A veteran of the Translating Western Knowledge into Late Imperial China project, which was organized by Michael Lackner, then at the University of Göttingen, Joachim Kurtz helped to edit one of the resulting conference volumes, *New Terms for New Ideas: Western Knowledge and Lexical Change in Late Imperial China* (Leiden: E. J. Brill, 2001). He also helped Lackner to develop several internet websites using search engines for Chinese primary texts to explore systematically the translation into classical Chinese of technical terms in the modern social and natural sciences from European languages during the late nineteenth and early twentieth century.

Joachim Kurtz’s new book is a pioneering reconsideration of the historical genealogy of logic as a technical subject in both China and the West from the seventeenth to the twentieth century. The early chapters focus on the reasons why logic failed to take hold as a discipline in China when the Jesuits introduced Aristotelian logic and the syllogism to Chinese literati in the late Ming. His argument that the Jesuits themselves never made entirely clear the place of logic as a discipline in their translations of Western learning into Chinese, which were compiled with the help of Chinese converts, is persuasive. Despite the much ballyhooed translation of Euclid’s *Elements of Geometry* into Chinese, we might add that the Chinese were never convinced that it offered a superior method of thinking and argumentation to their own, which informed, for example, the reasoning patterns (wenli 文理) in the infamous eight-legged essays of the Ming and Qing dynasties. [[Author: Change OK?]]
Although Kurtz is essentially correct here, he has based his own account of the Jesuits on historical material that others have often presented on both the translation of Euclid and the failure of Ferdinand Verbiest to gain the Kangxi emperor’s authorization to print a Jesuit compendium of Western knowledge known as the *Qionglixue* (Cursus philosophicus) for use on the influential Chinese civil service examinations. To elaborate on Verbiest’s remarkably ambitious efforts to insinuate the syllogistic method (*litui zhi fa* 理推之法) into the epistemological discourses of late imperial Chinese classicism, Kurtz has reviewed many primary sources that were not available earlier, but in the end he reemphasizes the reasons the Kangxi emperor gave for rejecting Verbiest’s request “as mere pretext” (pp. 85–86).

Yet Kurtz takes Verbiest’s own tactics at face value. Why? Because Verbiest’s appeal to the syllogism was authentic and not just a means to an end, while the Chinese rejection of the initiative was misguided from the beginning? The Chinese literati in the *Ministry of Rites* who advised the emperor on Verbiest’s request rejected the proposal because they claimed it wrongly focused on the brain and thus missed the centrality of the heart-mind (*xin* 心) in all mental deliberations. Kurtz dismisses this reason as disingenuous and a front for literati intransigence, which, in part, it surely was. However, when the Kangxi emperor himself weighed in and proclaimed “the style of this book is absurd and unintelligible” (p. 86; what others translate as “illogical”), Kurtz sees this as the playing out of a public performance at court with no intellectual merit. Verbiest’s gamble “came to naught” (p. 86).
Why, then, was Verbiest so focused on the syllogism? Was it just a clever ploy to show the emperor and his Chinese officials the way to God? Was not Verbiest perhaps convinced from his private audiences with him that the emperor was intrigued by European forms of reasoning, which the Jesuits claimed informed their allegedly more advanced expertise in calendrical studies and philosophy? Why else would Verbiest have been so audacious as to propose a European style of reasoning for the training and testing of all civil officials? He likely thought he stood a realistic chance to effect his plan.

In other words, if we examine contemporary Chinese forms of reasoning during the Ming-Qing transition, we might find that the intellectual context enables us to better understand on what grounds literati might consider Verbiest’s syllogism as absurd and unintelligible (or illogical), when compared to their own forms of rhetoric and persuasion. We might also discover that there were others in China, including perhaps the Kangxi emperor, who were intrigued by the new forms of rhetoric and reasoning Verbiest proffered.

Late Ming literati who were known for their literary traditions saw eight-legged essays as reliable mirrors of the rhetorical currents in their times. For them, the eight-legged essay had transcended its requirement as a formal exercise and become an important literary genre of prose writing in its own right. It was not merely an examination requirement but a cultural form that existed inside and outside the examination compound and was written by all classically literate men. They exhibited an exaggerated commitment to formal parallelism and thinking by analogy in their writings. Strict adherence to balanced clauses and balanced pairs of characters was required.
throughout the essay, but this feature becomes particularly rule-like in the Ming framing of the argument by building on the three major legs of the essay.

As the classical essay’s length requirement increased from the five hundred characters common in late Ming times to over seven hundred during the mid-Qing, the basic structure of the essay remained unchanged. The form of chain arguments used in such essays was built around pairs of complementary propositions, which derived their cogency from rich literary traditions that, over the centuries, had drawn on both the parallel-prose and ancient-style prose traditions of early and medieval China. Balanced prose presupposed that an argument should advance via pairs of complementary clauses and sections, which, when formalized and disciplined by analogies, avoided a wandering, unfocused narrative. Accordingly, the eight-legged essay represented an effort to confirm the vision of the sages in the Four Books and Five Classics from a ‘double angle of vision,’ which strictly correlated with the parallel syntax of the legs of the examination essay. If the eight-legged essay had such epistemological underpinnings for the civil examinations that Verbiest sought to dislodge, then it is not unreasonable to assume that these were also the standards that the Chinese literati used to evaluate and reject the syllogism for the Kangxi emperor.

A much crisper and less repetitive historical account of the fate of logic in China from 1600 to 1750 would have allowed Kurtz to present in more depth the forms of balanced prose writing and reasoning that he occasionally alludes to as “linked verse” (pp. 160, 183) in the subsequent chapters focused on the late nineteenth century. He acknowledges these were the mainstay of literati essays and informed the required eight-legged essay in the civil examinations (p. 364). What did the early Qing Chinese think
made a claim convincing? How did they argue? What were the terms of their developing arguments before, during, and after the Jesuit exchange? What was the impact of new classical movements in seventeenth-century China that stressed precise scholarship and exacting research? Kurtz addresses these issues only when he discusses, very sympathetically, the late Qing translators of Western logic (p. 183) who proceeded to discover “Chinese logic” at home (pp. 314, 327, 337). Ironically, and I should add to his immense credit, Kurtz takes up all these issues when he describes how late nineteenth-century writers and translators such as Yan Fu, Wang Guowei, Zhang Binglin, Liang Qichao, and Hu Shi, each discovered Chinese logic by looking back to these sorts of forms of linked verse (pp. 160, 183, 366). Better late than never to recognize these traditional forms of Chinese reasoning.

The later chapters in the book focus on the conceptual limits of Protestant missionary translations by Joseph Edkins, among others, in the nineteenth century that, similarly to the Jesuits, failed to convince the Chinese of the overriding value of logic as an important discipline. Again, Kurtz rightly points out that this was due less to Chinese resistance than to the vague manner that the English and American Protestants presented logic in their translations, again with the help of Chinese converts or those literati who worked in important translation bureaus with the Christians in the new Qing dynasty institutions, such as the Jiangnan Arsenal in Shanghai. Hence, the modern Protestants, like their early modern Jesuits predecessors, never seem to have articulated a persuasive account of logic as an important discipline in its own right.

Here it is especially useful to see how Chinese forms of classical writing and reasoning continued to hold sway in the nineteenth century. The Protestants, like many
Chinese, wailed against the debilitating aspects of the eight-legged essay requirement in civil examinations, for example. Here at least Kurtz does not lose the opportunity to present what the Chinese saw in such essays and why many of them were also becoming disenchanted with this essay form in a time when empirical demonstration and evidential scholarship were increasingly valorized by the leading literati as better than the airy and speculative essays based on Song dynasty classical learning (what many call “Neo-Confucianism”). Kurtz helps us better understand indigenous changes in Chinese forms of arguing at the turn of the twentieth century.

His focus on the lineage of Western logic as a disciplinary field in Chinese intellectual history at the end of the book successfully demonstrates that once the Chinese in the early twentieth century saw for themselves the value of logic as a cultural possession of their own and not just as a Western discipline, they quickly appropriated the study of logic, required in modern schools, and successfully argued that the Chinese had their own logical tradition, which they now contended was comparable with and equal to the Western and Indian logical traditions. This remarkable cultural and educational transformation is very ably described in Kurtz’s book. How much better this exciting conclusion would have been had he earlier spent more time explaining what late imperial Chinese thought about reason and persuasion when the Jesuits and Protestants tried, unsuccessfully, to convince them of the strengths of early modern and modern Western forms of logic.[[Author: Changes, in interest of exactness and clarity, OK?]]

An issue that Kurtz and others might address in the future is the globalized association in the twentieth century of logic, philosophy, and science. This issue was an undercurrent in the seventeenth and nineteenth centuries for both Jesuits and Protestants.
In the twentieth century, however, Euro-American educators universally became convinced that the logical rigor of geometry and the increasing importance of new forms of hypo-deductive logic had been instrumental in the rise of modern science in Europe after 1700. Thus, according to this view, the scientific revolution had required new forms of logic and demonstration, which the philosophy of the field of science in twentieth-century Euro-America valorized into a universal truth.

More recently, however, historians of science have challenged this consensus and have argued that logic and the forms of reasoning themselves were not sufficient historical or epistemological conditions to produce the breakthroughs in modern science, medicine, and technology that we were all taught to take for granted in grade school, including the Chinese since 1911. If we were first to problematize and then unpack this marriage made in heaven between science and logic, it would likely help us better evaluate why not only the Chinese but also Euro-American educators, scientists, and philosophers became so enthralled with this myth about the logical path to scientific discovery. Since Thomas Kuhn’s work first challenged this Pollyanna assumption in the 1960s, historians of science such as Bruno Latour and others have slowly distanced themselves from its conceits, while many philosophers of science continue to appeal to the priority of forms of reason and logic for scientific discovery. If those who might follow up on Kurz’s important book could introduce such larger issues, they would then be able to globalize the technical triumph of logic in the modern world overall, as well as in modern China, especially in departments of philosophy that today almost universally cater to analytic philosophy.
Despite some minor caveats, Joachim Kurtz’s book is a major contribution and should be positively evaluated. He is a very promising scholar working on many important issues in Sino-Western cultural history and someone from whom we can expect even greater things. If he can be persuaded to think more boldly, then his accounts in future projects might well become a tour de force for explaining intellectual change during the transition from late imperial to modern China.

Benjamin A. Elman

Benjamin A. Elman, professor of East Asian studies and history at Princeton University, was the Gordon Wu 1958 Professor of Chinese Studies. Please review this biography and revise as warranted.