

# Introduction

In March 1949, when Mao Zedong set out for Beijing from Xibaipo, the remote village where he had lived for the previous ten months, he took along four printed texts. Included were the *Shiji* (Records of the Grand Historian, c. 100 BCE) and the *Zizhi tongjian* (Comprehensive Mirror for Aid in Government, c. 1050 CE), two works that had been studied for centuries by emperors, statesmen, and would-be conquerors. Along with these two historical works, Mao packed two modern Chinese dictionaries, *Ciyuan* (*The Encyclopedic Dictionary*, first published by the Commercial Press in 1915) and *Cihai* (Ocean of Words, issued by Zhonghua Books in 1936-37).<sup>1</sup> If the two former titles, part of the standard repertoire regularly reprinted by both traditional and modern Chinese publishers, are seen as key elements of China's broadly based millennium-old print culture, then the presence of the two latter works symbolizes the singular intellectual and political importance of two modern industrialized publishing firms. Together with scores of other innovative Shanghai-based printing and publishing enterprises, these two corporations shaped and standardized modern Chinese language and thought, both Mao's and others', using Western-style printing and publishing operations of the sort commonly traced to Johann Gutenberg.<sup>2</sup>

As Mao, who had once organized a printing workers' union, understood, modern printing and publishing were unimaginable without the complex of revolutionary technologies invented by Gutenberg in the fifteenth century. At its most basic level, the Gutenberg revolution involved the adaptation of mechanical processes to the standardization and duplication of texts using movable metal type and the printing press. This new process resulted in the far-flung proliferation of printed matter throughout each society that it influenced. Simultaneously, the Gutenberg revolution also transformed business and social relationships, bringing forth, among other changes, one of the world's earliest capitalist enterprises, the print shop, with its attendant class divisions.

In Mao's day, China, like numerous countries, was still striving to come to grips with the Gutenberg revolution. What sets China apart from other

countries, however, is that the full story of its complex relationship with the modern Western intellectual and material culture epitomized by that revolution is still far from widely known. Scholarly works that have examined China's modern intellectual culture have tended to focus on Western missionary educational institutions after 1860, on Chinese-sponsored changes in the education system between 1895 and 1949, or on the impact of Western political philosophies on the Chinese after 1895. Very few, however, have studied the material culture, particularly the communications technology, that was a necessary, if not sufficient, cause of this intellectual change. This book seeks to redress the imbalance by examining the Shanghai-based printing and publishing system that delivered words, texts, and ideas to a new mass audience preoccupied with aiding China's twentieth-century quest for wealth, power, and international stature.<sup>3</sup>

Broadly speaking, this book studies the reciprocal influences of material and mental culture that were a central part of the social history of Shanghai life between 1876 and 1937. These were the years between which ever-increasing numbers of Chinese invested in and worked with capital-intensive Western printing technology. Spreading outward from Shanghai, the technological functions of modern printing and the intellectual culture of publishing also had a major impact on the country as a whole. The continuum from material to intellectual culture, from printers to publishers, and from publishing companies to government patrons and reading audiences provides the framework for this book. Together printing and publishing formed a knowledge-based micro-economy that merged a modern mechanized industry with the ancient literary culture of China while simultaneously advancing the organizational practices of the corporation, industrial trade association, and copyright protection in China. The evolution from traditional Chinese woodblock printing (xylography) to Western-style mechanized printing is an important part of that story as is the transformation of traditional Chinese print culture and commerce into modern Chinese print capitalism.

**From the Xylographic to the Mechanical Age:  
Print Culture, Print Commerce, and Print Capitalism**

In recent years, three concepts – print culture, print commerce, and print capitalism – have had a profound impact on the efforts of historians to understand the mental and social context of national development. Of the three, the reach of print culture is the most comprehensive. As Roger Chartier, a major proponent of this historiography, has explained, “print culture” is a term rooted in the efforts of European historians to understand the social implications of the Gutenberg revolution of early modern Europe.<sup>4</sup> In the

case of China, conversely, study of print culture generally involves examination of the impact of woodblock printing from its development in the early Tang dynasty (618-907), nearly eight centuries before Gutenberg's birth, its proliferation during the Song (960-1279), the Yuan (1279-1368), and the Ming (1368-1644) dynasties, and then its climax under the Qing (1644-1912) dynasty. Both in this broad form, as well as in Chartier's narrower sense of "the set of new acts arising out of the production of writing and pictures in a new form,"<sup>5</sup> the historiography of print culture has profoundly changed the ways that social and cultural historians of China perceive that empire's mental culture.

Western-language studies of premodern Chinese print culture have been loosely divided between those that address the official noncommercial and those that analyze the private commercial publishing realms, although the precise relationship between these two sectors is still the focus of debate.<sup>6</sup> Official noncommercial publishing largely supported the imperial orthodoxy. As is well known, Zhu Xi's (1130-1200) rearrangement of the Chinese Classics into the Four Books, as well as his commentaries, became, from the Yuan period down to Qing times, the core curriculum for the highly competitive civil service examination system and remained so until the abolition of that system in 1904-5. That system set Qing China's meritocratic personnel selection system apart from the aristocratic systems found throughout most of the world and contributed to the development of a broadly based print culture and publishing system in advance of that which developed in Europe after Gutenberg.<sup>7</sup> In a summary of publishing output that underestimates the real numbers of books in circulation, Tsuen-hsuei Tsien observes that "It is estimated that 253,435 titles are registered in various dynastic and other bibliographies from Han [206 BCE to 220 CE] to the 1930's; 126,649 were produced under the [Qing]."<sup>8</sup> This output was produced chiefly for the literate public whose preoccupation was success in the imperial civil service examinations and in gaining a place in the administration directing the vast Chinese empire.<sup>9</sup>

The national audience for printed texts in late imperial China, especially but by no means exclusively of examination-related materials, was sizable. In one view, between 30 and 45 percent of China's total male population and as much as 10 percent of its female population were functionally literate in the eighteenth and nineteenth centuries.<sup>10</sup> By implication, according to this view, out of a nineteenth-century population of 450 million, perhaps half could read with some degree of ease. Others estimate late Qing China's literacy rate at between 20 and 25 percent overall, a figure that still yields a reading public of between 90 and 110 million, albeit concentrated in urban areas.<sup>11</sup> Very few of these literates were actually officials, but many people

were familiar with parts of the official curriculum and its anticommercial physiocratic ideals as well as with other reading materials.

While the presses of the emperors, both in Beijing and in the provinces, produced mountains of finely crafted editions of encyclopedias, classics, histories, literature, and books of scholarship, the similarly “not-for-profit” presses of bibliophiles and scholars followed suit. Over the course of the Qing, private collectors created more than 750 famous libraries.<sup>12</sup> By that time, independent study, book collecting, and philanthropic printing and publishing had all long been recognized as part of elite Chinese life. True to the common conception of publishing as the civic-minded pursuit of literature, such men produced books for the love of learning, out of respect for the past, and to gain the respect of others. Sun Congtian (c. 1680-1759) was airing a widely held view when he wrote in his *Cangshu jiyao* (Bookman’s Manual) that “Books are the most valuable treasure in the world. For it is in books that we find discriminated the good and the bad in human nature and the strong and weak points in the ways of the world. In this world of ours, it takes well-read men to ‘cultivate their persons’ and consequently to ‘govern rightly their states.’”<sup>13</sup>

If print culture provides a loosely structured means of understanding elite Chinese intellectual life, the concept of “print commerce” enables inquiry into the world beyond the imperial state and its noncommercial, or even anticommercial, ideology. Scholars have recently begun to uncover an initially sizable, and eventually huge, commercial publishing sector in late imperial China, separate from the well-known elite worlds of imperial and philanthropic publishers and bookmen.<sup>14</sup> In her study of the commercial publishers of Jianyang (Fujian), for instance, Lucille Chia covers the six centuries from the Song through the Ming.<sup>15</sup> Timothy Brook, Dorothy Ko, and Kai-wing Chow discuss the intellectual and cultural effects of print commerce in the late Ming and early Qing. Ellen Widmer has studied the market-driven Hangzhou/Suzhou publishing house Huanduzhai from the 1620s to the 1690s.<sup>16</sup> Cynthia J. Brokaw takes the story of commercial publishing into back-country Fujian in the eighteenth and nineteenth centuries,<sup>17</sup> and James Flath examines the adaptation of north China’s commercial *nianhua* (New Year’s prints) craft business to historical changes of the nineteenth and twentieth centuries.<sup>18</sup>

These works illustrate that, from the late Ming onward, the expanding national economy stimulated and directed commerce in printed commodities. In this period, print commerce was already widely scattered throughout the Chinese empire, demonstrating the existence of a national market in books long before the appearance of Shanghai’s Gutenberg-influenced printing, publishing, and marketing system. Already by the mid-Ming,

important literati publishing and marketing centres were found in the two capitals, Nanjing and Beijing, as well as in Hangzhou, Huizhou, and Jianyang.<sup>19</sup> In the late Ming and early Qing, the elite trade moved decisively to the lower Yangzi, just west of Shanghai. Suzhou was the leading seventeenth century site, followed by Hangzhou, Nanjing, and Yangzhou.<sup>20</sup>

Initiative shifted north in the late eighteenth century when Beijing's Liulichang booksellers' district appeared. By the early nineteenth century, Liulichang was well known throughout China and East Asia as the empire's leading antique, art, and book emporium. There the anticommercial values of the Chinese literati rubbed up against the economic realities of the marketplace without, however, rupturing social relations in any particularly novel or dramatic fashion. Nonetheless, something more than mere connoisseurship underlay the success of the Liulichang shops, as indicated by the epitaph of an elite bookseller. The eulogy reveals a public rationale that seeks to justify monetary profit as a natural by-product of society's pursuit of learning:

With regard to trading books with people, we did not calculate profits too closely. If the books that [others] received [from us] were valuable, we would take ten taels [ounces of silver] and only sell them for a small amount over that. If the books we got were less valuable, we would sell them for only a little more. We took a long-term view and in this way earned more. "We sought profit, and made a living. We liked profit but also let those who bought books get their profit, too. Who is not like us in desiring profit? If we had concentrated only on profit, then goods would not have circulated, and this would have been the same as losing profit."<sup>21</sup>

In the 1870s, the redoubtable English ambassador Sir Rutherford Alcock made his way to Liulichang.<sup>22</sup> He confirmed the existence of a great deal of private commercial printing taking place there in the nerve-centre of the world's most populous empire.

The mixed attitude toward profit expressed in the eulogy cited above provides one hint of a problem that plagued Liulichang despite its success as the empire's largest bookselling district: a high rate of business failures.<sup>23</sup> If profit was not the primary *raison d'être* of Liulichang's and other elite booksellers and publishers throughout China, profitability was nevertheless a necessity of survival. During Liulichang's first century of existence, an uncertain supply system, limited numbers of high-quality editions, forgeries, and changing consumer tastes all constantly threatened to bankrupt the district's book dealers and publishers. By the end of the nineteenth century, however, bankruptcy was less of a threat than competition emanating from

Shanghai, which had historically been a cultural backwater. Thanks to a drastic realignment of intellectual and technological forces, by the first decade of the twentieth century, Shanghai had succeeded in marginalizing Beijing and all other Chinese publishing centres.

Thus, the commercial perspective modulates our view of post-Tang print culture as a by-product solely of imperial publishing. It adds a vital material context to the moral economy of imperial officials and their print culture. It also suggests that books, even the same book, and other printed matter could be simultaneously repositories of moral values and material objects of pecuniary value. In the first instance, books yielded existential insight or influenced behaviour. In the second, they fetched profits of a more metallic sort that could be turned to various objectives, regardless of the refinement of those who acquired them. These trends and characteristics continued into the nineteenth and twentieth centuries, when Shanghai ratcheted them all up several notches through its joining of Western printing technology with Chinese print culture and commerce.

In contrast to the concepts of print culture and print commerce, the term “print capitalism,” which often appears side by side with discussions of European print culture, has had less impact on scholarly analysis of China. In part, this omission reflects uncertainty about the nature of print capitalism, a term first popularized by Benedict Anderson.<sup>24</sup> Perhaps because print capitalism is a concept placed in service to his theme, nationalism, Anderson never really defines it, not even in the “concepts and definitions” section of his book. Generally, though, it may be inferred that, for Anderson, print capitalism refers simply to the commercialized, secularized, non-governmental, and nonphilanthropic production of texts for a popular audience. However, this definition is historically so imprecise that it could easily apply to the entire long history of late imperial Chinese book production, dating back to at least the Song. During the nine centuries that followed, Chinese workers carved blocks and used them to print all kinds of secularized, nongovernmental books. Their craft-based, handmade books then circulated commercially throughout China, without, however, establishing print capitalism.

Anderson’s notion of print capitalism was presaged by Lucien Febvre and Henri-Jean Martin’s discovery that the European print shop was the world’s first capitalist enterprise.<sup>25</sup> Many elements of what we today call capitalism have indeed been widely present in Western society since Gutenberg’s day. However, they did not come together in a consistent and replicable international format until the late nineteenth century.<sup>26</sup> Although Karl Marx, the first serious analyst of the modern mode of production, focused on the economic and social relations that defined what later came to be called

capitalism, he also acknowledged, like Febvre and Martin, that technology was a critical part of the capitalist system. Specifically, Marx argued that the development of machinery marked the genesis of the Industrial Revolution, “And to this day [technology] constantly serves as such a starting point, whenever a handicraft, or a manufacture, is turned into an industry carried on by machinery.”<sup>27</sup>

Print capitalism, I argue in this book, is an offshoot of the process of mechanization in the printing and publishing sector. Print capitalism may be said to have arrived when commercialized, secularized, nongovernmental, and nonphilanthropic printing came to be done, not as a handicraft, but as a form of “industry carried on by machinery.” Historians have become more aware of the roles of commerce and even industry in the late imperial Chinese world, but few demarcate the discontinuity between commerce and capitalism as acutely as Marie-Claire Bergère. In her study of the Chinese bourgeoisie in the early twentieth century, for instance, Bergère argues that “capitalism [did] not spring from a multiplication of markets nor even from their more or less organised integration, but from the introduction of mechanisation into a highly commercialised society.”<sup>28</sup> In addition, she maintains, mechanization laid a groundwork for the Chinese bourgeoisie.

Similarly, I argue that mechanization laid the material foundation that made Chinese print capitalism possible. At the same time, however, Chinese print capitalism required operating capital and a sizable market. Capital was obtained via the joint-stock limited liability corporation and from Shanghai’s modern banks, two organizational entities borrowed from the West that contrasted with the strongly familial enterprises of China; a large market was available only outside Shanghai, making the Shanghai publishers financially dependent on a national clientele to whom their new products, particularly textbooks, scholarly works, reference books, etc., could be sold. That patronage was regulated by tumultuous, frequently changing political regimes situated beyond the confines of the treaty port. Protection of the intellectual and manufacturing effort needed to produce printed commodities was an important part of the print capitalist process. Likewise, the creation of specialized managerial leadership led to employment of an adjunct workforce, a new form of skilled labour that turned out to be less vulnerable to patriarchal domination by management than traditional printers had been.

To date, just as print capitalism has received little attention from China scholars,<sup>29</sup> so too the important changes in China’s publishing sector brought on by adoption of Western technology have been largely overlooked. With a history stretching back to the early Tang dynasty, xylographic printing and publishing had become widely dispersed by the late imperial period.

Traditionally, blocks were made from treated pear, jujube, or catalpa wood, all of which were widely available.<sup>30</sup> During the Song dynasty (960-1279), the block-carving craft reached such heights that engravers were able to imitate individual calligraphic styles while still working within the Kaishu, or “plain written hand,” script. Three centuries later, during the Ming, xylographic innovations, such as three-colour printing, were added to the older techniques, but by then block-carving had spread widely throughout the empire and book printing encompassed a broader range of quality and genre.<sup>31</sup> By the nineteenth century, the process of carving wooden blocks had become so widespread and simplified that, at printing’s lower reaches, illiterate women and children were hired to perform the task.<sup>32</sup> The xylographic printing process, itself even simpler than that of carving, also promoted dispersal. In each case, a sheet of paper, most likely a common southern bamboo paper such as *lianshi*, was laid over an inked block and rubbed with a “long brush” (*changshua*) or “printing burnisher” (*cazi*)<sup>33</sup> to transfer the watery Chinese ink from block to paper, which was then peeled off and hung to dry. The tools themselves were rustic and easily obtained or adapted from other uses.

Nineteenth-century technological changes not only created the context for the rise of print capitalism, but also transformed the geography of Chinese publishing. To be sure, xylographic printing continued throughout that century and much of the next, but from the late nineteenth century on Shanghai was unquestionably the single most important centre of Chinese publishing, largely because it was the site in which most new printing technology was introduced. This technological revolution, as Perry Link has pointed out, encouraged the growth of China’s modern literature and made possible the expansion of commercially driven readership markets.<sup>34</sup> Scholars such as Leo Ou-fan Lee and Andrew J. Nathan<sup>35</sup> have traced the origins of Chinese mass culture to Shanghai and its modern publishing industry, observing that, after 1895, political news and new ideas were delivered to the Chinese people “almost exclusively through the press”<sup>36</sup> and modern periodicals.

Indeed, successful Shanghai publishers turned what Daniel R. Headrick, a Western historian of technology, and Zhang Xiumin, the leading historian of Chinese printing, both might call “a civilian tool of Western empire-building”<sup>37</sup> into one of the most efficacious devices underlying the multiple reconstructions of Chinese cultural life and state-building in the twentieth century. As we will see in this book, Chinese modernity was multifaceted and did not follow a simple straight line. This book problematizes our understanding of the Chinese and the Western, the traditional and the modern,

and shows them working constructively together rather than counter-productively against each other.

The intellectual influence of early-twentieth-century Shanghai periodicals is undeniable. However, in the period after 1895, books, particularly textbooks and reference books, but works of fiction and social science as well, were at least as important as periodicals in shaping long-term Chinese opinion. In fact, textbooks consistently reached more people than periodicals and presented a more stable message. As a result of their devoted pursuit of an expanded readership, Shanghai's comprehensive publishers, particularly the Commercial Press and *Zhonghua*, were forced into the technological vanguard of Shanghai's printers and publishers. In contrast to the decentralized traditional publishing business, the technological foundation on which their national intellectual leadership depended also granted Shanghai's book publishers an industrial supremacy unrivalled by other publishing centres.

For all the importance of new foreign machines in redefining and centralizing printing and publishing in Shanghai, older Chinese cultural values and practices did survive the arrival of that technology. In his enterprise history of the Commercial Press, Jean-Pierre Drège emphasizes that, in pre-1949 China, unlike in Western publishing operations in the same period, the three functions of editing, printing, and distribution were all united under one publishing roof. Just as significant, reminding us of the influence that noncommercial moral ideals of the literati had on modern Shanghai publishers, Drège also stresses, against Febvre and Martin's view of the post-Gutenberg Western publisher as an early capitalist dependent on machinery, that "there were ... two essential aspects in [Chinese] publishing, the idealistic aspect and the commercial aspect, and the reputation of a house depended in large part on reconciling them."<sup>38</sup> Here Drège is hinting at the prominent role of an inherited set of cultural values in influencing modern Chinese publishing business practices. This present work will extend Drège's conclusions to demonstrate the continuing influence of a traditionalistic print-culture mentality on the decisions of the modern industrial print capitalists who directed late Qing and Republican China's leading corporate publishing firms.

Late Qing and Republican Shanghai's printing and publishing world illustrates the merger of the three worlds of Chinese print culture, commerce, and capitalism. Shanghai tied culture and commerce together through a machine-based industry and provides us today with an ideal setting for studying their influence on each other. No other cultural industry was as central to the self-identity of the Chinese elite as the one that produced

books, and no other was as close to the heart of the Chinese state. For this reason, almost no other Chinese-owned industry was modernized as quickly as this one, with the result that Gutenberg was himself a familiar figure to literate Chinese of the 1920s and 1930s.

### **Gutenberg in Shanghai**

Although his progeny, in the form of typography, printing presses, and printing machines, appeared in Shanghai in the nineteenth century, Johann Gutenberg (1400?-68) himself did not figure as a recognizable name or noteworthy personality in the Shanghai consciousness before the mid-1920s.<sup>39</sup> His appearance then reflected growing public awareness of the importance of technology in national development as well as the widespread dissemination of the industrially manufactured book and journal. Gutenberg was absent from China's first modern dictionary, *Xin zidian* (New Dictionary) issued by the Commercial Press in 1912. Likewise, he did not appear in the Commercial Press's 1915 phrase dictionary, *Ciyuan*, or in *Zhonghua da zidian* (Zhonghua Big Dictionary), issued the same year by Zhonghua Books.<sup>40</sup> Nonetheless, all three modern dictionaries, the most important to appear in Chinese since *Kangxi zidian* (Kangxi Dictionary) of 1716, were printed using technology that could be traced to Gutenberg.

The absence of Gutenberg's biography from these reference works reflected venerable literary conventions that began to change in the 1920s. Traditional biography (*zhuanji*, *liezhuan*) typically focused on the public accomplishments of noteworthy Chinese officials, artists, and writers. Certainly not a Confucian official, painter, or writer, Gutenberg was also a foreigner, a group rarely treated by Chinese biographers. Even Chinese naturalists, scientists, and inventors seldom merited entries in early-twentieth-century dictionaries, not to mention older ones. By the mid-1920s, however, "foreign" historical categories such as science, technology, invention and inventors, and important Western historical figures did begin to appear in the published Chinese consciousness.<sup>41</sup>

After a period of adjustment that lasted from the mid-1920s to the mid-1930s, Chinese biographical entries started to focus on newly important themes such as the creation of individual scientific achievements, individual technological accomplishments that led to public benefits, and the inventiveness of the working class. By the 1930s, in the profile of Gutenberg presented to the reading public, older didactic qualities began to merge with newer concerns. In some cases, these themes also helped to support the view that China should be given credit for its contributions to world scientific and technological civilization.

When Gutenberg's name finally did appear in Chinese discussions of printing history, it was initially in the context of defensively assertive claims about China's contributions to world printing history. Such discussions reflect the almost immediate impact that Thomas Francis Carter's now-classic study in comparative history, *The Invention of Printing in China and Its Spread Westward* (1925), had in China, even in the original English-language edition. Convinced, and even inspired, by Carter's argument that the source of one of the distinguishing technologies of Europe's modern period lay in China, the Chinese now began to lay emphasis on their country's central place in world technological history in general and, more specifically, in printing history.

In 1927, for example, a well-known Shanghai journalist named Ge Gongzhen (1890-1935) issued China's first modern history of journalism under the imprint of the Commercial Press. Ge's work displayed some of the defensive posturing typical of this period. Discussing the art of printing, Ge stated that "Westerners take the German *Gu-teng-bao* (Guttenberg [sic]) as the ancestor of civilization and do not know that his invention of movable type was already 500 years late."<sup>42</sup> In fact, said Ge, "Printing was one of the technologies passed from China to the West. The book *The Invention of Printing in China*, written by the American Mr. Ka-de [Carter] records this in particularly great detail."<sup>43</sup> His nationalistic rhetoric aside, Ge's citation of Carter's book marks one of the first acknowledgments in a modern Chinese publication that printing technology was deemed an important element in national identity.<sup>44</sup>

Four years after Ge Gongzhen's book appeared, He Shengnai, the Commercial Press's colour-printing supervisor, wrote that Chinese printing technology spread first to Japan (in the eighth century) and eventually to Europe, where the German, Gutenberg, was influenced by it. Like Ge Gongzhen, He Shengnai stated that his source for this insight was Carter, who "read our ancient printing history and really worshipped our previous eras' spirit of creative progress."<sup>45</sup> Nonetheless, Gutenberg was important to He, as he was to Ge – only as a means for making claims about China's past greatness.

In the 1930s, however, as China's modern education system became increasingly Westernized, bringing with it the popular ideal of technological progress,<sup>46</sup> Gutenberg grew more recognizable to the Chinese for the lessons that he could teach. For example, a discussion of Gutenberg could be found in the essay "Zhongguo yinshua yu *Gu-deng-bao*" (Chinese Printing and Gutenberg),<sup>47</sup> which appeared in the journal *Kexue de Zhongguo* (Scientific China) in 1934. The author showed interest in Gutenberg as the first to create "Western" movable type. Like his predecessors, this author also qualified

his observation with the statement that a Chinese (Bi Sheng, in 1040) had developed movable type four centuries earlier.<sup>48</sup>

Nonetheless, here Gutenberg emerged as a creative personality who had overcome hardship to make his contribution to society. Readers learned, for instance, that the inventor had come from a wealthy family, one that “spent money like water,” yet had not succumbed to this temptation. Further moralizing revealed that, during his time in Strasbourg, Gutenberg had avoided the problems with drink that were common there. “He had an extremely fertile imagination, was good in action, clever in thought, behaved in a secretive manner, was quite short-tempered, and for this reason was long criticized by people,”<sup>49</sup> the writer concluded.

By the time Zhonghua Books issued its landmark dictionary, *Cihai*, in 1937, Gutenberg merited a full entry alongside outstanding Chinese literary and historical figures, foreign statesmen, and important historical and cultural events. Here, in a dictionary that took the place of the three cited above and reflected increased Chinese awareness of the non-Chinese world, Gutenberg was identified as the *German* inventor of movable type. More interestingly, readers were told that he had originally been a machine worker (*jixie gongren*). In 1450, Gutenberg entered Fust’s metal workshop and founded the first print shop using movable lead type,<sup>50</sup> says the dictionary. Implicitly, the status of machine workers now approached those of literary and official figures.

In 1939, in a multipart, illustrated translation series, Shanghai’s and China’s leading graphic arts journal, *Yiwen yinshua yuekan/The Graphic Printer*, continued to explain Gutenberg’s historical significance to Chinese printers. Like the authors of the three articles discussed above, the translator reminded his readers of Bi Sheng and China’s ancient contribution to Gutenberg, whose importance, he said, stemmed not only from his movable type and printing press but also from a technique for double-sided printing. Even with improvements over the following 487 years, “his general idea is still like it was in the old days,”<sup>51</sup> a statement that established Gutenberg as the fountainhead of all ideas advancing the craft since his own day.

Introducing Gutenberg via one of his many purely imaginary portraits (see Figure I.1), *The Graphic Printer*’s article went on to discuss Gutenberg’s experiments with his inventions after 1439.<sup>52</sup> Following a failed lawsuit in Strasbourg, readers were told, Gutenberg moved back to Mainz, where he set up a print shop with Johann Fust’s help. Now he put his invention to work. Calling Fust “a disciple with evil designs,” the article presented a cautionary tale in which Fust installed his son-in-law in Gutenberg’s print shop. Once the son-in-law mastered Gutenberg’s techniques, readers were



Figure 1.1 Gutenberg, the inventor of cast movable type.

Source: *Yiwen yinshua yuekan/The Graphic Printer* (Shanghai) 2, 2 (1939): 39.

told, Fust called in his loans and, when Gutenberg could not pay, confiscated the print shop. Still, the authors stressed, Gutenberg's spirit would not be subdued. With the help of Conrad Hummery, Gutenberg started up another printing operation, but unfortunately he died in 1468 before he could make a success of it.

From these evolving Chinese views of Gutenberg, several conclusions can be drawn. First, and most significant, Chinese initially became aware of his general importance to Western cultural history through an interpretation of their own printing history undertaken by a foreign scholar, Carter.<sup>53</sup> Second, their initial interest had less to do with Gutenberg himself and more to do with Carter's enthusiasm for China's own ancient role in the development of what the world acknowledged to be an important technology. Third, openness to Carter's argument eventually led Chinese writers to accept the view that technological advance, led by those who invented and paid for it, as well as by those who built and worked machines, was an important part of national development with key moral lessons to be learned by all.

These changing images of Gutenberg, influenced by varying Chinese habits, needs, and choices, suggest a parallel with the history of China's adaptation of his technological legacy. Among civilian technologies of the nineteenth

century, printing presses of the sort that Chinese of the 1930s believed could be traced to Gutenberg had arrived in China with a variety of more recent technologies. These newer technologies overcame the limitations of his original conception even as they incorporated many of his original ideas. Unlike Europeans who had grown accustomed to incremental technological advance, a process that designated the latest technology as the best technology, however, nineteenth-century Chinese had encountered an extensive range of European technologies from which they had chosen the best for their purposes. In the process of choosing, culture and history had inevitably influenced the technological choices that they had made along with the intellectual ones.

Furthermore, China was unlike most other non-Western regions that had experienced the Gutenberg revolution. Where indigenous print culture was absent or limited in range, the role of local culture and history was minimized in the absorption of this technological revolution. By contrast, late Qing and Republican China offers an outstanding opportunity to show how technologies, deemed to be universal because they are thought, *ipso facto*, to be “culturally neutral,” are reshaped by the societies to which they are passed. Except for the Chinese, few other civilizations in world history prior to the mid-twentieth century have been the ancestral homeland of a technology that was transferred to the West and then itself became the recipient of a later generation of that technology.<sup>54</sup> Discussing the influence of China’s traditional and modern culture on its choices of industrial technology will alter our categories of universals and particulars. We will find that China’s millennium-old print culture profoundly influenced its modern technological choices, enabling traditional systems of values to live on in the modern era.

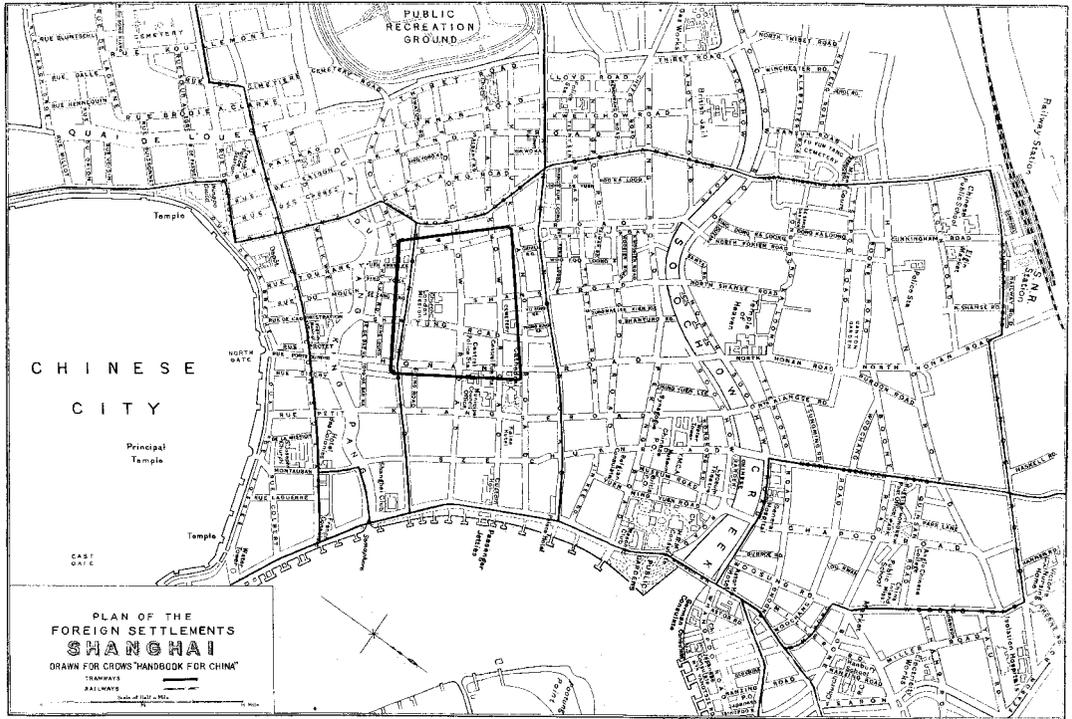
### **Origins of Shanghai’s Booksellers’ District (Wenhuaqie)**

On 29 August 1842, the Treaty of Nanjing was signed onboard HMS *Cornwallis*, moored in the Yangzi River, ending the First Anglo-Chinese War (a.k.a. Opium War, 1839-42). The first of a long series of unequal treaties between the Qing dynasty and foreign powers, this document opened five treaty ports to foreign residence and trade. Located a few kilometres from the sea on the Huangpu River, Shanghai, then an administrative and commercial centre of some 230,000 residents,<sup>55</sup> was one of the five.<sup>56</sup> By the end of the century, there would be 100 or so treaty ports scattered throughout China. Shanghai, however, by then inhabited by about one million persons, would tower over all of them.<sup>57</sup> Most inhabitants were Chinese and they joined the foreign merchants and missionaries who occupied the Anglo-

American International Concession and the French Concession. The Westerners created self-governing settlements that were defended against Qing interference by a series of regulations, including extraterritoriality, and security forces.<sup>58</sup> Chinese were drawn to the concessions by various factors, including the benefit of having a *cordon sanitaire* between themselves, the deteriorating Qing state, and then the weak Republican governments.<sup>59</sup> Among the Chinese who crowded into the settlements were numerous heirs to the print-culture and print-commerce traditions of the surrounding Jiangnan region.

Two inimical systems of values, the literati and the commercial, both rooted in China's late imperial past, vied for influence among Shanghai's book-sellers. Between 1876 and 1937, the city's modern publishers transmuted China's millennium-old print culture and three-century-old print commerce into modern industrial print capitalism. The public stage on which this drama played itself out was Wenhuaajie. The name Wenhuaajie (Culture-and-Education Streets) is a creation of the 1920s and 1930s. Already after the 1880s, however, along Henan Road (originally known as Qipanjie, or Chessboard Street), and soon spreading westward into Fuzhou Road (today still also known as Simalu, or Fourth Avenue), right in the middle of the Anglo-American International Concession, assembled all of China's major trade and journalistic publishers. They were joined by their retail outlets and trade associations, along with jobber printers, stationers, calligraphers, and painters. Numerous shops sold traditional literature and antiquarian books. Several others specialized in the traditional "four treasures" of the scholar's studio (*wenfang sibao*: namely, brushes, ink, paper, and inkstones) or marketed paintings and stele rubbings.

From this commercial district of low-rise, high-density structures piled up just behind the financial arsenals of the Bund,<sup>60</sup> the directives guiding late Qing and then Republican China's intellectual fashions and products were issued. Proximity to financial power promoted the growth of the modern publishing media. Throughout the late nineteenth and early twentieth centuries, some 300 major and minor publishing firms and bookstores assembled there (for an inventory of the district during its heyday, see the Appendix, "A Bird's-Eye View of 1930s Shanghai's Fuzhou Road/Wenhuaajie District"). At the same time, Wenhuaajie's location, concentrated between the banks and counting houses along the river and the sales depots of fabrics, jewellery, perfumes, and other luxuries, situated farther out along Nanjing and Canton Roads, symbolized the ambiguity of the book trade in Shanghai's consumer economy (see Map 2).<sup>61</sup> The intellectual middle ground, symbolized physically by the Fuzhou Road neighbourhood and politically by its location



Map 2 Shanghai concessions in 1916, with Wenhuaajie district outlined.

Source: Carl Crow, *Handbook for China*, 2nd ed. (Shanghai: Kelly & Walsh, 1916), between 82-83.

in the concession, placed Chinese booksellers and publishers in the forefront of both cultural conservation and cultural transformation.

In recent historical scholarship, so much attention has been paid to commercialization of the late imperial economy that awareness of the older anticommercial Chinese literati service ideal, essential for understanding Shanghai's booksellers, has nearly been eclipsed. Yet the moral economy of the Chinese literati counterbalanced commodification of print culture in a historically and intellectually significant way between 1876 and 1937. Both of these dynamics – the inherited and the acquired – injected values and social patterns into what became Wenhuaajie. Late imperial bookmen were vital to the creation of Shanghai's print capitalism at the end of the Qing dynasty. Their equivocality, by which they claimed links both to an elitist cultural past and to a commercial present, continued into the capital-intensive, industrialized printing and publishing era of Republican China and suggests the continuing, if irreconcilable, vigour of both.

A satirical novel published in Shanghai in the middle of the period discussed in this book sheds light on the survival of literati ideals in late-

nineteenth- and early-twentieth-century Shanghai. In Wu Woyao's (1866-1910) *Ershinian mudu zhi guai xianzhuang* (Vignettes from the Late Qing), books, print culture, and print commerce play just as important a role as anticommercial literati values.<sup>62</sup> In the face of the commodification of print culture, Wu reminds us of the continuing vitality of the deeply ingrained service ethic that underlay China's late Qing literati world and suggests why such values survived in Republican Shanghai's Wenhuaie.

*Vignettes from the Late Qing* first appeared in book form in 1909 through the Shanghai publisher Guangzhi shudian. Assuming a pose of high dudgeon, author Wu Woyao<sup>63</sup> strikes directly at early-twentieth-century Fuzhou Road and the behaviour, whether foul, praiseworthy, or humorous, of its denizens. In particular, Wu fires salvos at two major groups that he believed bore responsibility for China's crisis of belief in his day. Commercially driven booksellers, marketing useless ancient writings and modern fluff, are shown to distort the proper ends of learning for private gain at the expense of the public realm. Narrow-minded, overeducated readers also use books as an escape from public responsibility. From the standpoint of Wu's novel, both publishers and readers need to rectify their attitudes.

The meeting of the book's chief protagonist with the moral hero of the story provides a glimpse of Wu's view of the ambiguous men who worked in Shanghai's early-twentieth-century book industry. Wu also reveals insight into booksellers' own ambivalence about their careers in commerce. An episode involving a bookseller occurs just after the narrator (Wu) has arrived at his Shanghai hostel, likely located in the Fuzhou Road district that became Wenhuaie. The narrator enters a neighbouring room to inquire about buying a couple of *tao* (sets of books) from the elderly northern bookseller occupying it. The bookseller turns out to be Wang Boshu, both the narrator's relative and a former prefect of Datong, Shanxi. Handicapped by his nearsightedness and, more important in the narrator's view, by his honesty, the old man once made the mistake of criticizing the governor of Shanxi province to his face without knowing to whom he was speaking. Given the situation, Wang felt obliged to request medical leave. He has been working in the book trade ever since, buying lithographically printed books (*shiyin shu*) in Shanghai, reselling them in Beijing, and then using his profits to market more Shanghai-lithographed works.<sup>64</sup>

After relating experiences that allude to the triumph of merchant self-seeking over anticommercial literati ideals, Wang Boshu presents the narrator with the gift of a book. The text, a Chinese translation of a Japanese work entitled *Fuguo ce* (Plans for Enriching the Country), is given in the hope that the narrator can gain "some practical knowledge and free [himself] from the dilemma of those impractical old-style scholars [*mingshi*] who do

not know how high the sky is and how thick the earth is.”<sup>65</sup> Wang then goes on to describe those “impractical old-style scholars.” As a former official himself, Wang insists that officials are simply high-profile representatives of learned Chinese as a group. Whether viewed from a southern or a northern perspective, all of these well-read persons are just as pernicious: “There is a group of people who are colloquially referred to in Shanghai as ‘poisonous scholars [*shu du tou*],’ and who are known in the north as ‘bookworms [*shu daizi*].’ Just imagine, after they study their books, which are good things in themselves, they get ‘poisoned’ and they become mere ‘bookworms.’ How can they attend to their duties when the time comes?”<sup>66</sup>

Moving on to address his chief anxiety, Wang explains that the Western powers are not only poised and ready but also able to partition China. Its first line of defence, a narrow-minded officialdom, is not prepared either practically or intellectually to resist the onslaught, he laments, precisely because of the controlling influence of these poisonous bookworms on officialdom.

The fault of poisoned officialdom lies in “ancient books,” which can no longer provide an adequate guide to officials, Wang then observes. In the modern world, China’s traditional domestic cultural diplomacy revealed in the Twenty-Four Dynastic Histories, by means of which foreign invaders such as Mongols and Manchus were sinicized, is inadequate. Modern Western countries first conquer foreign lands politically and then rob them of their cultural identities. Shocked by this hair-raising information, the narrator asks Wang, “Could China one day sink so low? If so, what can be done to avert that?” Given the heavy moralizing owing at least partly to the literati tradition, Wang has a ready answer: education. Yes, avoid unnecessary waste, secure the borders, but above all else, he insists, China needs to “establish schools for every subject under the sun.” While still an official, he petitioned the governor of Shanxi on the issue but achieved nothing. “So, I got into the book trade,” he announces. “This was done with a definite purpose in mind ... The ordinary book-vendors were all uneducated and ... all ... they were after was profit. They did not know, nor did they care, which books were useful. My object was to sell only books that are useful.”<sup>67</sup>

Wang Boshu, a failed but still high-minded moralist, entered the book trade with the best of intentions but naïve about the height of the obstacles facing him, as he freely admits. Before long, he discovered that “the purchasers of books were just as unenlightened as the book-vendors.” They sought only old-style romances or miniaturized editions useful for the examinations of the sort marketed by the Shanghai-based lithographic publishers.<sup>68</sup> When presented with practical works of the sort that Wang gives the narrator, they showed no interest: “If one day these men were lucky enough to enter the official world, what would happen to our country?”<sup>69</sup>

Replying to the narrator's comment that not all such readers can become officials, Wang laments the fact that readers worse than they have already become officials. Referring to the well-known phenomenon of selling degrees that accelerated after the Taiping Rebellion (1851-64) and its insidious influence on public culture and learning, Wang reports "As to those who have bought their titles ... they are an even worse lot. Far from serving the country ... they're in business just as much as I am, but their search for profit is even keener than that of businessmen ... What will become of the country?"<sup>70</sup> Wang's only hope for China's future, its youth, is a predictable cliché in the early twenty-first century. At the time of the book's publication, though, he anticipates an elite, youth-led rejection of conventional late imperial values that would not be realized until the New Culture Movement of 1915-21. It is not surprising that that attack was only the first in a series of attacks on the profit-driven publishers of Shanghai's Wenhuajie.

In fact, already in Wu Woyao's day, some actual Shanghai publishers, as opposed to the fictitious ones of his novel, were trying to produce the "useful books" for which Wang Boshu calls. By 1909, when Wu's complete novel appeared, the print commerce that Wu describes had already given way to a print capitalism based on the industrial production of "useful books." Publishers such as the Commercial Press, for instance, had been manufacturing texts intended to school a new, post-civil service examination generation in modern, morally just principles for some time already. The public service ethic of such publishers was motivated, not by profit-free philanthropy, but by what they deemed the enlightened pursuit of industrial profits made from printed works for sale in what would soon be known as Wenhuajie. At the same time, the intellectual and material impacts of their activities would reverberate well beyond it.

In Wu's day, Chinese print capitalism still had half of its six-decade lifespan ahead of it. As innovative and inventive as Shanghai-based Chinese print capitalism demonstrated itself to be between 1876 and 1937, however, turmoil from 1937, when China's second modern war with Japan began, to 1949, when the Republic of China collapsed, irremediably weakened its viability and its centrality in China's economy. If print capitalism itself did not survive, however, both the Commercial Press and its chief competitor, Zhonghua, outlasted the Republican government and were present figuratively, via publications such as *Ciyuan* and *Cihai*, at the founding of the People's Republic of China.

Even more important historically, the Chinese chapter in the technological dimension of the Gutenberg revolution proved to be irreversible. Since Mao Zedong's declaration of the People's Republic on 1 October 1949, China has again become one of the world's preeminent book cultures. Even the

Cultural Revolution, conventionally viewed as a profoundly anti-intellectual and antibook movement, promoted large-scale book production and consumption. No symbol of the Cultural Revolution itself compares with the potency of *Mao Zhuxi yǔlu* (*Quotations from Chairman Mao*), the infamous “Little Red Book.” The first edition, after editing by Minister of Defence and Marshal Lin Biao (1907-71) that began in 1961, was published by the Political Department of the People’s Liberation Army (PLA) in May 1964. The same bureau also promoted the movement to study Mao’s longer writings. Over the next three years, one modern historian has estimated, the PLA “printed nearly a billion copies of the *Quotations* along with some 150,000,000 copies of Mao’s *Selected Works*.”<sup>71</sup> The technological means by which these books reached a national audience of hundreds of millions were those of a modern industrialized publishing industry whose roots lay in the period studied here.

### **Organization of This Book**

*Gutenberg in Shanghai* is a chronologically organized, problem-oriented, analytical history of the Shanghai printing and publishing industry that focuses on the period from 1876 to 1937. Combining the approaches of the history of the book and print culture, the social history of technology, and business history, it examines the origins of China’s modern print media industries in the late Qing dynasty and their development in the Republican period. It argues that traditional Chinese print culture and print commerce influenced Chinese technological choices and created a narrative of adaptation at odds with the conventional Western history of print capitalism. At the same time, the material cost of Gutenberg’s and subsequent technology imposed an organizational imperative that transformed conventional Chinese printing and publishing organizations along with workplace relations in them.

Presented through the eyes of Chinese commentators of the 1920s and 1930s, Chapter 1 explains how the system of printing technology associated with Gutenberg’s name was transformed by the late-eighteenth- and nineteenth-century European Industrial Revolution and how the Gutenberg revolution came to China. This chapter provides the first-ever detailed English-language account of how the inventions of König, Walter, Mergenthaler, and others that influenced the book-publishing trade came about and were introduced to China via Shanghai. Central to this story is the role of the Commercial Press, which, like the *Times* of London in early-nineteenth-century England, was important for subsidizing and promoting new machinery in China. In spite of having its roots in an illegal effort at

ideological subversion, this process marks the nineteenth and early twentieth centuries as one of world history's most fertile periods of international technological transfer prior to the post-World War II era.

Chapter 2 shows how the conservative motivations of traditional Chinese publishers and booksellers were reflected in Shanghai's lithographic industry starting in 1876. Reversing the conventional narrative, for the first time in either Chinese- or English-language scholarship, this chapter demonstrates that lithography, not letterpress (movable lead type) printing, was the industry that brought about the transition from traditional woodblock printing to mechanization. For the first time in China scholarship, it shows that China's traditional culture influenced its modern technological choices in constructive ways. Despite their conservatism, the lithographers simultaneously raised treaty-port Shanghai's intellectual profile and brought about new social and commercial forms that set the stage for the comprehensive lead-type printing and publishing industry that, in turn, superseded but did not wholly replace lithography or even xylography.

The following stage in China's mastery of the nineteenth-century European revolution in printing technology is examined in Chapter 3, which studies Shanghai's printing-press manufacturing industry. In this period, lasting from about 1895 to 1937, the Chinese learned how to manufacture their own printing presses and other machines, providing domestic printers and publishers with an alternative to many lines of imported machinery. In time, the success of Shanghai's machine-makers contributed to the spread of Gutenberg's revolution well beyond the confines of treaty-port Shanghai, but not before the Chinese gained a sense that they had sinicized this modern Western invention rooted in the technology of medieval China. Combining technological with social history, the chapter delves into the shadowy world of apprentices and masters, showing that the brutality of the printing machine trade created conditions that radicalized its workers.

After Chapters 1, 2, and 3 establish the importance of printing technology to the creation of modern Shanghai-based publishing, Chapter 4 investigates the development of Shanghai's multivalent modern publishing enterprises from the 1880s to approximately 1911. Their origins are traced to the reformist Chinese gentry, particularly to the contradictory influences of the imperial service ethic and the modern demand for adequate compensation for intellectual labour. This latter influence resulted from the high costs of mechanization, particularly from the price of adopting Western-style movable-type presses. High costs, in turn, promoted the awareness of textual property symbolized intellectually by the copyright and organizationally by the industrial trade association. In spite of the high rate of failure, by

adapting the joint-stock limited liability corporation to Chinese conditions, publishers in this phase also laid the groundwork for the industrial, commercial, and cultural bonanza that followed.

Building on the discussion of joint-stock firms, Chapter 5 details the rise of the three most important corporate publishers of Republican China in the context of the physical and symbolic development of Shanghai's Fuzhou Road/Wenhuaajie booksellers' district. Wenhuaajie was a highly meaningful cultural symbol to the Chinese of the Republican period. More than any other group among the scores, if not hundreds, of Shanghai publishers, the three big joint-stock companies (Commercial Press, Zhonghua Books, and World Books) studied here dominated the district and promoted its image as a national cultural centre. No mere cultural district, however, it was also a commercial one inseparably linked to Shanghai's industrial suburbs, as the chapter shows for the first time. Chapter 5 also demonstrates that the professionalization of publishing, by the 1930s, represented the culmination of the evolution away from late imperial literati print culture and created a new kind of Chinese intellectual.

The final section pulls all these topics and themes together into a summary and conclusion. Here the importance of Shanghai's printing and publishing industry as a first step toward understanding modern Chinese intellectual, cultural, and social history is highlighted. Print culture, technology, and the business organizations of print capitalism are all vital parts of this story and suggest the value of empirical research in overcoming the limits of nostalgic views of the past. Where many works imply that technological diffusion and change, along with social transformation and adaptation to that change, are best left unexamined, this book deliberately seeks to problematize them. The traditional Chinese printing and publishing industry was widely dispersed across the Chinese empire, partly for cultural reasons and partly because of the nature of its technology. Making sense of the meaning of the centralization that occurred when Shanghai came to dominate the modern industry is possible only when that industry can be compared both to what came before it in China and to what was common in other parts of the world.