

Sigrid Schmalzer, *The People's Peking Man: Popular Science and Human Identity in Twentieth-Century China*. Chicago: University of Chicago Press, 2008. 336pp. ISBN: 9780226738604.

Zhang, jian 張劍, *kexueshetuan zai jindai Zhongguo de mingyun: yi Zhongguokexueshe wei zhongxin*科學社團在近代中國的命運：以中國科學社為中心(The Science Association and the Change of Society in Modern China: A Study on the Science Society of China) Jinan: Shandong chubanshe, 2005.460pp. ISBN: 7-5328-4978-3.

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Since the mid-nineteenth century, the most consistent aspect of Chinese history has been change, such as political reforms and revolutions, reconfigurations of social structures, ideological shifts, and so on. Still, in the midst of such dramatic transformations some still points stand out which are negative in the two under-mentioned authors' opinions. Two recent dissertations have made significant contributions to our understanding of modern science in China—Zhang Jian's "Science Associations and Social Change in Modern China: A Study of the Science Society of China" and Sigrid Schmalzer's "The People's Peking Man: Popular Science and Human Identity in Twentieth-Century China," now available in book form. By juxtaposing them, I hope to point out some differences as well as the similarity in their perspectives, all of which may suggest a number of trends in the field of science and technology studies.

Zhang's book investigates the course of the Science Society of China from its genesis to its demise. But, more significantly, the book revealed the structural transformation of Chinese society, a phenomenon that affected scientific institutions, intellectual assumptions, social communities, and political situations. The history of

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the Science Society of China—traced alongside other science societies—suggests a number of questions: How was Chinese science institutionalized? How did the organizational structure of the Science Society change over time? What sort of communication system did it develop, and what were the relations it had with other scientific societies? What role did it play in the broader dissemination of science? What was the changing social role of scientists, and how did the scientific community and its network develop? Zhang's discussions of these issues and others displayed the changing complexion of Chinese science and society.

However, Zhang highlights intellectual changes and social structure at the expense of cultural analysis, examples of which are infrequent and rather desultory. He suggests that beneath the dynamic surface of modern Chinese science lay stagnation, heaviness, and all the old ills of tradition, visible in the research decisions of individuals as in the policies of national cultural organizations. He concludes a series of cultural comparisons between China and the West by insisting that both in terms of science and of the social situations, tradition continued to hamstring China during the period studied.

Zhang attributes this stagnation to a form of cronyism peculiar to China, a stubborn belief even among the ostensibly modern and enlightened leaders of the Science Society that “fellow villagers” (*laoxiang*, in Chinese culture it refers to a form of cronyism that is based on the same descent or homeland) needed to be treated specially. When investigating the limitations and obstructions imposed on the scientists as they took on new professional roles and established a particular status, Zhang found a great intellectual inertia due in part to official ideology, a tendency to value virtue more than truth, an undue emphasis on pragmatism, and so on. By observing a scientific community and its networks, Zhang illustrated the obstinate influence of traditional Chinese worldly wisdom. For example, in that historical context the leaders of the Science Society of China would prefer to giving a post to someone of the same homeland, major or profession as his own, rather than to assigning the best candidate according to competence required. And also they would like to dominate the most part of strategic decision as operated in a patriarchal system while disregarding the members' opinions.

Zhang's comparison between Chinese and Western cultures shows how very differently the members of scientific groups can view their associations. Zhang compared his opinions with Reynolds's paradigm of the relevant interpretation only to conclude that Reynolds was biased because he could not escape looking at China's social conditions from the context of American scientific culture. As Zhang noted, Reynold's dissertation—*The Advancement of Knowledge and the Enrichment of life: The Science Society of China and the Understanding of Science in the Early Republic, 1914–1930, PH.D. Dissertation of University of Wisconsin, Madison, 1986*—did a good investigation to the understanding of science of the members of the Science Society of China. On the other hand, some of Reynold's arguments were biased. For example, Reynolds took the creed of professionalization of American science as a reference to interpret the first reorganization of the society.

Sigrid Schmalzer's book also investigates change and stagnation in China's scientific culture, but it concentrates on the impact of Communist ideology on paleoanthropology and human nature. Through investigating the development of popularization of science based on paleoanthropology in twentieth-century China,

she exhibits the changing and contradictory political and cultural meaning of Peking man and Yěren (yetis), so that the conflicts among political elites, scientists groups, and masses in the confusing political cultures of republic, Maoist, and opening-time China are explored in a subtle way. Schmalzer looks at the fluidity of the scientist's identity and social status, how conflict and collaboration took place, the power of scientific discourse and social standing, and how the construction of the people's national identity related to the construction of science. In my view, Schmalzer set out not to excavate the intellectual history of paleoanthropology but to chart the vicissitudes experienced by the members of a specific occupation, as culture and status vied with each other. In Schmalzer's account, these trajectories are interwoven with the broader political environment, the international background, and a host of lurking contradictions between discourses and actions.

For the sake of offering some generalizations, I shall divide *The People's Peking Man* into three parts—Chapter 1, Chapters 2–5, and Chapters 6–8. In the first part, the thematic background for the whole story is presented: the struggle between tradition and modern. Schmalzer describes a network that includes local and foreign scientists and even laypersons, their contradictory views on priority of discovery, and the dilemma posed by the discovery of Peking man.

In the second part, which covers the turbulent decades between 1940 and 1978 and is the main part of the book, Schmalzer examines the intricate shifts in scientific thinking, connecting them to the relation between scientists and the people. By revealing the interests of the actors, how they constructed their networks, and how their scholarly work was disseminated, Schmalzer shows that those intellectuals were in an embarrassing position. In reality, on the one side, those intellectuals were honored as intelligent elite and they were trying to acquire cultural prestige as well. On the other side, they were pushed into the position where their class attributes, thoughts and mentality should be transformed by Chinese-working-class masses. By elaborating the political construction of human nature, Schmalzer supports Michel Foucault's assertion that every ideological system gives rise to fragmentation and contradictions, while the role of the dominate discourse such as Mao's Yan'an Forum and many relevant interpretations by others is to obliterate those incompatibilities. Of course, for Chinese people born before 1980, those basic ideas are quite familiar. Still, Schmalzer does an excellent job of highlighting such essential contradictions.

In Chapter 4, she discusses two methods for popularizing science—top-down and bottom-up—reminding me of the tacit struggle between scientists and the people over status. Going a step further in chapter 5, she connects the constant changes in the standing of intellectuals between Yan'an and the Cultural Revolution to ideological contradictions. Given Schmalzer's explicit aim of highlighting the contradictions between the discourse centered on “reverence for the masses” and that which expresses “concern about their lack of scientific knowledge,” it is unfortunate that she failed to understand that mass participation in the pro-science movement was no more rational than passionate, less about truth than about politics, more a struggle for power than an intellectual engagement. It concluded with the destruction of the truly scientific spirit.

Against the background of reform and opening to the West, Schmalzer assesses the rise of popular science and the resulting contradictions. In such new situations, the popular science was brought into diversification and then there emerged more

and more competing interpretations and contradictories within and without every field. Schmalzer describes the diversification process and its potential conflicts of diverse heterogeneous activities and subject matters of science dissemination, and various competing interpretations of humanity and popular science. She also passionately characterizes the changing scientists' status and relationship between scientists and masses revolving diverse interpretations in Yě rén and humanity. Just as Sigrid's comment on Yě rén research, in fact, all kinds of popular science had "offered a way for science, literature, and legend to come together in an exploration of humanity and inhumanity, wild(er)ness and civilization, so necessary in China's rapidly changing social and natural worlds." (p. 245). But unfortunately, since Sigrid's description of popular science was limited to paleoanthropology, she failed to make full sense of various forms of science dissemination in different fields during that time. For instance, workers and peasants broadly participated in technological innovation activities and basic learning of scientific knowledge. So there emerged some self-taught inventors and engineers worthy of the name.

Schmalzer's detailed archival research, her probing interviews, and the fine historical sensitivity displayed in her literary analysis, all contribute to her ambitious cultural study which exceeds Zhang Jian's study in my view. Like her fellow new cultural historians, Schmalzer excels in excavating meanings from representations by skillfully appropriating analytic methods from linguistics, semiotics, literary theory, cultural anthropology, and cultural studies. She turns to myths and legends, poems, dramas, and other literary works, pictures, textbooks, periodicals, museum displays, and so on. She has dredged up the profound meanings and the hidden fragments from those discourses. But just as every literary interpretation is somewhat arbitrary, so this interpretation occasionally feels a bit far-fetched. Take, for instance, her reading of *Bai mao nü* (*The White-Haired Girl*). Few would agree that the opera allegorizes the dissemination of science—Schmalzer's thesis—whereas it does seem to connect to revolutionary ideology and class struggle.

In conclusion, I would like to present the differences between these two studies as a comment on the different orientations of Chinese and Western historians to science and technology. Until now, the Chinese field has been dominated by historians from the older generation whose lodestars are Robert Merton, John Bernal, and Joseph Needham—historians with a strong interest in the interplay between science and society. Not until the 1990s did Chinese historians commence to pay attention to the "cultural turn" in history. Only within the last decade have original indigenous works of new cultural history appeared (e.g., Yang Nianqun's *Remaking "Patients"*). But historians of science and technology have been even slower to appreciate the new methods and hermeneutics long since familiar to their Western colleagues. Although science and technology studies have been followed with interest by a few scholars, those who study science and technology occupy an occupational status separate from general history, and the tendency to defend one's own turf has kept communication with adjacent fields at a minimum. So while Zhang's book includes detailed and accurate historical data, it contains far more description than discussion, so that one is bound to feel that his historical interpretation didn't go far enough.

In contrast, *The People's Peking Man* fully exploits the cultural turn in Western historiography. The author has taken on the subject of mass culture in everyday life, using carefully documented struggles and negotiations for discursive power, identity,

and social status among political and intellectual elites and the people of modern China to unearth contradictions lurking underground. This study uncovered the political and social construction of knowledge by integrating the macro level and the micro level, the structure and the interaction. So successful is the book that one must express a certain skepticism when the resistance to new approaches to science and technology is laid at the foot of academic politics.