

subsistence farmers and is sent to work despite her desire to continue schooling. Her parents' struggle against their grim economic situation and their desire to give their studious children a chance to make it in the new China touchingly illustrates the challenges facing multitudes of poor families.

In contrast, Chen Boy, nicknamed Jerry, is a brash "little emperor" who, because he speaks some English, is put to work where he can interact with the tourists, all the while chasing eagerly after their generous tips. Yung Chang makes an excellent choice in following both of these engrossing young people, and viewers are rewarded with the pair's openness as they deal with the frustrations and shocks of adolescence and first jobs.

The film interweaves shots of luxuriating tourists with those of workers toiling to support that leisure, and pits

the spin spouted by tour guides against the cruel realities that displaced residents face. Together, these juxtapositions neatly illustrate the ironies and contradictions caused by the enormous environmental and economic changes in the Yangtze River basin. Thankfully, Yung Chang never dwells too ponderously on the metaphors his film creates; rather, he employs only minimal narration and allows the landscape and people he films to evoke the human and environmental costs of China's unbridled development.

Although the Three Gorges Dam is a monumental project, the human scale of this well-crafted and moving film—echoing recent offerings like *Manufactured Landscapes* and *Still Life* (reviewed in *China Rights Forum* No. 1, 2008)—challenges the inhuman scale of the dam itself.

## China's Rich Scientific Past

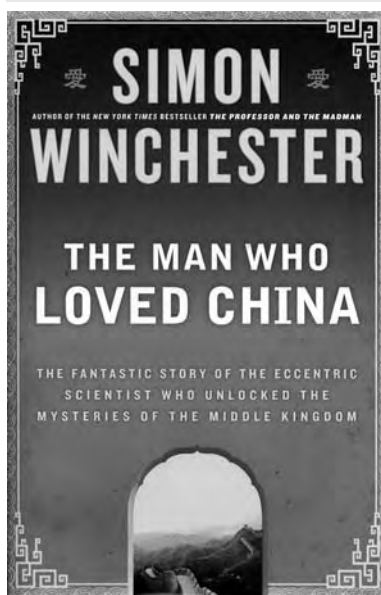
BY ROGER GARSIDE

The book's title refers to Joseph Needham (1900–1995), whose multi-volume *magnum opus*, *Science and Civilization in China*, continued beyond his death under the direction of the Needham Research Institute at the University of Cambridge. After 60 years the work now stretches across 24 books, organized into seven volumes, presenting the history of Chinese science and civilization to non-Chinese readers.

For decades, Needham, whose Cambridge academic career began in biochemistry, was the intellectual and administrative driving force behind this vast undertaking. He conceived the idea for the project, wrote most of the early volumes, and edited later ones.

In 1984, Lynn White Jr., Professor Emeritus of History at UCLA and a past president of the American History of Science Society, called Needham "the world's greatest scholar in

***The Man Who Loved China: The Fantastic Story of the Eccentric Scientist Who Unlocked the Mysteries of the Middle Kingdom***  
By Simon Winchester  
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the comparative study of civilizations . . . unique in the grandeur of his vision, and his epic ambitions." According to White, Needham was prolific in his publications while driven by one clear vision.

Needham was inspired to undertake his ground-breaking work during World War II while he was in China directing the British government's program of assistance to Chinese scientists. He discovered that, contrary to the view almost universally held in the West at that time, China had been the world's most technologically-advanced society from about 500 BC to 1500 CE. He set out to research the history of this phenomenon and make it known to the Western world. In addition, he questioned why "modern science" did not continue to develop in China after the sixteenth century?

According to scholars like White, while

Needham brilliantly succeeded in researching and presenting Chinese scientific achievements, he never answered this final question to the satisfaction of himself or others. Indeed, White argued that Needham posed the wrong question. He would have done better to ask why “modern science” developed in Europe, rather than address the negative question of why it did not in China.

Winchester is the first person to publish a book-length biography of Needham. He is not a scientist, an historian, or a China specialist, but rather a talented and enterprising freelance writer who once served as a foreign correspondent in Asia for various publications. He is also a gifted raconteur, bringing to life Needham’s adventures in China during World War II, his relationships with both his fellow academics at Cambridge and his wives, and his disastrous foray into world politics. Winchester does justice to Needham as an exciting, intensely passionate, and highly adventurous man with great intellectual ambition. In addition, he usefully reproduces Needham’s impressive list of Chinese inventions and discoveries with dates of first mention. However, Winchester ultimately fails to convey the brilliance and excitement of Needham’s deep and scholarly exploration of a vast range of topics.

The core of this book should have been in Chapter 5, *The Making of a Masterpiece*, but in the meager 30 pages accorded to Needham’s monumental work Winchester does not adequately examine the intellectual challenges that Needham addressed. He could have allowed passages of Needham’s own elegant prose to speak for themselves and included assessments of other writers, such as Professor White; Maurice Cowling, the Cambridge historian whose excellent biographical essay for *The New Criterion* in 1993 captures—in just over a dozen pages—something of the greatness of the man; or the brilliant Cambridge polymath (and authority on early Chinese music) Laurence Picken, who called an early volume of Needham’s *magnum opus* “perhaps the greatest single act of historical synthesis and intercultural communication ever attempted by one man.”

It is distasteful that a biography of a man who possessed great intellect and noble spirit—of whom the literary critic George Steiner once wrote, “Proust and Needham have made of remembrance both an act of moral justice

and of high art”—should be given a title as vulgar as this one. The book is marred by slapdash writing that a good editor would have corrected. There are glaring repetitions and inconsistencies. Furthermore, the dust-jacket description of this reviewer’s edition is seriously misleading: it states, quite wrongly, that the work “tells the sweeping history of China . . . through the story of one man,” when in fact the book does nothing of the sort. It also asserts that Needham solved “one of the great unanswered questions of history.” We have already seen that in the opinion of highly qualified scholars Needham did not succeed in answering the great question he posed.

In the prologue, Winchester claims that Needham’s *Science and Civilization in China* “stands today alongside the greatest of the world’s great encyclopedias and dictionaries as a monument to the power of human understanding.” In the epilogue, however, he acknowledges that Needham never fully worked out the answer to his own question, commenting that he was perhaps too close to his subject, “seeing many trees but not enough forest,” and then concludes that “the great strength of his books lay in their ability to catalog the early promise of Chinese science.”

A monument to the power of human understanding or a great catalog? Winchester does not seem to have a clear answer in his own mind.

Winchester also asserts that Needham was “unarguably the foremost student of China in the entire world.” How could he make this claim without considering Professor John King Fairbank of Harvard, a close contemporary of Needham’s, doyen of China scholars in America and joint initiator of the sixteen-volume *The Cambridge History of China*?

Those who would like to read a book that sets Needham’s intellectual achievements in the context of his life and times will find Winchester disappointing. One hopes that a biographer will soon come forward who will give the educated layman who has neither access nor time to read the many volumes of *Science and Civilization in China* an assessment and presentation of his work that does justice not only to the ambition and the cataloguing, but also to the true greatness of the man.