Guanglin Liu, "The Making of a Fiscal State in Song China, 960-1279," *The Economic History Review* 68, no. 1 (2015): 48-78; von Glahn, "Modalities of the Fiscal State," 1-29.

The demonetized mode of military service instituted by the Mongol-Yuan (1260/1271-1368) was characterized by military households that were designated by the state. Not since the days of the Northern Wei (386-535) had China seen hereditary occupational households, and the last time military households played a prominent role was in the early Tang (618-907). But the military household system of the Mongol-Yuan, which was premised upon the Mongols' nomadic notions of self-sufficiency and solidarity, encompassed a much broader segment of the population and was much larger in size. At the same time, the hereditary military system was attractive to the Mongols because it was a cost-efficient way of mobilizing soldiers when the Mongols were engaged in warfare with the Southern Song. The system seemed to have worked well initially in minimizing costs, strengthening state control over the population, and in granting the state access to a seemingly never-ending supply of soldiers, and it was preserved and expanded upon by the Ming.

This dissertation will be framed by three interconnected themes as it explores the relationship between military mobilization and empire-building in China between the mid-thirteenth and early seventeenth centuries. First, it will examine the institutional continuities and differences between the Yuan and Ming empires. What problems arose within the hereditary military system that both regimes utilized? How did the two states respond to them? Why did they respond as they did? Second, it will address the impact that military institutions had on other Yuan and Ming institutions. How did this supposedly cost-efficient military system influence the state's construction of its military and fiscal institutions? How did these institutions handle the long-term pressures and challenges brought about by the transition to hired troops? How successful were the Yuan and Ming in their responses? Finally, it will consider the Mongols' institutional legacy in China within a broader Eurasian context, namely, how does the

Yuan compare to its cousins in the west and how does the Ming compare with other post-Mongol imperial formations such as Muscovy Russia regarding its Mongol heritage and shared institutional challenges? How can a study of military policy and institutions reveal more about the lasting Chinggisid influence in Eurasia?

Chinese Military History Before the Mongol-Yuan

A broad survey of Chinese military history shows that military institutions were never static but changed with the needs of the state and new socioeconomic realities. In almost all periods in Chinese history, the voluntary recruitment of professional troops as a replacement for previous methods of military mobilization can be witnessed. The replacement of hereditary soldiers with hired troops in the Yuan and Ming was therefore not unique. However, the scale of hereditary military service and its deep impact on state institutions and society makes the Yuan-Ming experience more complex and intriguing.

The first moment of transition to professional soldiers can be witnessed during the Western Han (202 BCE-9 CE). Following the practices of the Qin (221-206 BCE), the early Han regime adopted universal conscription of all adult males between the ages of twenty-three and fifty-six as a means to raise soldiers. Conscripts underwent two years of military service, one in training and one either in the capital or in frontier garrisons along the northwest.[4] However, by the reign of Emperor Wu (140-87 BCE), the military needs of the state had changed. The Han court had largely addressed the issue of rebellious kingdoms (which the founding emperor had parceled out to his relatives and close supporters), and its most pressing military threat came

[4] Michael Loewe, "The Western Han Army: Organization, Leadership, and Operation," in *Military Culture in Imperial China*, edited by Nicola Di Cosmo (Cambridge, MA: Harvard University Press, 2009), 79.

from the nomadic Xiongnu. To fight the Xiongnu meant the court needed to rely on professional cavalry capable of rapidly responding to Xiongnu raids and launching penetrative attacks deep into the steppes. Moreover, as the Han empire expanded, it required soldiers to be garrisoned along the frontiers for longer periods of time. Thus, the previous method of conscripting farmer-soldiers and utilizing full-scale mobilization was no longer sufficient for the state's needs, and the court instead turned to professional soldiers, with volunteers, convicts, and mercenaries gradually replacing conscripts as the mainstay of the army.[5]

By the Eastern Han (25-220 CE), universal conscription was formally jettisoned in favor of a professional, standing army. Mark Edward Lewis noted that the rebellions against the usurper Wang Mang (45 BCE-23 CE) demonstrated that peasant conscripts could be turned against the state. To train them to fight was thus to breed potential rebels, and such considerations were in the minds of the Eastern Han court when it ended universal conscription.[6] During the chaotic last years of the Han, military commanders and regional governors emerged as autonomous warlords with their private armies. These private military forces, known as *buqu* 部曲, were experts in the use of arms, dependent on their commanders, and disconnected from civilian society and their own local origins. Their relationship to their commander was typically both servile and hereditary.[7] Thus, hereditary soldiery was born.

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[5] Wicky Tse, "Violence and Warfare in Early Imperial China," in *The Cambridge History of Violence*, edited by Garrect C. Fagan et al. (Cambridge: Cambridge University Press, 2020), 287-88.
[6] Mark Edward Lewis, *The Early Chinese Empires: Qin and Han* (Cambridge, MA: The Belknap Press of Harvard University, 2007), 138. See also Mark Edward Lewis, "The Han Abolition of Universal Military Service," in *Warfare in Chinese History*, edited by Hans J. van de Ven (Leiden: Brill, 2000), 33-76.
[7] David A. Graff, "The Art of War," in *The Cambridge History of China, Vol. 2: The Six Dynasties, 220-589*, edited by Albert E. Dien and Keith N. Knapp (Cambridge: Cambridge University Press, 2019), 289.

The development and growth of hereditary soldiers continued under the Cao Wei (220-266) and subsequent regimes. Soldiers were entered into special military registers, and they were controlled by military headquarters rather than civilian authorities. A soldier served for life, and if he died or became too old or infirm, a son or another close male relative would replace him. At the same time, the Cao Wei regime also implemented military farming colonies (an institution it inherited from the Western Han), staffed by special farming households, to provide for the army and ensure military self-sufficiency.[8]

The Period of Disunion witnessed the bifurcation in military mobilization methods between the north and the south. In the southern regimes of the Han Chinese, the recruitment of volunteers (*mubing* 募兵) largely replaced hereditary soldiers by the sixth century.[9] The northern "barbarian" non-Han regimes, by contrast, utilized a dual army structure whereby troops belonging to the ruler's ethnic origin (primarily cavalrymen) formed the core of the armed forces, supplemented by Han Chinese infantry.[10] With the northern regimes increasingly engaged in warfare with the south, an ever larger number of Han Chinese began to be conscripted into the army. These troops served short terms of rotational service modeled after the corvée labor system. The implementation of the Equal-Fields (*juntian* 均田) system by the Northern Wei allowed the state to restore universal military service, which provided the bulk of the Northern Wei's military forces.[11]

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[8] Graff, "The Art of War," 290; Tse, "Violence and Warfare," 290-91.
[9] Graff, "The Art of War," 292.
[10] David A. Graff, *Medieval Chinese Warfare, 300-900* (London and New York: Routledge, 2002), 99; "The Art of War," 292-93.
[11] Graff, "The Art of War," 293; Scott Pearce, *Northern Wei (386-534): A New Form of Empire in East Asia* (Oxford: Oxford University Press, 2023), 258-61. For an overview of the Equal-Fields system, see Richard von Glahn, "State and Economy: Production, Extraction, and Distribution," in *The Cambridge Economic History of*

The Equal-Fields system saw continued development under the Northern Wei's successor regimes. Out of it came the *fubing* 府兵 system, first inaugurated by the Northern Wei but reaching its height in the Sui (581-618) and Tang. Under this system, the state created hereditary military households based on the Equal-Fields land distribution system. In return for partial or full tax exemption, soldiers were to furnish their own provisions and most of their own equipment. When not on guard or called to fight, they were expected to engage in training and farming in their home communities.[12] The *fubing* bears some similarity to the military household system of the Yuan and Ming in that both were premised on the ideals of self-sufficient and self-replicating farmer-soldiers. Nonetheless, there were key differences. For one, the Yuan-Ming military households were conscripted empire-wide, whereas *fubing* soldiers existed only in specially designated prefectures that were concentrated in the northwest. Their duties, therefore, revolved around protecting the capitals and acting as the core of expeditionary forces, which was very different in nature than soldiers in the Yuan and Ming. Second, Yuan-Ming soldiers were expected to serve for life in garrisons, but *fubing* soldiers returned to their homes after their tour of duty was over. Additionally, *fubing* households received more generous tax exemptions than military households in the Yuan and Ming and were expected to provide their own equipment and supplies, whereas Yuan and Ming soldiers received rations and equipment from the state.[13]

The *fubing* formed the core of the early Tang army, but they were augmented by conscripts. In large swathes of eastern, central, and southern China, there were no *fubing* troops,

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China, Vol 1: To 1800, edited by Richard von Glahn and Debin Ma (Cambridge: Cambridge University Press, 2022), 122-25.

[12] David A. Graff, "The Reach of the Military: Tang," *Journal of Chinese History* 1, no. 2 (2017): 244-45.

[13] Chen Wenshi 陳文石, "Mingdai weisuo de jun" 明代衛所的軍, *Lishi yuyan yanjiusuo jikan* 歷史語言研究所集刊 48, no. 2 (1977): 201-03. The exception in the Mongol-Yuan were Mongol and Han Army soldiers, who were expected to provide their own supplies and equipment. But when stationed in garrisons or on expeditions, they still received rations from the state.

and the state depended instead on temporary peasant levies.[14] Nonetheless, as was the situation in the Han, the changing nature of warfare ultimately rendered the *fubing* system obsolete. As soldiers were increasingly needed to man frontier garrisons for long periods of time and with dwindling size of land allotments, the *fubing* system began to collapse. Instead, the Tang court sought to convince conscripts to remain on the frontiers for long periods of time with material inducements. These men, along with nomadic non-Chinese elements, came to form the new frontier armies of the Tang.[15]

After the end of the An Lushan Rebellion (755-763), the Imperial and provincial armies of the Tang came to be staffed by professional soldiers. These were career soldiers who once recruited served for life and depended entirely on pay from their commanders. As David Graff noted, these soldiers "were true mercenaries who were loyal to their commanders only to the extent that they found them good and reliable paymasters."[16] This type of army survived the end of the Tang and the Five Dynasties (907-979) period and was inherited by the Song. The Song court did encourage children of military families to succeed their fathers and elder brothers in the military, but for the entirety of the dynasty its military was made up of volunteers and recruits.[17] The northern "conquest regimes" of the Khitan Liao (916-1125) and Jurchen Jin (1115-1234), on the other hand, practiced a combination of conscription and recruitment. The nomadic Khitans and the semi-nomadic Jurchens both subscribed to the steppe notion of universal military service, and accordingly all Khitan and Jurchen males were liable for military mobilization. Both regimes

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[14] Graff, "The Reach of the Military," 245-46.
[15] Graff, *Medieval Chinese Warfare*, 205-09.
[16] Graff, "The Reach of the Military," 249-50.
[17] Tseng-Yü Wang, "A History of the Sung Military," in *The Cambridge History of China, Vol. 5, Part 2: Sung China, 960–1279 AD*, edited by John W. Chaffee and Denis Twitchett (Cambridge: Cambridge University Press, 2015), 218-19.

also conscripted from the Han Chinese population, as well as from the population of other groups of people under their rule, in times of military emergencies. Finally, they recruited volunteers to serve in the army in the same manner as the Song, although recruited troops seemed to have initially made up a smaller portion of the military. In the last years of the Jin, however, more and more volunteers came to be recruited as the state faced military pressure from the Mongols and desperately needed soldiers to replenish the ranks of its army.[18]

As the above survey demonstrated, the replacement of traditional methods of military mobilization with the recruitment of professional soldiers was not unique to the Yuan and Ming but has been a common theme throughout Chinese history. Nonetheless, three factors make the Yuan-Ming period worthy of attention. First, the hereditary military service was much more expansive compared to earlier periods. Second, as in all periods, military institutions played a major role in shaping the state and society. What makes the Yuan-Ming period unique is that the particular institution of military households that existed was a Mongol-Yuan invention that did not have parallels in other periods. Therefore, its impact on the development of institutions, as well as how the state transitioned away from this mode of military mobilization, demands scrutiny. Third, the Yuan and the Ming must be viewed within a broader Eurasian framework, given that the Yuan was one of four Mongol polities, and the Ming was among the many imperial formations to rise after the fall of the Mongols. Therefore, the Yuan and Ming had a shared institutional heritage with other parts of Eurasia.

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[18] Wang Cengyu 王曾瑜, *Liao Jin junzhi* 遼金軍制 (Baoding: Hebei daxue chubanshe, 2010), 66-68, 238-42. For a discussion of the Liao army, see also Karl A. Wittfogel and Feng Chia-sheng, *History of Chinese Society: Liao* (Lancaster: Lancaster Press, Inc., 1961), 508-39.

The Military and the Yuan-Ming Transition

The concept of a "Yuan-Ming transition" has been increasingly gaining currency among scholars, even if it is not specifically termed as such. In its simplest form, the Yuan-Ming transition refers to the mid-fourteenth century when the Mongol-Yuan collapsed amid peasant rebellions and was ultimately replaced by the Ming. This term is relevant when discussing the general history of China using the traditional method of dividing it into distinct dynastic periods. However, viewing it as such is overly simplistic. As the Mongol-Yuan gave way to the Ming, the Ming had to grapple with the institutional, cultural, and ideological legacy of the Mongols. In a chapter on the Timurid Empire (1370-1507), another polity born out of the Mongol Empire, Evrim Binbaş noted the various ways that Timurid rulers adapted, contested, and imagined Mongol legacy in their state-building project.[19] The situation was the same in the Ming, and the use of Mongol military institutions and their pervasive influence on the state in early periods meant such adaptation, contestation, and imagination occurred throughout the more than two and a half century of Ming rule. The Yuan-Ming transition, then, as it is used in this dissertation, refers to the period of time between when the Mongol-Yuan took power in China in the mid-thirteenth century to when the last vestiges of Mongol military institutions were jettisoned by the Ming, during which the Yuan adapted Mongol military institutions to function in China and the Ming grappled with how to maintain these institutions.

The legacy of the Mongols in China manifested itself in different ways - in state institutions, court culture, political ideology and worldview, the views of the intelligentsia, and

[19] Evrim Binbaş, "The Timurids and the Mongol Empire," in *The Mongol World*, edited by Timothy May and Michael Hope (London and New York: Routledge, 2022), 936-53.

even in the status of women.[20] Although scholars often point to similarities between the Yuan and Ming and how the Ming inherited and adapted Mongol institutions, Li Xinfeng has also drawn attention to where the Ming differed from the Yuan.[21] Within this paradigm of the Yuan-Ming transition, the military occupied a special position in the mind of the rulers. The Mongol-Yuan was an empire built upon military conquest and martial domination - all adult Mongol males were liable for military service and the Mongols valued martial exploits. Therefore, the military was of paramount importance to Mongol rulers. Although the Mongols began to adjust their institutions to suit the sedentary conditions of China early on, after Qubilai (r. 1260-1294) constructed the Mongol-Yuan state centered in north China, there became a more pressing need to adapt the military to suit the conditions of sedentary China and adjust its institutions to respond to new challenges that such adaptation brought (Chapter 1). These responses and

[20] Henry Serruys was one of the earliest scholars to note the persistence of Mongol customs in the early Ming and how the Ming court employed Mongols. See Henry Serruys, "Remains of Mongol Customs in the Early Ming Period," *Monumenta Serica* 16, no. 1-2 (1957): 137-90 and "The Mongols in China: 1400-1450," *Monumenta Serica* 27, no. 1 (1968): 233-305. For a brief summary on how the Yuan influenced Chinese political institutions, see Okada Hidehiro, "China as a Successor State to the Mongol Empire," in *The Mongol Empire and its Legacy*, edited by Reuven Amitai-Preiss and David O. Morgan (Leiden: Brill, 1999), 260-72. David Robinson has written extensively on how the Yuan influenced Ming court culture and on how the first Ming emperor appropriated Mongol ideology to legitimize his rule both at home and abroad and to court Chinggisid polities that arose in the aftermath of the Mongol-Yuan's collapse. See David M. Robinson, "The Ming Court and the Legacy of the Yuan Mongols," in *Culture, Courtiers, and Competition: The Ming Court (1368–1644)*, edited by David M. Robinson (Cambridge, MA: Harvard University Asia Center), 365-411; *In the Shadow of the Mongol Empire: Ming China and Eurasia* (Cambridge: Cambridge University Press, 2010); *Ming China and Its Allies: Imperial Rule in Eurasia* (Cambridge: Cambridge University Press, 2020). John Dardess has looked into how the Mongols influenced the views of the Chinese intelligentsia and led to the supremacy of *Daoxue* 道學 Neo-Confucianism in China, while Bettine Birge traced how Mongol rule changed the status of women in the family. See John W. Dardess, "Did the Mongols Matter? Territory, Power, and the Intelligentsia in China from the Northern Song to the Early Ming," in *The Song-Yuan-Ming Transition in Chinese History*, edited by Paul Jakov Smith and Richard von Glahn (Cambridge, MA: Harvard University Asia Center), 113-34; Betting Birge, "Women and Confucianism from Song to Ming: The Institutionalization of Patrilineality," in *The Song-Yuan-Ming Transition in Chinese History*, edited by Paul Jakov Smith and Richard von Glahn (Cambridge, MA: Harvard University Asia Center), 212-40.

[21] Li Xinfeng 李新峰, "Lun Yuan Ming zhijian de biangge" 論元明之間的變革, *Gudai wenming* 古代文明 4, no. 4 (2010): 83-102.

adjustments proved successful overall, allowing the military to respond to rebellions in the early 1350s (Chapter 2).

When Hongwu emerged victorious after two decades of civil war following the fall of the Mongol-Yuan, he sought to create a large and powerful military that would not only secure his rule at home but also deal with Mongol remnants that were still threatening his nascent regime. Up to twenty percent of the state's total households were registered as military households and almost ten percent of cultivated lands were military farmlands.[22] The importance of the military was also reflected in the administrative and political organization of the state. As Miyazaki Ichisada noted more than half a century ago, the merit nobility (generals who were enfeoffed as nobles) ranked higher than civil officials in the Hongwu court, were paid larger stipends, and more importantly were given hereditary titles of nobility that they could pass down to their descendants.[23] The Five Military Commissions, the highest military administrative organs, outranked their civilian counterparts (the Six Ministries) and military officials received higher salaries. Li Xinfeng argues that it was not until 1449, when a large segment of the merit nobility was wiped out in a disastrous military campaign, that this group finally lost its influence to civilian officials.[24]

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[22] Cao Shuji 曹樹基, *Zhongguo renkou shi - Ming shiqi* 中國人口史 - 明時期 (Shanghai: Fudan daxue chubanshe, 2001), 375-77; Zhang Dexin 張德信 and Lin Jinshu 林金樹, "Mingchu juntun shu'e de lishi kaocha" 明初軍屯數額的歷史考察, *Zhongguo shehui kexue* 中國社會科學 1987, no. 5 (1987): 187-206.
[23] Miyazaki Ichisada 宮崎市定, "Kōbu kara Eiraku e – shoki Minchō seiken no seikaku" 洪武から永楽へ–初期明朝政権の性格, *Tōyōshi kenkyū* 東洋史研究 27, no. 4 (1969): 5-8.
[24] Li Xinfeng 李新峰, *Ming qianqi junshi zhidu yanjiu* 明前期軍士制度研究 (Beijing: Beijing daxue chubanshe, 2016), 281-82.

Additionally, the Ming had also adopted Yuan military institutions wholesale.[25] This inheritance of Mongol military institutions (known in the Ming as the *weisuo* 衛所, or "guards and battalions") was not only expedient for the Hongwu emperor, but was also because self-sufficient and self-replicating military households, along with the institution of military farming, were in alignment with his own social and economic vision for the state. Nonetheless, the Ming had to contend with socioeconomic changes and new geopolitical realities, which necessitated adjustments to better respond to new challenges. While many of these changes occurred after Hongwu, even Hongwu himself recognized the need for adjustments and in some cases, it was his actions which laid the foundations for later changes. Some of the methods that the court used shared surprising parallels with those used by the Yuan, but over time the Ming military began to deviate from Hongwu model (Chapters 3 and 4). Military institutions were therefore not static or monolithic entities, but rather changed with the times, a process to which the court devoted a tremendous amount of time and resources.

Temporally, the Yuan-Ming transition did not end with the fall of the Yuan and the establishment of the Ming. The early Ming is often seen as the period where Mongol influence was most prevalent and when the military played a prominent role in the empire, but scholars have proposed different endpoints to the "early Ming." Edward Dreyer posited the year 1435, when the death of the Xuande emperor (r. 1425-1435) led to the ascension of his eight-year-old son. According to Dreyer, this was the moment in which the civil bureaucracy finally triumphed over the military elites.[26] Other scholars, however, see the definitive break as having occurred in

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[25] Romeyn Taylor, "Yüan Origins of the Wei-so System," in *Chinese Government in Ming Times: Seven Studies*, edited by Charles O. Hucker (New York: Columbia University Press, 1969), 34-40.
[26] Edward L. Dreyer, *Early Ming China: A Political History, 1355-1435* (Stanford: Stanford University Press, 1982), 1-11.

1449, when that eight-year-old boy, now an adult, led a disastrous military campaign into the steppes and was captured by the Oirat Mongols. The Tumu Crisis (*Tumubao zhi bian* 土木堡之變), as it became known, was such a major blow to the dynasty that it led to a fundamental change not just in military policy but also in the views of the intelligentsia.[27] More recently, David Robinson has suggested that 1461 could also serve as a marker in the history of both Mongols in the Ming and in the military's role in national politics, as it was the last palace coup in which the military played a significant role.[28] Finally, the notion of a "Jiajing transition," which argues that the ascension of the Jiajing emperor spelled the end of Mongol influence on Ming court culture, has also been posited.[29]

These markers are undoubtedly all valid depending on the study in the question, but this dissertation takes the view that from the standpoint of military institutions, the legacy of the early Ming, that is to say, what the Ming inherited from the Mongols, persisted well into the early sixteenth century. This long transition was punctuated by several phases where military institutions and policies were changed to adapt to new circumstances while also attempting to preserve the hereditary military system. For instance, although 1449 is indeed a watershed in the history of the Ming military and brought changes to the military system, the court also continued to try to restore some aspects of the early Ming military system, utilizing new policies and

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[27] Wu Han 吳晗, "Mingdai de junbing" 明代的軍兵, *Zhongguo shehui jingjishi jikan* 中國社會經濟史集刊 5, no. 2 (1937): 92-141; Frederick W. Mote, "The T'u-mu Incident of 1449," in *Chinese Ways in Warfare*, edited by Frank A. Kierman et al. (Cambridge, MA: Harvard University Press, 1974), 243-72; Philip de Heer, *The Care-Taker Emperor: Aspects of the Imperial Institution in Fifteenth-Century China as Reflected in the Political History of the Reign of Chu Ch'i-yü* (Leiden: Brill, 1986); Hung-lam Chu, "Intellectual Trends in the Fifteenth Century," *Ming Studies* 1989, no. 1 (1989): 1-33; Li, *Mingdai qianqi junshi zhidu yanjiu*, 1-2.

[28] David M. Robinson, "Politics, Force and Ethnicity in Ming China: Mongols and the Abortive Coup of 1461," *Harvard Journal of Asiatic Studies* 59, no. 1 (2008): 79-123.

[29] Robinson, "The Ming Court," 409-11.

methods to maintain the traditional military structure (Chapter 4). The definitive move away from Mongol institutions would not take place until the mid-sixteenth century, when new threats forced the Ming court to abandon its old policies in favor of voluntary recruitment of troops (Chapter 5).

Chinese Military History in Scholarly Literature

Any study of the relationship between the military and state-building cannot ignore the influential thesis of Charles Tilly. According to Tilly, heavy fiscal burdens imposed by military mobilization and war-making in early modern Europe necessitated territorial consolidation, centralization, differentiation of instruments of government and monopolization of the means of coercion – all fundamental processes of state-making. Thus, Tilly famously wrote, "War made the state, and the state made war."[30] Tilly, of course, was writing within the context of early modern Europe, with geopolitical and socioeconomic conditions that were radically different from that of China's. In medieval times, central power was weak in Europe, and military power was dispersed among numerous nobles and aristocrats. Such a situation was completely alien to China, where military power tended to be highly centralized except during periods of political upheaval. Furthermore, the relationship between warfare and state building began in China centuries before Europe, with Mark Edward Lewis arguing decades ago that changing modes of mobilization and warfare led to the emergence of a new kind of state during the Warring States period (circa 475-221 BCE).[31] Years later, Peter Perdue has tracked how Qing state-building

[30] Charles Tilly, "Reflections on the History of European State-Making," in *The Formation of National States in Western Europe*, edited by Charles Tilly and Gabriel Ardant (Princeton: Princeton University Press, 1975), 42.
[31] Mark Edward Lewis, *Sanctioned Violence in Early China* (Albany: State University of New York Press, 1990), 53-96.

went hand in hand with its conquest of Xinjiang.[32] More recently, Peter Lorge has noted the centrality of war in early Northern Song politics and how warfare shaped the development of the state.[33] Most studies on war's fiscal and logistical demands, however, tend to focus primarily on the nineteenth and twentieth centuries.[34]

Unfortunately, discussions of war-making and state formation have not extended to the Yuan and the Ming. For a long time, Ming military history has focused primarily on providing a general overview of the organizational structures of military institutions within the bureaucratic apparatus or grand narratives of battles and campaigns that were fought. Nonetheless, in recent years, scholars such as David Robinson and Michael Szonyi have renewed attention towards the military, moving away from older forms of scholarship and focusing instead on the evolution of the Ming garrison system and how the garrisons not only influenced the development of the state but also interacted with local social and economic environments. In an article titled "Why Military Institutions Matter for Ming History," Robinson points out two reasons why attention to the Ming military is warranted. First, it helps to put the Ming in a broader and more comparative, global light. The Ming military was the largest in the world at the time, and the resources that were devoted to it along with the logistical apparatus the state constructed to support the military were unmatched by contemporary polities. Second, attention to military institutions allows for a

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[32] Peter Perdue, *China Marches West: The Qing Conquest of Central Asia* (Cambridge, MA: Harvard University Press, 2005).
[33] Peter Lorge, *The Reunification of China: Peace through War under the Song Dynasty* (Cambridge: Cambridge University Press, 2015).
[34] For a sampling, see Chongyi Feng and David S.G. Goodman, *North China at War: The Social Ecology of Revolution, 1937-1945* (Lanham, MD: Rowman & Littlefield Publishers, 2000); Arthur Waldron, *From War to Nationalism: China's Turning Point, 1924-1925* (Cambridge: Cambridge University Press, 2002); Huaiyin Li, "Centralized Regionalism: The Rise of Regional Fiscal-Military States in China, 1916–28," *Modern Asian Studies* 55, no. 1 (2021): 253-91; Emily M. Hill, "War, Disunity, and State Building in China, 1912–1949," *Twentieth-Century China* 47, no. 1 (2022): 20-29.

better understanding of the extent of the state's reach. The state devoted a tremendous amount of resources to the military and military institutions and military policy touched the lives of millions of people and had profound implications for the development of local society.[35]

It is these implications that are the focus of Michael Szonyi's recent works on the Ming. Using the coastal garrisons of Fujian as an example, Szonyi has shown how military households manipulated military institutions and military policies to further their own interests rather than the interests of the state in a process called "everyday politics." According to Szonyi, military households not only developed a large number of individual variations in managing state exactions and expectations, but also took advantage of tax exemptions for military personnel and other military resources to serve diverse personal or family strategies. In all spheres of life – commercial, social, religious – military households negotiated with state mechanisms and state actors to benefit themselves.[36] In a more recent edited volume, Szonyi and his Chinese colleagues expanded their scope to cover other areas of China, shifting focus away from the traditional field of study on the northern frontier to internal garrisons in the southwest and southeast.[37]

Most notably, whereas scholars have traditionally viewed the Ming garrison system through the lens of "decline" and "collapse," Robinson and Szonyi instead highlight change and adaptation.[38] For Robinson, the reason that the hereditary model of military service could not be

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[35] David M. Robinson, "Why Military Institutions Matter for Ming History," *Journal of Chinese History* 1, no. 2 (2017): 297-98.
[36] Michael Szonyi, *The Art of Being Governed: Everyday Politics in Late Imperial China* (Princeton: Princeton University Press, 2017).
[37] Michael Szonyi and Shiyu Zhao, eds., *The Chinese Empire in Local Society: Ming Military Institutions and Their Legacies* (London and New York: Routledge, 2021).
[38] The collapse narrative has been influential in Sinophone historiography on the Ming military. Scholars typically point to the abuse and impoverishment faced by Ming soldiers and military households in explaining how and why

sustained was due more to socioeconomic change, and thus the nature of military recruitment changed alongside socioeconomic conditions. He argues that "changing policies and institutional arrangements were flexible if imperfect responses to evolving challenges."[39] For Szonyi too, the changing nature of the military in the Ming had to do with the changing social and economic environment. Although the Ming practice of uprooting soldiers from their homes and moving them around the empire was meant to "deterritorialize" them so that they would serve the interests of the state, the garrison soldiers slowly "reterritorialized" with local society as time went on. This, coupled with a growing inability of the Ming state to penetrate local society, meant that the hereditary military system envisioned by Hongwu could not be sustained. Szonyi also notes that "the conventional image of the Ming state as static and unresponsive is overstated."[40] This view is now increasingly gaining currency among Chinese scholars of the Ming. Li Xinfeng and Guo Hong, for instance, both noted that the *weisuo* never "collapsed" in the sense that it disappeared or ceased to function, but that its purpose changed from a military organization unit to a military household management unit.[41]

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the garrisons collapsed. According to this narrative, the Ming's hereditary military system was ultimately superseded by hired professional troops. See, for instance, Wu, "Mingdai de junbing," 92-141; Chen, "Mingdai weisuo de jun," 177-203; Yu Zhijia 于志嘉, *Mingdai junhu shixi zhidu* 明代軍戶世襲制度 (Taipei: Xuesheng shuju, 1987); Zhang Jinkui 張金奎, *Mingdai weisuo junhu yanjiu* 明代衛所軍戶研究 (Beijing: Xianzhuang shuju, 2007).

[39] David M. Robinson, "Military Labor in China, c. 1500," in *Fighting for a Living: A Comparative History of Military Labour 1500-2000*, edited by Erik-Jan Zürcher (Amsterdam: Amsterdam University Press, 2013), 43-80; "Why Military Institutions Matter for Ming History," 299.

[40] Szonyi, *The Art of Being Governed*, 228.

[41] Li, *Mingdai qianqi junshi zhidu yanjiu*, 276; Guo Hong 郭紅, *Mingdai weisuo "minhua": falü quyu* 明代衛所【民化】: 法律區域 (Shanghai: Shanghai daxue chubanshe, 2019). Gu Cheng has argued that since its inception, the *weisuo* had dual roles. It was not only used for military organization, but also constituted a distinct military geographical unit since it "had its own relatively independent jurisdiction, which not only governed the lands and population that are not subordinate to the Provincial Administration Commission, prefectures and counties, but also had relatively independent administrative, judicial, educational (imperial examination) and financial powers for a long time." See Gu Cheng, *The Hidden Land: The Garrison System and the Ming Dynasty*, translated by Ping Ning et al. (London and New York: Routledge, 2020), 1-39, 245.

Another aspect of the Ming military that has received much scrutiny has been the impact of military expenditures on Ming finances. The Hongwu emperor had decreed that military farming colonies be established so that the soldiers could feed themselves. According to an often-cited anecdote, Hongwu once proclaimed that he could support a million soldiers without taking a single grain of rice from the peasants.[42] However, these farming colonies declined rapidly from the late 1420s onward, forcing the state to step in and find other methods of provisioning, which included subsidizing the military with outlays of silver. As military service became increasingly monetized, Ming expenditures rose drastically. One scholar who studied these expenditures argued that massive military spending contributed to the Ming's collapse in the early seventeenth century.[43] The state simply spent more than its revenues could afford. Many reasons have been advanced to explain why this was the case, the most prevalent being that the Ming failed to tap into the booming commercial economy for revenue. The land tax, which was assessed at a low rate, remained the largest component of state revenue throughout the Ming.[44]

Institutional weakness has also been blamed for the Ming's fiscal problems. Ray Huang, an eminent Ming fiscal historian, wrote a scathing review of Ming fiscal institutions, arguing that

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[42] Lu Shen 陸深, *Yanshan waiji* 儼山外集, in *SKQS*, 885:167.

[43] Lai 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 (Taipei: Lianjing chuban gongsi, 2019).

[44] Ray Huang, *Taxation and Governmental Finance in 16th-Century Ming China* (Cambridge: Cambridge University Press, 1975), 38. William Guanglin Liu has noted that in 1585, a period when the Ming was undergoing economic growth, the state only had 111 commercial tax offices scattered throughout the entire empire. Consequently, "commercial taxes…lost their influence on state revenues." See William Guanglin Liu, *The Chinese Market Economy, 1000-1500* (Albany: State University of New York Press, 2015), 106-10. Richard von Glahn wrote that "the Ming government failed to capture revenue from the expansion of agriculture and commerce, thus suffered from chronic underfunding." See Richard von Glahn, *The Economic History of China: From Antiquity to the Nineteenth Century* (Cambridge: Cambridge University Press, 2016), 309.

due to a host of embedded flaws, the system was incapable of handling the problems of the day.[45] For Huang, military institutions played a key role in shaping these fiscal institutions – Hongwu had anticipated that the military would be self-sufficient and would therefore not pose a burden on financial resources.[46] Thus, when the farming colonies failed, the state did not possess the capacity to respond and this ultimately led to the dynasty's fall. However, this view has been challenged by David Robinson, who noted the diverse methods the court utilized to keep the military provisioned throughout the fifteenth and sixteenth centuries.[47] Kenneth Swope, a prominent scholar of the late Ming military, has also challenged Huang's characterization of a moribund Ming state. According to Swope, the Ming experienced a military revival in the late sixteenth century under the Wanli emperor (r. 1572-1620), with Ming forces successfully pacifying major rebellions in the northwest and southwest as well as fighting in Korea against the Japanese. For Swope, the military collapse of the Ming did not occur until the early seventeenth century, when the Ming state buckled under the combined pressures of the Manchus and peasant rebellions.[48]

While the Ming military has received the attention of scholars, the same cannot be said for the Yuan, especially in English. Hsiao Ch'i-ch'ing's *The Military Establishment of the Yuan Dynasty*, published more than forty years ago, remains the only English-language monograph devoted to the subject.[49] Scholars have continued to rely on works by Chinese historians, some

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[45] Huang, *Taxation and Governmental Finance*, 315-16.
[46] Ray Huang, "Military Expenditures in Sixteenth Century Ming China," *Oriens Extremus* 17. No. 1/2 (1970): 45.
[47] Robinson, "Why Military Institutions Matter for Ming History," 319-23.
[48] Kenneth M. Swope, "The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China," PhD diss., (University of Michigan, Ann Arbor, 2001); *The Military Collapse of China's Ming Dynasty, 1618-44* (London and New York: Routledge, 2016).
[49] Ch'i-ch'ing Hsiao, *The Military Establishment of the Yuan Dynasty* (Cambridge, MA: Harvard University Asia Center, 1978). For the Chinese version of his monograph, see Xiao Qiqing 蕭啟慶, "Yuandai de suwei zhidu" 元代

of them also published decades ago.[50] These works also include studies on Yuan military farming and military logistics.[51] While Sinophone scholarship admits that the Yuan court paid close attention to military issues and worked to alleviate them, they typically portray the Yuan military system as having deteriorated rapidly after the conquest of the Southern Song in 1270s and collapsing by the mid-fourteenth century. Hsiao blamed this collapse (which is similar to the

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的宿衛制度, in *Yuandaishi xintan* 元代史新探, edited by Xiao Qiqing (Taipei: Xinwenfeng chuban gongsi, 1983), 59-111; "Yuandai de zhenshu zhidu" 元代的鎮戍制度, in *Yuandaishi xintan*, edited by Xiao Qiqing (Taipei: Xinwenfeng chuban gongsi, 1983), 111-39.

[50] Chen Gaohua and Shi Weimin are among the early Chinese scholars who devoted attention to the Yuan military. Chen Gaohua 陳高華, "Yuandai de junhu" 元代的軍戶, in *Yuanshi yanjiu lungao* 元史研究論稿, edited by Chen Gaohua (Beijing: Zhonghua shuju, 1991), 127-55; Shi Weimin 史衛民, "Yuandai jundui de bingyuan tizhi yu bianzhi xitong" 元代軍隊的兵員體制與編制系統, *Menggushi yanjiu* 蒙古史研究 1989, no. 3 (1989): 65-79; "Yuandai shiwei qinjun jianzhi yange kaoshu" 元代侍衛親軍建置沿革考述, in *Yuanshi luncong 4* 元史論叢 4, edited by *Yuanshi yanjiu hui* 元史研究會 (Beijing: Zhonghua shuju, 1992), 84-109; *Zhongguo junshi tongshi di 14 juan: Yuandai junshi shi* 中國軍事通史 第 14 卷: 元代軍事史 (Beijing: Junshi kexue chubanshe, 1998). More recently, Li Zhi'an and Liu Xiao has drawn focus on the deployment and history of regional garrisons. Li Zhi'an 李治安, "Yuan Shaanxi Sichuan Menggujun du wanhufu kao" 元陝西四川蒙古軍都萬戶府考, *Lishi yanjiu* 2010, no. 1 (2010): 66-79; "Yuandai Chuan-Shaan-Gan jundui de zhengxing yu aolu tanzheng" 元代川陝甘軍隊的征行與奧魯探徵, *Xibei shida xuebao* 西北師大學報 54, no. 4 (2017): 34-46; Liu Xiao 劉曉, "Yuan zhenshou Pingjiang 'Shizilu wanhufu' kao" 元鎮守平江路 '十字路萬戶府' 考, in *Sui Tang Liao Song Jin Yuan shi luncong 3* 隋唐遼宋金元史論叢 3, edited by Huang Zhengjian 黃正建 (Shanghai: Shanghai guji chubanshe, 2013), 299-309; "Yuandai junshishi santi – *Yuan dianzhang* zhong chuxian de sizou xiaolu jun, baojia dingzhuang yu tongshi jun" 元代軍事史三題 –《元典章》中出現的私走小路軍、保甲丁壯與通事軍, *Zhongguoshi yanjiu* 2013, no. 3 (2013): 133-50; "Yuan zhenshou Hangzhou 'si wanhu' xinkao" 元鎮守杭州 '四萬戶' 新考, *Zhejiang xuekan* 浙江學刊 2014, no. 4 (2014): 36-44; "Yuan zhenshou Jiande 'Huaimeng wanhufu' yu zhenshou Huizhou 'Taizhou wanhufu' kao' 元鎮守建德 '懷孟萬戶府 '與鎮守徽州 '泰州萬戶府' 考, *Anhui shixue* 安徽史學 2014, no. 3 (2014): 109-15, 127; "Yuan Zhedong dao 'Yanhai wanhufu' kao" 元浙東道 "沿海萬戶府" 考, in *Qinghua Yuanshi 3* 清華元史 3, edited by Yao Dali 姚大力 and Liu Yingsheng 劉迎勝 (Beijing: Shangwu yinshu guan, 2015), 97-158; "Yuan Jiangxi xingsheng zhenshu jun wanhufu kao" 元江西行省鎮戍軍萬戶府考, *Shoudu shifan daxue xuebao* 首都師範大學學報 232 (2016): 11-25; "Zhenshu Bamin: Yuan Fujian diqu junfu yanjiu" 鎮戍八閩：元福建地區軍府研究, *Lishi yanjiu* 曆史研究 2017, no. 2 (2017): 23-38.

[51] Guo Qingchang 國慶昌, "Yuandai de juntun zhidu" 元代的軍屯制度, *Lishi yanjiu* 1961, no. 2 (1961): 39-45; Li Wei 李蔚, "Shilun Yuandai xibei tuntian de ruogan wenti" 試論元代西北屯田的若干問題, *Lanzhou daxue xuebao* 蘭州大學學報 21, no. 2 (1993): 94-100; "Zailun Yuandai xibei tuntian de jige wenti" 再論元代西北屯田的幾個問題, *Beifang gongye daxue xuebao* 北方工業大學學報 9, no. 4 (1997): 93-97; Li Qian 李倩, "Shilun 'Yuanshi Bingzhi' zhong guanyu Yuandai tuntian de louzai" 試論《元史· 兵志》中關於元代屯田的漏載, *Jiangnan luntan* 江南論壇 2003, no. 12 (2003): 73-75; Li Sha 李莎, "Yuandai tuntian zhong de renkou qianyi" 元代屯田中的人口遷移, *Zhengzhou hangkong gongye guanli xueyuan xuebao* 鄭州航空工業管理學院學報 26, no. 2 (2007): 47-48; Cong Haiping 叢海平, "Yuandai junshi houqin zhidu yanjiu" 元代軍事後勤制度研究, PhD diss., (Nankai University, 2010).

collapse narrative of the Ming military) on abuse, exploitation, and impoverishment of military personnel, but more importantly Hsiao argued that the military household system was itself unsustainable due to a host of embedded institutional flaws, namely that it was a nomadic institution which was ill-suited to function in sedentary China. This view was affirmed by Hong Jinfu, another prominent scholar of the Yuan, who wrote that the military household system was "not in accordance with human relationships and so it will undoubtedly lead to disharmony between the households – therefore the decline of the Yuan military household system was unavoidable."[52]

The narrative of the Yuan military collapse deserves reconsideration, but thus far there have few attempts by scholars to do so. John Dardess was one of the early opponents of this view, noting that the court possessed sufficient capacity to mobilize and support military expeditions against rebels in the 1350s. However, Dardess still subscribed to the notion that the garrisons had collapsed and argued that the Yuan depended primarily on Chinese recruits.[53] More recently, David Robinson, in writing about Northeast Asia during the last years of the Yuan, has also argued that the late Yuan state had the military capacity to suppress the rebels throughout the 1350s and well into the 1380s in frontier areas in the northeast, northwest, and southwest.[54] Therefore, a much deeper analysis and understanding of Mongol-Yuan military

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[52] Hong Jinfu 洪金富, "Yuandai Hanjun junhu de zhengtie jiegou yu zhengtie guanxi" 元代漢軍軍戶的正貼結構與正貼關係, *Zhongyang yanjiu yuan lishi yuyan yanjiu suo jikan* 中央研究院歷史語言研究所集刊 80, no. 2 (2009): 284.

[53] See John W. Dardess, *Conquerors and Confucians: Aspects of Political Change in Late Yüan China* (New York: Columbia University Press, 1973); "Shun-ti and the End of Yüan Rule in China," in *The Cambridge History of China, Vol. 6, Alien Regimes and Border States,* edited by Herbert Franke and Denis Twitchett (Cambridge: Cambridge University Press, 1994), 561-86.

[54] David M. Robinson, *Empire's Twilight: Northeast Asia under the Mongols* (Cambridge, MA: Harvard University Asia Center, 2009); *Korea and The Fall of the Mongol Empire: Alliance, Upheaval, and the Rise of a New East Asian Order* (Cambridge: Cambridge University Press, 2022).

institutions, how they functioned in China is necessary, and their legacy on the Ming is necessary.

Outline of Chapters (Discussion of Sources)

This dissertation is divided into five chapters and covers the period between 1260 and circa 1600. Chapter One looks at the introduction of hereditary military service in China by the Mongol-Yuan and how the court maintained the stability of its military institutions over the next few decades. Utilizing cases from the *Statutes of the Yuan Dynasty* (*Yuan dianzhang* 元典章),[55] the *Legislative Records from the Comprehensive Regulations* (*Tongzhi tiaoge* 通制條格), and the *Legislative Records of the Zhizheng Period* (*Zhizheng tiaoge* 至正條格), as well as literati writings, this chapter argues that the Yuan court paid close attention to the military and utilized different policies, some of which even went against established regulations and precedents, to ensure that soldiers could be mobilized. It played a careful balancing game, weighing the need to adjust its military institutions with the need to maintain the privileges of the Mongol elites. Although instances of abuse and exploitation undoubtedly occurred, this chapter argues that the court was successful overall in keeping the military funded and operational. The complaints of the Han literati, which informs much of the Sinophone scholarship on the Yuan military, therefore cannot be taken at face value, as those literati were pushing for reforms that went against the inclinations of the Mongols. Finally, this chapter shows that many Yuan military

[55] There are currently two punctuated and annotated editions of the *Yuan dianzhang* published. The first, published in 2011 in four volumes, is the work of scholars from Mainland China, Chen Gaohua 陳高華, Zhang Fan 張帆 et al. In 2016, Taiwanese scholar Hong Jinfu 洪金富 published his own edition in two volumes. This dissertation primarily uses the 2011 edition by Chen Gaohua et al. In cases where differences between the two editions are significant enough that it changes the meaning of the text, or if the 2016 Hong Jinfu edition contains additional annotations that clarifies the text, then both will be cited.

households engaged in “everyday politics” to benefit themselves in the same manner as the Ming military households that Szonyi studied.

The success of the Mongol court in maintaining the military is demonstrated in Chapter Two, which details the court’s efforts to suppress the Red Turban Rebellion in the 1350s. Using official histories, literati writings, and gazetteer records, this chapter shows that in the early 1350s, garrisons from north China, including huge contingents of Inner Asian troops, were mobilized by the court. These troops formed the core of the Yuan military, augmented by recruited mercenaries and local militia forces. These latter troops were employed due to the weakness of the southern garrisons, which were hit particularly hard by the problems of abuse and extortion mentioned in the first chapter. Nonetheless, the court used different strategies to keep these recruited troops in check. At the same time, the court constructed an elaborate logistical apparatus to support its military forces and a system of checks and balances to prevent regional military leaders from growing too powerful, all of which demonstrates the continued vigor of the state. As this chapter shows, the collapse of the Yuan military from 1355 onward was not due to the impoverishment of soldiers or the inherent weakness of the military, but rather to institutional changes in which military power fell into the hands of powerful prime ministers through a web of patronage. When this patronage system was disrupted in 1355, the military collapsed as a result and the Yuan never recovered. These prime ministers, who dominated the court from the 1320s to the mid-1350s, constituted a distinctively Chinese *qarachu* (non-Chinggisid military elite) class that bears some similarities to but at the same time was different from those that existed in Ilkhanate Persia. Thus, this chapter proposes a new way to view the collapse of the Mongol-Yuan state in the mid-fourteenth century.

Chapter Three investigates the early Ming from 1368 to 1449, drawing on sources such as the *Veritable Records of the Ming* (*Ming shilu* 明實錄), the *Itemized Precedents for Military Administration* (*Junzheng tiaoli* 軍政條例), and local gazetteers. The Ming inherited its military system from the Mongol-Yuan, but early Ming emperors, who possessed a different vision of the state than their Chinggisid predecessors and who faced different geopolitical challenges, took steps to strengthen central control over the military. The Hongwu and Yongle (r. 1402-1424) emperors utilized harsh punishments and strict regulatory policies coupled with lavish grants of money and material goods to keep military personnel in line. At the same time, they also detached soldiers from the *weisuo* and organized them separately to allow for more flexible military deployment, setting the stage for changes to military organization in the decades to follow. However, after the Yongle reign, stricter policies began to be loosened. The court transferred oversight powers from military officials first to local civilian authorities and then to the central government in moves that paralleled the actions of the Yuan court to strengthen oversight structures. I argue in this chapter that similar institutions which bred similar problems led to these similar solutions. In terms of logistics, this chapter uses case studies from three garrisons - Liaodong, Guizhou, and Gansu - to show that military farming was very successful in supplying grain to many garrisons up to the early 1420s. Thereafter, many of these colonies declined, but the court found other ways to provision the garrisons, tapping into both its coercive power in mobilizing civilians to deliver grain and into its commercial power by enticing merchants to do the same. Thus, while scholars commonly see key changes in military institutions occurring after 1449, this chapter demonstrates that many such changes were already underway in the 1430s and that the 1449 crisis simply accelerated some of these trends. This not only challenges the traditional chronological framework that is used to study Ming military

institutions but also calls for a reevaluation the causal relationship of what influenced the changes to military institutions and policies in the mid-Ming.

Chapter Four traces the evolution of the Ming's military policies between 1449 to circa 1500. This was a critical moment in Ming military history as the court was caught between restoration on the one hand and adaptation on the other. Utilizing compilations of precedents (*tiaoli* 條例) and sub-statutes (*shili* 事例), this chapter shows that the court ultimately sought to reconstitute, rather than restore, the *weisuo* in the second half of the fifteenth century. While the court wanted to preserve the hereditary farmer-soldier ideal that underpinned the *weisuo*, it sought to do so using different policies and through different organizational strategies. Restoration of military farming was implemented and conscription from military households continued, but these attempts were largely unsuccessful. The Ming continued to depend on alternative methods of provisioning for its garrisons. Military mobilization, meanwhile, was becoming increasingly commercialized. By the early sixteenth century, local officials were commuting mandatory military service into payments of silver which they used to hire troops. After initially attempting to stamp out this practice, the court ultimately accepted it after recognizing that hired troops yielded better results.

The reconstituted *weisuo* system worked well enough during the second half of the fifteenth century, but new crises in the mid-sixteenth century forced the Ming court to jettison coercive conscription and hereditary service altogether in favor of voluntary recruitment. Chapter Five utilizes statecraft memorials, military manuals, and the *Veritable Records* to trace this phase of the transition. The Ming army became increasingly professional in nature, particularly in south China where troops were hired in large numbers to fight pirates. At the same time, the Ming began constructing an elaborate system of defenses along its northern border, becoming

what we now know as the Great Wall. Both required large expenditures in silver, which was becoming the primary means of keeping the military supplied. Although the Ming fiscal system was not designed to support a professional military force, a series of *ad hoc* policy measures allowed the court to work through fiscal constraints and absorb high military spending. The fiscal collapse of the Ming would not occur until the 1630s, when the Manchu threat and massive peasant rebellions finally bankrupted the court.

The conclusion of the dissertation offers some thoughts on where China fits within a Eurasian context of war-making and empire-building. The Mongol Empire was a Eurasian phenomenon, and the Ming was one of several Eurasian imperial formations that arose after the fall of the Mongols and built on the legacy of the Mongols. As such, a comparison of the institutional practices of different Mongol and post-Mongol polities can reveal things that are not apparent by just looking at China in isolation. The conclusion will draw comparisons between the Mongol-Yuan and the Ilkhanate Persia, and between Ming China and Muscovy Russia, to explore questions of how the Mongols adapted their military institutions to function in sedentary conditions and how post-Mongol polities grappled with their Mongol institutional heritage.

Concepts and Definitions

This final section offers some definitions of terms and concepts that will be employed throughout this dissertation. Following David Robinson, "institutions" are defined as regulations and policies and specific state organizations and programs of lasting duration and significant scale. The Yuan garrisons, the Ming *weisuo*, and the mechanism by which the state conscripted soldiers are all institutions. "Military" is defined as affairs regarding soldiers and armed

personnel, usually but not exclusively subject to state authority.[56] Thus, late Yuan militia forces, raised and commanded by local gentry members, are included as part of the military.

Institutions are never static, and military institutions are no exception. As Szonyi noted, military institutions move around people.[57] As military households found ways to adapt to military service, they inadvertently also pushed military institutions to change. This is because what the military households see as adaptation (or "everyday politics") could and was construed by the state as a form of resistance, forcing the state to respond. In some instances, the state sought to interdict these practices, while in others the state either acquiesced to these practices or attempted to work with them. The question then becomes how should we characterize these changes? Are they indicative of the military institution's decline and collapse, or are they signs of the military's transition to something that better matched the current socioeconomic situation?

This study takes the view that what scholars previously see as "collapse" should instead be characterized as "transition." An institution is deemed to have collapsed when it has broken down and ceases to function and is ultimately replaced by something new. This, according to Wu Han, was what happened to the *weisuo*. Rising number of deserters coupled with the trauma of the Tumu Crisis led to the collapse of the *weisuo* and hereditary conscription and their replacement by hired troops.[58] By contrast, a transition occurs when an institution gradually changes over time, either because of internal reforms, external pressures, or both. When an institution transitions, it still retains some of its old features while adopting new ones. In this regard, the *weisuo* never collapsed since it still played a prominent role in organizing troops and

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[56] David M. Robinson, "Why Military Institutions Matter for Chinese History Circa 600-1800," *Journal of Chinese History* 1, no. 2 (2017): 235.
[57] Szonyi, *The Art of Being Governed*, 24.
[58] Wu, "Mingdai de junbing," 92-141.

managing military households well into the early seventeenth century, and hereditary conscription from military households continued alongside voluntary recruitment. However, the *weisuo* ultimately lost their original role of acting as a military unit, becoming more units of administration.

However, collapse and transition are not necessarily mutually exclusive. An institution can collapse and then transition into something else. This is best illustrated with the institution of military farming, which worked well initially but declined rapidly and ceased to be a major source for military provisioning. The military farming institution can therefore be characterized as having largely collapsed (although it should be noted that it still functioned in a much-reduced state), and the court eventually transitioned to other methods of provisioning.

Thus, while collapse is synonymous with failure, transition is a sign of success. In this dissertation, "success" is defined as the ability of the state to respond to challenges and to maintain its military strength. This entailed adjustments to policies and changes to institutions (i.e., transition). In this manner, the Ming court's transition to a professional army in the mid-sixteenth century should be seen as a success for the military. "Failure", on the other hand, is the inability of the state to prevent its institutions from collapsing or to revive institutions in decline. The inability for the Ming court to successfully conscript large numbers of personnel from the hereditary military households in the latter half of the fifteenth century thus signals a failure of the conscription mechanism.

Finally, policies and regulations are promulgated by the court, which is composed of the emperor and his high officials (both civil and military) located in the capital. In the Mongol-Yuan, the ethnic composition of the court played a major role in military decision-making as

well. The court during the Yuan period was dominated by Mongols and Central Asians, who monopolized high positions in the central government (particularly military positions) with only a few Han Chinese officials serving alongside them. This resulted in policies that many Han Chinese literati found insufficient in their quest to reform the Yuan state along Chinese lines. As such, when the term "court" is used in Chapters One and Two, it refers to the Mongol decision-makers in the capital. Such ethnic concerns do not exist in the Ming.

Chapter 1. Garrisoning China: The Mongol-Yuan Military, circa 1260-1350

Sometime in the late 1270s or early 1280s, a Chinese official by the name of Hu Zhiyu 胡祇遹 (1227-1295) submitted a long memorial to Qubilai (Emperor Shizu 世祖, r. 1260-1294) detailing a series of problems facing the military. Hu began his memorial by noting that "for our dynasty, nothing is more important than military administration" but claimed that "nothing is more chaotic than military administration."[59] For many later scholars, Hu's memorial serve as a poignant indictment of the Yuan military apparatus. While the Mongols had built up a formidable military force, these scholars believe it was undermined by mismanagement, corruption, a lack of incentives for soldiers, and the unsuitability of the hereditary household system for Chinese society. Using the words of Hu and other literati, along with legal cases concerning the military, scholars have concluded that the Yuan military deteriorated rapidly over the course of a century.[60] Meanwhile, Anglophone historiography has tended to steer clear of the topic altogether. As noted in the introduction, Hsiao Ch'i-ch'ing's 1978 monograph, which heavily emphasized decline, continues to remain the authoritative account on the Yuan military. This chapter, however, argues for an alternative view of the Yuan military, one that gives more agency to both the Mongol rulers and to the military households themselves. Rather than paint a picture of military decline, this chapter instead highlights the successes of the court in maintaining military strength and in doing so seeks to revise a view that has dominated historiography for more than half a century.

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[59] Hu Zhiyu 胡祇遹, "Junzheng" 軍政, in *QYW* 5, 165:576.

[60] Murakami Masatsugu 村上 正二, "Genchō heisei shijōni okeru ōro no seido" 元朝兵制史上に於ける奥魯の制度, *Tōyō gakuhō* 東洋学報 30, no. 3 (1943): 337-43; Oshima Ritsuko 大島 立子, "Genchō Kanminzoku shihai no ikkōsatsu -- gunko wo chūshintoshite" 元朝漢民族支配の一考察--軍戸を中心として, *Shiron* 史論 23 (1971): 13-23; Hsiao, *Military Establishment*, 27-29; Shi, *Yuandai junshi shi*, 393-95; Hong, "Yuandai Hanjun," 284.

Problems within the military undoubtedly existed and affected the soldiers and their households. Yet despite these problems, this chapter will show that the court paid close attention and actively responded to problems within the military, deploying a wide range of solutions that were at times quite successful in addressing the various issues that plagued the military. The military's transition from a conquest force to a garrison force and the changing nature of the military threat from the south to the northwest bred new issues which existing military institutions could not effectively deal with. This necessitated changes to military policies and institutions to better respond to these new issues. Some of these changes were an appeal to steppe customs, such as overlapping jurisdictions, mutual supervision, and private retainerships, while others were aimed at strengthening institutional control. Thus, these changes also intersected with shifts in the steppe-sedentary balance of governance, particularly after the reign of Qubilai.

Meanwhile, the military households were not just passive recipients of abuse and exploitation as they are often portrayed in the sources. While some became impoverished and deserted, others adapted and used their positions to maximize their own benefits while performing military service. Thus, the resilience and survival of the Yuan military apparatus was due not only to the actions of the state, but also to the actions of the military households. Taking the views of the literati at face value obscures the various challenges the Chinggisid state in eastern Eurasia faced in transitioning their army to function as a garrison force in sedentary China. As this chapter will argue, many literati tied their blistering criticism of the military to the need for a bureaucratic overhaul so that the Yuan military, and by extension the entire government, could function more like a native Chinese dynasty. In response, the court implemented reforms that largely addressed the issues the literati raised, though not to the extent

that literati wanted - that is, to rid the military of nomadic institutions. The Mongol-Yuan was at its core a hybrid state that sought to incorporate both Chinese and steppe institutions and, as it related to the military, utilized both sets of institutions. The Mongol rulers therefore had to balance literati demands for military reform with the need to keep the hereditary military and the privileges that such a system afforded to Mongol elites intact. That it could continually mobilize troops for campaigns in the first half of the fourteenth century is therefore a testament to the court's overall success in maintaining this balance.

The Mongol-Yuan Military: An Institutional Sketch

When Chinggis Khan (r. 1206-1227) embarked on his campaigns of conquest in 1206, his military looked very different than the one his grandson Qubilai used to destroy the Southern Song seven decades later. Nonetheless, two core features were maintained throughout the Mongol-Yuan. One was the military system's basic organizing principle, the decimal system, which divided soldiers into one-hundred men "centuries" (C. *baihu* 百戶, M. *ja'un*), one-thousand men "chiliarchies" (C. *qianhu* 千戶, M. *mingghan*), and ten-thousand men "myriarchies" (C. *wanhu* 萬戶, M. *tümen*). The decimal system had been used in the steppes long before the Mongols, but Chinggis's innovation was that he erased old tribal and kinship divisions and distributed men among different units.[61] The other was the *aurug* (*aolu* 奧魯)

[61] Timothy May, *The Mongol Art of War: Chinggis Khan and the Mongol Military System* (South Yorkshire: Pen & Sword Military, 2007), 31-32.

which, in its earliest form, was a base camp composed mostly of women, the old and infirm, and young children who accompanied the army to help provision front line troops.[62]

As the Mongol Empire expanded, its military became swelled by recruits drawn from sedentary regions that undertook garrison and siege duties. In North China, armies of surrendered and recruited Han Chinese, Khitans, and Jurchens were all utilized by the Mongols. Prior to 1262, the commanders of these Chinese armies were given great autonomy and were known as "hereditary marquesses" (*shihou* 世侯), since their positions were hereditary. However, after a major rebellion by one of these warlords in 1262, Qubilai took action to rein in their power and eventually folded their forces into the regular military.[63] This military force was known as the Han Army (*Hanjun* 漢軍), one of the four major army types of the Mongol-Yuan. After the conquest of South China in the 1270s, the armies of the former Southern Song were reorganized to form the "Newly-Adhered Army" (*Xinfujun* 新附軍).[64]

The successful reunification of China under Qubilai that ended nearly half a century of warfare in China marked a watershed in the military history of the Mongol-Yuan. The Mongols now had to transition their army from a conquest force into a garrison force, necessitating changes to its structure as it sought to adapt to new socioeconomic and geopolitical conditions. This transition was already underway in the 1230s as the Mongols settled in North China, but greatly accelerated in the 1270s and 1280s. A fundamental component of this new military

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[62] May, *The Mongol Art of War*, 32; Christopher Atwood, *The Rise of the Mongols: Five Chinese Sources* (Indianapolis: Hackett Publishing Company, Inc., 2021), 90.
[63] Hsiao, *Military Establishment*, 54-57; Xue Lei 薛磊, "Yuandai dongbei de junshi zhenshu" 元代東北的軍事鎮戍, in *Yuanshi luncong 11* 元史論叢 11, edited by Zhongguo Yuanshi yanjiu hui 中國元史研究會 (Tianjin: Tianjin guji chubanshe, 2009), 208-25; Li Zhi'an 李治安, *Hubilie zhuan* 忽必烈傳 (Beijing: Renmin chubanshe, 2004), 161-78.
[64] Shi, *Yuandai junshi shi*, 68-70.

system adapted to the situation in China was the institution of the hereditary military households (C. *junhu* 軍戶, M. *cerig orghon*). Under Ögedei Khan (r. 1229-1241), a census was conducted in 1235 that separated the population into civilian and military households, the latter of which provided the basis for military recruitment. Further censuses were ordered by Möngke (r. 1251-1259) and Qubilai for the purposes of both assessing taxation and recruiting soldiers. As part of this institutional adjustment, Mongol troops were organized into households as well. All military households were liable to furnish one adult male for military service and to provide him with equipment and supplies, but actual practice varied. Mongol military households, for instance, were sometimes required to provide two or even three adult males.[65] As time went on, many households became impoverished and could no longer take up military service. To address this issue within the Han Army, the court implemented a policy of "consolidation" of between two to five households of various economic and personnel strength to create composite households, with one "primary household" (*zhenghu* 正戶) supplying the soldier and the other "supplementary household(s)" (*tiehu* 貼戶) providing money and supplies.[66] All this served to minimize the state's cost in maintaining military personnel by transferring the burden directly to the military households.

To better tailor the military to function in sedentary China, the court also began adjusting the decimal system. Even during the early Mongol Empire, myriarchies (*tümen*) were typically kept at only between fifty to sixty percent strength, and as composite households became increasingly common among Han Army households, it was impossible to keep the decimal

[65] Hsiao, *Military Establishment*, 17-18.
[66] Hong, "Yuandai Hanjun," 267-68.

armies at full strength. [67] Therefore, Qubilai divided myriarchies and chiliarchies into three grades and centuries into two based on the number of troops they were expected to keep. A third grade myriarchy, for instance, was expected to only maintain between three to five thousand troops.[68] Another institution that had to adapt to new peacetime conditions was the *aurug*, which shed its role as a wartime logistical support unit – its duties were now only to provide soldiers and replacements for military service and to supply their traveling and living expenses.[69] As troops were dispatched to garrison throughout the empire, the distance between the serving soldier and his *aurug* became greater, creating serious logistical issues. Many scholars believe that *aurug*s became increasingly irrelevant as an institution and were abolished in 1345.[70] However, this applied only to *aurug*s of the Han Army; those for the Mongol armies survived well into the 1350s.[71] As the next chapter will argue, this was a sign that many Mongol garrisons remained in good fighting strength up until the last decades of the Yuan.

With new territories being brought into the empire, the Mongol rulers began detaching Mongol and other nomadic troops from the regular army to perform garrison duties as *tammachi*

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[67] May, *The Mongol Art of War*, 27. According to Oba Shoichi, this was due to the different social conditions in China. In traditional Mongol society, a "household" was defined as a family unit (M. *ayil*) that can supply one adult male for military service. Therefore, a "one thousand household" (*qianhu*) unit meant one thousand *ayils* that can each supply one soldier, which is the same as an army of one thousand. However, this type of organization could not be replicated in China and multiple households were combined to produce one soldier. Consequently "one thousand households" could no longer equal "one thousand men," hence the need to reduce the number of personnel in the decimal units. In other words, the Yuan state followed the decimal system in principle but adjusted the number of troops in practice so that these decimal units were rarely at their full strength. Hsiao Ch'i-ch'ing believes that on average, each myriarchy only had around 5,000 men. See Oba Shoichi 大葉 昇一, "Mongoru teikoku = Genchō no guntai soshiki: tokuni shikikeitō to hensei hōshiki ni tsuite" モンゴル帝国=元朝の軍隊組織 : とくに指揮系統と編成方式について, *Shigaku zasshi* 史学雑誌 95, no. 7 (1986): 1135-72; Hsiao, *Military Establishment*, 54.

[68] Tsutsumi Kazuaki 堤 一昭, "Dai Gen urus no Kōnan chūtongun" 大元ウルスの江南駐屯軍, *Ōsaka gaikokugo daigaku ronshū* 大阪外国語大学論集 19 (1998): 173-98.

[69] For a detailed study of the *aurug*, especially its role in the Mongol-Yuan, see Murakami, "Genchō heisei," 297-345.

[70] Chen, "Yuandai de junhu," 90; Shi, *Yuandai junshi shi*, 331.

[71] Murakami, "Genchō heisei," 46; Li Zhi'an, "Yuandai Chuan-Shaan-Gan jundui de zhengxing yu aolu tanzheng" 元代川陝甘軍隊的征行與奧魯探徵, *Xibei shida xuebao* 西北師大學報 54, no. 4 (2017): 42.

(*tanmachi* 探馬赤) troops. While there has been debate about the composition of the *tammachi* army and its status within the Mongol military hierarchy, recent scholars have argued that they were essentially no different from Mongol Army soldiers.[72] Thus, the Mongol-Yuan military eventually crystallized into four main army types divided along ethnic lines: the Mongol Army, the *Tammachi* Army, the Han Army, and the Newly-Adhered Army. After conquering the Southern Song, Qubilai developed a grand strategy to defend his new empire from internal and external threats. Part of this strategy was the creation of a semi-circle defensive line, stretching from Jiangnan to Yunnan to the northwest and finally to the Mongolian steppes and composed of garrison forces and imperial princes that served to protect North China and the Mongolian heartland from potential rebellions in the south and from Mongol challengers in the northwest. Mongol and *tammachi* troops, considered to be more trustworthy, that participated in the expedition south were pulled back to form a defensive line along the Huai River Valley to defend the two capitals from potential rebellions in the south. Some Mongol and *tammachi* troops were also sent to garrison the southwest, northwest, and northeast. South of the Huai River, the court depended primarily on Han and Newly-Adhered soldiers for security. Most of the southern garrisons were located in the Yangtze River Delta, the economic heartland of the empire.[73] Imperial princes, enfeoffed by Mongol rulers in various appanages (*touxia* 投下) throughout the empire, also sometimes commanded private military forces that were answerable only to the ruler. Although successive rulers imposed limits on the military authority of imperial princes,

[72] Chen Gaohua 陳高華 and Shi Weimin 史衛民, *Zhongguo zhengzhi zhidu tongshi diba juan Yuandai* 中國政治制度通史 第八卷 元代 (Beijing: Renmin chubanshe, 1996), 206; Li, "Yuandai Chuan-Shaan-Gan jundui," 43.
[73] Hsiao, *Military Establishment*, 55-56; Li, *Hubilie zhuan*, 382-83, 402; Oba Shoichi, "Gendai no Kōnan deruta chitai ni okeru tonju" 元代の江南デルタ地帯における屯戍, *Tochigi shigaku* 栃木史学 4 (1990): 129-58.

they continued to play a key military role, particularly in the northeast, where the court depended on them to maintain local order and to defend against potential threats from the Jurchens.[74]

To further protect the Capital Metropolitan Region (*Fuli* 腹裏) and to increase the military power of the ruler, Qubilai established the Imperial Guard Corps (*shiwei qinjun* 侍衛親軍), which was composed of elite troops drawn from the regional garrisons. Between 1260 and 1279, Qubilai established three guards (*wei* 衛), with each equivalent to a myriarchy, composed of a mix of Mongol, Han, Central Asian, and Newly-Adhered soldiers. Between 1279 and 1328 the number of guards increased to twenty-five. By 1330, there were thirty-four guards, including five Mongol guards, twelve Central Asian guards, and seventeen guards of Han and Newly-Adhered troops. The Imperial Guard Corps' main duties were defending the two capitals, engaging in military farming, taking part in major expeditions, and participating in construction work in the capital region.[75]

Then there was the *keshig* (*qiexue* 怯薛), made up of the sons and younger siblings of nobles and subordinate rulers. Originally established by Chinggis as his personal bodyguard, the *keshig* also took on domestic duties serving the Great Khan and became an administrative organ as well. One of the first things Qubilai did after he seized power in 1260 was to construct his own *keshig*, which was a force between 10,000 and 12,000 men. They were responsible for the Great Khan's personal security and the security of the imperial palace, although they also undertook domestic duties. In the Yuan, the *keshig* never went into combat, but their political

[74] Li Zhi'an, *Yuandai fenfeng zhidu yanjiu* 元代分封制度研究 (Tianjin: Tianjin guji chubanshe, 1992), 47-49; Xue, "Yuandai dongbei," 208-12.
[75] Hsiao, *Military Establishment*, 45-46; Shi, "Yuandai shiwei qinjun," 84-109.

significance grew, with members being entitled to participate in the decision-making of the Bureau of Military Affairs, the central administrative organ which oversaw the military. Moreover, many high officials were members of the *keshig*, and joining the *keshig* was one of the most important routes to office.[76] The *keshig* continued to remain an aristocratic organization composed of sons or younger siblings of nobles and high officials.[77]

As soldiers in the Mongol-Yuan were responsible for their own equipment and supplies, the state allocated to Mongol military households farmland in North China so that they could sustain themselves and an unknown amount of grazing land for their horses and cattle.[78] The state granted Han Army households four *qing* of tax-exempt land and exemptions from corvee labor and miscellaneous levies. Newly-Adhered soldiers, who received neither land nor auxiliary households, depended entirely on state rations, and they also did not have the *aurug*.[79] To further aid in military self-sufficiency, the Yuan state implemented military farming colonies. While this institution was not new to China, the Yuan dramatically expanded its scale and introduced a new method of organization that separated garrison soldiers from farming soldiers. The former trained, patrolled, and participated in expeditions while the latter engaged solely in farming. Each colonist was provided seeds, tools, and oxen by the state and the rent they paid was used to feed the garrisons.[80] Unfortunately, the true scale of military farming in the Yuan is not possible

[76] Hsiao, *Military Establishment*, 55-56. For a discussion of the *keshig* as a route to bureaucratic office, see Katayama Tomō 片山 共夫, "Kyōsetsu to Genchō kanryōsei" 怯薛と元朝官僚制, *Shigaku zasshi* 史学雑誌 89, no. 12 (1980): 1775-1811.
[77] Hsiao, *Military Establishment*, 34-44; Li, *Hubilie zhuan*, 362-78.
[78] Hsiao, *Military Establishment*, 20-21.
[79] Chen, "Yuandai de junhu," 75; Hsiao, *Military Establishment*, 20.
[80] Zhang Zexian 張澤咸 et al., *Zhongguo tunken shi* 2 中國屯墾史 2 (Beijing: Nongye chubanshe, 1990), 318-20.

to discern, since the statistics preserved in historical sources are incomplete. Nonetheless, many scholars agree that its scale was massive.[81]

A Military in Crisis: Issues and Problems within the Garrisons

Beginning in the 1260s and persisting up until the 1330s when documentary evidence ends, Yuan court records, composed mostly of decisions to legal cases, noted a series of problems that troubled the military. These included officer abuse and corruption, privatization of military labor and land, desertion, the poverty of military households, and logistical problems stemming from the long distance between the military garrison and the *aurug*. At the same time, Han Chinese literati, many of whom were shut out of the upper echelons of the court, drafted their own memorials on the issues facing the military, which they painted as being in a state of decline due to much of the same issues. As the introduction made clear, much of what we know of the Mongol-Yuan comes from Chinese-language sources, which makes reconstructing Mongol rule in China difficult. Since the issues noted by both the court, which was dominated by Mongols and Central Asians, and the Chinese literati were the same, later scholars haven taken these claims of decline at face value. This section, however, argues that by looking beyond the surface, what was perceived by the court and the literati were very different issues. To the Mongol rulers, problems within the military were just that - problems that needed to be resolved to maintain the strength of the army. But to the Chinese literati, their criticisms of the military apparatus focused on the hereditary officer class and questioned the Mongol system of hereditary

[81] See, for instance, Bai Xiaoqing 白曉清, "Yuandai Heilongjiang diqu de tuntian" 元代黑龍江地區的屯田, *Heilongjiang minzu congkan* 黑龍江民族叢刊 1994, no. 4 (1994): 77-78; Li, "Shilun 'Yuanshi Bingzhi' zhong guanyu Yuandai tuntian de lou zai," 73-75.

succession. Indeed, as this section will show, the literati attempted to use these criticisms to push the Mongols to undertake bureaucratic reform.

The Court's Perspective on the Military

Of all the issues within the military that were noted by the court, there was no bigger issue than that of impoverishment. Yuan sources give two reasons why soldiers and their households became impoverished. The first was repeated mobilizations from the second half of the thirteenth century to the first two decades of the fourteenth century, due mainly to the war with Qaidu (Haidu 海都, 1230-1301), a grandson of Ögedei who refused to acknowledge Qubilai as Great Khan and who rallied the Mongols of Central Asia to oppose Qubilai. To defend the northwest and the Mongolian heartland from Qaidu, Qubilai and his successors created large garrisons, which required the mobilization of tens of thousands of troops and the construction of provisioning systems.[82] Mongol and *tammachi* military households were hit particularly hard, since the court demanded more adult males from them for military service, and the result was that many fell into poverty. In 1303, one Mongol official told the emperor that Mongol soldiers from Shandong and Henan who had been mobilized to garrison Gansu in earlier years had to sell off their farmlands and wives to pay for equipment and supplies and instead suggested they should now no longer be sent to Gansu since peace had been restored. In 1320, Mongol officials in Daidu noted that *tammachi* soldiers in the region were pawning off pastures to pay for their upkeep.[83]

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[82] For the conflict between Qubilai and Qaidu, including Qubilai's strategy to contain Qaidu's raids, see Michal Biran, *Qaidu and the Rise of the Independent Mongol State in Central Asia* (Surrey: Curzon, 1997), 37-57.
[83] *YS* 134:3258; *YDZ* (2011), 2121.

However, for the court, a second and far more important reason for the impoverishment of the military households was extortion and expropriation of supplies by military officers throughout the military apparatus. Indeed, officer abuse seemed to be the primary cause of impoverishment from the court's vantage point. For instance, in 1278, the Censorate accused military officers of appropriating the soldiers' rations and fodder, among other abuses. The court's order to cease these acts seemed to have no effect, as in 1292, one centurion memorialized to the Censorate that in the past ten years, military officers in the Imperial Guard Corps had expropriated 21,000 *ding* of paper money from the soldiers. While the Censorate believed this to be exaggerated, it did note that expropriation was a serious issue.[84] In a 1307 edict, the emperor Temür (Chengzong 成宗, r. 1294-1307) complained that many Mongol and *tammachi* soldiers had fallen into poverty because of repeated mobilizations and extortion and abuse by their superior officers.[85]

Expropriation of the soldiers' supplies and rations was tied to the larger issue of logistics. The *aurug*s of the soldiers might be located hundreds or thousands of miles away from the garrisons, causing enormous difficulties for soldiers serving in faraway garrisons, particularly as it provided military officers who were dispatched to transport these supplies and monies with an opportunity to commit abuses. In a case dated to 1298, it was reported that some officers went so far as to charge soldiers a fee to transport their traveling expenses from the *aurug* to the garrisons.[86] The court was well aware of these problems, so in 1281 it decided to have the *aurug* send the funds instead to their respective Branch Secretariats, which would be disbursed only

[84] *YDZ* (2011), 1156-57; *TZTG*, 319.
[85] *YDZ* (2011), 57-58.
[86] *YDZ* (2011), 1216.

after authorization from the Central Secretariat. However, by 1283, officials complained that the process was slow and inefficient, and that it could take two to three years before the money reached the soldiers. As a result, in 1284 the court decided to return to the original method of collection and transportation, albeit with stricter supervision. In 1338, the court increased that supervision by having Branch Secretariats dispatch officials to work together with the *aurug*.[87] Thus, we see that despite its best efforts, the court could come up with no satisfactory solutions and could only rely on stronger supervision. This, as the previous section noted, was because the Yuan's logistical system, which worked well for nomadic warfare, had been reoriented for peacetime garrison duty across a huge empire and therefore became stretched.

Another common method of extortion was demands made on the military households by military officers for personal favors or to maintain relationships (*renqing* 人情), likely a euphemism for payments to maintain connections. These demands could take the form of money and gifts, or food and drinks. In a 1277 communique, the Censorate noted that during festivals, birthdays, send-offs, welcome ceremonies, banquets, and marriages, officers would demand gifts from soldiers or take from their subordinates' salaries.[88] These demands could become an onerous burden for the military households. In 1319, the Censorate told the emperor that the cost for military service was no more than ten *ding* of paper money a year for a household, but when officers make their annual rounds, the military households would have to spend between twenty to thirty *ding* to prepare gifts, fodder, and food and wine for them - two to three times the amount of money that the households were spending on military upkeep. The Censorate also reported

[87] *YDZ* (2011), 1215-16; *ZZTG*, 225.
[88] *YDZ* (2011), 1157; *TZTG*, 320. See also *TZTG*, 324-25 for a similar case from 1311 and *ZZTG*, 226 for a case from 1326.

that higher ranking officers and senior clerks would often use marriage as an excuse to deduct money from their subordinates' salaries as gifts, leading to those subordinates extorting soldiers or expropriating supplies in turn.[89] As a later section will make clear, households likely had good reason to make these payments to officers (and the fact that they could afford them runs counter to the court's argument that the payments were impoverishing the households), but from the view of the court, this was a sign of abuse.

Aside from expropriation, extortion, and solicitations, soldiers and their households also had to contend with two other major forms of abuse on the part of military officers: high-interest loans which officers forced soldiers to take and illegal privatization of military labor.[90] Successive Yuan emperors outlawed these practices, to no avail.[91] The problem of privatization was especially prevalent. For instance, the Censorate reported in 1293 that a chiliarch named Alibo 阿李孛 privatized four soldiers to help him sell wine and build houses. In 1297, a myriarch turned eleven soldiers under his command into household servants and used military craftsmen on his personal construction projects.[92]

Such forms of abuse, along with impoverishment, led to desertion among the soldiers. Newly-Adhered soldiers, for instance, fled and pledged themselves to local notables with wealth and influence as private retainers or tenant farmers.[93] Others chose to become Buddhist monks or

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[89] *YDZ* (2011), 2140-41.
[90] See, for example, a 1277 case where officials complained that these two problems were hurting military households. *YDZ* (2011), 1156; *YDZ* (2016), 1054-55. An almost identical report can be found in the *Tongzhi tiaoge*, see *TZTG*, 317-18.
[91] For edicts against the issuance of high-interest loans, see *YDZ* (2011), 57-58, 59. For edicts against privatizing soldiers, see *YDZ* (2011), 72.
[92] *YDZ* (2011), 1207; *ZZTG*, 312.
[93] *YDZ* (2011), 1197-98.

Daoist priests.[94] Even when deserting, they had help from military officers. Among the military regulations promulgated in 1299 was one that banned officers from releasing soldiers from service and then having the officer's family members or slaves take over for the soldier. In some cases, soldiers needed only to pay a bribe to the officers, while in other cases they would be privatized by the officers.[95] Of course, the officers' family members or slaves do not actually perform any duties – instead they claimed the soldier's rations and even their properties. According to Yuan regulations, deserters who voluntarily returned to service would have their properties and monies returned to them. However, the Bureau of Military Affairs reported in 1337 that local military officials often refused to return these properties and monies, with the implication that they had already been seized and appropriated.[96]

When soldiers fell off the registers, the state naturally had to track down the deserters or conscript replacements. The process by which this was done was called "track and replace" (*goubu* 勾補). It involved officials from the garrisons working together with local *aurug* officials and town or village authorities. However, according to several legal cases, military or *aurug* officials sent to track and replace frequently "released the rich and coerced the poor" (*fangfu chaipin* 放富差貧).[97] This was a practice in which wealthier households bribed officials to evade conscription. Poorer households who could not afford the bribe could have more than one member forcibly conscripted, an extremely heavy burden.

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[94] *YDZ* (2011), 1176.
[95] *YDZ* (2011), 1173, 1203-04, 2142-43.
[96] *ZZTG*, 63-64.
[97] *YDZ* (2011), 1158, 1174, 1175; *TZTG*, 320.

According to traditional narratives of the Mongol-Yuan military collapse, abuses by officers were responsible not only for the impoverishment of the military households and widespread desertion, but also for the collapse of the military farming colonies. Colony officials were frequently accused of expropriating oxen and farming equipment, or privatizing colonists. Those with land next to farming colonies would use natural disasters as an excuse to seize colony farmland. Others sought to profit at the expense of the colonists. For example, the court noted in 1320 that whenever there was a shortage of oxen, some officers would sell their own and force the colonists to buy them - if the market value was five *ding* of paper money, then they would charge ten *ding*. According to the report, "those with money will buy the oxen and avoid trouble. Those without money will have to sign a contract to return the oxen next year. If they are even a little delinquent in returning the oxen, then the officers would whip them and change the contract so that they have to pay twenty *ding*."[98]

Of course, conflicts also arose between the military households themselves, particularly between composite households, but far more blame was placed on the shoulders of military officers. Thus, in the narrative of the court, corrupt and abusive military officers played an outsized role in causing the impoverishment of the military households and the desertion of soldiers. High costs for military upkeep related to repeated mobilizations and conflicts within the military households were seen by the court only as secondary causes. Even when the problem was created by court policies, such as logistical difficulties in getting living expense monies to soldiers, one can still see military officers profiting in the middle at the expense of the soldiers. But it wasn't just the court who realized that officers were responsible for most of the abuses

[98] *YDZ* (2011), 1157, 1158, 2142, 2145, 2147.

within the military. As the following section will show, the Yuan literati also wrote about the impoverishment of military households and railed against the officer class, although their reason for doing so was very different.

The Perspective of the Literati

Many Yuan literati who commented on issues within the military were officials themselves, although in some cases they were civilians without any government affiliation. Their comments on the military took the form of advice memorials, in which they would present a problem or a series of problems and then propose corrective measures. Such forms of literature covered a range of topics, but one underlying theme tied them all together – that the Yuan court needed to reform itself and adopt the bureaucratic practices of previous Chinese dynasties, and for the court to exercise greater oversight and control over the bureaucracy. Naturally, the military was one such area where the literati saw a major need for reform due to a host of problems plaguing it. These problems can be roughly divided into two major categories. First was the wealth disparity among military households which impacted many households' ability to perform military service. Second was hereditary succession which produced generation after generation of useless and abusive officials. To resolve these problems, the literati believed that the Yuan needed to reform its military institutions.

The most detailed and among the earliest proposal on the military was one titled "Military Administration" (*junzheng* 軍政) submitted by the official Hu Zhiyu, a native of North China, only a few years after the Mongol-Yuan reunified China. Hu served in a variety of central and regional posts and was a prolific writer, producing advice memorials that covered almost every aspect of Yuan administration from the restoration of agriculture to the regulation of paper

money. His memorial on the military was submitted sometime in the late 1270s or early 1280s, after the conquest of the Southern Song was completed and while the military was still in a period of transition from a conquest to a garrison force. In his essay, Hu listed eight areas of concern and proposed corrective measure for each – heavy burdens faced by the Han Army soldiers and their households; soldiers dying or deserting; impoverishment of military households; problems arising from the requirement that only the conscripted soldier himself (*zhengsheng* 正身) can serve; problems with the uncontrolled use of military seals; corruption within county administrations when verifying the financial status of soldiers; too many officers without actual military responsibilities; and issues with consolidation. Broadly speaking, his eight problems can be grouped together into two categories – the impoverishment of military households and poor military administration.

In his second area of concern, Hu also noted the issue of officer abuse. He complained that officers would not only privatize military labor and force soldiers to take high-interest loans, but when soldiers fell ill, fled, or died, the officers would try to absolve themselves of any responsibility by falsely claiming that deserters were dead while the dead had deserted.[99] But while officer abuse was a serious problem for Hu, the far more important reason for issues within the military was poor administration, and the remaining seven areas all fall into this category. Hu believed that the root of this was the lack of accurate census data and proper household registers that authorities can rely on for a complete picture of the military households' economic status, especially since financial strength was the key criteria when conscripting Han Army households. Writing about the Jurchen Jin, Hu stated that a census was conducted every three years with

[99] Hu Zhiyu, "Junzheng," in *QYW* 5, 165:576-77; "Junzheng: you er, jun qian shensi zaitao zhi bizhuang" 軍政: 又二, 軍前身死在逃之弊狀, in *QYW* 5, 165:578-79.

three copies made - one for the county officials, one for sub-prefectural or prefectural officials, and one for central officials. Yet since the Mongols entered China, it could take five to seven years or even thirty to forty years before new population registration took place. The result was that the authorities lacked vital information to properly govern the military households, leading to issues such as double conscription and an inability of officials to discern truth from lies.[100]

What troubled Hu was that the lack of accurate information was providing officials up and down the bureaucracy with opportunities to exploit the military households. For instance, verification of a Han military household's financial status depended entirely on a sworn declaration (*baojie* 保結) submitted by county officials. However, Hu pointed out that many county officials and clerks were corrupt, and so they would engage in "releasing the rich while dispatching the poor." Thus, Hu wrote, "whether the army is dispatched or not, such power rests not with the court, but with the county officials."[101] Elsewhere, Hu took issue with the policy of consolidation, complaining that the burden of conscription was assessed unequally on wealthy and poor households, leading to huge wealth disparities between households with poorer households unable to afford military service.[102]

Hu Zhiyu was not the only official who commented on the wealth disparity between military households and on their impoverishment. Wang Yun 王惲 (1227-1304), one of Qubilai's closest Han Chinese advisers, also wrote on this matter. Wang memorialized Qubilai in

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[100] Hu Zhiyu, "Junzheng: you san, pinnan xiaofa zhi bizhuang" 軍政: 又三，貧難消乏之弊狀, in *QYW* 5, 165:579; "Junzheng: you yi, chongyi yi chongchai zhi kuzhuang" 軍政: 又一，重役一重差之苦狀, in *QYW* 5, 165:577; "Junzheng: you er, jun qian shensi zaitao zhi bizhuang," in *QYW* 5, 165:578-79. For how the census was conducted in the Jurchen Jin, see Wu Songdi 吳松弟, *Zhongguo renkou shi di 3 juan: Liao Song Jin Yuan shiqi* 中國人口史第三卷：遼宋金元時期 (Shanghai: Fudan daxue chubanshe, 2000), 201-09.

[101] Hu Zhiyu, "Junzheng: you liu, baojie zhi bi" 軍政: 又六，保結之弊, in *QYW* 5, 165:581-82.

[102] Hu Zhiyu, "Junzheng: you ba, hebing pianzhong zhi bi" 軍政: 又八，合併偏重之弊, in *QYW* 5, 165:583.

1292 that, "the wealthy [Han] military and postal households have vast fields of farmlands, their resources [money] amount to the millions, and they have numerous people [under their employment]. The poorer [households] struggle for sustenance every day, possessing not even a tiny amount of food and land."[103] Echoing Hu and Wang's point, the civilian Zhao Tianlin 趙天麟 (fl. early fourteenth century) memorialized to the throne stating that military households with large tracts of land and numerous adult males were performing the same military service as poorer households with no strong males and only widows and infants.[104] Some officials took issue with the four *qing* of tax-exempt land that was granted to the Han Army households, arguing that it was not enough. The official Wang Chen 王忱 (1236-1314) told the court that soldiers sent to garrison faraway regions could not afford their military upkeep with only four *qing* of tax-exempt farmland, and he urged the court to provide more tax relief.[105]

Aside from wealth disparity and impoverishment, another common theme in the literati's writings about the military was corruption within the officer class. One literatus who commented on this issue was a Southerner named Zheng Jiefu 鄭介夫 (fl. early fourteenth century), who also memorialized the throne as a civilian. In one of many memorials he submitted to Temür (Chengzong), Zheng did not hold back his criticism towards the hereditary officer class, accusing them of being "immature and ignorant, aside from putting on clothes and eating, they have no other abilities." For Zheng, hereditary succession was a favor bestowed upon them due to the

[103] Wang Yun 王惲, "Shang Shizu huangdi lun zhengshi shu" 上世祖皇帝論政事書, in *QYW* 6, 168:21.
[104] Zhao Tianlin 趙天臨, "Gu xingshi" 顧形勢, in *QYW* 28, 914:212.
[105] Su Tianjue 蘇天爵, "Yuan gu canzhi zhengshi Wang Xianmu gong xingzhuang" 元故參知政事王憲穆公行狀, in *QYW* 40, 1258:204.

merits of their ancestors, but now with so many useless officers in command, Zheng worried that there would be nothing left to reward others with merit.[106]

To correct this problem, many literati proposed that martial examinations (*wuju* 武舉) be established so that only those qualified can become officers. Zhao Tianlin wrote that, "Today the officials who command the troops of our state have succeeded to the positions of their fathers, [but] there are those who are not skilled in martial arts [and] there are those who do not read military tracts." He advised the court to adopt the various categories from Tang martial examinations, such as mounted and unmounted archery, mounted spearmanship, weightlifting, etc.[107] The *semu* official Ma Zuchang 馬祖常 (1279-1338) also advocated for martial examinations, although – conscious of the Yuan policy of ethnic divisions within the military – he proposed separate and easier examinations for Mongol officers.[108] Zheng Jiefu, while not directly advocating for exams, proposed something similar. He wrote that only those with skills should be entitled to hereditary succession, but they should first receive a lesser position until after they've gained experience and proven themselves in combat, at which point they would then be allowed to succeed to their fathers' original position.[109]

On the surface, many of these complaints – impoverishment, officer abuse, and corruption within the military administration – seem to be the same as those found in court-compiled sources. Some of the literati's corrective measures, such as strengthening military

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[106] Zheng Jiefu 鄭介夫, "Lun yuewu zhuang" 論閱武狀, in *QYW* 39, 1219:84. The mid-Yuan official Xu Youren 許有壬 (1287-1364) similarly described the officers who succeeded their fathers as "young and immature" youths who had no martial prowess and knew only to abuse the soldiers. See Xu Youren, "Zhengzhi shi shi" 正始十事, in *QYW* 38, 1184:59.
[107] Zhao Tianlin, "She wuju" 設武舉, in *QYW* 28, 912:182-83; "She si jiang" 設嗣將, in *QYW* 28, 912:185-87.
[108] Ma Zuchang 馬祖常, "Jianbai yishiwu shi" 建白一十五事, in *QYW* 32, 1034:389.
[109] Zheng Jiefu, "Lun yuewu zhuang," in *QYW* 39, 1219:85.

discipline and ordering the judicial agencies to investigate cases of abuse and corruption, are also those that the court had repeatedly implemented. However, reading these memorials in isolation and taking them at face value risks overlooking the literati's desire for bureaucratic reform, because as is often the case with Yuan literati, their criticisms of the government highlighted a need for fundamental changes to the state's bureaucratic practices. To the literati, the Yuan state needed to become more like a "Chinese" dynasty - the Tang, Song, and, to many northern Chinese, even the Jurchen Jin. It needed to exercise greater oversight over the bureaucracy to rid itself of corruption and abuse so that it could govern more effectively, it needed to ensure the quality of those that it employed, and it needed to jettison foreign steppe practices and institutions.

For instance, in all his writings, Hu Zhiyu was most concerned about three things in particular: the lack of accurate population registration, corruption among clerks, and government supernumeraries.[110] Hu unsurprisingly attributed the majority of the problems within the military to the lack of census information, and he believed that almost all the problems can be solved if the state conducted censuses regularly, which would wrest control of military households away from the hands of corrupt local authorities. Hu also attacked the clerks and accused them of corruption when dealing with military households, and he proposed that officers who were senior in age be dismissed and their units combined in order to reduce the number of supernumeraries.[111] Meanwhile, those who recommended military examinations all took issue

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[110] See Yiming Ha, "Emoluments, Institutions, and the Failure of Bureaucratic Reform in the Yuan Dynasty," *International Journal of Asian Studies* 15, no. 2 (2018): 153-93.

[111] See, for instance, Hu Zhiyu, "Junzheng: you yi, chongyi yi chongchai zhi kuzhuang" in *QYW* 5, 165:577-78; "Junzheng: you er, junqian shensi zaitao zhi bizhuang," in *QYW* 5, 165:579; "Junzheng: you san, pinnan xiaofa zhi bizhuang," in *QYW* 5, 165:580; "Junzheng: you liu, baojie zhi bi," in *QYW* 5, 165:582; "Junzheng: you qi, junguan youming wushi zhi zhuang" 軍政: 又七，軍官有名無實之狀, in *QYW* 5, 165:582; "Minjian jiku zhuang" 民間疾苦狀, in *QYW* 5, 166:596-97.

with the Yuan policy of hereditary succession, which tended to favor Mongols, and they also tied into that into the broader issue of bureaucratic reform. Zheng Jiefu's concern that the large cadre of officers were draining government resources and that their continued occupation of military positions blocked the appointment of those with actual merits was similarly tied into his larger concern regarding supernumerary state personnel, which he urged to court to reduce.[112] Zhao Tianlin was another official who placed the issue of hereditary military succession within the need for reforms, urging the court to shed its nomadic institutions and emulate the policies and practices of previous Chinese dynasties, especially the Tang, and to learn from their mistakes. While proposals on military exams did not seek to abolish hereditary succession completely, they sought to weaken it, and thereby the Mongols' stranglehold on military positions, by introducing a meritocratic element.

Thus, the major difference between court and literati views is that whereas the court was simply concerned with the problems and sought to correct them, the literati tied their discontent of Yuan bureaucratic institutions and practices with their desire for change. The ultimate goal of scholars such as Hu Zhiyu, Zheng Jiefu, and Zhao Tianlin was to bring Yuan administration closer to the administrations of previous Chinese dynasties. Their advocacy for the creation of population registers, the strengthening of military discipline, the reduction of supernumerary officers, and the weakening of hereditary succession were not so much about making the military stronger than it was aimed at making the military administration more Chinese. However, as the following sections will show, their success on this front was varied as the court played a delicate

[112] Zheng Jiefu, "Taiping ce" 太平策, in *QYW* 39, 1218:49-53, 66-68.

balancing act between responding to their concerns and maintaining the Mongols' own steppe heritage, and the literati's own ideas on how best to reform the military were also at times varied.

The Court Responds

How did the Mongol and Central Asian decision-makers of the Yuan court respond to these problems and criticisms? Yuan legal cases include numerous injunctions against proscribed behaviors, with punishments such as fines, caning, or dismissals. Deeper inspection into these sources, however, reveals that the court went beyond just perfunctory bans and punishments for bad behavior. Not only did the court respond to every single criticism raised by the literati to the best extent that it could, but its responses were also highly pragmatic and took into account the prevailing socioeconomic conditions at the time. This section will focus on the solutions of the court towards the various problems within the military, which falls into three broad categories: 1.) simple responses targeting specific and more straightforward problems such as impoverishment; 2.) institutional adjustments to improve mechanisms that could respond to problems within the military such as track and replace and military farming; and 3.) pragmatic and adaptive solutions towards more complex issues that involved broader structural changes which oftentimes went against the court's own laws and regulations. Taken together, these responses indicate that the fourteenth-century Mongol-Yuan court mobilized all its resources and utilized a wide-range of policy measures to maintain its military, while also demonstrating its capacity to engage in multi-agency and multi-level command and control.

Simple Responses

The first category of responses can be best seen in how the court responded to the impoverishment of military households. The solution was fairly simple – provide aid. In the

Statues of the Yuan Dynasty are five edicts spread throughout the late thirteenth and early fourteenth centuries which decreed that soldiers receive extra sets of clothing or allotments of cloth to alleviate their economic burdens. A further seven edicts deal with the families of deceased soldiers - in those cases the court mandated that they receive assistance for one or two years, mostly in the form of rations.[113] In addition, the court also provided aid to soldiers returning from campaigns or going home. In 1270, local authorities were ordered to provide soldiers with food, water, and any necessary medical assistance. And in 1287, on account of the local population of southern China refusing to give food and water to northern soldiers which was leading to the harassment of civilians, the court decided that when soldiers garrisoned in Liangguang and Fujian returned home on leave, they would receive one *sheng* of rice per day from local officials until they reached the Yangtze River.[114] In 1332, after it received word that 467 destitute Mongol military households had fled to Shaanxi, the court provided each with three months' worth of grain and fifty *liang* of paper money and sent them back to their original place of residence.[115] Action was also taken to help Mongol and *tammachi* soldiers who had mortgaged their property and sold their wives in order to afford military service. In 1303, money was provided to redeem the soldiers' lands and wives, and this was codified into law in 1320. Finally, as a result of *tammachi* soldiers mortgaging their pastures to civilians, the court redeemed those lands on the soldiers' behalf and only allowed civilians to keep it if it was sold with a contract.[116]

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[113] *YDZ* (2011), 55-59.
[114] *YDZ* (2011), 1210, 1212.
[115] *YS*, 36:805.
[116] *YDZ* (2011), 2121.

Another option to deal with impoverishment was by releasing poor military households back to civilian registration. This tactic was also used when there were no more suitable males left in a household for conscription.[117] For the literati, returning impoverished military households from service seemed to have been a point of pride, as it is often included in their biographical sketches (*xingzhuang* 行狀) as an accomplishment. For instance, the same Wang Chen who complained that four *qing* of tax-exempt land was insufficient for military households was later tasked with dealing with impoverishment among military households. It was recorded that when Wang visited the routes of Zhending 真定, Shunde 順德, and Guangping 廣平 in the Capital Metropolitan Region, he sent several hundred wealthy households to perform military service while releasing the poorer households.[118] Similarly, the official Du Shichang 杜世昌 (1240-1299) in 1275 discovered three thousand military households in Yidu 益都, Zilai 淄萊, and Ninghai 寧海 (all in modern Shandong) who had either fled or had been privatized by military officials and local strongmen. With the court's blessing, he released all those who had no males or were impoverished back to civilian registration.[119]

Finally, the court acted against abusive officials. To back up its injunctions against abusive behaviors, punishments such as caning and beatings, demotions, and dismissals were utilized. These regulations were strengthened in 1301, when the emperor agreed with the Censorate that stricter regulations were necessary for military officials and ordered that offending military officials be dismissed and punished based on thirteen precedents that were

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[117] *YDZ* (2011), 1200.
[118] Su Tianjue, "Yuan gu canzhi zhengshi Wang Xianmu gong xingzhuang," in *QYW* 40, 1258:204.
[119] Wei Su 危素, "Gu tongyi dafu xingbu shangshu zeng zanzhi gongchen zishan dafu zhongshu zuocheng shang hujun zhuifeng Chang'an jungong shi Zhongsu Du gong xingzhuang" 故通議大夫刑部尚書贈贊治功臣資善大夫中書左丞上護軍追封長安郡公謚忠肅杜公行狀, in *QYW* 48, 1477:398.

used to punish civilian officials.[120] Officials found guilty of embezzlement were ordered to pay back the embezzled amount through the confiscation of their wealth and property. Officers who issued high-interest loans would also have the principal and interest confiscated, while those who accidentally caused the death of soldiers were ordered to pay condolence money to the soldiers' families.[121]

Institutional Adjustments

Institutional adjustments can be seen most clearly in the track and replace mechanism and in the management of military farming colonies. These adjustments began almost as soon as the institutions were created but picked up steam in the fourteenth century. The early fourteenth century was a time of crisis for the Yuan court, as it faced a resurgence of military threats in Central Asia that would not subside until the 1320s. Therefore, the court urgently needed to ensure that it had an adequate supply of soldiers and that it could keep them provisioned. To that end, conscription and logistical mechanisms needed to be shored up, and this led to greater central oversight over track and replace, more flexible policies to entice deserters to return to service, and a restoration of military farming.

Within the track and replace mechanism, the primary complaint was that officials took bribes to release the rich from service while conscripting the poor, and the court attempted to solve this problem by implementing a policy of mutual responsibility. In the original 1268 policy, track and replace was to be conducted by an official from the garrison working together with *aurug* officials. Those who committed abuses during the process or did not take care of

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[120] *YDZ* (2011), 1554-55.
[121] *YDZ* (2011), 1575, 1577-78, 2132; *ZZTG*, 62, 312-13.

their soldiers would be removed from office, barred from serving again, and have half of their property confiscated. Meanwhile, those who could take care of their soldiers would be rewarded and promoted.[122] But the court was not satisfied with this regulation, as abuses continued to run rampant, and several major changes were implemented over the next few decades to strengthen the mechanism.

The first was in 1269 when the court mandated that local officials and village heads (*zhushou* 主首) were also responsible for track and replace.[123] This regulation was reemphasized in 1278. In a list of twenty-three regulations issued by the Bureau of Military Affairs, the court made very explicit that aside from the garrison and *aurug* officials, local leaders such as precinct heads (*fangli zheng* 坊里正), village authorities (*xiangsi* 鄉司), and the deserter's neighbors all bore responsibility. The regulation promised punishment to these people if they know of the desertion but do nothing.[124] Given the Yuan practice of having overlapping responsibilities and of delegating authority to multiple individuals or offices,[125] it is likely that the involvement of these local authorities was not only meant to aid *aurug* officials in track and replace, but also to keep an eye on them, ensuring that there was a degree of mutual supervision and collective responsibility.

Further reforms occurred in 1293 and 1338. Starting in 1293, the court moved responsibility for track and replace from the hands of garrison officials to military officials

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[122] *YDZ* (2011), 1193-94.
[123] *YDZ* (2011), 156.
[124] *YDZ* (2011), 1170.
[125] Elizabeth Endicott-West, *Mongolian Rule in China: Local Administration in the Yuan Dynasty* (Cambridge, MA: Harvard University Asia Center, 1989), 44-45; "The Yüan Government and Society," in *The Cambridge History of China, Vol. 6, Alien Regimes and Border States* (Cambridge: Cambridge University Press, 1994), 535-36.

appointed by the Branch Secretariats in order to crack down on abuses that were still prevalent.[126] The involvement of the Branch Secretariats were strengthened in regulations promulgated in 1311 and 1337, which required Branch Secretariat officials to manage and oversee various components of track and replace in tandem with garrison, *aurug*, and local authorities.[127] In the 1338 reform, the court tightened regulations by employing a carrot and stick approach to disincentivize *aurug* officials from committing abuses. If households under their watch absconded, then they would be punished. However, if they could return deserters from other regions to service, then they would be rewarded.[128]

Thus, the track and replace mechanism underwent several changes over the course of the Yuan as the highest-ranking civil and military decision-makers at court attempted to stamp out abuses. It first utilized local city or village authorities as a check on garrison and *aurug* officials, before shifting responsibility away from the garrisons to Bureau of Military Affairs or Branch Secretariat officials. The participation of officials from these superior agencies was meant to prevent actors who had local knowledge from committing fraud by adding another layer of supervision and collective responsibility. The court later strengthened regulations to discourage *aurug* officials from committing abuses while incentivizing them to return deserters to service. The existence of regulations on track and replace in the *Legislative Articles of the Zhizheng Reign*, promulgated in 1346, also shows us that even in the mid-fourteenth century, the mechanism was still in operation (albeit not without issues), which further suggests that the hereditary military system as a whole was still intact.

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[126] *YDZ* (2011), 1159-60.
[127] *YDZ* (2011), 1175; *ZZTG*, 63-64, 214.
[128] *ZZTG*, 311-12.

Military farming was another institution that underwent several policy reforms to strengthen it. Scholars all agree that military farming played an important role in the early Yuan, helping to restore agriculture, supply the military, and increase social control. Indeed, the Mongols realized very early on the utility of military farming, especially as they incorporated more sedentary soldiers, and successive Mongol rulers from Chinggis to Möngke all established farming colonies in North China. Later, farming colonies were also established in northwest China and even in Mongolia. Yet most scholars argue that by the early fourteenth century many of these colonies had all but collapsed due to abuses mentioned earlier such as privatization of colonists and illegal occupation of farmland.[129] Meanwhile, attempts by the Yuan court to resuscitate them were deemed unsuccessful. However, the court never stopped trying to restore the colonies, and while it is true that many of them had fallen into disarray, there is also evidence that the court's actions were successful and that some of the colonies were in good order.

The court first acted in 1278 by adopting a policy of mutual supervision. It ordered that the head official and the colony's centurion compare results annually. If their colony did not farm as much land as before, produced lower yields, if their oxen died or became skinny and weak, or if they hid their yields, then they would be punished. If the opposite was true, then they

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[129] He Tianming 何天明, "Shitan Menggu hanguo shiqi de tuntian" 試探蒙古汗國時期的屯田, *Neimenggu shehui kexue* 內蒙古社會科學 1985, no. 5 (1985): 42-44, 71; "Yuandai tuntian ruogan wenti tantao" 元代屯田若干問題探討, *Neimenggu shehui kexue* 內蒙古社會科學 1987, no. 3 (1987): 71-76; Yazawa Tomoyuki 矢澤 知行, "Mongoru jidai no heitan seido ni kansuru - shiron Dai Gen urusu to Furegu urusu no hikaku wo tsūjite" モンゴル時代の兵站制度に関する一試論 大元ウルスとフレグ・ウルスの比較を通じて, *Ehime daigaku kyōikugakubu kiyō. Dai 2 bu, jinbun・shakaikagaku* 愛媛大学教育学部紀要. 第 II 部, 人文・社会科学 32, no. 1 (1999): 49-50; Zhang Jinxi 張金銑, "Yuandai tuntian yanjiu shuping" 元代屯田研究述評, *Gujin nongye* 古今農業 2014, no. 3 (2014): 115-20. For the collapse of the Yuan farming colonies, see Guo, "Yuandai de juntun zhidu," 44-45; Zhou Jizhong 周繼中, "Yuandai Henan Jiangbei xingsheng de tuntian" 元代河南江北行省的屯田, *Anhui shixue* 安徽史學 1984, no. 5 (1984): 10-17; Oba Shoichi, "Mongoru teikoku = Genchō no Chinkai tonden ni tsuite" モンゴル帝国=元朝の称海屯田について, *Shikan* 史観 106 (1982): 82-95.

would be rewarded. In 1320, it was further decided that chiliarchs, centurions, and control officers (*tanya* 彈壓) from the left and right colony sections would switch sections every two years. [130] To prevent officials from using natural disasters as an excuse to occupy colony farmland, the court in 1321 devised a complex system of reporting and mutual responsibility involving civilian officials from neighboring prefectures, local military commanders, as well as officials from the Branch Secretariats.[131] In this manner, the court sought to prevent abuses and fraud by using different agencies and to have them monitor each other.

Periodically the court would also dispatch officials to carry out restoration work. For instance, the official He Wei 何瑋 (1245-1310) was sent sometime during the reign of Qaishan 海山 (Wuzong 武宗, r. 1307-1311) to revitalize military farming colonies. In Henan, He raised farming colonies yields by 170,000 *shi*, while in the Jinghu 荊湖 region, he restored the farming colonies so that they could produce millions of *shi* of grain annually.[132] He Wei's contemporary, the high Mongol official Harqasun 哈喇哈孫 (1257-1309), also participated in restoration work. It was said that the important military farming colony in Chenghai, located north of the Altai Mountains in Mongolia and established to support the large garrisons stationed there as defense against Qaidu, had collapsed by the early 1300s. To alleviate the state's burden in transporting grain there, Harqasun was dispatched in 1307 to restore the colony and he succeeded, obtaining 200,000 *hu* of rice annually.[133]

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[130] *YDZ* (2011), 1172, 2144.
[131] *ZZTG*, 79.
[132] Cheng Jufu 程鉅夫, "Liangguo He Wenzheng gong shendaobei" 梁國何文正公神道碑, in *QYW* 16, 537:372.
[133] Liu Minzhong 劉敏中, "Chi ci taifu you chengxiang zeng taishi Shunde Zhongxian wang bei" 敕賜太傅右丞相贈太師順德忠獻王碑, in *QYW* 11, 397:542. See also Oba, "Mongoru teikoku = Genchō no Chinkai tonden ni tsuite," 82-95.

Restoration work continued after Qaishan's reign. Sometime between the late 1310s and early 1330s, the official Shiliyatusi 十里牙禿思 (1284-1335), also known as Buliyetusi 卜里也禿思, worked to restore farming colonies in Hengzhou 衡州 and Yongzhou 永州 in Huguang, where he managed to obtain fifteen years' worth of grain at 20,000 *shi*.[134] During that same period, the official Zhang Shijie 張士傑 (1265-1333) was credited with uncovering 300 *qing* of illegally occupied colony farmland in an unknown location and increased yields there by 2,000 *shi*. And in 1336, an office created in Lianghuai and tasked with the restoration of farming colonies there uncovered 3,534 *qing* of illegally occupied farmland, 684 absconded households, and 6,580 *ding* of illicit paper money.[135]

The period between 1310 and 1340 was therefore one of intense military farming restoration. This need to restore the farming colonies could be due possibly to the fiscal crisis which occurred during the reigns of Qaishan and Ayurbarwada 愛育黎拔力八達 (Emperor Renzong 仁宗, r. 1311-1320), the result of high military spending, rewards to the nobility and aid to Mongol households, and large-scale construction projects.[136] Military farming was therefore seen as a viable strategy to alleviate the burden of military garrisons, particularly in the 1320s when the Yuan found itself at war with the Chagatai. Additionally, the fact that these records of restoration are found in the mid-Yuan suggests that many military farming colonies

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[134] Yu Ji 虞集, "Jingzhou lu zongguan Niegutai gong muzhiming" 靖州路總管捏古台公墓志銘, in *QYW* 27, 892:528.
[135] Xu Youren, "Lianghuai tuntian dabu du zongguanfu ji" 兩淮屯田打捕都總管府記, in *QYW* 38, 1191:199; "Zeng tongyi dafu Dadu lu du zongguan shang qingche duwei Qinghe junhou shi Zhuanghui Zhang gong shendaobei ming" 贈通議大夫大都路都總管上輕車都尉清河郡侯謚莊惠張公神道碑銘, in *QYW* 38, 1198:425.
[136] Li Jieshi 李玠奭, "Yuanchao Renzong qi de caizheng wending cuoshi jiqi yiyi" 元朝仁宗期的財政穩定措施及其意義, in *Yuanshi luncong 7* 元史論叢 7, edited by Zhongguo Yuanshi yanjiu hui 中國元史研究會 (Beijing: Zhonghua shuju, 1999), 46-53.

had indeed collapsed. However, if the records are to be believed, then such revitalization efforts were highly successful.

At the same time the court was carrying out restoration work, it also promulgated new regulations for underperforming colonies. In 1322, it utilized a similar carrot and stick approach to the 1338 track and replace order by decreeing rewards and punishments for colony officials based on the yields of their colonies.[137] Much like its later attempt at strengthening track and replace, the Yuan court hoped that by instituting a strict policy of rewards and punishments, officials up and down the chain of command would be diligent in their duties, since it was in no one's interest if their superiors or subordinates were not performing satisfactorily. In the final case on military farming, dated to 1338, the court ordered that more officials be dispatched to help manage the farming colonies and implemented punishments for officials who attempted to expropriate seeds or embezzle yields. It also reaffirmed two earlier precedents - that the supervising officials be rewarded and punished according to earlier precedents (most likely the 1322 case) and that they be rotated regularly.[138]

The 1322 and 1338 cases above both concern farming colonies attached to the Imperial Guard Corps in the Capital Metropolitan Region. In particular, the 1338 case mentions the chaos during the planting and harvesting seasons, implying that these colonies were operating as usual. Records also exist of farming colonies being particularly successful in the Guangxi region. A document celebrating a farming chiliarchy in the Jingjiang route (near modern-day Guilin), written sometime in the late 1330s or early 1340s, tells of this colony's success. Its officers included two chiliarchs and seventeen centurions, and it had 2,816 soldiers farming a total of

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[137] *ZZTG*, 235.
[138] *ZZTG*, 235-36.

12,480 *mu* of farmland.[139] Another commemorative document written in 1347 speaks of farming colonies and garrisons being established in Qingzhou, Binzhou, Liuzhou, Xiangzhou, Hengzhou, and Guizhou (all in Guangxi) to increase local security.[140] In the north too there are records of colonies continuing to function. One document excavated from the frontier garrison city of Qara Qoto (Heicheng 黑城) in what is today western Inner Mongolia and dated to 1351 mentions the military administration taking control of one farming colony and promoting it to a farming chiliarchy.[141]

That military farming was still seen as a viable strategy can be demonstrated in a 1330 case involving 627 Newly-Adhered soldiers and 1,597 members of their family in a garrison located in what is now Shanxi province. Each soldier was given one *qing* of land to farm and produced 1,000 *shi* of grain annually, and they also received 800 *ding* of Zhongtong notes as a clothing subsidy. The court decided that it would be far more economical to grant them one additional *qing* of land, drawn from abandoned or confiscated land in neighboring areas and farmed by tenant farmers, to replace the paper money subsidy.[142] In addition, the 1351 Qara Qoto document mentioned above and produced just two years before mass peasant rebellions would rock the Yuan and lead to its demise also demonstrates the court's continued commitment to military farming.

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[139] Luo Xian 羅咸, "Jingjiang lu tuntian qianhusuo ji" 靜江路屯田千戶所記, in *QYW* 46, 1427:277-78.
[140] Zhong Shifu 鐘世傅, "Hengzhou xiucheng ji" 橫州修城記, in *QYW* 56, 1710:378.
[141] Qara Qoto Document F116:W555, in Li Yiyou 李逸友, ed., *Heicheng chutu wenshu* 黑城出土文書 (Beijing: Kexue chubanshe, 1991), 119-20.
[142] *ZZTG*, 62.

Adaptive Responses

By far the most interesting is the third group of responses, which I term adaptive responses. Here the court tailored its responses to the socioeconomic situation on the ground to maximize its ability to draw on military manpower, and in doing so often went against its own laws and precedents. In some instances, these involved appeals to traditional steppe practices, which often clashed with traditional Han Chinese views of how the military should function. One of the clearest examples of this was a 1281 order that gave military officers a certain number of soldiers they could use as private retainers (known in Yuan sources as *zhaye* 扎也, a Jurchen word meaning "retainer" or "follower"). This was in response to the practice of officers privatizing soldiers, which the court could not stamp out. A reason for this policy might be that the idea of possessing private retainers was a long-standing steppe practice. In Mongol society, all men of importance from the khan to his nobles had retainers called *nökör*s who served him in return for rewards.[143] While the court considered privatization to be damaging to the military – and indeed it was for a highly centralized military as troops were no longer under the control of the state – its acknowledgment that officers could not function without these retainers might also be an acknowledgment of this steppe practice. As a result, the court stipulated that officers would be allotted a certain number of retainers based on their rank to perform administrative and personal duties for the officers.[144] In 1291, the number of retainers that officers could draw on in peacetime was drastically reduced. Myriarchs were given eight retainers, chiliarchs and general command officers four, and centurions and control officers two. No reasons were given for the

[143] Joseph Fletcher, "The Mongols: Ecological and Social Perspectives," *Harvard Journal of Asiatic Studies* 46, no. 1 (1986): 20; Jonathan K. Skaff, *Sui-Tang China and its Turko-Mongol Neighbors: Culture, Power and Connections, 580-800* (Oxford: Oxford University Press, 2012), 77-80.
[144] *YDZ* (2011), 1205-06.

decrease, with the edict simply stating that this was in response to officers privatizing more soldiers than they were allowed to.[145]

Table 1.1 Number of retainers allocated to military officers in 1281

Officer	**Rank**	**No. of retainers (each)**
Military Officials		
General Regional Military Commanders (*du yuanshuai* 都元帥)	2b	20
Pacification and Control Commissioner (*zhaotao* 招討)	3a	15
Myriarch	3a	15
Left and Right Assistant Regional Military Commanders (*zuoyou fu yuanshuai* 左右副元帥)	3a	15
Director-General (*zongguan* 總管)	3b	10
Chiliarch	4b-5b	10
Assistant Pacification and Control Commissioner (*fu zhaotao* 副招討)	4b	10
Chiliarchy Administrative Officer (*zongba* 總把)	Unknown	2
Centurion	6b-7b	2
General Command Officer of a Branch Secretariat (*xingsheng du zhenfu* 行省都鎮撫)	Unknown	7
General Command Officer of a Regional Military Command	5a	7

[145] *YDZ* (2011), 1206.

(*yuanshuai du zhenfu* 元帥都鎮撫)		
General Command Officer of a Pacification and Control Commission (*zhaotao du zhenfu* 招討都鎮撫)	Unknown	5
General Command Officer of a Myriarchy (*wanhu du zhenfu* 萬戶都鎮撫)	5a-6a	5
*Service Officials**		
Registrar of a Regional Military Command (*yuanshuaifu jingli* 元帥府經歷)	6b	2
Registrar of a Pacification and Control Commission (*zhaotaosi jingli* 招討司經歷)	7b	2
Various Chief Clerks (*zhu zhishi* 諸知事)	8b	1

Source: *YDZ* (2011), 192-228, 1205-1206
(*) - Service officials (*shouling guan* 首領官) were officials who supervised clerical functions within an agency.

Although this regulation did not solve the issue of privatization (the Yuan never did), it nonetheless shows that the court recognized that more action was needed aside from issuing injunctions and punishments. It sought to control what would have been a common steppe process bureaucratically by stipulating a certain number of retainers that could legally be employed. The problem was that officials disregarded this quota and continued to privatize more soldiers above the allotted number. Nonetheless, this policy remained in force, and retainers for military officials appear in the Yuan records as late as 1320, when the court decreed that the 1291 order be reapplied in response to farming colony officials going over their retainer quotas.[146]

[146] *YDZ* (2011), 2145-46.

Another instance where the court relaxed regulations was in allowing soldiers to hire substitutes. Yuan regulations stated that only the conscripted soldier himself could serve in the military and forbade substitutes, but this rule was frequently flaunted.[147] As a result, in the 1270s this regulation was gradually relaxed. In 1272, it was decided that if soldiers hired good and strong substitutes, those substitutes should be allowed to serve. Nonetheless, the court ordered substitutes be returned to their original place of registration once their contracts expired, although if there was no contract then they would be allowed to remain in the military if they wished.[148] In 1273, the court allowed households with only one adult male or disabled soldiers to hire substitutes. In 1278, military households who could not produce a male for service in the Imperial Guards were allowed to hire a substitute from their supplementary households, while those serving in regional garrisons could do so if they received permission from their respective Branch Secretariats.[149] Substitution was so common that one literati noted that half of the Mongol and Han Armies were made up of substitutes or slaves.[150] Chinese literati also disagreed on whether this practice should be allowed. The official Li Tingyu 李庭玉, who noted the substantial number of substitutes, thought that the court should ban the practice while Hu Zhiyu was highly supportive of substitutions, arguing that if they should be allowed to join the military if they wished.[151]

It should be noted that the 1270s saw Qubilai's final push against the Southern Song, and the decision to allow substitutes was undoubtedly rooted in the desire to maintain the strength of

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[147] *YDZ* (2011), 1164, 1168. The court was concerned that slaves or hired substitutes would not exert themselves in their duties and simply flee. See *TZTG*, 326-27.
[148] *YDZ* (2011), 1161, 1165.
[149] *YDZ* (2011), 1201-02; *TZTG*, 326-27.
[150] Li Tingyu 李庭玉, "Qu Xichuan ce" 取西川策, in *QYW* 28, 904:26.
[151] Hu Zhiyu, "Junzheng: you si, gouqi zhengshen zhibi" 軍政：又四，勾起正身之弊, in *QYW* 5, 165:580-81.

the army. As long as the substitutes were willing to fight, then the court could tolerate the practice. Thus, it was only a temporary measure. Indeed, going into the fourteenth century, prohibitions against substitutions once again surfaced in the legal codes. For instance, in 1320, the court decided to reaffirm a 1318 precedent banning the use of substitutes or slaves and threatened soldiers with caning and the confiscation of the money they used to hire those substitutes.[152]

The court was also willing to trade enforcement of laws for the maintenance of the military households' economic status. As noted above, one of the key features of Han military households was that they were given four *qing* of tax-exempt land. Any land they held in excess of that amount was liable for taxation. However, this rule was temporarily suspended in 1303 when officials complained that forcing Han military households to pay taxes on their landholdings was causing them to become impoverished:

> Recently civilians often expose to officials the hidden lands of the military households, and the landowners can only go with their [the civilians'] desires and sell the land to them [to stop a lawsuit]. Or there would be officials who often go to the villages and say they are there to survey the military households' landholdings [but] use that as an excuse to extort money and would leave the households alone only after satisfying their greed. If a family has more than four *qing* of land, then they would be living in constant fear and their hearts would not be at peace. This is not without cause. Currently the army is urgently needed, and the existence of such a situation is truly worrying. Last year the Bureau of Military Affairs memorialized and respectfully received an Imperial Edict stopping civilian officials from surveying the landholdings of the military households, [but] even though the officials have received the edict, the peasants know nothing of this, therefore crafty people [continue to] coerce military households and nothing has changed. If every *she* is ordered to post a notice stating that the amount of land owned by military households can no longer be reported, then those who are soldiers would be spared from coercion and disturbances. As for taxing landholdings in excess of four *qing*, it would be beneficial in the long term if it is determined after the border has been pacified and the troops are no longer urgently needed.

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[152] *YDZ* (2011), 2142-43, 2149.

近日民間多有訐告軍戶隱藏地畝者，地主惟是隨其所欲，承奉買去。又所在官吏不時下鄉，言要打量軍戶地畝，以此為名，脅斂錢物，所取各皆饜足，方纔釋免。但凡地過四頃之家，長懷憂懼，心皆不安。致此之由，有自來矣。今於緊急用兵之際，有此事端，深為可慮。去年樞密院奏奉聖旨，約束管民官司軍戶地畝，文字在官，百姓不知。狡獪之徒，恐脅軍戶，與舊無異。若令每社置一粉壁，其上只寫不得言告軍戶地畝數字，如此則當軍之家，皆得免其逼脅侵擾之患。四頃之外納稅一節，待其邊境事寧，用兵稍緩，然後別議，似為長便。[153]

This case is interesting to scholars not least because it shows that there were Han Army households who had substantial landholdings on which they were not paying taxes, but it also demonstrates the Yuan court's pragmatism and adaptability. In this instance, the court was facing a resurgent military threat from the Chagatai and so needed to maintain the economic viability of the Han Army households, who were being mobilized to campaign in the northwest. As such, the court decided that these households should be allowed for the time being to continue shielding their landholdings from taxation. Yet much like substitutions, this act was clearly a temporary measure and the court decided to revisit this matter once the border military emergency was over. In a 1317 imperial edict, the emperor granted tax reprieve on all reported landholdings of *tammachi* households in Henan and Jiangbei, while military households in the Capital Metropolitan Region had taxes on their landholdings in excess of four *qing* reduced by five *fen* for a year.[154] Thus, we can see that the taxes were restored sometime between 1303 and 1317.

Another salient example that demonstrates the court's flexibility was in how it dealt with deserters, namely that it traded harsh treatment for a policy that encouraged voluntary return. This was a change that began in 1299 and paralleled adjustments to track and replace, and it was

[153] *YDZ* (2011), 955-56; *YDZ* (2016), 898-99.
[154] *YDZ* (2011), 58.

reaffirmed in 1311. The emperor decreed that any deserters who turned themselves in within a hundred days after the promulgation of the imperial edict would be pardoned for their crimes. Furthermore, the properties they abandoned would also be returned to them in full and they would be exempt from military service for the next three years.[155] In 1319 the clemency period was shortened to fifty days, but other stipulations remained the same. As late as 1337 Yuan records still mentioned that deserters who returned were entitled to their original properties (although no time limit was given in this particular case).[156]

The examples in this section demonstrate the Yuan court's recognition that it often needed to violate its own administrative principles to serve its needs, and that it was willing to do so in order to maintain the military's strength. Certain practices such privatization of soldiers and the hiring of substitutes were difficult to ban, and so the court tried to control those practices, albeit with varying results. Allowing for the hiring of substitutes and for Han Army households to shield their taxable landholdings were acts of expediency to be sure, but it shows that if the situation demanded it, the court could temporarily put aside its regulations and suspend past precedents. Indeed, a document uncovered from Qara Qoto demonstrates just how far the Yuan court was willing to go to make sure the military functioned properly. In 1300, a massive expeditionary force arrived in Qara Qoto on its way to defend against Qaidu. As there was not enough grain in the region to feed this army, route officials urgently petitioned the Gansu Branch Secretariat for aid. The Branch Secretariat decided that the conventional method of purchasing grain in the market through "harmonious purchase" (*hedi* 和糴) would be too slow. Instead, it would take over the procurement and delivery of grain itself (a heavy financial burden) without

[155] *YDZ* (2011),1173, 1175.
[156] *YDZ* (2011), 2149; *ZZTG*, 63-64.

worrying about the costs. The Branch Secretariat dispatched 10,000 *shi* of grain to Qara Qoto to support the army, and the expedition resulted in a Yuan victory.[157] This victory, along with many others, would not have been possible without the pragmatic policies that were implemented to keep the army intact and provisioned.

Court Policies and Literati Concerns

And how did the court's responses relate the critiques of the literati? If the literati complaints are compared to the court's policies, then it becomes clear that the court did, in fact, address most of them. The court maintained some type of military examinations for its officer class, and it had regulations that governed hereditary succession. As the garrison system matured from the late thirteenth to the early fourteenth century, the court increasingly bureaucratized the way the military operated, employing registers and documents and multiple levels of supervision. The Yuan court was not averse to change and reform, but the issue, as this section will show, was that the reforming along the lines that the literati wanted would have seriously infringed upon the privileges of the Mongol elites, which was simply unacceptable to the Mongol rulers.

Take the issue of military examinations, which the literati viewed as a necessary reform. After the conquest of the Southern Song, Qubilai began to issue regulations to govern hereditary succession. Yazawa Tomoyuki has provided a summary of these regulations, but particular

[157] Qara Qoto Documents F116:W552; F116:W553; F116:W565; F116:W566; F116:W581, in Li, *Heicheng chutu wenshu,* 138-39. See also *YS*, 22:477. Harmonious purchase was a type of levy on the civilian households whereby the government purchased goods that it required at standardized rates that it set, often below market price. See Chen Gaohua 陳高華, "Lun Yuandai de hegu hemai" 論元代的和僱和買, in *Yuanshi luncong 3* 元史論叢 3, edited by Yuanshi yanjiu hui (Beijing: Zhonghua shuju, 1986), 130-43.

attention should be paid to the 1284 and 1288 regulations.[158] In 1284, the court decided that only Mongol officers from distinguished families and Mongol and Han officers who died in battle could have their brothers or sons succeed directly to their original positions. For officers who retired, became ill, or died naturally, their brothers and sons could only succeed to a position two ranks lower.[159] In the 1288 regulation, the court decreed that those succeeding hereditarily would be tested on horsemanship and archery, and that they must be capable individuals.[160] These regulations run counter to Zheng Jiefu's claim that officers were succeeding directly to their predecessors' positions.

The Yuan court therefore did have some kind of martial examinations and it also restricted the rank to which a large portion of its officers can succeed to. So why did the literati still present these proposals? There are three possible reasons. The first is that by the early fourteenth century when most of these literati were writing, the regulations were poorly or no longer enforced. This is plausible, as we see that other regulations were also frequently flaunted. The second reason could be that these officials wanted the institution of hereditary succession completely reformed. It is likely that Zheng Jiefu was speaking of officers who came from powerful Mongol families or whose ancestors had died in battle, as they would have been entitled to succeed directly to their predecessors' position. Ma Zuchang and Zhao Tianlin, meanwhile, were probably advocating for an expansion of military exams. Finally, it is important to consider that the literati might not have accurately portrayed the military. The Han Chinese

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[158] Yazawa Tomoyuki 矢澤 知行, "Dai Gen urusu no 'gunjin' wo megutte" 大元ウルスの "軍人" をめぐって, *Ehime daigaku kyōikugakubu kiyō. Dai 2 bu, jinbun・shakaikagaku* 愛媛大学教育学部紀要. 第 II 部, 人文・社会科学 35, no. 1 (2002): 22-24.
[159] *YDZ* (2011), 265.
[160] *YDZ* (2011), 266.

were largely shut out of the upper echelons of power and were not privy to military discussions or secrets, nor did they have complete political control in the localities. Men such as Zheng Jiefu and Zhao Tianlin were not even officials, so it's not unlikely that their writings were simply inaccurate (and would certainly explain why Zheng missed Yuan regulations on hereditary succession).

The increasing use of registers in track and replace, military farming, and in logistical support also shows the increasingly bureaucratic nature of the military administration. To prevent abuses and corruption, the court created a system of mutual supervision that involved the flow of documents up and down the administrative ladder and officials from multiple agencies coordinating and working together. To be fair, the 1270s and 1280s were still formative years for the military administration and many key regulations and policies had not yet been promulgated. Thus, Hu Zhiyu's complaint of its disorganized nature might make sense at the time. However, by the fourteenth century, the military administration had developed into a machinery capable of multi-agency and multi-level coordination. While it might not always be successful in tackling the problems of the day, it had certainly taken steps to become closer to what Hu envisioned in his memorial.

However, behind these regulatory reforms and pragmatic responses was another side of the Yuan court, one that was reluctant to pursue the deeper bureaucratic reforms the literati called for. Although Qubilai constructed a state that blended traditional Mongol institutions and practices with those of Han China, at its core, the Yuan was still a Mongol state that served to protect the interests of the Mongol elites. Later emperors lacked the power and authority that Qubilai had to keep the two sets of institutions balanced and came to depend more and more on steppe institutions and practices for political support and legitimacy. Therefore, it was both

unable and unwilling to reform along the lines that the literati wanted. Doing so would have meant they needed to jettison long-standing nomadic customs and institutions. They would have had to staff the upper echelons of government with Han Chinese officials, thus infringing upon the privilege of Mongol elites while at the same time placing untrustworthy people into positions of power.[161] Therefore, Zheng Jiefu's proposal to have all military officers succeed to a lower position was simply not feasible. The 1284 regulation made clear that Mongols from families with backgrounds could succeed directly to their predecessors' positions. In the Mongol-Yuan, possessing background (*genjiao* 根腳) meant one's family had a relationship with the rulers. The further back that relationship went, the more illustrious the family lineage was and the more powerful they were. Those who came from families that had served Chinggis possessed "great background" (*da genjiao* 大根腳) and commanded great respect. These were precisely the people Zheng targeted and the Mongol rulers could ill-afford to alienate.

What the Mongol court did instead was to attempt to strike a balance - between strengthening governing institutions and preserving the interests of the Mongol elites and between upholding laws and being flexible in their application. It did not want to go too far in either direction, preferring to find a middle ground. Thus, the court issued regulations to better govern the hereditary succession of officers but took care to give preferential treatment to Mongol elites and those who came from families with military accomplishments. It banned

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[161] Hsiao Ch'i-ch'ing, "Mid-Yüan Politics," in *The Cambridge History of China, Vol. 6: Alien Regimes and Border States*, edited by Herbert Franke and Denis Twitchett (Cambridge: Cambridge University Press, 1994), 490-560; Otagi Matsuo 愛宕 松男 and Terada Takenobu 寺田 隆信, *Mongoru to Dai Min teikoku* モンゴルと大明帝国 (Tokyo: Kodansha, 1998); Sugiyama Masaaki 杉山 正明, *Kubirai no chōsen: Mongoru ni yoru seikaishi no daitenkai* クビライの挑戦: モンゴルにより世界史の大転回 (Tokyo: Kōdansha gakujutsu bunko, 2010), 136-49; Yao Dali 姚大力, *Meng Yuan zhidu yu zhengzhi wenhua* 蒙元制度與政治文化 (Beijing: Beijing daxue chubanshe, 2011), 367; Ha, "Emoluments," 168-72.

certain practices but was willing to tolerate them in times of need if it served the interests of the state. When viewed in this light, proposals by the literati for an expansion of martial examinations were not feasible. Establishing regulations for hereditary succession was part of a broader attempt by Qubilai to reform and bring order to the new garrison system.[162] However, by the early fourteenth century, this system had already become well-established. The reason why no additional regulations concerning hereditary succession were issued after 1311 is presumably because the court was satisfied with its current system and saw no further need for adjustments. In other words, the court, in its view, had already struck a balance between maintaining the quality of the officer class and preserving their privilege. It might issue orders calling for those regulations to be enforced, but there was no need for additional changes, as doing so might risk upsetting the balance. Therefore, the literati proposals for martial examinations were ignored.

Court Policies and Military Households

The sections above have highlighted the various problems facing the military households and how the court attempted to address them. But how were the military households affected? First and foremost, it is necessary to dispel the notion that all the military households were impoverished or oppressed. Yuan military households enjoyed a host of benefits from the state in return for their service. For Mongol, *tammachi*, and Han households, aside from tax exempt land, they were also exempt from other miscellaneous taxes and levies and from corvée labor duties, a benefit that was even more generous than that of the Ming, which provided exemption only to the soldier himself and one companion. In addition, for Han Army households, taxes on any additional land over four *qing* was half the normal rate, and the households could deliver tax

[162] See Tsutsumi, "Dai Gen urus no Kōnan chūtongun," 173-98.

grains to nearby granaries. Military households were also exempt from harmonious purchase and harmonious employment (*hegu* 和僱), although this was eventually changed to apply only to soldiers serving in faraway garrisons.[163]

In addition, while some military households did indeed fall into poverty, there were many others who became wealthy and possessed large estates and many slaves. The four *qing* tax-exempt land that the court granted was extremely generous considering the average amount of land held by a peasant household in North China was around one *qing*. One early Japanese study estimated that only around one-sixth of the Han military households had four *qing* of land, but Ota Yaichiro noted that many of them probably broke apart their larger landholdings to take advantage of the tax exemption. Ota therefore concluded that there were a considerable number of military households with more than four *qing* of land, certainly far more than the earlier one-sixth estimate, and that they used their family members, slaves, or hired personnel to farm.[164] Another sign of the military households' wealth was that they could afford to hire substitutes. Hu Zhiyu estimated that the cost of a household hiring a substitute was no less than a hundred *guan* of paper money annually.[165] If Yuan sources are to be believed that there were a large number of substitutes in the military, then it must also mean that many households had the financial means to employ them.

Moreover, utilizing tax exemptions and owning land were just the legal ways in which military households could accumulate wealth. In his study of Ming military households, Michael

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[163] Oshima, "Genchō Kanminzoku shihai no ikkōsatsu," 5-7; Yazawa, "Dai Gen urusu no 'gunjin'," 25. Harmonious employment was a type of corvée labor duty imposed on the populace. See Chen, "Lun Yuandai de hegu hemai," 130-43.
[164] Ota Yaichiro 太田 彌一郎, "Gendai no kangun to sono nōgyō seisan" 元代の漢軍戸とその農業生産, *Shūkan tōyōgaku* 集刊東洋学 31 (1974): 171-77.
[165] Hu Zhiyu, "Shizheng" 時政, in *QYW* 5, 164:570.

Szonyi asserted that Ming military households engaged in what he termed "everyday politics," a practice whereby military households sought to maximize their interests through fulfilling military service by taking advantage of state institutions and regulations. Szonyi's work was premised upon extensive fieldwork that utilized local sources such as lineage genealogies, contracts, and interviews with the descendants of Ming soldiers, for which we have no comparable Yuan sources. However, even court-compiled sources such as the *Statutes of the Yuan Dynasty* contains evidence that Yuan military households too engaged in "everyday politics." For instance, scholars often cite the 1303 case temporarily forbidding officials from surveying the lands of Han military households mentioned above as clear indication that many households took advantage of their four *qing* of tax-exempt land to not pay tax on the rest of their lands. Furthermore, textiles produced by supplementary households for use by the serving soldiers of the primary households were not taxable, and so supplementary households would often sell these textiles on the market. Soldiers who received these textiles as part of their living expenses would also sell them and avoid paying tax on the transaction.[166]

The strategies used by Ming military households used to minimize their obligations can also be observed in the Yuan. One such strategy was what Szonyi termed "rotation", whereby all descendants shared the military obligations inherited from their ancestors. Thus, in a military household that was divided into different branches, each branch would take turns providing a soldier until all branches had served one term, at which point the cycle would begin anew.[167] In the Yuan, the rotation strategy, known as *painian* 排年, was commonly employed by composite households. While the composite system meant only one household was responsible for

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[166] *YDZ* (2011), 908-09.
[167] Szonyi, *The Art of Being Governed*, 53-54.

furnishing a soldier, in 1285 the court observed that the households would often determine their own schedule and each household would take turns providing a soldier. But rotation, in which all households were liable for service, undermined the goal of the composite household system to equalize the burdens of military service. A ban on this practice was unsuccessful, as records of rotation can still be found in 1319.[168] Presumably the court decided thereafter to tolerate the practice, as they did before the 1285 ban, so long as soldiers could be conscripted for service.

If the abuses detailed above were so detrimental to the military households, why did military households put up with them for so long? The answer suggests a much deeper relationship between military officers and military households that hitherto has been overlooked. Instead of viewing these practices as signs of corruption and abuse, we should consider the possible reasons why military households might *want* to pay their officers or work for them as retainers. Patronage has a long history, not just in the steppes but also in China. Whether it was the soldiers living in camp or their household members remaining behind in the *aurug*, members of the military households interacted closely with military officers and officials. Providing gifts to officers or officials, working as private retainers, or taking high-interest loans could enable the soldiers and their households to ingratiate themselves with their superiors and gain protection and other benefits.

One example of such benefit was protection from lawsuits. The procedure to try cases involving both military personnel and civilians stated that serious crimes such as robbery, theft, or murder were to be tried solely by civilian officials, while other crimes such as those involving property, wealth, or physical altercations were to be tried jointly by civilian and military

[168] Hong, "Yuandai Hanjun," 282-83.

officials.[169] Within this process, however, were a host of abuses, such as military households filing lawsuits with military officers instead of *aurug* officials as required by law, or military officials showing up late to joint trials.[170] The Chinese official Cheng Jufu 程鉅夫 (1249-1318) wrote that "the civilian officials and military officials of the routes are not united, and when the soldiers are abusive then the small civilians are harmed. The military officials do not want to oversee the matter while the civilian officials are too afraid to oversee the matter."[171] Cheng framed the issue as a lack of discipline on the part of the soldiers and a lack of responsibility on the part of the officials, while the court framed it as one of corruption. However, it is more likely that military officers were shielding their own soldiers from prosecution or lawsuits, precisely because the soldiers had established a patron-client relationship with their superior officers through gift-giving or by working as private retainers.

Finally, the cultural influences behind such practices must also be considered. As David Sneath noted, hospitality is considered a part of everyday life on the Mongolian steppes. Any visitor to an encampment, be they old friends or complete strangers or even foreigners, can expect to be offered drink, food, and lodgings without the expectation of reciprocation.[172] Moreover, Sneath argued that the transfers of goods and assistance are materializations of various types of social relations.[173] Therefore, Mongol military officers might have not considered the practice of visiting the military households and receiving food, drink, gifts from

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[169] *YDZ* (2011), 1783-84.
[170] *YDZ* (2011), 1160, 1783-85.
[171] Cheng Jufu, "Minjian libing: junren zuo guoshen zhe ze qi zhujiang reng zhong gelu daluhuachi zhi quan" 民間利病：軍人作過甚者責其主將仍重各路達魯花赤之權, in *QYW* 16, 526:90.
[172] David Sneath, "Everyday Hospitality in Mongolia: Obligation, Enaction and Projects of Governance," *L'Homme* 231-232 (2019): 68.
[173] David Sneath, "Transacting and Enacting: Corruption, Obligation and the Use of Monies in Mongolia," *Ethnos* 71, no. 1 (2006): 89-112.

them - behavior that would have been both common and acceptable in the steppes – as problematic, since it was just another way for officers and military households to form social bonds. From the vantage point of the court, however, this practice was considered corrupt exploitation that impoverished the military households. We do not know what the military households thought of this, but the picture is probably more nuanced than that painted by the court.

Conclusion

Court-compiled sources and literati writings paint the military as being plagued by a host of problems which led to its decline and inevitable collapse. However, the various examples presented in this chapter demonstrate that the court devoted a tremendous amount of attention to solving these problems. Some of its responses were clearly remedial in nature and were meant for short-term relief, such as granting aid to impoverished households. Others, such as revitalizing military farming and strengthening track and replace, were meant to have more long-lasting impact. Moreover, the court also demonstrated a certain willingness to tolerate what would normally be considered illegal practices so long as it was in its interest to do so. As Chapter 3 will show, some Yuan practices and policies to strengthen the military were even adopted by the Ming to address its own military problems.

While the literati related problems within the military to poor institutional practices, this chapter argues that almost all of their criticisms were eventually addressed by the court, constrained as it was by the need to preserve traditional steppe institutions and practices. The literati's more extreme proposals, such as an overhaul of the officer selection system to weaken hereditary succession, was simply unfeasible for the Mongol-Yuan court to undertake, as it

would have hurt the privilege of the Mongol elites whom the rulers depended on for political legitimacy and support. Furthermore, while the court and literati painted the military households as impoverished due to abuses and exploitation, the military households were not as poor as the sources and later scholars made them out to be. A substantial number of them owned large tracts of land, and they could also take advantage of the many benefits the state provided them. In addition, the fact that repeated regulations were issued against practices such as issuing high-interest loans and soliciting gifts shows that the military households were both able and willing to pay. This would have allowed them to establish closer social bonds with their superiors and form mutually beneficial relationships. The fact that the Yuan successfully prosecuted a war against the Chagatai Khanate between 1313 and 1323, often times penetrating deep into Chagatai territory and ultimately taming its western neighbor, as well fight a civil war between 1328 and 1332, when opposing sides supporting different claimants to the throne mobilized armies across the empire, is enough to demonstrate the resilience of the military households and the success of the court's policies to keep the military intact.[174] Had the Yuan military institutions indeed decayed to the extent that has been traditionally portrayed, then it is doubtful that troops and resources could have been mobilized for those wars. As the following chapter will demonstrate, many Yuan garrisons survived well into the 1350s and for the first three years of the Red Turban Rebellion these garrison forces, particularly troops stationed in North China, played a major role in allowing the court to initially turn the tide of the rebellion.

[174] Hsiao, "Mid-Yüan Politics," 541-45; Yingsheng Liu, "War and Peace Between the Yuan Dynasty and the Chaghadaid Khanate (1313-1323)," in *Mongols, Turks, and Others: Eurasian Nomads and the Sedentary World*, edited by Reuven Amitai and Michal Biran (Leiden: Brill, 2005), 339-58.

Chapter 2. Garrisons, Patronage, and Recruits: The Late Yuan Military, 1350-1355

When the Yuan prime minister Toqto'a 脫脫 (1314-1356) departed on expedition to attack rebels holed up in Gaoyou 高郵 (in modern Jiangsu) in mid-1354, the Mongol-Yuan had been facing sustained rebellions for almost three years. At first the peasant rebels captured large swathes of territory in the Huai River Valley, with many government garrisons caught off guard and unable to respond. It appeared, for a moment, the Mongol regime's very existence was threatened. This was the snapshot captured in later historiography, with scholars noting how the Yuan garrisons had essentially ceased to function by the 1350s and were overwhelmed by rebellions. Even John Dardess, who wrote of the strength of the Yuan military forces in this period, conceded that they were made up mostly of recruited Chinese personnel and not hereditary garrison troops.[175] Yet while scholars note the collapse of the Yuan garrisons, they also credit those same garrisons with almost putting down the rebellion by the end of 1354.[176] The fact was that when Toqto'a departed for Gaoyou, most of the rebels had been suppressed over the course of three years and the Yuan had reclaimed large swathes of territory. It seemed that with the defeat of the rebels in Gaoyou, which was all but certain as 1355 dawned, the Mongols would be able to weather the storm.

This period between 1350 and 1355, which is the focus of this chapter, is important and fascinating for several reasons. First, during these five years the garrison forces played an

[175] Dardess, *Conquerors and Confucians*, 109-10; "Shun-ti and the End of Yüan Rule," 576-80.
[176] Hsiao, *Military Establishment*, 53; Shi, *Yuandai junshi shi,* 408; Xiaolin Ma, "The Yuan Empire," in *The Mongol World*, edited by Timothy May and Michael Hope (London and New York: Routledge, 2022), 274.

important role in suppressing the rebellions, which shows that the court's responses to the various issues that arose and in adapting to changing circumstances as highlighted in the previous chapter was largely successful in keeping the military intact throughout the first half of the fourteenth century. The early defeats that the Yuan armies suffered at the hands of rebels should therefore not be seen as a sign that the military itself was weak. Instead, as this chapter will show, these early defeats were due more to poor leadership, and after more competent commanders were appointed, the Yuan army quickly reversed the tide. Second, even as rebellions plagued the Yuan, the court in Daidu possessed not only the capacity to undertake large-scale military mobilization, but also the loyalty of the southern Chinese gentry. As this chapter will show, many southern gentry leaders raised militias to suppress the rebels and then joined their forces with Yuan armies in exchange for government titles and positions, thus demonstrating that there continued to be a strong desire for people to engage with the state. Third and perhaps most importantly, the success of the early 1350s became undone with the dismissal of Toqto'a in early 1355. Thus far, no in-depth explanation has been given as to why the Yuan army could not function without Toqto'a in charge.

This chapter, however, argues that the reason for this was simply because Toqto'a had grown too powerful and indispensable, reflecting an institutional shift in the Mongol-Yuan that began in the 1320s in which military power devolved into the hands of powerful prime ministers, one of whom was Toqto'a. This shift bears similarities to the rise of a military aristocracy in the Ilkhanate which challenged the authority of the ruler, suggesting that this was a unique phenomenon in the Mongol Empire. Toqto'a was the longest serving of three powerful ministers who dominated the late Yuan, thus allowing his patronage network to permeate the civil and military bureaucracy. His active role in suppressing the rebellions furthered his power and

influence. It was under Toqto'a's direction and leadership that the Yuan mobilized its garrisons, engaged with militia leaders, built logistical apparatus, and continued to undertake massive state ventures, in this case restoring farming colonies. For all intents and purposes, this chapter argues that the Yuan court in the early 1350s *was* Toqto'a, and thus when he was removed the disruption to his patronage network severely damaged government forces. This in turn paralyzed the garrisons to the extent that they could no longer function effectively, allowing the rebels to regain momentum and forcing the Yuan to rely increasingly on the private armies of semi-autonomous warlords. The fall of the Yuan was therefore not a failure of the military itself, as many previous scholarship argued, but rather a failure by actors at court in recognizing the new political reality, that in dismissing the man who held the military together, the Yuan court caused its military forces to collapse. The suppression of the Red Turbans in the first half of the 1350s thus offers an interesting glimpse into the Yuan's institutional shift and how it affected the military, as well as helping to explain why, ultimately, despite still possessing capacity, resources, and legitimacy, the Yuan court slowly collapsed after 1355.

The Yuan Military During the Early Red Turban Rebellion

When writing about the peasant rebellions that overwhelmed the Yuan state in the mid-fourteenth century, the narrative has always been something akin to this. In 1351, workers in a government project to reroute the Yellow River broke out in rebellion. Its leaders proselytized a messianic vision, which quickly caught on, and in their religious zeal the rebels overwhelmed the skeletonized local garrisons, capturing large swathes of territory. This forced the Yuan court to mobilize its northern garrisons, particularly the elite Imperial Guard Corps, to deal with the

situation. Hsiao Ch'i-ch'ing was the first to mention the Yuan use of Imperial Guards,[177] but it was really John Dardess who wrote of this in detail.[178] While Dardess rightly noted the maladministration, corruption, and abuses did not prevent the Yuan from mobilizing its troops, he also underestimated the extent of garrison participation, writing that the bulk of the Yuan army that was mobilized to suppress the rebellions was composed of recruited Chinese mercenaries or volunteer militia. Meanwhile, Chinese scholars have similarly noted that the court initially depended on its Imperial Guards to suppress the rebellions, although much of their emphasis has been on how quickly these troops were routed and how this was representative of the Yuan's military collapse.[179] However, if we were to look past the early defeats of these forces, then it is clear that the Yuan garrisons not only survived but were very effective in suppressing the rebellion. More importantly, the Yuan court's ability to deploy these garrisons, which were spread out across different parts of the empire, is an important indicator of the Yuan court's capacity for mass military mobilization.

The court's initial responses are well enough to demonstrate its capacity for mobilization. According to the late Yuan-early Ming historian Quan Heng 權衡, when the court first received word of the rebellion in late 1351, it dispatched two military officials named Hesi 赫厮 and Tüchi 禿赤 to lead six thousand troops from the Asud Guard along with troops from "the various Han Armies" and garrison troops from the Henan Branch Secretariat. The Asud units, composed of the descendants of nomadic Alan troops stationed in the capital region, were described as strong, brave, and expert archers. The reason they were defeated, Quan Heng related, was

[177] Hsiao, *Military Establishment*, 53.
[178] Dardess, *Conquerors and Confucians*, 105-06.
[179] See, for example, Shi, "Yuandai shiwei qinjun," 99; *Yuandai junshi shi*, 406-08.

because of poor leadership and their undisciplined nature, which was compounded by their inability to fight on water or become accustomed to the southern topography, which in turn led to disease. Of particular importance here is that Quan Heng noted that this force included not only Asud troops but also Han Army and Henan garrison troops, suggesting that these forces were capable of fighting. The Han Army here probably refers to those attached to the Imperial Guard Corps, as Quan distinguished them from Henan garrison troops.

After this force was defeated, the court tapped Gongbubal 鞏卜班, a privy councilor of the Central Secretariat, to lead an army composed of nomadic Jurchen cavalry drawn from the appanages of imperial princes and Han Army troops in the Imperial Guard Corps several tens of thousands strong to attack Runing 汝寧 (in modern Henan/Anhui). However, Gongbubal was often drunk and unconscious, which allowed rebels to raid his camp at night and scatter his forces and kill him. The court then appointed Toqto'a's younger brother Esen Temür 也先帖木兒 to lead a massive army of 300,000 to suppress the rebels. While the strength of this force is possibly exaggerated, it did register a few victories early on. Unfortunately, Esen Temür's camp suffered a night panic at Shahe 沙河 and he fled, leading his army to collapse.[180] Thus, in all three cases, the defeat of the Yuan imperial army garrisons was not so much due to impoverishment or weakness of the soldiers, but rather due to poor leadership.

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[180] *GSWS*, 213a-16b; *YS*, 47:893. It is unclear what "night panic" here refers to, as the *Gengshen waishi* and the *History of the Yuan* only refers to it as *yejing* 夜驚. Ye Ziqi's account omits the night panic incident altogether, stating that Esen Temür fled before battle began. John Dardess wrote that enemy agents snuck into Esen Temür's camp at night and caused mass panic but does not cite where this information comes from. Nonetheless, I believe Dardess's reason is the most probable cause for the incident. See Ye Ziqi 葉子奇, *Caomuzi*, 3a:52; Dardess, *Conquerors and Confucians,* 106.

While evidence suggests that Imperial Guard Corps were mobilized by the court, the status of local garrisons is more difficult to determine. This is mainly because many literati sources simply describe them as "government troops" (*guanbing* 官兵 or *guanjun* 官軍) without specifying whether they were garrison troops or recruited mercenaries. Nonetheless, extant sources do suggest that garrison forces, particularly Mongol and *tammachi* forces in northern and southwestern China and in the Mongolian steppes, were still in good fighting strength in the early 1350s. Moreover, scattered records also point to the fact that the garrison forces in southern China survived as well and at least some of them could put up a fight against the rebels.

The best evidence of garrison troops participating in battle comes from a temple stele in Shaanxi. In 1351, Red Turbans invaded Jinzhou 金州 in southern Shaanxi but were driven out by a government force the following year. In 1353, to commemorate their victory and the rebuilding of a temple that had been burned by the rebels, Yuan officials erected a stele listing the names of all those involved in the 1352 suppression effort. The Japanese scholar Matsuda Koichi has analyzed the stele and found that the Yuan mobilized garrison forces from Shaanxi, Henan, Sichuan, Yunnan, and as far as Tibet to retake Jinzhou, an area of over one million square miles stretching from northwest to central to southwest China. This force included Mongol and *tammachi* troops, Han Army troops, Newly-Adhered Army troops, as well as Uighur troops.[181] . Building on Matsuda's analysis, the Chinese scholar Li Zhi'an has found that many of the Mongol myriarchies in Shaanxi, Sichuan, and Yunnan that were involved in the campaign had remained quite stable throughout the Yuan.[182]

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[181] Matsuda Koichi 松田 孝一, "Kōkin no ran shoki Sensei Genchōgun no zenyō" 紅巾の乱初期陝西元朝軍の全容, *Tōyō gakuhō* 東洋学報 75, no. 1-2 (1993): 1-30.
[182] Li, "Yuandai Chuan-Shaan-Gan jundui," 34-46.

In suppressing the rebellions in the early 1350s, the Yuan depended heavily on its northern garrisons, particularly Mongol and other nomadic troops. In one record, a myriarch named Shelibieganyinnu 舍里別干音奴 attached to the Mongol Army Command Office (*Menggujun zhenfu* 蒙古軍鎮撫) led his troops in the recovery of Raozhou 饒州 (in modern-day Jiangxi) in 1352. Another mentions Mongol troops under the command of a chiliarch named Gou'er 狗兒 working in tandem with local garrison troops and recruited mercenaries during the 1353 reconquest of Huizhou 徽州.[183] The *History of the Yuan* makes mention of two officials being dispatched to gather supplies for a Tatar army (*dadajun* 達達軍), presumably nomadic Jurchen cavalry from the northeast, that was being sent to Henan, while elsewhere noting that Tashi Temür 達識帖睦邇 (d.1364), a privy councilor of the Huainan Branch Secretariat, used recruited mercenaries together with Han and Mongol Army troops to defend Huai'an.[184] In 1353, the left prime minister of the Jiangxi Branch Secretariat Irinjinbal 亦憐真班 (fl. 1340s-1350s) and the general Honichi 火你赤 led "northern troops and militia forces" to recover lost territory in Nanchang 南昌.[185] Given the extensive participation of the northern garrisons documented above, "northern troops" (*beijun* 北軍) here likely refers to northern garrison soldiers, which would include Mongol soldiers. This is further evidence that the court's policy of alleviating the impoverishment of Mongol soldiers in the decades prior had proven fruitful.

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[183] Zhao Fang 趙汸, "Xiuning xian daluhuachi Ba hou wugong ji" 休寧縣達魯花赤八侯武功記, in *QYW* 54, 1669:514; "Jiangzhe sheng du zhenfu Hami gong jigong zhi bei" 江浙省都鎮撫哈密公紀功之碑, in *QYW* 54, 1672:552.
[184] *YS*, 42:905; *YS* 43:910.
[185] *Wanli xinxiu Nanchang fuzhi* 萬曆新修南昌府志, 24:472.

And what of the status of the southern garrisons? Available sources paint a rather mixed picture. Some garrisons remained in good enough shape to be called upon to fight. Garrison troops in the Henan, Huguang, and Jiangzhe Branch Secretariats, for instance, were able to blunt the momentum of the rebels, defeat them, and retake lost territories in 1352-1353.[186] One example was the Taizhou 台州 myriarchy of the Jiangzhe Branch Secretariat, based in Huizhou, which was mobilized and dispatched to defend Pingjiang 平江 (modern-day Suzhou), and it later participated in the recovery of Hangzhou and Huizhou and in other campaigns throughout Jiangnan in the 1350s.[187] Another example was the Huguang Branch Secretariat's second privy councilor Tiejie 鐵傑, who led Hunan's garrison troops in recovering Yuezhou 岳州.[188] There are also references to the Jiangxi Branch Secretariat dispatching myriarchs and chiliarchs under its command to lead government troops into combat in Nanchang.[189] And as late as 1356, troops from the Yanhai 沿海 myriarchy in Zhejiang were mobilized to attack Suichang 遂昌.[190]

However, it seemed to be the case that more southern garrison were depleted and left unable to respond. In 1352, it was recorded that Hangzhou only had two hundred weak and infirm soldiers.[191] According to textual research done by the Chinese scholar Liu Xiao, Hangzhou was garrisoned by four myriarchies and had between 20,000 to 30,000 troops during

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[186] Shi, *Yuandai junshi shi,* 408-09; Zhou Liangxiao 周良霄, *Yuanshi* 元史 (Shanghai: Shanghai renmin chubanshe, 2019), 682.
[187] Liu, "Yuan zhenshou Jiande 'Huaimeng wanhufu'," 114-16. One Yuan sources also mention that in 1354, garrison troops from myriarchies in Jiande, Huizhou, and Taizhou were mobilized to fight rebels. See Wang Kekuan 汪克寬, "Shishan xiansheng Zhenggong xingzhuang" 師山先生鄭公行狀, in *QYW* 52, 1597:178.
[188] *YS*, 42:898.
[189] *Wanli xinxiu Nanchang fuzhi*, 24:471-72.
[190] Liu, "Yuan Zhedong dao 'Yanhai wanhufu' kao," 155; Lian Lu 練魯, "Hu gong weide bei ming" 胡公威德碑銘, in *QYW* 56, 1705:248.
[191] Wei Su 危素, "Gu ronglu dafu Jiangzhe dengchu xing zhongshusheng pingzhang zhengshi Yuelutiemuer gong xingzhuang" 故榮祿大夫江浙等處行中書省平章政事月魯帖木兒公行狀, in *QYW* 48, 1477:413.

the 1310s.[192] It is likely that the 1352 record exaggerated Hangzhou's situation – more possible was the fact that most of Hangzhou's troops had been redeployed and the ranks of the remaining troops were seriously depleted and not suitable for combat. Meanwhile, government troops in Nanchang were described as "few in numbers and weak," and the city survived the rebel siege thanks primarily to the participation of its brave inhabitants.[193] In Henan, there were so few garrison troops that local officials resorted to mobilizing military farming colonists to fight.[194]

Perhaps the best indication of the southern garrisons' weakness was the fall of Wuchang 武昌 in early 1352. Wuchang, as the capital of the Huguang Branch Secretariat, was one of the most heavily garrisoned cities in southern China. Its garrison consisted of five to six myriarchies, with a nominal military strength of between 15,000 to 42,000 troops, and it was also the seat of an imperial clansmen, the Prince of Weishun 威順王. According to Li Zhi'an's study, the fall of Wuchang could be attributed to several factors. Corruption within the Huguang Branch Secretariat's military administration led to a weakening of its garrisons and Huguang officials and the Prince of Weishun were poor military leaders. Huguang garrison troops had also been undisciplined and abusive towards the populace while suppressing rebellions in the 1340s, which led to a general loss of goodwill. Thus, when rebellion broke out, there were few militia forces available to augment the depleted garrisons.[195] We therefore see in Wuchang a confluence of all the issues affecting the southern garrisons – poor leadership, corruption, and depleted garrisons.

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[192] Liu, "Yuan zhenshou Hangzhou 'si wanhu' xinkao," 44.
[193] *Wanli xinxiu Nanchang fuzhi*, 24:471.
[194] Zhou, "Yuandai Henan Jiangbei xingsheng tuntian," 15.
[195] Li Zhi'an, *Yuandai xingsheng zhidu* 元代行省制度 (Beijing: Zhonghua shuju, 2011), 277-78.

This situation was compounded by a lack of militia support which, as the following section will show, was instrumental to the Yuan's military success against the rebels.

Thus, while the collapse narrative of the Yuan military is overstated, it cannot be totally dismissed. By the 1350s, some garrisons were depleted and could no longer mount an effective resistance, particularly in southern China, thus allowing the Red Turbans initially to gain the upper hand. However, beginning from late 1351 to 1352, the Yuan court was able to mobilize its military forces to retake lost territory, with large contingents of northern troops being dispatched. The initial defeats suffered by the Asuds, Gongbubal, and Esen Temür did not seem to be due to impoverishment of soldiers or a depleted army, but to poor leadership and undisciplined troops, perhaps the result of inexperienced commanders, years of relative peace that eroded combat strength, and continued problems of abuse and impoverishment highlighted in the previous chapter. It might also be case that the commanders initially underestimated their enemy, as the rebels were undoubtedly seen as peasant rabble (it would also explain why the court initially sent only a detachment of nomadic cavalry with some garrison troops to deal with the rebellion). The fact that Yuan forces were later able to retake vast swathes of territory shows that when properly led, they could perform well on the battlefield. In 1354, when Toqto'a departed on his expedition against the rebels at Gaoyou, the army he commanded included troops drawn from the various appanages, nomadic troops from the steppes, troops from Central Asia and Tibet, and the various garrison troops of the Branch Secretariats. [196] We therefore see that major components of the Yuan garrison system, particularly its Inner Asian components, remained intact well into the

[196] *YS*, 43:916; Bi Yuan 畢沅, *Xu Zizhi tongjian* 續資治通鑒, 212:5769.

1350s, demonstrating that the policies implemented by the court to maintain the military were successful.

Mercenary and Militia Recruitment

If the Yuan garrisons had participated extensively in the suppression effort, why then, did the court also rely heavily on recruited mercenaries and militia forces? The answer to this question lies in the way in which these forces were used, which thus far has escaped the attention of scholars. While mercenaries and militias were indeed recruited in large numbers, in the first half of the 1350s, they were used to reinforce, rather than replace, garrison troops. Up until 1355, these forces did not seem to pose a threat to the dynasty which, as I will show in this section, was because mercenary and militia recruitment were conducted under the auspices of the state and by state agents. Moreover, by granting their commanders government titles and folding their units into the military apparatus, the Yuan was able to successfully keep these forces under control. The acceptance of government titles by militia leader also further demonstrates the court's legitimacy during this period, as it suggests that the local gentry continued to value association and engagement with the Yuan court.

The need for mercenary recruitment stemmed from the aforementioned depletion and weakness of some of the local garrison troops. When rebellions broke out, existing garrisons in southern China were ill-equipped to deal with them due to lack of manpower and were often overwhelmed by rebel forces. For example, the Taizhou myriarchy defending Huizhou was drawn to Pingjiang, allowing the Red Turbans to seize the undefended Huizhou in 1352. While the court did mobilize the northern garrisons, it also realized that mercenaries could be recruited to augment garrison troops. In the third month of 1352, the three Branch Secretariats in Jiangnan

were ordered to recruit mercenaries and militias to reinforce garrison troops in defending crossings along the Yangtze River. Two months later, Branch Secretariat officials were given greater freedom and flexibility to respond to the rebellions, and one of their duties was the recruitment of mercenaries.[197] Regional officials wasted no time in following the court's orders. In the fifth month of 1352, the court dispatched the official Dash Badalugh 答失八都魯 (d. 1357) to Jingmen 荊門 (in modern Hubei), where he recruited mercenaries and used them (presumably with local garrison forces) to rout the rebels and recover Xiangyang 襄陽.[198] Officials of the Jiangzhe Branch Secretariat, meanwhile, ordered the official Batemashili 八忒麻失里 to recruit several hundred mercenaries to aid government troops in recovering Huizhou.[199] And to mop up the remaining rebels in Funing sub-prefecture 福寧州, an official named Pan Shiying 潘世英 (1333-1354) recruited mercenaries from the local area to chase after them.[200]

One type of mercenary unit that was created during the rebellion was a naval force capable of fighting both on rivers and on the open seas. In 1353 a naval general myriarchy (*shuijun du wanhufu* 水軍都萬戶府) was established in Kunshan sub-prefecture 昆山州 (near Suzhou) and officials from the Zhedong Pacification Commission were placed in charge. The following year, a naval myriarchy (*shuijun wanhufu* 水軍萬戶府) was established in Zhenjiang under the command of the Jiangzhe Branch Secretariat, and in 1355 another naval myriarchy was

[197] *NTBY*, 248-49, 250-51.
[198] *YS*, 42:900.
[199] Zhao Fang, "Xiuning xian daluhuachi Ba hou wugong ji," in *QYW* 54, 1669:512.
[200] Gong Shitai 貢師泰, "Fujian dao du yuanshuaifu zouchai Pan Jizhong muzhiming" 福建道都元帥府奏差潘積中墓志銘, in *QYW* 45, 1405:334.

established at Xiaoqingkou 小清口 on the Yellow River in Jiangsu.[201] These naval myriarchies were responsible for defending against coastal or riverine threats - for instance in 1353 it was noted that pirates, presumably those under the command of Fang Guozhen 方國珍 (1319-1374), raided Taicang, prompting the court to establish a naval myriarchy there with the Jiangzhe Branch Secretariat in charge (this is likely the Kunshan naval myriarchy). Fang was a pirate, rebel leader, and regional warlord in the late Yuan. At the height of his power, he controlled almost the entirety of the Zhejiang and Fujian coastlines and vacillated between submitting to and opposing the Yuan until he finally surrendered to the Ming in 1369. The Yuan was thus competing with Fang for military labor in the region, although it seemed that the court's mercenaries were quite successful in repelling Fang and other pirates. In early 1354, Fang sent a thousand ships against Taicang, but his forces were routed by the government navy.[202]

It is not entirely clear where these naval troops came from, as Yuan sources do not mention their origins. Nonetheless, one entry in the *History of the Yuan* notes that in 1353, a militia and naval chiliarchy were established in Jiangxi and that "after the situation [rebellion] has been pacified, those who wish to become civilians will be allowed to do so."[203] The father of the Ming general Wei Qing 衛青 (d. 1436), Wei Bing 衛炳, was one of these naval soldiers - "during the Yuan [he] responded to recruitment and was attached to the naval myriarchy."[204] These passages suggest that the majority of the soldiers belonging to the new naval myriarchies

[201] *YS*, 92:2341-42.
[202] *Hongzhi Taicang zhouzhi* 弘治太倉州志, 135-36. For a biography of Fang, see *MS*, 123:3697-700.
[203] *YS*, 43:912.
[204] *Chongzhen Songjiang fuzhi* 崇禎松江府志, 38: 975b, 48:1261a.

were, like most other recruited mercenaries, civilians, although it is also possible that some might have been transferred from other garrisons, such as existing naval myriarchies.

However, mercenaries did not make up the majority of government forces and they were often used together with garrison troops. Two reasons might explain why. First, the court might not have fully trusted these mercenaries, most of whom were Chinese recruits. Thus, garrison troops were used to keep the mercenaries in check. Second and more importantly, the court might not have seen the need for large-scale mercenary use, as it considered its military strength sufficient to tackle most of the rebels. For instance, Toqto'a's use of mercenaries in his 1352 Xuzhou campaign was mainly to assist the government army, as the garrison troops were unfamiliar with the local terrain:

> Before long, [Toqto'a] requested to personally lead the army to Xuzhou. After the army departed, a general in Huaidong named Lu Shanzhi memorialized and said, "The government troops are not used to the topography, we should instead recruit salt workers and use them to attack the city." Additionally, a Huaidong magnate named Wang Xuan said, "Salt workers are just peasants, [and] we should instead recruit strong, brave, and nimble men from walled forts [military installations, possibly referring to relatives of soldiers] and use them to attack the city." From each group 30,000 men were recruited, and they wore yellow clothes and yellow caps and were called "the Yellow Army."
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> 未幾，自請督軍下徐州。兵出，有淮東元帥逯善之者，上言：「官軍不習水土，宜募場下鹽丁，可使攻城。」又有淮東豪民王宣者，亦上言：「鹽丁本野夫，不如募城墅趫勇慣捷者，可以攻城。」前後各得三萬人，皆黃衣黃帽，號曰「黃軍」。[205]

[205] *GSWS*, 214a.

The Yellow Army troops remained under the command of the Privy Councilor of the Jiangzhe Branch Secretariat Buyan Temür 普顏帖木爾 (d. 1356) until 1356, when they mutinied.[206]

Militia forces, raised by members of the landowning gentry or by local officials, also played a major role in stemming the initial tide of the Red Turbans. The early 1350s saw a wave of local militarization, with officials and gentry elites donating heavily to repair or build city walls and raise militia forces. Unlike state-recruited mercenaries, these militias were raised by local actors on their own initiative and at their own expense, often without explicit permission from the state (though the state quickly sanctioned and encouraged their recruitment). They also differed from recruited mercenaries in that they tended to be men from the local area and were initially used to defend their home regions in the absence of garrison troops. For example, in 1352, Red Turbans scattered government forces in Changzhou 常州 and the magistrate of Wujin county 武進縣 Liu Rong 劉溶 led a militia in a heroic final stand.[207] When government forces retreated from nearby Liyang 溧陽 in late 1352, several local gentry used their personal wealth to recruit militia forces in a desperate attempt to dislodge the occupying rebels.[208] A slightly more positive case was that of Shao Wenze 邵文澤, who raised a militia to defend his village and was promoted as a result.[209]

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[206] *YS*, 194:4395. The *History of the Yuan* notes here that the Yellow Army "mutinied again" (*fupan* 复叛), which suggests that they had mutinied once before, possibly when Toqto'a was dismissed in early 1355.
[207] *Guangxu Wujin Yanghu xianzhi* 光緒武進陽湖縣志, 16:446.
[208] Sun Keqi 孫克齊, "Renchen ji bian" 壬辰記變, in *QYW* 58, 1774:330-31. Another example was that of Deng Shi 鄧石 (1311-1352), who declined a government appointment in order to raise a militia force known as the "Righteous Braves of Taiping" (*Taiping yiyong* 太平義勇) to defend his hometown from the rebels. See Wei Su, "Deng Ruzhen muzhi" 鄧汝貞墓志, in *QYW* 48, 1481:540.
[209] *Wanli Kuaiji xianzhi* 萬曆會稽縣志, 11:457-58.

Although militias were initially recruited to defend their localities from the rebels in the absence of government forces, militia leaders were quick to help government troops. In 1352 the county sheriff of Guixi 貴溪縣 Zhang Liang 張亮 (d. 1352) raised a militia to defend the county seat. When Jiangzhe Branch Secretariat troops arrived, Zhang led his militia to reinforce government troops and perished heroically in battle.[210] That same year, a local gentry of Ningguo county 寧國縣 (in modern-day Anhui) named Rao Guili 饒貴禮 dispatched his sons to recruit 1,018 men who, together with a force of 5,000 militiamen gathered from local villages, aided government troops in recovering Ningguo from the rebels. Also in Ningguo in 1352, the brothers Zhou Hao 周鎬, Zhou Ming 周銘, and Zhou Yi 周鎰 raised a militia and aided government forces.[211] With government troops unable to claim victory due to their lack of topographical knowledge of rural Hunan, the prefect Wang Wenbiao 王文彪 (1278-1353) raised a force of braves who were skilled in warfare and knew the ravines and caves and assisted government forces in claiming victory. Wang then recruited more militiamen and set up guard posts along strategic choke points in the region.[212]

The description of mercenaries and militia in Yuan literati sources as men who knew how to fight points to the existence of a large pool of men with military experience. The sources themselves do not reveal where these recruited men came from, but based on available records it is possible to speculate on their origins. Tao Zongyi recounted the suppression bandits in the 1340s by two salt merchants acting on behalf of the court who possessed their own private armed

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[210] *Tongzhi Guangxin fuzhi* 同治廣信府志, 6.2:463.
[211] Zheng Yu 鄭玉, "You Yuan Fengyi xianyin Bao xiansheng muzhiming" 有元封黟縣尹鮑先生墓志銘, in *QYW* 46, 1433:411; Shu Disi 舒頔四, "Jingbiao Rao yishi ji" 旌表饒義士記, in *QYW* 52, 1601:265-66.
[212] Wang Hui 王禕, "Yuan Zhongxian dafu qian yongtian sishi zhishi Wang gong xingzhuang" 元中憲大夫僉庸田司事致仕王公行狀, in *QYW* 55, 1691:591.

retainers.[213] This suggests that there were already private military forces operating by the late 1340s, likely composed of young men from civilian households who had no other occupations. It is also not inconceivable that local gentry or officials might have raised militiamen in earlier years to deal with bandits or small-scale local disturbances as well, providing them with the experience as well as a pool of potential militiamen for recruitment in the 1350s, even though such earlier recruitment are not found in available records. Some of those recruited could also have been members of military households who were not liable for military service.[214]

In the case of both mercenaries and militias, they were meant to supplement and assist the garrison troops rather than to supplant them altogether. Indeed, Yuan sources and later gazetteers are littered with reference to these forces being used to "augment the government forces" (*yifu guanjun* 翼附官軍; *xiefu guanjun* 協輔官軍; *zhu guanjun* 助官軍) in combat.[215] Mercenaries and militias replacing garrison troops as the main force the court depended on did not take place until after Toqto'a's dismissal in 1355 and the subsequent rise of regional warlords, which will be covered in a later section. In the early 1350s, the court seemed to have managed these recruited troops well and kept their commanders loyal to the court. This was done by folding militia forces into the state apparatus, either by giving their leaders government titles or creating special militia units within the decimal system. For instance, a certain Mahmud 馬合穆 received specially designated militia myriarchy titles (*yibing wanhufu* 義兵萬戶府) to organize his militia

[213] Tao Zongyi 陶宗儀, *Nancun chuogeng lu* 南村輟耕錄, 351.
[214] This type of recruitment was especially prevalent from the mid-Ming onward. See Chapter 4.
[215] In addition to the examples given above, see also Zhao Fang, "Zishan dafu Huainan dengchu xing zhongshusheng zuocheng Wang gong zhuan" 資善大夫淮南等處行中書省左丞汪公傳, in *QYW* 54, 1672:555; Sun Siyong 孫思庸, "Suzhou Liuzizhen xunjian houjun qusibei" 宿州柳子鎮巡檢候君去思碑, in *QYW* 58, 1788:700-01. References to militia forces augmenting government troops can also be found in many local gazetteers.

forces as a reward after leading his men to victory against the rebels, while an official in the Jiangxi region established militia chiliarchies (*yibing qianhusuo* 義兵千戶所) to organize and train militia soldiers.[216]

In some cases, successful militia leaders could also expect to be given low to mid-level government rank and titles. In 1354, the court decreed that meritorious militia leaders and soldiers can be promoted into the military hierarchy, with those wishing to become civilians after the rebellion was pacified being allowed to do so.[217] As scholars have noted, association with the state was an effective strategy for personal and familial advancement, as it could entail social prestige and financial and/or political benefits.[218] Indeed, many of the accounts of militia leaders cited in this chapter are commemorative accounts written by local literati after said leaders were granted government titles. We thus see that Yuan titles continued to hold strong appeal in the eyes of the people, suggesting many gentry leaders had not yet lost faith in the Yuan court and saw engagement with it as beneficial.

The career of one Deng Deming 鄧德明 (1265-1358), a wealthy farmer, and his family exemplified this trend. In 1354, Red Turbans attacked Nanchang and Deng ordered his son Deng Kongzhe 鄧孔哲 and a grandson Deng Hanjie 鄧漢傑 to recruit militia forces, obtaining around ten thousand men. This force managed to block the rebels from directly assaulting Nanchang and a month later the rebels treated. Deng then moved his men to assist government forces under the

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[216] Zhou Tingzhen 周霆震, "Yibing wanhu Mahemu Antang shengci ji" 義兵萬戶馬合穆安塘生祠記, in *QYW* 39, 1223:165-67; Wang Li 王禮, "Ganzhou lu zongguanfu panguan Wang hou jixun bei" 贛州路總管府判官王侯紀勛碑, in *QYW* 60, 1862:751; *YS*, 92:2342.
[217] Bi Yuan, *Xu Zizhi tongjian*, 212:5767.
[218] See, for instance, Michael Szonyi, *Practicing Kinship: Lineage and Descent in Late Imperial China* (Stanford: Stanford University Press, 2002).

official Dodai 朵歹 to recover Fuzhou 撫州. For their efforts, Deng Kongzhe was given an honorary military title and made a militia centurion (*yibing baihu* 義兵百戶), Deng Hanjie was also given an honorary title and made the prefect of Wuyuan sub-prefecture 婺源州, and Deng Deming himself became a registrar (*jingli* 經歷) in a grain transportation myriarchy. The Deng family remained loyal to the Yuan to the end and several members came to obtain military or civilian titles, presumably for their contributions in fighting the rebels.[219]

Another strategy to control militias was to place militia units under the overall command of regular officials. For instance, the general Li Shilong 李士龍 performed admirably as a vanguard in Toqto'a's expeditionary force in 1352 and was promoted to the position of supervisor of Huizhou, prefect of Muzhou 睦州, and concurrently the general regional military commander of the militia troops (*yibing du yuanshuai* 義兵都元帥). In 1356, a supervisor of Huangyan sub-prefecture 黃巖州 was promoted to the prefect of Chuzhou 處州 and given overall command of the militias there.[220] The *History of the Yuan* notes that as early as 1352 the emperor Toghon Temür had ordered that all local officials recommend talented and capable government student graduates to serve as overseers of local militia forces and to promote

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[219] Gong Shitai, "Linqing yuhe yunliang wanhufu jingli Deng jun muzhiming" 臨清御河運糧萬戶府經歷鄧君墓誌銘, in *QYW* 45, 1406:354-56. Luo Liang 羅良 (fl. late-fourteenth century) provides another clear example. When the rebellions broke out, Luo raised a military force and followed the Yuan army in pacifying rebels in Jiangnan and for this he was made a county sheriff (*xianwei* 縣尉). As a result of his many military accomplishments, he subsequently rose to become a militia myriarch, route overseer, Branch Secretariat official, and was even awarded the noble rank of Duke of Jin (晉國公). See Chen Zhifang 陳志方, "Yuan you cheng Jinguo Luo gong muzhiming" 元右丞晉國羅公墓志銘, in *QYW* 51, 1576:455-57.

[220] Zhang Xuan 張宣, "Ai Li jiangjun shi xu" 哀李將軍詩序, in *QYW* 58, 1775:354; Yu Junmin 虞俊民, "Zhongxiao fang ji" 忠孝坊記, in *QYW* 59, 1793:55.

farming among the military households. Upon completion of their duties, they would be promoted to become regular officials.[221]

Mercenaries and militias thus played an important albeit secondary role in suppressing the rebels and, in a local context, proved to be quite effective. The court relied on them primarily for defense of local regions where garrison troops were lacking and to assist government troops in battling the rebels in their home region. Their recruitment was conducted with the blessing of the state, and they were commanded by state officials and military leaders. Thus, the term "government troops" that appears in Yuan literati sources probably referred to a combination of garrison troops and mercenaries. To co-opt gentry militia leaders and to better control their forces, the state handed out civilian and military titles to these men and organized their troops under the decimal system. In many cases, the court placed local officials in charge of overseeing militias. And, as Dardess noted, the landowning gentry in southern China remained loyal to the Yuan court during this period and actively cooperated with Yuan forces.[222] Indeed, many militias were raised by government officials or men with ties to the state. By using a combination of garrison troops with these recruited forces, the Yuan was by 1354 able to crush most of the rebels.

The Empire Strikes Back

In writing about the late Yuan court's actions to address the various crises that occurred, there has been a tendency to either paint these actions as a last-ditch effort by a failing state to resuscitate itself or to highlight how ineffective they were. A leading Chinese specialist of Yuan

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[221] *YS*, 42:897.
[222] Dardess, *Conquerors and Confucians*, 110.

military history, Shi Weimin, for instance, wrote that Toqto'a's efforts to restore military discipline in the late 1340s was an utter failure and that the Yuan army was beyond saving.[223] Yet the successes of the garrison forces in containing the initial outbreak of the rebellion have already been documented above. This section will explore the actions that the state took to keep its mobilized forces supplied and under control. Additionally, the court engaged in a plan to restore farming colonies around the capital, a massive undertaking that demonstrated some measure of success. Far from being weak and ineffective, the Mongol-Yuan during this period continued to demonstrate its ability to marshal its resources to deal with the rebellions.

One of the best indicators of the Yuan state's power and capacity was its ability to mobilize, coordinate, and support military forces from across the empire. Throughout the early 1350s, the Yuan state was able to continually mobilize tens of thousands of its garrison troops and dispatch them to battle. In the 1352 campaign against Xuzhou, the court mobilized twenty myriarchies (between 60,000 to 140,000 troops).[224] And as demonstrated by the suppression efforts in Shaanxi and by Toqto'a's campaign against Gaoyou, the court was able to draw on and deploy troops from as far away as Yunnan, Tibet, and Central Asia.[225] Naturally, the mobilization and deployment of these forces and the recruitment of mercenaries entailed costs and required a massive logistical apparatus, moving both soldiers and supplies for tens of thousands of miles across the empire. Records on how this was accomplished no longer exist, but we do know that for the most part the Branch Secretariats were responsible for supplying the campaigning troops. As Henan and the Huai River region was a war zone, most supplies had to

[223] Shi, *Yuandai junshi shi*, 403.
[224] *YS*, 42:901.
[225] Bi Yuan, *Xu Zizhi tongjian*, 212:5769.

be drawn from Jiangnan instead and by all accounts it was a huge burden. According to one Yuan scholar, "Since the military actions started in the empire, wherever the army goes, the people cannot farm, [and] military supplies all come from the south." Another commentator noted in 1355 that, "Since military action started in the Lianghuai region, even though Central Wu [the Jiangzhe region] has an abundance of grain, these grains are rapidly shipped [to the front] to support the military campaigns, and the process does not stop."[226] For Toqto'a's 1355 campaign, "the entirety of the supplies [of Toqto'a's army] came from Jiangzhe. Grains, cereals, firewood, and hay, and arrows, swords, spears, and armor for the army were transported by the tens of thousands on land and by river, [the transport convoy] went on for a thousand *li* and spread in every direction."[227] Nonetheless, Jiangnan successfully provided for the Yuan forces.

This logistical apparatus was a huge enterprise and often times involved the purchase and transfer of supplies from multiple Branch Secretariats or localities.[228] To better facilitate such a transfer, the court created a Divisional Central Secretariat (*zhongshu fensheng* 中書分省) in Jining 濟寧 (in Shandong) in 1351 and another in Zhangde 彰德 (in Henan) in 1352 to redirect tax grains and revenue straight to the front.[229] When two officials of the Henan Branch Secretariat mismanaged military supplies in 1352, the court responded by appointing a dedicated Pacification Commissioner to oversee military supplies so that there would be no future issues. The court further exhorted those with the means to supply the military to do so with the promise of government positions, while officials who could increase the amount of military supplies sent

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[226] Zheng Yuanyou 鄭元祐, "Ti liang wu qian biao hou" 題兩伍阡表後, in *QYW* 38, 1209:640; Gan Fu 甘復, "Jishe wen" 祭社文, in *QYW* 60, 1837:285.
[227] Gong Shitai, "Jiangzhe dengchu xing zhongshusheng pingzhang zhengshi Qingtong gong gongde zhi bei" 江浙等處行中書省平章政事慶童公功德之碑, in *QYW* 45, 1404:310-11.
[228] See, for instance, *YS*, 139:3360.
[229] *YS*, 92:2328-39; 184:4241.

to the front were to be promoted.[230] As mobilization of the northern garrisons went underway, in early 1352 an edict was issued ordering local officials in Shaanxi, Henan, and the Capital Metropolitan Region to make sure that agriculture was not impacted, that tax revenues could still be delivered to the troops, and that unpaid taxes would be promptly paid. Those impacted by natural disasters or bandits who did not possess oxen or seeds would have them provided by the state. Finally, soldiers and officers were forbidden from trampling over crops.[231]

The court seemed to have possessed sufficient tax revenue and treasury reserves at the onset of the rebellion to bear the cost of fighting. The annals of Toghon Temür are littered with references to rewards of gold, silver, paper money, and silk given to imperial princes and high officials and their troops for their battlefield successes. The court also took to the printing of paper money as an expedient way to raise funds – to reward the militia forces, six million *ding* of paper money was printed in 1355 alone. The court further purchased of warhorses from the steppes for campaigning troops or in some cases paid soldiers to procure their own horses.[232] When Esen Temür was dispatched on expedition in 1352, Quan Heng noted, perhaps with some exaggeration, that several thousand carts were used to ferry the gold, silver, silk, and other goods that was disbursed for the campaign.[233]

The ability of the Yuan state to disburse huge sums of money to support its mobilization efforts indicates that the Yuan fiscal system was, for the most part, still stable, capable of both extracting revenue and delivering money to the front. By combing through records in the *History*

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[230] *YS*, 42:896; 42:900.
[231] *YS*, 42:894.
[232] *YS*, 43:914-15; 44:928. Troops from Shaanxi were given paper money by the court for their equipment and horses when mobilized in 1354. It was recorded that 25,000 men and 7,500 horses were mobilized in total.
[233] *GSWS*, 214b.

of the Yuan, the Chinese scholars Chen Gaohua and Shi Weimin found that Yuan revenues, particularly its monetized portions, witnessed huge growth in the late 1320s and throughout the 1330s. Revenues from the salt monopoly saw the most growth, representing a three and a half time increase from Qubilai's reign and accounted for most of the Yuan's income. In the 1340s revenues from the salt monopoly declined compared to years prior, the result of the abscondence of salt-worker households, impoverishment of the population which made them unable to pay for government salt, and a glut of unsellable salt, but the monopoly system continued to function. Even during the midst of rebellion, the Yuan court could still collect tax revenue from Jiangnan and other regions and coordinate their transfer to campaigning troops. Of course, this rise in revenue was paralleled by an even steeper rise in expenditure. With revenues insufficient to meet these expenditures, Toqto'a resorted to currency reform. A new paper currency issued in late 1350 not only expanded the money supply but also dramatically increased the court's access to funds, if only for the time being.[234] That the Yuan court could keep the military adequately supplied while undertaking a massive state-led program to restore farming colonies (see below) as it fought the rebels is evidence of the state's power and capacity, and also suggests that Yuan finances were not in dire straits as scholars commonly suggest, at least not in the short-term.

A certain amount of credit for the success of this massive logistical venture must go to the various officials who were in charge. The official Cheng Zun 成遵 (1304-1359), for instance, successfully managed to deliver revenues from the salt monopoly, the single most important piece of state revenues, in 1351. According to Gong Shitai 貢師泰 (1298-1362), the logistical

[234] Dardess, *Conquerors and Confucians*, 97-99; Chen Gaohua 陳高華 and Shi Weimin 史衛民, *Zhongguo jingji tongshi: Yuandai jinji juan* 中國經濟通史: 元代經濟卷 (Beijing: Jingji ribao chubanshe, 2000), 780-83.

feat of supplying Toqto'a's massive army in 1354 was successful due to the efforts of the Jiangzhe Branch Secretariat privy councilor Qingtong 慶童 (d. 1368).[235] Yet it was ultimately the court's coordination and policies – directives sent from Daidu and acted upon by local officials – that allowed supplies to keep up with the soldiers. As we have already seen in the previous chapter, Yuan officials were willing to go to great lengths to ensure that its military forces could be properly provisioned during campaigns, often without worrying about the costs. Of course, this is not to say that the state's logistics were perfect - certainly there were problems and difficulties. The extractions that the court had to make to supply its military forces became a burden for the local populace, particularly those in Jiangnan. Soldiers also pillaged and looted, the problem of poor disciplined having never been addressed properly and compounded, undoubtedly, by lack of supplies in some cases. Furthermore, printing paper money might have been an expedient way to solve the fiscal crisis, but it was detrimental in the long-term as it led to hyperinflation. Nonetheless, given the success of the Yuan in suppressing the rebellions between 1352 and 1354, it seemed that its military logistics functioned well overall given the circumstances.

While the court was mobilizing troops and resources to fight the rebels, it was also investing heavily in farming colonies to reduce the capital's reliance on southern tribute grain, which was being threatened by rebel activity. These colonies operated similarly to the military farming colonies mentioned in the previous chapter – the state provided colonists with seeds and tools in exchange for a portion of the yields. At first, to alleviate the grain shortage, the court sought 500,000 *shi* of grain from Liaoyang in the northeast through harmonious purchase to

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[235] *YS*, 186:4280-81; Gong Shitai, "Jiangzhe dengchu xing zhongshusheng pingzhang zhengshi Qingtong gong gongde zhi bei," in *QYW* 45, 1404:310-11.

alleviate the grain shortage, but this was insufficient to supply the capital as it was less than ten percent of what the capital required annually.[236] On the advice of Toqto'a, who promised that the court could obtain a million *shi* of grain annually, and other high officials, Toghon Temür decreed in late 1352 that vast swathes of state-owned and former farming colony lands in the Capital Metropolitan Region would be turned into farming colonies. In the third month of 1353, the court established Divisional Offices of the Supervisors of Agricultural (*fen sinong si* 分司農司) to recruit peasants to farm and to oversee the colonies. Five million *ding* of paper money was earmarked for the project, including providing the recruited farmers with tools, oxen, and seeds.[237]

The creation of these colonies was a huge undertaking. In addition to costs associated with recruiting farmers and providing for them, the court also established agricultural offices in places such as Bianliang in Henan and Liaoyang to coordinate farming. In areas hard-hit by the rebellion such Xuzhou 許州, Runing, Nanyang 南陽, and Dengzhou 鄧州 in Henan, fallow and abandoned land were confiscated and turned into pastures to raise oxen for the farming colonies.[238] In addition, the court also recruited one thousand men from Jiangnan skilled in wet rice cultivation and one thousand men skilled in the construction of cofferdams to serve as

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[236] *YS*, 42:903. The Yuan scholar Hu Zhiyu noted that one adult male required at least two *sheng* (升) of grain per day. One hundred *sheng* made up one *shi*, so one adult male required at least 7.3 *shi* of grain annually. Given that Daidu's population in the Late Yuan was slightly over one million, based on Hu's figure the capital would require over 7,300,000 *shi* of grain annually to feed its entire population. This is a conservative estimate, given that Daidu was home to the imperial family and many elites who no doubt required more grain. See Hu Zhiyu 胡祗遹, "Ji zi Fang langzhong shu" 寄子方郎中書, in *QYW* 5, 164:226. For a study on Daidu's population, see Zhou Jizhong 周繼中, "Yuan Dadu renkou kao" 元大都人口考, in *Zhongguo Menggushi xuehui lunwen xuanji 1981* 中國蒙古史學會論文選集 1981, edited by Zhongguo Menggushi xuehui 中國蒙古史學會 (Huhehaote: Neimenggu renmin chubanshe, 1986), 166-74.

[237] *YS*, 42:903; 43:907; 92:2336; 138:3346.

[238] *YS*, 42:903; 43:909; 43:913.

agricultural teachers in the north for a period of one year. Those who could recruit these men were given government ranks corresponding to the number of men they recruited and would be put in charge of them. Each man would be paid ten *ding* of paper money.[239]

This undertaking produced 200,000 *shi* of rice in 1353, less than a quarter of Toqto'a's promised one million *shi*.[240] Nonetheless, the court was sufficiently satisfied with the result to expand the farming colonies. In 1355, it was ordered that Imperial Guard garrisons be dispatched to farms around the capital and that the Divisional Offices of the Supervisors of Agriculture would coordinate with their respective myriarchies. Each soldier was given five *ding* of paper money as a bonus and thereafter given two and a half *ding* of paper money each day. The court would continue to supply them with oxen, seeds, and tools. That same year, the court established Grand Offices of Soldier-Peasants (*da bingnong si* 大兵農司) in Baoding 保定, Hejian 河間, Wuqing 武清, and Jingji 景薊 in the Capital Metropolitan Region which controlled a total of 24 farming chiliarchies and 48 farming centuries.[241] The court encouraged the development and growth of farming colonies well into the early 1360s and the venture continued to demonstrate success. When famine struck the capital in the eleventh month of 1361, "the [yields of the] farming colonies were ready and 400,000 *shi* of grain were collected. Deputy Director of the Office of the Supervisors of Agriculture Hu Bingyi [胡秉彝] was rewarded with a ceremonial wine cup and gold to commend his achievements."[242]

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[239] *YS*, 43:908. See also Zheng Yuanyou, "Song Xu Yuandu xu" 送徐元度序, in *QYW* 38, 1208:614; Chen Ji 陳基, "Song Qiang Yanli beishang xu" 送強彥栗北上序, in *QYW* 50, 1529:233.
[240] *YS*, 187:4289.
[241] *YS*, 44:922; 92:2336.
[242] *YS*, 46:958. It is also important to also note that the Yuan was never completely cut off from southern tribute grain, as the maritime shipping routes were occasionally open when the Yuan courted Fang Guozhen to help deliver grain to Daidu.

It should be noted that the primary aim of the farming colonies was to keep the capital fed, and it was never explicitly stated that their yields would be used to supply the army. Still, it was not inconceivable that the court would have used surplus grain for military needs, and we know that the court did indeed have money and supplies to spare. Writing sometime between 1355 and 1358 to the prime minister Taiping 太平 (1301-1363), the official Yu Que 余闕 (1303-1358) noted that the court had surpluses and urged it to dispatch tens of thousands of *shi* of grain and fifty to seventy thousand *liang* of paper money to the front.[243] In addition, as part of a broader response to the rebellion, the farming colony project further demonstrated the capacity of the Yuan state and its ability to marshal the resources necessary to achieve its goals.

To better facilitate and coordinate military action, logistics, and farming, the Yuan court established a host of new agencies. New Pacification Commissions and Divisional Central Secretariats to manage supplies and the Divisional Offices of the Supervisors of Agricultural to oversee farming colonies have already been mentioned above. In 1352, the region between the Yellow River and the Huai River was detached from the Henan Branch Secretariat and placed under the newly formed Huainan Jiangbei Branch Secretariat based in Yangzhou 揚州 to allow for better coordination of anti-rebel efforts.[244] Branch Secretariat officials were given more leeway and flexibility to deal with the ever-changing situation on the ground - they no longer needed to report to the Central Secretariat about dispatching troops under their command or the disbursement of funds to purchase supplies. In addition, Branch Secretariats were given the ability to punish officials under the fourth rank for issues relating to military upkeep or

[243] Yu Que 余闕, "Shang He chengxiang shu" 上賀丞相書, in *QYW* 49, 1494:107.
[244] *YS*, 42:898; 92: 2332.

mercenary recruitment without central approval.[245] Finally, the court granted major Branch Secretariat officials significant military powers by appointing them as Regional Commanders (*zongbing guan* 總兵官) to oversee all military forces within their jurisdictions, including militias.[246]

However, this did not mean that the central government ceded all authority to the Branch Secretariats and regional military leaders. According to Dardess, Toqto'a used different sets of overlapping institutions to check the power of the regional officials and to prevent them from growing too powerful and independent. In this manner, the court managed to pit imperial princes, regional officials of different ranks and offices, censorial personnel, and militia leaders against one another. Furthermore, the court held onto the flow of supplies to the front lines through its Pacification Commissions and Divisional Central Secretariats, and by having military leaders procure supplies from other Branch Secretariats prevented them from developing their own regional satrapies.[247] The court also empowered the Pacification Commissions by giving them concurrent military powers. These Pacification Commissions and General Regional Military Commands (*xuanwei shi si du yuanshuai fu* 宣慰使司都元帥府), as they were known, had existed before but were mainly installed in border regions. However, in late 1351 the Jinghu Beidao Pacification Commission was given concurrent military command, and this was followed by the establishment of these additional Pacification Commissions in 1355 and 1356. Although theoretically under the jurisdiction of the Branch Secretariats, Pacification Commission officials were selected and appointed directly by the emperor and the Central Secretariat and therefore

[245] *NTBY*, 248-49.
[246] Matsuda, "Kōkin no ran shoki Sensei Genchōgun no zenyō," 8-10.
[247] Dardess, *Conquerors and Confucians*, 111, 114-16.

could serve as a further check on the Branch Secretariats.[248] Thus, even as the Toqto'a dispatched troops to the front under powerful military leaders, allowed for the recruitment of mercenaries and militia, and gave regional officials more powers, he nonetheless retained a significant degree of control.

Why did the Yuan Fall?

If the Yuan military had remained mostly intact in the first half of the 1350s and had been made stronger by recruited mercenaries and militia units, why did it disintegrate after 1355 and, having lost the military edge, slide into a slow collapse? As Dardess and many other scholars have noted, there was a confluence of factors that led to the collapse of the Yuan state, but the key lay with the decision to dismiss Toqto'a in early 1355. "At the time, the prime minister [Toqto'a] oversaw the army and the soldiers exerted themselves. Gaoyou was on the verge of falling, but [the soldiers] suddenly heard that the army would be disbanded, and all wailed."[249] Although Toqto'a's advisers begged him not to follow the imperial edict, Toqto'a refused and gave up his military command to three court-appointed generals. Yet with Toqto'a gone, the traditional narrative states that his army became so severely demoralized that it immediately disintegrated. "The army of a million men scattered in all four directions instantly…Those who had nowhere to go joined the Red Turbans."[250] Thus, the Red Turbans, who was on the verge of being destroyed, was suddenly given new life, and new regional rebel leaders immediately arose.

Additionally, the new rebel leaders were markedly different from their predecessors in that many of them, such as Chen Youliang 陳友諒 (1320-1363), Zhang Shicheng 張士誠 (1321-

[248] *YS*, 92:2338; Li, *Yuandai xingsheng zhidu*, 616-17.
[249] Bi Yuan, *Xu Zizhi tongjian*, 212:5772.
[250] *GSWS*, 28a-b.

1367), and even the Ming founder, actively courted the local landowning gentry elite instead of alienating them. During the first years of the rebellion, gentry elites had supported the Yuan by constructing or repairing city walls and raising militia forces and were instrumental in allowing the Yuan to reconquer lost territory. However, many of these gentry now threw their backing behind these new rebel leaders, depriving the Yuan military of crucial militia support. Moreover, after 1355, the Yuan court had effectively lost control of southern China, their main source of logistical support for the military. This was compounded by the fact that many of the military leaders who had been so successful in dealing with the Red Turbans under Toqto'a's direction had died by 1355.[251]

However, the question of what led to the Yuan army's collapse in the wake of Toqto'a's dismissal has not been properly addressed. How could one man cause the disintegration of the entire garrison force? Both historians at the time and modern historians generally attribute it to the fact that the senior commander (Toqto'a) was dismissed on the eve of a major battle.[252] Throughout Chinese history, such a move was seen by military theorists and officials as one of the gravest errors a ruler can make in war, for it had huge ramifications on the morale of the army. As a passage in the *Book of Sui* states, "Replacing the commander on the eve of battle has been a disaster since ancient times, it was because of this that Yue Yi left Yan and Zhao Kuo lost the battle for Zhao."[253] According to this narrative, after Toqto'a's dismissal the Yuan army rapidly lost morale. Taking advantage of this, the rebels within Gaoyou launched a counterattack

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[251] Dardess, *Conquerors and Confucians*, 131.
[252] *GSWS*, 28a-b; *YS*, 97:3349; Han Rulin 韓儒林, *Yuanchao shi xia* 元朝史下 (Beijing: Renmin chubanshe, 1986), 108; Zhang Jinrui 張金銳, "Lun Yuanmo Gaoyou zhi zhan ji qi yingxiang" 論元末高郵之戰及其影響, *Yuanshi luncong 14* 元史論叢 14, edited by Zhongguo Yuanshi yanjiu hui 中國元史研究會 (Tianjin: Tianjin guji chubanshe, 2014), 264.
[253] *Suishu*, 50:1199.

and completely routed the Yuan troops.[254] Additionally, some scholars also point to a passage in Quan Heng's private history where Qama 哈麻 (d. 1356), the main conspirator against Toqto'a, sent a message to Toqto'a's commanders stating that they and their families would be executed if they did not disband their troops as another reason why the army disintegrated.[255]

However, just the act of changing the commander itself cannot adequately explain the Yuan army's collapse at Gaoyou. Furthermore, there is little reason to believe Quan Heng that the commanders followed a secret order from Qama, particularly when in other sources they counseled Toqto'a to ignore an imperial edict. Instead, I argue that this was due to an institutional shift in the Yuan military in which the military garrisons became beholden to one man through a vast network of patronage and were unable to function properly when this network was disrupted. This shift not only paralleled what Chinese scholars saw as the growing power of the prime minister vis-a-vis the emperor but also bears similarities to the rise of the non-Chinggisid military aristocracy (*qarachu*) in the Ilkhanate, which one scholar argued turned the Ilkhanate into a quasi-feudal state.[256] While the Mongol-Yuan did not devolve into quasi-feudalism, its central government became increasingly dominated by "powerful ministers" (*quanchen* 權臣) who wielded power mainly through control of the military. Toqto'a was the longest serving and arguably the most powerful of these ministers, and his control over the military and the bureaucracy gave him unrivaled control by the time he was dismissed in early

[254] See, for instance, Sugiyama Masaaki 杉山 正明, *Mongoru teikoku no kōbō* モンゴル帝国の興亡 (Tokyo: Kōdansha, 1996), 222; Zhang, "Lun Yuanmo Gaoyou zhi zhan," 260-65.
[255] *GSWS*, 28a.
[256] Michael Hope, "'The Pillars of State:' Some Notes on the *Qarachu Beg*s and the *Kešikten* in the Īl-Khānate (1256-1335)," *Journal of the Royal Asiatic Society* 27, no. 2 (2017): 181-99.

1355. The following section will explore this institutional shift in the context of the military and how it caused the Yuan army's collapse following Toqto'a's departure.

The Yuan Institutional Shift and its Effect on the Military

The Yuan underwent an institutional shift beginning in the late 1320s with the rise of El Temür 燕帖木兒 (d. 1333), the Kipchak official who became kingmaker once he installed Tuq Temür 圖帖睦爾 (Emperor Wenzong, r. 1328-1329 and 1329-1333) as emperor. El Temür's family had served the Mongols since 1239, and El Temür himself enjoyed a distinguished military background - he served for ten years in the northern frontiers with his father and was part of Qaishan's bodyguards. When Qaishan ascended the throne, El Temür was catapulted up the ranks of the bureaucracy. Key to his success was his command of his own military units, including the Kipchak units of the Imperial Guard Corps. Using these loyal troops, he launched the 1328 civil war that enthroned Tuq Temür and thereafter came to enjoy even more power and privileges. The special office of Chief Military Commission (*da dudufu* 大都督府) was established for him through which he not only controlled six guards personally but also supervised the entire Imperial Guard apparatus. But El Temür's military influence extended far beyond the Imperial Guards. In 1329, the Donglu Mongol Supreme Military Command (*Donglu Menggu du yuanshuaifu* 東路蒙古都元帥府) in Liaoyang was placed under the command of the Chief Military Commission, and in the following year it officially became the Donglu Kipchak Army Myriarchy (*Donglu Qinchajun wanhufu* 東路欽察軍萬戶府), making it part of El Temür's personal army. Thus, the real commander-in-chief of the Yuan army was not the

emperor, but El Temür, and so great was his power that he refused to officially enthrone Toghon Temür for several months after the latter arrived in the capital in 1333.[257]

El Temür's death in 1333 and the subsequent purge of his family did not bring an end to this shift, for El Temür was only the first of three "powerful ministers" who would dominate the late Yuan court using military power and through the appointment of loyal partisans. El Temür's replacement was Bayan 伯顏 (1280-1340) of the Merkids. An associate of El Temür who also participated in the civil war on behalf of Tuq Temür, Bayan's position in court was second only to El Temür himself. Like El Temür, Bayan had under his command personal guard troops and gained control of the Imperial Guards after he became prime minister following El Temür's death. Bayan purged El Temür's family and supporters and ruled the court with dictatorial powers until he himself was purged in 1340 by his nephew Toqto'a in concert with the young emperor Toghon Temür.[258]

Toqto'a was therefore the product of this shift in which political and military power had devolved into the hands of powerful ministers and where control over the military, particularly the Imperial Guard Corps, became central to holding power. Although Toqto'a dispersed control of the Imperial Guards among the two prime ministers and leading officials of the Bureau of Military Affairs, he retained personal command of four guards. Furthermore, as the highest ranking official in the empire, Toqto'a's authority extended over the Bureau of Military Affairs, the central organ that controlled the dynasty's military forces, including direct control over the

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[257] Dardess, *Conquerors and Confucians*, 47, 56; Shi, *Yuandai junshi shi*, 398-400; Xue, "Yuandai dongbei," 216; Vered Shurany, "Tuqtuqa and His Descendants: Cross-Regional Mobility and Political Intrigue in the Mongol Yuan Army," in *Along the Silk Road in Mongol Eurasia*, edited by Michal Biran (Berkeley and Los Angeles: University of California Press, 2020), 120-40.
[258] Dardess, *Conquerors and Confucians*, 53-74; Shi, *Yuandai junshi shi*, 398-400.

Mongol Army.[259] In addition, from 1350 until 1355, it was possible that Toqto'a as the sole prime minister could have appropriated the guards controlled by his counterpart.[260] As Zhang Fan noted in his study of the Yuan prime ministerial system, although the power of the Central Secretariat was theoretically divided among several high-ranking officials, much of the actual power was concentrated into the hands of the two prime ministers, thus giving Toqto'a unrivaled control over the bureaucracy. Moreover, after returning to power in 1350, Toqto'a embarked on a purge of his political and ideological opponents, replacing them with his loyal partisans.[261]

Of course, the existence of "powerful ministers" is not a new phenomenon in Chinese history, and such figures were prominent even in native Chinese dynasties.[262] However, the different sociopolitical context of the Mongol-Yuan also meant that powerful ministers developed differently from previous Chinese dynasties. The Mongols' practice of tanistry as a means of succession - that is, selecting only the most qualified candidate - presented ambitious individuals with a path to power, particularly as succession disputes became more common after the death of Temür (Emperor Chengzong). Backing a successful candidate to the throne entailed wealth, power, and privileges.[263] Indeed, the three powerful ministers of the late Yuan all gained power through their involvement with imperial succession. These ministers also inherited command of their own private military units in the Imperial Guard Corps from their fathers, a

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[259] *YS*, 97:3343-3345; Shi, *Yuandai junshi shi*, 401-02. See Zhang Fan's classic study for the relationship between the Prime Minister/Central Secretariat and the Bureau of Military Affairs. Zhang Fan 張帆, *Yuandai zaixiang zhidu yanjiu* 元代宰相制度研究 (Beijing: Beijing daxue chubanshe, 1997), 173-80.
[260] Hong Lizhu 洪麗珠, *Gandan chuyue: Meng Yuan wanqi de zhengzheng* 肝膽楚越: 蒙元晚期的政爭 (Taipei: Hua Mulan chubanshe, 2011), 70.
[261] Zhang, *Yuandai zaixiang*, 206-09; Hong, *Gandan chuyue*, 79-81.
[262] For a study of *quanchen* in earlier periods of Chinese history, including their characteristics, see Jiang Jianzhong 江建忠, *Shiri zhe: Zhongguo gudai de quanchen* 蝕日者: 中國古代的權臣 (Taipei: Nianlun wenhua shiye gufen youxian gongsi, 1999), 11-43.
[263] Fletcher, "The Mongols," 17-18, 24-28.

feature of the Mongol-Yuan military that was tied to steppe notions of hereditary succession. The hybrid nature of the Mongol-Yuan and the inability of later rulers to keep the different sets of institutions in check mentioned in the previous chapter meant that rulers had to depend on these individuals for political and military support.

Timothy May argued that one effect of the Mongol Empire's collapse was the rise of non-Chinggisid Mongol elites known as *qarachu* who ruled through puppet Chinggisid khans and by force of arms. Yet May noted that the *qarachu* did not appear in China as they did in other parts of the Mongol Empire.[264] The rise of powerful ministers, however, shows that *qarachu* did exist in Mongol-Yuan, though different political conditions and paths of development meant the *qarachu* in China were of a very different nature than those found elsewhere. Here, the Ilkhanate example offers illumination. Research by Michael Hope has shown that in the Ilkhanate, a military aristocracy composed of members of Hülegü's (r. 1256-1265) *keshig* (bodyguards) and their descendants had already coalesced in the early decades of Ilkhanate rule. Over time, these military leaders' power vis-a-vis the Ilkhan grew and could even launch civil wars to influence the succession and commit regicide against rulers whom they felt infringed upon their interests and privileges. As a result, Hope argues that the Ilkhanate transitioned from a "patrimonial state" to a "quasi-feudal state."[265] Of course, the more bureaucratic nature of the Mongol Empire in China and the large number of imperial princes there prevented the formation of quasi-feudalism in the same manner as the Ilkhanate, but it could not inhibit the development of *qarachu* in the Late Yuan.

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[264] Timothy May, *The Mongol Empire* (Edinburgh: Edinburgh University Press, 2018), 336-51.
[265] Hope, "'The Pillars of State'," 181-93.

Arguably the first few "powerful ministers" of the Mongol-Yuan, Ahmad 阿合馬 (1242-1282), Sangha 桑哥 (d. 1291), and Temüder 鐵木迭兒 (d. 1323), cannot be considered *qarachu* in the same vein as those in the Ilkhanate, since they had no military power and depended entirely on the support of their patrons (Qubilai in the case of Ahmad and Sangha and Empress Dowager Targi in the case of Temüder). Nonetheless, factional struggles beginning in the mid-Yuan provided opportunities for military leaders to challenge the authority of the ruler. In 1323, a group of Mongol and *semu* nobles, along with imperial princes unsatisfied with the reforms of the Confucian-minded ruler Shidebala 碩德八剌 (Emperor Yingzong, r. 1320-23), murdered him and his China-oriented prime minister Baiju 拜住 (d. 1323). This was the first act of regicide in the Mongol-Yuan and the leader of the coup, Tegshi 鐵失 (d. 1323), commanded the Left and Right Asud Guards. What prevented the rise of a El Temür-like figure then was that the coup was likely orchestrated by Yesün Temür 也孫鐵木兒 (Emperor Taiding, r. 1323-1328), whose father was the eldest son of Jingim 真金 (1243-1286), Qubilai's heir apparent. Not only was Yesün Temür of impeccable heritage, but he also controlled one of the largest military forces in the Mongol-Yuan that was stationed in the steppes and commanded great respect within the empire. In this manner, he was able to keep potential challengers, both Chinggisid and non-Chinggisid, in check.[266] Nonetheless, factional struggles and succession disputes had already laid the foundations for the rise of military aristocrats in the Mongol-Yuan.

El Temür and Bayan were more like the *qarachu* of the Ilkhanate, leveraging their command of military units to come to power. The power and privileges bestowed upon them

[266] Morris Rossabi, *Khubilai Khan: His Life and Times* (Berkeley and Los Angeles: University of California Press, 1988), 179-84, 192-96; Hsiao, "Mid-Yüan Politics," 505-41.

were not unlike those given to Buqa, a *qarachu* in the Ilkhanate who brought onto the throne Arghun (r. 1284-1291) and ruled with dictatorial powers until Arghun managed to oust him in 1289.[267] Like their Ilkhanate counterparts, these Mongol-Yuan ministers could influence the succession for their own interests. El Temür was likely behind the assassination of Qoshila 和世剌 (Emperor Mingzong, r. 1329), Tuq Temür's older brother, for fear of being supplanted by Qoshila's Chagatai retainers and he also endeavored to prevent the ascension of Toghon Temür, which was supported by Bayan. Similarly, there are indications that Toqto'a might have attempted to meddle with the succession, as evidenced by his refusal to invest Toghon Temür's son Ayushiridara 愛育識里達臘 (1340-1378) as heir apparent.[268]

Nonetheless there were key differences. First, the existence of a large number of Chinggisid princes in China provided a counterweight to non-Chinggisid elites - Bayan, for instance, felt sufficiently threatened by these princes that he purged several of them.[269] Second, there were the existence of powerful empresses and empress dowagers. Steppe tradition afforded Mongol women tremendous power and influence,[270] which combined with the institution of the Chinese empress (which was itself no stranger to powerful female rulers), could counteract the power of the *qarachu*. To take the example of Bayan again - he owed part of his power to his alliance with Tuq Temür's widow Bundashiri, a daughter of the powerful Qonggirad clan.[271] Third, the *qarachu* in China had no opportunity to establish hereditary succession like their

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[267] Dardess, *Conquerors and Confucians*, 48-52, 57-58; Shurany, "Tuqtuqa and His Descendants," 131; Hope, "'The Pillars of State'," 190.
[268] Hsiao, "Mid-Yüan Politics," 545-47; Dardess, "Shun-ti and the End of Yüan Rule," 566-67, 578-80.
[269] Dardess, *Conquerors and Confucians*, 69-74.
[270] Anne F. Broadbridge, *Women and the Making of the Mongol Empire* (Cambridge: Cambridge University Press, 2018), 9-42.
[271] Dardess, *Conquerors and Confucians*, 55-59.

counterparts in the Ilkhanate. El Temür died before he could secure power for his son, and Bayan was removed by his Confucian-minded nephew Toqto'a. Finally, the bureaucratic nature of the Yuan state did not favor the development of the *qarachu* as a class - instead the court remained dominated by a single powerful figure. That the *qarachu* in China had different characteristics than those in the Golden Horde and the Ilkhanate does not mean they did not exist in the Mongol-Yuan – rather, they developed in a different sociopolitical context.

Toqto'a tenure as a powerful minister lasted longer than both his predecessors', and as Toghon Temür entered semi-retirement and withdrew from state affairs, Toqto'a's authority and influence grew. He used his tremendous power to undertake several large projects - under his leadership, the Yuan court compiled the dynastic histories of the Song, Jin, and Liao. It launched a currency reform in late 1350 that instantly solved, albeit temporarily, revenue issues. In 1351, it completed a program to reroute the Yellow River, thus paving the way to potentially restore the Grand Canal.[272] More importantly, as this chapter has shown, the mobilization, coordination, and provisioning of military units against the rebels were all done under Toqto'a's leadership and direction. He appointed commanders and entrusted them with the task of defeating the rebels, while at the same time building up a system of checks and balances to prevent any one commander from growing too independent and powerful.

Toqto'a even personally took to the field, first against Xuzhou and then against Gaoyou, which he might have done for three reasons. First, Toqto'a wanted to display the martial valor of the court. Second, he wanted to use the opportunity to bring regional military forces tighter under his control and leveraging his patronage network he seemed to have been successful in doing so,

[272] See Dardess, "Shun-ti and the End of Yüan Rule," 573-76.

as his expeditionary force was composed of just about every single type of army the Yuan could draw on. Third, Toqto'a might have wanted major military victories under his belt to bolster his position against his political enemies, as the Mongols valued martial prowess and battlefield victories.[273] Therefore, Toqto'a was the face of the Yuan's anti-rebellion efforts and the man who held everything together. His control over the military and bureaucracy, his efforts in directing the Yuan's military response, and the battlefield successes of the Yuan forces, including his own victory at Xuzhou, not only raised his prestige and increased his power, but also allowed him to gain the loyalty and respect of military commanders and soldiers.

This loyalty was on full display once the order to dismiss him was issued. After the imperial edict reached the army, his subordinates counseled him to ignore it. Some wanted Toqto'a to take Gaoyou first and then return to the capital to confront the emperor. Others advised him to declare Bolod Buqa 孛羅不花 (d. 1356), the Prince of Zhennan 鎮南王, as emperor and establish a rival court in the south. One commander named Halada 哈剌答 went so far as to commit suicide, crying, "Now that the prime minister is leaving, we will sure die at the hands of others. Today, I would rather die before the prime minister!" Ultimately, Toqto'a refused and heeded the edict. Tao Zongyi wrote that after Toqto'a was dismissed, many soldiers felt that he had been wronged and, in their anger, either abandoned their posts or became bandits themselves. Some even joined the rebels, proclaiming that the Yuan's fortunes were at an end.[274]

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[273] Hong, *Gandan chuyue*, 89-90; Hong Lizhu 洪麗珠, "Yuanmo Huabei jiangling yu Meng Yuan de wangguo lunshu" 元末華北將領與蒙元的亡國論述, in *Qinghua yuanshi 5* 清華元史 5, edited by Liu Yingsheng 劉迎勝 and Yao Dali 姚大力 (Beijing: Shangwu yinshu guan, 2020), 206.
[274] *YS*, 97:3348; Tao, *Nancun chuogeng lu*, 357; Changgu zhenyi 長谷真逸, *Nongtian yuhua* 農田餘話, in *Baoyantang miji di 20 ce* 寶顏堂秘笈第 20 冊, 5a-b.

It was in this context that the Yuan army lost morale and the rebels within Gaoyou launched their counterattack, leading to the army's disintegration.

Toqto'a's power had reached its apogee during the siege of Gaoyou. Even before the rebellion, he had made himself the dominant official, and his leadership in suppressing the rebellion made him even more indispensable. Quan Heng wrote that, "At the time Toqto'a had tremendous power. He administered affairs in court and commanded soldiers in the field. He had control over all-under-Heaven, and thus all-under-Heaven hoped for his victory."[275] After Toqto'a, there was no one else with the power and prestige who could retain control of the military forces, and further political infighting at Daidu and the suspicion cast by political actors there on regional commanders prevented the rise of another figure who could better coordinate anti-rebel responses.[276] Thus, it can be argued that the Yuan collapsed because of a failure to recognize that the political structures of the state had changed, that in dismissing Toqto'a, Toghon Temür failed to realize just how pervasive Toqto'a's influence was and how dependent the state was on him.

Dardess has posited several reasons for Toqto'a's dismissal. First, Toqto'a faced growing resistance from elements of the bureaucracy that was beginning to chafe under his control and opposed his centralization of power. His refusal to invest Ayushiridara as heir apparent was seized upon by his political enemy Qama to alienate the emperor and empress from him. But more importantly, Toqto'a had simply grown too powerful for Toghon Temür to tolerate. As Dardess pointed out, "there was no higher positions to promote him to, no honors and rewards

[275] *GSWS*, 27b.
[276] Hong, *Gandan chuyue*, 106.

that he did not possess already."[277] Yet there is no indication that Toqto'a sought to supplant the Chinggisids, whose legitimacy in the Mongol Empire was unquestioned and irreplaceable. Moreover, Toqto'a was well-versed in Neo-Confucianism – he had made the turn towards Confucian governance a hallmark of his tenure as prime minister – and no doubt valued Confucian notions of righteousness, duty, and loyalty. Chinese history is littered with powerful figures who saved the dynasty from destruction, gained tremendous power in the process, but remained loyal to the state. Guo Ziyi 郭子儀 (697-781), the hero of the An Lushan Rebellion in the Tang, and Zeng Guofan 曾國藩 (1811-1872), who defeated the Taiping Rebellion in the Qing (1636-1911), for instance, all had sufficient military and financial power and enough prestige to mount a serious challenge against the throne but chose not do so. Toqto'a himself had the opportunity to become an Ilkhanate-style *qarachu* by leveraging his tremendous military power to overthrow the emperor or establish a rival court. That he passed on the opportunity could be interpreted as a sign of revenge, to let the Yuan collapse, as Dardess suggested, but an equally compelling reason was that Toqto'a did not see fit to challenge the throne. But in any case, Toghon Temür did not want to wait to find out. No doubt the dictatorial reigns of El Temür and Bayan, including the murder of his father Qoshila by El Temür, weighed on his mind.

The Toghon Temür divided Toqto'a's military command among three individuals – Tai Buqa 太不花 (d. 1358), Ökecher 月闊察兒, and Sosaq 雪雪 (d. 1356). Both Tai Buqa and Ökecher participated in the suppression campaign under Toqto'a's leadership, but a deeper glance at their careers reveals that neither served in any capacity in Daidu that would have

[277] Dardess, *Conquerors and Confucians*, 122-27.

allowed them control over the Imperial Guards, let alone the entire military and bureaucracy.[278] Sosaq, meanwhile, was the younger brother of Qama, the man responsible for Toqto'a's downfall. [279] The loyalty that the Imperial Guard commanders and troops had for Toqto'a was not fully transferred to Toqto'a's replacements. None of them had the political and military power or the political machine that Toqto'a had, and at least one of them was involved in Toqto'a's dismissal. Small wonder, then, that many troops deserted and became outlaws themselves.

In preparing for his grand campaign against Gaoyou, Toqto'a had mobilized much of the dynasty's Imperial Guard and garrison forces. The disintegration of his army meant that the garrison forces, which had thus far served as the backbone of the Yuan military, was so severely weakened that it could no longer play an active role in suppressing the rebellion. One Taiwanese scholar pointed out that after Toqto'a's demise, there became a clearer division between the different types of government forces. Central government troops, composed of the demoralized remnants of the Imperial Guards and troops levied from the appanages of the imperial princes, fell under the command of Tai Buqa. There were also regional garrison forces under the command of high-ranking regional officials such as Dash Badalugh. Finally, there were private military forces raised by local leaders such as Chaghan Temür 察罕帖木兒 (1328-1362) and Li Siqi 李思齊 (1323-1374).[280] Whereas before these local armies would have all been under the

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[278] Tai Buqa, a member of the noble Qonggirad clan, enjoyed a brief stint as chief administrator of the Central Secretariat in 1348, but this position did not allow him command over any Guard units. He served mostly in regional positions. Prior to his appointment to the Bureau of Military Affairs and later to the Central Secretariat, Ökecher was a *keshig* (bodyguard) attached to the Crown Prince. In the *History of the Yuan* his name is also rendered in Chinese as 月可察兒. *YS*, 42:895, 43:916, 138:3339, 141:3381-83.
[279] *YS*, 205:4581.
[280] Hong, "Yuanmo Huabei jiangling," 212.

control of the Toqto'a-led court, now they were free from central control and could act as they pleased. The remaining central government troops under Tai Buqa seemed to have been wholly ineffective, both in fighting the rebels and in containing the rise of regional warlords. Discipline, which was already a problem before, worsened, and Tai Buqa allowed his army to loot and pillage throughout Henan and Shandong, ostensibly due to lack of supplies. Dash Badalugh was even ordered by the court at one point to attack him and bring him to justice. The sorry state of Tai Buqa's army led to the military defeat in Shandong, and he repeatedly ignored imperial commands to fight. In the end, the court had to engage in intrigue to arrest and kill him and his son in 1358.[281] The imperial garrisons thereafter faded as a viable military force.

Even regional garrison forces slipped out of the control of the court, as regional officials became warlords themselves, and the court turned instead to recruited mercenaries.[282] Writing sometime in 1358, the Yuan official Li Shizhan 李士瞻 (1313-1367) showed just how reliant the court was on mercenaries. By that time Red Turban forces had captured most of Shandong and was threatening Daidu, and Li urged the court to recruit mercenaries to defend the capital while waiting for regional military leaders such as Chaghan Temür, Kara Buqa 哈剌不花 (fl. 1350s), and Tai Buqa to bring in reinforcements, claiming that one hundred thousand men could be recruited in this manner. These troops could then be used to assist the regional forces to recover lost territory.[283] This points to the fact that the Imperial Guard Corps could no longer be counted upon to defend the capital. A year prior, another Yuan official also hinted at the court's reliance on mercenaries and militias. Zhou Wensun 周聞孫 (1307-1360) advised the court to establish

[281] Hong, "Yuanmo Huabei jiangling," 212-16.
[282] Matsuda, "Kōkin no ran shoki Sensei Genchōgun no zenyō," 9-10; Hong, "Yuanmo Huabei jiangling," 217.
[283] Li Shizhan 李士瞻, "Shang Zhongshu zongbing shu" 上中書總兵書, in *QYW* 50, 1524:131.

militia myriarchies and to provide militiamen with warhorses, while elsewhere urging the recruitment of landless peasants as mercenaries, stating that several thousand recruited mercenaries was superior to ten thousand conscripted soldiers.[284]

This gradual demise of the garrison forces after 1355 allowed for the rise of semi-autonomous regional warlords in northern China. Previously, the court co-opted militia leaders by placing them and their troops within the military and/or civilian administrative hierarchy, often under the overall leadership of its own officials. As these militia forces were used to augment regular garrison troops, they were naturally kept in check by garrison troops and court-appointed military leaders. But with the garrison troops gone, militia leaders such as Chaghan Temür, Kara Buqa, and Li Siqi suddenly found that they had much more leverage in dealing with the court. These military leaders were able to win victories against the rebels and recapture some lost territory, forcing the court to increasingly rely on them to stem the tide of the resurgent rebellion. The court still attempted to co-opt these military leaders by giving them bureaucratic titles, but now it had lost the ability to use its own officials and garrison troops to restrain their growing power. And whereas before they would be appointed mostly to low or mid-level regional military or civilian titles, now these leaders were given high-level Branch Secretariat or central government posts, such as control over entire Branch Secretariats and being allowed to "act at convenience".[285]

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[284] Zhou Wensun 周聞孫, "Shang Quan canzheng dier shu" 上全參政第二書, in *QYW* 51, 1561:133-36.
[285] Chaghan Temür, for instance, was given control of the Shaanxi and Henan Branch Secretariats and made an administrator of the Central Secretariat, along with a host of other bureaucratic titles, and was allowed to "act at convenience." See *YS*, 141:3384-93. Kara Buqa was made an associate overseer in the Bureau of Military Affairs. See *YS*, 188:4306-08.

Thus, from the second half of the 1350s onward, the Yuan's garrisons slowly disintegrated, it gradually lost the support of southern militia leaders, and its systems of checks on regional military leaders had been undone. The court therefore had no choice but to rely on semi-autonomous military warlords in northern China to defend itself while attempting to buy the loyalty of independent rebel regimes, such as those of Zhang Shicheng and Fang Guozhen, in the south. While these leaders maintained nominal submission to the Yuan court, it was clear that the court exercised little control over them and that they were more interested in maintaining their strength. Even the northern warlords, the very men that the court had come to depend on to suppress the rebels, could not be fully controlled. Chaghan Temür and his adopted son Köke Temür 擴廓帖木爾 (also known as Wang Baobao 王保保, d. 1375) engaged in a military conflict with another warlord, Bolod Temür 孛羅帖木兒 (d. 1365). Bolod Temür at one point even occupied the capital in his dispute with the heir apparent Ayushiridara, and Köke Temür himself would also later be drawn into a conflict with the court as well. This story of the Yuan's collapse and disintegration has been well-documented by John Dardess.[286] That the Yuan court survived as long as it did after Gaoyou seemed to have been due mainly to luck and its ability to play various warlords against each other, and not because it had any real institutional control over regional warlords - it just so happened that warlords such as Chaghan Temür felt a sense of duty and loyalty to the court and fought on its behalf.[287] Had Chaghan Temür felt differently or decided to change his attitude, the Yuan might not have lasted into the 1360s.

[286] See Dardess, *Conquerors and Confucians*.
[287] Hong, *Gandan chuyue*, 105-06.

Conclusion

The success of the Yuan military in the early 1350s highlighted in this chapter calls for a reconsideration of the Mongol-Yuan's demise. It did not fall due to military weakness or because the state itself had withered. The policies implemented by the court throughout the prior century that was the subject of the previous chapter seemed to have been largely successful, with only the southern garrisons showing signs of decline. The mobilization of garrison troops and the construction of a logistical apparatus suggests that the state possessed sufficient capacity to wage a prolonged military campaign against the rebels, while the use of mercenaries and militias demonstrates the state's adaptability in utilizing new resources. Local gentry elites remained loyal to the Yuan, as evidenced by the fact that they and their forces were successfully co-opted in the bureaucracy, though the state also took care to prevent them from growing powerful. These are not signs of a moribund state. As noted by Dardess and Robinson and affirmed in more detail here, the Yuan at this point still possessed vigor, respect, and resources. By the end of 1354, it seemed that it was on the verge of overcoming the crisis altogether.

What undid its success was Toqto'a's dismissal in early 1355 and the collapse of his patronage network. While notions of patronage were an integral part of steppe political culture and such networks had existed throughout the history of the Mongol-Yuan, what made Toqto'a unique was that he was the product of an institutional shift that was decades in the making in which the prime minister came to wield more power than the ruler, largely through control of the military. This shift on the one hand mirrored other moments in Chinese history when "powerful ministers" could challenge the authority of the emperor. But on the other hand, it was also unique to the context of Mongol rule, as can be glimpsed through a comparison with the Ilkhanate experience. Toqto'a had simply grown too powerful and influential, both politically and

militarily, and his web of patronage permeated the bureaucracy. Thus, his dismissal profoundly impacted the morale of his army since many of his troops and commanders owed him loyalty. Had there been a figure with Toqto'a's stature and power to replace him, as Bayan replaced El Temür and Toqto'a replaced Bayan, perhaps the garrison forces could have been salvaged. Yet his replacements could not keep the garrisons together and central military authority crumbled as a result. With the garrison forces depleted, there were no more restraints on the power of regional military leaders, who built their own truncated networks of patronage within in their spheres of influence. Sanctioned by the court, they appointed their own officials, procured their own supplies, and recruited their own troops, administering their territories like independent polities.[288]

With the fall of the Mongol-Yuan, China came under the control of the Ming empire. The following chapter will explore the military apparatus of this Yuan successor state. Built as it was upon the foundations of the Yuan military, the Ming military system also inherited many of the same problems. Even during the period between 1364 and 1449, which was the height of the Ming's hereditary household system, the state had to grapple with institutional issues and household survival strategies that first appeared in the Yuan. And much like the Yuan case, many historians of the Ming viewed the military within the context of decline. The next chapter will therefore highlight the issues facing the Ming military and how the early Ming state dealt with them, and in doing so will attempt to link some of the Ming's responses to those of the Yuan. The Ming not only inherited Yuan institutions, but some of their strategies for how to

[288] See Dardess, *Conquerors and Confucians*, 119-56; Dardess, "Shun-ti and the End of Yüan Rule," 576-80. Dardess also noted high-level factionalism, fiscal exhaustion, natural disasters, loss of gentry support, and the death of key military leaders as secondary reasons which contributed to the Yuan's fall.

manage the military were also rooted in Yuan practices. Furthermore, the influence that patronage networks had on the late Yuan military might have informed the Ming founder on how to tackle these issues within his own army, although these efforts were ultimately unsuccessful in the Ming.

Chapter 3. Hereditary Military in the Early Ming, 1368-1449

In the popular imagination, the Ming dynasty is often seen as a period of restoration of native Han Chinese rule. When the Hongwu emperor (r. 1368-1398) established the Ming in 1368, he declared that he would restore the rites, institutions, and customs of *Zhonghua* 中華 and rid the empire of barbarian practices. In 1385, Hongwu went further, blaming all the ills of Yuan on maladministration caused by barbarian rule.[289] Yet despite his grand pronouncements about restoring "native Chinese" traditions and institutions, scholars have noted the pervasive influence that the Mongol-Yuan had on all aspects of the Ming.[290] This is especially true for the military - Romeyn Taylor's early research on the subject has revealed that the Ming's *weisuo* 衛所 ("guards and battalions") system copied its entire military apparatus, down to the number of troops in each unit, from the Yuan.[291]

This inheritance of the Mongol-Yuan military institution naturally meant that the Ming inherited many of the same issues. Instances of desertion, impoverishment, and abuse can be found even in the early Hongwu reign, when the military system was supposedly at its strongest. While some of these issues are common in all premodern militaries, others were unique to the Mongol military system that was implemented in China. In response, the Ming court enacted a host of policies to arrest what it perceived to be a decline in military strength because of desertion and impoverishment. This chapter will examine the Ming's policies to strengthen military institutions during the period between 1368 and 1449 and in doing so will make three

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[289] *Taizu shilu*, in *MSL*, 31:549-50, 46:925-27; Zhu Yuanzhang 朱元璋, "Dagao: hu Yuan zhizhi disan" 大誥: 胡元制治第三, in *QMW*, 29:587.
[290] Refer to the introduction for a full treatment of the Mongol-Yuan's legacy on the Ming.
[291] Taylor, "Yüan Origins," 23-40.

major interventions. First, it argues that Ming military policy during this period underwent three distinct phases - the Hongwu (1368-1398), the Yongle (1402-1424), and the Hongxi to Zhengtong phases (1424-1449). Rather than see the Early Ming period as an unchanging and monolithic whole dominated by the institutions of its founding emperor, this chapter instead shows that during each phase, the court implemented different policies to increase central control and rein in abuses. Second, this chapter explores the different ways the court provisioned its garrisons, especially how Ming emperors were able to utilize military farming to supply the garrisons in the early fifteenth century. Using Liaodong, Guizhou, and Gansu as examples, it highlights the successes and failures of military farming in the early Ming and how the court transitioned to other methods to supply the guards. Finally, by stressing parallels between Yuan and Ming policies and practices, this chapter offers insight on why these policies and practices between the two regimes were so similar. While Ming rulers never acknowledged Yuan institutional legacy, turning back to Yuan methods even after using different policies to strengthen control suggests that these similarities might be due to the institutional nature of the hereditary military system that the Mongols introduced to China.

Taken together, these three arguments tell the story of not just how the early Ming state adopted Mongol military institutions but also how it negotiated its Mongol institutional legacy, utilizing a wide range of strategies and devoting a tremendous amount of resources to keep the military functioning. As socioeconomic and geopolitical conditions changed, the emperor and his officials had to constantly search for ways to maintain the military strength, keep it provisioned, and make the military administration more effective in tackling issues that arose and in carrying out the will of the state, all the while attempting to work within a self-sufficient military structure. While some of these policies were inspired by preceding dynasties (including the

Mongol-Yuan), others were drawn from contemporary local experiments. And though scholars typically see 1449 as a turning point in which the Ming adjusted its military, this chapter argues that some of these changes had their roots well before 1449 and that the *weisuo* was not an immutable military institution but part of a broader, ever-changing military apparatus.

The Ming Military and the Hongwu Agenda

Hongwu was a ruler with a mission. Influenced by his Neo-Confucian advisers who sought to create a strong centralized state that could bring order, stability, and moral rejuvenation to society, Hongwu saw himself as a Heavenly-anointed autocrat whose mission was to bring about world salvation. As emperor, Hongwu sought to transform the Ming into an idealized self-sufficient agrarian village society envisioned by Mencius and Neo-Confucian philosophers. To aid in this agenda, Hongwu preserved the Mongol-Yuan system of fixed household categories made up of civilians (*min* 民), military (*jun* 軍), artisans (*jiang* 匠), and several lesser categories. Such a system not only matched his vision of how society should function but also enabled him to exert strong control over the population. The people were to supply the state with taxes, corvée labor, military service, etc. according to their categories.[292] To better control the activities of civilians, Hongwu introduced the institution of the *lijia* 里甲 in 1370 (often translated as "hundreds and tithings" in English). Ten households comprised a *jia* and ten *jia* made up a *li*. The ten largest and wealthiest households would take turns serving as *lijia* heads or elders, and so a *lijia* was made up of 110 households in total. Hongwu hoped that the *lijia* would replace the government in local administration and gave them duties such as the collection and delivery of

[292] Dardess, *Confucianism and Autocracy: Professional Elites in the Founding of the Ming Dynasty* (Berkeley and Los Angeles: University of California Press, 1983); Edward L. Farmer, *Zhu Yuanzhang and Early Ming Legislation: The Reordering of Chinese Society Following the Era of Mongol Rule* (Leiden: Brill, 1995).

taxes, providing corvée labor service, undertaking construction work, conducting sacrifices, among others.[293]

To order the military, Hongwu implemented the "guards and battalions" system (*weisuo*). It preserved the Mongol-Yuan decimal system, with the guard (*wei*) corresponding to the Yuan myriarchy (*wanhu*) and the battalion (*suo*) corresponding to a chiliarchy (*qianhu*). But while the nominal strength of a Yuan myriarchy was 10,000, the Ming guard was capped at only 5,600 men, with each battalion composed of 1,120 men. Nonetheless, drawing on the *History of the Yuan*, Taylor pointed out that Yuan myriarchies in practice had only around 5,000 soldiers, which Hsiao Ch'i-ch'ing also noted.[294] This seemed to have been common in other parts of Eurasia as well, likely because it was difficult for the Mongols to maintain the decimal system at full strength given the diverse socioeconomic contexts of their empire. For instance, according to Beatrice Manz, *tümens* (myriarchies) in Temür's (better known as Tamerlane, r. 1370-1405) did not actually contain 10,000 soldiers - it did not even entail the potential to raise that many troops.[295] Battalions were made up of ten centuries of 112 men (*baihu*), each consisting of two platoons of 56 men (*zongqi* 總旗), which were in turn made up of five squadrons of 11 to 12 men (*xiaoqi* 小旗). In 1393, there were 329 guards throughout the Ming, yielding a total of around 1.2 million soldiers. Under the Yongle emperor (r. 1402-1424), the number of guards was increased to 493, which meant there were more than two million soldiers (assuming the guards were at full

[293] Kuribayashi Norio has a detailed study on the *lijia*. See Kuribayashi Norio 栗林 宣夫, *Rikōsei no kenkyū* 里甲制の研究 (Tokyo: Bunrishoin, 1971).
[294] Taylor, "Yüan Origins," 35; Hsiao, *Military Establishment*, 54. See also Chapter 1 on the division of myriarchies in the Yuan into three classes based on the number of troops they contained. Second and third class myriarchies contained less than 10,000 troops.
[295] Beatrice Forbes Manz, *The Rise and Rule of Tamerlane* (Cambridge: Cambridge University Press, 1989), 77.

strength).[296] But the military was not just composed of active-duty soldiers themselves. Ten to twenty percent of all registered households in the Ming were military households - in some localities they exceeded fifty percent.[297]

The Hongwu emperor also established an imperial army based in Nanjing under his personal command to defend the Capital Metropolitan Region (Zhili 直隸, later South Zhili 南直隸 after the capital was moved to Beijing). This was a substantial force, composed of 41 (later 48) guards with around 224,000 troops. Additionally, 86 guards (around ¼ of the national total) with 520,000 troops were stationed in the provinces around the capital, including along the coast to defend against pirates. There was a further 86 guards along the northern border to protect against Mongols. The remaining guards were scattered throughout the empire, with a substantial number in Yunnan and Guizhou.[298] Later, when Yongle moved the capital to Beijing, the number of troops garrisoned in the north rose exponentially. Most of them were imperial guards stationed around the capital, as Yongle increased the capital's defenses to a staggering 72 guards.[299]

The Ming also inherited the Yuan institution of military farming, including its practice of separating active-duty soldiers from farming colonists. Most colonists were given fifty *mu* of farmland (the same amount as during the Yuan), although greater and lesser amounts were also recorded. In sparsely populated areas in the north, allotments of farmland could reach into the hundreds of *mu* because the land was less fertile. For instance, in 1387, military farming

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[296] *MS*, 2196, 2204; Li, *Mingdai qianqi junshi zhidu yanjiu*, 246.
[297] Robinson, "Why Military Institutions Matter for Ming History," 298.
[298] Taylor, "Military Origins," 34; Fan Zhongyi 范中義, *Zhongguo junshi tongshi di 15 juan: Mingdai junshi shi*: 中國軍事通史第 15 卷：明代軍事史 (Beijing: Junshi kexue chubanshe, 1998), 138-40.
[299] Fan, *Mingdai junshi shi*, 301-02.

colonists in Shaanxi were given 500 *mu* of land each.[300] The key difference between Yuan and Ming military farming was that whereas Yuan farming colonies were mostly established in the north and the northwest, the Ming mandated that all guards have farming colonies attached. Hongwu decreed that seventy percent of soldiers should engage in farming while the remaining thirty percent undertook garrison duties, but actual practice varied by region. Along the northern frontier where there was a higher density of guards, as many as eighty percent of soldiers in each guard farmed.[301] In the late Hongwu and early Yongle periods, there were probably between 488,000 to 630,000 *qing* of military farmland, and during the institution's height in the mid-Yongle reign, the colonies could produce up to 20 million *shi* of grain annually.[302] This represented as much as ten percent of all cultivated land in the early Ming. Additionally, huge amounts of pastureland were also set aside for military use.[303] In this way, the Hongwu emperor sought to ensure full military self-sufficiency.

Ming military personnel were organized under military households and, as was the case in the Yuan, were expected to be self-sufficient and self-replicating. Once entered into military registration, a household could not leave except under extenuating circumstances. Although military households were expected to supply only one serving soldier, many were also required to provide an additional "auxiliary conscript" (*yuding* 餘丁) to accompany the soldier to camp to take care of him. In some instances, two or three auxiliary conscripts went with the soldier.[304] These soldiers were uprooted and sent to garrisons far away from their homes in a process

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[300] *MHD*, 119; *Taizu shilu*, in *MSL*, 185:2782. See also Wang Yuquan 王毓銓, *Mingdai de juntun* 明代的軍屯 (Beijing: Zhonghua shuju, 1965), 72-73; Foon Ming Liew, "Tuntian Farming of the Ming Dynasty (1368-1644)," PhD diss., (University of Hamburg, 1984), 92.
[301] Chen, "Mingdai weisuo de jun," 191; Liew, "Tuntian Farming," 87; Li, *Mingdai qianqi junshi zhidu yanjiu*, 266.
[302] Wang, *Mingdai de juntun*, 113; Liew, "Tuntian Farming," 105-10, 141-43.
[303] Robinson, "Why Military Institutions Matter for Ming History," 298.
[304] Wang, *Mingda de juntun*, 281.

Michael Szonyi termed "deterritorialization." As Szonyi explained, the aim of this policy was to break up existing socioeconomic networks so that soldiers could not undermine military objectives. Once at camp, soldiers and their dependents received monthly rations from the state, but other expenses were supplied by their households. As compensation, the state granted corvée labor exemptions to up to two members of military households and on three *qing* of land.[305]

The existence of a privileged military elite was another feature that Hongwu inherited from the Mongol-Yuan. Ming officer positions were hereditary and in the early Ming military officials occupied a higher political status than their civilian counterparts. After the ascension of the Yongle emperor, an even more privileged corps of military officers was created to reward his loyal followers. Hongwu had instituted military examinations for successors to military positions, but such requirements did not apply to Yongle's new military elites.[306] Additionally, both Hongwu and Yongle also fostered a merit nobility by rewarding their key commanders with hereditary titles of nobility and large stipends. Although Hongwu later purged many of these nobles, a core group composed of his earliest and most loyal followers survived and thrived. Under the Yongle emperor, these nobles also began participating in military decision-making, not unlike high-ranking members of the Mongol-Yuan *keshig*.[307]

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[305] Wu, "Mingdai de junbing," 104-05; Chen, "Mingdai weisuo de jun," 185-87; Wang Yuquan 王毓銓, "Mingdai de junhu - Mingdai peihu dangchai zhi yili" 明代的軍戶 - 明代配戶當差之一例, in *Wang Yuquanji* 王毓銓集 (Beijing: Zhongguo shehui kexue chubanshe, 2006), 284; Szonyi, *The Art of Being Governed*, 127-28.
[306] Yu, *Mingdai junhu shixu zhidu*, 141-44; Li, *Mingdai qianqi junshi zhidu yanjiu*, 229-30.
[307] Miyazaki, "Kōbu kara Eiraku e," 5-6; Dreyer, *Early Ming China*, 175; Li, *Mingdai qianqi junshi zhidu yanjiu*, 87-90, 106-12, 120. For a detailed study of the merit nobility, see Tani Mitsutaka 谷 光隆, "Mindai no kunshi ni kansuru ichi kōsatsu" 明代の勳臣に關する一考察, *Tōyōshi kenkyū* 東洋史研究 29, no. 4 (1971): 362-409.

Ming Military Conscription

The Ming military drew personnel from four main sources – soldiers who joined Hongwu's initial rebel movement, surrendered Yuan troops or those of other warlords, criminals sent to military exile as punishment, and conscripted personnel. Of these four, the first source provided relatively few men. The second source of manpower, particularly former Yuan troops, has not garnered much scholarly attention until recent years. Many these surrendered Yuan soldiers were likely of Han or *semu* origins who had grown accustomed to life in China proper - therefore they opted not to follow the Yuan court's 1364 retreat to the steppes. Many others were Mongol or other nomadic/semi-nomadic inhabitants of the northern border region who were conscripted by the Ming and came to form a major component of the Ming's northern defenses. Finally, surrendered Mongol nobles and generals also brought their military forces with them. The policy of the Hongwu emperor was to resettle these surrendered Mongol forces around the capital Nanjing, although a significant number were also garrisoned in Beiping (later Beijing).[308]

The Ming seemed to have depended primarily on surrendered Yuan officials or commanders to recruit their former troops. Most of these conscriptions took place between 1371 and 1374 in north China, although limited conscription also continued afterwards. For instance, the former Yuan official Shang Gao 商暠 (fl. late fourteenth century), who surrendered to

[308] Qi Wenying 奇文瑛, "Ming Hongwu shiqi neiqian Mengguren bianxi" 明洪武時期內遷蒙古人辨析, *Zhongguo bianjiang shidi yanjiu* 中國邊疆史地研究 14, no. 2 (2004): 59-65; "Shilun Hongwu shiqi gu Yuan guanbing anzhi yu junshi weisuo jianshe" 論洪武時期故元官兵安置與軍事衛所建設, *Minzu shi yanjiu 8* 民族史研究 8 (Beijing: Zhongyang minzu daxue chubanshe, 2008); Liu Jingchun 劉景純, "Mingchao qianqi anzhi Menggu deng bu guifu ren de shikong bianhua" 明朝前期安置蒙古等部歸附人的時空變化, *Shaanxi shifan daxue xuebao* 陝西師範大學學報 41, no. 2 (2012): 77-85; Guo Jiahui 郭嘉輝, *Mingdai weisuo de guifu junzheng yanjiu: yi "shanhouren" wei li* 明代衛所的歸附軍政研究: 以 "山後人" 為例 (Taipei: Wanjuan lou tushu gufen youxian gongsi, 2020). The Yongle emperor settled surrendered Mongol troops around the new capital Beijing.

Hongwu and served in a slew of high posts in the Ming, was dispatched in 1371 and again in 1373 to conscript former Yuan soldiers. In 1371, Shang conscripted 140,115 households and ordered that every three households produce one soldier for the Beiping garrisons.[309] In other instances, the court dispatched members of the merit nobility to conscript these troops.[310]

As most Yuan military registers were probably lost by this period, Ming officials relied primarily on self-reporting to conscript former Yuan soldiers. In 1369, the court ordered households who had escaped registration to report their Yuan household category to local authorities. The following year, the Ministry of Revenue was ordered to conduct an empire-wide population registration.[311] Officials also relied on reports from said household's neighbors, and such reporting seemed to have been widespread. In 1383, Hongwu decreed that the Ministry of War should stop allowing people from leveling accusations against former Yuan military households who had not reported their status after authorities were inundated with judicial disputes.[312]

Military exiles were another significant source of manpower. Ming law listed twenty-two types of crimes that were liable to be punished by military exile, such as smuggling salt, violating the maritime ban, or participating in rebellion. Indeed, the majority of those sent to military exile were guilty of the latter. However, records from the Ming Liaodong archives show that a significant number of military exiles were guilty of simply "committing illegal acts," which encompassed a wide range of behavior that authorities found questionable. While Ming

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[309] Tan Qian 談遷, *Guoque* 國榷, 4:443; *Taizu shilu*, in *MSL*, 80:1448, 83:1490.
[310] *Taizu shilu*, in *MSL*, 83:1482-83; Tan Qian, *Guoque*, 8:649-50.
[311] *MHD*, 129.
[312] *Taizu shilu*, in *MSL*, 152:2390.

law stipulated that such crimes were punishable by eighty blows with the stick, the Liaodong archives shows that they were instead sent to military exile.[313]

The extensive use of military exiles by the Ming was possibly because it provided the state with a convenient source of manpower, as authorities did not need to invest time and energy in categorizing and conscripting individual households. They were also cheaper to employ, since they received fewer rations than conscripted personnel and were discriminated against.[314] It is thus likely that the situation in other northern regions were probably similar to that in Liaodong, with large numbers of military exiles being dispatched, a fact bolstered by the myriad of fifteenth and sixteenth century legal statutes pertaining to it.[315] Nonetheless, in Liaodong, military exiles became such an important component of the military that Hongwu could no longer treat them differently, and they were included in grants and rewards.[316] Military exiles could be sent by themselves, or their entire household could be conscripted. Additionally, serving soldiers could also be sent to military exile as punishment, most often to remote border regions.

While both former Yuan soldiers and military exiles made up a significant portion of the army, the majority of Ming forces were conscripted from the civilian populace. The Ming used two types of conscription methods, with the number of adult males as the main criterion for conscription. The first method, known as *chouji* 抽籍, was simply to conscript a single household with many adult males as a military household. The second method, known as *duoji*

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[313] Zhou Yuanlian 周遠廉 and Xie Zhaohua 謝肇華, "Mingdai Liaodong junhuzhi chutan - Mingdai Liaodong dang'an yanjiu zhi yi" 明代遼東軍戶制初探 - 明代遼東檔案研究之一, *Shehui kexue jikan* 社會科學輯刊 1980, no. 2 (1980): 45-47.

[314] For an in-depth study of military exile in the Ming, see Wu Yanhong 吳艷紅, *Mingdai chongjun yanjiu* 明代充軍研究 (Beijing: Shehui kexue wenxian chubanshe, 2003).

[315] Wu, *Mingdai chongjun yanjiu*, 13-14, 51-61.

[316] Zhou and Xie, "Mingdai Liaodong junhuzhi chutan yi," 48.

垛集, essentially reprised the Yuan policy of consolidation in which two or more households were combined with the primary household supplying the soldier and the supplementary household(s) providing supplies. These two methods have received in-depth treatment by Yu Zhijia and Zhang Jinkui.[317]

As noted by Romeyn Taylor and more recently by Li Xinfeng, this adoption of Yuan military institutions was likely because there was no other model available for Hongwu and his followers to imitate, forcing them to work with institutions that they were already familiar with. Furthermore, Hongwu relied on former Yuan officials to construct a state apparatus for him in his early career.[318] This would have also conformed with practices elsewhere in Eurasia – as David Robinson pointed out, other post-Mongol imperial polities also made use of Mongol methods of military organization in the immediate aftermath of the Mongol Empires' disintegration.[319] There is undoubtedly much truth to this. Indeed, we find that apart from the institutions themselves, even Ming conscription methods followed Yuan precedent. However, Hongwu's own ideological inclinations also must have played a role. Fixed military households who were self-sufficient and self-replicating matched his vision of a fixed and orderly agrarian world dominated by small peasants while at the same time also increased state control over the population.

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[317] Yu, *Mingdai junhu shixi zhidu*, 10-21; Zhang, *Mingdai weisuo junhu yanjiu*, 39-47. See also Yu Zhijia, "Zailun duoji yu chouji" 再論垛集與抽集, in *Zheng Qinren jiaoshou qizhi shouqing lunwenji* 鄭欽仁教授七秩壽慶論文集, edited by Zheng Qinren jiaoshou qizhi shouqing lunwenj bianji weiyuanhui 鄭欽仁教授七秩壽慶論文集編輯委員會 (Taipei: Daoxiang chubanshe, 2006), 197-237; "Lun Mingdai duoji junhu de junyi gengdai - jian lun Mingdai junhu zhidu zhong huming budong daiyi de xianxiang" 論明代垛集軍戶的軍役更代 - 兼論明代軍戶制度中戶名不動代役的現象, in *Ming Qing falü yunzuo zhong de quanli yu wenhua* 明清法律運作中的權利與文化, edited by Qiu Pengsheng 邱澎生 and Chen Xiyuan 陳熙遠 (Taipei: Zhongyang yanjiu yuan, 2009), 35-85.
[318] Taylor, "Yuan Origins," 40; Li, *Mingdai qianqi junshi zhidu yanjiu*, 309.
[319] Robinson, "Why Military Institutions Matter for Ming History," 316.

Ming Military Issues

In 1387, the Hongwu emperor issued the *Grand Pronouncement to Military Officials* (*Dagao wuchen* 大誥武臣), a tract written for military officials in which he railed against abuses and corruption in the military. Reading the thirty-two cases that Hongwu presented, one cannot help but feel a sense of *déja vu* at how similar these problems were with those of the Yuan. But this should not come as a surprise – the adoption of Yuan military institutions and practices naturally meant the adoption of the problems that came with it. Hongwu complained that guard officers were appropriating military supplies, privatizing soldiers, and commandeering the salaries of subordinates or the rations of soldiers. In exchange for a bribe, officers would allow soldiers to escape military service, a practice known as *maifang* 賣放. Worse, officers were abusive towards soldiers and their families, often beating or even killing them.[320] Despite the court's best efforts to tackle these abuses, problems continued to persist. In 1433, the court noted that many of the same issues recorded by Hongwu, such as appropriation of supplies and privatization of soldiers, continued to plague the military.[321]

Military farming, too, faced serious problems, the most common of which were privatization of land and colonists by military officers and powerful notables and desertion due to impoverishment. The loss of colonists caused farming colonies to decline from the late 1420s onward.[322] Scholars agree that the late Hongwu and early Yongle reigns was the most successful

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[320] Zhu Yuanzhang, "Dagao wuchen: maozhi guanliang diyi" 大誥武臣：冒支官糧第一, in *QMW*, 32:731; "Dagao wuchen: Chu Qin deng shanshou junyi diqi" 大誥武臣：儲欽等擅收軍役第七, in *QMW*, 32:735; "Dagao wuchen: kelian haijun dijiu" 大誥武臣：科斂害軍第九, in *QMW*, 32:736; "Dagao wuchen: dasi junren di shisi" 大誥武臣：打死軍人第十四, in *QMW*, 32:739; "Dagao wuchen: maifang junren di shiba" 大誥武臣：賣放軍人第十八, in *QMW*, 32:741; "Dagao wuchen: jiansu junfu diershier" 大誥武臣：奸宿軍婦第二十二, in *QMW*, 32:743.
[321] *Xuanzong shilu*, in *MSL*, 108.2431-32.
[322] Wang, *Mingdai de juntun*, 290.

period for military farming, but that success was short-lived. In 1403, the Ming *Veritable Records* recorded that farming colonies produced a total of 23.45 million *shi* of grain. Two years later, they produced 22.46 million *shi*. However, by the 1430s, the amount of grain from the colonies never surpassed 3 million *shi*. [323]

Abuses and impoverishment naturally led to desertion. From 1367 to 1370, the Ming army suffered 47,900 desertions, and that number only grew as time went on, which greatly undermined the military. By 1438, officials claimed that there were as many as 1.2 million deserters, which would have been almost half of the army's nominal strength.[324] Like the Yuan, the Ming also had a track and replace mechanism, and unsurprisingly it suffered from many of the same problems. Hongwu noted in 1385 that local civilian officials charged with track and replace were receiving bribes from deserters to turn a blind eye and instead impressed civilians with the same surname and name as the deserter. Hongwu also accused officials of not providing travel permits to family members who were carrying traveling expenses to soldiers on their way to camp and sold these permits instead.[325] In 1429, the Ministry of War reported that every year sixteen to seventeen thousand military officials were dispatched for track and replace, but they returned with poor results. Moreover, the ministry noted that many officials dispatched during

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[323] See Liew, "Tuntian Farming," 104, 107. However, as Terada Takanobu cautioned, we cannot infer that the military farming colonies collapsed simply because annual yields declined, as the court lowered taxes on military farmlands, thereby leading to less grain being collected. A far more important reason for the collapse of the institution was the widespread privatization of military farmland. See Terada Takanobu 寺田 隆信, *Shanxi shangren yanjiu* 山西商人研究, translated by Zhang Zhengming 張正明 et al. (Taiyuan: Shanxi renmin chubanshe, 1986), 65-66, 73.

[324] *Taizu shilu*, in *MSL*, 59:1161; *Yingzong shilu*, in *MSL*, 46:889.

[325] Zhu Yuanzhang, "Dagao: gouqu taojun di ershiyi" 大誥：勾取逃軍逃軍第二十一, in *QMW*, 29:594; "Dagao: maojie junyi di qishisan" 大誥：冒解軍役第七十三, in *QMW*, 29:620.

the Hongwu and Yongle reigns never returned at all, and instead settled down in other places and started families.[326]

Such issues were, of course, not unique to the Yuan and the Ming. In the Song, for instance, officials also noted that military officers took bribes, occupied farmland, privatized soldiers, and engaged in various forms of abuse.[327] But while the issues were the same, the Mongol military institutions that the Ming inherited changed the nature of these problems. For one, the military household system meant that it was not just the soldiers who were subject to abuse and exploitation, but their household as well. And while the Song could easily offer generous financial benefits to entice recruitment, the hereditary nature of military service in the Yuan and the Ming meant the state had to engage in labor and resource intensive track and replace, playing an ever-evolving cat and mouse game with military households who were keen on avoiding conscription. Hereditary service also produced a corps of privileged military officers who were difficult to handle. Despite several high-profile cases of execution that Hongwu highlighted in his *Grand Pronouncement to Military Officials*, many were simply demoted or exiled even after committing heinous crimes. Like their Yuan counterparts, Ming officials would frequently blame the military's ills on this hereditary officer class.[328] Finally, military farming was never an important component of the Song military, with the Song buying much of its military supplies from the market and utilizing harmonious purchase.[329] By contrast, military

[326] *JZTL*, 9.
[327] Wang Zengyu 王曾瑜, *Songchao junzhi chutan (zengding ben)* 宋朝軍制初探 (增訂本) (Beijing: Zhonghua shuju, 2011), 488-506.
[328] Robinson, "Why Military Institutions Matter for Ming History," 305-07, 323-26.
[329] See Wang, *Songchao junzhi chutan*, 418-40.

farms were immensely important in maintaining the self-sufficient nature of the Yuan and Ming militaries, and their decline would have tremendous consequences.

Early Ming Policies to Control the Military

Having recognized the problems, in the period between 1368 and 1449, Ming emperors took steps to strengthen central oversight and control to rein in these abuses. This section explores these policies and argues that they can be divided into three distinct phases. During the Hongwu reign (1368-1398), harsh punishments, registers, and large transfers of wealth were used to control the military. The Yongle reign (1402-1424) strengthened some of the Hongwu policies, particularly with regards to military farming, but also introduced new methods of military organization that deviated from the *weisuo* structure. This would have a profound impact on the military in the second half of the fifteenth century. Between the Hongxi to Zhengtong reigns (1424-1449), the court began to relax some of the harsher Hongwu and Yongle-era policies while also introducing new methods to strengthen central control. These changes to military policies show that the Ming was not a monolithic entity that operated under a dynastic constitution and ancestral institutions designed by Hongwu. Its policies towards the military can be best described as a constant series of modifications and reforms that were sparked by changing conditions on the ground. Moreover, the amount of attention and resources that the emperor and his court devoted to the military shows that they were fully cognizant that military power, and by extension military institutions, were an integral component to dynastic survival and longevity.

The Hongwu Reign: Centralizing Authority

Hongwu attempted to impose greater personal control over the military primarily through the imposition of new regulations and punishments and through large transfers of wealth. Okuyama Norio has studied these regulations as they applied to military officers, noting that Hongwu created registers to keep track of information, established rules to govern promotions and successions, forbade officers from hearing lawsuits, implemented martial examinations for successors to hereditary positions, outlawed the exchange of gifts between merit nobles, officers, and soldiers, and ordered officers to be rotated regularly to serve in the capital so he could keep a closer eye on them. The goal of these policies, as Okuyama related, was to sever any private relationships between military nobles, officers, and soldiers for fear that military commanders would grow too powerful and independent. For instance, the first offense for an officer receiving gifts from merit nobles was one hundred strokes with a heavy stick and military exile, and the second offense was death. Yet Okuyama also noted that these policies were contradictory, as they did not apply while the military was campaigning.[330] In other words, Hongwu sought only to break up private relationship and patronage during peacetime, but realized that such relationships were crucial during wartime, as soldiers would be more willing to fight for their commanders. As the following chapter will show, this tension between the need to prevent patronage and to keep soldiers motivated by allowing them to form relationships with their commanders would resurface in the early sixteenth century.

[330] Okuyama Norio 奥山 憲夫, "Kōbuchō no gunji seisaku" 洪武朝の軍事政策, in *Mindai gunseishi kenkyū* 明代軍政史研究, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 33-77.

To better govern the military households, Hongwu and his successors relied heavily on documentation to keep accurate track of information. In the Ming, all households were registered, and household information were compiled into so-called Yellow Registers (*huangce* 黃冊) during the 1381 empire-wide census. But aside from this, Hongwu also introduced two new registers for the military in 1388. The first was the "rectification and replacement register" (*qinggou ce* 清勾冊), kept by guard officials, which recorded the name and native place of deserted or deceased soldiers. The second was the "military household register" (*junhu hukou ce* 軍戶戶口冊), kept by prefectural and county authorities, which recorded the household's conscription history, the number of males in their native place, the number of replacements conscripted, and the number of males in the guards. Officials were to cross-check dead soldiers or deserters with the information recorded within these registers during track and replace to find the appropriate replacement. Hongwu envisioned that the registers would play a central role in keeping the military intact and ordered that they be as accurate as possible. The Ming apparently required the registers be updated annually, though this rule was not always followed, particularly after the Hongwu reign.[331]

Hongwu's successors continued his policy of compiling registers to keep information up-to-date and become better appraised of the local situation. In 1433, the Xuande (r. 1425-1435) court ordered the creation of a new type of military household register, to be kept by guard authorities, detailing a household's service record and the number of adult males at camp and in their native place.[332] Two years later, two additional registers were added. The "register of

[331] Yu, *Mingdai junhu shixi zhidu*, 52, 82; Zhang, *Mingdai weisuo junhu yanjiu*, 162-66.
[332] *Xuanzong shilu*, in *MSL*, 104:2322-23.

names" (*huaming ce* 花名冊) was kept by the Ministry of War and recorded five categories: the number of troops originally in the *weisuo*, the number of newly recruited troops, the number of discharged troops, the number of troops remaining, and the number of troops obtained from track and replace. The "answers register" (*huida ce* 回答冊), compiled by local civil authorities and dispatched to the Ministry of War, recorded the results of track and replace.[333] Thus, within half a century, the Ming court was working with five types of military registers.

Harsh punishments were also utilized by Hongwu to keep commanders and soldiers in line. To combat desertion, Hongwu ordered in 1371 that salary reductions and demotions be instituted for military officers if they fail to take care of their troops and cause desertion. Hongwu's focus on officers was likely tied into their hereditary nature. In his *Grand Pronouncements to Military Officials*, Hongwu made clear that hereditary succession was a privilege afforded to these officers for their service. In his mind, this high reward meant they had to perform to his exacting standard or suffer the consequences. On a more practical level, officers shouldered the responsibility of commanding the soldiers and interacted with the troops directly. Therefore, they naturally had to be held to a higher standard. Finally, it is possible that Hongwu was aware of the problems that officers had caused in the Yuan and so tried to keep his own officers in line.

Table 3.1 Punishments for officers responsible for soldiers deserting (1371)

Severity of desertion	**Punishment**
Three desertions within a squadron	Squadron commander demoted to soldier

[333] Wang Xian 王憲, "Jichu qingjun shiyi" 計處清軍事宜, in *HMJSWB*, 99:872.

Fifteen desertions within a platoon	Platoon commander is demoted to squadron commander
Every fifteen desertions within a century	Reduce centurion's monthly salary by one *dan*
Sixty or more desertions within a century*	Remove centurion from command and demote him to platoon commander
Every fifty desertions within a battalion	Reduce battalion commander's monthly salary by one *dan*
Five hundred or more desertions within a battalion	Remove battalion commander from command and demote him to centurion
Five desertions within a squadron while on expedition	Squadron commander demoted to soldier
Twenty-five desertions within a platoon while on expedition	Platoon commander is demoted to squadron commander
Every thirty desertions within a century while on expedition	Reduce centurion's monthly salary by one *dan*
Ninety desertions within a century while on expedition	Remove centurion from command and demote him to platoon commander
Every one hundred desertions within a battalion while on expedition	Reduce battalion commander's monthly salary by one *dan*
Eight hundred desertions within a battalion while on expedition	Remove battalion commander from command and demote him to centurion

Source: *Taizu shilu*, in *MSL*, 69:1291-92.

In 1380, Hongwu reset the salary reductions:

> Recently, many soldiers in the various guards have fled. This is all because [officers] do not take good care of them. It is appropriate to redetermine the punishment for battalion and century [officers]. If there are one hundred deserters

> within a battalion, reduce the commander's monthly salary by one *shi*. If there are two hundred [deserters], reduce their monthly salaries by two *shi*. If there are ten deserters within a century, reduce the centurion's monthly salary by one *shi*. If there are twenty [deserters], reduce their monthly salaries by two *shi*. If the troops under their command are not at their full strength and this is due to soldiers dying of illness or being incapacitated, [the commanders] should not be punished.
>
> 近各衛士卒多有逋逃者，皆由統之者不能撫恤，宜重定千百戶罰格。凡一千戶所逃至 百人者，千戶月減俸一石，二百人者，減二石。一百戶所逃及十人者，百戶月減俸一 石，二十人者，減二石。若所管軍伍不如數，及有病亡、殘疾事故，不在此限。[334]

The combined 1371 and 1380 regulations were entered into the 1397 *Great Ming Code*.[335]

A cursory glance at these regulations reveals that punishments fell disproportionately on the shoulders of lower-ranking officers. This could be because these officers interacted more closely with soldiers and thus bore more responsibility, but it could also be because higher-ranking officers were part of a more privileged group of military elites. Moreover, this practice of more lenient punishments for high-ranking officers was also common in the Yuan. In many cases, even for the most heinous of crimes, Yuan myriarchs (equivalent to a Ming guard commander) could expect to receive imperial pardons or were punished lightly and allowed to remain in their posts. By contrast, centurions guilty of those same crimes were dismissed and not allowed to serve again.[336] We therefore see here that just as in the Yuan, there was an attempt to protect the privilege of high-ranking military elites.

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[334] *Taizu shilu*, in *MSL*, 131:2089.
[335] Yonglin Jiang, trans. *The Great Ming Code* (Seattle: University of Washington Press, 2014), 136-37.
[336] See, for instance, *YDZ* (2011), 1844, 2132-33; *ZZTG*, 311. It should be noted that Hongwu did order harsh punishments such as execution to some high-ranking officers in his *Grand Pronouncement to Military Officials*, but in each of these situations the crimes committed by these officers were especially heinous. Most of the time, they were merely demoted, transferred to remote positions, or ordered to redeem themselves through merit.

For soldiers, Hongwu stipulated beatings of between sixty to a hundred strokes with a large wooden stick for all deserters and those who harbored them. The number of blows depended on the type of guard the deserter belonged to (capital or regional), any history of prior desertions, and whether the army was on expedition. All those caught were returned to service, and soldiers who deserted a second time during expeditions were hanged. Deserters who turned themselves in within a hundred days were spared punishment, while those who turned themselves in after a hundred days had their beating reduced by twenty strokes.[337]

To balance these punishments, Hongwu regularly issued rewards and grants to military personnel, for any stick had to be wielded in tandem with a carrot. Rewards kept soldiers loyal and motivated, particularly as the Ming in this period continued to mobilize against Mongols in the north and in the southwest. Moreover, it helped to reinforce Hongwu's image as a generous patriarch. As David Robinson noted, "imperial mercy and munificence were to be reciprocated with gratitude, loyalty, and the desire to 'repay to the dynasty.'"[338] This was a massive transfer of wealth to the military and included silver, paper money, textiles, clothing, and other material goods. Okuyama Norio, who has studied these grants extensively, noted that of all the grants made by Hongwu, between sixty to ninety percent went to the military.[339] For instance, between 1368 and 1391, Hongwu disbursed a total of 3.7 million *liang* of silver, with more than 68% going to military personnel and an additional 18% used to purchase military supplies. During that same period, the court granted 12.3 million bolts of cotton cloth, 3.4 million *jin* of cotton, 1.7 million sets of winter clothing, 1.4 million bolts of summer cloth, and 19,180 sets of summer

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[337] Jiang, *The Great Ming Code*, 135-36.
[338] Robinson, "Military Labor in China," 68.
[339] Okuyama Norio, "Kōbuchō no shiyo san‐ken dōsen sono hoka" 洪武朝の賜与三‐絹· 銅銭· その他, in *Mindai gunseishi kenkyu* 明代軍政史研究, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 170-71.

clothing. Almost all these textiles and clothing went to the military. Other goods that were granted include paper money, silk (which primarily went to military officers), bronze coins, rice, finished leather goods, and peppers. The capital garrisons received most of these grants, followed by the northern garrisons and the Yunnan garrisons.[340]

The Yongle Reign: The Height of Control

The Yongle emperor claimed his overthrow of his nephew and his ascension to the throne was intended to restore Hongwu's institutions, which he cast as being dismantled by the Jianwen emperor (r. 1398-1402). While Yongle in some ways maintained and strengthened Hongwu's military policies, he also began altering military institutions. Yongle instituted even harsher punishments than his father to deter desertion, greatly tightened regulations on military farming, and continued grants to military personnel. At the same time, he hastened reforms to the military structure so that it could better respond to military emergencies, which gradually transitioned the military away from the *weisuo* system as the primary basis for military operations. This transition would be greatly accelerated in the mid-Ming.

Yongle's 1402 redetermination of punishments towards desertion was notably harsher than Hongwu's regulations, addressing what he claimed was commanders not following the Hongwu regulations which was leading to increased desertion. Yongle decreed that a single desertion within a century would entail a half salary reduction for the centurion, and ten desertions would see him forfeit his entire salary. Thirty or forty desertions would see the

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[340] Okuyama Norio, "Kōbuchō no shiyo ichi‐gin shō" 洪武朝の賜与一‐銀· 鈔, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 100-30; "Kōbuchō no shiyo ni‐men ma" 洪武朝の賜与二‐綿· 麻, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 131-49; "Kōbuchō no shiyo san," 150-75.

centurion demoted. Battalion and guard commanders would be similarly punished based on the number of deserters. By contrast, under Hongwu's regulations, ten desertions entailed only a reduction of one *shi* from the centurion's salary.[341] But like his father, Yongle attempted to balance these punishments with continued transfers of wealth to the military to keep military personnel loyal and motivated. In 1404, for instance, he ordered that counties in Shaanxi produce leather coats for border troops. In 1406 and again in 1422, all military personnel were given paper money.[342]

For military farming, Yongle decreed in 1404 that each farming colony unit must produce twenty-four *shi* of grain annually, and that colony officials would be rewarded and punished based on the yields of their colonies. Half of these grains would constitute a "primary tax" (*zhengliang* 正糧) which went to colony granaries and were used to pay farming colonists, while the other half, known as a "surplus tax" (*yuliang* 餘糧), was delivered to guard granaries, and used to pay officers and combat soldiers. The following year, Yongle ordered that "red signboards" (*hongpai* 紅牌) be installed in every farming colony detailing rewards and punishments. The signboards also stated that farming soldiers over sixty, the handicapped, and the sick and young need only provide grain to support themselves and were not subjected to the new regulations.[343]

While Yongle strengthened Hongwu-era military policies and expanded the *weisuo* by establishing more guards, he also hastened the transformation of the *weisuo* into purely a management unit by reorganizing the military structure to create a new institution. While the

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[341] *Taizong shilu*, in *MSL*, 13:229.
[342] *Taizong shilu*, in *MSL*, 28:511; 52:784; 248:2317.
[343] *Taizong shilu*, in *MSL*, 27:494-97; 33:589; 38:646-47; *MHD*, 121.

weisuo had always played a management and organizational role, registering soldiers and providing them with training, weapons, and supplies, it also was meant to conduct military operations. In times of war, merit nobles or generals would be dispatched from the capital to mobilize the various guards for battle. But by the mid-Hongwu reign, the situation was starting to change. With its garrison cities and farming colonies, the *weisuo* was beginning to lose offensive capabilities and could not operate flexibly in responding to military emergencies. To enable better responses, Hongwu ordered that more elite troops be drawn from the interior guards for patrol and defensive duties along the frontiers.

Like many Ming policies, this practice began as a temporary measure, but by the 1390s, these troops were being ordered to garrison the border for extended periods. For instance, in 1395, 34,000 cavalrymen and infantry from Henan were dispatched "north of the passes" to construct fortifications and engage in military farming.[344] In 1389, Hongwu separated infantry and cavalry troops under the command of the Beiping Branch Regional Military Commission into distinct units and ordered that elite infantry troops be trained instead as cavalrymen and sent to the capital to receive warhorses. In 1397, these cavalrymen were reorganized - rather than use decimal organization like the *weisuo*, the cavalry units were grouped into units of hundreds, with one general appointed for every five hundred men.[345] Hongwu thus drew the most elite troops from guards throughout the realm and redistributed them according to each region's need.

While these changes began in the Hongwu reign, they were greatly accelerated and made permanent by Yongle. Hongwu created the new position of Regional Commanders (*zongbing* 總

[344] *Taizu shilu*, in *MSL*, 236:3445.
[345] *Taizu shilu*, in *MSL*, 197:2961; 252:3642.

兵) to lead these troops, but these were temporary positions. Under Yongle, who sought to strengthen the Ming's northwestern defenses against a planned invasion of China by Timur (better known as Tamerlane, 1325-1405) in 1404, these positions were made permanent in the form of Grand Defenders (*zhenshou* 鎮守), tactical commanders appointed to lead troops and direct combat operations. Unlike Regional Military Commissioners, who only oversaw military logistics and management (the court dispatched commanders from the capital during times of war), Regional Commanders and Grand Defenders were vested with the authority to command and lead troops. Later, Yongle elevated his Grand Defenders to Regional Commanders, who were given greater authority over military matters and were staffed exclusively by merit nobles. The Regional Commanders commanded either a specific number of troops, such as in 1410 when the merit noble Song Hu 宋琥 (d. 1430) was given command of 10,000 cavalrymen drawn from Henan, Shanxi, and Shaanxi and sent to garrison Gansu, or all troops in a given area, such as in 1414 when Zhu Rong 朱榮 (1359-1425) was appointed Regional Commander in Datong with command over all the troops in Shanxi.[346] Some Regional Commanders were even given power over provincial civilian authorities, allowing them to oversee logistics and provisioning.[347] These changes allowed for more streamlined military operations and enabled faster responses to raids or attacks.

After Yongle, *weisuo* troops would frequently be dispatched to garrison other places, with these garrisons taking the place of the *weisuo* as a military operations unit. The *weisuo* thereafter began to function more as a unit to manage the soldiers' family members who

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[346] *Taizong shilu*, in *MSL*, 111:1420; 156:1796

[347] Zhao Xianhai 趙現海, *Mingdai jiubian changcheng junzhen shi* 明代九邊長城軍鎮史 (Beijing: Shehui kexue wenxian chubanshe, 2012), 160, 186, 195.

remained behind in the guards and to provide front line garrisons with supplies. Yongle's successors, the Hongxi (r. 1424-1425) and Xuande emperors, continued to dispatch Regional Commanders to the frontiers and vested them with greater authority over military affairs, including placing Regional Military Commissions (theoretically the highest military authority in a province) under their jurisdiction.[348] These actions, often in response to the changing border situation brought about by the withdrawal of Ming troops from the forward steppe garrisons that Hongwu initially established but were abandoned by Yongle, eventually gave birth to the Nine Border Garrison Commands (*jiubian zhen* 九邊鎮) in the early sixteenth century. This transformation will be explored further in the following chapter.

Another major Yongle-era reform was the creation of an elite central army under his personal command that he could quickly mobilize and personally lead on expeditions that would eventually develop into the Capital Army (*jingying* 京營) after his death. In 1409, Yongle drew elite troops from Nanjing and the Capital Metropolitan Region totaling 50,000 men and an additional 30,000 men from Shandong, Shaanxi, Liaodong, Huguang, Henan, and Shanxi to accompany him to the new capital of Beijing. This army was destroyed by the Mongols in 1409 after a disastrous military campaign in the steppes, which prompted Yongle to personally lead an expedition north. For this expedition, he drew 120,000 men from garrisons throughout the empire. After the conclusion of this and subsequent expeditions, these troops were not returned to their original guards but were stationed around Beijing. After the conclusion of his fifth expedition in 1424, the court formally declared that these troops would become the Capital Army

[348] Zhao, *Mingdai jiubian changcheng*, 190.

and would be permanently stationed around Beijing as an elite force.[349] Later Ming scholars claim that the Capital Army in the Yongle period had 800,000 men, a figure that was included in the *History of the Ming* and quoted by the pioneering historian, Wu Han (1909-1969). Later textual research by Chinese scholars has revealed that the Capital Army during the Yongle period had between 300,000 to 400,000 troops, and the 800,000 figure included troops stationed in the surrounding guards.[350] Aside from defending the capital and acting as an elite expeditionary force, the Capital Army was also used to maintain the combat effectiveness of the provincial guards. The court ordered that provincial armies regularly rotate to Beijing to train while troops from the Capital Army were also dispatched to garrison other places.[351] By the time the Zhengtong emperor (r. 1435-1449, 1456-1464 as the Tianshun emperor) departed on expedition in 1449, the Capital Army is estimated to have at most 300,000 troops.[352]

The dispatching of troops drawn from the guards, the appointment of Regional Commanders, and the creation of the Capital Army shows that substantial changes to military institutions were already underway by the first decade of the fifteenth century. The existence and continued development of these parallel military institutions which existed alongside the *weisuo*

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[349] Li, *Mingdai qianqi junshi zhidu yanjiu*, 165-68, 182-86. The Capital Army was composed of three main components: The Five Camps Division (*wujun ying* 五軍營) was composed of a mix of infantry and cavalry, the Three Thousand Division (*sanqian ying* 三千營) was composed of elite nomadic cavalry, and the Firearms Division (*shenji ying* 神機營) was composed of firearm troops. Commanders were mostly drawn from the merit nobility or high-ranking military officials. See Huang Miantang 黃冕堂, "Lun Mingdai de jingying" 論明代的京營, *Shixue jikan* 史學集刊 1992, no. 3 (1992): 28-35; Fan, *Mingdai junshi shi*, 294-96.

[350] Wu, "Mingdai de junbing," 106; Ma Zishu 馬自樹, "Mingdai bingzhi chutan shang" 明代兵制初探上, *Dongjiang xuekan* 東疆學刊 1985, no. 2 (1985): 38; Huang, "Lun Mingdai de jingying," 30-31.

[351] See Kawagoe Yasuhiro 川越 泰博, "Hangun banjōsei" 班軍番上制, in *Mindai Chūgoku no gunsei to seiji* 明代中国の軍制と政治, edited by Kawagoe Yasuhiro (Tokyo: Kokusho kankōkai, 2001), 117-56; "Hangun banjusei" 班軍番戍制, in *Mindai Chūgoku no gunsei to seiji*, edited by Kawagoe Yasuhiro (Tokyo: Kokusho kankōkai, 2001), 157-229; Peng 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).

[352] Li Xinfeng 李新峰, "Tumu zhi zhan zhiyi" 土木之戰志疑, *Mingshi yanjiu* 明史研究 6 (2010): 110.

led to its transition to a military household management unit even before the often-cited year of 1449, although this transition would be greatly accelerated after Tumu. And while the *weisuo* is often used to describe the Ming military, the changes highlighted here shows that it was but a facet of a far broader, more flexible, and sophisticated military apparatus whose purposes and duties evolved with changing socioeconomic and geopolitical conditions. As the next chapter will show, Yongle's military reforms gradually evolved into the "divisional army" (*yingbing* 營兵) system, where troops drawn from the *weisuo* were organized into "divisions" (*ying* 營) led by individual commanders. Together with the use of hired troops and local militias, they would make up a reconstituted *weisuo* system in the second half of the fifteenth century.

From Hongxi to Zhengtong: New Developments

The quarter-century from the death of the Yongle emperor in 1424 to the Tumu Crisis in 1449 saw the continuation of Yongle's policy of dispatching *weisuo* troops to garrison elsewhere and appointing Regional Commanders and other military officers to lead them. However, two new and seemingly opposing phenomenon can also be discerned when analyzing the military policy of this period: a gradual loosening of some of the previously harsh policies and greater central control over the military by dispatching civilian officials to oversee track and replace. Through these efforts, the court sought to prevent desertion and abuse and restore the vitality of the army through methods that were different than those utilized by Hongwu and Yongle and tailored to respond to new socioeconomic contexts and challenges.

One of the most prominent examples of loosening harsh policies was the removal of Yongle-era regulations on military farming. Even Yongle himself recognized that his target of twenty-four *shi* was overly optimistic. Two months after the policy was promulgated, Yongle

delayed its implementation by three years and reduced the amount for the surplus tax.[353] By 1425, the court decided to halve the surplus tax to only six *shi*, and the primary tax was canceled altogether in 1437.[354] Thereafter, farming colonies supplied only the surplus tax and kept whatever remained for themselves. This was a substantial modification to the Yongle-era policies.

Towards deserters, the court also sought to incentivize them to return. As early as the Hongwu reign, deserters willing to turn themselves in would be forgiven, regardless of the period of their desertion, but Hongwu and Yongle depended more on disincentives to dissuade desertion.[355] Such methods must have yielded poor results, for in 1425, the newly enthroned Xuande emperor sought to sweeten the deal by providing deserters with a one month reprieve to prepare their traveling expenses before they were sent to the guards. In 1428, this was lengthened to three months.[356] For newly conscripted soldiers from track and replace, the court decreed in 1429 that they be allowed a one-and-a-half months' reprieve after they arrive at the guards before they were put to work – half a month to wait for the arrival of their rations and another month to prepare their living quarters.[357]

The policy of deterritorialization was also loosened. Deterritorialization often meant that southern soldiers would be sent north and vice versa, but to many observers, the inability for soldiers to acclimatize was also a major motivator for desertion. The powerful Grand Secretary Yang Shiqi 楊士奇 (1365-1444), who served as one of the regents for the young Zhengtong

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[353] *Taizong shilu*, in *MSL*, 40:666; 82:1101.
[354] *Renzong shilu*, in *MSL*, 6b:214-15; *Yingzong shilu*, in *MSL*, 1:14.
[355] Zhu Yuanzhang, "Dagao xubian: taojun di qishiyi" 大誥續編：逃軍第七十一, in *QMW*, 30:665-66.
[356] *Xuanzong shilu* in *MSL*, 9:240, 36:892.
[357] *JZTL*, 4.

emperor, was a proponent of having soldiers serve in a local guard, and so during the Zhengtong reign that became the policy.[358] However, this change seemed to have been a double-edged sword. On the one hand, deserters did turn themselves in, but on the other hand, many of them only deserted to take advantage of the new favorable policies to serve in a closer guard. In an effort to prevent desertion, the Ming court inadvertently created a new group of deserters.[359] As a result, the conflict over where to send conscripts was never resolved, with different rulers approaching the issue in different ways. Later Ming courts altered between sending them to serve in their original (faraway) guards or allowing them to remain in a local (nearby) guard.[360]

At the same time the court was loosening some of the harsher policies, it also took steps to increase its control over the military apparatus. Under Hongwu and Yongle, military affairs were entrusted primarily to local military officials and merit nobles, by the 1430s the court with its increasingly civilian orientation sought to wrest control away from the military. As David Robinson noted, this began with the transfer of power over granaries away from military officials and culminated in the dispatching of dedicated censors to manage track and replace and in the promulgation of new sub-statutes to govern the military.[361] To rein in powerful Regional Commanders, the Hongxi to Zhengtong courts also began appointing civilian officials as Grand Defenders during times of emergencies and transferred some military responsibilities to Grand Coordinators (*xunfu* 巡撫), who were officials appointed by the court initially to oversee fiscal matters within a province.[362] While there is much truth to the civilian turn argument, Ming

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[358] Yang Shiqi 楊士奇, "Lun goubu nanbei bianjun shu" 論勾補南北邊軍疏, in *HMJSWB*, 15:109-10; *JZTL*, 19.
[359] Yu, *Mingdai junhu shixi zhidu*, 66.
[360] For changes to the policy, see Guo, *Mingdai weisuo "minhua",* 62-79.
[361] Robinson, "Why Military Institutions Matter for Ming History," 307-08.
[362] Zhao, *Mingdai jiubian changcheng*, 647-58.

emperors were at the same time also vesting eunuchs with military powers by appointing them as Grand Defenders and as the Grand Commandant (*shoubei* 守備) in the southern capital of Nanjing, where they controlled the military there and acted as the emperor's representative.[363] Thus, Ming emperors were playing a balancing act by distributing power among different officials and agencies to prevent one group, be it military commanders, civilian officials, or palace eunuchs, from growing too powerful.[364]

In 1428, the court dispatched for the first time what would become known as the "investigating censor for the rectification of military affairs" (*qingli junzheng jiancha yushi* 清理軍政監察御史), or "military rectification censor" (*qingjun yushi* 清軍御史) for short.[365] The primary duty of these civil officials was to oversee track and replace, although they were also concerned with equipment and supplies, remuneration, military farming, and warhorses. Their varied duties show that the court was not just concerned with what it perceived to be faltering military readiness, but also the threat of losing control of the tremendous amount of resources the military had. Military rectification censors had no office or staff of their own aside from some clerks – they primarily supervised local guard and civilian officials and *lijia* elders. The process by which these censors worked was described in a memorial embedded into a mid-fifteenth century sub-statute. According to the memorial, censors would go down to the villages and interrogate *lijia* elders and aged residents about the service history of military households in that

[363] Richard B. Crawford, "Eunuch Power in the Ming Dynasty," *T'oung Pao* 49, no. 3 (1961): 127-28.
[364] See Li Du 李渡, *Mingdai huangquan zhengzhi yanjiu* 明代皇權政治研究 (Beijing: Shehui kexue chubanshe, 2004).
[365] *Xuanzong shilu*, in *MSL*, 44:1089.

village, and they would peruse local registers and compare them with the rectification and replacement registers to ascertain the proper target for conscription.[366]

By the end of the Yongle reign, more than fifty-years had passed since Hongwu first established the *weisuo* structure and twenty-seven years had passed since the promulgation of the Ming code. With conditions on the ground changing from what had been the case in the Hongwu and Yongle periods, the central government needed to update the operations of its institutions, including military institutions, and to provide new guidance to its territorial officials. To address issues and questions not covered in the Ming code, in 1429, the Xuande court issued a compilation known as the *Itemized Precedents for Military Administration* (*Junzheng tiaoli* 軍政條例), which established guidelines for track and replace and would be expanded during the Zhengtong period. The court sought to provide officials with clear guidelines on how to approach various problems in track and replace in the hopes that it could crack down on abuses such as double or wrongful conscription and delays. It mandated that track and replace take place every three to six months and that it must be completed within a stipulated time limit. While loosening some of the harsher policies of the previous reigns, towards those who continued to commit abuses or went over the track and replace time limit, the *Itemized Precedents* prescribed harsh punishments such as military exile for the entire family.[367]

This was the start of the promulgation of various precedents (*tiaoli* 條例) and sub-statutes (*shili* 事例) by the court, which were used to address new issues and questions brought about by socioeconomic changes not covered by the dynastic constitution of Hongwu, and to explain

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[366] *LBSL*, 479; *TLQW*, 481-84.
[367] *JZTL*, 3-9.

discrepancies between the dynastic constitution and actual practice. As Ray Huang described, lower-ranking bureaucrats would petition the court to apply an exception to an established rule (or to implement a policy) in his locality alone, which became a precedent after the emperor approved. Thereafter, other officials would submit similar petitions which were approved until the exception became the norm.[368] In other words, to ensure better operations, the Ming court heavily valued the input of its local representatives and considered local conditions. Between the second half of the fifteenth century and the first half of the sixteenth century, successive emperors promulgated several compilations of these precedents and sub-statutes, and many would refer back to the *Itemized Precedents*, giving it canonical status in military affairs rivaling that of the *Great Ming Code*.

Military rectification censors became institutionalized from the Zhengtong reign onward, with censors dispatched every three years. Later, it was also decided that censors would be rotated triennially to prevent them from forming bonds with local actors.[369] In 1436, the *Itemized Precedents* was expanded to include new regulations addressing specific problems in specific regions. For instance, the court was particularly concerned about desertions in Shandong and Shanxi and ordered officials to take care to return deserters to service. It also reiterated that deserters who turned themselves in would be spared of punishment.[370]

The final major expansion of the *Itemized Precedents* occurred in 1437. Particularly noteworthy was that military rectification censors were now empowered with the judicial

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[368] Ray Huang, "The Ming Fiscal Administration," in *The Cambridge History of China, Vol. 7: The Ming Dynasty, 1368-1644, Part 2*, edited by Denis Twitchett and Frederick W. Mote (Cambridge: Cambridge University Press, 1998), 114-15.
[369] *Yingzong shilu*, in *MSL*, 232:5080.
[370] *JZTL*, 9-13.

authority to try and punish abusive officers and corrupt officials. It also sought to address the troublesome issue of double conscription as a result of replacements being sent to nearby guards or when soldiers were moved to different guards. The court noted that oftentimes the original guards would still attempt to conscript a replacement for the transferred soldier, leading to double conscription. Moreover, many military households were splitting into branches, with those branch households registering as civilians instead. This led to issues with military rectification, as many conscripts would claim they were wrongfully conscripted. The court ordered that local officials investigate the matter carefully but that these wrongly conscripted troops remain in the guards. They would be released only after their status has been verified. Military rectification censors were ordered to supervise and crack down on abuses.[371]

Thus, although the Xuande and Zhengtong courts gradually loosened some policies to entice deserters to return to service voluntarily, it introduced military rectification censors as a way of increasing central civilian control over the military, as well as central control over the localities. The promulgation of the *Itemized Precedents* was meant to provide a systematic guideline for track and replace and to address specific issues that had come up since the Hongwu period. It also gave military rectification censors broad authority to supervise military affairs and to punish offending officials. As a later section will show, these policies share some surprising parallels with those implemented by the Yuan court.

Provisioning the Guards: Three Case Studies

The preceding section has covered how Ming administration of the guards changed over the eight decades between 1368 and 1449, particularly pertaining to military organization and

[371] *JZTL*, 13-19.

governance. But military logistics also underwent major changes during this period. The massive size of the Ming military naturally created the problem of how to keep the armies provisioned. Following the ideal of military self-sufficiency, Hongwu ordered the widespread implementation of military farming. Much like his Yuan predecessors, Hongwu saw the utility of farming colonies in reducing the burdens of the state and allowing for the restoration of agriculture, but more importantly military farming also fit into Hongwu's ideals of a self-sufficient agrarian economy in which people were tied to the land. As he told his officials early in his reign, military farming "allows the soldiers to be fed without burdening the people, it is the way to everlasting peace."[372]

Hongwu, however, had an overly optimistic appraisal of military farming. Even in the best of circumstances, military farming could not lead to full self-sufficiency. As such, the court had to look for other avenues to supply the military, including court grants to military personnel, commutation of rations and salaries to paper money and then silver, and the use of the salt-barter method (*kaizhong* 開中) to supply areas where military farming yields were insufficient. This section will explore how the Ming court utilized various methods in addition to military farming to keep the garrisons supplied by analyzing the situation in three garrisons – Liaodong (northeast), Guizhou (southwest), and Gansu (northwest). All three were major military strongholds where large numbers of troops were stationed, and thus the court was very invested in their upkeep and in ensuring that supplies could reach them. However, the different geographies, climates, ethnic compositions, and strategic significance of these regions necessitated differences in strategies. In Liaodong, where military farming was initially very

[372] *Taizu shilu*, in *MSL*, 87:154.5

successful, the court primarily depended on salt-barter to deliver grain after farming yields declined while also began subsidizing military spending with silver disbursements from Beijing. Guizhou witnessed a similar trend of previously successful military farming colonies going into decline, but whereas the court harnessed commercial power to supply Liaodong, in Guizhou it turned to conscripting civilians to deliver grain from other regions. When transportation grew too difficult, the court ordered that grain to be commuted to silver and textiles instead. Finally, Gansu did not see any success with military farming, and the court utilized all three methods – salt-barter, civilian transport, and silver subsidies - to keep the garrison supplied.

Liaodong

The Liaodong Garrison was the linchpin of Ming defenses in the northeast, where Northern Yuan, the remnants of the Yuan court that fled to the steppes after the fall of Daidu in 1368, forces still operated in the 1370s and 1380s, and thus demanded close attention from the court. During the Hongwu period, Liaodong's military strength was estimated to be at 94,693 soldiers with a total population of around 400,000.[373] This military force required 800,000 to 1,000,000 *shi* of grain annually, and for most of the Hongwu reign, the vast majority of this amount was delivered by ocean transport (*haiyun* 海運) from Shandong. For instance, in 1385, the court dispatched 752,200 *shi* of grain via ocean transport to Liaodong. In 1396, an official noted that in recent years the court was delivering 600,000 *shi* of grain to Liaodong annually.[374]

[373] Du Hongtao 杜洪濤, *Shugu fengyan: Mingdai Liaodong de weisuo tizhi yu junshi shehui* 戍鼓烽煙: 明代遼東的衛所體制與軍事社會 (Shanghai: Shanghai guji chubanshe, 2021), 67-68.
[374] *Taizu shilu*, in *MSL*, 173:2638; 245:3560.

This process was both time-consuming and expensive. It not only entailed the delivery of grain to ports along the Shandong coast but also required the assembling of ships to send them to Liaodong. Furthermore, there was no guarantee that ships could arrive at their destination, as they were subjected to the mercy of the sea. In 1382, after receiving word that sailors transporting grain had drowned, Hongwu decreed that military farming be implemented in Liaodong to reduce the state's burdens and to prevent such tragedies.[375] By 1386, Liaodong registered 18,050 colonists. Assuming each farmed a standard allotment of 50 *mu*, Liaodong would have had over 900,000 *mu* of military farmland.[376]

Military farming in Liaodong immediately demonstrated success. By 1391 it was recorded that the colonies produced 537,250 *shi* of surplus grain annually, which would have met at least half of the garrisons' needs. Hongwu was clearly optimistic about the Liaodong military farms, for three years later he decreed that garrisons there would subsist solely on the yields of the colonies.[377] However, as the 1396 example above demonstrated, ocean transport was still utilized to deliver grain, meaning that Liaodong did not achieve self-sufficiency during the Hongwu period. It came close, however, during the Yongle reign. This was a clear indication of the effectiveness of the aforementioned Yongle reforms in increasing yields, particularly in years of good harvest. In 1412, Liaodong's military farms yielded a record 716,100 *shi*. This number fell to 635,145 *shi* in 1419, but it was still higher than Hongwu-era yields.[378] So successful were

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[375] *Taizu shilu*, in *MSL*, 145:2283.
[376] Zhou Yuanlian 周遠廉 and Xie Zhaohua 謝肇華, "Mingdai Liaodong juntunzhi chutan - Mingdai Liaodong dang'an yanjiu zhi er" 明代遼東軍屯制初探 - 明代遼東檔案研究之二, *Liaoning daxue xuebao* 遼寧大學學報 1980, no. 6 (1980): 53.
[377] *Wanli kuaji lu,* in *XXSKQS*, 832:189; *Taizu shilu*, in *MSL*, 233:3403.
[378] *Wanli kuaji lu,* in *XXSKQS*, 832:189; *Wuzong shilu*, in *MSL*, 39:915.

the farming colonies that records of ocean transport to Liaodong largely disappeared from the *Veritable Records* after the early Yongle period.

Ming administrative statistics in the *Veritable Records* have long drawn scrutiny from historians. Ray Huang, for instance, believed that many of these statistics were inaccurate, especially those pertaining to military farming.[379] There is good reason for such skepticism - one Chinese scholar has pointed out that Datong officials falsified reports to the capital with the tacit approval of the Ministry of Revenue.[380] Nonetheless, these numbers cannot be totally dismissed. Even if false reporting occurred and were widespread, these were the numbers that were reported to the capital and used by the court to implement policy, as evidenced by Hongwu's decision to end ocean transport in favor of military farming. Furthermore, as the fourth and fifth chapter will demonstrate, some *Veritable Record* statistics can be corroborated by those found in other entries and in other sources.

When the farming colonies couldn't provide sufficient grain, the state turned to merchants for help. Under the so-called "salt-barter system," merchants delivered grain to border guards in exchange for salt licenses (*yanyin* 鹽引), which entitled them to a certain amount of salt that they could then sell.[381] Although this method was already in use during the Hongwu and Yongle periods (the system itself had been in place since the Song), it became more important from the Xuande reign on, when the military farms began to decline. Constant warfare in the area, which sapped the colonies' manpower and ruined agriculture, combined with privatization

[379] See Ray Huang, "Administrative Statistics in Ming T'ai-tsung Shih-lu: An Illustration of Chinese Bureaucratism as Criticized by Dr. Needham," *Ming Studies* 1983, no. 1 (1983): 39-66.
[380] Zhang, *Mingdai weisuo junhu yanjiu*, 102-03.
[381] Liew, "Tuntian Farming," 19-22.

of land led to a decline in farming yields. By 1443, only 454,265 *shi* of grain were collected.[382] As a result, the court began to encourage merchants to supply Liaodong with grain in exchange for salt licenses. This system was a resounding success – in 1439 the Grand Coordinator of Liaodong complained that although merchants had delivered more than 100,000 *shi* of grain to Liaodong, the province did not possess enough granaries to store all of it.[383]

Another policy that was implemented to address shortfalls in military farming was to tax lands farmed by auxiliary conscripts. In the early Ming, many auxiliary conscripts and dependents of soldiers in Liaodong took to reclaiming and farming abandoned or fallow land to supplement their family's income. This practice was encouraged by the state, which at first did not collect any taxes from them. However, in response to a rising number of farming colonists being drafted to fight, the court decided in 1434 to tax these holdings at a rate of one *dou* per *mu*. Officials estimated that 88,169 *mu* of land were in cultivation, which would yield approximately 8,816 *shi* of grain.[384] Finally, the court also began the practice of disbursing silver from the central coffers, known as "annual subsidies" (*nianli* 年例) to Liaodong in 1441, when 100,000 *liang* was given to purchase grain.[385] Thus, as the Ming state was forced to reduce its reliance on military farming, it also experimented with and utilized alternative methods of provisioning, some of which would become the primary means of supplying Liaodong in the years to come.

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[382] *Wanli kuaji lu,* in *XXSKQS*, 832:189.
[383] *Yingzong shilu*, in *MSL*, 50:968.
[384] *Xuanzong shilu*, in *MSL*, 115:2592.
[385] *Yingzong shilu*, in *MSL*, 154:3016.

Guizhou

Guizhou was another major military stronghold in the Ming, which served to anchor Ming authority in the southwest, where military farming proved successful in early periods. After conquering Yunnan in 1382, Hongwu incorporated the southwest into the Ming empire and established garrisons to secure Ming gains. Guizhou, with its strategic location between Yunnan and Huguang, hosted a large garrison. The Guizhou Regional Military Commission encompassed eighteen guards and two battalions, and a further six guards stationed in Guizhou were under the control of the Huguang Regional Military Commission.[386] The Guizhou Regional Military Commission probably numbered between 120,000 and 154,000 soldiers and, assuming each soldier had three dependents, Guizhou's military population would have numbered between 360,000 and 462,000.[387]

Prior to the establishment of military farming colonies, most supplies were either drawn from local tax revenue or transported from Sichuan and Huguang via civilian transport (*minyun* 民運), a practice whereby civilians were drafted to deliver grain to the guards in exchange for tax waivers. But local areas could not produce sufficient grain to feed the garrisons – in 1373 it was noted that just the Guizhou Guard alone required 70,000 *shi* of grain, but nearby prefectures could only supply 12,000 *shi*. Transporting grain was also extremely difficult due to the terrain

[386] Liu Ruzhong 劉如仲, "Mingdai Guizhou weisuo de jianzhi" 明代貴州衛所的建置, *Zhongguo lishi bowuguan guankan* 中國歷史博物館館刊 1984 (1984): 82.

[387] The two most-cited gazetteers give different numbers for the "original amount" (*yuan'e* 原額) of troops in Guizhou. The *Jiajing Guizhou tongzhi* gives a figure of 153,960 troops, while the *Qianji* gives 119,161. This reason for this discrepancy is not clear, but it is possible that these figures are for different periods. Nonetheless, the "original amount" probably referred to military strength in the Hongwu to early Yongle eras. See *Jiajing Guizhou tongzhi*, 305-06; *Qianji*, 459-71.

and was a huge burden on civilians who undertook the delivery.[388] As a result, Hongwu decreed that military farming colonies be established to reduce the burdens of civilian transport.

The scale of military farming in Guizhou was massive, with over 930,000 *mu* of farmland in cultivation.[389] Guizhou's average yield per *mu* was 2.3 *dou*, which meant that the colonies could produce at least 214,000 *shi* of grain annually.[390] However, the actual amount was likely much higher, since military colonies paid more in rent than civilian farmlands. The compilers of the *Jiajing Guizhou tongzhi* extolled the effectiveness of military farming in the early Ming, stating that the garrisons never lacked grain. The gazetteer, compiled in 1555, records that military farms in Guizhou produced around 82,000 *shi* of grain during that period, so we can only imagine the yields at the colonies' height.[391]

Much like Liaodong, the Guizhou military farms declined after the Yongle period, as state-owned land increasingly fell into the hands of local strongmen, many of whom were senior military officers, merit nobles, or families of high officials. Through a combination of corruption, collusion, and the establishment of local patronage networks, these men and their families privatized military farmland to the detriment of the state. By 1441, the Minister of War Wang Ji 王驥 (1378-1460) was complaining that much of Guizhou's military farmlands had been privatized and that poor soldiers had no land to farm.[392] To make up for the decline, the state similarly employed the salt-barter method. As with other regions, the salt-barter method had

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[388] *Taizu shilu*, in *MSL*, 79:1442; 84:1499. See also *Jiajing Guizhou tongzhi*, 285.
[389] The *Jiajing Guizhou tongzhi* gives a total of 938,575 *mu* as the "original amount" of military farmland (most likely during the Yongle period). The *Qianji* gives a slightly lower 933,929 *mu*, which matches the number found in the *Ming huidian*. See *Jiajing Guizhou tongzhi*, 278-79; *Qianji*, 408; *MHD*, 120.
[390] Guizhou liubainian jingjishi bianji weiyuanhui 貴州六百年經濟史編輯委員會, *Guizhou liubainian jingjishi* 貴州六百年經濟史 (Guiyang: Guizhou renmin chubanshe, 1998), 208.
[391] *Jiajing Guizhou tongzhi*, 279, 288-90.
[392] Wang Ji 王驥, "Guizhou junliang shu" 貴州軍糧疏, in *HMJSWB*, 28:207.

been used during the Hongwu and Yongle reigns as a secondary measure to supply the guards in years when the military farms could not produce enough grain.[393] But whereas salt-barter became one of the primary methods of supplying Liaodong's garrisons, in Guizhou it did not seem to become dominant, as mentions of it in the *Veritable Records* during the Xuande and Zhengtong periods are much scarcer. Its scale also seemed to have been much smaller - in 1441 the court dispatched 15,700 salt licenses to Guizhou after military officials complained of a lack of supplies. In 1449, the exchange rate between rice and salt license was 1.2 to 1.5 *shi* per license (much lower than Hongwu and Yongle-era exchange rates). Assuming the 1441 attempt also utilized these rates, then at most Guizhou would have received 23,550 *shi* of rice.[394]

The relatively low use of salt-barter might be due to the difficulties of transportation, which meant fewer merchants were willing to participate. But it could also be due to the court's ability to mobilize laborers to directly deliver grains to Guizhou from Huguang and Sichuan, which once again became the primary method of supplying Guizhou. In 1438, for instance, it ordered that an additional 50,000 *shi* of grain be sent to two guards in Guizhou to shore up defenses against Miao bandits.[395] The importance of Guizhou was further amplified in the late 1430s and 1440s, when the Ming launched the Luchuan-Pingmian Campaigns against the recalcitrant Muang Mao polity along the Yunnan-Burma frontier.[396] To support the expeditionary force, the court ordered that 300,000 *shi* of grain be delivered to Guizhou from Huguang and

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[393] For the salt-barter method in Guizhou during the Hongwu and Yongle periods, see Guizhou, *Guizhou liubainian jingjishi*, 39-41.
[394] *Yingzong shilu*, in *MSL*, 80:1591; 179:3461.
[395] *Yingzong shilu*, in *MSL*, 38:739-40.
[396] For the Luchuan-Pingmian Campaigns, see Foon Ming Liew, "The Luchuan-Pingmian Campaigns (1436–1449) in the Light of Official Chinese Historiography," *Oriens Extremus* 39, no. 2 (1996): 162-203.

Sichuan.[397] Yet the court once again ran into issues of transportation, and so it utilized a new method – conversion of grain allocations to silver and other in-kind goods.

Like most Ming policies, conversions of grain began during the Hongwu reign. As noted above, the Hongwu emperor frequently lavished grants of money and goods on the military, a practice that was continued by his successors. Yet this was a huge financial burden, and so in the 1380s Hongwu began to replace in-kind grants (particularly textiles and rice) with paper money. The idea was certainly good on paper – soldiers could use the money to buy whatever they needed for themselves while simultaneously lessening the burdens of the state. However, hyperinflation due to excessive printing of the paper money drastically reduced its value, and so the Hongwu court resumed in-kind grants, lest soldiers become dissatisfied and combat readiness be eroded.[398] During the Yongle reign, a portion of military rations for guards in some regions were converted to paper money, and in areas where rice was abundant, the share of paper money was significantly higher.[399]

The first instances of conversion of silver can also be observed in the early Hongwu reign, but the process was not institutionalized until 1438, two years after the court commuted tax grains from some provinces into silver (the so-called "Golden Floral Silver" *jinhua yin* 金花銀). In that year 400,000 *shi* of grain bound for the northern guards were commuted to silver.[400] Commutation was silver was considered beneficial in that it eased the burden of transport, reduced tax burdens on the farmers, and ensured that the border troops would be sufficiently

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[397] *Yingzong shilu*, in *MSL*, 182:3543.
[398] Okuyama, "Kōbuchō no shiyo ni," 135-39; "Kōbuchō no shiyo san," 166-67.
[399] *MHD*, 39:277; *MS*, 82:2004.
[400] Zhang, *Mingdai weisuo junhu yanjiu*, 112-13, 124-25.

remunerated. To keep the military sufficiently provisioned, the Ming court jettisoned Hongwu's anti-market ideals premised on in-kind payment. In 1441, the 10,000 *shi* of grain levied from Ba County 巴縣 in Sichuan and Bozhou 播州 in Guizhou were converted to silver and cloth. The following year, this policy was officially institutionalized for Guizhou. It was ordered that grain from Huguang would be converted to silver, while grain from Guizhou and Sichuan would be converted to cloth. Those who wished to pay in silver instead would be allowed to do so.[401] Thereafter, conversion to silver and cloth became the primary method of supplying the Guizhou garrisons.

Gansu/Hexi

In contrast to Liaodong and Guizhou, the Ming guards in Gansu failed altogether to achieve self-sufficiency and depended almost entirely on supplies from other provinces. Much as it was during the Yuan, Gansu was a major military bastion in the Ming, allowing the Ming to gain a foothold in the strategic Hexi Corridor in the northwest and project power into Central Asia. Its garrison in the early Ming (likely late Hongwu or early Yongle) consisted of 72,885 troops, with a total military population exceeding 200,000.[402] The Ming moved to implement military farming early on, with colonies established as soon as the region was conquered. Throughout the Hongwu and Yongle periods there were attempts to further develop the colonies, with a large number of men, cattle, farming implements, and seeds dispatched from Shaanxi.[403]

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[401] *Yingzong shilu*, in *MSL*, 84:1676; 93:1883.
[402] Zhang Lei 張磊, *Mingdai weisuo yu Hexi diqu shehui bianqian yanjiu* 明代衛所與河西地區社會變遷研究 (Beijing: Guangming ribao chubanshe, 2021), 135.
[403] *Gulang xianzhi*, 4:6a-b; *Taizu shilu*, in *MSL*, 199:2983; 207:3087; *Taizong shilu*, in *MSL*, 26:478.

Yet the garrisons could not subsist on the yields of the military farms. In 1397, Shaanxi military officials noted that the Gansu guards had 33,500 colonists and 630,000 *mu* of farmland, yet Gansu authorities constantly had to dispatch grain to the garrisons since the colonies could not produce much due to unfavorable agricultural conditions.[404] As Chapter 1 showed, military farms there in the Yuan also failed to achieve self-sufficiency, and military units stationed in Gansu depended mostly on harmonious purchase and delivery of grain from outside. The situation was similar in the Ming, with civilian transport delivering the lion's share of supplies to Gansu. One Chinese scholar calculated that between the Hongwu and Xuande reigns, Gansu received between 200,000 to 500,000 *shi* of grain annually from the court.[405]

Like Liaodong and Guizhou, the Ming court also implemented the salt-barter method in Gansu. In 1378, to encourage more merchants to participate in the system, the Hongwu emperor lowered the amount of rice need for a salt license. For the Liangzhou Guard, one license was exchanged for two and a half *dou* of rice; for Meizhou, it was three and a half *dou*; for Linzhao, seven *dou*; and for Hezhou, four *dou*. Throughout the 1430s, tens of thousands of salt licenses were granted to merchants, which signified that a huge amount of grain were being delivered.[406] Eventually, the high cost associated with transporting grain to remote border regions made it more economical for merchants to fund farming colonies in those areas instead to provide grain for the military, and these colonies became known as "enterprise farming colonies" (*shangtun* 商屯). These enterprise farming colonies were also found in other regions, including Guizhou, but they seemed to have been especially successful in Gansu. According to one late Ming writer,

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[404] *Taizu shilu*, in *MSL*, 249:3607-08.
[405] Zhang, *Mingdai weisuo yu Hexi*, 139-40.
[406] Zhang, *Mingdai weisuo yu Hexi,* 142; *Taizu shilu*, in *MSL*, 117:1912.

during the Yongle reign, wealthy merchants attracted by the program invested in land reclamation, hired landless peasants to farm, constructed fortifications and watchtowers, and organized security.[407] The enterprise farming colony program also demonstrated great success in Shaanxi, which was a major source of grain for Gansu.[408]

Military farming, civilian transport, and the salt-barter method were sufficient to keep Gansu supplied in the Hongwu and Yongle periods. But by the 1430s, Gansu witnessed a decline in military farming similar to other regions. As a result, the court began delivering textiles to Gansu from the treasury.[409] This was the beginnings of annual subsidies to Gansu. By the Zhengtong period, the court was disbursing silver instead. In 1440 the treasury disbursed 36,660 *liang* of silver to Shaanxi to purchase grain for Gansu. In 1442, Gansu received 17,430 *liang* of silver.[410] At the same time, a portion of the civilian transport grain was also converted to textiles to ease the burden of transportation. Eventually this portion was converted to silver, but full conversion to silver appeared later in Gansu than other regions. On the one hand this was due to the commercial economy in Gansu being relatively underdeveloped, while on the other hand Gansu was an important military stronghold, so the court preferred grain to textiles and silver.[411]

The above three cases show that the Ming court was quite adept in utilizing different approaches and resources to keep the garrisons supplied. Aside from the wide-scale implementation of military farming, the Ming state could draw on its transportation networks and

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[407] Zhang Pu 張溥, *Qilu qiwen* 七録齊文, in *Siku jinhuishu congkan*, 182:375. According to Terada Takanobu, merchants had to purchase grain on the spot before delivering them to granaries, so it was more expedient for them to fund farming colonies instead. See Terada, *Shanxi shangren yanjiu*, 109.
[408] *Taizu shilu*, in *MSL*, 198:2976-77; Okuyama Norio, "Kōbuchō no getsuryō ni tsuite" 洪武朝の月糧について, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 90-92.
[409] *Xuanzong shilu*, in *MSL*, 67:1581-82.
[410] *Yingzong shilu*, in *MSL*, 74:1430; 88:1768.
[411] Zhang, *Mingdai weisuo yu Hexi*, 152-54.

coercive ability to conscript labor to deliver grain, as well as utilize its salt monopoly to entice merchants to finance military spending. When transportation proved difficult, the court converted grain to more transportable items such as silver and textiles. Thus, as long as it was necessary, the court could come up with methods to feed and pay the soldiers. Aside from military farming, civilian transport, salt-barter, and annual subsidies, a huge amount of wealth also flowed to the military in the forms of grants and rewards. Finally, the three case studies demonstrate the success of military farming in the early Ming, when many huge military garrisons could come close to self-sufficiency. After the 1420s, however, military farming began to fail, forcing the court to rely more on other methods to provision the military, but these methods were also incredibly successful. Of particular importance is the commutation of deliveries to silver, which would play a key role in supplying the guards going forward. By the mid-fifteenth century, annual subsidies of silver and salt-barter would become the primary means of military provisioning.

Yuan Legacy?

If the Ming had inherited Yuan military institutions and the same problems, how did its policies to address these problems compare with those of the Yuan? Putting the policies of the two courts side by side, a surprising number of similarities can be discerned. These included allowing officers to keep a certain number of soldiers as retainers to combat privatization, giving deserters grace periods to return to service, using non-official local actors as a check on officials in track and replace, and dispatching central government officials to increase central oversight over the military. Whether or not the Ming knowingly copied Yuan policy is impossible to know, but I suggest that a reason these similarities exist was because they were the natural outcomes of the hereditary military apparatus.

In allowing military officers a set number of retainers, Hongwu was following in the footsteps of Yuan efforts to combat illegal privatization of soldiers. In 1393, Hongwu noted that officers were privatizing soldiers on an alarming scale and ordered the Ministry of Rites to come up with a retainer policy for military officials. It was decided that officials ranked one to three would be given six retainers, those ranked four to six would have four retainers, and those ranked seven to nine would have two retainers. These retainers would come from the ranks of the combat soldiers who would rotate in serving the commanders once every three days. Senior clerks within the *weisuo* were also given retainers. Four years later, however, Hongwu decided that far too many soldiers were being used as retainers and decided to cut that number down - commanders to assistant commanders would be given four retainers, chiliarchs would be given three, and centurions two.[412]

The heavy involvement of the *lijia* in track and replace is also similar to Yuan practice. As the *lijia* was meant to police itself and control the local population, one of its duties was naturally to arrest deserters and help the state conduct track and replace. Over time, Hongwu transferred more and more track and replace responsibility to the *lijia*, part of his push to use the *lijia* to limit the powers of local officials.[413] In his 1386 *Further Compilation of the Grand Pronouncements* (*Dagao xubian* 大誥續編), Hongwu not only affirmed the role of the *lijia* in track and replace but also ordered that *lijia* leaders monitor the actions of officials. Any officials who displayed corrupt or abusive behavior should be arrested by the *lijia* and turned over to the judicial authorities, after which *lijia* elders would be rewarded with five *ding* of paper money.[414]

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[412] *Taizu shilu*, in *MSL*, 229:3347, 252:3644.
[413] See Sarah Schneewind, "Visions and Revisions: Village Policies of the Ming Founder in Seven Phases," *T'oung Pao* 87, no. 4/5 (2001): 317-59.
[414] Zhu Yuanzhang, "Dagao xubian: taojun di qishiyi," in *QMW*, 30:665-66.

This policy aligned closely with Yuan attempts to have village and town authorities work with and monitor local officials. Under the *Itemized Precedents*, the importance of the *lijia* was reiterated. Deserters were to be arrested and held by the *lijia* until track and replace officials arrive. The *lijia* were responsible for verifying the manpower of military households and were also tasked with escorting conscripts to nearby guards for service. Cognizant of the fact that the *lijia* could also commit abuses, the court ordered that any offending *lijia* elder be punished with military exile.[415]

Thus, the evolution of Ming military policy mirrors that of the Yuan's. In the beginning, the Ming depended primarily on local military and civilian officials for track and replace, but soon came to use the *lijia* as a check on these officials. Later, however, the court realized that the *lijia* itself was not fully trustworthy, and so promulgated new regulations to govern them and dispatched censors to oversee the process, thereby imposing central control. At the same time, policies encouraging deserters to return to service were also similar to those of the Yuan's, although the Yuan policy for forgiving military service for three years was far more generous. To combat the issue of privatization, Hongwu also allowed military officials to draw on soldiers as retainers and, just like the Yuan, decided to reduce the number of retainers afterwards.

The reason for these similarities, however, is harder to discern. If the Ming rulers did copy Yuan policies, they made no mention of it. However, the similarities in broader policy shifts might have been because of the way military institutions were constructed. The state naturally would have employed local military and civilian officials for track and replace, since they were the front-line personnel who interacted closely with the troops and their households.

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[415] *JZTL*, 3-17.

The use of non-official local actors to monitor local officials was because they already played an important role in track and replace, and so the state gave them more responsibilities. In the case of the Hongwu emperor, it coincided with an anti-bureaucratic phase of his rule where he sought to replace local officials with the *lijia*. When the court ultimately realized that these non-official actors too were committing abuses, it strengthened control by putting the process under central supervision, as it considered central officials to be more accountable to the court.

Hongwu's decision to limit interactions between merit nobles, officers, and soldiers also deserves some attention. It is possible to explain his actions through the lens of paranoia – Hongwu was an intensely paranoid monarch who saw enemies all around him and throughout his reign executed thousands of officials for treason and other crimes. Therefore, he would have naturally been against the formation of patronage networks within the military, which would challenge his rule. But it is also worth considering whether Hongwu knew (or how much he knew) of the late Yuan patronage networks. Given that Hongwu employed many former Yuan officials, it is not inconceivable that he learned of Toqto'a's dominance through patronage and the effect that it had. The two reasons are also not mutually exclusive – Hongwu's desire to prevent the formation of patronage within the military could reflect his own paranoid attitude and desire to maintain control while at the same time preventing the flaws of the late Yuan in his state.

Thus, while it is possible that Hongwu might have copied some policies from the Yuan or was influenced by Yuan developments given that he employed many former Yuan officials (this is certainly plausible in the policy allowing officers to keep private retainers), it is more likely that similarities in the development of military policy had more to do with how the military institutions were structured. The similar military institutions of the Yuan and the Ming bred the

same types of issues and necessitated similar responses. In some cases, the court sought to increase state control and tighten regulations, while in other cases its responses were more flexible and pragmatic. Hereditary succession also birthed a corps of military elites whose privileges had to be protected, especially by later emperors who lacked the authority of the founder to challenge them. The fact that both the Yuan and the Ming saw these developments suggests that this was a natural evolution in how the court managed a hereditary military system. This is not to say, however, that Ming policies were wholesale copies of those utilized by the Yuan. The policies mentioned above are only part of a broader repertoire of policy measures that Ming emperors and officials deployed. Nonetheless, the number of similarities between Yuan and Ming policies, be they coincidences or otherwise, should not be ignored.

Conclusion: Transition or Collapse?

To many scholars, the 1430s and 1440s was a time of decline for the *weisuo*. The military farming colonies had collapsed, and the military apparatus was plagued with desertion and privatization. Yet the period also saw the Ming undertake two major campaigns. Between 1436 and 1449, the court fought against the Muang Mao polity in Yunnan and Burma, dispatching tens of thousands of troops to fight in tropical conditions. In 1449, the court mobilized the Capital Army for the Zhengtong emperor's personal and disastrous campaign against the Oirats. This once again breeds a familiar question – if the military was in a state of decline by then, how could the Ming still mobilize troops and supplies?

This chapter has shown how the Ming court employed various methods to control and provision the military and that like the Mongol-Yuan, the Ming was flexible and pragmatic in its approach. Whatever problems the military faced did not lead to any loss of combat capabilities,

and the court continued to actively invest in maintaining the strength of the military. What had begun to collapse, however, was Hongwu's ideal of self-sufficient farmer-soldiers. After the early 1420s, the military farming colonies simply could not produce enough grain to meet the military's needs, forcing the court to transition to a new model to keep the military supplied. Its preferred methods – salt-barter, civilian transport, and annual subsidies – would become even more important following the Tumu Crisis of 1449, which seriously undermined border defenses and the farming colonies. Meanwhile, the process of dispatching guard troops to garrison elsewhere gained steam after 1449 and hastened the transformation of the *weisuo* into a pure military management unit. By the early sixteenth century, this practice led to the formation of the garrison commands (*zhen* 鎮).

Thus, while scholars often point to 1449 as the beginning of a new phase in Ming military organization, the evidence presented in this chapter demonstrates that such a transition had started long before then. The gradual abandonment of military farming in favor of other methods of provisioning, the use of silver, and the movement of troops away from the *weisuo* all deviated from Hongwu's military institutions. What the Tumu Crisis did, as the following chapter will show, was to accelerate some of these changes as the court sought to reconstitute its defenses. The second half of the fifteenth century witnessed a concerted attempt by the court to restore the *weisuo* in the face of military pressure from the Mongols, but the policies it implemented to do so reveals a surprising tension between the rhetoric of preserving Hongwu's military institutions and the actual policies that were implemented which adapted to current conditions.

Chapter 4. The Military in Transition: The Mid-Ming, 1449-circa 1500

The Tumu Crisis (土木之變) is a major watershed in the dynasty's history. As a result of incompetent leadership and poor military planning, the Capital Army and the Beijing guards were almost completely decimated by the Oirats, the westernmost group of Mongols who rose to power in the aftermath of the Yuan's collapse, and many merit nobles and high official perished. The young Zhengtong emperor was captured and taken hostage. Such a damaging blow to the dynasty fundamentally transformed the intellectual and political orientation of the court.[416] Yet more importantly, the crisis underpinned the weakness of the *weisuo* system and helped to usher in a new period in the military history of the Ming – the era of voluntary recruitment. Many Ming historians therefore consider 1449 as the end of the Early Ming period, as it marked a change in military recruitment and strategy.[417]

This chapter explores changes to Ming military policy regarding conscription and provisioning from the mid-fifteenth to the early sixteenth century. In some ways these changes were the intensification of trends that were already underway during the Early Ming. In other ways, however, the military crisis created by the Tumu Incident pushed the Ming court to adopt new measures to shore up the military. These were the recruitment of soldiers from the ranks of military auxiliaries, the conscription of civilian militias, the acceptance of housemen (*jiading* 家丁 or *jiabing* 家兵), and the transition to the divisional army system. This chapter shows that during the mid-Ming, these policies were made permanent as the court sought to tap into new

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[416] See de Heer, *The Care-Taker Emperor*; Chu, "Intellectual Trends," 1-33.
[417] Scholarship on this subject is well-developed. See, for example, Wu, "Mingdai de junbing," 92-141; Mote, "The T'u-mu Incident," 243-72; Kenneth M. Swope, "Manifesting Awe: Grand Strategy and Imperial Leadership in the Ming Dynasty," *The Journal of Military History* 79, no. 3 (2015): 616; Li, *Mingdai qianqi junshi zhidu yanjiu*, 1-2.

sources of manpower to replenish the garrisons and employed new methods of organization to better defend the northern frontiers. At the same time, motivated partly by financial concerns and partly by an ideological desire to return to the ideal days of the dynasty founder, many members of the court espoused a rhetoric of restoration. As a result, the Ming also invested in track and replace and the restoration of military farming. While the goal of both implementing new policies and restoring old institutions was meant to shore up the *weisuo* system, it does lead to an interesting question - what direction was the Ming court taking? Was the goal to restore the institutions of the dynastic founder, or was it instead to construct a new system based on current socioeconomic conditions within the framework of the old institutions? Or, perhaps, it sought to create a hybrid of the two?

As this chapter will show, restorationist rhetoric ran increasingly hollow and officials on the ground became more aware that restoration to an ideal past was unrealistic. Instead, they depended on other solutions more tailored to the present situation – the institutionalization of militia service, the recruitment of military auxiliaries, the increasing use of silver as a form of payment, and the heavy utilization of salt-barter to raise funds. These officials recognized the need to be flexible, but their actions sometimes ran into opposition from officials in Beijing, even though the central court would eventually relent and make official the policies that had long been employed in local contexts. Such tensions characterized the military administration in the second half of the fifteenth century. Against this backdrop, restoration was not so much about going back to the ideal days of the past than trying to maintain the status quo or adapt to new circumstances without rejecting outright the policies of the Hongwu and Yongle emperors. In other words, the Ming military was not being restored, but rather reconstituted. Officials constantly tried new policies and adjusted them to match current conditions, all the while

maintaining the veneer of the traditional *weisuo* system, for restoration rhetoric was both politically expedient and not seen as running counter to modifying institutions and practices to better suit the current situation. In this manner, the military was able to navigate the challenges of the day.

Post-Tumu Developments: Rebuilding Border Defenses

After the defeat at Tumu, the defenses of the capital were imperiled, and with the capture of the emperor, the court was without leadership at this critical juncture and thrown into a state of confusion. Many officials feared a replay of the 1127 Jingkang Incident, when the reigning Northern Song emperor, his father, and most of the imperial family and court were captured in humiliating fashion by the Jurchens after the capital city of Kaifeng fell, and there was a clamor for a retreat south to Nanjing. But a vocal faction led by Yu Qian 于謙 (1398-1457), who as Vice Minister of War was now the most senior civilian official in charge of the military (his superior perished at Tumu), staunchly opposed retreating. Yu went so far as to exclaim that anyone who advocated retreat should be beheaded. The influential eunuch Li Yongchang 李永昌 argued against retreat by stating that the imperial tombs, temples and palaces, the imperial granaries, and the homes of officials and commoners were all in Beijing. Their arguments persuaded the Empress Dowager to make the decision to defend the capital. Zhengtong's younger half-brother Zhu Qiyu 朱祁鈺 (1428-1457) was hastily appointed regent and shortly after ascended the throne as the Jingtai emperor (r. 1449-1457) to lower the value of the hostage Zhengtong. The remaining troops from the surrounding regions were all mobilized and trained while new troops were hastily recruited, weapons manufactured, and grain stockpiled. Yu Qian and his close

associate Shi Heng 石亨 (d. 1460) took charge of Beijing's defenses and ultimately forced the Oirats to withdraw.[418]

In the immediate aftermath of Tumu, the primary concern was how to reconstitute the capital and border defense network after the devastation inflicted on the Capital Army. A flood of memorials was submitted by officials on how best to proceed, but Yu Qian clearly stood out as the dominant military theorist. Of great interest to historians was his reforms to the Capital Army through the creation of "drill units" (*tuanying* 團營), which led to a much more unified command structure and better cohesion.[419] But there was another, even more pressing issue facing Yu Qian and the court. Beijing had been saved mainly by redeploying troops stationed in other regions such as Xuanfu 宣府 (modern day Zhangjiakou in Hebei) and Liaodong. The problem now was how to restore these guards to their original strength to prevent future enemy incursions.

As noted in the previous chapter, the Ming's hereditary military was plagued since the onset by various problems and abuses such as appropriation of supplies, impoverishment, and privatization of soldiers that undermined the foundations of hereditary military service. Throughout the decades, troops fell off military registers – in 1438, Yu Qian reported that the court was seeking to track and replace 1.2 million soldiers who had died or deserted in years

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[418] *Yingzong shilu*, in *MSL*, 181:3509; 183:3555-63; Tilemann Grimm and Denis Twitchett, "The Cheng-t'ung, Ching-t'ai, and T'ien-shun Reigns, 1436-1464," in *The Cambridge History of China, Vol. 7: The Ming Dynasty, 1368-1644, Part I*, edited by Frederick W. Mote and Denis Twitchett (Cambridge: Cambridge University Press, 1988), 236-38.

[419] Yu Qian's reform involved selecting 100,000 of the most elite troops and organizing them into five drill units, each under a field commander, with a field marshal (selected from among the commanders) overseeing the entire force. Since this reform has been well-documented by both Chinese and Western scholars, I will not go into detail here. See Fan, *Mingdai junshi shi*, 445-51; Frederick W. Mote, "The Ch'eng-hua and Hung-chih Reigns, 1465–1505," in *The Cambridge History of China, Vol. 7: The Ming Dynasty, 1368-1644, Part 1*, edited by Frederick W. Mote and Denis Twitchett (Cambridge: Cambridge University Press, 1988), 373-74.

prior. Yet even then the court still managed to mobilize close to 150,000 troops for military campaigns in the southwest and 200,000 troops for the 1449 expedition,[420] demonstrating that policies implemented to preserve the military had some measure of success. Tumu, however, was such a devastating blow that track and replace, which the court relied on to replenish missing personnel, could not suddenly produce enough manpower to replenish the depleted guards. It was against this backdrop that the court looked to reconstitute its weakened *weisuo* system.

This augmentation was done through two methods: the recruitment of mercenaries and the recruitment of local militia forces. In the aftermath of Tumu, officials needed to raise a military force quickly to defend the capital and the northern frontier from further Oirat incursions. In early 1450, the Minister of Revenue Jin Lian 金濂 (d. 1454) petitioned the court to recruit "righteous and loyal heroes" (*zhongyi haojie* 忠義豪傑) to defend the capital and various strategic locations and proposed that close relatives of officials (*guanshe* 官舍), soldiers and commoners, government students, clerks, and even priests and monks take part in recruitment, promising them positions based on the *weisuo* decimal system corresponding to the number of men they recruited. This request received the endorsement of the emperor, who dispatched officials to aid in recruitment. The following day, Yu Qian noted the lack of troops in Datong and urged the court to recruit up to 30,000 volunteers in Shanxi. These troops would similarly be organized under the decimal system and would be promoted for merit in combat.[421] Unlike the coercive conscription of the Hongwu period, these recruited troops were all volunteers who were

[420] See Liew, "The Luchuan-Pingmian Campaigns," 162-203; "Tumu zhi zhan zhiyi," 110-15; Cao Yongnian 曹永年, "'Tumu zhi bian' Ming bingli ji shangwang renshu kao" '土木之變' 明兵力及傷亡人數考, *Zhonghua wenshi luncong* 中華文史論叢 2013, no. 1 (2013): 251-59.
[421] *Yingzong shilu*, in *MSL*, 189:3870-71; 189:3871-82.

paid generous sign-up bonuses (*weisuo* regulars received none). Under Yu Qian's scheme, mercenaries recruited from Shanxi would be given one *liang* of silver and two bolts of textiles in addition to traveling rations on the same level as *weisuo* regulars while on campaigns.

One target for recruitment was military auxiliaries. These included close relatives of military officers (*sheren* 舍人) and auxiliary conscript of soldiers.[422] Originally soldiers took only one auxiliary conscript with them to camp (although in some cases they took two or three), but over time they proliferated and formed large military families. By the time of the Tumu Crisis, officials noticed that they constituted a considerable pool of military labor that could be drawn upon to defend the capital. In 1449, not long after news of Tumu reached Beijing, the Ministry of War recruited 400 military auxiliaries as soldiers and gathered an additional 130 volunteers from the capital and placed them under Shi Heng's command. At the same time, the Ministry of War ordered that registers be compiled to tabulate the number of available auxiliaries throughout the empire. This register was completed in 1451, and it was ordered that able-bodied military auxiliaries above the age of forty and any volunteers would be sent to guards were manpower was lacking to train. In a sign that officials throughout the Ming were beginning to realize the potential for military auxiliaries to augment the *weisuo*, in 1450 the Grand Coordinator of Guangxi received permission to conscript one out of three or two out of seven auxiliary conscripts of regular infantry and one out of ten auxiliary conscripts of cavalrymen in the Guangxi Regional Military Commission and sent them to local guards to train so they can participate in exterminating bandits. However, the recruitment of military auxiliaries during this

[422] For research on *sheren*, see Kawagoe Yasuhiro 川越 泰博, "Mindai eisho no shajin ni tsuite – 'eisenbu' no bunseki wo tōshite" 明代衛所の舎人について--「衛選簿」の分析を通して, *Chūō daigaku bungakubu kiyō* 中央大学文学部紀要 120 (1986): 77-107.

period was temporary, with officials deciding to redetermine their status after the military emergency was over.[423] Nonetheless, it would not be long before the court decided to use military auxiliaries to permanently man the garrisons.

The second method of augmentation was through the recruitment of local militias, known as "civilian legionnaires" (*minzhuang* 民壯). These were civilians who were conscripted and armed by the state and trained in the *weisuo* for several months in the autumn and winter but otherwise engaged in farming the rest of the year. They were not paid, but when called upon to participate in expeditions, were distributed traveling rations and were given corvée labor exemptions just like regular soldiers. It was also expressly forbidden to induct these militia forces into military registration. In 1450, the court limited labor exemptions to only to three members of their households, as many took advantage of recruitment to claim exemptions for the entire household.[424] To alleviate the heavy burden of both farming and military training, Yu Qian suggested that the legionnaires be divided into two shifts, with each taking turns serving.[425]

As Kawagoe Yasuhiro noted, the concept of civilian legionnaires predated the Tumu Crisis by several decades, but in its earliest iteration they were used only as local police. But after Tumu, they were widely recruited to help reconstitute border defenses.[426] Civilian legionnaires were attractive because officials saw them as an expedient way to quickly raise troops without compromising the farmer-soldier ideal that underpinned the Ming military while also sparing the court from paying them regularly. By the second month of 1450, it was reported

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[423] *Yingzong shilu*, in *MSL*, 184:3622; 189:3866-67; 200:4263.
[424] *Yingzong shilu*, in *MSL*, 192:4008.
[425] Yu Qian 于謙, *Yu Qianji* 于謙集, 342.
[426] Kawagoe Yasuhiro, "Sōkōki no minsōsei ni tsuite - Mindai gunseishi kenkyū no hitokusari" 創行期の民壮制について-- 明代軍制史研究の一齣, *Shakai bunka shigaku* 社会文化史学 13 (1976): 20-33.

that such recruitment had yielded 95,200 legionnaires throughout North China. The emperor ordered that further recruitment cease for fear that it might spark local unrest. Ming administrators at the time also did not consider them to be particularly effective at fighting - one censor told the emperor that "[fighting] is not their forte, but they can nonetheless still assist the soldiers."[427]

Throughout the 1450s, the military threat from the Oirats gradually subsided. However, this did not mean that recruitment of militia forces ceased. Civilian legionnaires, who were recruited mainly in the inland regions of North China, were not disbanded, but were assigned instead to local guards to shore up local defenses as opposed to being sent to guard Beijing. Whenever local guards lacked manpower, authorities would recruit civilian legionnaires. This transformed them into a local defense force.[428] Along the northern frontiers, a new type of soldier also appeared - local troops (*tubing* 土兵). Local troops were recruited primarily in Shanxi and Shaanxi under the same principles as civilian legionnaires – they would train during the fall and winter and engage in agriculture during the spring and summer. Where they differed from civilian legionnaires was in the target for recruitment – civilian legionnaires were recruited only from civilian households, whereas local troops could be drawn from civilian and military households, settled nomads, and even ethnic minorities. They were also given sign-up bonuses in silver and more generous labor exemptions. And whereas civilian legionnaires were primarily used for defense, local troops could be dispatched on expeditions.[429]

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[427] *Yingzong shilu*, in *MSL*, 186:3723; 197:4186-88; 189:3870-71; 225:4920.
[428] Sŏ Inpŏm 徐仁範, "Doboku no hen to kinōhei: giyū to minsō wo chūshin toshite" 土木の変と勤王兵：義勇と民壮を中心として, *Tōyō gakuhō* 東洋学報 82, no. 1 (2000): 11.
[429] Sŏ Inpŏm, "Mindai chūki no Sensei no dohei ni tsuite - boheisei kenkyū no tegakari toshite" 明代中期の陝西の土兵について- 募兵制研究の手掛かりとして, *Shūkan tōyōgaku* 集刊東洋学 74 (1995): 67, 70-71, 74-75.

The first attested instance of local troop recruitment was in 1457.[430] The court ordered that each recruit be given one *liang* of silver as a sign-up bonus by the central government. Additionally, five *shi* of tax grains would be waived from their household and two males would be exempt from corvée labor. The court also ordered that track and replace not be performed on their households in order to maintain strict separation between civilian and military registration. Recruitment of local troops during this period was limited. In 1458, it was recorded that Liaodong and Datong only recruited 909 and 645 local troops respectively – numerically insignificant given the size of the military forces in those regions.[431] Much like military auxiliaries, the widespread use of civilian legionnaires and local troops would not take place until decades later.

Restoring the *weisuo*

The half century from the reign of Tianshun (1457-1464) to Hongzhi (1487-1505) was characterized by an intense effort on the part of the court to restore the strength of the *weisuo*. This effort began in the Tianshun period but reached its climax during the Chenghua reign (1464-1487). During this period, the Ming renewed threat from the Mongols following Dayan Khan's (1472-1517, r. 1480-1517) reunification of the Mongolian steppes. Mongol raids became virtually ceaseless, and an increasing number of Mongols moved into Hetao 河套 (a region in the Ordos Plateau along the northern bend of the Yellow River), which put great strain on Ming defenses.[432] The court therefore attempted restoration through two methods. The first was to turn

[430] Wang Huiming 王慧明, "Mingdai mubingzhi yanjiu" 明代募兵制研究, PhD diss., (Dongbei Normal University, 2021), 92.
[431] *Yingzong shilu*, 281:6038-39; 290:6195-96; 690:6228.
[432] Mote, "The Ch'eng-hua and Hung-chih Reigns," 398-402; Sō, "Mindai chūki no Sensei no dohei ni tsuite," 70, 72.

the short-term measures implemented after the Tumu Crisis to augment the garrisons into permanent policies. That is, the conscription of civilian legionnaires and local troops became institutionalized and military auxiliaries came to be recruited in even larger numbers. The second was to double down on track and replace to conscript troops from the military household and stamping out abuses. These efforts largely continued through the Hongzhi period but started tapering off towards the end of the reign, replaced by policies much more conducive towards voluntary recruitment. Thus, by the time the Hongzhi emperor died, the court had already established the foundations for the large-scale recruitment of professional soldiers in later periods. This tension between the rhetoric of restoration and actual practices that differed would permeate throughout Ming military administration in this period.

Changing Patterns of Recruitment

Military auxiliaries were heavily targeted for recruitment. More and more, officials came to realize that they constituted a huge pool of untapped military labor that could be used to shore up the guards. These military auxiliaries often lived in areas around the guards, where they engaged in agriculture or commerce. Over time, they established strategies to take advantage of their special status to grow their households. Officials noted that in order to avoid taxes and corvée labor, crafty officers and soldiers would register one or two military auxiliaries at camp while claiming that the remaining males were registered as civilians elsewhere. But when civilian officials came to conscript laborers, they would claim that they were registered as military auxiliaries. When officials came for track and replace, they would pay bribes to avoid conscription. Furthermore, they did not pay taxes on their farmland, claiming that the yields were used to support military personnel. As a result, both civilian and military authorities attempted to

put an end to this, leading to confrontation in 1464 about who had control over this group of people.

In the eighth month of 1464, the magistrate of Rongcheng county 容城縣 in the Northern Capital Metropolitan Region (North Zhili 北直隸) Jiang Yao 姜耀 memorialized the court, requesting that only one or two military auxiliaries be allowed to remain at camp and the rest be returned to civilian registration so that they could pay taxes and engage in corvée labor. Jiang was reacting to the issue, which dated back to the Hongwu reign, of civilian households pretending to be military households to take advantage of tax exemptions and engage in the aforementioned practices. But rather than just ferret these households out, Jiang proposed that *all* military auxiliaries be sent back to civilian registration. The Ministry of Rites supported Jiang's memorial, and the Tianshun emperor approved. Ministry of War officials, however, rushed to protest, accusing the magistrate of ignorance and of attempting to demonstrate "minor talent." The problem, as Ministry of War officials pointed out, was that civilian officials in other regions were using the Rongcheng case as a precedent to take control of military auxiliaries, thus negatively impacting the military. The Grand Coordinator of Zhili argued that if all military auxiliaries were sent back, then the guards would be depleted, since military auxiliaries were able-bodied men who were familiar with martial affairs. These officials instead recommended that all military auxiliaries be registered and remain at camp to train as soldiers. Only when the original household had no more males would one auxiliary conscript be sent back from the guards. Civilian officials would be banned from conscripting military auxiliaries for corvée labor, and civilians would be banned from joining military registration if they weren't

conscripted. Evidently, the need to maintain the *weisuo* won out in Tianshun's mind, and he approved the Ministry of War's request.[433]

Thereafter, the recruitment of military auxiliaries increased. In 1465, the new Chenghua court ordered that males with tremendous strength and outstanding intellect among military auxiliaries and civilian households throughout the empire be inducted into the military and organized into a new unit within the guards under the command of capable military commanders.[434] In 1468, one Grand Coordinator in Zhili reported that many officers in the region who were promoted and transferred elsewhere left their extended family in their original guards. Over time, these people became just like civilians with property and livelihoods and became divorced from the *weisuo*. The Grand Coordinator further noted that many of them wanted to voluntarily enlist, but as there was no precedent for their recruitment, it was difficult for local military authorities to proceed. Based on this account, officials from the Six Ministries and the Censorate petitioned the emperor to order military rectification censors to compile registers for this population to conscript those who owed military service and to gather volunteers, thus establishing the relevant precedent. Several years later in 1477, this precedent was broadened beyond Zhili and was applied to guards throughout the empire. It was decided that these volunteers would remain in the guard where their promoted relative originally served rather than be sent to a new guard, with the reason being that they've already established a livelihood in the region so it would be cruel to uproot them.[435]

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[433] "Cunliu sheyu chongshi junwu" 存留舍餘充實軍伍, in *HMTFSLZ*, 1057-60.
[434] *Xianzong shilu*, in *MSL*, 24:468-69.
[435] "Qingli junhu ji junren shengdiao dengxiang yixia dizhi qingyuan toujun xuling shouyi li" 清理軍戶及軍人陞調等項遺下弟姪情願投軍許令收役例, in *HMTFSLZ*, 1064-65; "Touchong junyi shoucao ganyou yingqiu maixian zhe diaowei chongjun li" 投充軍役收操敢有營求買閑者調衛充軍例, in *TLQW*, 217-23.

A decade later, however, the court had turned from gathering volunteers to coercive conscription. In 1486, Ministry of War officials reported that abuses ran rampant in the attempt to conscript military auxiliaries. Since conscription depended entirely on *weisuo* officials, these military officials often hid their own males from conscription and instead conscripted the old or infirm, or the underage, or falsely claimed desertion. The court replied primarily on extorting the military auxiliaries to turn themselves in and on the threat of coercive punishment, but central officials pointed out that military officers in the guards did not fear punishment since it was too light. As a result, the emperor strengthened sanctions and ordered that in the seventy-two Beijing guards, one out of three military auxiliaries would be conscripted. Anyone caught hiding their military auxiliaries could be punished by up to five years of harsh military exile along the frontiers.[436] Thus, we see that in the decade between 1468 and 1477, officials were primarily concerned with inducting volunteers, but by 1486 they had turned towards coercive conscription instead. This shift is likely due to the fact that there were few volunteers at a time the court desperately needed manpower and paralleled the court's treatment of civilian legionnaires and local troops, which will be covered below.

The organizing principle for these recruited troops continued to be the *weisuo*. But an important change occurred during this period. Despite the court's insistence in many cases that these soldiers would form their own units and that no replacements be conscripted, by the 1470s it was clear that these recruited troops were treated no differently than regular *weisuo* soldiers. A 1476 case from Liaodong perfectly illustrates this:

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[436] "Yinni yuding busong caobei zhaozui qingzhong ligong nianxian" 隱匿餘丁不送操備照罪輕重立功年限, in *Huang Ming Chenghua ershisannian tiaoli*, 89-91.

> [The Vice Minister of War in Charge of Border Defenses Ma] Wensheng memorialized again: The Liaodong Regional Military Commission's recruitment of approximately 2,700 soldiers and the Guangning Defender's recruitment of approximately 1,800 soldiers are all auxiliary conscripts from the Jin[zhou], Fu[zhou], Hai[zhou], and Gai[zhou] guards. They now receive rations from the authorities and undertake official duties but are not subordinate under the *weisuo* and their names are not registered. If one day they abscond, they cannot be replaced. [This memorial] requests that Shandong's Vice Commissioner and Assistant Commissioner in charge of supplies examine these soldiers' native places of registration and calculate the number of auxiliary conscripts [they brought with them]. For those households with numerous auxiliary conscripts, [the extra conscripts] should be sent back to assist the old soldiers [in their original guards]. The recruited soldiers and their [remaining] auxiliary conscripts should be registered and dispatched to the *weisuo*. For those who will be attached to the Liaodong [Regional Military Commission], five hundred should be sent to Fushun. For those who will be attached to Guangning, one thousand men [should be dispatched] and form an additional battalion. The remainder should be sent to the Dingliao, Dongning, and Guangning guards based on where they were originally recruited. If they die or flee, then replacements should be obtained [from their households]. This way, the military will have a fixed amount of soldiers and the people will not become private laborers.
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> 文升又奏：遼東都司帶管應募兵二千七百有奇，廣寧操守應募兵一千八百有奇，俱金、復、海、盖等衛餘丁。今既廩食在官，而募者亦陞受職役，然不轄以衛所，不籍其姓名，他日逃故，無從勾補。乞令山東管糧參政、僉事，稽二處募兵本貫，量遣所帶餘丁，眾多者還助舊軍，仍籍應募兵并所留餘丁，分編衛所，隸遼東者以五百人編入撫順，隸廣寧者以一千人增設一所，餘則各照原募地方編入定遼、東寧、廣寧諸衛，乏軍所分，有故一槩勾補。庶軍有定伍，人無私役。[437]

The memorial above demonstrates that officials were concerned about recruits not being properly registered and organized. Furthermore, officials expected them to function in the same way as conscripted soldiers – if they died or deserted, the court would obtain a replacement from their households. It was also a sign that they were no longer seen as temporary soldiers but were expected to function like *weisuo* regulars. The court approved all of Ma's requests.

[437] *Xianzong shilu*, in *MSL*, 160:2932-33.

At the same time, the recruitment of civilian legionnaires and local troops also changed. In the early period of recruitment, the phrase "their status will be redetermined" was often used to describe them, pointing to their temporary nature.[438] However, as noted in the previous section, these militia forces were maintained even after the military emergency. Their duties were varied – aside from training half the year, they were also in charge of local security, river patrol, and guarding granaries and prisons.[439] Sŏ Inpŏm noted that early on the court targeted volunteers, but already in the Jingtai period, when few volunteered for recruitment, local officials and *lijia* personnel would resort to coercive conscription.[440] This practice continued into the Chenghua and Hongzhi periods, when ever larger numbers of civilian legionnaires and local troops were inducted into the military to shore up defenses. With the re-emergence of Mongol power during this period, the court needed additional manpower for its northern garrisons. It was in this context that the court began institutionalizing the recruitment of militiamen.

Already in 1472, officials noted that no one wanted to become civilian legionnaires since service was for life.[441] But this did not deter the court from further conscription. In 1477, permission was granted to conscript replacements for legionnaires who were old or infirm.[442] This essentially turned them into military households, even though they were still registered on paper as civilians. In 1494, civilian legionnaires and local militia were officially turned into a corvée labor obligation levied on the populace. Using the *lijia* as the basis, males were forcibly

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[438] See, for instance, *Yingzong shilu*, in *MSL*, 183:3594-95; 187:3790-91; 189:3866-67; Ye Sheng 葉盛, "Cao bei jinyao shu" 操備緊要疏, in *HMJSWB*, 59.464.
[439] Saeki Tomi 佐伯 富, "Minshin jidai no minsō ni tsuite" 明清時代の民壮について, *Tōyōshi kenkyū* 東洋史研究 15, no. 4 (1957): 407-09.
[440] Sŏ, "Mindai chūki no Sensei no dohei ni tsuite," 68; Sŏ, "Doboku no hen to kinōhei," 14.
[441] *Xianzong shilu*, in *MSL*, 110:2146. See also Sŏ, "Doboku no hen to kinōhei," 15.
[442] *Xianzong shilu*, in *MSL*, 168:3040-41. See also Ni Yue 倪嶽, "Lun xibei beibian shiyi shu" 論西北備邊事宜疏, in *HMJSWB*, 77:673-74.

conscripted by local civilian authorities from wealthy civilian and military households to serve as militiamen.[443] Despite rising number of desertions and attempts by households to evade service, by 1501 there were over 300,000 civilian legionnaires and local troops serving in the empire, many of whom were in the north.[444] To put that into perspective, according to one Chinese scholar, during the late-fifteenth and early sixteenth centuries, there were a total of 281,261 imperial regulars serving in the north.[445] In 1502, it was reported that Yansui had recruited 10,367 local troops while Ningxia had recruited 11,000 local troops, making up the bulk of military forces in these garrisons.[446]

In this manner, the Chenghua and Hongzhi courts transformed the short-term measures implemented by the Jingtai court to shore up defenses in the face of the Oirat invasion into a long-term policy that could replenish the ranks of the *weisuo*. Military auxiliaries and civilians were recruited in large numbers and inducted into the guards. Thus, one Chinese scholar notes that the "hired soldiers" of the mid-Ming were really made up mostly of civilian legionnaires and local troops who were not actually hired.[447] However, the greatest change to Ming military institutions in this period was not the recruitment of these troops, but the fact that they were gradually transformed into a new group of *de facto* hereditary military households. Despite high levels of desertion and privatization, this policy worked in filling the ranks of the guards. As Mote noted, even with military pressure from the Mongols, the Ming's border defenses held, pointing to the relative success of the policies implemented in shoring up the *weisuo* and border

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[443] *MHD*, 702; *Xiaozong shilu*, in *MSL*, 93:1702.
[444] Saeki, "Minshin jidai no minsō ni tsuite, 406.
[445] Liang Miaotai 梁淼泰, "Mingdai 'jiubian' de junshu" 明代 "九邊" 的軍數, *Zhongguo shi yanjiu* 中國史研究 1997, no. 1 (1997): 152.
[446] *Xiaozong shilu*, in *MSL*, 187:3447; Zheng Rubi 鄭汝璧 et al., comps., *Yansui zhenzhi* 延綏鎮志, 3:176; Sō, "Mindai chūki no Sensei no dohei ni tsuite," 74-76.
[447] Li Du 李渡, "Mingdai mubingzhi jianlun" 明代募兵制簡論, *Wenshizhe* 文史哲 1986, no. 2 (1986): 64.

defenses. In 1473, the Chenghua emperor even directed border military officials to mobilize and dispatch troops against the polity of Turfan in modern-day Xinjiang, a campaign that was carried out (albeit no fighting took place).[448] But recruiting soldiers and conscripting militia was not the only method the court used to restore the *weisuo*. As the next section will show, it also relied on the traditional institution of track and replace.

Restoring Past Institutions

Despite heavy reliance on recruited military auxiliaries and conscripted militia, the dominant rhetoric at court seemed to have favored the traditional *weisuo* institution as devised by Hongwu. At the same time the court was making permanent the military service of civilian legionnaires and local troops, officials were also expounding on their ephemeral nature. Bai Gui 白圭 (1419-1475), who served as Minister of War under the Chenghua emperor, memorialized that when hired soldiers were no longer needed, only those who wished to remain in the army should be allowed to do so – the rest should all be sent back to farm.[449] "If there are already soldiers who receive rations but civilians are also recruited," wrote the great fifteenth-century literatus Qiu Jun 邱濬 (1421-1495), "then it becomes the case that civilians pay taxes to support the soldiers but they themselves are not spared. It would be impossible [for such acts] not to disturb the people. To suggest recruiting civilians, unless there are no other alternatives, it must not be done."[450] For these officials, a far more important task was to restore the traditional *weisuo* institution.

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[448] Morris Rossabi, "Ming China's Relations with Hami and Central Asia, 1404-1513: A Reexamination of Traditional Chinese Foreign Policy," PhD diss., (University of Michigan, Ann Arbor, 1970), 186-88.
[449] Bai Gui 白圭, "Junwu qi shi" 軍務七事, in *HMJSWB*, 42.327-28.
[450] Qiu Jun 丘濬, *Daxue yanyibu* 大學衍義補, in *SKQS*, 713:403.

Several reasons can explain why the prevailing view at court tended towards restoration. On an ideological level, the *weisuo* was an ancestral institution established by the Ming founder and so restoration was seen as orthodox – even those who opposed hereditary conscription did not dare proposing the *weisuo*'s abolition.[451] Moreover, after the Tumu debacle, the "statecraft learning" (*jingshi* 經世) movement started to become popular, with scholar-officials looking back towards antiquity for inspiration on how to cure the ills of their time and to achieve peace and stability.[452] Timothy Brook argued that Ming literati saw the Zhengde (1506-1521) period as the start of decline, terming it the "Zhengde Decay," and that going into the sixteenth and seventeenth centuries there was growing nostalgia for the days of Hongwu and Yongle.[453] More recently, one Chinese scholar has argued that this decay started much earlier in the Chenghua reign, a period of great social upheaval characterized by growing military conflicts, local unrest, land annexation by wealthy families, and climate change. It was in this context that Qiu Jun published his *magnum opus The Supplement to the Expanded Meaning of the Great Learning* (*Daxue yanyi bu* 大學衍義補). Qiu was one of the most prominent thinkers of his age, but some of his views on statecraft were by no means unique. Qiu and his contemporaries all sought to learn from antiquity to "nourish the people" (*yangmin* 養民), and central to this was the restoration of agriculture. In military terms, these officials privileged the ideal institutions of

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[451] Zhang, *Mingdai weisuo junhu yanjiu*, 358-59.
[452] Chu, "Intellectual Trends," 1-33.
[453] Timothy Brook, *The Confusions of Pleasure: Commerce and Culture in Ming China* (Berkeley and Los Angeles: 1998), 139-52. This has also been noted by other scholars, see Harry Miller, "Wishful Thinking About Zhu Yuanzhang in Late Ming Historical and Political Discourse," 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, 2009), 107-14; Jaret Weisfogel, "Invoking Zhu Yuanzhang: Guan Zhidao's Adaptations of the Ming Founder's Ritual Statutes to Late-Ming Jiangnan Society," 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, 2009), 115-35.

Hongwu and Yongle (self-sufficient farmer-soldiers and military farming), which they saw as being in line with antiquity. It also explains Qiu's aforementioned opposition to voluntary recruitment, which he saw as harming the people.[454]

There was, however, a more practical reason for restoration. Hiring troops was simply too expensive, as the Ming state did not possess sufficient fiscal capacity at the time to transition to marketized recruitment. This was why the court preferred to conscript civilian legionnaires and local troops, since they engaged in agriculture for half the year and could sustain themselves. It not only saved on cost, but ideologically, it also conformed to the Ming founder's ideals. But the court did not solely rely on these troops – going hand-in-hand with their recruitment was an expansion of the track and replace mechanism to conscript hereditary soldiers to the *weisuo* to restore military self-sufficiency.

As noted in the previous chapter, during the Xuande and Zhengtong eras, the court began dispatching military rectification censors to work together with local authorities and *lijia* personnel for track and replace and to restore military discipline. In late 1449, military rectification was paused in light of the Tumu Crisis, but resumed just two years later.[455] Yu Qian was himself supportive of rectification measures, as he spoke of the need for local authorities to compile and submit registers of its soldiers to the court, but he suggested that rectification not be carried out in emergencies.[456] Although military rectification censors were temporarily suspended again in 1457, the court also reiterated existing regulations to shore up future rectification efforts, including strict injunctions against falsely claiming civilians with same

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[454] Fan, *Mingdai junshi shi*, 517-20; Zhao Yutian 趙玉田 and Luo Chaorong 羅朝蓉, *Qiu Jun jingshi sixiang yanjiu* 丘濬經世思想研究 (Guangzhou: Jinan daxue chubanshe, 2018).
[455] *Yingzong shilu*, in *MSL*, 183:3584; 205:4402.
[456] Yu Qian, *Yu Qianji*, 655.

surnames as military households were liable for conscription, mandating that replacements be conscripted from family members available at camp, and punishing officers who embezzled military rations. Military rectification was underway again by 1460.[457]

Rectification efforts reached a climax during the Chenghua reign, reflecting the growing trend of civilian dominance over the military that started in the 1430s.[458] In 1472, the court mandated annual reviews of military strength and disbursement of rations in the capital guards to prevent desertion. At the same time, it was formalized that military rectification would be carried out once every three years.[459] In 1476, the Ministry of War refused a request from Shandong to halt rectification there on account of drought and famine. Instead, it ordered rectification censors work with provincial authorities to "handle matters according to the severity of the disasters in different regions." It decided that officials did not need to strictly adhere to predetermined quotas for rectification and that newly conscripted personnel be temporarily allowed to remain at home, but did not pause rectification.[460] Yet the court did not seem optimistic about the results of track and replace. In 1475, it stipulated that a thirty percent success rate for military rectification would suffice. Censors who could not even reach that target would be demoted. This low target for track and replace suggests that the court was aware of the challenges facing military rectification censors and did not expect stunning success.[461] Nonetheless, major policymakers in Beijing continued to voice support for rectification.

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[457] *Yingzong shilu*, in *MSL*, 278:5935-38; 317:6619-20.
[458] Mote, "The Ch'eng-hua and Hung-chih Reigns," 372; Okuyama Norio, "Seitō Keitaichō no kyūyo" 正統· 景泰朝の給与, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 263.
[459] "Chali jingwei junshi" 查理京衛軍士, in *LBSL*, 434-36.
[460] *Xianzong shilu*, in *MSL*, 158:2892.
[461] Yu, *Mingdai junhu shixi zhidu*, 100.

Qiu Jun, for instance, frequently praised the superiority of the *weisuo* system, which he considered better than the military institutions of past dynasties.[462] Having voiced his objections to voluntary recruitment, Qiu Jun proposed his solution, which was unsurprisingly track and replace:

> The current policy should be to order the Ministry of War to rectify [the military]. All the Regional Military Commissions [must be ordered] to compile registers to record the original number of troops in their guards, the number of troops remaining today, the number of troops missing (those alive and dead should not be differentiated and should be recorded accurately), their original place of registration and their household status, and the reason they joined the military. The Ministry of Revenue should still be ordered to instruct all the Provincial Administration Commissions to have [subordinate] prefectures, sub-prefectures, and counties compile registers on the number of military households under their jurisdiction, the number with males in active service, and the number of unregistered people. [These registers] can be checked against one another to determine an accurate number [of troops and deserters]. The Ministry of War should order the guards to report the number of soldiers on their payroll and number of unreplaced personnel, then convene a meeting of civil and military officials [to discuss] what method to implement in order to replace the missing personnel and restore [the military] to its condition at the beginning of the dynasty. It is necessary to avoid causing resentment among the people, nor should it harm the people and lead to unrest. It must [first] be thoroughly and repeatedly examined before being implemented.
>
> 為今之計，乞敕兵部通行清理，凡天下都司衛所俱要造冊，開具本衛若所原設額數若干、見今實在若干、缺伍若干，不問存亡，備細開造，具其籍貫及充軍緣由，仍行戶部行下天下布政司，若府州縣亦要造冊，開具各州縣軍戶若干、見在充當者若干、挨無名籍者若干，彼此照對以見其實在之數，其衛所見在食糧者若干、缺伍不補者若干，兵部類以奏聞，會文武大臣集議，所缺必設何法然後得軍伍足數以複國初之舊，必須不怫民情而致其生怨，不為民害而激其生變，講明根究，至再至三，然後見之施行。[463]

[462] Qiu Jun, *Daxue yanyi bu*, in *SKQS*, 712:443, 713:334, 398.
[463] Qiu Jun, *Daxue yanyi bu*, in *SKQS*, 713:398-99.

Qiu Jun thus highlighted the predominant belief of many of his contemporaries at court on how to deal with the *weisuo*.[464] The court responded by dispatching large numbers of censors to carry out military rectification.

What were some of the challenges facing these censors? For the most part much of it was the same as the abuses of earlier periods, but the court's own policies also led to problems. Punishments for censors who couldn't meet the thirty percent target meant officials were more interested in meeting the quota than they were in actually conscripting soldiers. Chenghua-era sub-statutes noted that the old, infirm, sick, or underaged would often be conscripted for military service. Civilians with the same surname as the conscription target or those who received special exemptions were also conscripted. One Shaanxi prefect told the court in 1478 that out of 2,151 conscripts for Binzhou 邠州, only 317 were liable for conscription. The remaining 1,834 had all received exemptions to serve in other guards but were doubly conscripted.[465] People also preferred voluntary recruitment due to sign-up bonuses and the ability to serve near their home regions, further hampering rectification efforts.[466]

Ironically, the *lijia*, the very institution that Hongwu sought to use in keeping local officials in check, contributed heavily to these abuses. The important role the *lijia* played in track and replace meant they were positioned perfectly to collude with military rectification censors. The Ministry of War reported in the aforementioned case that it was the *lijia* who hid strong

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[464] Many of Qiu Jun's contemporaries or juniors espoused similar views. All supported military rectification and suggested ways to make the mechanism stronger and less prone to abuse. Some of them carried their restorationist ideals into the Jiajing period. See, for instance, Wang Xian 王憲, "Jichu qingjun shiyi" 計處清軍事宜, in *HMJSWB*, 99:872-78; Wang Qiong 王瓊, "Wei chen yujian yi su minkun shi" 爲陳愚見以蘇民困事, in *HMJSWB*, 111:1024.
[465] "Qingjun yushi du bing suoshu qingjie junshi shenyan nianmao li" 清軍御史督併所屬清解軍士審驗年貌例, in *LBSL*, 491-94; "Junren ai wu mingji xing wei kaihuo gaidiao biewei yousi huibao wuci buxu gouqu li" 軍人挨無名籍行衛開豁該調別衛有司回報五次不許勾取例, in *LBSL*, 547-49.
[466] *Xianzong shilu*, in *MSL*, 113:2203.

males from rectification and instead sent the old, infirm, or the underaged. Furthermore, officials noted that *lijia* elders would often be bribed to report a military household as having gone extinct or make other false claims to excuse said household from military service.[467] Often times, censors do not check the conscripts, as they were simply interested in meeting their quotas. Officials complained that this was because the court only punished rectification censors and military households and not the *lijia*, essentially giving *lijia* personnel free rein to commit crimes. It was decided that in such cases, *lijia* elders would be punished with military exile.[468]

Despite these problems, the Chenghua and Hongzhi courts continued to invest heavily in military rectification. In 1475, the court streamlined the rectification process by having censors oversee the compilation of rectification registers and allowing them to order rectification directly, thereby cutting down time wasted from when the Regional Military Commissions began compiling rectification registers and to when the Ministry of War receive those registers and ordered rectification to begin.[469] The court also widened the scope of track and replace to include those who had been evading service for long periods of time. In 1477, it was noted that in Zhejiang alone there were about 19,842 eligible males who have not been conscripted since the Zhengtong reign. In 1482, rectification censors in Guangdong and Guangxi uncovered households that had been evading military service since the Yongle reign by pretending to be civilians or splitting their households into different branches. The court reiterated previous

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[467] "Qijie Yunnan junren wuyao zhengshen lian qixiao buxu maigu yixing zhiren" 起解雲南軍人務要正身連妻小不許買顧異姓之人, in *Huang Ming Chenghua ershisannian tiaoli*, 99; "Hu fenji tuojun zhengfan bianwei lilao ju fujin ju chongjun" 戶分籍脫軍正犯边衞里老俱附近俱充軍, in *Da Ming jiuqing shili anli*, 56a-59a.

[468] "Gechu qing junding wuyao jingzhuang zhengshen weizhe jiang junren quanjia fa bianwei jieren fa fujin weisuo ju chongjun" 各處清軍丁務要精壯正身違者將軍人全家發邊衛解人發附近衛所俱充軍, in *TLQW*, 507-11.

[469] "Qingli junwu shili" 清理軍伍事例, in *LBSL*, 451-54.

regulations and extorted households still evading service to turn themselves in, promising harsh punishment for them and anyone helping them if they did not do so.[470]

Registers played an important role in military rectification. As noted above, a rectification register containing details of the forthcoming rectification action had to be compiled before military rectification could begin. In 1472, the court mandated that all guards conduct annual reviews of their military strength and the amount of rations it was disbursing and that these information be compiled into registers for reference during track and replace. Registers were so important that in 1475, the court ordered military rectification censors to punish guard personnel if their rectification registers were not submitted on time.[471] The court also utilized harsh punishments to deter officer abuse. It was ordered that if a newly conscripted soldier deserted within a year of arriving in the guards, then his commanding officer would be demoted one rank for every ten soldiers who deserted. This punishment was considered so heavy that in 1470 military officials and merit nobles rushed to protest it, noting that it was not in line with the Ming code. The court temporarily suspended this regulation, but it apparently was restored a few months later and would remain the official policy into the Hongzhi reign.[472]

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[470] "Wugou junshi mianxing chajie li" 無勾軍士免行查解例, in *LBSL*, 513-23; "Jinge zaoce lishu zuobi maimo junding" 禁革造冊里書作弊埋沒軍丁, in *HMTFSLZ*, 1069-70.

[471] "Neiwai junwei meinian yici chali junyi li" 內外軍衛每年一次查理軍役例, in *TLQW*, 216-18; "Ge weisuo qingzao junwu wence weixian jiang guanli zhufeng chawen li" 各衛所清造軍伍問策違限將官吏住俸查問例, in *LBSL*, 432-33.

[472] "Jiedao xinjun wangtao shiming gaiguan guanyuan yilü wenduan bu dijiang li" 解到新軍枉逃十名該管官員依律問斷不遞降例, in *TLQW*, 155-61; "Zouzhun jinyue bangwen fan shikuan" 奏准禁約榜文 凡十款, in *TLQW*, 191-93; "Ge weisuo guanyuan bu cunxu xinjun nai shi shiwan taozou jiuwen faqian li" 各衛所官員不存恤新軍乃士恃頑逃走究問發遷例, in *LBSL*, 473-77.

The Hongzhi Transition

Although the Hongzhi emperor also subscribed to the notion of restoration and continued the policies of the previous reign, important changes also began to take place towards the latter part of his reign in the early sixteenth century. These changes mainly revolved around the commutation of militia duties to silver and the growing tolerance of housemen, who were private retainers recruited by border military commanders. This trend towards voluntary recruitment signaled that the court had realized that restoration, particularly military rectification, was no longer sufficient, and that it had to adapt to the changing socioeconomic situation by embracing monetization. Local officials and commanders had long come to the realization that voluntary recruitment yielded better results than coercive conscription and accordingly adjusted their policies to better take advantage of local current conditions. What Hongzhi court did, then, was not implement any novel policies, but rather confirm practices that were already widespread in local society, a common dynamic in Ming governance in general that many scholars have observed.

Not surprisingly, this change in attitude was driven by the court's own policy of institutionalizing militia service. This service was deeply unpopular, especially since it became permanent and hereditary, and many conscripted militiamen deserted. For instance, in 1501, it was reported that more than half of the civilian legionnaires (around 1,500 men) in one Shanxi guard had fled.[473] However, even more serious was that ironically, militia duties were starting to impede agriculture, particularly as militiamen served for longer periods of time. Local regions were thus deprived of tax revenue and males for corvée labor. Moreover, after militiamen

[473] *Xiaozong shilu*, in *MSL*, 178:3287-88.

deserted, their households would continue to claim exemptions while their commanding officers would appropriate their rations, thereby adding even more costs to the state.[474]

Military rectification too was not very successful. A Grand Coordinator of Liaodong reported in 1468 that track and replace could only recover recently deserted personnel, not those who had deserted long ago, and even then, it was prone to abuses. In Guizhou, officials complained that only ten or twenty percent of the conscripted personnel could make it to camp. In 1477 Zhejiang authorities were, for reasons unmentioned, unable to conscript any replacements for guards in Shaanxi.[475] Thus, Yu Zhijia pointed out that even the thirty percent target was unrealistically high.[476] Much of this had to be do with the fact that censors were simply not interested in their duties, but equally important was that the court was not realistic in trying to restore the *weisuo* through Hongwu-era mechanisms. In 1488, the Minister of War Yu Zijun 余子俊 (1429-1488) memorialized that Liaodong's military registers had been lost and suggested that Hongwu and Yongle-era registers stored in Nanjing be unsealed and used to make copies for military rectification purposes. In other words, the court wanted officials to rely on information a century old for conscription.[477] Small wonder, then, that rectification did not work, and local officials had to come up with other solutions to augment the garrisons.

That solution was to commute militia service to payments of silver. This practice originally started off as a bribe – the wealthy households from which these militiamen were

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[474] Saeki, "Minshin jidai no minsō ni tsuite," 416, 418.

[475] "Qingli junhu ji junren shengdiao dengxiang yixia dizhi qingyuan toujun xuling shouyi li" 清理軍戶及軍人陞調等項遺下弟姪情願投軍許令收役例, in *HMTFSLZ*, 1064-65; "Tianshun liunian yihou gaotou fujin chongjunzhe reng jie yuanwei" 天順六年以後告投附近充軍者仍解原衛, in *HMTFSLZ*, 1067-69; "Qingjie Shaanxi junyi shi[li]" 清解陝西軍役事[例], in *Huang Ming Chenghua ershisannian tiaoli*, 139-40.

[476] Yu, *Mingdai junhu shixi zhidu*, 100, 103.

[477] *Xiaozong shilu*, 21:498-99.

conscripted paid silver to avoid conscription. By the end of the Hongzhi reign, officials in Shanxi had transformed these bribes into regular payments of silver levied on civilian households, which they used to buy warhorses or hire troops. In 1497, for instance, militiamen in Shanxi paid two *liang* of silver to the Regional Military Commission for the purchase of warhorses for garrison soldiers. In 1499, every militiaman in one Shanxi prefecture paid 0.3 *liang* of silver monthly to the Provincial Administration Commission, also for the purchase of warhorses. According to Iwami Hiroshi, conversion to silver primarily had three benefits. First, it allowed farmers to continue working their fields and thus preserved agricultural production. Second, coercive conscription did not yield good results and hired soldiers were more effective. Third, it allowed the state to use the wealth of the people more efficiently.[478]

In 1501, the Grand Coordinator of Datong Liu Yu 劉宇 (1439-1508) proposed standardizing this policy in Shanxi, but in 1503 the court rejected the proposal on the account that there was no precedent for silver conversion. However, it was unable to arrest the trend towards monetization, and presumably payments in silver continued. Just four years later, the new Zhengde court reneged on the ban and waived militia duties for three thousand men in Shanxi in exchange for a contribution of 1.2 *liang* of silver each.[479] By the Jiajing period, militia service had been transformed almost entirely into a silver levy and the money was used to hire troops.

At the same time, the late Hongzhi court was also growing increasingly tolerant of housemen. The institution of housemen probably dated to the early Ming, but at that time it

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[478] Saeki, "Minshin jidai no minsō ni tsuite," 411, 419-23; Iwami Hiroshi 岩見 宏, "Mindai no minsō to hokuhen bōei" 明代の民壯と北邊防衞, *Tōyōshi kenkyū* 東洋史研究 19, no. 2 (1960): 289-90.
[479] *Xiaozong shilu*, in *MSL*, 198:3655-56; *Wuzong shilu*, in *MSL*, 28:731.

referred to family members or slaves of major officials and generals.[480] While the institution would not become fully developed until the Jiajing period, already in the early to mid-fifteenth century there were instances where private retainers were put into combat. In the 1440s and 1450s, border commanders in Datong likely utilized housemen, and when the Mongol general Cao Qin 曹欽 (d.1461) launched his rebellion against the Tianshun emperor, he similarly had private retainers under his command.[481]

Many housemen were recruited mercenaries, although some were surrendered nomads and privatized *weisuo* troops. As the state did not subsidize their recruitment and maintenance until the Jiajing period, early housemen were paid by their commanders. These commanders could afford the upkeep due to privatization of military farmland, which provided them with an economic base from which they could amass men and resources.[482] The court's tolerance of housemen meant that it was also tolerating the continued occupation of military farmland, which clashed with its desire to restore military farming. But as housemen were better paid and were loyal to their commanders, they were more effective in combat, and it was precisely this that made the court tacitly accept their existence. This is another sign of the court's adaptation and transition away from the goals of restoration, as utility began to outweigh ideology. Housemen would become a major component of the Ming military from the mid-sixteenth century onward.

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[480] Suzuki Tadashi 鈴木 正, "Mindai katei kō" 明代家丁考, *Shikan* 史觀 37 (1952): 27.
[481] Ma Chujian 馬楚堅, "Mingdai de jiading" 明代的家丁, in *Ming Qing bianzheng yu zhiluan* 明清邊政與治亂, edited by Ma Chujian (Tianjin: Tianjin renmin chubanshe, 1994), 135; David M. Robinson, "Politics, Force and Ethnicity in Ming China," 79-123.
[482] Suzuki, "Mindai katei kō," 30-31; Zhao Zhongnan 趙中男, "Lun Mingdai junshi jiading zhidu xingcheng de shehui jingji tiaojian ji qi fazhan" 論明代軍事家丁制度形成的社會經濟條件及其發展, *Shehui kexue jikan* 社會科學輯刊 1991, no. 2 (1991): 86; Ma, "Mingdai de jiading," 136-38.

From Divisional Army to the Garrison Commands

At the same time recruitment policies were undergoing major changes, the Ming's frontier defensive system was also being transformed. This was the transformation of the divisional army system into the frontier garrison commands (*zhen* 鎮) – special military commands along strategic border areas headed by a Regional Commander (*zongbing* 總兵) who oversaw troops and defenses within their respective jurisdictions. As noted in the previous chapter, during the Hongwu and Yongle reigns, *weisuo* troops were already being dispatched to garrison other areas and were organized outside of the *weisuo* system under Regional Commanders. The need for more flexible defenses in the face of renewed Mongol raids in the second half of the fifteenth century only accelerated this trend, with a formal garrison command defensive structure established.

The garrison commands had their origins in the Yongle period. To defend against Timur's planned invasion, Yongle appointed Regional Commanders to Gansu and Ningxia to oversee garrison troops there and to build fortifications. Yongle also pulled back forward Ming defenses in Daning 大寧 (in modern-day Inner Mongolia) that had been established by Hongwu to bolster Beijing's defenses and to reduce the power of the princely courts. In 1430, the Xuande emperor withdrew defensive lines further south by pulling back the Kaiping Guard 開平衛 (also in modern-day Inner Mongolia), which was becoming increasingly difficult to supply due to the harsh frontier environment that resulted from the Little Ice Age. This shift of Ming defenses almost two hundred miles south turned Xuanfu and Datong into front line garrisons. By the end of the Xuande period, Gansu, Ningxia, Xuanfu, Datong, and Liaodong had all been elevated to

garrison commands.[483] In earlier periods Regional Commanders and Regional Military Commissions (*dusi* 都司) divided responsibility – Regional Commanders led troops while the Commissions were in charge of logistics, but after the 1430s Regional Military Commissions were subordinated under Regional Commanders.[484] Thus, garrison commands became the *de facto* military authority in the north, with control over not only over the *weisuo* and logistics within their jurisdictions, but were also with the authority to dispatch and lead troops into combat.

Yet the Nine Border Garrison Commands that we are familiar with did not come into full existence until the Chenghua and Hongzhi periods and did not crystallize until the Jiajing period. During the second half of the fifteenth century, increased Mongol pressure on northern defenses, particularly after the loss of Hetao, necessitated new military responses. By the 1470s, the court began to subdivide the garrison commands into different military circuits (*lu* 路), each containing a number of guards and forts and headed by an Assistant Regional Commander (*canjiang* 參將) who led a division of troops drawn from the *weisuo*. This, officials told the emperor, would allow for more flexible defense as the military circuits could mutually reinforce one another in times of need – if one circuit was attacked, then the others could come to its aid.[485]

To complement the creation of military circuits, the structure of the divisional army was also reorganized. It was noted that during the Tianshun reign, Regional Commanders, Assistant Regional Commanders, and other officers were not given a formal rank structure and there was

[483] See Zhao, *Mingdai jiubian changcheng*, 252-59.
[484] Zhao, *Mingdai jiubian changcheng*, 187-90.
[485] *Xianzong shilu*, in *MSL*, 152:2780-82; *Xiaozong shilu*, in *MSL*, 21:500-01.

no clear chain of command, leading to conflict regarding military decisions and command.[486] As a result, in 1478, a new list of titles was promulgated. Military commanders who remained with the Regional Commander in the garrison command city would be known as Vice Defenders (*xieshou* 協守), while those who defended individual circuits would be known as Branch Defenders (*fenshou* 分守). Regional Military Commissioners who commanded individual cities or forts and were not subordinated under Regional Commanders were also known as Branch Defenders, and those who were subordinated to Regional Commanders were called Grand Commandants (*shoubei* 守備). Regional Commanders were established as the highest military authority within a garrison command.[487] By the Chenghua period, each of these different commanders had their own "division" (*ying* 營) of troops, including even eunuchs who were dispatched as military overseers and who reported directly to the emperor. It was noted that these commanders considered their divisions to be their personal troops and often refused to send their best units into combat to aid others. As a result, in 1488, the court further streamlined the command structure to concentrate control of these units into the hands of the Regional Commander.[488]

To make up these divisions, the most elite troops were dispatched and the strongest of them were ordered to act as vanguard forces. These troops were organized not under the decimal system but in groups of five – in Xuanfu and Datong, for instance, the command cities were

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[486] *Yingzong shilu*, in *MSL*, 300:6373-74.
[487] *Xianzong shilu*, in *MSL*, 184:3309-10; 278:4686.
[488] Xiao Lijun 肖立軍, *Mingdai shengzhen yingbingzhi yu difang zhixu* 明代省鎮營兵制與地方秩序 (Tianjin: Tianjin guji chubanshe, 2010), 280-81. The proposal would also limit the ability of eunuchs to command troops independently of the Regional Commander. See Shih-shan Henry Tsai's classic study on Ming eunuchs for their role in the Ming military system. Shih-shan Henry Tsai, *The Eunuchs in the Ming Dynasty* (Albany: State University of New York Press, 1996), 59-78.

divided into districts and each district was manned by five hundred troops, made up of smaller units of fifty men and squadrons of five men. The court ordered that in the event of merit or demerit, all five men within a squadron would be rewarded or punished together.[489] These troops were mostly drawn from the *weisuo*, but officials also recruited from the ranks of military auxiliaries, gathered volunteers, and utilized housemen. When there were no volunteers, the court resorted to forcible conscription among the military households, with one out of three males conscripted from a household.[490] We therefore see that by this period, Ming military units were commonly composite forces, drawing on a variety of military labor that were managed and paid in diverse ways. Such a pattern of organization allowed the Ming state and its local officials to quickly mobilize troops, but also required a complex administrative structure, both formal and informal.

In this manner, the divisional army was formally merged into the garrison command structure. The Hongwu-Yongle practice of dispatching *weisuo* troops to guard forts or strategic passes having been institutionalized, the mid-Ming *weisuo* became fully transformed into a military household management unit that was responsible for furnishing troops for these garrisons and providing logistical support. The fact that the guards became depleted due to desertion and privatization hindered this role. In 1465, Ministry of War officials reported that the Kaiping Guard had less than three hundred troops remaining in the guard city, as thousands were dispatched on patrol or to guard forts or had deserted, and discounting troops sent to guard granaries and prisons, there were less than one hundred men available for city defense. This

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[489] *Yingzong shilu*, in *MSL*, 205:4394-95; *Xianzong shilu*, in *MSL*, 11:230-31; *Xiaozong shilu*, in *MSL*, 21:499.
[490] *Xianzong shilu*, in *MSL*, 98:1873; *Xiaozong shilu*, in *MSL*, 179:3301-03; *Shizong shilu*, in *MSL*, 396:6965-66. See also Xiao, *Mingdai shengzhen yingbingzhi*, 524-26.

meant the 370 soldiers sent to man the roughly the 74 beacon towers in the region could not be replaced for long periods of time, stymieing their effectiveness and allowing Mongols to enter. Seventeen years later, Jinglu Guard (in Shaanxi) officials reported that desertion and the dispatching of troops elsewhere had reduced the guard's strength from over five thousand to only several hundred men. Therefore, there was not enough troops left over to respond to military emergencies in other circuits or to reinforce forts in the region.[491] In these two cases the court ordered that these guards be prioritized when military exiles are dispatched. Other measures used to ensure sufficient manpower in the guards for dispatch included the aforementioned practices of recruiting military auxiliaries, utilizing militia forces, and condoning housemen.

The Issue of Supply

The changing patterns of recruitment and changing military conditions in the aftermath of Tumu had an enormous impact on military provisioning. While the recruitment and upkeep of mercenaries and militiamen entailed costs, large-scale recruitment also impacted agriculture. At the same time, regular *weisuo* soldiers still needed to be paid. But the military farms had declined considerably by this period, as colonists were repeatedly mobilized for military duties, forcing the state to shoulder more responsibilities for provisioning the guards. Military pressures in the mid-fifteenth century also exacerbated the problems of the divisional army policy implemented by Yongle. The court thus had to look for ways to logistically support the military, and here too we see a bifurcation between professed rhetoric at court and actual policies in practice.

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[491] "Taojun qiufan bofa Kaiping Yun Longzhou dengchu taojun li" 逃軍囚犯撥發開平雲龍州等處逃軍例, in *Da Ming Jiuqing shili anli*, 23b-26b; "Tongxing zaijing fasi bing Shaanxi Henan Shanxi dengchu wenxing yamen yuyou taojun zuiqiu ji jiangdiao ligong yingbo Yulin zhe fenbo yiban yu zhu Lu wei chaicao li" 通行在京法司并陝西河南山西等處問刑衙門遇有逃軍罪囚及降調立功應發榆林者分撥一半與諸虜衞差操例, in *Da Ming Jiuqing shili anli*, 28a-31a. The court's response was to dispatch criminals to these guards as military exiles.

In the mid-fifteenth century, military farming, civilian transport, and salt-barter continued to be the primary means of provisioning the military. Although the military farms had declined greatly by this period, they still provided some support for the garrisons. For example, in 1457 and 1483, Datong's military farms supplied over 100,000 *shi* of grain. But the other two provisioning methods had superseded military farming – in 1457 civilian transport delivered 150,000 *shi* of grain to Datong, and in 1483, Datong received 200,000 *shi* of millet from the salt-barter method.[492] This system worked well in early fifteenth century in supplying the guards, but new issues after Tumu created new pressures for provisioning. One major issue was caused by the divisional army policy. As noted above, the divisional army had superseded the *weisuo* militarily by this period in terms of military operations (with the *weisuo* regulated to a purely administrative/fiscal unit), but with larger numbers of guard troops being deployed for long periods of time away from their guard, how to transport grain to them became a pressing issue, particularly as divisional army garrisons had no military farms attached to them. Furthermore, double rations were being paid, as soldiers received a traveling ration and their dependents in the guards still claimed their monthly ration.[493] The court thus employed a two-prong solution to solve these issues. First, it attempted to restore the military farming colonies that had been in decline since the 1430s to boost the amount of available grain. Second and more realistically, it continued to rely heavily on salt-barter and civilian transport for provisioning, but increasingly commuted these deliveries of grain into silver.

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[492] Zhang Jinkui 張金奎, "Mingdai Shanxi xingdusi weisuo, jun'e, junxiang kaoshi" 明代山西行都司衛所、軍額、軍餉考實, *Datong zhiye jishu xueyuan xuebao* 大同職業技術學院學報 14, no. 3 (2000): 50.
[493] Okuyama, "Seitō Keitaichō no kyūyo," 244.

However, with the dominant rhetoric at court being one of restoration, its preferred method to solve fiscal issues was to restore the military farming colonies and go back to the self-sufficient days of old. After the Tumu debacle, many proposals were advanced on how to raise funds and gather supplies, including transporting grain from other regions, using the salt-barter method, selling government offices in return for grain contributions, and paying soldiers using silver. However, Yu Qian dismissed them all as temporary solutions, stating that they did not address the root (*ben* 本) of the issue, and he instead advocated the reclamation of land and the restoration of military farming.[494] In 1452, the court embarked on a campaign to restore the military farms throughout the empire, ordering those occupied lands and colonists to return them and mobilizing military auxiliaries to farm. Officials who could not restore occupied farmland were to be punished.[495] In 1454, Minister of War Sun Yuanzhen 孫元貞 (1388-1474) suggested that Yongle's red signboard policy be restored and that more stringent control be exerted over the colonies – "if all the guards farm as they had in the past, then the amount of grain in storage would be innumerable. How can the soldiers lack food to eat!"[496]

The attempt to restore military farming was closely tied to the use of civilian legionnaires and local troops. Recall that in the early days of recruitment, these militia forces were paid a sign-up bonus in silver. However, as the state transitioned to coercive conscription and changed this service into a levy, it could dispense with this payment. Furthermore, these troops were not paid and only received rations while on expedition – they were expected to farm for half the year and support themselves. By combining the usage of farmer-soldiers with the restoration of

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[494] Yu Qian, *Yu Qianji*, 37-39.
[495] *Yingzong shilu*, in *MSL*, 218:4718; 220:4751-52; 221:4781-82; 222:4804.
[496] *Yingzong shilu*, in *MSL*, 247:5354-55.

military farming, the state was attempting to minimize its obligations to support the military and transfer responsibility to the soldiers themselves. This policy certainly seemed good on paper and received the support of policymakers at court. Petitions on adhering to the red signboards were advanced once more in 1458 and again in 1484.[497] Qiu Jun, having expounded at length about the superiority of Ming military farming versus the provisioning mechanisms of previous dynasties, suggested that military farms be implemented throughout the northern border region to restore self-sufficiency and that rents on them be lowered.[498] But as the military situation along the border grew more precarious from the 1470s on, military expenses rose as the court was forced to recruit more troops, which could not be supported through military farming. Between 1500 and 1502, Beijing rushed a total of 4.15 million *liang* of silver to several frontier commands in response to an uptick in Mongol raids, a drastic increase compared to years prior when annual subsidies did not exceed one million *liang* for the entire northern frontier. In 1505, the court disbursed funds to recruit 210,000 mercenaries to strengthen border garrisons.[499]

Unsurprisingly, officials warned that the treasury would soon be exhausted as a result. In 1470, the Minister of Revenue complained that there was not enough money to pay the salaries of military officials in the capital, as their numbers had increased.[500] Han Wen 韓文 (1441-1526), who served in a slew of high court positions, noted in the late Hongzhi-early Zhengde period that the *Taicang* 太倉 granary (the primary granary used to disperse military

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[497] *Yingzong shilu*, in *MSL*, 292:6232-33; 255:4312-13.
[498] Qiu Jun, *Daxue yanyibu*, in *SKQS*, 712:440-41, 443-44, 449.
[499] Terada Takanobu, "Mindai ni okeru henshō mondai no ichi sokumen - kyōun nenreigin ni tsuite" 明代における邊餉問題の一側面 - 京運年例銀について, in *Mindaishi runsō: Shimizu hakase tsuito kinen* 明代史論叢: 清水博士追悼記念, edited by Shimizu hakase tsuito kinen Mindaishi ronso hensan iinkai 清水博士追悼記念明代史論叢編纂委員会 (Tokyo: Daian, 1962), 278; Huang, "Military Expenditures," 68.
[500] "Jian rongshi jie yongdu bing cankao tianxia junzhi liangchao shumu li" 減冗食節用度并參考天下軍職糧鈔數目例, in *TLQW*, 50-66.

expenditures), typically held three to four million *liang* and no less than two million *liang* of silver in reserve for military emergencies, but with recent spending on the military, rewards, and administration, expenses for the year had reached close to five million *liang*, seriously straining finances. Like his colleagues, Han believed that military farming was a sound institution that could alleviate fiscal pressures, but crucially, Han saw it as a long-term solution and recommended other, short-term measures to solve the crisis. These included reducing government supernumeraries and cutting back on rewards, increase collection of commercial taxes, and survey state land to collect unpaid taxes.[501]

Han's suggestion of implanting other measures paralleling the restoration of military farming is important, for in practice the Ming continued to depend on strategies previous courts utilized to provision the military – the salt-barter method, civilian transport, and annual subsidies. One Japanese scholar suggested that from the late fifteenth to the early sixteenth century, between 75 and 90 percent of grain along the northern border was delivered from elsewhere, pointing to the heavy reliance of civilian transport and salt-barter method.[502] To resolve the issue of rations and divisional army deployment, the court also ordered that all dependents accompany the soldier to the new garrison. This served to end the issue of double rations being disbursed as well as to keep soldiers tied down to their garrisons.[503]

Yet an even bigger change that was occurring in the second half of the fifteenth century was the acceleration of silver usage. While silver had been used to pay border garrisons even

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[501] Han Wen 韓文, "Wei quefa yinliang kucang kongxu deng shi" 為缺乏銀兩庫藏空虛等事, in *HMJSWB*, 85:757-59.
[502] Terada Takanobu, "Minunryō to tondenryō: Mindai ni okeru henshō no ichi sokumen (2)" 民運糧屯田糧:明代における邊餉一側面 (二), *Tōyōshi kenkyū* 東洋史研究 21, no. 2 (1962): 200.
[503] Okuyama, "Seitō Keitaichō no kyūyo," 246.

before Tumu, its use expanded drastically after 1449. One impetus for the conversion to silver was that it was an expedient way to pay soldiers. To cut down on costs and time spent transporting grain, the court began paying soldiers with goods from nearby storehouses, including cotton, textiles, and peppers, as well as worthless paper money. But this depreciated the value of the rations, as soldiers needed to sell these goods in exchange for necessities. The situation was especially bad for soldiers who continued to receive rations from faraway granaries, as officials would sell the rations once already for more transportable items.[504] Thus, silver was meant to alleviate this problem.

Some of this silver was disbursed directly by the court in the form of annual subsidies, although as noted above, its amount during this period was minuscule. Most of the silver likely came from converting tax grains and salt-barter. As early as 1445, the Zhengtong court had ordered military farming yields to be converted to silver, ostensibly to ease the burden of transportation. This came off the heels of the conversion of civilian tax grains to silver in 1436. However, these early conversions took place mainly in the south, such as in Zhejiang and Fujian, and among a small number of guards. Conversion of military farming yields in the north did not begin until the Chenghua-Hongzhi period. This reflects what was already noted in the previous chapter with the case of Gansu – that the court preferred to pay its northern garrisons in grain, with silverization occurring relatively late as a result. According to Wang Yuquan, silver conversion was only used in cases where transportation was difficult or applied on lands that produced low yields. Even then, only a portion of the rent was paid in silver.[505] Salt-barter was also largely converted to silver, which will be explained in detail below. Finally, there were

[504] Okuyama, "Seitō Keitaichō no kyūyo," 262.
[505] Wang, *Mingdai de juntun*, 159-69.

civilian transport grains. Much like military farming yields, their conversion to silver can also be traced to the Zhengtong period, but the practice did not become widespread until the early sixteenth century. In Datong, for instance, the first record of civilian transport grains being converted to silver only appeared in 1524.[506]

Against this backdrop was the continued push to restore military farming. Rhetoric ran high, and the Chenghua and Hongzhi courts seemed committed to the long-term plan of restoration. Many officials were thus dispatched to supervise or manage (*tidu* 提督, *guan* 管, *li* 理) the military farms. A 1480 imperial edict to these officials spelled out their duties. They were to ensure the timely collection and delivery of tax grains, recover occupied land and return deserted colonists to service, and vigorously investigate and prosecute anyone who commit abuses.[507] Officials whose colonies could not produce enough grain to meet court established quotas would have their salaries suspended.[508]

Table 4.1 Officials dispatched by the Chenghua court to oversee military farms

Date	Entry	Source
Chenghua 2/*run* 3/9 (1466)	Datong Rear Guard Military Commissioner… Chen Zhi is promoted to oversee affairs of the Assistant Commissioner of the Shanxi Branch Regional Military Commission…Zhi will manage military farms.	*Xianzong shilu*, 28:554
Chenghua 11/6/24 (1475)	It is ordered that the Assistant Provincial Commissioner of Yunnan Weng Sui will concurrently manage the military farms.	*Xianzong shilu*, 142:2642

[506] Terada, "Minunryō to tondenryō," 196-206; Zhang, "Mingdai Shanxi," 50.
[507] "Jingcheng xiatun junqi youfan taohui laijing qianduo xu guantun qianshi zouxing fasi najie benguan shouwen li" 京城下屯軍旗有犯逃回來京潛躲許管屯僉事奏行法司拿解本官收問例, in *Da Ming Jiuqing shili anli*, 31b-33b.
[508] "Tuoqian tunliang zhangyinguan guantunguan buceng jingshou xi mian zhufeng" 拖欠屯粮掌印官管屯官不曾經手悉免住俸, in *Da Ming jiuqing shili anli*, 26b-27a; "Tuoqian tunliang guanyuan zhufeng cuizheng li" 拖欠屯粮官員住俸催徵例, in *Da Ming jiuqing shili anli*, 28b-30a.

Chenghua 13/4/24 (1477)	An additional Associate Administrator is appointed to Yan'an prefecture in Shaanxi with the sole duty of pacifying the soldiers and managing the military farms.	*Xianzong shilu*, 165:2993
Chenghua 13/10/6 (1477)	An additional Vice Provincial Surveillance Commissioner is appointed to Yunnan to manage the military farms.	*Xianzong shilu*, 171:3095
Chenghua 14/10/7 (1478)	Secretary of the Ministry of Revenue Dong Ling is promoted to Assistant Provincial Surveillance Commissioner of Henan with the sole duty of managing the military farms.	*Xianzong shilu*, 183:3297
Chenghua 16/9/2 (1480)	Xu Jin [is given] the sole duty of managing military farms to ensure [the availability of] military supplies [in Huguang].	*Xianzong shilu* 207:2605
Chenghua 17/3/5 (1481)	Shanxi Assistant Provincial Surveillance Commissioner Wang Kuan is promoted to Vice Provincial Surveillance Commissioner with the sole duty of managing military farms.	*Xianzong shilu*, 213:3698
Chenghua 18/2/29 (1482)	Associate Prefect of Yan'an Prefecture Zhang Chengzong is promoted to Assistant Provincial Surveillance Commissioner of Shaanxi with the sole duty of managing supplies for border [garrisons] in Yulin and other areas while concurrently supervising the military farms.	*Xianzong shilu*, 224:3856
Chenghua 18/12/26 (1482)	Meiyu Battalion's reserve commander Yang Rong is promoted to oversee affairs of the Assistant Military Commissioner of the Wanquan Regional Military Commission to supervise the military farms and capture bandits.	*Xianzong shilu*, 235:4012
Chenghua 22/12/16 (1486)	It is ordered that the Assistant Commander of the Yunnan Left Guard Ma Xuan will supervise the military farms.	*Xianzong shilu*, 285:4822
Chenghua 23/2/18 (1487)	Director of the Ministry of Punishments…Yang Guangpu is promoted to the position of… Vice Provincial Surveillance Commissioner of Shanxi with the duty of managing military farms.	*Xianzong shilu*, 287:4854
Chenghua 23/2/20 (1487)	Secretary in the Ministry Revenue Chen Mo… is promoted to the position of Assistant Provincial Surveillance Administrator of Henan with the duty of pacifying the people and managing the military farms…Office Director in the Ministry of War Zhang Shanzhao…is promoted to the position of Assistant Provincial Surveillance Administrator of Sichuan with the duty of managing the military farms.	*Xianzong shilu*, 287:4855-56

Table 4.2 Officials dispatched by the Hongzhi court to oversee military farms

Date	Entry	Source
Chenghua 23/12/3	An additional Assistant Prefect is appointed to Lintao and Gongchao Prefectures in Shaanxi with the sole purpose of supervising the military farms and irrigation works.	*Xiaozong shilu*, 8:157
Hongzhi 4/2/3 (1491)	It is ordered that Assistant Regional Commander of Yunnan Fang Xi will supervise the military farms.	*Xiaozong shilu*, 48:961
Hongzhi 6/4/4 (1493)	The Assistant Surveillance Commissioner of Zhejiang Chen Jiamo is transferred to Shandong to manage the Northern Zhili military farms.	*Xiaozong shilu*, 74:1378
Hongzhi 9/5/10 (1496)	The Prefect of Jizhou in Zhili Qian Chengde is promoted to Shandong Assistant Surveillance Commissioner to manage the Northern Zhili military farms.	*Xiaozong shilu*, 113:2053
Hongzhi 16/4/6 (1503)	It is ordered that Vice Surveillance Commissioner of Guizhou Mao Ke will be transferred to supervise the schools and concurrently supervise and manage the military farms.	*Xiaozong shilu*, 198:3657
Hongzhi 17/2/6 (1504)	The Vice Surveillance Commissioner Li Weicong is transferred to the Shandong Surveillance Commission with the sole purpose of managing the Liaodong military farms.	*Xiaozong shilu*, 207:3852
Hongzhi 17/9/28 (1504)	Vice Director of the Ministry of Revenue Feng Kui is promoted to Assistant Surveillance Commissioner…Kui will be assigned to Guangdong to rectify the salt monopoly and concurrently manage the military farms.	*Xiaozong shilu*, 216:4077

Liaodong, which the Chenghua and Hongzhi courts were especially concerned about, provides a perfect example of the challenges facing the court and the solutions it employed to resolve those challenges.

Mid-Ming Liaodong

Liaodong in the late fifteenth-century was at the center of a crisis that consumed the Chenghua court. This crisis had its roots in the 1430s with the southward migration of the

Uriankhai Mongols, which put strain on Ming defenses, and was compounded in the second half of the fifteenth century by increased Jurchen activity.[509] Even as nomad raids grew frequent, Liaodong's guards were depleted due to desertion, privatization, and deployment of its troops elsewhere. One official told the emperor in 1468 that one Liaodong guard originally had 11,030 troops, but now had only 1,870. To make up for the missing personnel, farming colonists were drafted to man the guards or to construct defensive fortifications, exacerbating the decline of the farming colonies.[510] Mao Tai 毛泰 (*js.* 1469), who oversaw military provisions during this period, gave a bleak assessment of Liaodong's situation in 1483. According to Mao, yields from the Liaodong military farms fell to less than a quarter compared to that of the Hongwu era while the number of farming soldiers was only thirty-seven percent of that of the Xuande era. Mao attributed the decline of the farms to a 1476 decision by Liaodong Grand Coordinator Chen Yue 陳鉞 (1429-1488) to have colonists train while also releasing 60,000 unregistered colonists – military auxiliaries whose registration could not be verified and therefore were drafted to the local guards – from their farming duties to alleviate their burdens. Within five years, Liaodong's grain output was reduced by 300,000 *shi*. Now, Liaodong had only 16,700 colonists and could only produce 167,900 *shi* of grain, but of that 70,000 to 80,000 *shi* were waived due to famine. Thus, the thirty-two granaries of Liaodong did not even possess two months' worth of grain.[511]

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[509] See Zhang Shizun 張士尊, *Mingdai Liaodong bianjiang yanjiu* 明代遼東邊疆研究 (Changchun: Jilin renmin chubanshe, 2002), 203-46; Zhao, *Mingdai jiubian changcheng*, 348-63.
[510] "Qingli junhu ji junren shengdiao dengxiang yixia dizhi qingyuan toujun xuling shouyi li," in *HMTFSLZ*, 1064; Du, *Shugu fengyan*, 201-03.
[511] *Xianzong shilu*, in *MSL*, 244:4138-40. Chen Yue sought to lessen the burdens placed on military auxiliaries. See his memorial in *Xianzong shilu*, in *MSL*, 172:3104. The *Mingshi jishi benmo*, mentions that Chen Yue was transferred away from Liaodong by Vice Minister of War Ma Wensheng for being unfamiliar with Liaodong's affairs and for implementing inappropriate policies. See *Mingshi jishi benmo*, 555-56.

Mao's dire assessment seemed accurate. Since the Zhengtong reign, the court annually disbursed 100,000 *liang* of silver to Liaodong to subsidize a portion of the military spending there. One official estimated in 1476 that this was sufficient to purchase 400,000 *shi* of millet.[512] The remainder had to be gathered from other sources. Officials in 1484 noted that military farming and annual subsidies accounted for 520,000 out of the 965,300 *shi* of grain Liaodong needed, suggesting that military farming could only supply around 120,000 *shi*. Other passages in the *Veritable Records* give similar figures, that military farming and annual subsidies accounted for fifty to sixty percent of Liaodong's grain in this period. Liaodong annually required 800,000 to 1,000,000 *shi* of grain to function, and if annual subsidies could purchase between 300,000 to 400,000 *shi*, the colonies could therefore only produce between 100,000 to 200,000 *shi*.[513] The remainder of Liaodong's needs came from the salt-barter method. But officials warned the emperor that the treasury was rapidly losing the ability to pay for Liaodong's military upkeep due to high military spending and lack of merchants responding to salt-barter. Thus, the court sought to restore the farming colonies.

In 1477, the court ordered that officials audit the status of military farms in Liaodong's twenty-one guards and that unoccupied land should be turned over to landless military auxiliaries to farm.[514] Mao Tai in his 1483 memorial urged the court to "study the old regulations of the military farms. All regulations that could be implemented should be carefully deliberated and put into practice…Those who disobey the old regulations should be punished. This way, supplies at the border will be abundant." As for specific policy measures, Mao Tai recommended that two

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[512] Wang Zunwang 王尊旺, *Mingdai jiubian junfei kaolun* 明代九邊軍費考論 (Tianjin: Tianjin guji chubanshe, 2014), 150-51.
[513] *Xianzong shilu*, in *MSL*, 191:3401; 249:4213; 262:4443.
[514] *Xianzong shilu*, in *MSL*, 172:3104-05.

registers be compiled for the farming colonies and that these registers be compared annually.[515] In response to Mao Tai's memorials, the court decreed in 1484 that Yongle's red signboards be restored. Military officers were also forbidden from mobilizing farming colonists for construction – they should instead conscript laborers from the 180,000 military auxiliaries in Liaodong.[516]

One Chinese historian notes that Mao Tai's measures demonstrated some success, but that his success is impossible to quantify.[517] Nonetheless, we can glimpse the results by drawing on figures from later records. In 1537, Liaodong's farming colonies produced 364,900 *shi* of grain and included 18,635 colonists, a figure that remained stable for the next three decades (see Chapter 5). In 1508, the Zhengde court reported an income of 241,460 *shi* from Liaodong's military farms, already an increase from the lows of Mao Tai's time.[518] By this time a portion of Liaodong's farming yields had also been converted to silver – in the early Jiajing reign it was recorded that Liaodong's farms produced 259,990 *shi* of grain and also supplied 205,965 *liang* of converted silver.[519] Thus, we can postulate that Liaodong's farms could produce upwards of 370,000 *shi* of grain in total, with a quarter being converted to silver and the rest in grain.

What does this mean for Liaodong's restoration attempt? Despite the rhetoric of going back to the days of Hongwu and Yongle, in practice the emperor, court ministers, and local authorities were all cognizant of the fact that it was impossible to do so. Rhetoric aside, what

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[515] *Xianzong shilu*, in *MSL*, 244:4138-40; 249:4214.
[516] *Xianzong shilu*, in *MSL*, 255:4312-13
[517] Zhang, *Mingdai Liaodong*, 359.
[518] Zhan Jifa 戰繼發 and Wang Yun 王耘, *Heilongjiang tunken shi di yi juan* 黑龍江屯墾史第一卷 (Beijing: Shehui kexue wenxian chubanshe, 2017), 158-59. It was also noted that as a result of surveying, the court managed to raise the total income of all of Liaodong's farms to 451,391 *shi*, but this included income from taxing military auxiliaries' lands and estates owned by large families. This success was likely short-lived, as these measures were stopped the following year after a major mutiny.
[519] Wang, *Mingdai de juntun*, 168.

mid-Ming restoration attempts in Liaodong was trying to accomplish was not to go back to the early 1400s, but to maintain the current status of the colonies. At best, it sought to restore the farming colonies to the production level of the 1430s.[520] Moreover, restoration was a long-term solution and officials needed to depend on other methods to raise funds in the interim. These methods, as the Grand Coordinator of Liaodong Ma Wensheng 馬文升 (1426-1510) noted in 1485, included claiming taxes on lands that were being shielded from taxation, increasing commercial and transportation taxes, and granting more salt licenses. Indeed, the salt-barter trade continued to provide a lion's share of Liaodong's grains.

For example, in preparation for an attack on the Jurchens in 1467, Liaodong authorities used the salt-barter method to stockpile grain. In 1472, a total of 630,000 salt licenses were disbursed for nearly 500,000 *shi* of grain. A decade later, 900,000 salt licenses were granted to alleviate famine in Liaodong.[521] The court adjusted the value of the salt licenses based on current market conditions to maximize the amount of grain that could be delivered while also constructing defensive fortifications to protect merchants from nomadic raids. By the late fifteenth century, with the increasing use of silver, the salt-barter trade was also monetized, with merchants paying silver for licenses instead of delivering grain. The first instance was in 1499, when 597,450 licenses were converted to silver at an unknown rate for use in Liaodong.[522] Thereafter, conversions became more common.

Much like the conversion of tax grains and civilian transport to silver, allowing merchants to use silver instead of in-kind goods for salt licenses was also premised on

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[520] Zhang, *Mingdai Liaodong*, 357.
[521] *Xianzong shilu*, in *MSL*, 110:2136; 229:3929; Zhang, *Mingdai Liaodong*, 240-42.
[522] *Xiaozong shilu*, in *MSL*, 152:2692.

convenience. Beginning in 1466, the court also allowed merchants to deliver silver directly to local Salt Distribution Commissions (*du zhuanyun yanshi si* 都轉運鹽使司) instead of to the frontier, and authorities would either purchase grains with the silver or forward it directly to the garrisons.[523] This represented a major transformation of the salt-barter institution. According to Terada Takanobu, this change was mutually beneficial for both the state and the merchants. Officials found that they could charge merchants more per license for deliveries inland to Salt Distribution Commissions, sometimes double the price of deliveries to the frontier. Merchants were willing to accept this price increase because it was more convenient and economical for them. Eventually this led to two types of salt merchants – "frontier merchants" continued to make deliveries of grain or silver to the border garrisons, while "inland merchants" made deliveries to Salt Distribution Commissions. By the end of the Zhengde period, most of the salt-barter revenue came from inland merchants and deliveries.[524] However, as the following chapter will argue, this policy had a debilitating effect on border grain prices, even as it allowed the court to bolster its coffers with silver.

How Successful Was Restoration?

Liaodong's case above shows that actual practice differed radically from professed rhetoric. While some officials believed it possible to go back to "the good old days", most saw that as an ideal that was impossible to reach and so took a more realistic view of the situation. As long as colony production was stable and did not decline further, they could source funds from other avenues to support the garrisons. The Liaodong case, I think, is likely true for other areas

[523] Wang Minquan 王敏銓 et al., *Zhongguo jingji tongshi: Mingdai jingji juan* 中國經濟通史: 明代經濟卷 (Beijing: Jingji ribao chubanshe, 2000), 1025.
[524] Terada, *Shanxi shangren yanjiu*, 100-04.

as well. Han Wen noted that the Chenghua restoration attempts focused primarily on military farms in the Northern Capital Metropolitan Region and that the colonies of the border garrisons were not restored. Ma Wensheng was more specific about the results. In an undated memorial, Ma wrote that restoration had thus far uncovered 41,000 *qing* of illegally occupied farmland and 408,000 *shi* of grain throughout the empire, a paltry amount given what was needed to sustain the garrisons.[525] Both recommended more intense restoration efforts take place, but also suggested alternative measures in the meantime.

The decline of the military farms should be seen in the context of the depletion of the guards. With colonists either deserting or being mobilized for military duties, their lands were naturally gobbled up by officers. As the previous chapter noted, salt-barter and annual subsidies had already begun to supersede military farming in providing for the garrisons in the 1430s. Socioeconomic changes in the second half of the fifteenth century only accelerated the decline of the farming colonies. Much like their civilian counterparts, colonists turned towards powerful military officials or nobles to shield them from taxation. Some sold or mortgaged their land. Abandoned colony farmland was also occupied by civilians, who registered them with local authorities.[526] And with the state lacking the same degree of control over society as it did during earlier periods, it was increasingly difficult to arrest these developments.

What the ideal of restoration as seen in the rhetoric of many officials entailed was returning the institution back to what it had been at its height. It did so through the compilation of registers, by attempting to claw back land from the hands of officials and nobles, returning

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[525] Ma Wensheng 馬文升, "Qing tuntian yi fu jiuzhi shu" 清屯田以複舊制疏, in *HMJSWB*, 63:519-20; Han, "Wei quefa yinliang kucang kongxu deng shi," in *HMJSWB*, 85:758-59.
[526] Wang, *Mingdai de juntun*, 287, 290; Liew, "Tuntian Farming," 151-52.

farming personnel to the colonies, and by punishing corrupt officials. Yet the socioeconomic context had clearly changed, and simply addressing the problems on the surface was both insufficient and unrealistic. Moreover, military farming took time to produce results, and officials found it more expedient to use silver and salt-barter instead to raise funds. Thus, when the court urgently needed supplies for an upcoming campaign against the Jurchens, it turned to merchants, not military farms.

Restoration also carried with it the risk of alienating those who stood to gain from occupying farmland. In 1509, mutinies erupted in Jinzhou 錦州 and Yizhou 義州 in Liaodong, caused by overzealous officials attempting to register colony farmland in Liaodong in preparation for restoration. Military officers with privatized farmland led the charge, destroying buildings and beating and driving out the court commissioners. Local officials, many of whom occupied land themselves, tacitly sided with the mutineers and did nothing to stop them. Thereafter, the court relented and canceled land registration in Liaodong.[527] To be fair, military farming did not totally disappear insofar as it was still able to provide some grain but restoring them back to when they could provide hundreds of thousands of *shi* of grain was simply not possible. The late Hongzhi decision to approve the use of housemen was an unspoken acknowledgment by the court that it had essentially given up on further restoration, so long as it could maintain the current state of the farming colonies.

[527] Du, *Shugu fengyan*, 225.

The Mid-Ming Reconsidered

The events of 1449 left a long-lasting impact on the military policy of the Ming. Thereafter, no Ming emperor again campaigned in person, nor did the Ming state again attempt large-scale power projection in the steppes. Its military philosophy on how best to guard the state vacillated between offense and defense for several decades before gradually settling on defense. The Great Wall that we are all so familiar with today was constructed during the late-sixteenth century, the result of the Ming's loss of military power in the aftermath of the Tumu Incident.[528] While this overall change in border defense policy is not difficult to trace, a far more complex issue is the Ming policies towards the *weisuo*.

Chinese scholars have come to note that the *weisuo* gradually evolved from a military organization system to a military household management system (mainly to ensure hereditary conscription could take place) while its troops evolved from combat soldiers to a source of manpower for recruitment into the divisional army.[529] David Robinson has offered a similar view on the evolution of the *weisuo*, writing that the changes within the system were tied to and resulted from wider socioeconomic developments, most importantly the increasing monetization of taxes and labor duties.[530] The decision to tap into the large pool of military auxiliaries and to recruit non-traditional troops were seen as the natural result of the evasion of military duty by soldiers, the proliferation of military household members which led to an expansion of military

[528] Mote, "The T'u-mu Incident of 1449," 267-72; "The Ch'eng-hua and Hung-chih Reigns, 1465–1505," 371; Arthur Waldron, *The Great Wall of China: From History to Myth* (Cambridge: Cambridge University Press, 1992), 56-57, 91-107; Fan, *Mingdai junshi shi*, 439-40.
[529] Li, *Mingdai qianqi junshi zhidu yanjiu*, 276; Guo, *Mingdai weisuo "minhua"*, 88.
[530] Robinson, "Military Labor in China," 72-75.

auxiliary numbers, and the increasingly monetized economy. Yet at the same time, the court continued to devote resources into reviving track and replace and military farming.

The rhetoric that undergirds restorationist policies and the policies that were implemented reveal a deep tension between restoration and adaptation. The views of many major fifteenth century political figures such as Yu Qian, Ma Wensheng, Qiu Jun, and others show that restorationist ideology was prevalent in the upper echelons of government. Under their leadership and encouragement, the court invested heavily in restoration as a long-term solution to the ills of the military. Yet officials on the ground recognized that restoration was a painstakingly long process that was difficult, if not impossible, to produce any meaningful results. Thus, aside from staunch restorationists like Qiu Jun who never held territorial office, those who espoused restoration but had local military and/or administrative experience relied instead on other methods to shore up the military.

These methods were the policies implemented after Tumu to refill the guards, which had worked well in allowing the court to reconstitute its defenses. It was easier for officials to recruit fresh personnel from the ranks of military auxiliaries and to conscript civilian militia than it was trying to track and replace missing *weisuo* personnel. These large pools of available labor were simply too tempting for the court to ignore, particularly when track and replace produced poor results, and policies to conscript them were made permanent. For provisioning, using merchant contributions and silver subsidies was far more expedient than military farming. Thus, when Ma Wensheng was Grand Coordinator of Liaodong, he recommended several actions the court should take to quickly make up for the lack of supplies in Liaodong. Military farming was not one of them, despite Ma's professed support for the institution.

Still, it was not possible for the court to move away from the *weisuo*. Ideologically it was an ancestral institution that could not be ignored. Financially, hiring soldiers was simply not seen as a viable long-term solution due to fiscal constraints. The Ming state did not possess institutions that could draw in sufficient amounts of revenue to support a professional army, even given the commercial growth that was starting to occur. It is not surprising, then, that the court preferred to use militias, who were supposed to be self-supporting. It conformed to Hongwu's vision of farmer-soldiers while also saving on military upkeep, thus addressing two problems simultaneously.

The tension between adaptation and restoration also played out between central and territorial officials. Territorial officials, who were more knowledgeable of local conditions, often adjusted central policies during implementation. This is best demonstrated in Shanxi officials' conversion of militia service to silver mentioned above. This was a win-win policy for both the civilians and the officials – households could pay to avoid onerous military service while local authorities could use the money as they saw fit. But when this policy was reported to Beijing, it was rejected on account that there was no precedent for it. The growing prominence of housemen, funded initially by occupied military farmland, and their acceptance by the court also reveals a similar tension, for it clashed with the goal of restoring the farming colonies. In the end, the military utility of the housemen outweighed the imagined benefits of restoration. It was far better to keep the commanders and their retainers in line than to alienate them by attempting to recover occupied farmland – the mutiny in Liaodong demonstrated the volatility of such actions.

The transformation of the military, then, paralleled the treatment of other aspects of Hongwu's institutions. In her essay on Ming monastic policies, Anne Gerritsen noted that despite idealizing Hongwu's policies, when actually implementing laws later emperors and their officials

only "[selectively adopted] Hongwu measures, depending on which circumstances seemed most pressing at the time and which aspects of the Hongwu legacy seemed most pertinent." Many were cognizant of the differences between the letter of the law and the new social reality, and those differences were accepted.[531] The large number of precedents and sub-statutes (both of which were used to explain deviations from past law and regulations) promulgated in this period for the military shows that the treatment of the *weisuo* was the same. Most professed support for Hongwu's institution and rallied behind the rhetoric of restoration. Some, like Qiu Jun, might have genuinely believed it possible to go back to the ideal days of old. But these officials, I believe, were in the minority. Most recognized that restoration was perhaps better suited to maintain the status quo and prevent further deterioration. Officials up and down the bureaucracy turned elsewhere for solutions, continually reassessing and recalibrating different policy measures to match ever evolving socioeconomic conditions, all the while preserving the shells of the old institutions. Thus, despite the rhetoric of *restoring* the *weisuo*, what the court actually did was to *reconstitute* it.

Conclusion

This chapter is a story of both success and failure, and it is a story of not restoration, but reconstitution. Even as the court continued to remain ideologically committed to the *weisuo* and professed rhetoric to restore it, policymakers were also turning to towards more adaptive policies that proved more effective in bolstering the military. Despite increased Mongol raids in the second half of the fifteenth century and challenges to Ming hegemony in Central Asia, the Ming

[531] Anne Gerritsen, "The Hongwu Legacy: Fifteenth-Century Views on Zhu Yuanzhang's Monastic Policies," 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), 62-63, 69.

military was, for the most part, able to meet these challenges. But problems persisted, particularly with burgeoning military expenditures, the result of increased military action as well as large-scale recruitment and conscription. The court's preferred method of restoring military farming could not achieve the desired effect of lessening military spending and could only maintain its current situation, and it was forced to continue relying on salt-barter and later, annual subsidies. Despite complaints of bankruptcy, the court was ultimately still able to find the necessary funds.

The following chapter will explore how the military system further changed in the sixteenth century. The twin crises of the Jiajing reign – the *wokou* raids from the 1540s to the 1560s and the growing power of the Mongols, culminating in Altan Khan's (1507-1582) siege of Beijing in 1550 – revealed the inadequacies of the mid-Ming military apparatus and marked the final end of restoration attempts. Thereafter, mercenary recruitment completely displaced coercive conscription, annual subsidies replaced military farming and the salt-barter mechanism, and housemen became a potent fighting force that went on state payroll. These actions, coupled with the continued ability of the court to draw on funds to support the military, allowed the Ming was able to weather through the crises of the mid-sixteenth century. In many ways, the success of these policies was because the foundations for them had already been laid in the decades prior. Thus, just as the Tumu Crisis accelerated early fifteenth-century trends, so too did the new crises of the Jiajing reign accelerate trends that had already appeared in the early sixteenth-century. Restoring the *weisuo* might have failed, but the court did lay the foundation for policies that would strengthen the Ming military as it entered the seventeenth century.

Chapter 5. A New Era: The Ming Military in the Sixteenth Century

In June of 1550, Mongol forces under Altan Khan (1507-1582) raided the Ming frontier garrison of Datong. At first glance, this raid seemed no different from those that the Mongols had been conducting since the latter half of the fifteenth century. However, by October, Altan's forces had put Beijing under siege and were looting its suburbs. In a repeat of the aftermath of the Tumu Crisis a century earlier, Beijing was once again threatened by nomads. Despite possessing 140,000 men on paper, the combat strength of the capital garrisons was less than half that number. What soldiers that could be mobilized refused to fight, fearing the Mongols' strength, and provisions could not be found for the reinforcements. Fortunately for the Ming, Altan had no imperial or territorial ambitions – he retreated after his troops had plundered the area and having gotten the Ming to agree to open border markets for trade.[532]

The "Gengxu Disturbance" (*gengxu zhibian* 庚戌之變), as the event came to be known, exposed deep inadequacies in the Ming defensive network. Whereas Beijing was rendered defenseless in 1449 because the Capital Army had been destroyed at Tumu, in the 1550 raid the Capital Army and Beijing's defenses failed altogether in preventing the Mongols from approaching the capital. After the raid, the Ming court embarked on reforms that changed the nature of military service, abandoning coercive conscription in favor of voluntary recruitment. The *weisuo* that was instituted by the dynastic founder was reduced to a logistical and management unit. Yet as was the case with military reforms after the Tumu Crisis, the changes to

[532] For a summary of the raid, see James Geiss, "The Chia-ching Reign, 1522-1566," in *The Cambridge History of China, Vol. 7: The Ming Dynasty, 1368-1644, Part I*, edited by Frederick W. Mote and Denis Twitchett (Cambridge: Cambridge University Press, 1988), 475-76; John Dardess, *More than the Great Wall: The Northern Frontier and Ming National Security, 1368-1644* (Lanham: Rowman & Littlefield, 2022), 412-13.

policy and institutions brought about by Altan's raid were not instantaneous – the Ming did not simply abandon one set of institutions for another. Rather, the foundations for marketized recruitment and payments in silver had been established long before then, and the 1550 military crisis simply accelerated these trends. Furthermore, stark regional variations arose in these new patterns of recruitment and provisioning. At the same time Mongols were putting pressure on the northern frontiers, southeastern China was facing a very different threat – so-called "Japanese pirates" (*wokou* 倭寇) who plagued the coastal region for much of the mid-sixteenth century.[533] The very different socioeconomic nature of the southeast, coupled with the dissimilar nature of the *wokou* threat vis-a-vis that of the Mongols', necessitated different responses from the court.

This chapter will explore three aspects of the transformation of Ming military policy in the mid-sixteenth century – recruitment, construction, and provisioning. First, the Jiajing court accelerated the transition to a new model of military mobilization premised on the hiring of volunteers with silver. The twin military crises that broke out in the Jiajing period signaled that the Chenghua-Hongzhi era policies of coercive conscription and *weisuo* restoration were no longer sufficient to meet these new challenges. This chapter will focus on the north/northeast and the southeast to show that organization and upkeep of hired troops in the north and south were very different in nature, a result of different socioeconomic conditions that was becoming more apparent during this period. Second, the construction of border fortifications assumed unprecedented importance in Ming military policy during the sixteenth century, was a key component of the Ming military transformation, and increasing military spending. Finally, this chapter will explore the fiscal impact that this all had on the Ming. The construction of

[533] Despite being called "Japanese pirates", historians agree that the majority were actually Chinese. See Kwan-wai So, *Japanese Piracy in Ming China during the 16th Century* (East Lansing: Michigan State University Press, 1975).

fortifications went hand in hand with the recruitment of troops, and the combined costs put great pressure on Ming finances. This forced the court to reassess strategic threats and look for new avenues to raise funds, demonstrating its flexibility in working within finite resources and fiscal constraints to support the military. Ultimately, the demand for silver payments to the military helped to usher in the Single-Whip Reforms, which transformed the Ming tax system. By demonstrating the continuous evolution of Ming military policy and institutions during the sixteenth century, this chapter highlights the various challenges facing the Ming court and the policies it implemented to support the military as it attempted to navigate new crises and issues. It also argues that with the transformation to marketized recruitment, the Mongol military institutions the Ming inherited finally went out the door.

Changing Patterns of Defense

When speaking of Ming border defenses in the sixteenth century, it is impossible to ignore the presence of the Nine Garrison Commands, which included Liaodong, Xuanfu, Datong, Yansui, Ningxia, Gansu, Jizhou, Shanxi, and Guyuan, all located along the northern border in strategic locations.[534] Together, they formed the linchpin of Ming defenses, and each of the garrison commands controlled garrison cities, forts, and tens of thousands of troops. As the previous chapter has shown, the Nine Border Commands had their roots in the divisional army system and was already becoming prominent in the second half of the fifteenth century when military circuits were drawn up to subdivide the garrison commands. By the early sixteenth century, the Nine Garrison Commands had become fully crystallized with a unified command

[534] Wei Huan 魏煥, *Huang Ming jiubian kao* 皇明九邊考, in *Siku quanshu congmu congshu* 四庫全書存目叢書, 226:10.

structure and clearly delineated military responsibilities divided among commanders of different ranks. Each garrison command was a node of military activity, with a large number of elite troops and an intricate series of defensive fortifications under its jurisdiction. Together, these nine garrison commands formed a continuous defensive line stretching from the northwest to the northeast and allowed for more flexible military defense and operations.

By the mid-sixteenth century, a clear command-and-control structure had been implemented for the garrison commands. Each was led by a Regional Commander (*zongbing* 總兵), who commanded troops known as the "primary army" (*zhengjun* 正軍). They were responsible for the Regional Commander's safety, but also assisted in autumn patrols and reinforced other units in times of need. The Regional Commander was assisted by a Vice Regional Commander (*fu zongbing* 副總兵), who commanded an elite corps of troops known as "shock troops" (*qibing* 奇兵). They were mainly used to reinforce troops in combat and to engage in ambush maneuvers. Each of the garrison command's individual circuits were defended by "reinforcing troops" (*yuanbing* 援兵), led by Assistant Regional Commanders (*canjiang* 參將). *Yuanbing* also participated in military expeditions and autumn patrols and could be called to reinforce other circuits. Finally, there were "mobile troops" (*youbing* 游兵) led by Mobile Corps Commanders (*youji* 游擊) who engaged in patrol and other defensive duties. They could also be called upon to serve as reinforcements, participate in offensive raids, or even be dispatched to the capital to shore up defenses there.[535]

[535] Xiao, *Mingdai shengzhen yingbingzhi*, 42-48.

Each military unit within the divisional army, with the number of units differing depending on the size of the garrison command, was composed of three thousand men – a military necessity given how the circuits were structured. Each circuit was made up of two defensive lines, with the first line defended by two thousand infantry and the second manned by one thousand cavalry. The command city, where the Regional Commander oversaw the entire garrison, typically had around 20,000 troops in reserve. Each divisional army unit of three thousand was made up of squadrons (*wu* 伍) of five, with ten squadrons making up a company (*dui* 隊) and ten companies making up a battalion, led by a battalion commander (*zongba* 總把). Two battalions made up a chiliarchy, and each unit had three chiliarchs (*qianzong* 千總) who reported to one commander.[536] Thus, the superiority of the divisional army and the garrison command system over the traditional *weisuo* was not only because they were composed of more elite troops, but also because they allowed for more flexible responses by more cohesive military units – troops can be dispatched rapidly to any area and different circuits can come to each other's aid.

In 1533, the Jiajing emperor formally institutionalized the appointment of Regional Commanders and forbade officials from protesting against their appointment. The three criteria for Regional Commanders were that they be brave, knowledgeable in military strategy, and that they were familiar with border affairs. Nonetheless, Jiajing ordered that they still be drawn from members of the merit nobility, a sign that the merit nobility continued to play an important

[536] Xiao, *Mingdai shengzhen yingbingzhi*, 48, 291. The number of divisions was depended on how many circuits the garrison command was subdivided into. Shaanxi, for instance, had twenty-four divisions in total, while Datong would have had twelve divisions in total. It's also important to note that divisions were not always at full strength. See Xiao, *Mingdai shengzhen yingbingzhi*, 283-85, 288.

military role.[537] By the 1540s, the court was allowing Regional Commanders to recruit and train their own troops, likely because this improved combat efficiency by allowing commanders and troops to form stronger bonds.[538] Yet this also essentially transformed the divisional army into a private retainer force that was paid for by the state, completely discarding Hongwu's ideal that troops and commanders have no contact during peacetime.

The superiority of the divisional army and the garrison commands to Ming policymakers essentially sounded the death knell for the *weisuo* and military rectification. The *weisuo*'s only purpose thereafter was to organize recruited units and provide logistical support, such as manufacturing and supplying weapons, and also acting as a base camp for family members of soldiers. In Liaodong, for instance, *weisuo* officers were no longer in charge of the military and instead became local administrators dealing with matters such as local security, famine relief, and criminal trials.[539] The *weisuo*'s decline in importance and the turn towards marketized recruitment naturally meant that military rectification, which was used to conscript soldiers from the hereditary military households, was no longer critical, since soldiers can just be hired. Already in the Zhengde period, rectification was paused for three years and proposals to abolish rectification censors were starting to appear. The importance of military rectification continued to decline throughout the Jiajing reign until rectification censors were finally abolished in the late sixteenth century, with Regional Inspectors (*xun'an yushi* 巡按御史) and local civilian officials taking over military rectification duties.[540]

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[537] *Shizong shilu*, in *MSL*, 125:2998-99; 148:3418.
[538] Xiao, *Mingdai shengzhen yingbingzhi*, 284.
[539] Du, *Shugu fengyan*, 135-36; Xiao, *Mingdai shengzhen yingbingzhi*, 523-24.
[540] Yu, *Mingdai junhu shixi zhidu*, 107-08, 200.

In response to growing Mongol power under the leadership of Altan Khan, the Ming court substantially increased the resources it devoted to its northern border defenses. The number of troops dispatched to the northern frontiers increased exponentially. One Chinese scholar has calculated that by the end of the Jiajing reign, there were likely upwards of 800,000 troops spread throughout the nine garrison commands, higher than even the early Yongle period (683,056 troops). This number fell to between 400,000 and 600,000 troops by the early Wanli reign but was still significantly higher than the second half of the fifteenth century, when the number of troops stationed in the north was likely only between 250,000 and 280,000. However, these figures only included *weisuo* troops (encompassing recruited soldiers, since most of them were organized under the *weisuo*), with civilian legionnaires and local troops not counted.[541] Additionally, during times of emergency troops could be dispatched to a region from the Capital Army or from other areas, and these "guest troops" (*kejun* 客軍) were often not included in the military strength of the garrisons. Thus, new emerging threats pushed the Ming court to reform its military organization in the north and substantially increase the number of deployed troops. As the following section will show, the bulk of them were no longer conscripted hereditary troops, but rather hired volunteers.

The Rise of Professional Soldiers

By the mid-sixteenth century, most of the troops stationed in the northern garrison commands were recruited volunteers. The previous chapter has shown that professional soldiers were not a new concept, as they had been recruited since the mid-fifteenth century. However, by this time voluntary recruitment had replaced coercive conscription as the primary method of

[541] See Liang, "Mingdai 'jiubian' de junshu," 147-57.

military mobilization. Moreover, recruited soldiers shed the hereditary status that had been impressed on them during the Chenghua period, and they also slowly began to become divorced from the *weisuo*. This period also marked a key transformation of the ideology that underpinned the Ming military – thereafter, soldiers and households were no longer tied together. In the south, a different breed of hired soldiers arose as a result of the *wokou* crisis, one more akin to professional soldiers of Early Modern Europe. This section will explore the different nature of hired soldiers in the north and the south, how they developed through the sixteenth century, and how the state managed them. Despite Hongwu's attempts to create a uniform military throughout the empire, by the mid-sixteenth century long-standing regional differences between the north and the south became more apparent, leading to a change in how soldiers were recruited, provisioned, and organized.

Hired Soldiers in the North

The major changes to recruitment and mobilization transformed the Ming's northern military. First was the gradual turn away from the *weisuo* as a means of organization, and second was the collapse of coercive conscription. In the Jiajing period, one key component that underlay the *weisuo* system – hereditary service – was jettisoned by the court. With more and more troops being recruited and with conscription yielding poor results, the court slowly did away with hereditary service. Recall from the previous chapter that hereditary service was precisely the reason why local soldiers and hired troops in the late fifteenth century often deserted. In 1534, the court decreed that soldiers along the northern frontiers would no longer be hereditary. They would still be organized within the *weisuo*, but no more heirs would be conscripted from them.[542]

[542] *Shizong shilu*, in *MSL*, 159:3562.

In 1558, soldiers recruited for the Capital Army were also no longer hereditary.[543] As one of the *weisuo*'s main purpose was to manage military households for track and replace, the end of hereditary service meant that its relevance as a military institution was further reduced. By the end of the Ming, some officials were submitting memorials asking that the institution of hereditary military service be abolished altogether, but the emperor refused on the grounds that it was an "ancestral institution."[544] What this meant was that the institution of the *weisuo* and the corresponding hereditary military households continued to exist, but the court no longer primarily relied on them for military manpower.

At the same time, military organization was also shifting away the *weisuo*, but at least during the Jiajing period this shift was not yet universal in the north. The Jizhou Garrison Command was the most representative of this move away from the *weisuo*. In 1563, Jizhou received permission from the Ministry of War to separate their hired troops from hereditary personnel. Military service for hired troops would end with the soldiers themselves and no heirs would be conscripted to replace them, unlike the previous practice where hired troops were also eventually turned into hereditary soldiers. More importantly, Jizhou troops were no longer required to be organized into the *weisuo*, which was the practice elsewhere (troops were first entered into the *weisuo* for organization and the most elite units were drawn away to the divisional army).[545] Nonetheless, this situation seemed to have been unique to Jizhou. Records from other garrison commands showed that the *weisuo* continued to play a role in military

[543] Zheng Xiao 鄭曉, *Zheng Duanjian gong zouyi* 鄭端簡公奏議, in *XXSKQS*, 477:34-35.
[544] Zhang, *Mingdai weisuo junhu yanjiu*, 363.
[545] Liu Xiaozu 劉效祖, *Sizhen sanguanzhi* 四鎮三關志, in *Siku jinhui shu congkan* 四庫禁毀書叢刊, 10:293.

organization. In Shanxi, for instance, the court recruited 1,500 troops to replace missing *weisuo* troops, and each was given one *qing* of land to support themselves.[546]

The Wanli court formally institutionalized many Jiajing-era policies concerning recruitment. In 1577, the court decreed that hired soldiers over the age of fifty or those who were infirm would be released from service, and new replacements would be recruited. In 1586, officials were banned from conscripting replacements from hired soldiers' households.[547] Yuan Huang 袁黃 (1533-1606), who served in the Ministry of War and later followed the Ming armies into Korea, noted that this was because commanders often engaged in illegal conscription of hired troops who deserted, as the commanders feared punishment for causing desertion, and the result was that the entire recruitment process was being thrown into disorder and more soldiers were deserting. The court therefore had to step in and ban hereditary conscription.[548] Indeed, although the court decreed that hired troops were no longer be hereditary, some coercive conscription of replacements continued under the surface. Years earlier in 1569, Tan Lun 譚綸 (1519-1577), who served as Supreme Commander (*zongdu* 總督) of Ji-Liao (overseeing the Jizhou and Liaodong garrison commands), noted how some officials were still conscripting from the relatives of deserted soldiers. This point was echoed by Yao Guangxian 郜光先 (1533-1589), the Grand Coordinator of Liaodong, who wrote in the same period.[549] Presumably the Ming

[546] *Shizong shilu*, in *MSL*, 447:7618.
[547] *Shenzong shilu*, in *MSL*, 59:1362; 172:3138.
[548] Yuan Huang 袁黃, *Baochi zhengshu* 寶坻政書, in *Beijing tushuguan guji zhenben congkan* 北京圖書館古籍珍本叢刊, 48:409.
[549] Tan Lun 譚綸, *Tan Xiangmingong zouyi* 譚襄敏公奏議, in *MBJCK* 3, 11:509; Zhang Lu 張鹵, *Huang Ming Jia Long shuchao* 皇明嘉隆疏抄, in *Siku quanshu cunmu congshu*, 73:444.

never did manage to completely end the practice of hereditary conscription for hired soldiers, even if it was officially banned.

The turn to full-scale marketized recruitment also signaled the end of coercive conscription for civilian legionnaires and local troops. Starting from the Zhengde period, officials began urging the court to loosen conscription policies, especially since the court was dealing with several large-scale rebellions. The Minister of War Wang Qiong 王瓊 (1459-1532) recommended in 1516 that all civilian legionnaires conscripted after 1494 to be released from service to alleviate their burdens.[550] Instead, the court offered generous terms to hire civilians as soldiers to suppress the rebellions, and one of the stated reasons was that this would prevent them from joining the rebels.[551] During the early Jiajing reign, reforms to civilian legionnaires were implemented that essentially ended the institution as a military force.

In 1522, the court capped the number of civilian legionnaires in each sub-prefecture or county to between one to two hundred men, and it was forbidden to mobilize them during the farming season unless there were emergencies. Five years later, territorial officials were ordered to tabulate the number of civilian legionnaires within their jurisdictions and release extra legionnaires from service. The rest would be divided into two shifts and could only be mobilized during serious emergencies. Finally, in 1529, civilian legionnaires who could no longer afford to undertake service were released. Thereafter, the court decreed that the legionnaires could only be used for local defense.[552] Thus, civilian legionnaires were reverted to their original roles as local security, signaling that the court no longer saw them as a viable military force.

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[550] Wang Qiong 王瓊, *Jinxi benbing fuzhou* 晉溪本兵敷奏, in *XXSKQS*, 476:3.
[551] *Wuzong shilu*, in *MSL*, 73:1613; 77:1698.
[552] *MHD*, 702.

Local troops, on the other hand, continued to be recruited, but in a sign that the court now valued voluntary recruitment more than coercive conscription, in 1523 it decided that local troops who volunteered for service would be paid more than those who were conscripted.[553] Officials believed that motivated by good pay, volunteers, particularly those who were not wealthy, would be more willing to fight for the state. In 1539, when authorities in Datong constructed five forts along the frontiers, they opted to recruit volunteers rather than deploy garrison troops, arguing that "the rich are reluctant to move, even if they are forced to do so; the poor are happy to move, even when they are discouraged." Three thousand five hundred men were recruited in this manner.[554]

More and more, officials saw hired troops as an indispensable component of the military. In 1534, when the court sought to recruit troops to deal with a mutiny in Datong, the chief grand secretary Xia Yan 夏言 (1482-1548) objected on the grounds that there were already enough troops in the border regions and that recruiting more would just add to burgeoning military costs. Jiajing agreed and recalled recruiting officials. However, just a month later, the court ordered the recruitment of 2,000 troops each for Liaodong, Xuanfu, Datong, Yansui, and Shanhai Pass; 3,000 troops for Shanxi; and 1,000 each for Ningxia, Shaanxi, and Guyuan. They would be organized into the *weisuo*, given rations and equipment, and a sign-up bonus of three *liang* of silver, which would come out of the horse levy (*majiayin* 馬價銀; silver payments levied on

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[553] *MHD*, 670.

[554] Mao Bowen 毛伯溫, "Chuangli wubao shu Datong libao" 創立五堡疏 大同立堡, in *HMJSWB*, 158:1592-93. The reluctance to use garrison troops to man these forts was because of a mutiny that broke out in Datong in 1524 when the Grand Coordinator of Datong forced garrison troops to go to these frontier forts. The soldiers, having grown inured to a comfortable life within Datong, mutinied and killed him. See Hagiwara Junpei 萩原 淳平, "Mindai Kaseiki no Daidō hanran to Mongoria jō: nōkōmin to yūbokumin to no setten" 明代嘉靖期の大同反亂とモンゴリア (上): 農耕民と遊牧民との接點, *Tōyōshi kenkyū* 東洋史研究 30, no. 4 (1972): 326-50; Dardess, *More than the Great Wall*, 361-62.

areas that do not produce warhorses for the purchase of such horses).[555] Thus, we see that it was already impossible for the court to move away from hired troops.

The view that voluntary recruitment was superior to coercive conscription was a dramatic reversal of the Chenghua-Hongzhi era ideology that had privileged track and replace. Yuan Huang wrote that hereditary soldiers in the *weisuo* and conscripted personnel were not as effective as volunteers and that the conscription process was rife with issues. However, Yuan bemoaned that officials were still illegally conscripting replacements for dead or deserted troops, which made recruitment less attractive in the eyes of the people.[556] Such a view was common in the late Ming. The Chongzhen era official Song Quan 宋權 (1598-1652) shared Yuan's sentiments and wrote that hereditary conscription was a huge burden on the people.[557]

In sum, voluntary recruitment underwent a shift in the sixteenth century that saw soldiers largely divorced from their households. The removal of their hereditary status meant that one of the key components of the *weisuo*, the management of soldiers and their households for conscription, was gone. Unlike their counterparts in the Chenghua and Hongzhi courts, Ming officials of the mid-sixteenth century saw hired soldiers as superior to conscripted self-sufficient farmer-soldiers, and the court gradually abandoned coercive conscription as a result. Local troops became no different than regular hired soldiers while civilian legionnaires were abandoned as a military force. Thus, the late-fifteenth century military model of turning recruited

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[555] Xia Yan 夏言, *Guizhou wenji* 桂洲文集, in *Siku quanshu cunmu congshu* 74:565-67; *Shizong shilu*, in *MSL*, 164:3629-30.
[556] Yuan, *Baochi zhengshu*, 48:408-09.
[557] Song Quan 宋權, *Song Quanji* 宋權集, 277-78. Tan Lun and Zhang Lu also noted the problem of illegal conscription, as mentioned previously in the section.

and conscripted personnel into a new type of hereditary soldiery was dismantled by the court, even though in some instances such recruitment continued illegally under the surface.

Housemen in the Sixteenth Century

Changes to recruiting patterns also brought changes to the institution of housemen, the private retainers of border military commanders. In the mid-Ming, housemen were not sanctioned by the state and their commanders were responsible for their upkeep. However, by the end of the Hongzhi reign, the court tacitly acknowledged their use. Full state support for them, however, would not come until the Jiajing period and state support was institutionalized only during the Wanli period. As housemen were seen as more elite and capable units, a large number of them were recruited and they gradually merged into the divisional army system. Yet by the Wanli period, their recruitment was causing huge strains on the treasury, forcing the court to limit them.

The first major sign of formal acceptance occurred between the Zhengde and Jiajing periods, when the court started granting border military leaders "cultivating honesty land" (*yangliantian* 養廉田) to support their housemen. In many cases such land had already been occupied by commanders, with the court merely legalizing such occupation. Indeed, as both Suzuki Tadashi and Terada Takanobu noted, border military commanders were among the largest landowners along the northern frontiers.[558] Other methods of supplying housemen included granting land to them to farm, commanders engaging in commercial activities to make money, or sending housemen to raid or pillage. However, as an ever-larger number of housemen

[558] Suzuki, "Mindai katei kō," 32-35; Terada, *Shanxi shangren yanjiu*, 71.

were recruited, it became difficult for commanders to sustain them. As a result, housemen entered state payroll, with the court disbursing silver to border commanders to pay for their upkeep.[559]

Additionally, housemen became folded into the divisional army system. An earlier section has already mentioned that Regional Commanders were allowed to recruit and train their own units, and in many cases commanders with housemen were already operating within the divisional army. The fact that housemen were now paid by the state further blurred the boundary between soldier and private retainer. This eventually led to the emergence of two types of housemen. The so-called "housemen at camp" (*zaiying jiading* 在營家丁) were led by local military commanders but did not follow him when he was transferred. They were answerable only to the court and functioned essentially as well-paid elite soldiers who were tied to the divisional army camp. The second type was the "attendant housemen" (*suiren jiading* 隨任家丁), who were answerable both to the state and to their commanders and accompanied their commanders when he was transferred. According to Zhao Zhongnan, this second type of housemen were in the majority.[560]

The effectiveness of housemen led to their large-scale recruitment in the late sixteenth century. After 1550, the Capital Army was made up almost entirely of hired troops, including large numbers of housemen.[561] In Liaodong too there was heavy use of housemen. The Li family

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[559] Suzuki, "Mindai katei kō," 37; Xiao Xu 肖許, "Mingdai jiangshuai jiading de xingshuai jiqi yingxiang" 明代將帥家丁的興衰及其影響, *Nankai shixue* 南開史學 1984, no. 1 (1984): 111; Zhao Zhongnan, "Lun Mingdai junshi jiading zhidu xingcheng de shehui jingji tiaojian ji qi fazhan" 論明代軍事家丁制度形成的社會經濟條件及其發展, *Shehui kexue jikan* 社會科學輯刊 1991, no. 2 (1991): 86-90; Ma, "Mingdai de jiading," 141.
[560] Zhao, "Lun Mingdai jundui zhong jiading," 147.
[561] Okuyama Norio, "Kōjutsu no hen zengo no keiei" 庚戌の前後の京営, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 339-60.

of Liaodong, led by Li Chengliang 李成梁 (1526-1615) and his sons, were characteristic of powerful military commanders who fielded private retainers operating under the divisional army system. Using his housemen, Li led repeated raids into Mongol and Jurchen territory, inflicting great losses on his enemies and increasing Ming power in the region.[562] Eventually, the large number of housemen in Liaodong and elsewhere became such a financial drain that the Wanli court took steps to limit their recruitment. The number of housemen were ordered to be reduced and recruitment caps were instituted. Furthermore, to save on military costs, the court also legalized the formerly illegal practice of using the salaries of deserters to pay the housemen.[563]

Hired Troops in the South

Marketized recruitment in south China was notably difference than in the north. With the court's attention focused firmly on the northern frontiers, the southern *weisuo* were left to deteriorate more rapidly and were overwhelmed by the *wokou* crisis that engulfed the southeastern coast beginning in the 1540s. Nonetheless, the court's gaze was still on the north, particularly after Altan's 1550 raid on Beijing. The court therefore left the task of suppressing the *wokou* largely in the hands of officials it entrusted to deal with the matter, such as Zhu Wan 朱紈 (1494-1550) and Hu Zongxian 胡宗憲 (1512-1565), vesting them with broad powers to recruit, fund, and train their own troops.

When the *wokou* crisis first broke out, the existing southern garrisons were totally ineffective. According to Tan Lun:

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[562] See Kenneth M. Swope, "A Few Good Men: The Li Family and China's Northern Frontier In The Late Ming," *Ming Studies* 2004, no. 1 (2004): 34-81.
[563] Zhao, "Lun Mingdai junshi jiading zhidu," 89-90.

> Recently discipline has worsened, and the garrisons are empty, and the officials and soldiers of the various *weisuo* are generally unruly and intractable, stubborn and shameless. When they are sent to the battlefield, they are bewildered and lost; when they are ordered to guard cities, they ignore orders. As a result, the people who pay taxes are forced to serve as soldiers. This is a reversal of the order of things, and there is nothing worse than this.
>
> 比來法令廢弛，行伍空虛，各該衛所官軍大都桀驁不馴，頑鈍無恥，驅之戎行則恍然自失，責之城守則恬若罔聞，於是乃復以供賦之民受登陴之役，事之倒置，未有甚於此者。[564]

In 1555, it was recorded that a mere sixty to seventy *wokou* bandits managed to raid from Hangzhou to Nanjing with impunity, even putting the Ming's southern capital under siege.[565] When the military command Qi Jiguang 戚繼光 (1528-1588) arrived in Zhejiang, he similarly noted the uselessness of *weisuo* soldiers and urged the recruitment of three thousand volunteers.[566]

The *Illustrated Compendium on Governing the Seas* (*Chouhai tubian* 籌海圖編), compiled in the 1550s, lays out why voluntary recruitment in the south was necessary. Troops drawn from garrisons were arrogant and undisciplined, and they lacked the will to fight when deployed to other regions. While civilian legionnaires could be mobilized to defend their home regions, they also had difficulty fighting in other areas. Furthermore, the state would have to provide them with rations and equipment, yet funds and supplies were scarce. If officials did provide rations, it was feared that large numbers of vagrants would join, and it would be impossible to support them all. Asking them to provide their own supplies, on the other hand, would be an unnecessary burden and many would not be able to afford to do so anyways.

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[564] Tan Lun, *Tan Xiangmingong zouyi*, in *MBJCK* 3, 11:289.
[565] *MS*, 322:8353.
[566] *MS*, 212:5611.

Finally, conscripting civilian legionnaires would also impact agriculture, and thus hiring soldiers was the best option.[567]

Unlike in the north, where the court subsidized recruitment with annual subsidies, in the south officials were left to their own devices to raise funds. This reflected the court's priorities – the north was always the primary military focus and so the court dispersed more funds there. Additionally, south China was a much wealthier region and thus demanded less subsidies from Beijing. Southern officials typically raised funds through two methods: converting corvée service to silver levies and by adding surcharges on the land tax. For instance, officials ordered that only sixty percent of local militia forces remain in service, while the remaining forty would have their service commuted to a service levy of 7.2 *liang* of silver. Later, all militiamen were allowed to commute their service for 12 *liang*. This method was very successful, and it was recorded that 9,000 *liang* of silver could be obtained annually just from Suzhou alone.[568] Similar conversions can also be found in Guangdong and Guangxi.[569] Surcharges provided another major source of revenue. In Wenzhou, for example, funding for recruitment came from a "troop training tax" (*lianbing yinliang* 練兵銀兩) of an unspecified amount that was levied on civilian farmland in the region.[570]

Also, unlike their northern counterparts, southern recruits were never organized into the *weisuo* and there was no hereditary conscription for them, legal or otherwise. Instead, they were

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[567] Hu Zongxian 胡宗憲, comp., *Chouhai tubian* 籌海圖編, 11:11a-b.
[568] Huang, "Military Expenditures," 49-50; Liu Guanglin 劉光臨 and Liu Hongling 劉紅玲, "Jiajing chao kangwo zhanzheng he yitiao bianfa de zhankai" 嘉靖朝抗倭戰爭和一條鞭法的展開, in *Ming Qing luncong* 12 明清論叢 12, edited by Zhu Chengru 朱誠如 and Wang Tianyou 王天有 (Beijing: Zijincheng chubanshe, 2012), 135.
[569] Dai Jing 戴璟 and Zhang Yue 張岳 et al., comps., *Jiajing Guangdong tongzhi chugao* 嘉靖廣東通志初稿, in *Siku quanshu cunmu congshu*, 189:549-50; Tian Rucheng 田汝成, *Yanjiao jiwen* 炎徼記聞, in *SKQS*, 352:628-29.
[570] Wang Shugao 王叔杲, *Wang Shugaoji* 王叔杲集, 387-88.

organized into battalions (*zong* 總) of five hundred, led by a battalion commander (*zongba* 總把). Included in these battalions were auxiliary conscripts, a combat medic, a clerk, a number of flag bearers and firearm technicians, and thirteen warhorses.[571] They were also not led by *weisuo* officers. In the Wenzhou case, it was noted that while some commanders were drawn from the *weisuo*, many others were recruited from the civilian populace. Paid in silver, divorced from household categories, drilled rigorously by their commanders, and devoted solely to fighting (unlike their northern counterparts, many of whom also farmed), these soldiers were a clear sign of the professionalization of the Ming soldiery; they were similar to the professional (or career) soldiers that started appearing in early modern Europe – men whose sole occupation was to fight and who commanded high pay due to their military expertise.[572]

The *wokou* crisis consumed the southeastern coast for almost three decades. But a few months after the death of the Jiajing emperor in 1567, the maritime ban that had been in place since the 1530s was rescinded. This, combined with effective armed suppression, ended the crisis by the late 1560s. As these troops had been recruited specifically to deal with the *wokou*, now that the crisis was resolved their services were naturally no longer needed. By 1552 local authorities in the south had recruited more than 100,000 soldiers, but as the *wokou* threat decreased, the court ordered that their numbers be reduced to save costs. By 1570, there were only twenty-seven battalions of hired soldiers (13,500 troops), and this was further reduced to only ten battalions (5,000 troops). The demobilized soldiers would instead be replaced by fifteen

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[571] Fan Lai 范淶, *Liang Zhe haifang leikao xubian* 兩浙海防類考續編, in *Zhongguo shixue congshu san bian* 中國史學叢書 三編, 202.

[572] Professional soldiers have often been studied in the context of Europe's "military revolution." See, for instance, Frank Tallet, *War and Society in Early Modern Europe, 1495-1715* (London and New York: Routledge, 1992) and Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, 2nd edition (Cambridge: Cambridge University Press, 1996).

squadrons of civilian legionnaires (7,500 men) and eight squadrons of hereditary garrison troops (4,000 men).[573]

Yet officials had to be careful in dealing with these former soldiers. Karen Barkey's research on the Ottoman Empire has shown how former mercenary soldiers recruited during times of war came to form large armed bands that roamed the countryside after they were demobilized and were employed by powerful local actors.[574] Such a situation was observed in the Ming as well. In 1560, it was reported that after demobilization, former soldiers had nowhere else to go and instead formed large bandit groups that pillaged and raided. The court decided that one way to deal with them was to turn them into local militia forces.[575] The fact that southern mercenaries could be demobilized reflected the very different nature of the threat in the south, namely that unlike the Mongols the *wokou* threat could actually be defused.

Renumerations for Hired Soldiers

Finally, it is necessary to discuss how hired soldiers were paid. Under Hongwu's original conception of the *weisuo*, all soldiers received uniform rations in grain. However, this was impossible to achieve due to regional variations in agricultural productivity and ease of transportation. By the Yongle period, troops in different areas were being paid differently – in areas where rice was more abundant, soldiers received more paper money or other in-kind goods, and such a payment system became institutionalized. In other words, throughout nearly the entire

[573] Fan Lai, *Liang Zhe haifang leikao xubian* 兩浙海防類考續編, 201.
[574] Karen Barkey, *Bandits and Bureaucrats: The Ottoman Route to State Centralization* (Ithaca: Cornell University Press, 1997).
[575] *Shizong shilu*, in *MSL*, 479:8009-10; 480:8021.

Ming period, the court did not try to enforce uniform wages (despite Hongwu's ideals) but instead accepted regional differences in pay for its military labor.

As noted in the previous chapter, during the 1450s payments started to be converted into silver as the court sought to simplify the complicated process of ration conversion that was leading to a reduction in the actual value of the rations. By the Jiajing period, payments in silver were widespread, but the court continued to pay a portion of salaries in-kind. For instance, conscripted soldiers were paid nine months in silver and three months in grain, with the conversion rate tied to fluctuating grain prices. This became the standard practice after 1538 for garrisons along the northern border. By 1552, all rations for soldiers had been converted to silver, but in practice northern border troops were still paid using the 1538 precedent, that is, a combination of silver and grain.[576] The reason for this, as a later section will show, was because the court wanted to minimize the problem whereby soldiers were not paid enough silver to purchase grain, which was caused mainly by the depreciating value of silver and high grain prices.[577] Put differently, wages in the Ming were inseparably tied to broader socioeconomic conditions.

One manifestation of that close connection was the ever more apparent variation in soldiers' pay. In general, recruited mercenaries and housemen were paid much better than hereditary *weisuo* soldiers - aside from a higher monthly salary in silver, they were also given sign-up bonuses. But the actual amount they received varied highly depending on region. By far the most generously paid soldiers were those recruited in the south to fight the *wokou*, a

[576] Okuyama Norio, "Gin shikyū no kakudai" 銀支給の拡大, in *Mindai gunseishi kenkyu*, edited by Okuyama Norio (Tokyo: Kyūko shoin, 2003), 269-70.
[577] Okuyama, "Gin shikyū no kakudai," 276.

reflection of the wealth of Jiangnan and the ability of officials there to raise large sums of money. For instance, Yu Dayou's 俞大猷 (1503-1579) troops were given 1.5 *liang* of silver as a monthly wage and 0.45 *shi* of grain as traveling rations when on expeditions. They further received 20 *liang* of silver as a sign-up bonus to purchase equipment and clothing. If they died of illness, their families would be given 6 *liang* as condolence money for burial, but if they died in combat their family would receive double that amount.[578] While the wages were close to the average paid to laborers in the Ming, the sign-up bonus of twenty *liang* was extremely generous, equivalent to more than a year's wage paid in advance.[579]

In the north, the highest paid soldiers were in Jizhou. In 1568, when Tan Lun recruited 30,000 troops, he paid them a monthly salary of 1.5 *liang*. This was more than double the amount of *weisuo* troops, who received 0.7 *liang* of silver in the spring and summer and 0.45 *liang* in the autumn and winter.[580] The generous salary enjoyed by troops in Jizhou was likely because Jizhou by this point had become the primary garrison defending Beijing and therefore the court provided more silver subsidies. Soldiers in other garrison commands were not paid nearly as much. Those in Yansui were only paid 0.75 *liang*, and when officials there requested an increase in annual subsidies to raise pay, their proposal was rejected by the court.[581]

The lowest paid troops were in Liaodong, as noted by Grand Coordinator Gu Yangqian 顧養謙 (1537-1604) in 1586. Housemen, who had the highest pay, received only 0.65 *liang* a

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[578] Hu Zongxian, *Chouhai tubian* 籌海圖編, 13:29b.
[579] For a succinct discussion of Ming wages, see Timothy Brook, *The Price of Collapse: The Little Ice Age and the Fall of Ming China* (Princeton: Princeton University Press, 2023), 57-60.
[580] Tan Lun, *Tan Xiangmingong zouyi*, in *MBJCK* 3, 11:375; Liu Xiaozu, *Sizhen sanguanzhi*, in *Siku jinhui shu congkan*, 10:191.
[581] *Shenzong shilu*, in *MSL*, 50:1154.

month and 0.9 *liang* as an annual reward. Regular troops received even less - 0.4 *liang* monthly for wages and a 0.9 *liang* annual reward. Troops in Liaodong's Gaizhou and Fuzhou guards received the least amount of pay – only 0.25 *liang* of silver. However, this low pay should not be taken at face value and regional variations in terms of military compensation must be considered. The reason why Liaodong troops were paid so low was because they were also given land. Gu's successor as Grand Coordinator Li Hualong 李化龍 (1554-1611) reported that Liaodong soldiers were each given fifty *mu* of tax-exempt farmland.[582] Thus, Liaodong troops had another source of income and did not need to subsist solely on their monthly pay. Increases to salaries of northern troops would not take place until the 1590s, when large contingents of them were recruited and mobilized for the Korea campaign against Japan.

Building the Great Wall

The increase in the number of troops along the northern frontiers was paralleled by the construction of border fortifications, which eventually morphed into the Great Wall. While construction of defensive fortifications along the north began as early as the Hongwu period, it wasn't until the mid-sixteenth century that we see large-scale construction of walls and other fortifications. This was part of the broader change in Ming military policy in this period that went hand-in-hand with the recruitment of volunteers. Although it is commonly assumed that the Great Wall was a single continuous line of walls stretching east to west, the truth was that the walls were constructed piecemeal at different times over a span of a century and constantly maintained and repaired. They were not linked together and coated with bricks until the Wanli

[582] Gu Yangqian 顧養謙, *Chong'an Gu xiansheng fu Liao zouyi* 衝安顧先生撫遼奏議, in *XXSKQS*, 478:283; Li Hualong 李化龍, *Fu Liao shugao* 撫遼疏稿, in *Siku jinhui shu congkan* 四庫禁毀書叢刊, 69:44.

period. Additionally, the Great Wall border fortification system also included beacon towers, defensive watch towers, and border forts. This section will take Datong, Jizhou, and Liaodong as case studies and show Ming fortifications and defensive strategy throughout the second half of the sixteenth century. By studying these three garrisons in this order, it will also allow us to see the shifting emphasis of defense from west to east – Datong was the first garrison command to see significant construction of border fortifications in the 1540s and 1550s, but attention quickly shifted to Jizhou following Altan's raid, before it shifted once again to Liaodong in the late sixteenth century.

The Datong Garrison Command

Since the mid-fifteenth century, Datong and Xuanfu had been the front-line defense in the north, especially after the loss of the Ordos. Datong in particular was subjected to repeated Mongol raids in the late fifteenth and early sixteenth centuries, with the Zhengde emperor himself involved with fighting off one of these raids in 1517.[583] Moreover, Datong's defenses were left in a state of decline. In Datong's heyday in the early Ming, the garrison was manned by 135,778 infantry and cavalry troops, but by the mid-fifteenth century, Datong's combined infantry, cavalry, militia, officers, and military auxiliaries (*she* 舍) registered only 59,909, of whom 51,609 actually remained. Datong's two northern defensive lines, located roughly twenty-eight miles apart from one another and consisting of a series of interconnected walls and

[583] Li Weizhen 李維楨, comp., *Wanli Shanxi tongzhi* 山西通志, 25:1960; Li Zhongfu 黎中輔, comp., *Datong xianzhi* 大同縣志, 15:823; Tan Qian, *Guoque*, 44:2749-51, 2762; 49:3045; 50:3135-36. There were many Mongols raids into Datong, only some of the major ones are cited here.

fortifications, had fallen into ruin. Of the 211 beacon towers constructed along the second defensive line in 1485, only 56 remained.[584]

The situation in Datong was exacerbated by a major mutiny in 1533, where the mutineers actually invited the Mongols to join them. Later, after the mutiny was suppressed, many mutineers fled to the steppes and joined the Mongols.[585] Ming officials noted in the aftermath of the mutiny that many of the former mutineers were acting as spies or guides for the Mongols in raiding Datong, and that they were even training Mongol troops to better perform against Ming defenses.[586] Using these defectors and other Han Chinese migrants, Altan Khan was able to greatly increase his power and construct a nomadic-sedentary hybrid state in the steppes.[587] It was in this context that the Ming court began the construction of a massive defensive apparatus in Datong.

From the 1540s on, the court constructed numerous forts in Datong – twenty-four within a five-year period between 1541 and 1546. By the early Wanli era, there were seventy-two forts in Datong, most of which were built in the Jiajing reign. From the 1570s to the 1590s, the walls of most of these forts were strengthened with bricks.[588] Additionally, local officials dug trenches, built beacon towers, and mended border walls. Weng Wanda 翁萬達 (1498-1552), who served

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[584] Wei Huan, *Huang Ming jiubian kao*, in *Siku quanshu cunmu congshu*, 226:62-64; *MHD* 668-69. Although there is disagreement over the period of the "original quota" of 135,778 soldiers provided by the *Ming huidian*, this figure most likely reflected Datong's strength during the 1390s. See Zhang, "Mingdai Shanxi," 45.
[585] See Hagiwara Junpei, "Mindai Kaseiki no Daidō hanran to Mongoria ge: nōkōmin to yūbokumin to no setten" 明代嘉靖期の大同反亂とモンゴリア (下): 農耕民と遊牧民との接點, *Tōyōshi kenkyū* 東洋史研究 31, no. 1 (1972): 64-81; Dardess, *More than the Great Wall*, 364-67.
[586] Han Bangqi 韓邦奇, "Qinzun chiyu shu" 欽遵敕諭疏, in *HMJSWB*, 160:1615-16; *Shizong shilu*, in *MSL*, 198:4168.
[587] Hagiwara, "Mindai Kaseiki no Daidō hanran to Mongoria jō," 362-50.
[588] Li Hailin, *Mingdai Datong zhen bianfang tixi yanjiu* 明代大同鎮邊防體系研究 (Taiyuan: Sanjin chubanshe, 2013), 47-53, 57-60.

as Supreme Commander of Xuan-Da, considered Datong to be the most important yet also the most indefensible region in the north due to its lack of natural barriers, which meant it had to be well protected. Weng saw border walls as more effective than forts and trenches and in 1546 constructed forty-four miles of walls and other fortifications from Xuanfu to Datong at the cost of 29,000 *liang* of silver.[589] That same year, Datong officials sought approval for the construction of a staggering 206 miles of walls from Xuanfu to the garrison town of Yanghe northeast of Datong city, which would be manned by 15,000 newly recruited troops. It is not clear whether the court approved of this request, but the following year Weng Wanda received another 37,000 *liang* of silver to construct walls in Datong.[590]

To better make use of these walls, Weng recommended a new defensive strategy. In one of his memorials on the disposition of border troops, he recommended that the 155,000 soldiers in Datong and Shanxi be spread out along the border to man the walls permanently, rather than just be deployed in the autumn to guard against Mongol raids. In this manner, the main defensive line would shift north and the Mongols who managed to break through would become trapped in the area between the main and secondary defensive lines.[591] Jiajing was highly enthusiastic about Weng's wall-building efforts. In 1546 when the Ministry of War opposed Weng's walls, Jiajing overruled them, and in 1547 when officials of the Ministry of Revenue complained about Weng's excessive wall-building, Jiajing severely chastised them and suspended their salaries.[592]

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[589] Weng estimated that construction would take roughly eighty-seven days and would cost around 24,000 *liang* of silver. Weng Wanda 翁萬達, "Xiuzhu bianqiang shu Xuan Da xiuqiang" 修築邊牆疏 宣大修牆, in *HMJSWB*, 224:2354-55; *Shizong shilu*, in *MSL*, 380:5800-01; *MS*, 198:5245.
[590] *Shizong shilu*, in *MSL*, 305:5899; 323:5997-99. In 1547, Weng reported that Datong already had around two hundred miles of border walls, which he did not consider sufficient. *Shizong shilu*, in *MSL*, 322:5971.
[591] Weng Wanda, "Xiuzhu bianqiang shu," in *HMJSWB*, 224:2355-58; "Jishi jingli bianfang daji shu zhuangshou Datong" 及時經理邊防大計疏 專守大同, in *HMJSWB*, 224:2258-60.
[592] *Shizong shilu*, in *MSL*, 209:5816-18; 323:5997-99.

All in all, Weng would construct more than three hundred miles of border walls and thousands of beacon towers from Datong to Xuanfu, laying the foundations for a defense system that would be greatly augmented and expanded by later officials. Although Weng's walls were unable to completely stop the Mongols, it nonetheless strengthened Datong and, as the *History of the Ming* tells us, "The bandits thus were afraid of recklessly attacking."[593]

The Jizhou Garrison Command

According to Wei Huan's 魏煥 (*js.* 1529) *Records of the Nine Border Garrisons of the August Ming* (*Huang Ming jiubian kao* 皇明九邊考), the Jizhou Garrison Command was among the second wave of commands established, but before the Chenghua-Hongzhi period, it saw relatively little combat and so it lacked the defensive fortifications seen in places like Xuanfu and Datong. However, increased military pressure in the late fifteenth century necessitated the construction of fortifications in the region. In 1504, for instance, it was reported that border walls in Jizhou had fallen into disrepair and so the court mobilized 450 craftsmen from Shuntian and Yongping prefectures for repairs. To fund the project, officials commuted the service of some of these craftsmen to a fee of 1.8 *liang* of silver, which they used to hire laborers. These laborers were used together with troops and farming auxiliaries to carry out the repairs.[594]

However, Jizhou's rise in importance would not take place until the 1550s, after Altan's raid exposed the weakened defenses around the capital. Thus, attention shifted east from Datong, and there was a frenzy of wall-building in the region, including completing previously unfinished

[593] *MS*, 198:5247. See also Waldron, *The Great Wall*, 150-57.
[594] *Xiaozong shilu*, in *MSL*, 215:4053-54.

walls.[595] However, in Jizhou a new type of defensive structure was added – watchtowers. Beacon towers (*duntai* 墩台) were already a common feature of the Ming's northern defensive network, but prior to the 1550s they were used primarily for signaling. This new type of towers that were built were instead known as watchtowers (*ditai* 敵台), because in addition to signaling they could be used for military actions against enemy raiders.

Defensive watchtowers seemed to have originated in Datong. In 1554, the newly appointed Supreme Commander of Xuan-Da Xu Lun 許論 (1495-1566) memorialized the throne asking that Weng Wanda's defensive network be modified. Xu pointed out that the six hundred or so beacon towers built by Weng along Datong's frontiers were located behind the walls, which essentially made them useless for signaling purposes. Instead, Xu recommended that new watchtowers be built twenty or thirty paces outside the walls, with one tower every three hundred paces. These would be large towers, measuring fifty feet wide and thirty-five feet tall, complete with parapets, a barrack building on top, and doors for entry. Each tower would be manned by ten soldiers, and additional troops would be added during the autumn defense season. The court approved Xu's request and disbursed 30,000 *liang* of silver from the Taicang and an additional 60,000 *liang* from the Court of the Imperial Stud (*taipusi* 太僕寺).[596]

This type of watchtower became very popular during the late Jiajing and Longqing periods. They were constructed using wooden frames and coated with bricks. Unlike previous beacon towers, these towers were hollow in the center and contained enclosed embrasures from which archers could fire down at enemies while being protected from return fire. Thus, the

[595] Zhao, *Mingdai jiubian changcheng*, 388.
[596] *Shizong shilu*, in *MSL*, 415:7214-15.

purpose of towers shifted from signaling to defense and later to offensive operations. The issue, however, was that the Mongols often used fire to burn the towers' wooden or to smoke the defenders out, but that did not stop Ming officials from advocating for their continued construction.[597]

In Jizhou, watchtowers were built on a massive scale. When Tan Lun became Supreme Commander of Ji-Liao, he advocated for the offensive use of watchtowers. In a memorial to the court, he suggested that the near 2,400 *li* (around 860 miles) of frontiers between Shanhai Pass and Zhenbian Fortress 鎮邊城 (near modern-day Zhangjiakou in Hebei), which he considered difficult to defend, be divided into twelve military circuits and that three thousand watchtowers be constructed in strategic locations. These towers would be spaced fifty-five to a hundred paces apart so that they could support one another. They were also massive – thirty-one feet tall and a hundred twenty-five feet wide, with a capacity for fifty soldiers. In peacetime they would function as lookouts for troops stationed along the wall, but during emergencies when troops are deployed, their defenders can act as raiding units to aid troops in combat. Tan estimated that each tower would cost fifty *liang* and that one thousand can be built each year. In the end, the court only disbursed 35,000 *liang* of silver from the Taicang and 15,000 *liang* from the Ministry of War, enough for only a third of what Tan requested.[598]

Jizhou's defensive network was considered successful by military administrators. In 1574, the newly appointed Supreme Commander of Xuan-Da Wang Chonggu 王崇古 (1515-1588) told the court that many of Datong's beacon towers were still located far from the border

[597] Zhao, *Mingdai jiubian changcheng*, 388-89.
[598] *Muzong shilu*, in *MSL*, 29:759-60.

walls which made them difficult to defend. He recommended that Datong and Xuanfu follow Ji-Liao's example and construct strong towers either immediately behind on the walls or, more preferably, with walls between them. The top of the tower would be used for observation and signaling, while three stories down there should be a floor with arrow slits for archers to rain fire down on the enemy.[599] Thus, in Jizhou the defensive network consisted not only of walls but also of watchtowers which were now beginning to be used for both defensive and offensive operations.

The Liaodong Garrison Command

In contrast to Datong and Jizhou, Liaodong's wall-building frenzy began later, during the late sixteenth and early seventeenth centuries. This was because for much of the fifteenth and sixteenth centuries, the military pressure on Liaodong was not great compared to other regions. Liaodong's defensive fortifications were first built in the 1430s, when Uriankhai Mongol settlement south pushed for the formation of the Liaodong Garrison Command to better defend the region. These earlier fortifications, already called "Great Wall" (*changcheng* 長城) by contemporary observers, were composed of forts built at strategic choke points, beacon towers, wooden palisades, mountain walls, and ditches.[600] Much of the actual wall-building took place in the second half of the fifteenth century to deter Jurchen activity. In 1472, the Chenghua court ordered that each of the garrison command construct walls, and only Yansui and Ningxia were exempt due to military emergencies. In 1479, officials reported that Liaodong's walls, which stretched from Kaiyuan 開原 (modern-day Tieling) in the east to the Yalu River in the west, had

[599] *Shenzong shilu*, in *MSL*, 22:584-85. It is not clear how this relates to Xu Lun's memorial which argued that towers should be located outside, rather than inside, the walls.
[600] Zhao, *Mingdai jiubian changcheng*, 348.

fallen into disrepair and suggested building additional fortifications to protect merchants engaging in the salt-barter trade.[601]

In 1503, the Hongzhi court disbursed funds to build and repair walls in Liaodong. Officials told the emperor that Liaodong's fortifications and beacon towers were mostly ruined and could no longer effectively prevent raids. They suggested the appointment of dedicated officials to oversee the construction of over a thousand *li* of new brick walls while also mending existing walls. Every one of Liaodong's five circuits should construct fifty *li* of walls annually, and within five to seven years the entire project would be finished. To raise funds for this venture, the court allowed criminals a one-time chance to pay redemption money for their crimes. The price was set at one *shi* of rice for five *chi* (about one foot) of walls, or eight *qian* of silver to hire workers.[602]

After this, however, there seemed to have been a lull in the construction of fortifications. One Ming scholar noted that "the caitiffs [in the region] are few in number and weak." Moreover, they engaged in border trade with the Ming and the land was fertile and rich in resources. Therefore, they did not need to resort to raiding. Those who did raid faced Ming military reprisals. Another scholar believed that because the nomads in Liaodong did not solely engage in hunting and participated in sedentary agriculture, they were not as effective in combat. Moreover, Liaodong's defenses were sufficient to deter raids, and thus Liaodong was comparatively more peaceful than other garrison commands for much of the sixteenth century.[603]

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[601] *Xianzong shilu*, in *MSL*, 101:1970; 191:3402.
[602] *Xiaozong shilu*, in *MSL*, 195:3602-03; 197:3635-36.
[603] Zheng Xiao 鄭曉, *Jinyan* 今言, 108; Xu Lun 許論, *Jiubian tulun* 九邊圖論, in *Mingdai Menggu Hanji shiliao huibian 12* 明代蒙古漢籍史料彙編 12, 10.

The major wave of Liaodong wall construction began in the Wanli period, as Liaodong began facing increasing pressure from the Jurchens, particularly in the early seventeenth century. Already by 1573, the court was building a massive network of fortifications in Liaodong. It was reported that 137 forts, 9 fortified towns, 4 barrier passes, and 1,934 watchtowers, garrison posts, corner guard towers, beacon towers, and mountain forts had been built. Additionally, 282,373.9 *zhang* (around 561 miles) of walls were built and 29,941 *zhang* (around 60 miles) of ditches had been dug.[604] Evidently, this was not considered enough, as the following year 791 *li* (292 miles) of walls were constructed at the expense of 400,000 *liang* of silver using 10,000 soldiers and 600 craftsmen.[605]

Liaodong's defenses, while impressive, ultimately failed to stop the Jurchens from overrunning them. By the early seventeenth century, most of Liaodong had fallen to the Later Jin and Ming forces regrouped in the Liaoxi area to the west. Ningyuan 寧遠 (modern-day Xingcheng in Liaoning) became the new linchpin of Ming defenses in the region, with officials hoping to use Liaodong Bay as a natural deterrent against Jurchen attempts to flank from the east. This strategy was already implemented in the Jiajing reign, with officials noting in 1546 that eighty-nine miles of walls and ditches were built in the Ningyuan region, along with a hundred and fifty beacon towers. From the Wanli reign on, construction of Ningyuan's fortifications intensified, particularly after the loss of Liaodong.[606] While successful in resisting Later Jin pressure for a number of years, this defensive system too failed in the end.[607]

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[604] *Shenzong shilu*, in *MSL*, 15:461-62.
[605] *Shenzong shilu*, in *MSL*, 22:589.
[606] Zhao, *Mingdai jiubian changcheng*, 369-72.
[607] For the loss of the northeast, see Swope, *Military Collapse*.

In sum, during from mid-sixteenth to the early seventeenth centuries, we see a west to east shift in the construction of defensive fortifications in response to new geopolitical threats, with the court devoting large sums of money and manpower to make these fortifications a reality. They included not just walls but also forts and defensive watchtowers. But the construction of new fortifications in the east did not mean that the court neglected its western defenses. During the Wanli period, almost all the Datong forts constructed during the Jiajing reign had their walls coated with bricks.[608] Much of Weng Wanda's defensive walls also fell into ruin within a few decades due to constant attacks, and officials in the 1570s received funds to repair them.[609] Wall-building in Jizhou continued in the Wanli period as well.[610] With a brief pause in the 1590s due to diversion of resources to fund the Korean campaign, wall-building in the Ming continued right up to the fall of the dynasty in 1644. The following section will explore how the Ming court absorbed the costs of recruiting and maintaining soldiers, as well as constructing border fortifications.

Provisioning the Garrison Commands

The construction of fortifications went hand in hand with the recruitment of mercenaries, as troops had to be recruited and assigned to man the fortifications. The previous section has mentioned briefly some of the ways that the court paid for the construction of fortifications, such as converting labor service into silver and by allowing criminals to pay redemption money, but most of the funds were disbursed from the treasury. This added to the annual subsidies that the

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[608] Yang Shining 楊時寧, *Xuan Da Shanxi sanzhen tushuo* 宣大山西三鎮圖說, in *XXSKQS*, 739:165-212; Li, *Mingdai Datong*, 37-60.
[609] Waldron, *The Great Wall*, 163-64.
[610] *Shenzong shilu*, in *MSL*, 48:1114.

court was paying to the garrison commands for military upkeep. Such costs were spread unevenly over time periods and geographical locations – as fortifications were built from west to east, the rise in costs paralleled that. This section will take the same three garrison commands – Datong, Jizhou, and Liaodong – and explore how the court kept them provisioned, particularly as the number of troops within those garrison ballooned with the construction of new fortifications. While the traditional provision methods of military farming, civilian transport, and salt-barter continued to be employed, from the Jiajing reign on annual subsidies took on greater importance. Working within finite resources and fiscal institutions designed for a self-sufficient military, the Ming court continually reassessed strategic threats and prioritized funding for the most critical regions.

The Datong Garrison Command

Like all Ming garrisons, Datong was initially supposed to depend on its military farms for subsistence. However, this proved to be impossible, particularly as the military farming institution as a whole began to decline after the Yongle reign. Instead, civilian grain transport delivered the lion's share of grain to Datong. Between the Zhengtong and Hongzhi reigns, some 400,000 to 500,000 *shi* of grain were delivered to Datong annually. This was supplemented by military farming yields and salt-barter. Between the Jiajing and Wanli periods, civilian transport was largely commuted to silver, obtaining around around 550,000 to 671,955 *liang* annually.[611]

Datong's annual subsidies prior to the Jiajing period were quite low – the *Collected Statutes of the Great Ming* (*Da Ming huidian* 大明會典) noted that prior to 1538 it received only

[611] Zhang, "Mingdai Shanxi," 50.

70,000 *liang* annually. However, with the growth of Mongol power in the region following the 1533 mutiny, the court began disbursing more funds to Datong to recruit troops. By 1549, Datong's annual subsidies grew to 268,769 *liang* and by 1573 Datong was receiving 450,638 *liang* from the court.[612] During this period, annual subsidies likely superseded income obtained from the military farms and the salt-barter method, becoming the second most importance source of income for Datong after civilian transport. From the 1540s to the 1590s, the amount of silver flowing into Datong was second only to the Xuanfu garrison, reflecting Datong's military importance.[613]

However, by the early seventeenth century, the court's attention had shifted to Liaodong. As a result, the annual subsidies disbursed to Datong decreased as well. According to statistics in the *Collected Statutes*, which reflected the situation in the mid-Wanli period, civilian transport delivered 586,415 *shi* of grain to Datong, with much of it actually in silver. Zhang Jinkui's study of Datong noted that civilian transport after the Jiajing period was fixed at 7,274 *shi* of grains and 671,955.76 *liang* of converted silver. Military farms in the region produced 126,744.5 *shi* of grain, and 43,804 salt licenses were granted to merchants. Annual subsidies, meanwhile, had fallen to 269,638 *liang*. Zhang's data for the early Wanli reign shows that the salt-barter method produced around 45,700 *liang* of silver for Datong, so it is likely that this was also the case in the mid-Wanli period.[614]

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[612] Wang, *Mingdai jiubian junfei*, 129-30.
[613] Lai, *Bianzhen liangxiang*, 235-37.
[614] *MHD*, 213; Zhang, "Mingdai Shanxi," 50.

The Jizhou Garrison Command

In contrast to other garrison commands, Jizhou depended almost entirely on annual subsidies. As it was originally not an important garrison, military farming, civilian transport, and salt-barter did not play an important role in Jizhou. During the Wanli period, civilian transport delivered a paltry 27,755 *liang* of converted silver annually. The salt-barter method produced a further 13,582 *liang* of silver, while military farming yielded 53,568 *shi* of grain. Additionally, Jizhou also received tribute grains (*caoliang* 漕糧) from the south. In the Jiajing period, Jizhou received 100,000 *shi* in grain and a further 80,000 *shi* in converted silver, but during the Wanli period only 50,000 *shi* were delivered, with the converted portion going to the Taicang treasury instead.[615]

These sources of income were dwarfed by the annual subsidies that the court disbursed to Jizhou, which ballooned rapidly after 1550. Previously there was no set quota for annual subsidies given to Jizhou, and the court gave between ten to forty thousand *liang* of silver annually depending on the year. In 1542, annual subsidies for Jizhou were set to 30,000 *liang*, and later a further 50,000 *liang* was added for the recruitment of troops. In the aftermath of Altan's raid, annual subsidies increased to between 200,000 and 300,000 *liang*, sometimes reaching highs of almost 500,000 *liang* a year. Only in the late Jiajing period did the court start instituting limits, likely because the military situation had stabilized by then.[616]

Unique to Jizhou was the fact that it often played host to a large guest army (troops from other places), which were used to shore up the garrison, and hence most of the subsidies were

[615] *MHD*, 210-11.
[616] *MHD*, 210-11.

used to pay for them. For instance, by 1566 annual subsidies to Jizhou had fallen to 232,486 *liang*. Of that, 41,953 *liang* were used to pay garrison troops, but the majority – 176,488 *liang* - went to guest troops. During the Longqing era, subsidies to Jizhou once again increased due to military emergencies. In 1569, Jizhou received 799,128 *liang*, divided between 165,703 *liang* for garrison troops and 633,479 *liang* for guest army troops. By the Wanli period, subsidies to Jizhou stabilized to around 420,000 *liang*, divided roughly equally between garrison and guest army troops.[617]

The Liaodong Garrison Command

Liaodong's logistical situation in the first half of the sixteenth century was similar to that of half a century earlier. In 1537, it was recorded that Liaodong had 31,620 *qing* of farmland and 18,635 colonists, producing 364,900 *shi* of grain annually.[618] This amount was higher than the average yields of the Liaodong's farms in the late fifteenth century (between 100,000 to 200,000 *shi*), a reflection that that Liaodong's attempts at restoring military farming demonstrated some success. Given the extensive construction of fortifications in the Chenghua and Hongzhi periods in Liaodong, it is likely that Liaodong's yields declined as a result of the deteriorating military situation. By the 1530s, as Liaodong's situation stabilized, the farming colonies could resume production and yields went back to their fifteenth century average. Additionally, the 1537 figure was likely inclusive of the converted silver portion (as opposed to deducting the converted portion from the total yield and listing it separately) – as the previous chapter pointed out, a portion of Liaodong's military farming yields was converted to silver.

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[617] Wang, *Mingdai jiubian junfei*, 155-57.
[618] Ren Luo 任洛, *Liaodong zhi* 遼東志, in *Liaohai congshu* 遼海叢書, 2:387, 402-03.

The increase in military farming production combined with a relatively calm border situation and problems within the salt monopoly could also explain the reduction in salt-barter revenues. In the previous chapter, it was noted that salt-barter in the late fifteenth century could provide Liaodong with up to 500,000 *shi* of grains annually. Later, grain delivery was converted to silver payments. In 1524, Liaodong obtained around 75,000 *liang* of silver from 185,000 salt licenses, but that number fell to only 27,125 *liang* in 1530 (from 70,000 salt licenses). Available records indicate that between 20,000 to 30,000 *liang* seemed to be the average revenue from the salt-barter trade in the Jiajing reign, although in the late 1550s the salt-barter trade could deliver up to 56,000 *liang* of silver to Liaodong. Nonetheless, it never reached the 1524 figure and likely could not match the amount delivered to Liaodong a century prior.[619] By the Wanli reign, depreciation of silver caused a further decline in salt-barter revenue, an issue that will be explored in the following section.

The decline in salt-barter revenues was offset by the gradual increase in annual subsidies to Liaodong. In the second half of the fifteenth century annual subsidies to Liaodong amounted to no more than 100,000 *liang* of silver a year. By 1537 that number had risen to 150,000 *liang* but remained around that amount until 1559. Gradual increases to Liaodong's annual subsidies began in the 1560s due to increased military pressures. In 1565, Liaodong received 198,000 *liang* from the court, even as the amount of grain produced by military farms remained roughly the same as in 1537.[620] By the early Wanli reign, Liaodong was receiving 307,925 *liang* in subsidies, almost double the 1537 amount. An additional 102,518 *liang* was earmarked for guest army troops in the region. Military farming yields, meanwhile, fell to around 279,212 *shi* and

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[619] Lai, *Bianzhen liangxiang*, 161-63.
[620] Ren Luo, *Liaodong zhi*, 2:387, 402-03; Li Fu 李輔, *Quan Liao zhi* 全遼志, in *Liaohai congshu* 遼海叢書, 2:543.

salt-barter was delivering only 39,716 *liang*.[621] Thus, annual subsidies seemed to have become the primary source of revenue for Liaodong by this period. Liaodong's military importance during the Korea campaign caused its annual subsidies to rise to 624,380 *liang* in 1591 and thereafter it would continue to remain high due to the war with the Later Jin.[622]

The above analysis of Datong, Jizhou, and Liaodong reveals that in the sixteenth century, annual subsidies, which rose considerably in each region following increased military pressures, had become an indispensable part of the garrison commands' revenue. For the northwest garrisons, such as Datong, Gansu, Ningxia, civilian transport was still likely the most important source of revenue, while further east annual subsidies superseded other sources of income. Military farming and salt-barter still played a role, but their importance had diminished compared to earlier periods. It should also be noted that annual subsidies were primarily for the recruitment and maintenance of mercenaries. For the construction of fortifications, the court disbursed additional funds, which can total hundreds of thousands of *liang* of silver. The following section will explore how rising military expenditures as a result of recruitment and construction impacted Ming finances and how the Ming managed to afford these costs.

The Fiscal Impact

In 1549, the Ministry of Revenue sent an accounting report to the Jiajing emperor, detailing the dire financial straits the empire was facing as a result of high military spending. Officials told the emperor that in 1531, the Jingtongcang granary 京通倉 was disbursing only 2.8 million *shi* of grain for the military against an income of 3.7 million *shi*, and that the various

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[621] *MHD*, 212-13.
[622] Wang, *Mingdai jiubian junfei*, 152-53.

capital granaries had eight to nine years' worth of surpluses. However, now military spending had reached 5.37 million *shi*, reducing the granary surpluses by half. Meanwhile, the Taicang's annual revenue was only 2 million *liang*, but various military expenditures cost the court 1.33 million *liang*. Two other treasuries - the Neiku 內庫 and the Waiku 外庫 - had 4 million and 1 million *liang* in reserve respectively, but both the cost of recruitment and additional funds disbursed during the autumn defense season (590,000 *liang* and 1.1 million *liang* respectively) came from these two treasuries. These figures did not even factor in the cost of building fortifications, rewarding personnel, and alleviating famine. Thus, the court was spending almost 3.47 million *liang* a year - 1.47 million *liang* more than the Taicang's revenue.[623]

That the Ming was facing tremendous fiscal pressure should not come as a surprise given the high spending on the recruitment of troops and construction of fortifications mentioned above, particularly as annual subsidies began constituting an ever-larger component of the garrison commands' income. In the second half of the sixteenth century, the court was spending between two to three million *liang* annually to subsidize the border garrisons, whereas previously annual subsidies amounted to no more than six hundred thousand *liang* a year altogether. When military spending on the south was also added, Ray Huang posited a conservative estimate of seven million *liang* in the 1550s.[624] The reason for this increase is likely threefold. First, annual subsidies were a convenient way to fund the garrisons since that money was already there, particularly during military emergencies when funds needed to be disbursed quickly. Second, most soldiers recruited from the Jiajing reign on were no longer farmer-soldiers who supported

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[623] *Shizong shilu*, in *MSL*, 351:6339-41.
[624] Huang, "Military Expenditures," 52-53; Wang, *Mingdai jiubian junfei*, 163-66.

themselves – they depended entirely on state payments. Third and more importantly, the previous funding method of combining civilian transport, military farming, and salt-barter was no longer effective in meeting the needs of the garrisons, since the state was limited in the amount of grain it could demand from these three sources. Ming agricultural tax income remained largely stable from the mid-fifteenth to the late sixteenth centuries, registering a decline of between three to eight million *shi* compared to the Early Ming. This stability is also shown by Lai Jiancheng, who found no increase in agricultural tax revenue in the Late Ming – the increase in income likely resulted from more efficient tax collection instead.[625] This income was perhaps sufficient for the Chenghua-Hongzhi era, but could not meet the increased military spending of the mid-Jiajing reign, thus forcing the state to pick up the tab.

Ming officials wasted no time in letting the emperor know the dire fiscal straits facing the empire. In 1550, the Ministry of Revenue once again commented on high military expenditures, noting that the actual Taicang revenue for 1549 had exceeded the revenue quota of 2,125,355 *liang* and stood at 3,957,116 *liang*, but even then, military expenditures had reached 4,122,727 *liang*. A few years later, officials told Jiajing that military spending in the past few years hovered between three to six million *liang* (the highest was in 1551 when the court spent 5.95 million *liang*) against the Taicang's annual revenue of two million.[626] Yet little could be done to ameliorate the situation, as the Mongol problem was one the court could never resolve. Instead, the court had to look for ways to fund the garrisons. Even as officials complained of high

[625] Zhao Yi 趙毅 and Fan Chuannan 范傳南, "Jiubian fangwei yu Ming diguo de caizheng tizhi bianqian" 九邊防衛與明帝國的財政體制變遷, *Shehui kexue jikan* 社會科學輯刊 2011, no. 5 (2011): 140-41; Lai, *Bianzhen liangxiang*, 28-29.
[626] *Shizong shilu*, in *MSL*, 356:6405-06; 456:7712-13.

military expenditures and budget deficits, the court was taking measures to increase revenue to meet increased military spending.

At first, the court's response was simply to order officials to compile detailed expenditure reports and then to reduce spending. Obviously, this was insufficient and likely impossible, so new sources of wealth had to be found. The court implemented a series of *ad hoc* measures which by all accounts were successful, allowing the Jiajing, Longqing, and early Wanli courts to absorb high military spending. Central to these *ad hoc* measures was increased surcharges on the land tax. For instance, Ray Huang noted that in order to meet increased military expenditures in the aftermath of Altan's raid in 1551, the court gained an additional 1.16 million *liang* of silver through temporary surcharges. By mid-century, the court was collecting between 25 to 35 million *liang* of silver from the land tax when surcharges were factored in.[627] Therefore, while the Ming tax rated remained quite stable over time, the actual amount paid by farmers was much higher. Other methods of raising revenue included increasing the salt production quota in Lianghuai (yielding roughly 300,000 *liang*) and converting tribute grain to silver (adding an additional 1 million *liang*). In the 1550 case the emperor also temporarily yielded Golden Floral Silver bound for the privy purse, providing the Ministry of War with an additional 3.5 million *liang*.[628]

Given the limited sources of revenue that the Ming court could draw from, the court thus worked within the confines of its fiscal system to find additional funds for the military. Of

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[627] Huang, "Military Expenditures," 48.
[628] Huang, "Military Expenditures," 48. Emperors were known to have used funds from the privy purse to shore up the military. For instance, the newly enthroned Jiajing emperor disbursed 13,000 *liang* of his own personal silver to the Datong garrison in 1521 when he found that Datong soldiers' pay was in arrears. See *Shizong shilu*, in *MSL*, 3:125-26.

particular importance was the salt monopoly. Although the previous section showed that the salt-barter trade declined in the Jiajing period, the salt monopoly as a whole remained a vital source of income. Ray Huang noted several problems within the monopoly, such as overproduction which led to a glut of salt licenses, inability to compete with contraband salt, and mismanagement, and these contributed to crises in 1520s, 1560, and 1600s that caused the salt-barter system to nearly collapse and made it unable to support the garrisons.[629] Nonetheless, the monopoly was continuously revived and continued to function, becoming especially successful in the late sixteenth century. Revenue from the monopoly increased in the 1580s and 1590s due to more efficient supervision of the institution, and much of that revenue entered the Taicang, the primary treasury used to pay for annual subsidies. In 1578, for instance, the salt monopoly accounted for 27.31% of the Taicang's 3.7 million *liang* income, and it would continue to produce revenue well into the Wanli reign.[630]

An even greater effect of the changing form of military mobilization and provisioning in the sixteenth century was the Single-Whip Reform (*yitiao bianfa* 一條鞭法), the conversion of most labor obligations to silver. As noted above, such conversions became widespread in the mid-sixteenth century in southeastern China as officials sought funds for anti-*wokou* campaigns. Various forms of corvée labor service were converted to silver levies instead, a process that was successful and allowed local officials to raise large sums of money to hire troops. In other words, policies characteristic of the Single-Whip Reform was already being practiced in southeast China during the Jiajing period, a direct result of military mobilization.[631] After the *wokou* crisis abated,

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[629] Huang, *Taxation and Governmental Finance*, 202-12.
[630] Huang, *Taxation and Governmental Finance*, 211-12; Lai, *Bianzhen liangxiang*, 31, 33, 37-38; Wang, *Zhongguo jingji tongshi: Mingdai*, 1029-30.
[631] Liu and Liu, "Jiajing chao kangwo zhanzheng," 113-48.

such conversions were made permanent and gradually spread to the north by the 1570s and 1580s. According to Ray Huang, there was a difference in how the policy was implemented there. In the south, service levies were factored into the regular land tax as surcharges, whereas in the north the service levy was assessed directly on each *mu* of land.[632] The Single-Whip Reform not only simplified the Ming fiscal code but also increased state income. Combined with fiscal retrenchment under the grand secretary Zhang Juzheng 張居正 (1525-1582), the court was able to accumulate huge budget surpluses in the early Wanli period that would enable the Wanli emperor to launch his "Three Great Campaigns."[633]

In sum, despite claims of huge budget deficits brought about by high military spending, the Ming court in the sixteenth century was still able to come up with the necessary funds and absorb high military spending. This was done by implementing a series of *ad hoc* policies to work within the fiscal system to boost revenue. In the last decades of the sixteenth century, the widespread conversion of corvée service to silver and increased salt production powered the growth in revenue. Under Zhang Juzheng's careful management and policy of fiscal retrenchment, the treasuries even recorded budget surpluses for a time. Yet while the state was able to find ways to raise funds, the following sub-section will show that the increasing use of silver as a form of payment led to new problems for soldiers along the frontiers that once again had some officials clamoring for restoration of military farming.

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[632] Huang, *Taxation and Governmental Finance*, 122-23.

[633] Huang, "Military Expenditures," 56-59; *Taxation and Governmental Finance*, 130-33; Wu Liangqi 吳量愷, *Zhongguo jingji tongshi: Mingdai juan* 中國經濟通史: 明代卷 (Changsha: Hunan renmin chubanshe, 2002), 504-05.

Final Attempts at Restoration

In the fifteenth century, silver was seen as a solution to many problems facing the military. It was easier to transport than grain and textiles, it could be used more flexibly by local military authorities, and it solved the issue of rations depreciating. Yet this last benefit was true insofar as the value of silver could be maintained. By the sixteenth century, as more and more silver flowed to the border garrisons due to salt-barter and later the influx of foreign silver, it started to have the opposite effect – the value of silver began to fall while the price of grain elevated, putting more burdens on soldiers.[634] This was confounded by the decline of farming colonies, particularly enterprising colonies founded by salt-barter merchants (as they were now delivering silver inland), leading to grain shortages.[635]

This issue is summed by succinctly by the high official Yang Yiqing 楊一清 (1454-1530), who in the early Jiajing reign served as Minister of War and headed the Shanxi Garrison Command. Writing about the situation in Gansu, Yang noted that there was only a finite amount of grain in the region available for purchase, which was leading to elevated grain prices that impoverished soldiers. The issue was exacerbated by salt-barter merchants delivering more silver to the garrison. No matter how much silver the court delivered, it could not alleviate the lack of grain in the region. Thus, to Yang, payments in silver were not a viable long-term solution. Yang proposed that merchants be ordered to deliver grain instead, but he also advocated for the restoration of military farming. Rectification censors should conscript personnel for farming, but

[634] Terada, *Shanxi shangren yanjiu*, 148-51; von Glahn, *The Economic History of China*, 309.
[635] Liew, "Tuntian Farming," 29-31.

colonists could also be hired. They would be given land, farming implements, oxen, and seeds. Those found to be illegally occupying farmland would be forced to return them.[636]

At first glance, this appears no different than proposals advanced during the Chenghua and Hongzhi reigns. Indeed, officials in 1535 suggested following Chenghua-era registers to conscript military personnel in Shaanxi and Gansu, where they would be given farmland taxed according to the old regulations of six *shi*. These colonists would also be organized into the *weisuo* under the Hongwu-era principle of seventy percent farming and thirty percent training. And as late as 1591, one official told the Wanli emperor that the key to reducing budget deficits was to reduce spending and restore farming.[637] Nonetheless, a crucial difference lay in that while many Chenghua-Hongzhi era officials advocated for military farming as part of a broader court ideology that privileged the old institutions of Hongwu and Yongle as *the* long-term solution to high military expenditures, the officials who advanced similar proposals in the Jiajing court saw farming as a practical method to increase the amount of grain flowing to the border to alleviate high grain prices. The issue of grain prices never arose in late fifteenth century discussions on restoring military farming but was central to policymakers in the sixteenth century.

Nor was military farming used exclusively to solve the issue. In 1529, the court ordered that salt-barter merchants making deliveries to the border deliver grain instead, and they would similarly be encouraged to establish enterprising farming colonies.[638] Nonetheless, the same officials advocating for the restoration of farming also noted how it was impossible to do so

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[636] Yang Yiqing 楊一清, "Lun Gansu shiyi xiuju tunzheng" 論甘肅事宜 修舉屯政, in *HMJSWB*, 119:1137-39.
[637] "Yi_ bianbei yi yu luhuan shi" 議_邊備以禦虜患事, in *Jiajing gebu xinli bingbu er*, 28b-30a; Yang Junmin 楊俊民, "Bianxiang jianzeng gongyi nanji zhuo changce yitu zhi'an shu" 邊餉漸增供億難繼酌長策以圖治安疏, in *HMJSWB*, 389:4209.
[638] *MHD*, 238.

under the current situation. One Ministry of Revenue official told the emperor that there were four reasons why restoration of farming colonies was impossible – Mongol raids made it impossible to farm, oxen were in poor shape and cannot be used, colonists were deserting and there was no one to farm, and the occupation of Hetao which resulted in the loss of fertile agricultural land. Another official gave four similar reasons – the loss of farming personnel, Mongol raids, high taxes on military farmland, and privatization.[639] Terada Takanobu argued that high grain prices contributed to privatization, as those with farmland realized they could make money selling grain.[640] The Ming court never did fully restore its colonies, and its solution was to raise salaries in silver.

Conclusion

The sixteenth century was a pivotal moment in the history of the Ming military. It represented the acceptance of the growing market economy and the final repudiation of the self-sufficient military institutions that the Ming inherited from the Mongols. Hereditary service and the *weisuo* were maintained insofar as they were considered "ancestral institutions" that were impossible to abolish, but their role in the military was greatly diminished. Gone were the days where the court would devote time and resources to engage in military rectification and track down and replace missing hereditary personnel. Instead, sixteenth century officials saw marketized recruitment was both more expedient and more effective. In the north and the south, large numbers of troops were hired to deal with the Mongols and the *wokou*. To afford their upkeep, the court enacted a host of measures to raise funds, the most prominent ones being

[639] *Shizong shilu*, in *MSL*, 162:3598-99; Pang Shangpeng 龐尚鵬, "Qingli Yansui tuntian shu" 清理延綏屯田疏, in *HMJSWB*, 359:3872.
[640] Terada, *Shanxi shangren yanjiu*, 148.

adding surcharges to the land tax, commuting labor obligations to silver, and increasing salt production. These policies largely allowed the Ming to absorb increased military spending. The fiscal crisis that scholars commonly associate with the fall of the Ming did not occur until the early seventeenth century, when military spending spiraled out of control due to the twin threats of the Manchus and peasant rebels, even as the court drastically boosted its silver revenues through a series of emergency taxes.[641]

For most of the sixteenth century, the evidence presented in this chapter shows that the Ming court was still largely able to meet its military challenges. After the weakness of its defensive network was exposed in 1550, the court embarked on a large-scale project to bolster its defenses through the recruitment of hired troops and the construction of border fortifications. These were used in concert with other measures, such as offensive military operations and diplomatic and economic accommodation.[642] In places like Liaodong, this chapter has shown that strong Ming military power kept the region relatively peaceful for much of the sixteenth century. So, can we say that sixteenth century Ming policies were a success?

The answer to this question is complicated. The court had clearly shown its ability to adapt to changing military situations and needs. In the aftermath of military crisis in 1449 and 1550, the court took measure to bolster its defenses. When these measures proved ineffective in the face of new challenges, the court quickly jettisoned them in favor of different approaches. This we see first with the use of civilian legionnaires and local troops in the aftermath of Tumu, and then with the rejection of hereditary conscription in favor of marketized recruitment in the

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[641] Lai, *Bianzhen liangxiang*; von Glahn, *The Economic History of China*, 310; Christian Lamouroux and Richard von Glahn, "Public Finance," in *The Cambridge Economic History of China, Vol. 1: To 1800*, edited by Richard von Glahn and Debin Ma (Cambridge: Cambridge University Press, 2022), 367-68.
[642] Waldron, *The Great Wall*.

sixteenth century. The corresponding rise in military expenditure was also met. Yet on the other hand the fiscal issue was never solved, and the Ming was able to meet increased spending largely by working within the confines of a fiscal system that privileged the land tax ahead of other sources of income. These *ad hoc* measures were effective in the short term, but there was only so much money that could be obtained. Indeed, as the Ming faced military pressure from the Manchus in the early seventeenth century, it could only institute a series of emergency taxes. While this indeed drastically increased income, it also fanned the flames of discontent. When coupled with famine, floods, and epidemic disease, it led to widespread peasant revolts that ultimately toppled the dynasty.[643]

[643] Swope, *Military Collapse*; von Glahn, *The Economic History of China*, 310; Lamouroux and von Glahn, "Public Finance," 368.

Conclusion

When the Hongwu emperor promulgated his *Grand Pronouncement to Military Officials* in 1388 warning against the abuse and exploitation of soldiers, he could have hardly imagined the headache the military would be giving his successors. Hongwu was supremely confident in his institutions, going as far as forbidding his successors from changing them, and he envisioned that the various regulations and pronouncements he issued would be sufficient to preserve the self-sufficient farmer-soldier ideal that underpinned the Ming military. Yet as this dissertation has shown, the military in the Yuan and the Ming was never a monolithic, unchanging institution. As with all state institutions, the military changed with the times and the court had to adapt to new socioeconomic and geopolitical realities. The militaries of the Yuan and Ming perfectly illustrate such a transformation. Both militaries were premised upon self-sufficient and self-replicating military households that were meant to supply the state with large numbers of soldiers at minimal cost. Both militaries faced similar issues – privatization of soldiers, appropriation of military farmland, and various other forms of abuses. While these issues were not exclusive to the Yuan and the Ming, the unique institutional foundation of their military meant that such problems were extremely detrimental. As a result, both dynasties also employed similar solutions to increase central oversight and to prevent abuses from happening, although the Ming also utilized new methods to respond to different geopolitical contexts. Towards the end of the two empires, professional soldiery became an important component of the military. This transition from hereditary conscription to voluntary recruitment is all the more interesting given that the Yuan and Ming's fiscal institutions were designed to support a self-sufficient military, which meant the court had to work through certain constraints to raise sufficient revenue to hire troops. The following section will summarize the rise and fall of hereditary

military service in almost four centuries it was in operation and the major changes to military institutions during this period as presented in the dissertation.

The Chinese Military, 1260 to circa 1600

The five chapters of this dissertation have traced how the history of the hereditary military system in the Yuan and the Ming from 1260 to circa 1600, a span of almost four centuries. This was a method of mobilization that had never before been used on such a large-scale in China and it had tremendous consequences for the development of other state institutions. It was the Mongol-Yuan who first introduced this particular form of hereditary military mobilization to China, and, over the course of their rule, the Mongols had to confront the various issues mentioned above which threatened the integrity of the military (Chapter One). The solutions they employed, from disbursing aid and releasing poor military households from service, to strengthening institutional mechanisms, to more adaptive policies that sought to preserve military strength even at the expense of going against established regulations or precedents, shows that the Mongol court paid close attention to the military. Their efforts were largely successful in keeping the military strong, as evidenced by the internal and external wars that it fought throughout the first half of the fourteenth century. However, the underlying principle that informed the Mongol court's actions was the need to maintain the institutional privileges of the Mongol elites and to balance that against the need for military reform. The Han Chinese literati berated the Mongols for failing to reform according to their own vision, leaving behind records that for a long time informed our understanding of the Yuan military. Yet given the successful campaigns that were carried out and the fact that many military households in north China seemed to have grown wealthy through military service, the accusations of exploitation and abuse cannot be taken at face value.

That the Mongols were successful in maintaining military strength, at least in north China, is best reflected in the Yuan's anti-rebel campaigns in the early 1350s, in which they mobilized large contingents of garrison troops from the north (Chapter Two). These forces included Han Army troops (many of whom were attached to the Imperial Guard Corps), as well as Mongol and other Inner Asian troops. The Mongols were compelled to rely heavily on these northern troops because many garrisons in the south were skeletonized due to the abuses mentioned in the first chapter and were in no shape to fight. To help augment its military forces, the Yuan court also hired soldiers and utilized militias raised by members of the southern gentry. The fact that the court could support such massive mobilization efforts points to sufficient fiscal capacity at the time. It is difficult to say what would have happened to the Yuan military had the court successfully managed to suppress the uprisings in 1355. The court would possibly have wanted to maintain the military household system, for it was still working well enough in the north. Nonetheless, the large number of hired troops would have to be dealt with and the southern garrisons needed to be revived. Perhaps there would have been a northern and southern divide, with hereditary soldiers in the north and hired troops in the south, or perhaps hired troops would become a new hereditary army in the same way the Yuan incorporated the hired soldiers of the Southern Song. But such a line of analysis is speculative at best. The Yuan military machine largely collapsed after 1355, due not to abuse or exploitation or impoverishment, but because control of the military had devolved into the hands of "powerful ministers" through a large web of patronage. Such as a situation was unique to the Mongol-Yuan, despite having precedents in Chinese history, because of the unique sociopolitical nature of the Yuan. When this patronage network was disrupted, as it was in 1355, the military apparatus collapsed as a result.

The Ming, born out of the Mongol-Yuan, inherited the military institutions of its Mongol predecessors in the form of the *weisuo* 衛所 ("guards and battalions"), and early Ming rulers took steps to strengthen central oversight abuses (Chapter Three). The Hongwu and Yongle emperors sought to balance harsh punishments with generous rewards in order to better control the military. The turn towards utilizing local actors, such as village authorities and local elders, as a check on military officials and then subjecting the military to closer central oversight parallels institutional adjustments that the Mongol-Yuan implemented that are described in Chapter One. Yet at the same time Hongwu was decreeing that his institutions were inviolable, he himself was making changes to military organization to enable his armies to better respond to emergencies. This allowed his successors to build on his changes and slowly move the military away from the *weisuo* structure through the construction of what would become known as the "divisional army" system (*yingbing* 營兵). By the 1430s, the Ming court had also largely rejected the harsh measures implemented by Hongwu and Yongle and instead transitioned to a much more balanced approach to entice deserters to return, all the while subjecting the military to increasing central civilian oversight. While the year 1449 is often viewed by scholars as the year in which the Ming military began to deviate from hereditary military service and the *weisuo*, much of that transformation had already begun in the decades prior.

The military crisis brought about by the Tumu Incident in 1449 necessitated changes to military organization to restore the garrisons and defend against resurgent Mongol threats (Chapter Four). At first the court implemented a series of short-term measures to raise troops quickly, including recruiting civilians as militiamen and hiring from the ever-expanding pool of military auxiliaries. However, officials quickly recognized the long-term potential in utilizing these personnel to refill the ranks of depleted garrisons and institutionalized their conscription.

This essentially turned them into a new type of hereditary soldiery. Parallel to this was an intense effort on the part of the central government to restore the hereditary military households by doubling down on their conscription. Nonetheless, while restoration was the official ideology of the court, officials on the ground sought to adapt to local conditions when mobilizing soldiers. This largely entailed allowing conscripts to pay silver to avoid militia service, which contravened official regulations, and then using this silver to hire volunteers, as well as allowing border commanders to field private retainers. This tension between restoration and adaptation played out mostly in the second half of the fifteenth century, but by the early sixteenth century, the court was forced to acknowledge the failure of restoration and implicitly accepted the strategies of local officials. Thus, what the court did in the latter half of the fifteenth century was not simply to restore the military as it existed in the early Ming, but rather to reconstitute it using new methods that took into account the changed socioeconomic conditions of the period.

This newly reconstituted military apparatus worked well in responding to challenges up to the middle of the sixteenth century, but Altan's raid in 1550 and the *wokou* crisis along the southeastern coast exposed deep inadequacies, forcing the court to begin jettisoning coercive conscription in favor of voluntary recruitment (Chapter Five). By this period, the divisional army system had superseded the *weisuo* as the primary means of organizing combat units, and these hired troops existed outside the military household framework and were paid in silver. In the south, troops hired to fight the *wokou* came to resemble the professional soldiers of early modern Europe in that they were trained solely to fight (whereas many of their northern counterparts also farmed). This difference was partly a consequence of the different economic conditions of south China, which did not allow for land distribution as a form of payment. In addition, unlike the northern frontier, the *wokou* crisis was actually resolved, which meant these troops could

ultimately be demobilized. The agricultural and commercial wealth of the south also made it possible to raise large sums of money to fund recruitment. In many ways, the use of hired troops and silver accelerated trends that had already appeared in the late fifteenth century. While hereditary soldiery continued to exist, they were no longer the main component of the Ming military.

At the same time, systems of provisioning also underwent a transformation. Both the Yuan and Ming militaries were built upon self-sufficient ideals, with military farming colonies playing the major role in keeping the garrisons supplied. Yet in both cases, military farms deteriorated rapidly after an initial period of success. In the Yuan, fiscal crises in the 1310s and 1320s necessitated attempts to restore the farming colonies, and if the scattered records are to be believed, the court was successful in restoring and maintaining at least some of the colonies (Chapter One). Additionally, Mongol, *tammachi* (Mongol troops drawn from the Mongol Army for garrison duty), and Han Army households received financial support from their households, which was different from the Ming. Thus, as long as the military households were stable, then money and supplies could flow to the soldiers. The fact that Yuan soldiers in the north participated in military campaigns throughout the fourteenth century shows that many of these households were probably in good shape. That the Yuan court could also afford to mobilize and provision these troops and hire new soldiers point to the fact that the state possessed sufficient revenue reserves and fiscal capacity (Chapter Two). Unfortunately, lack of extant sources makes it impossible to study how this was done, but the salt monopoly and the expedient use of new paper currency undoubtedly played a role. In the Ming, the military farms demonstrated success in the early years of the fifteenth century in keeping the garrison supplied, but thereafter began to slowly decline; the state instead transitioned to other forms of provisioning that relied primarily

on civilian transport and the salt-barter method (Chapter Three). These methods of provisioning continued to play a huge role in the second half of the fifteenth century, but the court also began to disburse silver subsidies to border garrisons and sought to restore military farming (Chapter Four). Yet silver subsidies did not play an important role in this period, and restoration of farming colonies was aimed more at maintaining them in their current state than restoring them to their height in the early Ming. Silver subsidies did not become a major component of military spending until the mid-sixteenth century, when increased recruitment of troops and the construction of extensive border fortifications led to increased spending (Chapter Five). In order to raise the necessary funds, the Ming utilized a host of policy measures, such as adding surcharges to the land tax, converting corvée service to silver levies, and boosting the salt monopoly. These measures culminated in the Single-Whip Reform, which simplified the Ming tax code and made tax collection more efficient. Thus, despite tremendous fiscal pressures, the Ming successfully kept the army paid and fed.

While the comparison between the Yuan and the Ming has yielded insight on the rise and fall of hereditary military service in China and how the court transitioned to supporting a professional army, such a comparison should not be limited to only China. The Mongol Empire was a Eurasian phenomenon, and the dissolution of the unified empire in 1260 spawned four successor states. The fall of the Mongols in the second half of the fourteenth century then created several imperial formations throughout Eurasia that drew on the legacy of the Mongols. How these successor states adapted, contested, and negotiated Mongol ideology has been subjected to study, but what is less known is how they collectively grappled with their Mongol military

legacy.[644] Institutional legacies are often difficult to trace, as the links are not explicit. Thus, it is necessary to look into institutional practices to discern where parallels and divergences occur. What follows, then, will be a comparison of the institutional practices relating to the military between China and other Eurasian polities, with a focus on the Mongol-Yuan and Ilkhanate Persia, and Ming China and Muscovy Russia. A study of these symmetries of practice and where they diverged will allow us to better understand the military and institutional legacy of the Mongols in Eurasia.

Towards a Mongol-Eurasian Model of War and Empire

Throughout the past few decades, there have been attempts by historians to compare various aspects of the four Mongol khanates and the various Mongol successor states with each other. But because the Mongols ruled over areas with vastly different conditions, the Mongol khanates and successor states also varied in their development, even if they shared the same political, social, and institutional heritage. This section will focus on comparisons of China with Ilkhanate Persia and Muscovy Russia. The Ilkhanate, another Mongol polity who ruled over a sedentary region, faced some of the same challenges as their cousins in China in adapting their nomadic lifestyle and institutions to sedentary conditions. Muscovy Russia, meanwhile, employed Mongol ideology, institutions, and military organization in the course of state-building in the same manner as the Ming. Its agrarian basis and the intense threat it faced from steppe nomads also shares some similarities to the Ming experience.

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[644] Everim Binbaş, for instance, has studied how Chinggisid ideology was utilized by the Timurids. David Robinson has done the same for China, while Charles Halperin noted early on how Russian political leaders utilized Chinggisid ideology to justify their actions. Charles J. Halperin, *Russia and the Golden Horde: The Mongol Impact on Medieval Russian History* (Bloomington: Indiana University Press, 1985), 97-102; Robinson, *In the Shadow of the Mongol Empire*; *Ming China and its Allies*; Binbaş, "The Timurids and the Mongol Empire," 936-53.

The Ilkhanate and the Mongol-Yuan

The Ilkhanate was established by Hülegü (1217-1265, r. 1256-1265), the third son of Tolui (1191-1232) and younger brother of Möngke and Qubilai, in 1256. Its core territory lies in what is now Iran, Iraq, and Azerbaijan, but at its greatest extent the Ilkhanate also included parts of modern Turkey, Syria, Armenia, Georgia, Afghanistan, Pakistan, Turkmenistan, and Tajikistan. Being the only one of the four khanates not initially designated by Chinggis Khan, Hülegü and his successors derived their right to rule through patents granted to them by the Great Khans (Möngke and Qubilai). Thus, Hülegü chose the title *Il-khan*, which meant "subservient khan," to signify his subservience to the Great Khans in the east. Nonetheless, for its entire history, the Ilkhanate functioned as an autonomous entity ruled over by the house of Hülegü.[645]

Like their cousins in China, the Ilkhans controlled a largely sedentary population with a developed literary and administrative tradition. They thus faced similar challenges in how to adapt their rule to sedentary conditions. As it relates to the military, the Ilkhanate army was similar to the Mongol-Yuan in that Mongol troops formed the core of the army, augmented by soldiers drawn from sedentary populations. The size of the Ilkhanate army is difficult to calculate – when Hülegü departed on his expedition against the Isma'ilis and the Abbasids in 1253, he likely had with him 60,000 troops drawn from the Ögedeid realms and a further 20,000 troops drawn from Tolui's old patrimony. John Masson Smith, Jr. estimated that Hülegü commanded between fifteen and seventeen *tümens* (myriarchies), with 150,000 to 170,000 Mongol soldiers.

[645] For a succinct summary on the Ilkhanate, see David O. Morgan, *The Mongols*, 2nd edition (Malden: Blackwell Publishing, 2007), 128-51.

Following traditional steppe customs, universal conscription was practiced for all nomads, while one soldier was levied for every nine households for non-nomads.[646]

Mongol troops in the Ilkhanate were expected to be self-sufficient – since the Ilkhanate possessed good pastures, its rulers distributed these lands to the soldiers. Soldiers could also expect to augment their income with loot after battles. But with conquests drying up and insufficient pastures available for distribution (soldiers also had to pay taxes on their pastures), the Ilkhanate court sought new ways to provision the soldiers. At first it turned to payments in grain, but these were still inadequate. It was difficult to extract the amount of wealth necessary to afford these payments, and poor administration meant many soldiers didn't even receive them. As a result, Ghazan (r. 1295-1304), the seventh Ilkhan who is best known for converting the Ilkhanate to Islam, turned to the *iqta* land grant system.[647]

The *iqta* was a well-known institution in the Muslim world. It essentially entailed granting a parcel of land to a holder who was then responsible for administering it. The *iqta* holder used the revenue to support his military upkeep and to pay for soldiers under his command. Under the Mongols, the *iqta* was still used, but early on it was only granted to higher-ranking military commanders. Ghazan turned the *iqta* into the primary method of remuneration

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[646] John Masson Smith, Jr., "Mongol Manpower and Persian Population," *Journal of the Economic and Social History of the Orient* 18, no. 3 (1975): 271-78; David O. Morgan, "The Mongol Armies in Persia," *Der Islam* 56, no. 1 (1979): 82-88; Manz, *The Rise and Rule of Tamerlane*, 97; Xu Liangli 徐良利, *Yi'er hanguoshi yanjiu* 伊爾汗國史研究 (Beijing: Renmin chubanshe, 2009), 83; Michael Hope, *Power, Politics, and Tradition in the Mongol Empire and the Īlkhānate of Iran* (Oxford: Oxford University Press, 2016), 91-101.

[647] A.P. Martinez, "Some Notes on the Īl-Xānid Army," *Archivum Eurasie Medii Aevi* 6 (1988): 213-16; Charles J. Halperin, "Russia in the Mongol Empire in Comparative Perspective," in *Russian and Mongols: Slavs and the Steppes in Medieval and Early Modern Russia*, edited by Victor Spinei and George Bilavschi (Bucureşti: Editura Academiei Române, 2007), 129; Xu, *Yi'er hanguoshi yanjiu*, 133; Reuvan Amitai, "Turko-Mongolian Nomads and the *Iqtā'* System in the Islamic Middle East (ca. 1000-1400 AD)," in *Nomads in the Sedentary World*, edited by Anatoly M. Khazanov (Richmond, Surrey: Curzon Press, 2011), 158-59.

for Mongol soldiers, but the *iqta* he instituted differed from earlier iterations. The Ilkhanate *iqta* was granted based on the decimal system and became hereditary. Chiliarchs were assigned land through drawing lots, and the chiliarchs then subdivided the land among the centurions, who then subdivided their land among the decani, who then subdivided them among individual soldiers. In this manner, each Mongol soldier was granted rights to revenue from a parcel of land, which was farmed by peasants or slaves.[648]

For many, the implication of the *iqta* was that the Mongols in Persia became sedentarized, shedding their nomadic notions of self-sufficiency and embracing agriculture. This was the view of the great scholar of the Mongols David Morgan and is supported by the Chinese scholar Xu Liangli. Rueven Amitai, too, see the *iqta* as a sign of Islamicization/Persianization, and his belief that the Mongols did not adopt the *iqta* is rooted in the idea that the Mongols wanted to preserve their nomadic heritage.[649] Amitai has also argued against the sedentarization theory in general, showing evidence that the Ilkhanate armies did not undergo massive transformations in their basic nature and equipment and tactics in the early fourteenth century.

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[648] I.P. Petrushevsky, "The Socio-Economic Condition of Iran Under the Īl-Khāns," in *The Cambridge History of Iran, Vol. 5: The Saljuq and Mongol Periods*, edited by J.A. Boyle (Cambridge: Cambridge University Press, 1968), 518; C.E. Bosworth, "Army II. Islamic to the Mongol Era," in *Encyclopaedia Iranica II*, edited by Ehsan Yarshater (London and Boston: Routledge & Kegan Paul, 1987), 499-503; Xu, *Yi'er hanguoshi yanjiu*, 134; Amitai, "Turko-Mongolian Nomads and the *Iqtā'* System," 159. While most scholars agree that Ghazan made large-scale use of the *iqta* to provision his military forces, more recently Reuvan Amitai has challenged this idea, noting that the *iqta* was not widely used in the Ilkhanate as it is sparsely mentioned in the sources. However, Amitai does not provide any alternatives for how the Ilkhanate supplied its military without the *iqta*. See Amitai, "Turko-Mongolian Nomads and the *Iqtā'* System," 165; "Continuity and Change in the Mongol Army of the Ilkhanate," in *The Mongols' Middle East: Continuity and Change in Ilkhanid Iran*, edited by Bruno Di Nicola and Charles P. Melville (Leiden: Brill, 2016), 44-45.

[649] Morgan, "The Mongol Armies in Persia," 93, 96; *The Mongols*, 150-51; "The Decline and Fall of the Mongol Empire," *Journal of the Royal Asiatic Society* 19, no. 4 (2009): 432; Xu, *Yi'er hanguoshi yanjiu*, 136; Amitai, "Turko-Mongolian Nomads and the *Iqtā'* System," 165.

Most Mongol soldiers were still lightly armored mounted archers riding small steppe horses who fought using traditional steppe tactics.[650]

The Japanese historian Yazawa Tomoyuki offers a compelling argument regarding the sedentarization issue. According to Yazawa, the implementation of military farming by the Mongols in China and the *iqta* in Persia are not signs of sedentarization, as commonly assumed by many historians, but rather represent attempts by the Mongols to maintain their nomadic custom of self-sufficiency.[651] For Yazawa, both the Mongol-Yuan and the Ilkhanate were simply adapting to their new sedentary environments, utilizing local institutions to maintain their steppe traditions and ideals.[652] The findings of this dissertation support Yazawa's conclusion. Yazawa noted that much of the land that Ghazan parceled out as *iqta* lands had already been privatized and occupied by Mongol military commanders. What Ghazan did, essentially, was to acknowledge the current situation and use it to the state's benefit. This is not unlike the actions of the Mongol-Yuan court in adapting to new socioeconomic circumstances in China through the use of adaptive strategies, as highlighted in Chapter One. If both the Mongol-Yuan and the Ilkhanate successfully adapted to their new environment, what are the implications for their military?

David Morgan argued that both entities lost military strength as a result of sedentarization, while their Golden Horde (which itself also adopted the *iqta*) and Chagatai

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[650] Amitai, "Continuity and Change in the Mongol Army," 40-43.
[651] The idea that the Mongols became sedentarized in China is also popular among Chinese historians, who sees military farming colonies and land grants as similar to the *iqta* in pushing for the adoption of agriculture among the Mongols. See, for instance, He, "Yuandai tuntian ruogan wenti tantao," 74; Xiao Qiqing 蕭啟慶, "Lun Yuandai Mengguren zhi Hanhua" 論元代蒙古人之漢化, *Taidai lishi xuebao* 臺大歷史學報 17 (1992): 251-52; Shi, *Yuandai junshi shi*, 273; Ma, "The Yuan Empire," 274.
[652] Yazawa, "Mongoru jidai no heitan seido ni kansuru," 41-55.

cousins maintained steppe customs and remained militarily powerful. This argument has largely been refuted by Amitai, as noted above. Amitai also argued that the Ilkhanate was able to mobilize troops for campaigns against the Mamluks in Egypt and to suppress rebellions well into the early 1320s, pointing to the vitality of its military.[653] For China, Chapter Two has shown large contingents of Mongol and other nomadic troops being mobilized in the early 1350s to suppress the Red Turbans, suggesting that Inner Asian elements of the Mongol-Yuan army similarly maintained their combat strength. One Yuan source notes that the Mongol prince Chechektü 徹徹禿 (d. 1339) commanded 480,000 troops in the Mongolian steppes in the late 1330s, although another, later source gives a much lower figure of 180,000 troops.[654] Discrepancies in the numbers aside, this was clearly a large military force composed mostly of Mongol troops, thereby showing that the Mongols were largely successful in maintaining their steppe heritage in sedentary conditions.

The comparison has thus far shown the Mongols' adaptability and their military strength in China and Persia. The comparison in Chapter Two has also demonstrated that there were parallel developments in the institution of the *qarachu*, the non-Chinggisid elites whose growing power vis-a-vis the ruler had a profound impact on the state. However, such comparison also raises a new question about the intellectual and material exchange between these two Mongol entities and their implications for state institutions that was highlighted by Thomas Allsen.[655] Building on Allsen's research on the role of Bolad (d. 1313), who is credited with bringing much

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[653] Charles P. Melville, "Abu Sa'id and the Revolt of the Amirs in 1319," in *L'Iran face à la domination Mongole*, edited by Denise Aigle (Tehran: Institut Francais de Recherche en Iran, 1997), 89-120; Reuven Amitai, "The Resolution of the Mongol-Mamluk War," in *Mongols, Turks, and Others*, edited by Reuven Amitai and Michal Biran (Leiden: Brill, 2005), 361; "Continuity and Change in the Mongol Army," 38-52.
[654] Wei Su 危素, "Xiahou Shangxuan zhuan" 夏侯尚玄傳, in *QYW* 48, 1476:386; Ke Shaomin 柯劭忞, *Xin Yuanshi*, 233:16b.
[655] See Thomas Allsen, *Culture and Conquest in Mongol Eurasia* (Cambridge: Cambridge University Press, 2004).

administrative expertise and intellectual knowledge from China to Persia, Beatrice Manz suggests that Ghazan's *iqta* system was actually based on the military farms of the Mongol-Yuan.[656] Donald Ostrowski, meanwhile, suggests the opposite – it was really the Persians serving the early Mongol khans who brought the notion of the *iqta* to China, thereby influencing the land grants in the Yuan.[657] A comparison of the military institutions of the Mongol-Yuan and the Ilkhanate, however, shows that both of these interpretations are inaccurate. The military farms in China were in no way similar to the *iqta*, which were land grants to military commanders and soldiers from which they were to support themselves and maintain self-sufficiency. By contrast, military farms in the Yuan were mostly attached to non-Mongol garrisons, and their yields were used to provide for the garrison as a whole and not for individual soldiers. Ostrowski's argument, on the other hand, is completely unsubstantiated – there is no evidence to suggest that the Persians taught the Mongols to implement the *iqta* in China.[658] More similar to the *iqta* would be the farmland and pastures that the Yuan court granted to Mongol soldiers, which again affirms Yazawa's argument that the Mongols in China and Persia sought to maintain military self-sufficiency by adopting local institutions.

In sum, both the Mongol-Yuan and the Ilkhanate militaries seemed to have maintained their nomadic character in sedentary territories. The usage of land grants and military farming were not signs of sedentarization, but rather demonstrated the adaptability of the Mongols to new environments. The fact that large numbers of Mongol troops could be mobilized also disproves

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[656] Manz, *The Rise and Rule of Tamerlane*, 9.
[657] Donald Ostrowski, *Muscovy and the Mongols: Cross-Cultural Influences on the Steppe Frontier, 1304-1589* (Cambridge, MA: Harvard University Press, 1998), 53-54.
[658] Ostrowski cites as his evidence Elizabeth Endicott-West's monograph *Mongolian Rule in China*, yet Endicott-West was discussing appanages of imperial relatives, not land grants to soldiers. Ostrowski, *Muscovy and the Mongols*, 53 fn.72.

Charles Halperin's suggestion that the Yuan never solved the problem of supplying and maintaining nomadic troops in sedentary conditions.[659] Ultimately, what caused both the Mongol-Yuan and the Ilkhanate to collapse were more structural issues related to the state's development and not so much military weakness. In the Ilkhanate, the military aristocracy sidelined the ruler and the Ilkhanate dissolved after the last Ilkhan Abu Sa'id (r. 1315-1336) died without an heir, which led to infighting among the military aristocrats. In the Mongol-Yuan, a series of "powerful ministers" dominated the court through control of the military, and the fall of the last of these ministers, Toqto'a, caused the formidable Yuan military machine to collapse.

Muscovy and the Ming

The decline and fall of the Mongol Empire beginning in the mid-fourteenth century led to the emergence of numerous successor states. Ming China, Muscovy Russia, and the Timurids are among those directly descended from the Mongols. All three adapted Mongol ideology, made use of Mongol institutions, and interacted closely with steppe nomads. However, as Beatrice Manz has eloquently demonstrated, the Timurids retained significantly more nomadic institutions and practices (unsurprising, given that it was born out of the Chagatai) and its nature was very different from that of the Ming and Muscovy.[660] China and Russia, on the other hand, constituted what Karen Barkey called "empires of difference." Such empires ruled from the center, but allowed for the existence of diverse languages, ethnicity, and religions of their subject peoples as anchors of social stability. As Nancy Shields Kollman noted, Russia, China, the Ottomans, Safavids, and Mughals were all empires of difference: connected by trade, warfare,

[659] Halperin, "Russia in the Mongol Empire," 128-29.
[660] Manz, *The Rise and Rule of Tamerlane*. See also Beatrice Forbes Manz, *Power, Politics and Religion in Timurid Iran* (Cambridge: Cambridge University Press, 2007).

and conquest, they shared military technologies, bureaucratic record-keeping skills, languages, communication networks, ideologies, and approaches to governance through "difference."[661] Thus, this section will center its discussion on China and Russia, two states that I argue drew the most from the Mongols.

When the Mongols first entered Russia, Moscow was one of several small princely city-states and was not a significant political or military power. Yet by the end of the fourteenth century, Moscow had become a dominant player. Historians attribute the rise of Moscow to four factors: Mongol patronage (Muscovite princes worked closely with and collected tribute on behalf of the Mongols); the relocation of the see of the Orthodox Church from Kiev to Moscow in 1320; the practice of primogeniture which led to political stability; and a favorable geographic location.[662] Yet even as Muscovy became more powerful, the steppe world remained of great importance to Moscow's rulers. The remnants of the Golden Horde continued to plague Moscow militarily, and Muscovite princes tapped into the legacy of the Mongols to further their own interests.[663]

Imperial Russia, used here to denote the Russian empire after the reforms of Peter I (r. 1682-1725), like its Qing and Ottoman counterparts, expanded rapidly and tamed the steppe nomads. As such, scholars are quick to offer comparisons.[664] Less attention, however, has been devoted to a study of how Muscovy and the early Romanov empire (pre-Peter) compared with

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[661] Nancy Shields Kollmann, *The Russian Empire, 1450-1801* (Oxford: Oxford University Press, 2017), 2.
[662] Kollmann, *The Russian Empire*, 44. For a brief history of Muscovy, see Robert O. Crummey, *The Formation of Muscovy, 1304-1613* (London and New York: Routledge, 1987), 29-83.
[663] Crummey, *The Formation of Muscovy*, 96-101.
[664] See, for instance, Michael Khodarkovsky, *Where Two Worlds Met: The Russian State and the Kalmyk Nomads, 1600-1771* (Ithaca: Cornell University Press, 1992); Perdue, *China Marches West*, 518-46; Kollmann, *The Russian Empire*, 457-58.

the Ming. Yet the parallels between the two are striking. To start, both utilized different sources of legitimacy, including the Mongol heritage.[665] On an institutional level, Muscovite borrowing of Mongol institutions was, like that of Ming China and the rest of post-Mongol Eurasia, selective and utilitarian.[666] Finally, Muscovite society and economy closely mirrored the Ming's. Both were agrarian societies with peasant households as their foundation. In Muscovy, "communes" of several villages were organized by the state for local governance. Communes resolved disputes, managed service obligations, and oversaw shared resources, not unlike the function of the *lijia* in the Ming. Muscovite peasants not only paid taxes and provided specific goods for lords and princes, but also undertook corvée labor and served as soldiers.[667]

As it related to the military, both Muscovy and the Ming made use of the decimal system to organize their armies. Muscovite soldiers fought on horseback, utilizing Mongol attire, Mongol tactics, Mongol weapons, and Mongol formations.[668] The Ming army was much more varied in its composition (unsurprising given the size of the empire), but there were large contingents of cavalry, especially in earlier periods. In the 1372 campaign against Northern Yuan remnants, Hongwu dispatched a cavalry army 150,000 men strong.[669] The Yongle emperor as a prince fought the Mongols primarily with cavalry armies and during his reign there were likely

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[665] Michael Khodarkovsky, *Russia's Steppe Frontier: The Making of a Colonial Empire, 1500-1800* (Bloomington: Indiana University Press, 2002), 39-45; Ostrowski, *Muscovy and the Mongols*, 13-27. David Robinson's recent scholarship has highlighted how the Ming tapped into the Mongols for legitimacy. See footnote 1 in this conclusion.
[666] Charles J. Halperin, "Muscovite Political Institutions in the 14th Century," in *Russian and Mongols: Slavs and the Steppes in Medieval and Early Modern Russia*, edited by Victor Spinei and George Bilavschi (Bucureşti: Editura Academiei Române, 2007), 250.
[667] Crummey, *The Formation of Muscovy*, 215.
[668] Halperin, *Russia and the Golden Horde*, 91.
[669] Dreyer, *Early Ming China*, 74; Wu Guoqing 武國卿, *Zhongguo zhanzheng shi di liu juan: Yuanchao shiji Mingchao shiji* 中國戰爭史第六卷: 元朝時期明朝時期 (Beijing: Renmin chubanshe, 2016), 566.

over a million horses being raised throughout the Ming.[670] Chapter Three has also shown that large contingents of Mongols were absorbed into the Ming army.

Muscovite cavalrymen were self-sufficient hereditary middle-class servitors. To maintain their self-sufficiency, Moscow made use of land grants (called *pomeste* or *votchina*) which functioned essentially in the same manner as the *iqta* - they were farmed by serfs and provided for the cavalryman's maintenance. Donald Ostrowski argues that this similarity was due to the fact that the Russians derived the *pomeste* from the *iqta*, which was introduced to Russia by the Golden Horde. The Muscovy state came to gain large amounts of land without the proper means to administer them, so granting them to cavalrymen solved both the problems of military provisioning and land administration.[671] Military self-sufficiency was also fundamental to the military in the early Ming, although the Ming state chose military farming to achieve this.

Even as Muscovy became ascendant in Russia, it faced a multitude of enemies. Moscow's proximity to the Pontic and Caspian steppes meant it faced a perennial threat from the steppe nomads. As Charles Halperin noted, the Golden Horde never had to garrison its forces in Russia because no Russian city was safe from Mongol punitive expeditions.[672] Even after the Golden Horde collapsed, its remnants continued to pose the most serious challenge to Moscow's survival. This was especially the case as Muscovy expanded under Ivan III (r. 1462-1505) and adopted a more aggressive posture. In the east and the south, Moscow attempted to control the

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[670] Noa Grass, "A Million Horses: Raising Government Horses in Early Ming China," in *Animals and Human Society in Asia: Historical, Cultural and Ethical Perspectives*, edited by Rotem Kowner et al. (London: Palgrave Macmillan, 2019), 299-328; Tonio Andrade, "How Yongle Learned to Stop Worrying and Love the Gun: Perspectives on Early Ming Military History," in *The Ming World*, edited by Kenneth M. Swope (London and New York: Routledge, 2020), 73-74.
[671] Donald Ostrowski, "The Military Land Grant Along the Muslim-Christian Frontier," *Russian History* 19, no. 1/4 (1992): 345-59; *Muscovy and the Mongols*, 48-49.
[672] Halperin, "Russia in the Mongol Empire," 129.

steppes by opportunistically allying with the Crimean Tatars. Muscovy intervened in internal struggles within the Kazan Khanate and overcame a major invasion from the Great Horde, both times with help from the Tatars.[673] Yet it would be the Crimean Tatars who would pose the greatest threat to Muscovite frontier security throughout the sixteenth century. In 1571, twenty-one years after Altan's raid on Beijing, Crimean Tatars burned Moscow. This was but one of many large incursions - as early as 1521, the Crimeans had raided to the outskirts of Moscow and in 1592 Moscow was burned once more.[674] It's no wonder, then, that the Muscovite army was geared towards fighting nomads. Even into the 1530s, most of Muscovy's cavalry were still in the Mongol mold - light cavalry archers who were organized decimally and utilized steppe tactics. Military advances were made mostly in artillery, and there were few other technological changes during this period.[675]

To defend itself against these nomadic threats, Muscovy and the early Romanov empire built a series of defensive fortifications not unlike the Great Wall of the Ming. The first of these fortified lines - the 375-mile-long Abatis Line - began to take shape in the late sixteenth century. It ran along the Oka River south of Moscow and consisted largely of abatis barriers augmented by wooden blockhouses or earthen forts and flanked with ditches, pits, and anti-cavalry barriers. It was manned by military colonists who were given land just behind the line.[676] Over time, and as Russia expanded, new fortified lines came to be built. In 1637, work started on the New Belgorod Line. This defensive line linked together other garrison towns, cut into invasion routes much further south, and utilized new European earth fortification techniques. By the 1650s, it

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[673] Crummey, *The Formation of Muscovy*, 84-101, esp. 96-101.
[674] Brian L. Davies, *Warfare, State and Society on the Black Sea Steppe, 1500-1700* (London and New York: Routledge, 2007), 13, 16-17.
[675] Davies, *Warfare, State and Society*, 41-42, 52.
[676] Davies, *Warfare, State and Society*, 44-45.

included up to twenty-two forts, creating a continuous defensive line of nearly five hundred miles "from the upper Vorskla in the west at the border of Ukrainian lands to the Tsna River in the east, fronting Nogais and Kalmyks." With the completion of the Trans-Kama Line in 1655, Russia's southern frontier was protected by over 1,000 miles of fortified lines stretching from the Poland-Lithuanian border to the Urals.[677]

Fortified lines provided the state with several benefits. It stopped raids, protected agricultural colonies and trade routes, halted the flight of taxpayers to the steppes, and eventually began to intrude into grazing lands and river crossings to disrupt the nomadic economy and their way of life.[678] The policy behind these fortified lines was one of planned military colonization coordinated across a broad front. The state constructed fortified lines, created garrison towns, and moved frontier armies and peasants to man them.[679] In this manner, Russian policy was similar to Weng Wanda's proposals in Datong, which included the construction of walls backed by garrison forts and manned permanently by soldiers.

Particularly striking in the construction of border fortifications was the need to stop taxpayer flight. This was a serious problem in Russia, since the state was predominantly agrarian in nature. Many peasants moved to areas behind the new fortified lines, taking advantage of the need for agricultural colonists in these regions, but others fled to the steppes where they joined Cossack bands.[680] In the Ming, there was a noticeable wave of migration to the steppes from the 1530s to the 1580s. Peasants, criminals, religious sectarians, and soldiers, for a variety of reason,

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[677] Davies, *Warfare, State and Society*, 56, 88, 91-92; Kollmann, *The Russian Empire*, 67.
[678] Khodarkovsky, *Russia's Steppe Frontier*, 215-16; Kollmann, *The Russian Empire*, 67, 163.
[679] Davies, *Warfare, State and Society*, 40.
[680] Cossacks were semi-nomadic and militarized groups initially composed of Tatars and Turks who fled from the various Mongol successor polities in the steppes. They were later joined by Slavs escaping from central authority in Russia and elsewhere. Davies, *Warfare, State and Society*, 94-96.

fled to the steppes and found employment under Mongol rulers there. Many more were abducted during Mongol raids.[681] Thus, the Great Wall also served the purposes of preventing the outflow of people and private interactions between Ming subjects and steppe nomads, and channeling all forms of interactions, be they commercial or military, into areas where the court could better control them.

Finally, both Muscovy and the Ming underwent a similar transformation in military technology. Admittedly, the Ming had used firearms technology much earlier than Muscovy against the nomads[682], but the late sixteenth century witnessed an explosion of new gunpowder weapons and infantry tactics. In the Ming, European firearms and cannons were introduced during the fight against the *wokou*. Commanders such as Qi Jiguang utilized these weapons and devised new tactics, which diffused to the northern frontiers after Qi and others were dispatched there.[683] In Russia, beginning in the mid-sixteenth century, the state began developing larger armies with more complex procedures of mobilization and command-and-control and armed with newer weapons. By the seventeenth century, as rivalry with Poland-Lithuania and Sweden began to heat up, Russia adopted European-style infantry regiments and gradually implemented its military reforms in the steppes.[684]

Not all of these parallels can be attributed to Mongol legacy. Some might be coincidental - it just so happened that both Ming China and Muscovy Russia faced other military threats that

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[681] See Hagiwara, "Mindai Kaseiki no Daidō hanran to Mongoria ge," 64-81.
[682] See Andrade, "How Yongle Learned to Stop Worrying and Love the Gun," 71-87.
[683] Tonio Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History* (Princeton: Princeton University Press, 2016), 166-95; "Maritime China in Global Military History," in *Early Modern East Asia: War, Commerce, and Cultural Exchange*, edited by Kenneth M. Swope and Tonio Andrade (London and New York, 2016), 100-18.
[684] Carol Belkin Stevens, *Soldiers on the Steppe: Army Reform and Social Change in Early Modern Russia* (DeKalb: Northern Illinois University Press, 1995); Davies, *Warfare, State and Society*, 203-05.

sparked technological changes which were then implemented against steppe foes. Similarly, there is no evidence to suggest that the agrarian basis of both economies and their similar organizational structure for local society was a result of Mongol rule, although Nancy Shields Kollman does note that the Russians borrowed force relocations, a regular feature in Muscovy as well as in the early Ming, from the Mongols.[685] Nevertheless, the usage of Mongol military tactics and organization and the construction of defensive fortifications along the steppe frontiers was a direct result of Mongol rule. Both faced the same enemies, and naturally both utilized similar methods. And as was the case in China, Mongol rule in Russia offered Muscovite rulers tried and tested institutions to rule over an empire.

Yet despite sharing many parallels in how their military was structured and how they responded to the steppe threat, Ming China and Muscovy Russia ultimately took inverse trajectories. In spite of Hongwu's vision of a self-sufficient agrarian village economy, the Ming increasingly began to commercialize. Hongwu's attempt to impose strict order on society, including preventing the free movement of people, broke down. As the hereditary military system started to decline, the Ming shifted from coercive conscription to recruiting volunteers. Russia, however, doubled down on its coercive policies. It, too, faced a crisis with its hereditary military servitors unable to afford military service due to the dwindling size of land allotments and peasant flight. However, the state took action to support them, including providing them with relief, extra land, and forcing fleeing peasants to return. To ensure a predictable supply of laborers for services and a stable tax base, the Russia state decreed in 1649 that peasants were bound to the land they worked and that all movements were illegal. Serfdom was thus

[685] Kollmann, *The Russian Empire*, 162.

institutionalized in Russia, and even after the adoption of European-style infantry armies, the Russian state continued to rely on coercive conscription of the peasantry to raise large armies.[686] This was in stark contrast to the Ming, which turned to voluntary recruitment.

Although Chinggisid ideology and the Mongol legacy became less important in both China and Russia, the reasons they were abandoned were very different. In China, the Mongol military institutions that the Ming inherited could no longer function effectively given long-term socioeconomic changes. The Ming therefore tried new methods to maintain its military. The ascension of the Jiajing emperor in 1521 has also been noted as a key moment of transition - born and raised as a prince faraway from Beijing, "Jiajing's upbringing did not feature so prominently the trappings of the Mongol legacy." As a result, the court under his reign began to shed its various identifications with the Mongol Empire.[687] In Russia, the Chinggisid legacy became largely obsolete once the Romanovs came to power in the early seventeenth century. The reforms of Peter the Great completely oriented Russia away from the steppes towards the institutional and cultural trappings of Western Europe. Militarily, the Petrine reforms also sought to create a new modern European-style army with musket infantry, a professional artillery corps, and dragoon cavalry.[688]

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[686] Asano Akira 浅野 明, "Ivan Raitei-ki Roshia no chikōchisei: Novgorodo chihō no jirei kenkyū" イヴァン雷帝期ロシアの知行地制: ノヴゴロド地方の事例研, *Shigaku zasshi* 史学雑誌 94, no. 7 (1985): 1133-77; Crummey, *The Formation of Muscovy*, 6-8, 215; Davies, *Warfare, State and Society*, 68-71; Kollmann, *The Russian Empire*, 222-24; Elise Kimerling Wirtschafter, "Military Service and the Russian Social Order, 1649-1861," in *Fighting for a Living: A Comparative History of Military Labour 1500-2000*, edited by Erik-Jan Zürcher (Amsterdam: Amsterdam University Press, 2013), 394-95.
[687] Robinson, "The Ming Court," 409-11.
[688] Khodarkovsky, *Russia's Steppe Frontier*, 222; Wirtschafter, "Military Service," 394-418; Kollmann, *The Russian Empire*, 296-300.

The usage of fortifications also differed, which was a reflection of changing frontier policies in China and Russia. In both places walls and fortified lines were constructed for defense, but the Russians came to use them for offensive purposes in ways that the Ming did or could not. The Ming was able to project power into the steppes early on, with Hongwu and Yongle dispatching huge military expeditions against nomadic threats. The Hongwu emperor had also established garrisons in the steppes that were intended to be forward operating bases for power projection. However, for a variety of reasons, these forward garrisons were gradually pulled back in the following decades. After the disastrous 1449 Tumu Crisis, the Ming eventually adopted a more defensive posture and built fortifications to contain raids. True, Ming cavalry units launched counterraids, but these were small-scale military maneuvers designed to deter further aggression, not to control the steppes. Climate change and geopolitics were partly to blame for the Ming withdrawal from the steppes (Chapter Four), but there was also a reaction against military adventurism and martial spectacles in the aftermath of Tumu.[689] Moreover, factionalism and political infighting made it near impossible to undertake large campaigns, a fact that was demonstrated by the spectacular collapse of a planned campaign to recover the Ordos in the 1540s.[690]

Russia, by contrast, utilized its defensive lines to tame the steppe nomads, believing that a more aggressive policy would yield better results in controlling the steppes. It was Ivan III and his successor Vasilii III (r. 1505-1533) who inaugurated this more aggressive and interventionist attitude, which not only put them at odds with Poland-Lithuania in the west but also with the

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[689] See David M. Robinson, *Martial Spectacles of the Ming Court* (Cambridge, MA: Harvard University Press, 2013).
[690] John W. Dardess, *Four Seasons: A Ming Emperor and His Grand Secretaries in Sixteenth-Century China* (London: Rowman & Littlefield, 2016), 129-37.

various steppe nomads, who were arguably the bigger threat. This meant that Muscovy had to be constantly ready for war, and this need for war informed the development of the Muscovite state throughout the sixteenth century. Indeed, it was Vasilii's court who first began assigning troops to the southern frontiers to prepare for invasions, a precursor to the defensive lines that his successors would build.[691] As mentioned above, these defensive lines could intrude into grazing lands and river crossings, thus giving Russian authorities control over the nomadic way of life. The state also settled large numbers of peasants behind these lines to shore up Russian control. The early Romanov rulers continued to build defensive lines as they expanded the Russian empire. So indispensable were defensive lines to the Russian imperial project that new ones were constructed well into the late eighteenth century as Peter the Great and Catherine the Great (r. 1762-1796) sought to turn Russia into a trans-Eurasian empire by expanding to the east and south. Thousands of miles of defensive lines were built in the Urals and Siberia to protect Russian settlement, to aid in expansion, and to defend against nomadic threats (now the Kazakhs).[692] Russia, then, abandoned its fallback strategy for one of more active forward defense during the reign of Ivan III and later aggressive expansion after the Petrine reforms, while the Ming pulled back its defenses and used fortifications to delineate a defensive border region.

The above comparison of China with Persia and Russia reveals the strong institutional influence of the Mongols. As the Mongols moved into sedentary regions, they adapted to local conditions, using local institutions or creating new ones to preserve their own steppe customs. Mongol successor states then adopted these Mongol institutions for their own use. Eventually, long-term developments in socioeconomic and geopolitical conditions throughout Eurasia caused

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[691] Crummey, *The Formation of Muscovy*, 101-05, 109.
[692] Kollmann, *The Russian Empire*, 86-88, 97.

these polities to discard their Chinggisid heritage (the Ottoman Empire provides another example, where after the conquest of Mecca and Medina the Ottoman rulers adopted the trappings of Islam at the expense of their nomadic heritage). Edward L. Farmer opined in a recent publication that it was difficult to compare the military strength of the Ming to that of other Eurasian states.[693] And while it may indeed be difficult for a comparison of military strengths, a comparison of institutions and institutional practices can provide a better picture on the issues of war-making and empire-building in post-Mongol Eurasia.

The Yuan-Ming Transition in Chinese Military History

Turning our attention back to China, the militaries of the Yuan and the Ming both represented a phase in Chinese history during which hereditary military service and military self-sufficiency reigned supreme, but at the same time the two dynasties were part of the same long-term trend in Chinese history that saw the eventual transition to a professional military force. In many ways, the military institutions of the Yuan and Ming - hereditary service, military farming, coercive conscription - were not unique, nor was the turn towards professional soldiers, private retainers, and local militias unusual. All were found in previous dynasties. Yet it was the scale that the hereditary military system was implemented in China, as well as the profound impact that such a method of military organization had on Chinese state and society, that truly set the Yuan and Ming apart from previous and later periods.

In the Qin (221-206 BCE) and the early years of the Western Han (202 BCE - 9 CE), universal conscription of all adult males supplied the bulk of the armed forces. However, as the

[693] Edward L. Farmer, "The Ming as a Eurasian Power," in *The Ming World*, edited by Kenneth M. Swope (London and New York: Routledge, 2020), 418.

nature of warfare changed to fighting the Xiongnu, professional soldiers, particularly cavalrymen, became more important than conscripts. Gradually, the Han abandoned universal conscription, until it was finally abolished in 30 CE after the establishment of the Eastern Han regime (25-220 CE). Thereafter, the Han court depended on professional soldiers levied for specific campaigns.[694] The Period of Disunion (220-589 CE) saw the emergence of hereditary military households that were derived from the private retainer armies of the late Han warlords. Under the Xianbei regimes in the north, hereditary military service gradually evolved into the *fubing* 府兵 system that reached its height during the first few decades of the Tang (618-907). Under this system, households were registered as military households and given land to farm in exchange for providing males for military service. Yet hereditary military service was not the only means of military mobilization. During the Period of Disunion, regimes in both the north and the south also utilized conscription and voluntary recruitment. Even in the early Tang, the state made extensive use of temporary peasant conscripts.[695] Just as it was during the Han, the changing nature of warfare forced the Tang court to rely increasingly on professional soldiers made up of peasant conscripts who served for long periods of time along the frontiers. By the latter half of the Tang, these armies had transformed into full-time mercenary soldiers composed of willing volunteers who fought for pay.[696]

This was the army that the Song inherited, and the cost of supporting such a military led to the formation of a "fiscal state" in China. The Song court turned to market forces to support its vast professional standing military, reaping enormous sums of money through indirect

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[694] Lewis, "Han Abolition," 33-76; Tse, "Violence and Warfare," 285-92.
[695] von Glahn, *The Economic History of China*, 180-81; Graff, "The Reach of the Military," 244-46; "The Art of War, 289-95; Tse, "Violence and Warfare," 290-91.
[696] Graff, "The Reach of the Military," 247-50.

taxation.[697] In the north, the Khitans Liao (916-1125) and Jurchen Jin (1115-1234) continued the practice of the northern regimes in the Period of Disunion - its core military was made up of cavalry belonging to the ruler's ethnic origin and augmented by Chinese conscripts and volunteers.[698] The Song period was thus unique in Chinese history, but its dependence on marketized recruitment and its development of military financing was interrupted by the Mongol conquest, the introduction of hereditary military service, and the Ming inheritance of these Mongol institutions. The military institutions of the Yuan and Ming, although similar on the surface to those of previous dynasties, represented a profound shift in how the state organized for war. For the first time in Chinese history, almost the entirety of the military was based on hereditary principles. These military institutions deviated not only from the universal conscription of earlier periods and the professional armies of the Song, but also from the hereditary military households of the Period of Disunion and the *fubing* system of the Tang. The Mongol-Yuan furthermore faced an issue confronting all nomadic empires with how to transition an army organized around steppe principles of war making into an army designed to maintain control over conquered sedentary populations. The Ming, meanwhile, drew on not only the immediate precedents of the Mongol-Yuan in organizing and maintaining a hereditary army but also faced the need to focus on frontier defense against steppe nomads. Nonetheless, both the Yuan and Ming were eventually compelled to support the voluntary recruitment of soldiers. After the Ming fell, the Manchu Qing (1636-1911) abolished hereditary military households, instead implementing a hybrid military system composed of hereditary Bannermen of Manchu,

[697] Liu, "The Making of a Fiscal State," 47-78; von Glahn, "Modalities of the Fiscal State," 17-22.
[698] Wang, *Liao Jin junzhi*.

Mongol, and Han military servitors and a professional Green Standard Army (*lüying* 綠營) of paid volunteer recruits who served for life.[699]

While Ming military institutions faded into obscurity with the Qing conquest, they had a huge impact on the Qing state. The various institutions and regulations designed to support the self-sufficient military (such as low levels of taxation levied on land and a lack of fiscal institutions for capturing capture revenue from commerce, industry or consumption outside the salt monopoly) and later the recruitment of professional soldiers (including the conversion of taxes and labor obligations to silver) were inherited and built upon by the Qing state.[700] Thus, it can be argued that the hereditary military institutions of the Mongol-Yuan informed the development of the Chinese state for more than five hundred years well into the mid-nineteenth century. Yet the influence of hereditary military service went far beyond state institutions and development. As research by Michael Szonyi and other scholars of historical anthropology have shown, Ming military institutions had a profound impact on local society as well. As a result of the Ming's deterritorialization policies that shifted people across the empire, some former guards in Fujian are even today linguistic islands, whose people speak a distinct dialect different from the communities around them. Many people in these villages are descended from Ming soldiers, and the military service of their ancestors still inform local practices such as religious rituals.[701] Today, villages bearing their Ming-era names dot the Chinese countryside. Nowhere is this more apparent than in Datong, where many of the Jiajing-era forts survived and are still contained

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[699] See Christine Moll-Murata and Ulrich Theobald's chapter in *Fighting for a Living* for a concise treatment of the Qing military system. "Military Employment in Qing Dynasty China," in *Fighting for a Living*, edited by Erik-Jan Zürcher (Amsterdam: Amsterdam University Press, 2013), 353-91.
[700] von Glahn, "Modalities of the Fiscal State," 22-23.
[701] See Szonyi, *The Art of Being Governed*; Szonyi and Zhao, *The Chinese Empire in Local Society*.

within their original boundaries. Some are so well-preserved that their walls are intact and are visible on Google Earth.[702] Even the Tumu fort, the site of Zhengtong's 1449 defeat and capture, has become Tumu village, with some of its walls and a small section of a Ming-era shrine commemorating those who died in still remaining (a photograph taken by a U-2 spy plane in 1963 shows that in the early 1960s, the original Ming walls still existed and the village was contained within it).[703] It is likely that the inhabitants of these villages are also descendants of Ming soldiers, and perhaps they too preserved the dialect and traditions of their Ming ancestors. Such concerns are beyond the scope of this dissertation, but future research can hopefully shed more light on the impact that Mongol military institutions continue to exert on Chinese society today.

[702] Wang Li 王力, "Ming changcheng Datong zhen junshi juluo zhengtixing yanjiu" 明長城大同鎮軍事聚落整體性研究, Master's Thesis (Tianjin University, 2011), 24-41.

[703] "Hangpai zhaopian li de Tumu zhi bian" 航拍照片里的土木之變, *The Paper* online, May 9, 2021, https://www.thepaper.cn/newsDetail_forward_12595234; "Yi fenzhong liaojie Zhongguo Hebei sheng Zhangjiakou shi Huailai xian jingnei de chengbao Tumu bao" 一分鐘了解中國河北省張家口市懷來縣境內的城堡土木堡, Baidu miaodong, accessed February 26, video, 0:56, https://baike.baidu.com/video?secondId=47782875&lemmaId=5611198&fromModule=lemma-video_video-share. Tumu village as it is today can be viewed on Google Earth at these coordinates: 40°22'53"N 115°36'23"E.

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HMJSWB
Chen Zilong 陳子龍 et al., comps. *Huang Ming jingshi wenbian* 皇明經世文編. 508 juan. Beijing: Zhonghua shuju, 1962.

HMTFSLZ
Huang Ming tiaofa shilei zuan 皇明條法事類纂. In *Zhongguo zhenxi falü dianji jicheng yibian disi zhi liu ce* 中國珍稀法律典籍集成 乙編 第四至六冊. Beijing: Kexue chubanshe, 1994.

JZTL
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LBSL
Liubu shili 六部事例. In *Tianyige cang Mingdai zhengshu zhenben congkan 5* 天一閣藏明代政書珍本叢刊 5. Beijing: Xianzhuang shuju, 2010.

MBJCK
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MHD
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MS
Zhang Tingyu 張廷玉 et al., comps. *Mingshi* 明史. 332 juan. Beijing: Zhonghua shuju, 1974.

MSL
Ming shilu 明實錄. Academia Sinica Scripta Sinica database. http://hanchi.ihp.sinica.edu.tw/.

NTBY
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SKQS
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TZTG
Tongzhi tiaoge jiaozhu 通制條格校注. Punctuated and annotated by Fang Linggui 方齡貴. Beijing: Zhonghua shuju, 2001.

XXSKQS
Xuxiu Siku quanshu 續修四庫全書. 1,800 juan. Shanghai: Shanghai guji chubanshe, 2002.

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YDZ (2016)
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YS
Song Lian 宋濂 et al., comps. *Yuanshi* 元史. 210 juan. Beijing: Zhonghua shuju, 1976.

ZZTG
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