FOREWORD

ANN M. BLAIR

Discussions of *information* have been on a steady rise since the mid-twentieth century across multiple disciplines: in computer science, *information theory* was inspired by an influential 1948 paper by Claude E. Shannon; American library schools started including *information sciences* in their purview from the mid-1960s; in 1965, Rowena W. Swanson, head of the Directorate of Information Sciences at the U.S. Air Force, forecast an influential future for this new field.¹ In 1971, communications theorist Marshall McLuhan was among the early users of *information age* to designate an era that he rightly predicted would be transformed by electronic devices. In the intervening fifty years, the references to *information* have become so numerous and so varied that no single definition could embrace them all.² But this abundant discussion has for the most part been built on two assumptions—that information is new in the digital age and that it is unique to the Western or westernized world. This volume offers a welcome challenge to both of these. Its authors use information as an illuminating new lens through which to consider a huge range of Chinese textual production across different times, places, and genres.

The lens of information opens up new perspectives in multiple ways. The emphasis here is on informational works concerned with literary texts and books, which are themselves in written form. The first innovation in this volume is that it focuses on works that have often been considered derivative or ancillary; they comprise commentaries, anthologies, periodical collectanea, histories, and reference genres—lexicons, bibliographies, and encyclopedias.

The second is that these texts are studied here less for their explicit messages (e.g., their historical or commentarial spin) than for the ways they present and manage their contents. Furthermore, the scope extends both outside the texts to institutions like libraries, museums, and archives and inside the texts to script, punctuation, and layout. The purpose is to uncover the material, intellectual, and social practices and systems that made it possible to store, retrieve, and transmit textual information. As in other projects in book history and media studies, the methods deployed range from revisiting iconic works like the gigantic eighteenth-century compilation project of the *Siku quanshu* 四庫全書 (Complete writings of the four repositories) to noticing the “often unprepossessing, partly invisible objects and the processes generated around them that render organization possible,” such as graphemes, sorting mechanisms, and citation practices.³

Information is used in this volume as an etic category—that is, one applied by current scholars to historical contexts where there was no equivalent term or concept. The point is not to seek such equivalents in Chinese language and writing but rather to examine how what we today call information in a demotic, nontechnical sense was stored, sorted, and retrieved in contexts distant from our own, both geographically and chronologically. The assumption here is that “every age is an information age.”⁴ When computer scientist Anthony G. Oettinger made this observation in 1980, he was pondering the “relation of knowledge to power” in his day and the outlook for the early twenty-first century. Within two decades, this idea started to appeal to historians with a rather different import. The much-repeated notion that the rise of digital technologies constituted a unique “age of information” has inspired historians to challenge that singularity by investigating the ways in which the various past contexts they studied had also been “information ages,” each with distinctive technologies and patterns of behavior.⁵ Similarly, the widespread shifts we have experienced to new technologies and ways of working have heightened our awareness of “little tools of knowledge,” long ignored because taken for granted but now rendered visible by their decline—among them, for example, handwriting, index cards, and the bound periodical.⁶ The recent rise of studies in the history of information thus offers a vivid example of the observation of pioneering cultural historian Jacob Burckhardt in the late nineteenth century that “history is on every occasion the record of what one age finds worthy of note in another.”⁷

At the same time that they knowingly pursue questions prompted by their own time, historians of information, like all good cultural historians, seek answers couched within the terms and values of the contexts they study—in other words, the emic categories present in their sources (i.e., the terms and concepts in use at the time). The crucial method is contextual analysis, including the study of the motives for composing a text and the audience targeted, the sources and models on which the text drew both explicitly and tacitly, the

relationship of the text to the field of other texts circulating at the time, the means chosen and used to disseminate it, and the reception it garnered at the time and, as relevant, in later periods. For example, many genres discussed in this volume involved the compilation of selected texts, either in whole or in part; as scholars in this volume emphasize, the acts of excerpting and collecting, although they do not meet modern criteria of originality, were nonetheless “purposeful and careful” (Detwyler, part II.C on histories). Some were commissioned by the state (that is, by an emperor or a bureaucratic office); others were commercially motivated, promising buyers easier access to authoritative texts or social status; some were personal in origin and disseminated later by others. Through attentive study, the expert contributors to this volume reconstruct the kinds of use and value that the producers expected to provide in these various genres as well as their actual impacts, which did not always match the hopes invested in them. Alongside important works that were hardly used (like the massive *Yongle dadian* 永樂大典 [Great compendium of the Yongle reign], composed in 1403–8), some compilations were reedited and reprinted for centuries; whether or not the text changed in the process of transmission, the varied contexts of time and place modified its import and impact. Some collections proved useful in preserving texts that were otherwise lost, although this was not the purpose of their initial composition (see Allen, chapter 31). The informational genres studied here serve as documents of the several contexts in which they were created and activated and of the mental categories of their makers and users.

In lived experience, information is received through all five senses—smell, taste, and touch as well as hearing and sight. Notwithstanding recent technologies developed for sound and digital content, writing has been and remains the dominant means of storing, transmitting, and retrieving information. The written record is usually all that remains of the much richer information landscapes of the past, which included words spoken along with gestures and other signals (e.g., clothing, ceremonies, and song), of which we catch glimpses only when they were recorded in texts that have come down to us. The presence of an ambient oral culture seems especially important for ancient Chinese texts, which rarely mentioned textual authorities, presumably because these were well known to any reader (see Nylan and Rusk, chapter 15). As the volume of texts available expanded (by the fourth century CE), abundant bibliographical citation became the norm. The great accumulation and proliferation of texts (notably in imperial and local libraries and, by the sixteenth century, in the marketplace) motivated the production of books about books, as studied in this volume. These offered information useful for navigating not the world itself but the world of texts (drama, fiction, poetry, and the classical canon) and their intertextual allusions and references. The textualization of Chinese culture, whereby more and more information was recorded in written and often

printed form, was crucial to the survival of so many sources over long stretches of time and geographical distance. Texts were also subject to censorship and destruction under multiple political regimes, and yet they have often survived nonetheless, as in the case of traditional reference works held by families that escaped the book raids of the Cultural Revolution (see Altehenger, chapter 9).

The Chinese textual corpus is exceptional for the continuity of its transmission of a classical canon. These texts were long-lived but not “timeless”; we can appreciate them better by understanding the historical contingencies as well as the structures of cultural and political power involved in their survival. Textual transmission over long periods has typically depended on one or both of material and cultural durability. Material durability enables a text to survive even through periods of cultural disinterest. It comprises durability of the medium itself. Inscriptions on stone can last for millennia, but even fragile media like bamboo strips can survive in certain conditions, though few in number and fragmentary, and become known when recovered by archeological research; durability is furthered in another way by the production of abundant copies thanks to printing. Cultural durability results from the desire of successive generations of authors, editors, commentators, and compilers, and their copyists or printers, abetted by readers or commissioners, to make a new copy or imprint of a text, in some cases updated to suit the needs of a later context. Cultural interest was essential to the transmission of texts down to the point at which we have abundant surviving original sources (i.e., the sixteenth century or so). The transmission of information, just like its production, was often commissioned or supported by centers of political or cultural power, including the imperial court or bureaucracy, and by the intellectual values and career ambitions of literati. Even in the absence of active censorship, omitting texts from informational genres or from copying or compiling projects could result in long-term neglect and loss.

Historians of information are thus attentive to material forms as well as textual practices; the authors of this volume offer nuanced assessments of the interrelationships between the two. For example, surviving bamboo slips show that early Chinese texts were not laid out to match the material substrate, even in cases where the text could have been laid out accordingly (see Meyer and Indraccolo, chapter 11). Similarly, in ancient Greece and Rome the size of a papyrus roll did not always match the size of the books into which literary works were typically divided—scrolls could fit two or three books of the epic poems of Homer or one book of Thucydides’s *History of the Peloponnesian War*.⁸ Material forms create affordances that shape but rarely determine cultural production. The same is true of scripts, as this volume lays to rest any notion that effective or modern information technologies require an alphabetic writing system. Chinese writing operates by the combination of graphical components associated with both sound and meaning; digital techniques have introduced

tools that make text input in Chinese as efficient as input in alphabetic scripts (see Mullaney, chapter 4). One noticeable impact of Chinese characters is the profusion of different ways for sorting them in indices or lexica. While alphabetical order has been settled in Europe since antiquity, dozens of different systems have been devised over the centuries for sorting Chinese characters; the topic offers a fascinating opportunity to study the “infrastructural power of an index itself, i.e., its ability to determine the mental and physical habits to search for information, habits that become so ingrained in literary practices that they are hard to abandon even if sociopolitical and technological conditions change significantly” (Kuzuoğlu, chapter 3).

Histories of information offer new perspectives on major turning points in technology like the invention and spread of printing, under way centuries earlier in China than in Europe, but they also bring to light the *longue durée* of material forms and cultural habits and practices that have hardly warranted attention before. This volume, part of a cluster of new reference works on the history of information, is crucial in focusing on a non-Western context.⁹ Chinese literary information encompasses a huge geographical and chronological range. China was hardly a monolithic cultural entity, and the approach taken by the fifty-six authors (across fifty-eight chapters) is carefully attentive to the specific contexts in which the examples of literary information they study were generated, circulated, and transmitted. Specialists will appreciate the combination of expert syntheses and insightful innovative analyses of information practices. For the nonspecialist reader, the volume offers an engaging introduction to Chinese textual culture, including a limpid discussion of Chinese script and the systematic discussion of informatic modes from the ancient period of unauthored classical texts, through the medieval period (roughly the fourth through the tenth centuries) and the middle (Song-Ming) and later (Qing) imperial periods, to the twentieth century (with a central breakpoint in 1949) and the age of the internet after 2000. The result is a resource that will aid the study and understanding of Chinese texts in any field—not only in the genres studied here but also in scholarship, philosophy, and science. I hope this major contribution to the history of information will facilitate nuanced and well-informed cross-cultural comparisons and dialogue and encourage similar studies of other linguistic and cultural contexts.

Notes

1. Rowena W. Swanson, *Information Sciences, 1965* (Washington, DC: Office of Aerospace Research, U.S. Air Force, 1966), iv.
2. Chaim Zins, “Conceptual Approaches for Defining Data, Information, and Knowledge,” *Journal of the American Society for Information Science and Technology* 58, no. 4 (2007): 479–93.

3. Timon Beyes, Robin Holt, and Claus Pias, "By Means of Which: Media, Technology and Organization," in *The Oxford Handbook of Media, Technology and Organization Studies*, ed. Timon Beyes, Robin Holt, and Claus Pias (Oxford: Oxford University Press, 2020), 505.
4. Anthony G. Oettinger, "Information Resources: Knowledge and Power in the 21st Century," *Science*, n.s., 209, no. 4452 (July 4, 1980): 191.
5. Earlier studies include Michael E. Hobart and Zachary S. Schiffman, *Information Ages: Literacy, Numeracy, and the Computer Revolution* (Baltimore: Johns Hopkins University Press, 1998); and Robert Darnton, "An Early Information Society: News and the Media in Eighteenth-Century Paris," *American Historical Review* 105, no. 1 (2000): 1–35. See also the parallel development of histories of knowledge, as in Peter Burke, *A Social History of Knowledge: From Gutenberg to Diderot* (Cambridge: Polity Press, 2000), and *A Social History of Knowledge II: From the Encyclopédie to Wikipedia* (Cambridge: Polity Press, 2012); and Ian F. McNeely and Lisa Wolverton, *Reinventing Knowledge: From Alexandria to the Internet* (New York: W. W. Norton, 2008).
6. Peter Becker and William Clark, eds., *Little Tools of Knowledge: Historical Essays on Academic and Bureaucratic Practices* (Ann Arbor: University of Michigan Press, 2001).
7. Jacob Burckhardt, "Introduction to the History of the Seventeenth and Eighteenth Centuries," in *Judgments on History and Historians*, trans. Harry Zohn (Indianapolis, IN: Liberty Fund, 1999), sec. 84, p. 168.
8. Herwig Maehler, "Books, Greek and Roman," in *The Oxford Companion to Classical Civilization*, ed. Simon Hornblower and Antony Spawforth, 2nd ed. (Oxford: Oxford University Press, 2014), 249–52.
9. Michele Kennerly, Samuel Frederick, and Jonathan E. Abel, eds. *Information Keywords* (New York: Columbia University Press, 2020); Ann Blair, Paul Duguid, Anja-Silvia Goeing, and Anthony Grafton, eds., *Information: A Historical Companion* (Princeton, NJ: Princeton University Press, 2020).