

AN EARLY MODERN ECONOMY IN CHINA

The first English translation of Li Bozhong's pioneering study *An Early Modern Economy in China* uses sophisticated analysis to reconstruct the GDP of the Yangzi Delta. In this innovative economic history, Li provides a basis for understanding the Delta's economy, an area of unprecedented growth in modern times. Using quantitative research Li carefully reconstructs the economies of the region, combining three methods for estimating GDP: output, income, and expenditure. The result reveals the structure and level of income and production in this highly commercialized and urbanized part of China, establishing a benchmark for future reconstructions of regional economics through GDP. This is a landmark text in the field of economic history which has had a great impact on understanding Chinese economic history in global perspective.

LI BOZHONG is Chair Professor of Humanities at Peking University, having previously taught at Hong Kong University of Science and Technology and Tsinghua University. He is recognized as one of the foremost scholars of the economic history of China.



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AN EARLY MODERN ECONOMY IN CHINA

The Yangzi Delta in the 1820s

LI BOZHONG

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This book is dedicated to Aining and Xingfang





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NOTES ON THE TRANSLATION

The Use of Pinyin

In this book, the *pinyin* system is used, which is the official romanization system in the PRC. It has been adopted by the UN and other world agencies, and has become the system most commonly used in scholarship and journalism, largely supplanting the older Wade–Giles system.

Pinyin is now used in newspapers and is being adopted generally in scholarly works, although the traditional Wade–Giles system is still used in the 15-volume *Cambridge History of China*.

Citation Forms

There are three major types of sources cited in this book. The first type is original texts from pre-modern Chinese literature, which can be considered "primary sources" or "first-hand sources" to some degree and include manuscripts, old-fashioned publications using traditional block printing technology, and modern photocopies of some of the above documents. Following the traditional publication practice, these documents usually only have volume numbers, because pages were not numbered in some cases, or in other cases two pages were ascribed to a single page number (e.g. Page 1 contains pages 1a and 1b). Therefore, in Chinese scholarship of history, citations of classical works refer to the original book, volume (*juan*) and section (*jie*) number and not to the pagination of a particular edition. I follow the traditional practice when sources of this type are cited in this book.

The titles of original Chinese documents are spelled in *pinyin* and not translated into English. Some of the titles which are too long are abbreviated and only the abbreviations are used in the text of the book. Such is the case with the names of some compiling teams of modern works.

Document publication dates refer to the year of the available edition, even if they are not the earliest year of original publication. In many cases, the publication date refers to the year of the reprinting of the document in the twentieth and twenty-first centuries.



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NOTES ON THE TRANSLATION

Chinese and Japanese Names, Titles, and Terms

When citing Chinese and Japanese names, the family name is given first, followed by the given name. Non-Chinese and non-Japanese names are cited in the form in which they are best known in the West.

Following the usual practice, Chinese emperors are designated by their reign titles, not by their personal names.

The official titles and positions, academic degrees, as well as the names of government services, taxes, and so on, in Qing China were quite different from what they are today. In this book, the original names and titles are spelled in *pinyin* and the English translations are given when necessary. For the English translations of the official titles and positions, refer mainly to T'ung-tsu Ch'u's *Local Government in China under the Ch'ing*, and Charles Hucker's *A Dictionary of Official Titles in Imperial China*, and, very occasionally to Zhang Ying et al.'s *Chinese–English Dictionary of Ming Government Official Titles*.



INTRODUCTIONS TO THE ENGLISH EDITION

PHILIP T. HOFFMAN California Institute of Technology

Li Bozhong's An Early Modern Economy in China: The Yangzi Delta in the 1820s is many things, all of them both rewarding and deeply interesting. A naïve reader unacquainted with Li Bozhong's earlier work might assume that it is simply the English translation of a work that earlier appeared in Chinese, but it is far more than that, for the text has not only been translated, but revised and updated to take into account recent developments in Chinese history. The new edition in English clearly entailed a great deal of additional research and writing.

An economic historian who reads the book will likely connect it to Li Bozhong's well-known 2012 article in the *Journal of Economic History*, "Before the Great Divergence? Comparing the Yangzi Delta and the Netherlands at the Beginning of the Nineteenth Century." Coauthored with Jan Luiten van Zanden, the article compared early nineteenth-century GDP per capita in two of the most prosperous and advanced regions of the preindustrial world – the Netherlands and part of the Yangzi Delta – and concluded that output per capita was much higher in the Netherlands. That conclusion was a major contribution to the great divergence debate that focuses on when the economies of China and Europe went off in different directions on the route to modern growth.

The book does elaborate on that comparison. It justifies it, pointing out that both the Netherlands and the Huating-Lou area (a part of the Yangzi Delta that Li Bozhong examines) had high incomes in the pre-industrial period but both were also slow to achieve modern economic growth and industrialization. The Netherlands fell behind Britain in the industrial revolution; Huating-Lou (as the book explains) lost its economic leadership to Shanghai when China industrialized. And both resembled one another in many other ways as well: they were about the same size; had free markets, commercialized agriculture, and handicraft industry; and both were maritime transportation hubs at the mouth of major rivers.

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An Early Modern Economy in China also supports and explains all the calculations that went into the 2012 article and – most important – shows readers how they can carry out similar research on other regions in China. Li Bozhong makes a strong case in the book for that sort of local study, and he argues persuasively that such local studies are perhaps more important right now than estimates of GDP per capita for entire countries in the pre-industrial era, when reliable statistics for a whole economy are usually lacking and regional variations of output per capita can be large. By giving readers a lucid guide that will help them carry out similar local projects, he has helped advance the economic history of China and of every other pre-industrial economy too. We can all read his guide and consult its appendices with profit, just as we do with other classics such E. A. Wrigley's and R. S. Schofield's *The Population History of England 1541–1871* (1981). The result, it should be clear, is a real service to economic historians.

But the book will appeal to an audience far wider than just economic historians. By describing how the Huating-Lou economy functioned – its agriculture, its large manufacturing sector, and its services, from commerce and transportation to education and government – Li Bozhong paints a detailed picture of local society and even of local politics. With his help, life two centuries ago in this part of the Yangzi is revived, and we can see it pass before us, no matter what kind of historian we are.

Finally, the book describes Li Bozhong's own fascinating intellectual odyssey as an economic historian. It recounts how he came to use the modern system of national accounts and how he applied it to early modern Chinese history. Doing so, he explains, involved a great deal of effort to "glean the necessary data from fragmentary and sporadic historical sources." His account of the steps he took along the way shows us a master historian at work; it should encourage us all to keep pushing off in new directions of research.

DWIGHT H.PERKINS

Harvard University

The English translation of Professor Li Bozhong's remarkable study of the GDP of the Huating-Lou area of China in the early nineteenth century is a very welcome development. This book is in fact more than a translation of the work first published in Chinese in 2010 because it has been updated and revised to take into account many works of others since 2010 and further work done on this region of the lower Yangzi River Delta by Professor Li himself.

The book is organized as an effort to estimate the GDP of this relatively wealthy area of China roughly two centuries ago and to compare that GDP with that of the Netherlands at roughly the same time. Because this effort is so carefully and systematically analyzed, the result is clearly by far the best estimate of Chinese GDP in a particular region of the country. It definitively



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establishes that, at least in the more advanced parts of China, income and output were comparable to what was found in the more advanced parts of Europe at that time.

To say that this book presents the best estimate of Chinese GDP two centuries ago, however, does not begin to explain why this book is so important to the study of Chinese economic history. The chapters presenting the detailed data and supporting qualitative information on the three main components of the production estimate of GDP (agriculture, industry, and services) present a complete picture of the early 1800s economy in the Jiangnan region. This allows the scholar familiar with the increasing number of high quality works on one or another component of the economy in that period to put that component (the financial system, the commercial system, particular industries, etc.) in context and thus judge just how important it was to the overall regional economy.

Scholars working on the economy of other regions of China could also not do better than to use the framework of these chapters to judge what was and was not present in the region they are focusing on. Many other regions will not have the extraordinarily rich data that are available for Jiangnan and Huating-Lou, but by comparing their region with the complete picture of the Huating-Lou economy, scholars can more readily judge with the data that they have what makes their region different. Alternatively, if one had sufficient data for a reasonably representative sample of other regions in China, one could build up a comparatively definitive estimate of GDP for the whole country.

The production side is only part of the story told in this book. The book also estimates GDP from the income and expenditure side thus presenting a rich lode of information on wages, profits, consumption expenditures, and much else. As with the production data, these income estimates and their framework allow the scholar of individual companies and industries to place their studies in context. Were the profits and sales of the Guangzhou merchants or the Shanxi bankers, for example, a significant part of the economy or not?

To get the structure of income, Professor Li first systematically estimates employment in the region starting with the number of days and hours that individuals spent in various occupations. The result is a rich picture both of the nature of the diverse kinds of employment but also their quantitative significance. When combined with the data on the income from these different kinds of employment, one could derive an estimate of the level of inequality in the 1820s. The wage data alone provide detailed knowledge of both the level and structure of wages in early nineteenth-century China. China's labor market was not integrated nationally at this time, but there was enough migration in the early nineteenth century for there to be something like a regional labor market that extended far beyond Huating-Lou. Thus these wage data would probably be similar for much of the population of the broader lower Yangzi region.



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The chapter on consumption gives a rich picture of how people spent their income and hence how they lived and spent their time. The amount spent on weddings and funerals, for example, is estimated and for many families the amount could cause financial distress. Roughly 10 percent of the population smoked opium. The data on food expenditures give researchers an estimate of how much meat was consumed per capita in a rich area that can be used for comparisons with other less prosperous areas and much else.

I could go on in this vein elaborating on the many detailed insights that this book provides about the nature of life in a comparatively wealthy Chinese region in the early nineteenth century. There is also considerable information on many of these findings on earlier periods in Chinese history and Professor Li makes comments on the relevance of his data to some of these earlier periods. He also carefully uses data from the 1940s and 1950s in support of his assumptions about the situation in the 1820s and that in turn gives one a picture of how much or how little things had changed by that later period.

Finally the book establishes to a degree not previously done that China's economy in 1823–29 was a complex sophisticated economy fully comparable to that of Europe around the same time. Jiangnan was clearly the most developed part of China but the major commercial centers of England, the Netherlands, and northern Germany were also the most developed parts of the European continent. That said, by the 1870s, as the second phase of the industrial revolution based in part on fundamental breakthroughs in science (electricity, chemistry) took hold in Europe, no similar breakthrough occurred in China until much later. Because there was no such breakthrough in China until much later, Professor Li is able to use data from the mid-twentieth century to test the consistency and plausibility of some of his earlier period estimates.

One hopes that in his retirement, Professor Li Bozhong will continue to produce major contributions to Chinese economic history. One hopes even more that many future historians, most of them probably in China because of the barrier of learning both classical Chinese and some modern economics, will follow in Professor Li's footsteps. This study will be of great value to anyone interested in the pre-modern economy of China and of Asia more broadly.

JAN LUITEN VAN ZANDEN

Utrecht University

In China, economic history as a discipline has changed dramatically in the past 20 years. Much like its economy, it has been "catching up" quickly, by a combination of borrowing of established ideas from abroad and introducing new ideas rooted in the Chinese context. Since the emergence of "new economic history" in the 1960s the international standards and research practices



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in this field have changed gradually, with an increased focus on quantitative research, the use of economic modeling, and econometric testing. It is no exaggeration to say that Li Bozhong has been the "homegrown" pioneer of this kind of modern quantitative research in China; over the years he has established a very strong reputation for detailed historical research into the long-term evolution of the Yangzi Delta in particular and China in general, basing his work on a wide range of historical sources that gradually have become available for this kind of research. His research formed one of the pillars of the reassessment of Chinese economic performance before 1800 by Kenneth Pomeranz – his famous book on *The Great Divergence* could probably not have been written without the pioneering research into agricultural productivity and output in that region by Li Bozhong. In his footsteps new generations of Chinese economic historians are starting to unearth many wonderful historical sources and tell fascinating stories about the dynamic economic development of the region before the industrial revolution.

This book is another example of the fresh look that he has on the Chinese economy before the industrial revolution. It presents a careful reconstruction of the economy of the Huating-Lou district in the Yangzi Delta in the 1820s, making use of a broad range of historical sources. The method that is used, the reconstruction of the national accounts of the region, is the standard in modern economic research, but has not been applied to a Chinese region in the past. By combining the three approaches for estimating GDP, the output, income, and expenditure approaches, he arrives at reliable estimates of the structure and level of income and production in this highly commercialized and urbanized part of China. The reconstruction shows the advanced economic structure of the Huating-Lou region and the high level of productivity that was consistent with it. This pioneering work by Li Bozhong not only demonstrates the potential of carefully reconstructing the economic structure of such a region, but also the possibilities for international comparative work. I had the immense pleasure to work together with Li Bozhong on a related project, where we compared the structure and productivity of the Huating-Lou district with a "similar" advanced, urbanized delta economy, the Netherlands, also in the 1820s. In this book he makes use of this comparison to discuss fundamental questions about Chinese and European economic development. In particular the comparison with the "First Modern Economy" as analyzed by Jan de Vries and Ad van der Woude is highly illuminating, and will lead to a better understanding of both the Chinese and the Western European development path.

This is a courageous and highly innovative book that will have a big impact on our understanding of the economic history of China in global perspective. It is a model for the new generations of economic historians that are emerging now in China, who will certainly transform our ideas about the causes of its specific trajectory in the future.



PREFACE

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As early as in 1986, Dwight Perkins wrote: "It took one hundred and fifty years for the industrial revolution to begin in England in the late eighteenth century and then sweep across the rest of Europe and North America (including the former Soviet bloc), raising the living standards in an area that today encompasses roughly about 23 percent of the world's total population. If China's efforts to become an industrialized nation succeed, however, then another 23 per cent of the world's total will live in the industrialized world within just four or five short decades."

Just decades later, Perkins' prediction has become reality. China has become a great power in the present-day world in the term of economic size, second only to the USA. Even compared with other rapidly growing economies, China's performance is still the most spectacular, as Jim O'Neill, who coined the term BRICs, wrote in 2011: "People tell me from time to time that I should consider taking the C out of BRICs because China is of such huge relevance on its own. Of course, some say that if I took the C out of BRICs there would be no story about the others. They have a point. China is the greatest story of our generation."

Because of the spectacular economic growth, which can be labeled "the greatest economic miracle in world history," the country has attained new importance in global historical terms. This unprecedented growth raises the question of why this economic miracle has taken place. To answer this question is an important task for economists and historians the world over.

The economic miracle that China has created calls for a deep and comprehensive examination of China's economic performance before the arrival of the West in the mid-nineteenth century. As Dwight Perkins noted, China has changed greatly in the last decades. But China's history still clearly illuminates

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¹ Perkins 1986.

² O'Neill 2011.



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its present. The presence of the past can be seen in many areas. China's present is a continuity of its past, or the persistence of the past.³

Jiangnan (the Yangzi Delta) has taken the lead in the rapid economic growth of China. Though it has been the most advanced area of China for the past millennium, the Yangzi Delta had been much behind Western Europe in its level of economic development before 1979 when the economic reform began in China. In the following three decades, in particular since 1992, however, the Delta's economy has been growing dramatically. The Delta produced 17.8 percent of China's GDP in 2009 which amounted to US\$878.6 billion (nominal), in striking contrast to US\$44.3 billion in 1978 and US\$65.4 billion in 1992. If measured in purchasing power parity (PPP), moreover, the 2009 GDP of the Delta was even bigger: it reached US\$1,600 billion (in 2009 dollars). In other words, if the Delta was counted as an independent economy, it would be the tenth largest in the world, just a little bit smaller than Italy, in ninth place, and bigger than many major economies such as Mexico, South Korea, Spain, Canada, Indonesia, Turkey, Australia, Iran, Taiwan, and Poland, which ranked the eleventh to twentieth respectively.⁴

It is fair, therefore, to regard the economic growth of Jiangnan as the greatest miracle in China, or "the miracle among miracles." If we look back backwards in time, however, we will not feel very surprised. Jiangnan has been China's most developed region for the last millennium and has been seen as the hero of the modern Chinese story.

This unparalleled importance gives Jiangnan a special position in the study of Chinese economic history. It is not difficult to understand, therefore, why the economic history of the area has attracted the most intensive study over the past century and many influential views and theories of Chinese history are in fact drawn from the experience of the area.

A couple of works discussing the GDP of pre-twentieth-century China appeared after my book was published in 2010, which dealt with the whole country and covered several centuries. Since China is a continent-sized country in which great regional differences exist, and dramatic changes and fluctuations have occurred in its economy over a period of centuries, I believe that general studies of the whole country and covering long periods should be undertaken only after thorough regional research has been carried out. It is my opinion that, though there are different approaches to the study of China's GDP, the better one, at least for the moment, would be to carve out a narrow segment of China's economic growth story in terms of time and area and to carry out intensive, in-depth, and well-informed research before proceeding with more general study. Because there is as yet no such case

³ Perkins 1986.

⁴ Li Bozhong 2015.



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study, it is necessary to at least attempt it. This book represents the fruits of that attempt.

This book was finished in 2009 after five years of intensive study. It was published in China in 2010 and won two awards in 2012 and 2013.⁵ In 2014, the proposal to publish an English version was accepted by Cambridge University Press. The translation began in the same year and was finished in 2016. The major work in the following years involved cross-checking citations with the original texts, finding the correct English translations for proper nouns, technical terms, and specific titles, and so on. I have also corrected many small mistakes and errors which existed in the original Chinese edition and in the drafts of the English translation, and made some cuts in lengthy discourses. These tasks are very time consuming because the nouns, terms, and titles are so specific and the numbers of them so numerous that many of them cannot be found in previous scholarship. Moreover, in the period of nine years between 2010 and 2019, considerable advances have been made in the field of Jiangnan economic history. To make the book reflect this updated scholarship, I have adopted some new results of research of mine and others, and, based on them, I have written a considerable number of new sections, paragraphs, and footnotes supplementary to the translation of the Chinese version. Many footnotes in the text were very long and detailed. I have either condensed them or moved them to three newly created appendices (18, 19, and 20), which makes the text easier to follow for many readers who are not China scholars. Because the changes made are so many, this English edition is considerably different from the original Chinese edition. In this sense, the English edition can be seen as a fully revised version of the original Chinese edition.

My first debt is to Mr. Wee Kek Koon and Dr. Matthew Noellert. Kek Koon is a Lecturer at the Department of Translation of The Chinese University of Hong Kong and an experienced professional translator who has translated a number of modern Chinese literature works. Matthew is a fine scholar of the younger generation, specializing in modern Chinese social history. He was a PhD student at Hong Kong University of Science and Technology when he joined the work and is now an Assistant Professor at the History Department of the University of Iowa. Kek Koon translated the book and Matthew modified the translation. Because the book is so big and the research is highly professionalized, the translation was extremely challenging; both of them used their skills of language and knowledge of modern Chinese history and made valuable contributions to the translation. Without their great efforts, this volume would not have appeared. Thus I have spent four years in the translation and

⁵ They are the (quinquennial) *Guo Moruo* Award for the Best Works in History, Beijing, 2012, and the (triennial) Prize for the Excellent Works in Humanities and Social Sciences of Chinese Colleges and Universities of China, Beijing, 2013.



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I am responsible, right or wrong, for the final translation, in particular for the newly written parts.

My second debt is to my colleagues in economic history. I have been fortunate in the number of scholars who have been willing to read the summary and some translated chapters of this book, and to listen to my lectures on this book on different occasions and many of them made extensive comments and suggestions. I particularly thank Professor Dwight Perkins, Professor Jan Luiten van Zanden, and Professor Philip Hoffman, who kindly contributed their prefaces for the English version of this book, and Professor Justin Yifu Lin, Professor Kenneth Pomeranz, and Professor Peter Nolan whose comments appear on the cover of the book. Special mention also must be made of very detailed comments and suggestions by three anonymous reviewers invited by Cambridge University Press. All the comments, suggestions, and encouragements made by the individuals above have been very helpful to the revising of the book and many of them were incorporated in the English version.

My third debt is to Dr. Christina Ye and Dr. Lucy Rhymer for their fruitful cooperation which was crucial to the publication of the translation. I also thank the editors of Cambridge University Press. We have established a good working relationship, which has proved to be very helpful.

I appreciate Zhonghua shuju (Zhonghua Book Company) for their kind agreement to the publication of the English translation of this book.

My special thanks is given to the Translation Project of the Chinese Humanities and Social Sciences Academic Boutique of the Chinese Fund for the Humanities and Social Sciences for their generous sponsorship.

Finally, I'd to say a few words about the writing style of this book.

Since this book is a piece of work of economic history, the analyses and discussions used in this study are within the framework and discourse system of economics. Therefore, the basic writing style is one that economists use commonly. However, I have reminded myself of the warnings issued by Robert Solow that a work of economic history should have its own characteristics, and not be a remake of a work of economics.⁶ As a work of history, this book should have the basic features of modern historiography, which is of particular importance to this book because it is not only the first attempt to apply the methods of GDP research to Chinese economic history prior to the twentieth century, but also a case study of a particular area of early modern China which deals with its economic history in great depth and comprehensiveness. Though Jiangnan in general and Songjiang in particular have attracted intensive study in the previous scholarship, many aspects and details of the situations of the Hua-Lou area are still untouched and no case study of the specific area has been made so far. In order to provide a solid basis for the study in this book,

⁶ Solow 1985.



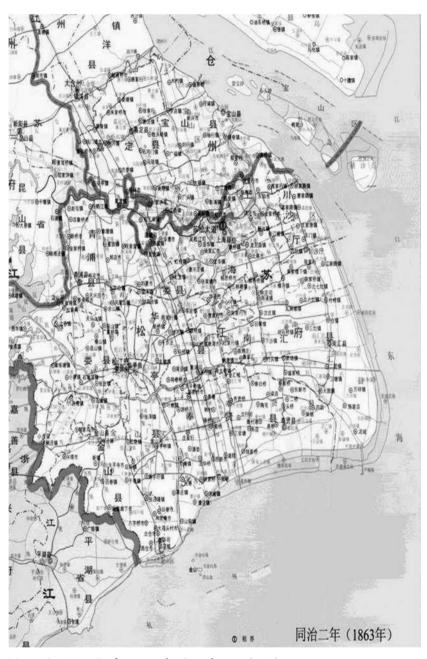
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I have expended great effort in empirical research: combing through thousands of historical documents and modern investigations, searching them for useful materials, checking the details to establish whether they are correct or not, and processing the materials into usable data. All these jobs required the skills of a historian and the writing style that historians use. Therefore, the writing style of this book is a mixture of those of economist and historian, or an economic historian.

In a general sense, the book can also be seen to use a mixture of the writing styles of Chinese, Japanese, and Western economic historians. Most of the detailed empirical study is contained in footnotes and appendices, while the basic analyses appear in the main text. Those readers who are not familiar with the writing styles of Chinese and Japanese economic historians can focus on the text and check the footnotes and appendices only when needed. Since we are living in an era of globalization, scholarship, just like many other things, is being globalized. Only with the integration of more and more different styles of scholarship can a truly "global scholarship" be formed. In this sense, Western readers may in fact benefit from this book's mixture of writing styles.

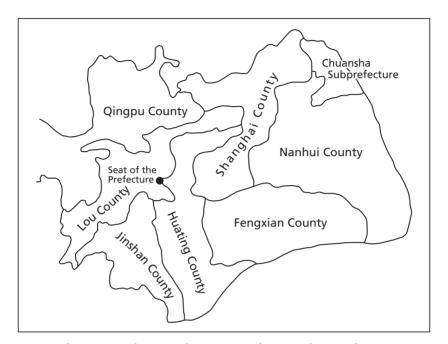






Map 1 Songjiang Prefecture in the Qing dynasty (1863)





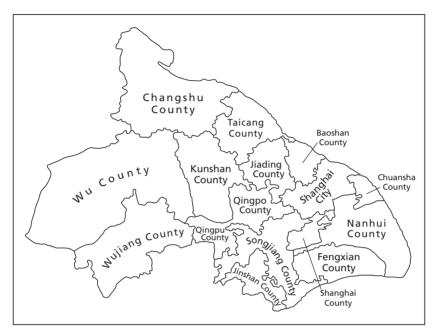
Map 2 Administrative divisions of Songjiang Prefecture in the Qing dynasty





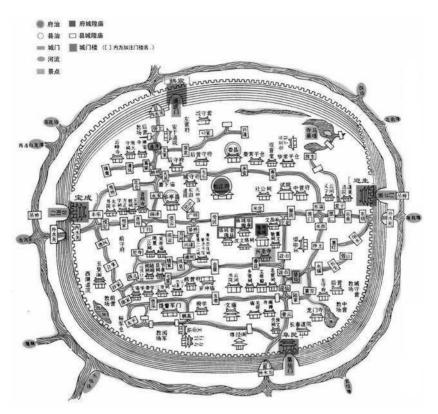
Map 3 Administrative divisions of Songjiang County in the Republican era (1937)





Map 4 Songjiang County and its surrounding areas in early Republican times (1910s)





Map 5 Songjiang City in the beginning of the nineteenth century





Map 6 Administrative divisions of modern Shanghai metropolis

