Chinese Science Fiction: Imported and Indigenous

by Lisa Raphals*

ABSTRACT

The relation of science to science fiction in the history of Chinese science fiction has been closely linked to both the influence of Western science and to ideals of progress, nationalism, and empire. But when we turn to China’s long history of philosophical speculation, a rather different story needs to be told. This article examines the ways in which the indigenous Chinese sciences have fed into fiction, and considers the consequences for our understandings of the genre of science fiction itself and its broader social and historical contexts, as well as relationships between modernity, progress, and science in a non-Western, but globally crucial, context.

In the debates surrounding Chinese science fiction, scholars have often concerned themselves with the question of “origins.” At what point can “Chinese science fiction” be said to have emerged?1 Crucially, was it a modern phenomenon that arose toward the end of the Qing dynasty (1644–1911) in the late nineteenth/early twentieth century, or was it rooted in earlier literary genres? If we adopt the “modernist” view, further questions arise. What did Qing writers and readers understand as “Western” SF? Which writers were available in translation? How did “Western” SF evolve, and what did the Chinese authors of works we (retrospectively) recognize as SF consider themselves to be doing? How did SF become indigenous to China? Answers to these questions, some of which are explored elsewhere in this volume, are complicated by genre definitions and the status of SF in China—until recently relegated to children’s pedagogic literature, and considered of little literary or even popular interest. In China today, the genre of “science fiction” (kehuan 科幻) is considered distinct from “fantasy” (qihuan 奇幻), which includes both xuanhuan 玄幻, fantastic fiction with Chinese supernatural elements, and mohuan 魔幻, magical fiction with Western elements.2 Both are made even more complicated when the history of indigenous Chinese science is taken into consideration.

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1 I use the terms science fiction and SF interchangeably, to include both clearly “science”-oriented and speculative fiction.

2 Pinyin transliteration of Chinese words is used throughout, except for personal names, where I follow authors’ own usages. For consistency, all Chinese references are in traditional characters (jiánti), including contemporary pieces originally published in simplified (jiānti) characters. Chinese names are cited surname first in accordance with Chinese name conventions. Chinese characters are included because Chinese SF Anglophone literature often omits them, making names and titles harder to find in Chinese sources.

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Chinese scientific and philosophical literature offers a long and rich parallel history of speculation on topics that are now staples of science fiction; these span several genres of Chinese writing since the fourth century BCE. This article explores the way in which these topics, distinct threads that appear in Chinese philosophical and historiographical texts from the fifth or fourth centuries BCE to roughly the sixth century CE, were expressed. In particular, it considers accounts of travels in time and space (above or beyond the earth), and accounts of immortality or extreme longevity. It also considers “transformative accounts,” including contact with sentient nonhuman entities, descriptions of changing species, and the indigenous Chinese genre of “tales of the strange” (zhiguai 志怪). While these texts can retrospectively be recognized as science-fictional, from the viewpoints of their creators, these genres address practices and theories defined by indigenous Chinese sciences. Their relationship with indigenous science fiction, however, is considerably more difficult to define. Nonetheless, Chinese indigenous literary, religious, and scientific traditions informed Chinese SF in important ways. This article thus surveys what might be called a “parallel SF context” for relationships between science and fiction in a Chinese context, one that demonstrates that speculations on science in fiction need not necessarily lead to the Western modes of “science fiction” that have dominated the literature.

A MODERNIST HISTORY OF CHINESE SF

Modernist accounts of Chinese SF describe three distinct phases: the utopian, science fictional writings of the late Qing dynasty; pedagogical, didactic stories produced in the Maoist period; and the rise of speculative, often dystopian, science fiction since 1989. The first part of this article will briefly review these developments before moving on to consider the role of the indigenous Chinese sciences.

A range of contemporary scholars are actively exploring the role of SF in the cultural life of the late Qing dynasty.1 During this period, Chinese SF and utopian texts explored notions of “Chineseness,” modernity, and human nature.2 Several key intellectual figures of the period concerned themselves with SF. Both the great Qing statesman Liang Qichao 梁啟超 (1873–1929) and the great writer Lu Xun 魯迅 (1881–1936) thought that SF, particularly that by Jules Verne, would help spread modern Western knowledge into China.3 By 1919, at least fifty SF titles had been translated into Chinese in both books

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and magazines; they appeared under the rubric of “science fiction”—kexue xiaoshuo—term that was not yet in general use in the West.⁶ These translations focused on particular authors and themes, and especially on technological fantasies. As the SF author and editor Xu Nianci (1875–1908) remarked, their plots all originated in a scientific ideal of transcending nature and promoting evolution. Readers of this literature rejected indigenous literature grounded in the traditional sciences as “un-scientific.”⁷ Another important element was utopianism, prompted by early translations of Edward Bellamy’s Looking Backward (1888).⁸ Utopianism was central to Liang Qichao’s vision of a revitalized Confucian China, and his unfinished novel Future of New China has been considered the origin of Chinese SF.⁹ Liang’s novel drew on theories of evolution and confidence in national rejuvenation, which began to dominate modern Chinese intellectual culture at the beginning of the twentieth century. It influenced several other early twentieth-century utopian works.¹⁰ Common to Liang and these other works was the view that fiction could both civilize and imagine a future for a China defeated by the Opium War and partitioned by Western powers. As Li Boyuan (1867–1906) put it in his founding manifesto for the magazine Xiuxiang xiaoshuo 繡像小説 (Illustrated fiction), Western countries used fiction to “civilize their people” through writers who analyze the past, predict the future, and use their insights to awaken the populace.¹¹

Over the ensuing years, utopian and science fiction drifted apart. By the 1950s, SF was “science fantasy fiction” (kexue huaxiang xiaoshuo 科學幻想小說), itself a sub-

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⁶ This term first appeared in the table of contents of Liang Qichao’s literary magazine Xin Xiaoshuo 新小説 [New fiction], first published in Japan in 1902. See Issacson, Celestial Empire (cit. n. 3), 7–8.

⁷ See Wang, Fin-de-Siècle Splendor (cit. n. 3). 256. Translation of SF into Chinese declined, but then revived after 1949, with yet more translations of Jules Verne and a substantial number of Russian works. It was only in the early 1980s that a wider range of SF was translated into Chinese, including Ray Bradbury, Arthur C. Clarke, and Isaac Asimov. See Jiang Qian, “Translation and the Development of Science Fiction in Twentieth-Century China.” Sci. Fict. Studies 40 (2013): 120–1.

⁸ Jiang, “Translation” (cit. n. 7), 116–7. Further details appear in Jiang’s 2006 PhD dissertation from Fudan University, which is cited in “Translation,” but unavailable to this author.


¹⁰ Wu Jianren 吳新仁, Xin shihou ji 新石頭記 [The new story of the stone] (1908; repr., Guangzhou: Huacheng chubanshe, 1987). Also first published in 1908 was Yang Ziyuan 楊致遠, Xin jiuyuan 新紀元 [New era] (1908; repr., Nanning: Guangxi shifan daxue chubanshe, 2008); this was written under the pseudonym Bi heguan zhuren 碧荷館主人 [Master of the Saphire Lotus House]. Wu Jianren lived from 1866 to 1910, and Yang Ziyuan from 1871 to 1919. Lu Shi 陸士誥 (1878–1944) wrote Xin Zhongguo 新中國 [New China] (Beijing: Zhongguo youyi chuban gongsi, 2009), which was originally published in 1910. For further details, see Lorenzo Andolfatto, “Paper Worlds: The Chinese Utopian Novel at the Beginning of the Twentieth Century, 1902–1910” (PhD diss., Università Ca’ Foscari Venezia [Ca’ Foscari University, Venice], 2015); Douwe Fokkema, Perfect Worlds: Utopian Fiction in China and the West (Amsterdam, Neth., 2011); Mikael Huss, “Hesitant Journey to the West: SF’s Changing Fortunes in Mainland China,” Sci. Fict. Studies 27 (2000): 92–104; Jiang Jing, “Creating Humans” (cit. n. 4); Jiang, “Translation” (cit. n. 7); Song, “Chinese Science Fiction” (cit. n. 3); Wang, Fin-de-siècle Splendor (cit. n. 3); and Wang Dun, “The Late Qing’s Other Utopias” (cit. n. 3).

genre of “science belles-lettres” (kexue wenyi 科学文藝). Both were distinct from the category of “utopian fiction” (lixiang xiaoshuo 理想小說). After the founding of the People’s Republic of China in 1949, the agenda of Chinese science fiction was set first by Marxism, and then Maoism. Marxist priorities drew on Soviet theories, according to which science fiction should concentrate on describing two things: (1) the scientific imagination as the source of technoscientific development, and (2) the imagined future of communist society. Government campaigns for “Marching toward Science” (xiang jinjun 向科学进军) in the mid-1950s promoted both science fiction and popular science, although between 1949 and 1966 Chinese science fiction focused on short stories aimed at young readers, with few works for adults being published. Since the late 1950s, science fiction has been designated in Chinese by the term kexue huanxiang 科学幻想 小说 or science fantasy fiction. It falls under the broader category of kexue wenyi, “science belles-lettres,” which included all “artistic” science propaganda. Kexue wenyi in turn was a subcategory of “science popularization” (kexue puji 科学普及). All were linked to the Chinese Association for the Popularization of Science (Zhongguo Kexue Puji Xiehui 中國科學普及協會), founded in Shanghai in 1978. This science popularization was aimed at an audience of children and young people. The narratives were linear and action oriented, conspicuously included children, and first appeared in specialized children’s magazines and publishing houses. However, the “fantasy” content of this genre was strictly limited to the scientifically plausible, a point that is significant for comparison with the use of indigenous Chinese “tales of the strange” (discussed below). Given its primary interest in science education, this period produced little in the way of either indigenous SF or translations of foreign work. As Wu Dingbo has observed, these productions share several common traits: providing science education through a cast of scientist characters, using patriotism and optimism to resolve conflicts, and settings in a near and—by implication—possible, future.

During the Cultural Revolution (1966–76), SF disappeared from China, reappearing with a vengeance in the 1980s. This was the Chinese “new wave,” which rejected both propaganda and utopianism. Song Mingwei identifies the key year as

14 For accounts of this situation, see Wu Yan, “‘Great Wall Planet’” (cit. n. 13); and Rui Kunze [Wang Rui 王瑞], “Displaced Fantasy: Pulp Science Fiction in the Early Reform Era of the People’s Republic Of China,” East Asian History 41 (2017): 25–40.
16 Wu Dingbo and Patrick D. Murphy, Science Fiction from China (New York, N.Y., 1989), xxxvi.
17 This period also saw the publication of Rao Zhonghua’s 廖忠華 Zhongguo Kexue Xiaoshuo Daquan 中國科幻小說大全 [Compendium of Chinese science fiction] (Beijing: Haiyang chubanshe, 1982), which subsequently became a standard sourcebook for the subject. Examples of this new wave include Tong Enzheng 諸恩正, “Shanhu Dao Shang de Siguang” 珊瑚島上的光 [Death ray on a coral island], Renmin wenxue 人民文学 (August 1978): 41–58; Zheng Wenguang 鄭文光, “Feixiang Rennazuo” 飛向人馬座 [Flying to Sagittarius], Shijie kehuan bolan 世界科幻博物 [World scifi expo], May 2005, originally published 1979; Wang Xiaoda 王曉達, “Bing xia de meng” 冰下的夢 [Dream under the ice], in Wang Xiaoada yuan: Bing xia de meng 王曉達卷: 冰下的夢 [Collecting short stories of Wang Xiaoada: Dream under the ice], eds. Dong Renwei 江仁威 and Yao Haijun 翁海軍 (Beijing: Shijie huaren kehuan xie huizu bian 世界華人科幻協會編), World Chinese Science Fiction Associ-
1989—the year of the Tiananmen massacre and the collapse of the democracy movement. Several of these writers pursue “hard science” themes deployed in socially complex and nuanced settings. The three most prominent of these writers are Liu Cixin [Liu Cixin 刘慈欣, Wang Jinkang 王晋康, and Han Song 韩松]. Liu Cixin’s Three-Body Problem (Santi 三体) trilogy imagines a disastrous scenario of the consequences of reckless alien contact, beginning during the Cultural Revolution and ending in a distant future of intercivilizational and interdimensional warfare.18 Wang Jinkang also focuses on science, but in the context of ethics.19 Han Song addresses problems of society and culture, and the implications of science for society.20 China and Chinese nationalism remain prominent themes, with China literally saving the world in several plot lines.21 But younger new wave Chinese science fiction also offers an indirect critique of government policies (in sometimes dystopian visions), the human implications of technology, and issues of censorship and government control.22

Other authors are more experimental, and draw on history and legend, sometimes combined with time travel. For example, Zhao Haihong 赵海虹, one of the few women authors of Chinese SF, also has a longstanding interest in Chinese short story genres and martial arts fiction.23 Fei Dao 飞氘 imagines Confucius returning to Mount Tai
to understand the history of Chinese civilization.\textsuperscript{24} Xia Jia 夏笳, another female SF writer, draws on themes from legend and religion in novels such as The Demon-Enslaving Flask (2004), Carmen (2005), and Dream of Eternal Summer (2008); the last is a love story between an immortal and a time traveler.\textsuperscript{25} Zhao Haihong, Fei Dao, and Xia Jia have academic backgrounds, which link them both to the writing of SF and to its reception through both teaching and critical studies.\textsuperscript{26} While these authors do not explicitly draw on the traditional Chinese sciences, they come closer to it. At the same time, in a parallel SF universe in Hong Kong, Ni Cong 倪聰 (1935–), writing under the name Ni Kuang 倪匡, published the Wisely (or Wesley, Wei si li 衛斯理) series of some one hundred and fifty novels between 1963 and 2004. They included both SF and martial arts elements, and Ni was a close friend of the martial arts writer Louis Cha (discussed below).\textsuperscript{27}

In summary, early twentieth-century SF in China, both indigenous and in Western translations, was focused on themes of evolution and technology, with specific interest in helping China gain scientific and technological expertise in the wake of its defeats in the Opium War. While it included some of the recognized “classics” of Western SF, others were conspicuously absent, including Mary Shelley’s Frankenstein (Kexue guairen 科学怪人, literally “science madman”), which would have been entirely inconsistent with the priorities behind early Chinese interest in SF. The Maoist period was equally preoccupied with (Western) science, but with a marked shift from interest in the power of fiction to promote social change, toward a narrower view of SF as a tool of science education. Liang Qichao’s call for a science-fictional literature of national renewal had all but disappeared, leaving only the science. Since 1989, SF has flowered in China, free from earlier constraints. In some cases—notably Liu Cixin’s Three-Body Problem—it has retained an orientation toward science. But in all these periods, “science” is unquestionably understood as modern Western science. What happens if we look again at themes from Chinese philosophy and from the indigenous Chinese sciences?

\section*{SF AND THE TRADITIONAL CHINESE SCIENCES}

While a defining feature of the late Qing emergence of Chinese SF was its close engagement with modern science, as Fan Fa-ti has pointed out, historical actors—including early twentieth-century Chinese scientists, and readers and writers of early Chinese SF—wrestled with binary concepts such as traditional/modern and Chinese/Western; these binaries and categories informed their practices as producers and as

\textsuperscript{24} Fei Dao 飛氘, “Yilan zhong shan xiao” 一览众山小 [A list of small mountains], Kehuan shijie 科幻世界 [Science fiction world], August 2009.
\textsuperscript{25} Xia Jia, “Yongxia zhi meng” 永夏之夢 [Dream of eternal summer], Kehuan Shijie [Science fiction world], September 2008.
\textsuperscript{26} Zhao Haihong is a professor at the Institution of Foreign Languages of Zhejiang Gongshang University. Jia Liyuan (Fei Dao) holds a PhD in comparative literature from Tsinghua University. Wang Yao (Xia Jia) holds a PhD in comparative literature and world literature from the Department of Chinese, Peking University (2014), and is currently a lecturer of Chinese literature at Xi’an Jiaotong University.
\textsuperscript{27} I am grateful to Bill Mak for calling this series to my attention. Several of the books have been adapted for film and television, including the films The Legend of Wisely (1987), The Cat (1992), and The Wesley’s Mysterious File (2002); and the television series The New Adventures of Wisely (1998) and The “W” Files (2004).
readers of both science and SF. Given these orientations, it is no surprise that the authors and audiences of late Qing SF described other veins of fantastic indigenous literature as "mythology" or "superstition." But we are not obliged to base a contemporary history of Chinese SF solely on these assessments.

Debates about the history of science in China, including the question of where "science" stood in indigenous hierarchies of knowledge, began with the pioneering work of Joseph Needham (1900–95). Needham approached the problem of the history of science in China by trying to fit the Chinese scientific tradition into the categories of twentieth-century Western science. Many later historians of science in China, including several of Needham's own close collaborators, later rejected this "universalist" approach as anachronistic and culturally inappropriate. Part of the problem, as Nathan Sivin argues, is that indigenous Chinese accounts focused on specific sciences—quantitative and qualitative—rather than on any unified notion of "science." In his taxonomy of the traditional Chinese sciences, Sivin distinguishes three quantitative and three qualitative sciences. Most important for Chinese SF is the qualitative science of medicine, which included "nurturing life," longevity, and alchemy (discussed below). These three themes link directly to immortality themes in SF, but—crucially—they also link to other Chinese literary genres. Philosophical texts include references to interspecies transformation and space/time travel.

The historical development of the Chinese sciences has been extensively explored by historians of science. Some of these studies do not inform SF but are important to mention in order to demonstrate the variety and development of the Chinese sciences.


For example, in mathematics, they include studies of early Chinese notions of demonstration and proof (Karine Chemla’s work is an example), as well as the translation and study of complex Chinese mathematical works, including texts excavated from tombs. In astronomy, they include studies of archeoastronomy and the unparalleled record of Chinese astronomical records and observations. And in medicine, they include studies of nurturing life and longevity practices; Chinese botany and materia medica; the history of medicine; and translation of key texts, both classical and contemporary. The rich history of indigenous Chinese sciences puts us in a position to ask a different set of questions, and to imagine an alternative past. What would Chinese SF have looked like if writers had taken the indigenous sciences of their own tradition seriously?

TRAVEL IN SPACE AND TIME

Space and time travel are classic motifs of Western SF. They first appear in China in the great Daoist fourth-century (BCE) classic, the Zhuangzi. One passage describes a “spirit person” who appears to practice diet and breath regulation—“He does not eat the five grains but sucks in the wind and drinks dew.” These practices are powerful: “He roams beyond the world” (literally, “the four seas”), and when he concentrates his spirit, it protects living things from plagues and makes the grain ripen.

This time paradox is introduced as an analogy to a category of error, rather than as a description of actual time travel. The same paradox reappears in a list of paradoxes attributed to Zhuangzi’s friend (and logical sparring partner) Hui Shi: “I go to Yue today and arrive yesterday.”


33 See Needham and Wang, Science and Civilisation, vol. 3 (cit. n. 29); and David Pankenier, Astrology and Cosmology in Early China: Conforming Earth to Heaven (Cambridge, UK, 2013).


35 Zhuangzi jishi 莊子集釋 [Collected explanations of the Zhuangzi] (Beijing, 1961), 1:28; compare A. C. Graham, Chuang tzu: The Inner Chapters (London, 1981), 46. Translations from the Zhuangzi are my own, but are indebted to Graham’s translation.

36 未成子心而有是，是今日過越而昔至也。是以魚有為有，Zhuangzi jishi 2:56; compare Graham, Inner Chapters, 51 (both cit. n. 35).
today yet arrive yesterday.”37 Here the travel to Yue (contemporary Vietnam) is posed as a paradox, and the idea of time travel is clearly articulated. Time travel plots feature in some new wave Chinese SF, although very infrequently in comparison to the West, where time travel is an early and prominent theme.38 The genre in which time travel comes into its own for China is, in fact, the historical television drama. The first show of this genre, Shen Hua 神話 (The Myth, 2010), was based on the 2005 Jackie Chan movie of the same name.39 Time travel plots became so popular that the State Administration of Radio, Film, and Television eventually banned them on the grounds that they “treated [sic] serious history in a frivolous way.”40 But as New Yorker columnist Richard Brody pointed out, Chinese time-travel plots offer escape—escape from contemporary China to the China of an earlier and perhaps preferable time.41

TRANSFORMATION STORIES

If time travel can be found in modern historical Chinese drama, the idea of one species or sex transforming into another also emerges in an unexpected genre. This motif is found in several different early stories, which range from accounts of human origins, the genre of zhiguai, and Buddhist reincarnation stories. Early twentieth-century Chinese interest in theories of evolution also prompted a debate on “spontaneous generation.” Hu Shih 胡适 (1891–1962), one of the great scholar-diplomats of twentieth-century China, and a student of John Dewey at Columbia University, identified a narrative from the Zhuangzi as an example of a possible early theory of biological evolution. In this elaborate account of how species transform into one another under the influences of different environments, organisms start from “minute beginnings,” and when they reach the boundary of water and land they become algae. They transform again when they germinate in elevated places, and when they reach fertilized soil they develop into plants. Here more transformations occur; roots become grubs, and their leaves become butterflies, which in turn transform into insects, which transform into birds. A further series of transformations between plants and insects leads to the green 宁 plant. It produces panthers, panthers produce horses, horses produce humans, and humans return to minute beginnings.42 Hu argued that theories of qi introduce issues of potentiality and actuality; if all organisms arise from some kind of elemental and generative qi, it must contain the potential for all later forms, providing the conceptual groundwork for a theory of evolution. Hu used this Zhuangzi passage to argue

37 今日适越而昔来, Zhuangzi jishi 33:1102; compare Graham, Inner Chapters, 283 (both cit. n. 35).
38 Qian Lifang 钱莉芳, Tian yi 天意 [The will of heaven] (Chengdu, 2004); and Qian, Tian ming 天命 [The command of heaven] (Changchun, 2011). I am grateful to my PhD student Fan Yilun for calling these works to my attention.
39 The Myth was produced in Hong Kong in 2005, directed by Stanley Tong, and starred Jackie Chan, Tony Leung Ka-fai, Kim Hee-sun, and Mallika Sherawat (Culver City, Calif., Sony Pictures Home Entertainment, 2007), DVD.
40 See Robert G. Price, Space to Create in Chinese Science Fiction (Kaarst, Ger., 2017), 70.
42 Zhuangzi jishi 18:624–5; compare Graham, Inner chapters, 21–2 (both cit. n. 35); and Hu Shih, “The Development of the Logical Method in Ancient China” (PhD diss., Columbia University, 1917), 135–6, also published in Shanghai, 1922.
that Warring States (475–221 BCE) thinkers recognized organic continuity throughout the gradations of the animate world.\footnote{Hu, “Logical Method” (cit. n. 42), 121–2; compare Hu Shi 胡適, “Xian Qin zhuzi jinhualun” 先秦諸子進化論 [Theories of evolution in the philosophers before the Qin period], Kao xue 考學 [Study of antiquity] 3, no. 1 (1917): 19–41. This point is explicitly echoed in Joseph Needham and Donald Leslie, “Ancient and Mediaeval Chinese Thought on Evolution,” Bulletin of the National Institute of Science of India 7 (1955): 1–18, which quotes Hu. For discussion of debates on spontaneous generation in early twentieth-century China, see Fan Fa-ti, “The Controversy over Spontaneous Generation in Republican China: Science, Culture, and Politics,” in Routes of Culture and Science in Modern China, ed. Benjamin Elman and Jing Tsu (Leiden, Neth., 2014), 209–44.}

Other types of transformation stories appear in the indigenous genre, zhiguai 志怪, “tales of the strange” or “records of anomalies.” These accounts became prominent toward the end of the Han, Six Dynasties, and Tang periods (200–900 CE), and are classified by Chinese sources as history, not fiction.\footnote{For introductions to zhiguai and anomaly literature, see Robert Ford Campany, Strange Writing: Anomaly Accounts in Early Medieval China (Albany, N.Y., 1996); and Hu Yinglin 胡應麟 (1551–1602) rethought the traditional genre of “fiction,” literally “small talk” (xiaoshuo 小說), which he considered too vague and re-worked into six distinct genres. The first two deal with the supernatural—anomaly accounts (zhiguai) and “prose romances of the marvellous” (chuanqi 傳奇), a genre that dates from the Tang dynasty.\footnote{For details of these story types, see Fontaine Lien “The Intrusion Story and Lessons from the Fantastic: A Cross-Cultural Study” (PhD diss., Univ. of California, Riverside, 2014); Liu Mingming, “Theory of the Strange towards the Establishment of Zhiguai as a Genre” (PhD diss., Univ. of California, Riverside, 2015); and Lisa Raphals, “The Limits of ‘Humanity’ in Comparative Perspective: Cordwainer Smith and the Soushenji,” in World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution, ed. Congshu jicheng tongmi (Hong Kong: Kit-sze Chan (Hong Kong, 2005), 143–56.}\footnote{Campany, Strange Writing (cit. n. 44), 52–79.}} They extend the boundaries of the human by portraying both humans and other animals as part of a continuous moral community, depicting transformation between humans, animals, plants, and spirits, in which animals in particular are capable of reward and retribution. They include narratives of reincarnation and human interactions with gods, ghosts, and spirits; but many are focused on crossing boundaries of both species and sex.\footnote{The most important text that includes gender transformation accounts is the fourth-century anomaly account Zeng yu, 增愚 [Records of an inquest into the spirit realm] by Ban Bao 博寶 (335–49 CE), in Congshu jicheng tongmi [Complete collection of books from various collectanea], vols. 2692–2694, ed. Wang Yunwu 王雲武 (Shanghai: Shanghai wenshu guan, 1935–40). For details of these story types, see Raphals, “The Limits” (cit. n. 44).\footnote{The four other genres are anecdotes (za lù 隨錄), miscellaneous notes (cong tan 素談), researches (bian ding 辨訂), and moral admonitions (zhen gui 範規). See Lu Xun 魯迅 (Zhou Shuren 周樹人), Zhongguo xiaoshuo shilüe 中國小說史略 [A brief history of Chinese fiction] (1930; repr., Shanghai 2001), 4; and Lu Xun, A Brief History of Chinese Fiction, trans. Gladys Yang and Yang Xianyi (Beijing, 1959), 5.}} Some describe partial transformations, such as an animal growing extra or inappropriate body parts, while others describe transformations between species. Still others recount cross-species matings and anomalous births, such as one species giving birth to another, or babies born with multiple heads or feet. Other transformations involve gender.\footnote{Especially interesting are the highly normative accounts of reward and retribution between humans and animals, where animals behave according to the standards of human morality, sometimes better than humans do. Again, these stories do not relate easily to Western categories of SF. Zhiguai was one of several genres that dealt with the supernatural in late imperial China. The Ming dynasty bibliographer Hu Yinglin 胡應麟 (1551–1602) rethought the traditional genre of “fiction,” literally “small talk” (xiaoshuo 小說), which he considered too vague and re-worked into six distinct genres. The first two deal with the supernatural—anomaly accounts (zhiguai) and “prose romances of the marvellous” (chuanqi 傳奇), a genre that dates from the Tang dynasty.} Especially interesting are the highly normative accounts of reward and retribution between humans and animals, where animals behave according to the standards of human morality, sometimes better than humans do.

## The Limits of Humanity in Comparative Perspective: Cordwainer Smith and the Soushenji

The most important text that includes gender transformation accounts is the fourth-century *Soushen ji* 聖神記 [Records of an inquest into the spirit realm] by Ban Bao 博寶 (335–49 CE), in *Congshu jicheng tongmi* [Complete collection of books from various collectanea], vols. 2692–2694, ed. Wang Yunwu 王雲武 (Shanghai: Shanghai wenshu guan, 1935–40). For details of these story types, see Raphals, “The Limits” (cit. n. 44).

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The popularity in both text and the visual arts has been noted by Huss and Liu, as well as by many scholars of Chinese literature.

The point for purposes of this discussion is that modern Chinese language has inexorably connected modern Chinese narratives and chuanqi. Cao Xueqin's *Hong Lou Meng* (1880), 2:1–16, translates the story title as “The Lo-cha Country and the Sea Market.”

In contrast to the theme of space and time travel, both late Qing dynasty and contemporary new wave science fiction draw on chuanqi. Human-animal hybrids appear in the cat-headed citizens of the novel by Lao She, *Mao Cheng Ji* (Cat country). Another important SF element that first appears in chuanqi are some of the important seeds of utopian literature in China. Several chuanqi stories involve nonexistent utopias or dystopias. For example, one story in *Liaozhai zhiyi* (Strange tales from a Chinese studio), by Pu Songling 蒲松齡 (1640–1715), opposes a dystopian “City of Ogres” to an idealized “City under the Ocean.”

Another example is the novel by Wu Jianren 吳趼人 (1866–1910), *Xin Shi Tou Ji* 新石頭記, 1908 (New story of the stone), which is one of the great novels of late Qing China—a utopian account of the continuing travels of Jia Baoyu, the main character of the original *Shitou Ji* 石頭記 (Story of the stone), after the end of the original novel. Baoyu encounters a “Civilized


52 Also known as the Dream of the Red Chamber [Honglou meng 紅樓夢], the *Story of the Stone*, by Cao Xueqin 曹雪芹 (1791), is considered one of the four classic novels of China.
Realm (wenming jingjie 文明境界) with futuristic technology, including medical lenses that image bone and soft tissue, underground trains, underwater wireless telephones, and submarines that fire “silent electric cannons” (wusheng dianpao 無聲電炮). Yet its vision of moral governance is Confucian—its ruler is the benevolent monarch Dongfang Qiang (Strength of the East). This realm’s districts are named for traditional Confucian virtues, including compassion (ci 慈), filiality (xiao 孝), loyalty (zhong 忠), benevolence (ren 仁), and trustworthiness (xin 信).53

MODES OF IMMORTALITY

Extreme longevity and immortality are staples of Western SF, and unsurprisingly, the Encyclopedia of Science Fiction describes immortality as one of the basic motifs of speculative thought.54 Chinese medical and scientific traditions have been concerned with a spectrum ranging from health to longevity, and including—in some cases—attempts at literal, physical immortality, for some two millennia. Two particular areas are important here. One is nurturing life (yang sheng 養生), an interest of common ground for philosophers and practitioners of medical arts, which encompassed a range of practices for preserving one’s person, self, or essential nature. The other are accounts of Daoist adepts who were also physicians.

The term yang sheng first appears in the Zhuangzi, which makes fun of a tradition of exercise for therapy and health known as daoyin 導引 (pulling and guiding). The Zhuangzi contrasts real sages to yang sheng practitioners who “blow out, breathe in, old out, new in.” Caring only for longevity, these are the practitioners of “guide-and-pull” (dao yin) and “nourish the body” (yang xing 養形).55 In the Han dynasty, “nurturing life” techniques became a major concern of the so-called Recipe Masters (fang shi 方士) of the Han court. This group included physicians, compounders of elixirs of immortality, and magicians whose spells and recipes involved curses, love charms, and poisons. Fang texts on nurturing life include methods for absorbing and circulating qi in the body, for example, and breathing and meditation exercises, diet, drugs, and sexual techniques. Medical texts excavated from Han dynasty tombs also document these practices. A corpus of medical manuscripts excavated from Mawangdui (Changsha, Hubei, 169 BCE) includes six medical manuscripts specifically concerned with nurturing life.56 One, “Drawings of guiding and pulling” (Daoyin tu 導引圖), is a series of forty-four drawings of human figures performing exercises. Some are described in another excavated text, the “Pulling book” (Yin shu 引書), ex-

53 See Wang Dun, “The Late Qing’s Other Utopias” (cit. n. 3), 38. The New Story of the Stone was initially serialized under the pen name “Lao Shaonian” 老少年 [Old youth] in the newspaper Nanfang Bao 南方報 in 1905 (July 21 to November 29) as shehui xiaoshuo 社會小說 [Social fiction]. It was published as an illustrated book in 1908 by Shanghai Reform Fiction Press [Shanghai gailiang xiaoshuo she 上海改良小說社] under the pen name Wofo Shanren 我佛山人, and labeled as lixiang xiaoshuo 理想小說 [fiction of ideals].


55 Zhuangzi jishi (cit. n. 35), 15:535.

56 For a translation of these medical texts, see Harper, Early Chinese (cit. n. 34).
ancient recipes and techniques associated with fang shi.

Longevity practices were closely linked with traditional Chinese medicine. Three important early physicians were also Daoist scholars who were concerned with longevity practices. Ge Hong 葛洪 (283–343 or 363 CE) was the first of several explicitly Daoist physicians to write about the practice of alchemy. He initially studied the Confucian classics but became interested in immortality techniques. Ge Hong gave up a military career and political life in order to devote himself to immortality practices, and eventually settled at Mt. Luofu in Guangxi where he studied alchemy until his death. He was the first to systematically describe the history and theory of Daoist immortality techniques such as “preserving unity” (shou yi 守一), circulating energy (xing qi 行氣), “guiding and pulling” (dao yin), and sexual longevity techniques (fang zong 房中). As an alchemist, he experimented with drugs and minerals. Tao Hongjing 陶弘景 (456–536), the effective founder of Shangqing (Highest Clarity) Daoism, held several court positions under the Liu Song and Qi dynasties, but eventually settled at Mt. Luofu and practiced alchemy.

To summarize, most of these texts can be described as part of a yang sheng culture, which offered and emphasized control over physiological processes of the body and mind that were understood as transformations of qi. These technical arts form a continuum with philosophy because their transformations were understood as self-cultivation in the coterminous senses of moral excellence, health, and longevity (rather than medical pathology), and physiological transformation through the manipulation of qi. Such views informed Warring States accounts of dietary practices, exercise regimens, breath meditation, sexual cultivation techniques, and other technical traditions associated with fang shi.

There is also evidence for yang sheng in lists of lost book titles. The Hanshu Bibliographic Treatise includes titles of lost medical works on nurturing life, health, and longevity, such as Shen Nong Huangdi shi jin 神農黃帝食禁 [Food prohibitions of Shen Nong and Huangdi], Huangdi sanwang yangyang fang 黃帝三王養陽方 [Recipes of Huangdi and the three sage-kings for nurturing Yang], and the Huangdi zazi bu yin 黃帝雜子步引 [Stepping and pulling book of Huangdi and other masters]. See Hanshu 漢書 [Standard history of the Han dynasty] (Beijing, 1962), 30:1778–79. For further information on this material, see Lisa Raphals, “Chinese Philosophy and Chinese Medicine,” in Zalta, Stanford Encyclopedia (cit. n. 31) (entry first published 28 April 2005), https://plato.stanford.edu/archives/spr2017/entries/chinese-phil-medicine/.


nastics. He was educated in both early Daoist traditions and the works of Ge Hong, and was actively engaged in mostly unsuccessful attempts to produce alchemical elixirs.

Sun Simiao 孫思邈 (581–682), the author of two major medical works that are still consulted and a work on Daoist longevity prescriptions, is still worshiped as the “Medicine Buddha” and “King of Medicine” (yao wang 藥王).

He also wrote several works on Daoist alchemy, which he is believed to have practiced (he died at the age of 101). Taiqing Danjing Yaojue 太清丹經要訣 (Essential instructions from the Scripture of the Elixirs of Great Clarity), ca. 640, is an anthology of some thirty selected methods.

Sun Simiao’s Shiyang lun 揚論 (Essay on preserving and nourishing life) gives monthly advice on food, sleeping habits, and good and ill auspices for various types of action. In summary, Sun Simiao, like Ge Hong and Tao Hong-jing, combines explicit interests in Daoist philosophy, medicine, materia medica, and alchemy. All these authors focused, to varying degrees, on longevity and immortality.

But despite its importance in philosophy and medicine, immortality is not a major trope in Chinese SF, with the single exception of Xu Nianci’s New Tales of Mr. Braggadocio (Xin faluo xiansheng tan 新法螺先生譚), the story of a man whose body and soul are separated in a typhoon. His body sinks toward the center of the earth, and his soul travels to Mercury and Venus. On Mercury, it watches the transplantation of rudimentary plants and animals appear at the same time, refuting biologists’ claims that plants preceded animals in evolution. Immortality appears when the protagonist’s body, hav-

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62 Sun Simiao’s Qian jin fang 千金方 [Prescriptions worth a thousand in gold] (652 CE) was a comprehensive treatise on the practice of medicine, including herbal remedies, the history of medicine, and the first Chinese treatise on medical ethics. The supplement (Qian jin yi fang 千金翼方, 682 CE) records some thirty years of Sun’s own experience, with special interest in folk remedies.


65 Xu Nianci 徐念慈, Xin faluo xiansheng tan 新法螺先生譚 [New tales of Mr. Braggadocio] (Shanghai, 1905; reprinted in Zhongguo jindai wenxue daxi 1840–1929: xiaoshuoji 中國近代文學大系 1840–1929: 小說集 [A treasury of modern Chinese literature 1840–1929: fiction collection], ed. Wu Zuxiang 吳祖繡 et al., vol. 6 (Shanghai, 1991), 323–43, on 325; Xu Nianci’s New Tales of Mr. Braggadocio was translated by Nathaniel Isaacson in Renditions 77/78 (2012): 15–38; see this publication for bibliographic details on additional publications of New Tales and stories of Mr. Braggadocio preceding it. It was also published under the pseudonym Donghai Juewo 東海覺我 (Awakened One from the Eastern Sea), and included in The New Braggadocio [Xin faluo 新法螺], by Fiction Forest Press [Xiaoshuo lin she 小說林社] in Shanghai in 1905. A founder of the press, Xu was one of the editors of the journal Xiaoshuo lin 小說林 [Forest of novels]. The novel is a sequel to the novel by Iwaya Sazanami 岩谷小波 (1870–1933), Tales of Mr. Braggadocio (Hora Sensei 法螺先生) translated into Chinese by Bao Tianxiao 包天笑 (1876–1973) as Faluo xiansheng tan 法螺先生譚 [Tales of Mr. Braggadocio] and Faluo xiansheng xu tan 法螺先生續譚 [Continued tales of Mr. Braggadocio]. For details see Isaacson, “New Tales.”

66 Chinese has no word that is equivalent to the English “soul.” Two terms in use in popular religion and medicine refer to a “cloud soul” (hun 魂) and a “white soul” (po 灵). For “soul,” Xu Nianci uses the unusual term linghun 靈魂, which he explains thus: “I have no word for it, but it would be referred to in the common language of religion as the ‘soul.’” Xu uses the terms “soul-body” (linghun zhi shen 靈魂之身) and “corporeal-body” (quqiao zhi shen 穆腦殻之身). He avoids the strong mind-body dualism of some Western traditions and apparent mind-body holism of traditional China by clearly referring to the linghun soul as a kind of body [shen 身]. For the semantic field of Chinese words for mind, soul, and spirit, and for discussion of issues of mind-body dualism in China, see Lisa Raphals, “Body and Mind in Early China and Greece,” Journal of Cognitive Historiography 2 (2015): 132–82.
ing arrived at the center of the earth, encounters a quasi-immortal man. The story imitates—and quotes—the *Zhuangzi* (discussed above), but immortality and rejuvenation are passing plot elements and not the central concern of the text. Immortality themes sometimes appear in new wave writing, but in new guises that are still closely linked to science—for example, in Fei Dao’s “The Demon’s Head,” where a scientist preserves the brain of a general assassinated conveniently close to a neurological research institute. But even here, his “immortality” arises from neuroscience, and not from immortality practices.

CONCLUSION

In conclusion, we are now in a position to answer some of the questions with which we began. First, what counts as Chinese SF? Second, what “science” did it draw on? Third, how, if at all, can we connect a Chinese SF born from scientific modernity with a possible alternate Chinese SF that arises from deeper Chinese traditions of natural philosophy?

In all its forms, from its origins in the late nineteenth century, at least until the new wave, Chinese SF—*kehuan xiaoshuo*—has been a modernist phenomenon that emerged out of interaction with the West; and it seems clear that the original Qing dynasty readership understood it this way. Nor was the Maoist version of Chinese SF any less indebted to Western science and technology, although for slightly different reasons. That situation at least partially continues under the new wave, though some authors have begun to explore more widely. As for the second question, the science that Chinese SF drew from was clearly both the “science” (a unified notion of science) and particular sciences of the modern West. So, Chinese SF has been inextricably linked to modern science in ways that largely preclude the indigenous sciences. And there are further demarcations of genre, which contrast the “Chinese SF” (*kehuan*) based on Western science to “fantasy” (*qihuan*). *Qihuan* includes both Chinese supernatural (*xuanhuan*) and Western magical fiction (*mohuan*). *Xuanhuan* might appear to accommodate the traditional Chinese sciences, but it excludes Daoist immortality stories (*xiuzhen* 修真), an important part of the landscape of the traditional Chinese sciences. And both *kehuan* and *qihuan* exclude time travel stories (*chuanyue* 穿越). Some of these issues parallel arguments about the boundaries between SF, fantasy, and horror in Western genres. But there seems to be no easy mapping between Chinese and Western SF and the other genres with which they coexist.

These problems bring us to the third question of how, if at all, a Chinese SF born from scientific modernity might connect to a Chinese SF rooted in Chinese traditions of natural philosophy. One possibility is that at least some new wave authors will reject the premises of early Chinese SF from the late Qing and early twentieth century, and extend their reach beyond its concerns. Here an interesting divide arises between the very different training of contemporary Chinese “hard SF” and new wave writers.

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The most prominent hard SF writers, Liu Cixin and Wang Jinkang, were trained as engineers—hydroelectric and civil, respectively. By contrast, several new wave writers hold advanced degrees and university positions in literature, and their interests open the prospect of themes from philosophical writing, including that of time travel, transformation, and Daoist immortality motifs.

But neither group has had obvious exposure to themes from the indigenous Chinese sciences, so it is perhaps not surprising that explicit themes from these areas do not appear. Nor do debates about what counts as Chinese SF help clarify the absence of the indigenous Chinese sciences. Some scholars try to trace Chinese SF back to zhiguai, while others date it to the 1930s, 1950s, or even the post-Mao period. An interesting middle ground is offered by Isaacson, who dates it to the late Qing, arguing that it arose in response to an epistemological crisis due to subjugation to European powers and the translation into Chinese of newly emergent Western science fiction. He also argues that an adequate account of the history of SF in China requires an understanding of its relationship to earlier genres. His approach helps explain the absence of the indigenous sciences, which could have been lost under pressure of the two developments noted above that were fundamentally responses to the West. But that situation may change as the agenda of Chinese SF changes.

My goal here is not to argue for zhiguai or chuanqi as the origins of Chinese SF, or to claim that the indigenous sciences inform Chinese SF, which they clearly do not. Rather, Chinese indigenous natural philosophy and sciences suggest an alternative literary path that could happen, and perhaps already is happening. In conclusion, relations between Chinese literary genres, their indigenous scientific traditions, the introduction of Western science, and the introduction and development of science fiction all form a complex network that warrants further study and should not be oversimplified.

70 For discussion of translations of Western science fiction into Chinese in the early twentieth century, see Jiang, “Translation” (cit. n. 7); and Isaacson, Celestial Empire (cit. n. 3), 2, 26, 146–80.

Appendix: A Brief Bibliography of Contemporary Chinese SF

Bao Shu 宝树 (pen name of Li Jun 李峻, 1980–)


Chen Qiufan 陈楸帆 [Stanley Chan] (1981–)


**Fei Dao** (pen name of Jia Liyuan 賈立元, 1983–)


**Han Song** 韩松 (1965–)


**He Xi** 何夕 [He Hongwei 何宏偉] (1971–)


**La La** 拉拉 (1977–)


**Ling Chen** 凌晨 (1972–)


**Liu Cixin** 劉慈欣 (1963–).

Liu, Ken (translation)

Mao Boyong 马伯庸 (1980–)

Qian Lifang 钱莉芳 (1978–)

Wang Jinkang 王晋康 (1948–)

Xia Jia 夏笳 (pen name of Wang Yao 王瑶, 1984–)

Zhao Haihong 赵海虹 (1977–)