“The gentleman is not a vessel,” or so Confucius is supposed to have said (Analects 2.12). Yet during the Western and Eastern Han dynasty (202 BCE to 220 CE), according to the editors of this stimulating collection of essays, it was precisely gentlemen’s expertise in various *shu*術 (“technical arts”) that mattered. Such “technical arts” (embracing skills such as law and prognostication as well as more “scientific” areas like astronomy/astrology) provided aspiring statesmen with claims on official employment, methods of imperial rule, and grounds on which to seek a more comprehensive, sage-like understanding of “the whole” (the perennial goal of early Chinese intellectuals). Inspired by twin convictions—first, the necessity for modern scholars to understand “technical arts” to better apprehend Han elites and their world; and second, the need to rescue the subject from its comparative scholarly neglect—this volume’s editors and contributors explore a variety of questions concerning such “technical” subjects, mainly by analyzing their appearances in the *Shiji* of Sima Qian (d. 86 BCE) and *Han Shu* of Ban Gu (d. 92 CE), especially the tables and treatises.

If this volume’s wide-ranging essays are united by a single thread, it is an interest in problematizing and contextualizing the sources (it is this that perhaps most distinguishes the volume’s contributors from prior generations of scholars, such as Joseph Needham, more focused on obtaining “facts” to construct a picture of how contemporaries actually developed and applied technology).[1] As several of the contributors observe, the technical treatises within the *Shiji* and *Han Shu* often appear intended to rhetorically subordinate technical arts to the Confucian classics, prioritizing those classics whose mastery provided individuals such as Ban Gu with their claims to authority over their political and cultural rivals. However, such rhetorical subordination occurs in Han-era texts precisely because during the Han such approaches were contested. Texts dealing with technical arts from this period need to be appreciated as arising from a context of intellectual ferment and struggle rather than as unproblematic descriptions of how things were. As frustrating as historians of science in China may find it, the technical treatises cannot simply be “mined” for facts without regard for context. Although the histories can be (and in this volume are) supplemented by archaeological materials, our ability to do...
so at present is limited, requiring meticulous attention both to the former’s text and context. While the volume’s overall message will not be completely novel to historians of the Han (due in large part to prior work by the contributors), several of the questions it poses remain without clear answers, and it is not completely without points to which an interested reader may object, it does succeed in highlighting both the importance of technical matters to Han elites as well as the advantages of jettisoning conventional, analytic categories, such as “science and technology,” “politics,” and “history,” which were often blurred or absent during the Han.[2] To put it another way, it argues that technical matters were also political.

The nine chapters together with editors’ introduction extend widely across different categories of knowledge during the Han, showcasing the conceptual breadth of Han “technical arts.” Michael Loewe provides a detailed discussion of land management and related legal terminology during the Han, arguing that the court’s ability to supervise and enforce land laws weakened from around 130 CE. He usefully distinguishes the north from the south, which had more but smaller households, for which he suggests several possible reasons. Ultimately, Loewe avers that only in exceptional instances was personal ownership clearly acknowledged, although unfortunately the nature of land tenure, both for great landholders as well as small peasants, remains a mystery, with the nature of “ownership” during the Han a riddle still awaiting elucidation.

Luke Habberstad’s chapter focuses on the rhetoric of water management in the Shiji and Han Shu treatises. He distinguishes the Shiji’s emphasis on collaboration between ruler and chief minister from the Han Shu’s rhetoric of an enlightened ruler selecting between the plans of rival ministers and consequent enshrinement of morality as a criterion for successful management of hydrological projects. Habberstad concludes that we should view the treatises as fundamentally political documents seeking to establish contrasting norms for a successful hydraulic project.

Lee Chi-hsiang’s chapter is an erudite, philological exercise intended to demonstrate the importance of interrogating the classicizing, Han-era sources of our assumptions about early China. Lee explores the origin of the “two capitals model” laid out by Ban Gu in his geographical treatise, in which the Eastern Han capital Luoyang is assigned a history in which it also functioned as capital of the Western and Eastern Zhou (thereby establishing a politico-moral equivalence between the three eras). Lee questions this traditionally accepted claim, suggesting it arose from unwarranted tweaks and conflations of early sources, subsequently buttressed by Ban Gu’s own authority.

Jesse Chapman focuses on distinguishing the underlying assumptions behind the astrological treatises of the Shiji and Han Shu. The Shiji views observation of “celestial signs” as an important tool for government in and of itself, transmitted as the patrimony of lineages of specialists. In contrast, the Han Shu’s treatise frames its account of such phenomena within a generalizing approach that assumes the centrality of the classics. Such differences, Chapman argues, suggest a changing relationship between technical arts and classicism over the course of the Han, in which the former is increasingly subordinated to the latter (a conclusion that for the Han as a whole may require more evidence, given the different backgrounds between the Sima line of court astrologers and the Ban family’s expertise in classical learning).

Michael Nylan’s chapter complicates the Han Shu’s treatise on wuxing 五行 (objecting to rendering wuxing as “five phases,” she leaves the term untranslated). Focusing on providing an answer to why the Han Shu includes such a treatise, lacking an equivalent in the Shiji, she suggests that we view it as “revelation text offering testimony on extra-human but quasi-legal judgments” (p. 251) and that the text shows a particular preference for the theories of Liu Xin 劉歆 (d. 23 CE). Nylan cau-
tions the Western reader against assuming for Han scholars either the same degree of reverence for classics or for commentary as is often held for inspired scripture in Abrahamic faiths or secular rationality.

Tian Tian’s chapter contrasts Sima Qian and Ban Gu’s accounts of the imperial sacrifices. In particular, Tian focuses on the Han imperial cult of the deity Taiyi 泰— and its eventual displacement by “Heaven” (天 Tian), corresponding to a shift in influence from “miracle workers” (方士 fangshi) to classicists (a change for which the author could more fully account). Tian’s conclusion that Ban Gu’s classicist account of state sacrifices reflects an anachronistic retrojection is hardly novel, although the Han historian will appreciate his discussion of changes in our sources’ understanding of the jiao 郊 sacrifices and other finer details of cult.

Examining Han mathematical texts and in particular their subsequent exegesis, Karine Chemla argues that a form of abstraction can be discerned in them, albeit one that is not identical to the modern concept. Focusing on the term “empty expressions” (空言 kongyan), a phrase with strong Confucian resonance, such “abstractions” were designed to both illuminate and justify the operations and procedures outlined in such texts.

Miranda Brown’s chapter seeks to deconstruct a common assumption (derived from the Shiji) that Han-era medical expertise was exclusively transmitted through master-disciple relationships. Examining archaeological materials (the Wuwei manuscripts), she suggests that medical texts’ explanatory matter implies the latter could obviate the need for personal instruction in medicine. Such obviation was desirable (and was possibly assisted/directed by government) precisely because of medical science’s practical connections with public administration (as an object both of concern for officials and also public support).

Mark Csikszentmihalyi and Zheng Yifan focus on analyzing the Han Shu’s bibliographic treatise (“Yiwen zhi” 藝文志) to explain how (some) Han scholars conceptually divided contemporary knowledge. They identify in the treatise two overarching narratives: a three-stage narrative of decline from a primal unity into fragmentation (textually represented by classics > masters’ writings > technical writings); and an idealized administrative framework onto which the writings were mapped. The effect of the treatise’s schema was to valorize the classics while integrating technical writings with the former, albeit in a subordinate position.

Perhaps most accurately characterized as belonging to the field of early Chinese intellectual history, the book’s individual chapters will be helpful for historians of science and law interested in up-to-date discussions of their specific subjects, while the entire volume is highly useful for anyone interested in the cutting edge of research on the intellectual, political, or institutional history of early China. While unfortunately much of the work will not be immediately transparent for comparativists lacking a background in China studies, it is likely to prove rewarding for those who persevere past the specialized vocabulary and assumed historical knowledge. If the volume’s primary goal is to complicate our understanding of intellectual life in the Han, while problematizing the relationship of Han technical subjects to politics, it may be said to have succeeded. A less specialized reader might have preferred the inclusion of an overall conclusion, outlining how the findings of the individual chapters more fundamentally challenge or refine our current understandings of the Han; however, as the editors acknowledge, this volume is merely the “start” of an ongoing conversation (p. 8).

Notes
For instance, the insistent translation of *liezhuan* 列傳 as “biography” is surely inapposite for a genre also covering accounts of foreign lands.

If there is additional discussion of this review, you may access it through the network, at

https://networks.h-net.org/h-sci-med-tech


**URL:** https://www.h-net.org/reviews/showrev.php?id=58083

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.