INTRODUCTION

Lucille Chia and Hilde De Weerdt

I. In Search of the Earliest History of Printing

When we first planned the conference that gave rise to this volume, one goal was to address the impact of woodblock printing (xylography) on Chinese recorded culture from the tenth through the fourteenth centuries. As the conference proceeded, however, we quickly realized that thinking of the printing block as an agent of change was only one of many ways to help us comprehend the shifts in transmitting and transforming knowledge for the first several centuries when this technology was in use. Printing was not merely added to the available media—manuscript on paper, inscriptions on stone, paintings, among others—but also changed the relationships among these media. This first "golden age" of print in China, which began in the tenth century, was long in coming. By the beginning of the Song Dynasty (960–1279), woodblock printing had already been in use for two and a half centuries or more, not only in China, but also for nearly as long in the other parts of East Asia heavily influenced by Chinese culture—Korea and Japan. By the end of the Song Dynasty, the Chinese had been printing books and other materials for nearly as long as Western Europe from the time of Gutenberg to the present. Thus, as rich and varied as the materials presented in the nine essays of this volume, they represent neither the first nor the last word on how printing helped bring about important new dimensions of book culture in China during these five centuries. We hope, however, that readers of the volume will be inspired to think further on the questions raised and expand upon the research done.

In the first part of this introduction, we reflect on the earliest part of the story of Chinese printing, not to repeat what has been written on the subject,[1] but to help us better understand the dramatic quantitative

---

[1] In addition to the well-known older works (Carter, *Invention of Printing*, and Pelliot, *Débuts de l'Imprimerie*), somewhat more recent discussions (sections in Tsien, *Paper and Printing* and in Zhang Xiumin, *Zhongguo yinshua shi*), as well as other

and qualitative changes in the history of books that occurred from the Song onward.

The difficulties in studying printing in pre-Song China lie not just in the relative scarcity of extant sources but also in the limited range of these materials, whether religious or secular. Thus, through the end of the Tang Dynasty (618–906), we have short Buddhist dharani sutras, a few longer sutras or portions thereof, and a variety of privately printed materials, but nothing published by the state. Information about these works comes from the extant imprints themselves, manuscript texts copied from printed versions, and occasional references to them in other writings. For the surviving works or their remnants, we have been mostly dependent on archaeological finds. These discoveries consist mainly of Buddhist materials, since many of the other kinds of works listed above were useful references that would be well-read and thumbed until worn out and discarded, rather than buried in a Buddhist stupa or in a tomb.[2] That is, the survival pattern probably does not accurately reflect the quantitative distribution of what had actually been printed—a problem common throughout the world for all but recent times. It is even more difficult to estimate the scale of printing of these popular, ordinary books and booklets sold in the market. Indeed, our knowledge about such imprints comes as much or more from the writings of government officials who disapproved of the sale of privately printed calendars, imperial decrees prohibiting these calendars, and descriptions of the poor print quality of the items on sale.[3]

---

works (Drège, *Les bibliothèques en Chine*, "Des effets de l'imprimerie," "Du rouleau manuscrit," "La lecture et l'écriture"; Su Bai, *Tang-Song shiqi de diaoban yinshua*; Cao Zhi, *Zhongguo yinshua shu*; and Seo, "The Printing Industry in Chang'an") have added to our still scanty knowledge about the earliest history of printing in China. Moreover, this essay owes much to Timothy H. Barrett's research on this topic, presented in many articles, including one for this conference, as well as his recent book, *The Woman Who Discovered Printing*.

[2] See Seo, "Printing Industry" for a recent tabulation of the known imprints from China, Korea, and Japan from the eighth century through the end of the Tang in the early tenth century (pp. 30–32) and secondary works on these materials.

[3] In 835, Feng Su 馮宿 (767–836), a military commissioner in Sichuan, memorialized that privately printed calendars were being sold even before the official one issued by the government's Astronomy Bureau and that this was to be prohibited. See, e.g., Pelliot, *Débuts*, 33–34; Tsien, *Paper and Printing*, 151. In the same year, Emperor Wenzong 文宗 decreed that the provincial authorities should forbid the carving of woodblocks for such works (Seo, "Printing Industry," 14). Nearly fifty years later, in 883, again in Sichuan, another Tang official, Liu Pian 柳玭, reported seeing poorly

Nevertheless, assuming that these known printed materials indicate the range if not an accurate distribution of what was printed, then we may also ask why it was that for two hundred and fifty years or longer, other kinds of works were *not* printed. As scholars have shown, representatives of the state in the Tang and Five Dynasties (907–59) were clearly cognizant of print technology, even if most individual rulers evinced no great enthusiasm for utilizing it. Even the one notable exception is based on plausible circumstantial evidence rather than hard proof—the case of Empress Wu 武 (r. 690–705), who may have utilized blockprinting to replicate a huge number of copies of a Buddhist text in imitation of the Indian ruler Ashoka's spread of Buddhist relics throughout his kingdom.[4] In any case we currently still have no known samples of printed materials which can definitely be dated to eighth-century China. In fact, it is not until the tenth century, after the end of the Tang, when we encounter evidence of printed works sponsored by, or at least favored or permitted by the state (see below).

From the ninth century, we have at least some surviving Buddhist printed materials—the short dharani sutras that have survived their centuries-long burial in stupas and tombs, and usually even shorter talismanic texts buried in tombs, as well as the complete *Diamond Sutra* printed in 868.[5] Then why, given the various ways Buddhists used printing, did they not print the entire Canon? Collections of Buddhist

---

blockprinted character books, divination works, and other imprints on sale (Pelliot, *Débuts*, 37–41; Tsien, *Paper and Printing*, 151–52).

[4] In *The Woman Who Discovered Printing* (ch. 6, esp. 89–90), Barrett provides a credible scenario but no hard evidence that Empress Wu actually fulfilled her vow to disseminate over eight million short sutras or that these copies were blockprinted, since such a huge number may have taxed even the efforts of the many scribes available to the court, especially if the copies had to be made quickly. Barrett further argues that the text was the dharani sutra *Wugou jing guang da tuoluoni jing* 無垢淨光大陀羅尼經, the same text as that printed between 705–51 and found in a stupa in the Sakyamuni Pagoda of Pulguk-sa 佛國寺 in Kyongju 慶州, Korea. Somewhat later (ca. 770), blockprinted excerpts from the same text copies (supposedly a million) were made and distributed by Empress Shōtoko 稱德天皇 of Japan to temples around the country. That the Korean and Japanese texts both contain special characters used under Empress Wu would bolster Barrett's argument about the latter's use of blockprinting to replicate a Buddhist text. Finally, Barrett feels that the Tang Dynasty after Empress Wu interrupted it, "apparently turned away from printing from 706 till its demise in 907" (p. 135). For the Korean and Japanese examples, see Tsien, *Paper and Printing*, 149–51.

[5] This entire scroll of the *Diamond Sutra* can be seen at the International Dunhuang Project's website: http://idp.bl.uk/database/oo_scroll_h.a4d?uid=9671877789; bst=1;recnum=18824;index=1.

writings intended to be comprehensive were first compiled in China in the Period of Disunion (220–589), with several imperially-sponsored manuscript collections donated to temples, and other copies financed by wealthy donors. During the Sui Dynasty, Wendi 文帝 (r. 581–604) had forty-six manuscript copies of the "Canon" made and presented to various temples, a practice followed by the Tang emperors.[6] Catalogs of Buddhist texts were also compiled, largely as private individual projects, but occasionally with state sponsorship, including one in 695 under Empress Wu. Despite the compilation of *Da Zhou kanding zhongjing mulu* 大周刊定眾經目錄 (*Catalog of scriptures authorized by the Great Zhou*),[7] however, there is no indication that Empress Wu intended to print the entire Buddhist Canon of her day, whatever her plans for replicating millions of a short dharani sutra.

Similarly the Daoists had long been familiar with earlier technologies for making impressions. They had been using engraved seals with talismanic powers, possibly from the first century CE or earlier, and had also made impressions on paper with such seals, with the earliest record of such use from the seventh or even late sixth century.[8] By the Tang, Daoist leaders were thus aware of the capabilities of this technology of replicating text and image on paper. In addition, by the reign of Emperor Xuanzong 玄宗 (r. 712–56) during the Kaiyuan 開元 period (713–41), the earlier practice of collecting Daoist texts for the imperial library had become part of a plan to compile a Canon.[9] But, as with the Buddhist Tripitaka, there was no indication that the Daoist Canon was to be printed. In short, given the general Chinese

---

[6] Mizuno Kōgen, *Buddhist Sutras*, 165.

[7] For a discussion of *Da Zhou kanding zhongjing mulu* compiled by an imperially appointed committee and the political and ideological struggles behind some of the works included in the catalog, see Tokono, "Evaluation of Indigenous Scriptures," 50–52.

[8] On the use of talismanic seals to ward off evil, to invoke spirits, to destroy demons, to heal sickness, and the transfer of the seal's power by impression on paper, see Strickmann, *Chinese Magical Medicine*, 123–93. As Strickmann points out, the earliest record of printing the text of such seals on paper is actually in a fifth-century Buddhist work, but the cross-influences of Buddhism and Daoism render pointless attempts to credit one of these religions as the first to use such a practice. See also Barrett, "*Feng-tao k'o*," which is a Daoist text dated to between 550–688 (and more likely 658–68) that mentions printing of Daoist icons on paper.

[9] Schipper, "General Introduction," 24–25, in Schipper and Verellen, eds., *Taoist Canon*. Barrett, *The Woman Who Discovered Printing*, 89, mentions that earlier Empress Wu "had had copied out at least one set of the entire Taoist scriptures," but the evidence for this is uncertain.

obsession with the power and authority of the written word since at least the second millennium BCE, why did the availability of suitable quality paper (since at least the first century CE and probably earlier) and a technology of imprinting fail to stimulate either the state or religious institutions to use xylography to produce book-length texts no sooner than the late ninth century?

Plausible explanations to why neither the Budhist nor Daoist Canon was printed before the Song are worth mentioning, even briefly, to illustrate the complex early history of blockprinting in China. First, the enormous cost of either canon required financial and human resources that could only have been marshaled by the state, rather than by a single monastery or even several monasteries. Second, handcopying was not only cheaper but perhaps also seen as earning more religious merit than reproduction by blockprinting, until the latter became sufficiently widespread in the tenth century. A more comprehensive answer that also considers non-religious printing requires looking at the complex history of how the process of impressing image or text on soft materials in general and xylography in particular were used in China until the ninth or tenth century.

Xylography and Other Print Technologies

Xylography was apparently a relative latecomer among a number of imprinting technologies, each of which used a particular combination of ink or dye on a given material. The various earlier methods differed sufficiently from each other and they may not have obviously inspired the idea of replicating text and image on paper. Printing patterns or images on a piece of cloth using some resist technique may not have readily prompted its practitioners or observers to extend the method to printing texts on paper. Thus, even while Barrett argues that resist-dye technology devised by a Ms. Liu in the early eighth century used woodblocks to impress an "intricate flower pattern" onto cloth, he is careful to point out that it does not "prove that these skills were used for printing text…"[10] Indeed, as Barrett also mentions, impressing patterns on dyed textiles included a set of related techniques used throughout the premodern world in areas where xylography did not develop.

---

[10] Barrett, "Woodblock Dyeing," 245.

Furthermore, when finally woodblock, ink, and paper were put together for xylography, the products were not necessarily meant to be read or even looked at. For example, as noted above, imprinting on different surfaces was often connected with the transference of religious/magical power: on cloth, paper, clay, sand, and—for healing purposes—on the skin of the sick person. In such applications, the majority of the printed texts, symbols, or images were usually not very long nor meant to be read (at least by humans). As Barrett suggests, the very act of impressing brought to mind such religious notions as the Buddhist transfer of karma by molds or seals, or the Dao as a seal that replicates its image without itself changing or being consumed, or that a text is at once impressed in its entirety (even though humans would have to read it sequentially).[11] In short, the talismanic function of these printed texts and images, although it did not preclude them from being read or looked at like mundane works, would not necessarily inspire their makers and users to, in Barrett's word, "reconceptualize" the technology to create new documents.[12]

It is interesting that in at least three different areas of the world—Europe, the Islamic Near East, and East Asia, blockprinting was first used for religious purposes. In Europe, blockprinting developed a few decades prior to the far better-known "invention" of movable-type printing in the mid-fifteenth century and was used to produce religious prayer sheets, images for veneration with sacred power to protect and heal, amulets,[13] and for a short time, full-length block-books, including the fully illustrated "Paupers' Bibles."[14] Blockprints

---

[11] Barrett, *Woman Who Discovered Printing*, 108–9.

[12] Ibid., 85–86.

[13] Skemer (*Binding Words*, 222), points out that the blockprints for Christian veneration also were emblems of sacred and apotropaic power. Furthermore, "[w]hile woodblocks had been used in the West since the twelfth century to stamp designs on fabric, the earliest examples of paper block-prints date no earlier than the final years of the fourteenth century and more likely from the 1420s. In fact, the West was late to embrace the possibilities of printing." It seems that scholars like Skemer who study European printing express the same puzzlement as their counterparts looking at China as to why, with the existence of an imprinting technology, printing text on paper should have taken so long to develop.

[14] Rather than a predecessor, chronologically or technologically, European block-printing of books actually peaked in the 1450s through 1470s, after the introduction of movable-type printing. On the other hand, similarities in manuscript and blockbook versions of the Paupers' Bibles, or *Biblia pauperum*, suggest that they served much the same functions and "reinforced the interaction of oral and literate strategies that characterized the later Middle Ages." See Nellhaus, "Mementos," 321.

continued to be used for illustrations where the pictorial woodblock was placed together with movable type for the text until the early seventeenth century, but thereafter became mostly a specialized artistic technique. In the Islamic world, amulets, or *tarsh* with religious texts were printed on woodblocks from the tenth through the fourteenth centuries.[15] These amulets did not lead to further use of printing for other, longer, sacred or mundane texts, and print culture in the modern sense only developed in the nineteenth century.[16]

The existence and limited use of a particular technology therefore does not inevitably lead to its widespread utilization for other purposes. For an exasperated modern reader cursed with hindsight, the temptation to believe that in China, early uses of woodblock printing for other purposes must surely have led to printing books for wide dissemination proves almost irresistible. But the facts we have adduced resist such an obvious scenario.

Moreover, even after groups and individuals in China began using blockprinting to produce new documents, they may well have perceived the relative advantages of printing over handcopying differently from those of us who live in a modern world inundated with print and apt to look upon it as more formal and polished than manuscript. For example, printing was sometimes used to make many copies more speedily but not necessarily better than could be done even by the many scribes at the disposal of an imperial court, a government office, or a large religious institution. A ruler in a hurry, say, to replicate

---

[15] The range of the tenth through the very early fifteenth centuries is generally proposed by scholars in the field, as discussed in Schaefer, *Enigmatic Charms*, 41–51. The printing might have been done with woodblocks or possibly metal matrices (ibid., 38). Bulliet ("Medieval Arabic Tarsh," 438) argues that the printed amulets were cheaper than the finely handwritten versions and were sold to the common people by peddlers who were connected to the underworld of Middle East Muslim society. Bulliet speculates that production of these *tarsh* ceased when organized Sufism, whose leaders wrote their own amulets, successfully won over the people who had been the peddlers' customers. While this is one possibility, it certainly differs from the situation in imperial China, where handwritten and printed materials coexisted within individual religious groups. For Barrett's speculation that the undated printed spells found by archaeologists in China were meant to be distinguished from professionally handwritten full sutras, see *The Woman Who Discovered Printing*, 120–21.

[16] For a recent survey of works on print culture in the Arabic world, see Roper, "Printing Press." For Islamic South Asia, see the two works by Francis Robinson. These treatments all concern developments in the last two centuries and present a very different picture from the continuous and increasing use of paper in the Islamic world as described in Bloom, *Paper before Print*.

thousands or millions of copies of small sutras, or to distribute (sup-posedly) the printed *Daode jing* 道德經,[17] would have resorted to printing.[18] Another example, rather late, is that of the eminent Daoist scholar Du Guangting 杜光庭 (850–933), who resolved to reproduce *Guang shengyi* 廣聖義, a sub-commentary on commentaries of *Daode jing*, written by the Tang Emperor Xuanzong. In Du's report to the emperor, he explained that since the size of the thirty-fascicle work had prevented it from being disseminated, Du had woodblocks carved, with a contribution from a high official. This use of print may imply that in the post-Tang era of the early tenth century there was a short-age of scribes even at the court of a ruler.[19] Indeed, Du Guangting managed to publish *Guang shengyi* in 913, ten years before the col-lected works of Guanxiu 貫休 (832–913), a leading Buddhist figure, were posthumously printed by his disciples, perhaps in a belated effort to compete with Du's more successful publication.[20]

It was not until the tenth century that the state, or the elite in gen-eral, felt it necessary or desirable to produce and disseminate many non-religious works in print. Certainly the need to guard imperial or elite authority was one reason for their hesitation; all hard evidence concerning printing related to the Tang state has to do with memo-rials complaining about illegal commercial imprints and imperial decrees prohibiting such materials. Furthermore, much of what the state communicated was aimed at a limited audience easily reachable by manuscript, or at a wider audience through stone inscription or vocal pronouncement. Even into the first half of the tenth century, there apparently remained a feeling among the literati that there was no need to disseminate widely their own writings, and someone like

---

[17] In 940, there was an imperial decree concerning the distribution of *Daode jing* in north China. Cited in Barrett, "Religion and the First Recorded Print Run," 460.

[18] Ivins (*Prints and Visual Communication*, 29) in discussing early European woodcuts, makes much the same point: "So far as their buyers were concerned prints were just pictures and not a special kind of pictorial statement that could be exactly repeated. Exact repeatability meant no more to the original purchasers than it does today to the buyers of greeting cards. So far as the maker was concerned a print was merely a picture made by a process which saved time and labour in quantity produc-tion. The printing surface from which they were struck off was no more and no less than a capital investment in specialized machinery."

[19] Barrett, "Taoism and the Origins of State Printing," 26.

[20] Ibid., 22.

He Ning 和凝 (898–955), who published his own verses, was subject to other scholars' opprobrium.[21]

In fact, those who first took advantage of xylography to produce books or booklets seem to have been printers who sold their imprints in the market place. To them we owe works such as the only known medical work—a moxibustion canon,[22] a set of admonitions to a daughter about to marry,[23] almanacs,[24] calendars, rhyming dictionaries, divination works, and starting from the tenth century, dharani sutras. Those texts that identify their printers show that the latter were located in major urban centers, including Chang'an, Chengdu and the surrounding area, Luoyang, and, by the tenth century at the latest, the Jiangnan area, especially around Hangzhou, areas that would grow into larger printing centers in the Song.[25]

The State and the Proliferation of Printing in the Tenth Century

In the several decades before the founding of the Song Dynasty, during the Five Dynasties period, conditions began to change: in addition to the kinds of imprints already mentioned, there were also commercially printed sutras, collections of prose and poetry, and the first printings of collections of the Confucian classics.[26] A book trade

---

[21] He Ning printing his own writings in over one hundred *juan* and circulating them was "an act ridiculed by many men of knowledge" (*Xin Wudai shi*, 56.640; translated by Davis, *Historical Records of the Five Dynasties*, 454). But *Jiu Wudai shi* (127.3898), does not mention this disapproval. Could this evaluation of He Ning's publishing effort have been Ouyang Xiu's own?

[22] What survives from Dunhuang is a handcopy of *Xinji beiji jiujing* 新集備急灸經 (*Newly collected canon of emergency moxibustion remedies*), which had originally been printed by the Li family of the Eastern Market in Chang'an (Chang'an dongshi Li jia 長安東市李家). Lo, "Quick and Easy Chinese Medicine," esp. 232–236, and Seo, "The Printing Industry," 14–22. The original imprint would have been published prior to 861, when the copy was made.

[23] Seo, "The Printing Industry," 22–28 and references therein. Of the several handcopies from Dunhuang, which are based on an imprint from the Li family of the capital (Shangdu Li jia yin 上都李家印), one gives a *xinsi* 辛巳 date, presumably 921.

[24] Seo ("The Printing Industry," 4–14), discusses fragments of three different almanacs, including one "in big print from the Major Diao family of the Eastern Market of the capital" (Shangdu dongshi da Diao jia dayin liri 上都東市大刁家大印曆日), and another, the "Almanac of the Fan Shang family of Chengdu in Xichuan, Jiannan" (Jiannan Xichuan Chengdufu Fan Shang jia li 劍南西川成都府樊賞家曆).

[25] Seo, ibid., Table 3, 30–32.

[26] In addition to the printing of the nine Confucian classics initiated by the Later Tang ministers, Feng Dao and Li Yu, in Kaifeng from 932–53, Wu Zhaoyi 毋昭裔 (d. 967), minister under the Later Shu in Chengdu supervised not only the carving of the woodblocks for a set of the Confucian classics, but also a stone inscription of these

among different regions of the Ten Kingdoms may have existed. Pelliot suggests that the project to print the Nine Classics and several lexicographical works initiated by Feng Dao 馮道 (882–954) and Li Yu 李愚 (d. 935) may have been inspired by the imprints from the Sichuan and Wu-Yue areas brought by traveling merchants for sale in Kaifeng.[27] Perhaps it would have been merely a matter of time before this diversification would have further expanded, but it is clear that dramatic growth in the number and diversity of works truly took off in the Song, due in great part to the willingness of the state to collect, (re-)compile, and publish so many works, combined with a recognition of the potential of print. The Song state's search for and sponsorship of the (re-)compilation and publication of a wide variety of works, including the Confucian classics, histories, philosophers, and literary collections, was partly a continuation of the re-stocking process that had already begun in the Five Dynasties period.[28] Indeed, if the Song really had inherited only a scanty 10,000 *juan* from the imperial library of the late Tang,[29] then the need for replenishing the badly depleted imperial and government libraries was urgent, even if much had been irretrievably lost during the turmoil in the late Tang and afterwards. Ouyang Xiu 歐陽修 (1007–72), who wrote "Yiwen zhi" 藝文志 ("Bibliographic treatise") in *Xin Tang shu* 新唐書 (*New history*

works. Wu also printed works like the famous literary anthology, *Wenxuan* 文選, and two topical collections of literary passages, *Chu xue ji* 初學記, and *Bo shi liu tie* 白氏六帖. There is little information on Wu, but the most thorough discussion of the sources remains Pelliot, *Débuts*, 61–81; see also Tsien, *Paper and Printing*, 156–57 and Zhang Xiumin, *Zhongguo yinshua shi*, 40, 43–44.

[27] Pelliot (*Débuts*, 52–53) argues that Feng Dao had probably never been to the Wu-Yue area or Sichuan, and Li Yu *may* have been in the Wu-Yue area. Thus it was more likely that either or both men saw imprints from these areas in Kaifeng.

[28] Poon, "Books and Printing," esp. ch. 5.

[29] McMullen, *State and Scholars in T'ang China*, 237. This number is corroborated by that of 13,000 *juan* for the holdings of the San guan 三館 (Three Institutes) at the start of the Song Dynasty (Jiang Shaoyu, *Shishi leiyuan*, 393, cited in McDermott, *Social History*, 49). Both figures are drastically below the peak of over 89,000 rolls in the Jixian yuan 集賢院 (Academy of Assembled Worthies) library alone in 721, according to *Tang huiyao* (1), 64.23a–b. This figure is problematic, since it is more than the sum of the number of *juan* given for each of the four bibliographic divisions (81,990 rolls). Either the arithmetic is faulty, or there were duplicates of some works in the collection. Since duplicate copies are usually not specified in the numbers in historical works describing book collections, comparisons of the sizes of imperial libraries in different historical periods can be difficult.

of the Tang dynasty) and compiled the bibliography of Tang works therein, lamented the loss of more than half of these texts.[30]

Similarly, the great loss of Buddhist texts resulting from the persecution under Tang Wuzong 武宗 (r. 841–46), the rebellions and turmoil at the end of the Tang in the early tenth century, as well as a later proscription of Buddhism under Emperor Shizong 世宗 (r. 954–59) of the Later Zhou 後周 Dynasty may have spurred the Song state soon after its establishment to sponsor the first woodblock edition of the Buddhist Canon—*Kaibao zang* 開寶藏 (972–83). As massive as this project was—far more massive than cutting enough woodblocks for a million copies of one short dharani sutra[31]—the Song government probably realized that this was the more efficient and quicker way to re-supply monasteries with Buddhist works. In fact, despite already flourishing Buddhist publishing in areas such as the Wu-Yue kingdom (especially in and around its capital of Hangzhou), certain works incorporated into the Kaibao Tripitaka came from copies from Japan.[32]

Even more important was the Song state's need to publish authorized, standardized editions of the many texts needed by its officials, the growing number of men studying for the government examinations, scholars in general, and students attending the growing numbers of government and private schools. In this process, scholars were appointed to collate editions of each existing work and expend efforts on compiling and writing new ones. These efforts would have kept hundreds of government copyists fully employed, so that it was far more efficient to print rather than handcopy finished copies of all these texts. In short, print culture among the educated elite truly took off in the Song because of the state's willingness to devote its considerable resources to put this not very new technology to new use.[33] This was

---

[30] *Xin Tang shu*, 47.1421–23.

[31] The number of copies that a woodblock can yield before becoming totally worn depends on the kind of wood, its treatment, the climatic conditions, etc. Assuming that one woodblock could produce 5,000 printed copies, then 200 woodblocks would be needed to make a million copies. The Kaibao Tripitaka required some 130,000 blocks (Mizuno Kōgen, *Buddhist Sutras*, 173).

[32] On the loss of Buddhist works during the persecution under Tang Wuzong (845) and late Tang rebellions, see Fang Guangchang, *Zhongguo xieben Dazangjing*, 324, 327, 341. The importing of Buddhist texts from Japan (Mizuno Kōgen, *Buddhist Sutras*, 169) did not necessarily mean that there were no surviving copies in China, but that they were so rare that it was easier to obtain them from known sources abroad.

[33] For a general but detailed look at publishing in the Song, see Poon, "Books and Printing."

done, however, not with the fanfare accorded a self-conscious techno-logical "revolution," such as the ongoing developments today stimu-lated by computer-based information technology, but with almost the same matter-of-factness that accompanied an apparently obvious and easy technology like photocopying.

Print was emphatically not an agent of change that eliminated a thriving manuscript culture; manuscript continued to exist until at least the late nineteenth and in some cases into the twentieth cen-tury. The shared features of a page produced by handcopying and blockprinting were as important as the differences between these two methods; indeed, a blockprinted page inevitably begins with a hand-drafted copy. The parting of the ways between xylography and manu-script follows a different course from that between typography and manuscript.[34]

Furthermore, the debate about the merits of manuscript vs. print continued through the Song. Those who saw benefits in print generally referred to its making the work more available.[35] In fact, the educated reader in the early days of the Song may have been primarily grateful to get *any* copy of a work, print or manuscript, and remained fairly oblivious to the potentially great differences between the two forms. For example, as Susan Cherniack points out, many Song scholars were dismayed to discover that all the errors in manuscript texts and more appeared in the printed version. Thus even for the prestigious and supposedly authoritative editions issued by the Directorate of Educa-tion in the Northern Song, several successive re-collations were often required to arrive at relatively error-free versions of even the most

---

[34] But even as McKitterick (*Print, Manuscript*, esp. 47–52) points out, typographi-cally printed books "cohabited" easily with manuscript, to the point that many vol-umes had printed and manuscript pages intermingled. Thus, even for typography, "It is misleading to speak of any transition from manuscript to print as if it were a finite process, let alone an orderly one, or indeed that the process was all in one direction" (p. 47).

[35] For example, Poon ("Books and Printing," 118–19) cites the famous story of Xing Bing 邢昺 (932–1010), the head of the Directorate of Education who proudly told Emperor Zhenzong 真宗 in 1005 that the Directorate had gone from holding no more than 4,000 woodblocks at the beginning of the dynasty to several hundred thousand, for the Confucian classics and commentaries and histories, and that unlike the situ-ation in his youth, "at present block-printed books are plentiful so that scholars and commoners alike can easily own their own copies." Xing Bing was most likely exag-gerating, since the Directorate publications were never cheap nor that plentiful, and at the beginning of the eleventh century Song commercial printing had yet to burgeon.

fundamental works, such as the Confucian classics and related commentaries and the dynastic histories.[36]

It would be impossible, however, to deny that printing in Song China helped effect revolutionary changes in Chinese book culture, something that many of the essays in this volume will amply demonstrate. And if, as Timothy Barrett claims in the title of his new book, Empress Wu was the "woman who discovered printing," she was not alone. In every age when printing was and still is applied to new and different uses, or on a different scale of known uses, the authors, editors, publishers, printers, and consumers of print all discover the uses of printing anew.

II. The Essays

The Problem of Quantification

According to standard accounts of the history of printing, at least those that take a global approach to the history of this technology, printing developed in China in the seventh or eighth century, but was largely limited to government offices, Buddhist and Daoist temples, and religious practitioners in the first few centuries after its invention. Scholars and officials continued to rely almost exclusively on hand-copied editions of the classics, histories, and the literary works of past and contemporary authors. This situation changed dramatically during the eleventh and twelfth centuries. These centuries were marked by the expansion of commercial printing, the diversification of the kinds of texts in print, and experimentation with new printing technologies such as movable-type and multi-color printing—even though the latter was initially only applied in the printing of New Year pictures.[37]

Did the adoption of printing, used, as the papers in this volume underscore, in conjunction with other media, lead to increases in book production and changes in circulation? During the first millennium CE secretaries, clerks, and copyists produced enormous quantities of administrative records, religious texts, and various kinds of literature in manuscript for the literate elite.[38] Court libraries, central and local

---

[36] Cherniack, "Book Culture," esp. 57–73.
[37] Based on De Weerdt, "Chinese Printing, 1000–1500."
[38] Barrett, *Woman Who Discovered Printing*, 31–55.

government agencies, monasteries, as well as the homes of literate elite families contained collections ranging from a few thousand to tens of thousands of scrolls and, by the end of the first millennium, codices.[39] Precise counts or reliable estimates of either manuscript or print book production are not available for any time period in imperial Chinese history. The main reason why the papers discussing text accumulation in this volume will not change that state of affairs relates to the impossibility of obtaining reliable figures. As the best documented studies of Chinese printers in the second millennium CE indicate,[40] unlike printers working with movable type, woodblock printers may not have recorded print runs, as their investment in block carving and storage was akin to a print-on-demand system and typically generated income over a longer period of time. Alternatively, whatever records and ledgers were kept were discarded or recycled.

Reliable figures for book production cannot be obtained from extant titles and copies, or even from catalogs, because of an even greater unknown. Loss is a constant theme in the history of Chinese book collecting and one that merits further attention. Jean-Pierre Drège has recounted in detail the frequent conflagration and pillage of court libraries between the second century BCE and the tenth century CE, a story that continued into the second millennium.[41] Joseph McDermott's work illustrates the similar fate of family collections as inheritance law, downward mobility, as well as political and military unrest led to the dispersal of most of the larger private book collections after just a few generations.

The papers of Lucille Chia and Joseph Dennis in this volume further underscore that the numbers of titles transmitted from the period between the eleventh and the fourteenth centuries represent a tiny fraction of the number of titles circulating. Dennis shows that most gazetteers have been lost or exist in only one out of a handful of editions, and Chia lifts a tip of the veil that shrouds the large-scale printing activities of Daoist communities in north China. Their papers show that, besides the more common reasons already mentioned above, books disappeared because of a wide variety of political and cultural practices including de-canonization, proscriptions, censorship, and (permanent)

[39] Drège, *Les bibliothèques en Chine*, chs. 1 and 3.
[40] Chia, *Printing for Profit*; Brokaw, *Commerce in Culture*, esp. 20–28.
[41] Drège, *Les bibliothèques en Chine*, ch. 1; Winkelman, "Imperial Library in Southern Sung China."

borrowing from larger collections. Chia suggests in addition that the on-demand nature of woodblock printing made Chinese books more vulnerable to extinction than European books. Orders to destroy the blocks, increasingly featured in publishing regulations since the eleventh century, had an immediate impact on the further distribution of titles that may have existed in only small numbers of copies.

Yet, like production, loss is very difficult to quantify. The catalogs of missing titles compiled by the editors of the Daoist Canon and by court librarians can in some ways serve as indicators but ultimately point to a need to further query the meaning of loss. The catalogs served as indices of titles to seek out in other locales and, in the case of the court collections, resulted in the recovery of many titles and the acquisition of new ones. Similarly, as other papers in this volume show time and again, the factors quoted above as political and cultural causes for loss also stimulated the preservation of selected titles. Ronald Egan, for example, recounts how the proscription of Su Shi's 蘇軾 (1037–1101) work brought out the commercial appetite of the bureaucrat supposed to implement it. Joseph Dennis provides examples of how the practice of borrowing led to the recovery and printing of rare items. I have argued elsewhere that during times of political and military upheaval in particular loss was invoked as a justification for the launching of printing projects and cannot necessarily be taken at face value as an indicator of the actual extinction of material objects.[42]

The experience of loss as well as the experience of accumulation are reflected in the testimony of Song Dynasty writers and collectors. In the absence of systematic and unambiguous statistics on book production before and during this period, these papers substantiate and flesh out through the combination of fragmentary and rough quantitative information and qualitative data the conclusion that during the eleventh and twelfth centuries books became more widely available than they had ever been and were increasingly circulating in print. Joseph McDermott's chapter on Jiangxi book collecting demonstrates that the number of noteworthy collectors increased dramatically from about five for the entire pre-Song era to seventy by the end of the dynasty. The holdings of large private collections grew from "a few thousand *juan*" in the tenth century to well over 10,000 and even 50,000 in the eleventh and twelfth centuries. What are the implications of these numbers?

---

[42] De Weerdt, "Discourse of Loss."

McDermott notes that the quantitative growth in book collecting underlies broader social changes as well as developments in the geographical distribution and uses of books. The scholar-official collector begins to dominate the scene during the eleventh century and diminishes the once-dominant stature of the Buddhist monastery as book repository and center of learning. This collector is interested in a broad range of subjects including classics, histories, and other literature tested in the civil service examinations but also books on geography, divination, medicine, and fiction, all of which are to shape the persona of the cultured literatus. He can be found in a larger number of prefectures, even though core prefectures house and attract more collectors than peripheral ones.

In his case studies of Song Dynasty readers and writers Ronald Egan reflects on changes in attitudes towards and in the uses of books resulting from their wider availability and the increased adoption of printing in the dissemination of the written word. Particularly revealing is the reference game Li Qingzhao 李清照 (1084–ca. 1155) played with her husband. Her ability to cite the exact location of randomly chosen passages illustrates how the paginated layout of the printed book facilitated the use of texts as reference materials. Reference materials of different kinds (historical, literary, and administrative encyclopedias, rhyme dictionaries, style manuals, dictionaries of philosophical or bureaucratic terms, etc.) were widely available from the late eleventh century onwards.[43] According to contemporary witnesses they encouraged fragmentary reading among the growing readership of men preparing for the civil service examinations. At the same time selective reading for practical goals stimulated the formulation of reading rules, with some compilers and printers designing guides for scanning texts, and others doing the same to counter the trend of selective scanning.[44] Neo-Confucian reading programs provided a direct response to the perceived lack of concentration in elite reading habits by outlining a core list of titles to be read slowly, repeatedly, and with an eye to discovering the moral principles embedded in them.

Others celebrated the wider circulation of books and justified the literati desire to collect on the basis of a different understanding of

---

[43] See, for example, Drège, "Des effets de l'imprimerie en Chine" and De Weerdt, "Encyclopedia as Textbook."

[44] Gardner, *Learning to Be a Sage*; De Weerdt, *Competition over Content*, 297–209.

intertextuality. Even though 'broad learning' (*boxue* 博學) in the sense of extensive reading was a more widely shared value among scholar-officials, Lu You 陸游 (1125–1210) provides a theoretical argument for it that closely resembles twentieth-century understandings of inter-textuality: a book, a chapter, or any element of a text always refers to other texts and can only make sense through connections with other texts. To read is in his view therefore to collect. As Egan explains, the name of his studio, "The Nest of Books," is not only a description of the untidy arrangement of the books in it, but also a metaphor of what reading is in essence and an expression of the desire to keep building connections among texts.

Printing and Media Interoperability

Scholars generally agree that the eleventh and twelfth centuries witnessed substantial growth in book production and the experience and perception of the abundance of books gave rise to new ways of thinking about texts and their use. However, there are differences of opinion regarding the question of how significant printing was in the growth of book collections and the rise of new ways of reading. Joseph McDermott emphasizes the role of manuscript in building private collections and has elsewhere supported the argument that manuscript remained the dominant tool for disseminating the written word in China until the sixteenth century. Handcopying was also crucial in replenishing court libraries throughout the course of the Song Dynasty.[45] Apart from court collections, these essays illustrate that precise statistics on the ratio of manuscript to print are hard to come by, an indicator of how closely connected both means of knowledge transmission remained throughout the course of imperial Chinese history.

Joseph Dennis's description of the life cycle of a gazetteer is a telling illustration of the interrelationship between manuscript and print. Gazetteers existed as partial or complete manuscripts sometimes for extended periods of time and were then edited into a printed edition. Print versions could be handcopied and then in turn become the basis for a reprint. Despite the blurred boundaries between and interdependence of the two media, Dennis maintains that printing became the norm for the publication of gazetteers over the course of

---

[45] McDermott, *Social History*, ch. 2, and, "Ascendance of the Imprint in China"; De Weerdt, "Byways in the Imperial Chinese Information Order."

the Song Dynasty. The normality of print in the twelfth century is also reflected in collectors' frequent disregard for distinctions between manuscript and print in their catalogs. Egan suggests here that the normality of print added new significance to the act of handcopying. Friends and acquaintances of collectors and scholars stressed their subjects' personal involvement in handcopying as an act of scholarly depth and rigor in the face of declining learning standards perceived to be the result of the growing reliance on printed copies. More recent work on manuscript publishing suggests that personal copying was also an expression of respect for the text, its author, or the person to whom the copied text was sent or dedicated in a world where reproduction in manuscript was often left to professional copyists and secretaries.[46]

Print and manuscript further interacted with other media such as painting and stone engraving. TJ Hinrichs's paper on the Northern Song state's dissemination of medical knowledge suggests that stele and woodblock were considered to be most effective in conveying broadly applicable information about epidemics and cures. Such steles, as well as those carrying maps (De Weerdt), were frequently set up in or near public areas such as government offices, schools, or crossings; as in the case of woodblocks, copies could be produced through applying paper and ink against the stone slabs. Stone tended to be more costly and bulky and thus less useful for the production of longer texts and books, but it carried associations of durability. Moreover, as Lucille Chia suggests, those associations gained added meaning at times when proscriptions only ordered the destruction of woodblocks. As the use of printing proliferated, however, preservation also came to be seen as an attribute of woodblock printing. This is not only illustrated in the massive printing projects sponsored by state agencies and religious organizations, as well as private individuals, since the tenth century, but was also testified to in Shi Zhijing's 史志經 (ca. 1202–?) thirteenth-century observation that precious stone and metal could be easily destroyed whereas printing had rescued

---

[46] The papers presented at "Manuscript Culture in the Chinese Tradition" (Harvard University, May 14–15, 2010) will add greatly to our understanding of Chinese manuscript publishing from the Warring States period through the present. Abstracts are available at http://isites.harvard.edu/icb/icb.do?keyword=k12612&pageid=icb.page 328763 The emphasis on personal copying in relation to professional copying is discussed in Hilde De Weerdt's paper, "Manuscript Transmission during the First Age of Print."

texts from extinction even in the face of bans and campaigns of destruction (Lucille Chia).

Similarly to the relationship between print and manuscript, Susan Huang describes a bi-directional relationship between painting and printed images in her paper on Buddhist prints produced in Hangzhou between the tenth and the thirteenth centuries. Paintings were transferred onto woodblock wholesale. As further shown in Chia's comparison between Daoist printed images and temple murals, painting also provided inspiration for motifs adopted by woodblock illustrators and carvers. Motifs could be borrowed across different genres, with, for example, a painting of a literati studio sharing elements with a Buddhist sutra frontispiece. Printed illustrations partook in a visual language that rendered the relationship between text and image indirect. The existence of this language, a kind of jargon monopolized by illustrators and carvers, also explains the transferability of print designs from one genre to another. Illustrations featuring buildings in Buddhist prints thus incorporated elements of illustrations appearing in the well-known architecture manual *Yingzao fashi*, 營造法式 (*Building standards*) and Buddhist prints in turn became sources of inspiration for illustrated fiction. Printed illustrations could also reshape or promote novel painting practices, as, for example, the printed architecture manual fed into the ruler-lined (*jiehua* 界畫) painting tradition.

Moving beyond earlier work on printed illustrations, Huang's analysis of the visual language of printed images demonstrates how regional traditions and networks can be reconstructed through continuities in particular constellations of motifs and compositional schemes. The differences between Buddhist printed illustrations found at Dunhuang and those produced in Hangzhou substantiate other findings regarding the variability of the relationship between text and image even in the case of similar genres. The use of more generic and iconic images in the Dunhuang area versus the more content-related illustrations found in Hangzhou prints may also help account for the reputation of Hangzhou illustrators and carvers. Hangzhou prints were not only found in Xi Xia; as Lucille Chia's paper shows, Hangzhou carvers were also recruited by northerners to work on Daoist illustrations.

Did the use of different media result in different viewing or reading experiences? Very few papers either in this volume or in other scholarship venture into the Chinese history of reading. This question awaits future research, but some of the papers propose possible lines of inquiry. According to Egan, not only the experience of the abundance

of books but printing itself facilitated the use of books as reference tools. We still know too little about the ways in which similar types of reference tools were read in manuscript before the tenth century to be able to relate reading for reference to the use of print technology per se. The layout of the printed page and the addition of all manner of paratextual elements to facilitate reference and scanning suggest, however, that printing was among available technologies best suited to satisfy and also further stimulate the pedagogical and broader reading needs of the increasing numbers of literate men (and to a much lesser extent women).

De Weerdt's paper argues that even though paratextual elements such as headings and intralinear markup were used in manuscript, competition in commercial printing led to their normalization, if not their standardization. Paratext shapes reading in multiple ways, but the impact varies depending on the medium, as in the case of map steles and commercial prints of the same map titles. The transposition of disconnected text blocks on the periphery of a large stele (or original silk manuscript) onto codex-size pages of text stimulated a particular type of guided reading and analysis of the map. The text on the printed page was hierarchically arranged as a list of features to mark on the preceding pages which reproduced the graphic part of the map. This reading logic cannot be deduced from the monumental map, but the techniques used to promote it would have been familiar to Song readers from other types of printed manuals such as anthologies and encyclopedias, in which a variety of visual aids were also used to guide readers to the most relevant parts of the crammed pages of text.

How did cost considerations play into the selection of media? The question of whether and to what extent printing resulted in cost reductions and thus contributed to the wider social distribution of information has received contradictory answers in scholarship on the topic. The reduction of cost is generally seen as one of the major contributions of print technology to the democratization of the written word in early modern Europe. Historians of late imperial China have argued that printed books only became much more affordable in the sixteenth and seventeenth centuries when cheaper paper and labor-saving carving techniques significantly lowered book prices. They suggest that it is also from this time onwards that printed books reached broader social circles including merchants, artisans, farmers, and women.[47]

---

[47] Brokaw and Chow, eds., *Printing and Book Culture*; see esp. the papers by Brokaw, Carlitz, Hegel, McLaren, and McDermott in this volume.

Joseph Dennis's exploration of the cost of printing gazetteers between the Song and Ming dynasties highlights the problematic nature of cost and price data, but at the same time suggests some new ways in which the economic history of book production can be written in the absence of systematic quantitative data. By investigating contemporary observations on production costs by the sponsors of gazetteer printing projects at different times, he comes to the conclusion that there is a remarkable continuity in the perception of the real cost of printing. Whether manuscript or print proved more cost-effective remains unclear; earlier work on this question suggests that the answer may vary depending on the number of copies needed. Weng Tongwen found that already by the eleventh century, central government offices saved tenfold by substituting printed forms for the earlier manuscript versions.[48]

Even though costs for medium-scale printing projects like gazetteers or the works of Daoist or Neo-Confucian masters were not prohibitive, they typically involved substantial planning. In addition to discussing the technical and economic aspects of the production process, several of the papers in this volume consider the socio-political and intellectual relations and tensions that shaped the production of the printed copies that still survive in rare book rooms. Joseph Dennis and Lucille Chia describe the fundraising efforts of local officials, local elites, and Daoist clergy and adepts to finance gazetteers and Quanzhen Daoist works. Gazetteers typically involved local communities only, but Quanzhen clergy traveled far and wide to seek support for larger printing projects. Such projects and their outcomes could then turn into tokens of communal identities based on place, social networks, and religious affiliation. Charles Hartman uncovers the multiple political forces that could wrest control over the destiny of a work away from the author during the process of preparing a manuscript for print. Chen Jun 陳均 (1174–1244) most likely compiled four manuscripts on Song history, but friends interested in exploiting the polemical potential of his work re-titled and reformatted it in print, turning it into a more marketable ideological alternative to rival 'documentary' types of history. Hartman's investigative work shows how the author attempted to distance his work from the political associations made for it by its promoters and how the calculation of political risk led to varying printed editions of Chen Jun's work.

---

[48] Weng Tongwen, "Yinshua duiyu shuji chengben de yingxiang," 36–37.

Given that Chinese history is strongly regional, it follows that regional discrepancies informed the use of different media for knowledge transmission and regular transactions. The major printing centers in Song China were Kaifeng, Jianyang, Hangzhou, and Chengdu; other places lagged far behind their productivity in all manner of information genres. Despite regional differences in productivity and in the availability of books of all kinds, the papers included here suggest that the Song state as well as religious and intellectual organizations and commercial networks significantly widened the geographical distribution of the printed word. Information produced for and by the state was carved onto woodblocks in locales throughout the Song Empire, as illustrated in the papers of Joseph Dennis and TJ Hinrichs. Lucille Chia casts light on the uses of print in the north, an area that has been thoroughly neglected in scholarship on the early history of printing in part because of the dismal survival rates of imprints. Proximity to printing centers could be a comparative advantage for intellectual networks, as Charles Hartman suggests. The rise of Fujianese printing coincided with the spread of Daoxue Neo-Confucianism, while the first invasions of Mongol armies in the southwestern parts of the Song territories led to a decline in the activity of Sichuanese printers and possibly the circulation of the work of Sichuanese scholars. Even though the ready accessibility of print technology may thus be correlated with regional discrepancies in overall cultural impact, Joseph McDermott suggests that this did not necessarily lead to significant discrepancies in terms of consumption. Jiangxi did not host a major printing center, but its collectors traveled and tapped into commercial networks to turn several of its prefectures into centers of book consumption.

Quantity, reduced cost, and speed can be considered the key advantages that movable type printing presented over manuscript production in early modern Europe;[49] these comparative advantages coincided with other cultural and political developments, with the result that many claims have been made for printing as an epoch-making technology. Some of the papers here similarly attribute fixity, standardization, as well as the acceleration of critical debate to the increased use of woodblock printing from the eleventh century onwards. Historians of Euro-

---

[49] The following is based on the concluding comments made by Ann Blair at the conference in which most of the papers in this volume were first presented, "First Impressions: The Cultural History of Print in Imperial China (eighth–fourteenth centuries)," Fairbank Center for East Asian Studies, Harvard University, June 27, 2007.

pean history have cautioned against the technological determinism that may be implied in these kinds of correlations and redefined the historical role of print as a resource that magnified trends towards the commercialization of books and the intensification of scholarly debate which were already emerging in manuscript workshops just prior to the appearance of the new technology.[50] Others have treated such effects as fixity as gradual changes playing themselves out over the course of centuries or as the historical byproduct of the industrialization of print rather than as an inherent feature of printing.[51] The papers in this volume address a different set of historical circumstances, but are centrally concerned with the question of why printing became a regular activity for state agencies, religious and intellectual movements, families and private individuals and how they used it in shaping and defending positions of authority, in efforts at standardization, and in challenging the perceived standardizing effects of printed texts.

Control and Contestation

Printing in the Chinese territories was from the very beginning intertwined with state legitimation. During the first three centuries of the history of print, successive monarchs, starting with Empress Wu around the turn of the eighth century and including Qian Shu 錢俶 (r. 947–978), the king of Wu-Yue discussed in Huang's paper, in the mid-tenth century, invested heavily in the mass-production of Buddhist prayers. As Timothy Barrett has suggested in the case of Empress Wu, such investments were inspired by the ideal of the Buddhist Chakravartin or Wheel-Turning Monarch who wields spiritual and secular power universally.[52]

By the early tenth century the state also used print as a means to fix authoritative editions of texts as it expanded from investments in Buddhist literature into the publication of the classics. The printing of the classics by the Directorate of Education under four of the short-lived Five Dynasties was premised on the expectation that this edition would henceforth be the standard for this set of foundational texts for

---

[50] Anthony Grafton articulates this position in a critical review of Elizabeth Eisenstein's *The Printing Press as an Agent of Change* in "The Importance of Being Printed."

[51] McKitterick, *Print, Manuscript and the Search for Order*; Johns, *Nature of the Book*.

[52] Barrett, *The Woman Who Discovered Printing*, esp. ch. 6.

the literate elite. In Emperor Mingzong's 明宗 (r. 926–33) words, "If anyone wishes to transcribe the Classics, he must copy these printed editions. Interpolations from any other sources and the publication of alternative editions are hereby forbidden."[53] The objective to develop standard editions of foundational texts was retained during the early Song period, as the re-established Directorate of Education published standard printed editions of the dynastic histories (McLaren) and medical canonical texts (Hinrichs).

The Directorate was not only charged with setting authoritative editions, but also with monitoring texts printed by commercial, local government, and private entities. The Directorate sold copies drawn from the original woodblocks, but, as Mingzong's order suggests, also allowed other entities to copy and reprint its editions. As the eleventh century progressed, the numbers of potential book buyers expanded as the numbers of students preparing for the civil service examinations increased. Commercial publishers gradually began to displace the central government as a dominant force in the book market. The Directorate's role shifted from a setter of standards to an arbiter of the standards set by scholar-official elites operating in the provinces.[54]

Several of the papers in this volume substantiate the by-now standard perception of the Northern Song state as driven by the vision of comprehensive centralized reform. This vision found its clearest expression during successive waves of reform campaigns, first in the 1040s and then again from the late 1060s onwards. That this vision was predicated upon previous efforts at centralization under the founding Song emperors can be deduced from some of the papers included here. TJ Hinrichs traces the history of successive compilation and printing projects in and beyond the medical field starting with the first Song emperor Emperor Taizu 太祖 (r. 960–976) through the early years of the reign of Emperor Renzong 仁宗 (r. 1023–1063). She reads these and later efforts at the dissemination of medical literature to local officialdom as ways in which the government not only extended its reach but also redefined the meaning of governance, including within its scope the responsibility of officialdom to make medical knowledge inform the transformation of the people through education. Ronald

---

[53] Translation adapted from Cherniack, "Book," 20; Wang Pu, comp., *Wudai hui-yao*, 8.3a.
[54] De Weerdt, *Competition over Content*, ch. 4.

Egan cites evidence portraying the first Song emperors as sponsors of large educational projects, adamant that the state should be involved in the business of printing to educate the (literate) population and not, as some of their officials proposed, to raise revenue. Joseph Dennis further shows the Northern Song state's interest in collecting and printing local information both in the format of local gazetteers (*tujing* 圖經) and comprehensive gazetteers of the empire.

These same papers also suggest the ascendance of other authorities over the course of the Southern Song period. Gazetteers, now called records (*zhi* 志), featured more literary content celebrating local writers and families; they were more frequently printed and began to feature prominently in the collections of private collectors in addition to central government offices. Medical knowledge became the preserve of lay specialists who focused on individualized treatment for all sorts of ailments rather than on centralized and standardized cures for epidemic disease; medical knowledge was then increasingly disseminated through commercial printers. Publishing regulations issued with increased regularity over the course of the late eleventh and twelfth centuries ordered closer regional and central governmental oversight but testified to the state's uphill battle in controlling the expanding book market. The government censored and proscribed periodically, as shown in the papers by Egan, Hartman, and Chia discussing the Northern Song, Southern Song, and Yuan periods; these papers equally show, however, that conscripted titles remained in circulation and that censorship was rather haphazard, so that unflattering portrayals of imperial behavior were visibly removed from some editions but remained available in other contemporary renditions.

Standardization was the perceived effect not only of government imprints, but of printing more generally. Su Shi's metaphor of the woodblock printing process in describing Wang Anshi's 王安石 (1021–1085) educational policies expresses the early realization that printing, then exploited by the government in pushing through its curricular standards, could have the effect of stamping out difference.[55] Several of the papers demonstrate that commercial and private printers participated in circulating government editions and texts; they also

---

[55] Bol, "Redefinition of Literati Learning," 174–75.

contributed to the canonization of particular texts and authors.[56] Competition drove the systematic use of paratextual elements;[57] the reliance on itinerant artisan labor may have further promoted the standardization of visual motifs, as shown in Huang's and Chia's essays.

Song literate elites were aware of the standardizing effects of government and commercial prints, but they also exploited the medium to contest its perceived negative side-effects. Anne McLaren demonstrates how the Directorate editions of the histories of the Three Dynasties elicited discontent with regard to organization and layout. She argues that the perceived fixity of print stimulated critical response and traces lineages of revisionist histories that did not displace the Directorate editions but became nevertheless complementary to the existence of standard editions in private as well as court collections. Charles Hartman examines how Neo-Confucian critics of the reigning government reformatted historical texts in accordance with Zhu Xi's *Zizhi tongjian gangmu* 資治通鑑綱目 (*Outline and details of "Comprehensive mirror for aid in governance"*), promoted their publication in print, and endeavored to displace contending histories with them. The contradictions of print were manifold as images of the empire disseminated through commercial printers but derived from geographies sponsored by the Northern Song state could be turned into a rallying cry against the appeasement policies of Southern Song regimes.

From the very beginnings of its history in the East Asian world, printing was invested with authority. Due to the perception that it preserved and disseminated information effectively, and at a cost more affordable than comparable public media such as the inscribed stone stele famously exploited by the First Emperor of the Qin,[58] it turned into a technology that a wider spectrum of the literate population employed in shaping and contesting political, religious, intellectual, and vocational authority.

Future Prospects

The bibliographic range of Song book printing has previously been explored in the work of Ming-sun Poon, Sören Edgren, Lucille Chia,

---

[56] For the circulation of *guwen* anthologies, see De Weerdt, *Competition over Content*, 297–301, 309–21.
[57] Chia, *Printing for Profit*, 46–50.
[58] Kern, *Stele Inscriptions of Ch'in Shih-huang*, esp. 50–58.

and Jean-Pierre Drège. The papers in this volume seek to further flesh out the diversity of Song printing and book history by exploring the social and political relations that shaped the production and reproduction of printed texts, the impact of new intellectual formations on book production, the interaction between print and other media, implied readership and reading instructions, and the increase of collectors and the growth of collections resulting from the expansion of textual production.

The essays confirm the general picture outlined in previous work in Chinese book history: the use of print became a standard procedure in the reproduction and multiplication of all sorts of textual and visual knowledge between the eleventh and thirteenth centuries, albeit that print did not replace manuscript or oral and pictorial means of knowledge transmission. The essays also resonate with current interpretations of the broader social and cultural developments taking place between the tenth and the fourteenth centuries. The early Song court harnessed the power of print in an attempt to either synthesize or control knowledge in a wide variety of fields including medicine, geography, history, literature, and religion. Starting in the eleventh century but more assertively in the twelfth and thirteenth centuries literate elites diverted state authority in knowledge production toward local and regional elite networks. Growing numbers of texts were produced by local elites in conjunction with local governments, and by private and commercial printers. Printing may have strengthened their ability to distribute works that symbolized their domination over other social groups such as preparation manuals for the civil service examinations.[59] The use of the printed medium may also have sharpened social distinctions through the dissemination of technical knowledge exclusively destined for literate elites seeking new occupational opportunities in medicine or divination and differentiating themselves from the illiterate practitioners of the same arts.[60]

The social repercussions of the greater availability of texts in print and other media remains an area that will require further exploration

---

[59] This observation is based on Cynthia Brokaw's concluding comments to "First Impressions: The Cultural History of Print in Imperial China (eighth–fourteenth centuries)," the conference on which this volume is based. It was held at the Fairbank Center for East Asian Studies, Harvard University, June 25, 2007.

[60] Liu, "Divination and Printing in the Song." On the differentiation between elite and non-elite ritual practitioners, see Davis, *Society and the Supernatural.*

by both social and cultural historians. The essays in this volume are mostly focused on elite readers—a characteristic shared by most work on imperial Chinese attitudes towards texts and reading and a partial consequence of the remaining evidence. The representation of non-elite producers and consumers of texts and of their relationship to elite readers, however, is not only important in and of itself, but also key to the question of whether and how printing and the explosive growth of textual production buttressed elite strategies of distinction and thus domination. Similarly, mapping more systematically across time and space the social networks that funded printing projects and those that were formed by the exchange of texts may help us better understand the social dimensions of Song printing and reading; analyzing such social data in conjunction with genre and thematic distributions of text titles and contents should also result in a new and more comprehensive understanding of long-term cultural trends.

A basic precondition for this work is the compilation of a bibliography that includes all titles, not only those listed in select Song and later catalogs or those extant in modern public and private collections, but also the large numbers of titles mentioned in prefaces and postfaces in collected writings (*wenji* 文集), biographical accounts, gazetteers, or notebooks (*biji* 筆記). An examination of such a list against surviving titles may also give us a better sense of one of the most striking features of Song printing and book production when compared to the early modern European experience: the dismal survival rate of all manner of texts. The question as to what factors led to the disappearance of archives, gazettes, the often referred to single-sheet publications, contracts, travel maps as well as books also deserves further examination, ideally in the context of a comparative assessment of cultural practices promoting preservation and those resulting in willful or accidental destruction, neglect, and recycling.[61]

Even though cultural historians and literary scholars have begun to venture into the history of reading, most of the work to date has examined readership in general terms, implied reading, and the theory of reading rather than representations of actual reading experiences.[62]

---

[61] I thank Robert Hymes indirectly for his observations on the scale and problem of loss and Peter Bol directly for relaying his exchange with Hymes on the subject to me.

[62] Representative recent examples focusing on the history of reading include Li Yu, "A History of Reading" and all pre-modern contributions in the volume edited

Even though source materials are typically blamed for the irretrievable nature of reading habits, some have shown that careful analysis of the large numbers of dedications and inscriptions preserved in literary collections can lead to a better understanding of individual reading practices and even a new form of intellectual biography.[63] Poetry, notebooks, and correspondence could similarly be used for a more systematic understanding of the ways in which different media affected reading experience and of broader trends in both individual and collective reading habits.[64] Finally, the temporal scope of this volume has been limited to the eleventh through the fourteenth centuries for practical reasons. We hope that this effort, inspired by the edited volume on later imperial printing and book culture edited by Cynthia Brokaw and Kai-Wing Chow, will lead to a companion volume on pre-Song uses of manuscript and print in the production of textual and visual knowledge, the perception of and mechanisms for coping with the accumulation of texts, and reading publics and practices more broadly.

---

by Bernhard Führer, *Aspekte des Lesens*. De Weerdt (*Competition over Content*) and Gardner (*Learning to Be a Sage*) touch upon reading instructions in Song times. See also Brokaw, "Book History." Dai Lianbin's dissertation forthcoming from the University of Oxford aims to address Ming reading practices.

   [63] Ichiki, "Hakubun yakuchū kō."
   [64] De Weerdt, "Court Gazettes" and "Maps and Memory."