Logistics of Empire: Governance and Spatial Friction in Ming China, 1368-1644

Book Description

Logistics of Empire studies how rulers and officials of Ming-dynasty China (1368-1644) managed the logistical challenges of governing a premodern bureaucratic empire. As a premodern bureaucratic empire, the Ming faced a triple challenge: it had to move many documents and officials within a territorially large state ("empire"), across hierarchically organized offices whose occupants were appointed by the central government ("bureaucracy"), and using preindustrial technologies of transportation and communication ("premodern"). This combination of size, organizational complexity, and technological limitation led the Ming state to adopt certain administrative practices that may appear quite strange to the modern eye. Logistics of Empire examines some of these practices and explains the logic behind them. It argues that many seemingly counterintuitive practices can be explained by spatial friction, an inconspicuous but potent force that constrained the operation of premodern institutions.

By adopting spatial friction as an analytical concept, the book also seeks to resolve a long-standing historiographical problem concerning the anomaly of imperial China (221 BCE - 1911 CE) within the premodern world. Before about the nineteenth century, when new technologies drastically increased the speed of long-distance travel and communication, most Eurasian empires relied on appanage-based or loosely centralized forms of governance that could be sustained with limited movements of people and documents. By contrast, many dynasties of imperial China governed vast territories through highly centralized bureaucracies that monitored and controlled minute details of local administration. As a result of its exceptional centralization, the imperial Chinese state has acquired paradoxical images of being both strong and weak: on the one hand, some scholars have lauded China’s ability to develop a highly centralized bureaucracy at a time when no other polity of equivalent size had done so; on the other hand, some other scholars have criticized the seeming inefficiency of the Chinese state when comparing it—either consciously or subconsciously—against familiar features of modern bureaucracies.

Historians have so far not provided a satisfactory explanation for the seeming inefficiency or inadequacy of some Chinese institutions. In general, the voluminous scholarship on the imperial Chinese state falls within three categories. In the first category are studies that concentrate on studying aspects of the Chinese state that resemble the tools and principles that we recognize today as important features of modern bureaucracies, such as document-based administration and rule-based decision making. Pioneered by scholars such as Charles Hucker, Silas Wu, and Beatrice Bartlett, these studies have identified many crucial
tools by which the central state maintained its control, but they have tended to overlook some other aspects of the Chinese state that appear to contradict our conventional understanding of effective administration. The second category of studies—represented by Ray Huang’s influential book 1587, a Year of No Significance—emphasizes the irrationality of these other elements, such as considerations of precedent, ritual, and morality that underlay and constrained almost all policy decisions. While these studies have revealed important mechanisms by which the Chinese state failed to achieve some of its stated objectives, they have also perpetuated the uncritical assumption that all premodern institutions ought to have developed in the same way as institutions of the modern West. By contrast, studies in the third category—exemplified by Yonglin Jiang’s insightful study of the Ming Code—examine how Chinese rulers and officials themselves understood their practices and institutions. Although these studies can help us understand the intentions and internal logic behind some unfamiliar Chinese practices, they often do so by accepting the methodological stance that different societies operated according to different and incompatible principles, making it impossible to analyze Chinese institutions within a global comparative framework.

*Logistics of Empire* is an attempt to explain seemingly inefficient institutions of imperial China without relying on an argument of cultural particularity or a Eurocentric analytical framework. It builds on the contributions but resolves certain shortcomings of earlier studies by adopting the methodological stance that we can explain the particularity of Chinese institutions using universally applicable principles of human motivation and accountability. The book shows that imperial China faced the same basic challenges as those of other premodern states, yet China’s immense size and centralized government structure amplified these challenges in the form of spatial friction. Among the many dynasties of imperial China, the Ming is worth studying because the tactics it used to counter spatial friction tend to strike modern observers as particularly strange.

*Logistics of Empire* identifies and explains some of these tactics in four related areas of Ming governance: the transmission of state documents; administrative writing conventions; the movement and evaluation of local officials; and the maintenance of a shared moral standard among all officials. In addition to synthesizing information from historical and regulatory texts produced by the central state, the study draws on a broad range of sources that reveal how individual actors adapted to and sometimes defied central regulations, such as local gazetteers and collected writings of Ming officials. By paying attention to the materialities of governance—such as how long it took documents and officials to travel from one location to another, or how the state authenticated and synchronized information—the book shows that we can find a comprehensible logic behind many premodern institutions that at first appear counterintuitive.

**Chapter Summaries**

**Preface**

The Preface introduces some examples of counterintuitive practices in Ming administration. It explains why we should try to uncover the logic behind these practices, and how my attempt to do so differs from those of previous studies.
Chapter 1. The Anatomy of Spatial Friction

This chapter serves two functions. First, it introduces the basic structures of Ming bureaucracy to readers who have no background knowledge of Ming or Chinese history. Second, it establishes a theoretical framework for the entire book by explaining what spatial friction is and how it affected the operation of premodern institutions.

The chapter opens by examining the frustrations of Zhu Yuanzhang (r. 1368-98), founder of the Ming dynasty, whose reign epitomizes the dilemma faced by all leaders of large organizations. As an emperor who had theoretically unlimited power, Zhu could appoint the tens of thousands of officials who worked for him, yet he lacked the ability to monitor each official’s behavior without relying on intermediaries. In his unceasing effort to eliminate official corruption, Zhu relied on various accountability mechanisms to find and punish officials who misbehaved, yet these efforts turned counterproductive when the emperor found evidence of "corruption" everywhere he looked, ultimately executing tens of thousands of officials and their associates over the course of his reign.

The remainder of the chapter explains why Zhu’s approach to bureaucratic management failed. At the empirical level, the chapter introduces some basic information about the Ming state, including the structure of its bureaucracy; how it established accountability through routine reporting, auditing, and personnel evaluations; and how long it took for state documents and officials to move around the empire. At the theoretical level, the chapter explains how the problem faced by Zhu Yuanzhang and all subsequent Ming rulers both resembled and differed from the so-called principal-agent problem that social scientists have identified in many large organizations. As in a typical principal-agent problem, the Ming state incurred certain operational costs in the forms of time, labor, and material resources whenever it established a new accountability mechanism. But unlike in most other principal-agent situations, these operational costs were massively amplified when the Ming state tried to institute an accountability mechanism across long distances.

This amplification of operational costs by distance—spatial friction—constrained Ming rulers in ways hard to appreciate for most modern observers, who live in a world where the costs and time lags of communication have become negligible. Chapter 1 argues that Zhu Yuanzhang’s approach failed because he relied too heavily on accountability mechanisms that required high operational costs. Chapters 2-5, in turn, argue that many seemingly strange practices of the Ming state reduced the state’s overall operational costs in a high-friction environment where accountability mechanisms were costly.

Chapter 2. Transmitting Documents

This chapter studies the operation and transformation of the Ming postal system. Like earlier Chinese dynasties, the Ming operated an extensive postal-relay network that transmitted state documents and transported government officials. Previously, scholars generally assumed that the Ming postal system operated according to the blueprint established by Zhu Yuanzhang, who expected all state documents to be transmitted by postmen who ran in relays. The chapter reveals, by contrast, that the system experienced frequent delays and losses after the early Ming, prompting many officials to dispatch
important documents not through the postal system, but through individual messengers who carried the documents all the way to their destinations.

The chapter argues that Zhu Yuanzhang's blueprint failed because it tried to keep postmen accountable by threatening them with harsh punishments, yet it did not budget for the extra cost it would have taken supervisors to monitor and identify misbehaving postmen who worked far from their offices. Although some observers may find it puzzling that later-Ming officials did not make full use of a postal infrastructure that promised theoretically high delivery speeds, the chapter shows that in practice, single-messenger delivery offered a faster and more secure alternative to the postal system by making the responsibility for document delivery less diffused and easier to track.

Chapter 3. Conveying Information

This chapter examines the peculiar narrative structure of Ming official documents, which cited earlier communications not by summarizing them, but through long strings of direct quotations arranged non-chronologically. This narrative structure, which I call embedded quotations, emerged in China sometime around the Song dynasty (960-1279) and continued to be used into the Republican period (1911-49). Although some scholars have criticized the embedded quotation structure for its length and redundancy, a closer analysis reveals that the structure provided a logistically simple method for authenticating and synchronizing information in situations where multiple government offices had to keep track of decisions across long distances.

While the chapter studies an administrative convention that persisted for a millennium, it draws on cases from the Ming dynasty to explain how the embedded quotation structure served the particular needs of the imperial Chinese state. In doing so, the chapter also illustrates why we cannot apply our conventional understandings of "efficiency" to premodern societies, where the benefits of some institutions could not be readily observed or measured through the metrics most familiar to modern observers.

Chapter 4. Maintaining Loyalty

This chapter examines several occasions that required low-level provincial officials to travel frequently to the capital: undergoing personnel evaluations, paying respects to the emperor on New Year's Day, and delivering congratulatory memorials to the emperor at various annual festivities. Because some of these trips served primarily ceremonial purposes, the chapter raises the question of whether rituals enhanced or diminished the Ming state's ability to maintain control over its bureaucracy.

Although some historians have argued for the importance of ritual in maintaining political authority, most existing studies have focused on the performance of ritual within geographically confined spaces such as courts and cities. By contrast, Ming officials had to travel long distances to participate in state rituals, generating substantial costs and administrative disruptions that make their trips appear particularly wasteful. This chapter presents the voices of both officials who defended the frequent trips and some critics who tried to eliminate or reduce them. By contextualizing Ming practices within longer-term developments of the imperial Chinese bureaucracy, the chapter argues that the frequent
trips created a shared culture of propriety among Ming officials, and by extension, helped sustain their loyalty. This cultural approach to maintaining loyalty made up for the deficiencies of more mechanical means of bureaucratic control such as auditing, which produced even greater costs and disruptions when carried out over long distances in a high friction environment.

Chapter 5. Regulating Morality

This chapter examines the periodic transfer of high-level provincial officials. These transfers were common methods of bureaucratic control that not only prevented officials from establishing local power bases, but also matched their skills and qualifications to the changing demands of different regions. Surprisingly, the primary challenge in coordinating the transfers was not that it took a long time for appointment orders to reach officials or for the officials to travel to their new posts. Rather, the central state encountered logistical nightmares when transferring officials delayed their departures for months, either to satisfy the administrative requirement of waiting for their successors to arrive, or to express their humility by declining the initial orders of appointment and waiting for the emperor to appoint them again (or both).

By analyzing some extreme cases of delayed transfer and how Ming officials talked about them, the chapter assesses whether Ming officials responded rationally to the effects of spatial friction. It argues that while promoting values such as humility helped the Ming state establish a shared culture of morality, the subsequent commodification of these values encouraged officials to promote their own moral images at the expense of the state’s administrative needs. In this way, Ming officials acted rationally as individuals to defend their own reputations, even though they sometimes acted irrationally as members of the larger collective—the Ming state—to which their fates were ultimately tied.

Conclusion

The Conclusion places the book's findings in broader geographical and chronological contexts. Geographically, it contrasts the late imperial Chinese bureaucracy with bureaucratic institutions that emerged in early modern Europe. Because the European institutions operated over much shorter distances than their Chinese equivalents, European states could rely heavily on mechanical means of control without suffering substantial effects of spatial friction. When historians imagine the course of European development as normative, therefore, they end up forming the false impression that the cultural means of control adopted in China were somehow incompatible with "real" bureaucracies.

Chronologically, the Conclusion also considers how the Ming approach to managing spatial friction differed from those of other imperial Chinese dynasties. Whereas other dynasties generally countered spatial friction by adopting a simpler bureaucratic structure or giving limited discretion to certain categories of territorial officials, the Ming maintained both a highly complex bureaucracy and a strong commitment to the ideal of centralized governance. As a result, the Ming experienced stronger effects of spatial friction than other
dynasties, making its institutions appear especially strange and its choices requiring explanation.

**Target Audience and Complementary Titles**

The target audiences of this book include historians of imperial China; historians of comparative empires, bureaucracies, and communications; and social scientists who study the dynamics of large organizations. Below, I discuss the book's relevance to each group.

**Imperial Chinese History**

Although this book illustrates the effects of spatial friction using Ming examples, the problems of bureaucratic control, accountability, and communication time lags applied to the entirety of imperial Chinese history. With the exception of Chapter 1, each chapter contextualizes Ming practices within longer-term developments in imperial China and explains how or why the Ming approach to managing spatial friction differed from the solutions adopted by other dynasties. As such, the book should appeal broadly to historians of China interested in understanding the functioning of the imperial Chinese state. The book builds on a long tradition of scholarship including classics such as the following:


Several recent publications have examined matters of morality, ritual, and bureaucratic control that are central to my study, but they generally do not examine how such matters intersected with problems that arose from the Chinese state's immense territorial size:


Another set of recent publications have examined how the imperial Chinese state managed its vast territories, but these studies generally focus on explaining how the central state adopted various communication or districting strategies to strengthen its control. Because
my book focuses on explaining bureaucratic practices that appear to have weakened the Ming state’s effectiveness, it overlaps with these books in topic, but not in methodology:

- Ruth Mostern, “Dividing the Realm in Order to Govern”: The Spatial Organization of the Song State (960-1276 CE) (Harvard University Asia Center, 2011).
- Hilde De Weerdt, Information, Territory, and Networks: The Crisis and Maintenance of Empire in Song China (Harvard University Asia Center, 2015).

**Comparative Empires, Bureaucracies, and Communications**

Over the past decade, scholars of premodern empires have engaged in various collaborative projects that resulted in important edited volumes such as the following:

- Peter Crooks and Timothy Parsons eds., Empires and Bureaucracy in World History: From Late Antiquity to the Twentieth Century (Cambridge University Press, 2016).

Beyond such edited volumes, however, historians interested in cross-regional comparison can benefit as well from monographs that offer detailed discussions of individual polities while presenting their analyses within global comparative frameworks. My book serves the needs of this group by (1) adopting the concept of spatial friction to explain how the problems faced by imperial China differed from the problems faced by other premodern polities; (2) comparing Ming practices with those of other premodern polities whenever relevant to the discussion; and (3) explaining Ming bureaucratic practices in ways understandable to non-specialist readers.

**Social Science**

At its core, this book is about how Ming institutions aligned the incentives of various actors with competing interests. In explaining why the Ming state adopted certain counterintuitive incentive structures, I draw on several analytical frameworks that emerged originally in the social sciences, including agency theory, stewardship theory, and collective action theory. I show that while the basic propositions of these theories apply to Ming China as well, their frameworks need to be refined and expanded to accommodate the highly anomalous set of factors presented by the imperial Chinese state.

The book should therefore be of interest to social scientists interested in the functioning of premodern states as well as other large organizations. Methodologically, it complements some recent publications that analyze the development of Chinese and/or other historical societies through the frameworks of economics and political science. Topically, however, it
differs from these publications in having a narrower chronological and geographical focus, and in analyzing not only social and political institutions, but also how these institutions intersected with the cultural dimensions of Ming bureaucracy:


**Manuscript Specifications**

**Word Count**

The following estimated word count includes all accompanying footnotes:

- Preface: 3,000
- Chapter 1: 15,000
- Chapter 2: 15,000
- Chapter 3: 15,000
- Chapter 4: 15,000
- Chapter 5: 15,000
- Conclusion: 5,000
- Appendices and Bibliography: 17,000

Total word count: 100,000

**Images, Charts, and Maps**

Each chapter contains an average of 6 images, charts, and/or maps. These include a chart of the Ming bureaucratic structure that may need to be printed over two pages; and a large diagram illustrating the embedded quotation structure, which may need to be printed over multiple pages. I rely heavily on charts and maps to explain complex ideas and to reduce the word count. I would like to work with the press to determine what is the optimal number of figures to include in the final manuscript.

**Tables**

Each chapter contains about 1-3 tables summarizing structured or quantitative data. I would like to work with the press to determine whether some tables should be placed in
the Appendix, an institutional repository, and/or a companion website. I have basic familiarity with Tableau (data visualization) and web design, and I can build the companion website if needed.

Copyright
- I will obtain the permissions for all images.
- I will create and hold the copyrights to all charts and maps. The only exception is a possible overview map of the Ming empire, which may need to be made professionally.
- Chapter 2 will be revised based on an article published previously in *Late Imperial China*. I have retained all rights for this article.

About the Author

I am an Assistant Professor of History at Claremont McKenna College. I study the cultural and institutional history of late imperial China, and my research seeks to reveal the connection between imperial Chinese institutions and broader issues of communications, archival practices, and modes of governance in the premodern world. Prior to receiving my PhD in East Asian Languages and Cultures from Columbia University (2017), I spent two years as a visiting student at the Department of Comparative Literature and Culture at the University of Tokyo. I have participated in collaborative projects with historians of other world regions, including a conference on early modern bureaucratic practices at the German Historical Institute Washington and a recently formed working group on premodern postal systems. Part of my research for this book has been published as "More Haste, Less Speed: Sources of Friction in the Ming Postal System" in *Late Imperial China* (2019).