

***Kexue xiaoshuo*: Science Fiction in the Contact Zone**

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ABSTRACT

This article advocates reading *kexue xiaoshuo* (science novels) as a contact genre embodying a unique subjectivity emerging out of late Qing China's interactions with the world. Taking its cue from Mary Louise Pratt's (1948-) concept of the 'contact zone,' this article adopts a contact approach to recount *kexue xiaoshuo*'s genesis by underscoring an unlikely combination of science and fantasy as interaction and improvisation found in the contact zone. Extrapolating from fictional texts such as *New Story of the Stone* to the shifting epistemological landscape in late Qing reading culture, this article presents *kexue xiaoshuo* as a cultural formation like Pidgin English, which records traces of contention between autochthonous and Western intellectual traditions.

KEY WORDS: *kexue xiaoshuo*, contact zone, science fiction, epistemology, Chinese science fiction

In 1907, a short story entitled “*Zhu shen da huiyi* (The Great Parliament of Gods)” by Bao Tianxiao (1876-1973) was published in the Shanghai-based magazine *Yueyue xiaoshuo* (Monthly Fictions).¹ The story imagines an end-of-year session for the Heavenly Court, where immortals and deities are busy with annual performance reports and plans for the next year. Everything is said to be conducted in proper parliamentary fashion, since “now is the age of preparing to practice constitutionalism, and all institutions must adopt a civilized system. Although the celestial world is separated from our earthly one, both should follow the same principles” (*Da Huiyi* 39).²

Soon, however, all annual reports turn into messages of woe. Zhao Gongming, God of Fortune, as well as vice-lord of the exchequer and minister of commerce for the Heavenly Court, reports the Heavenly Court is in grave financial danger, “people are poor and all the sources of revenue have run dry. We have exhausted all sources of income, and if we continue to

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2. All Chinese sources are translated by the author.

over-spend, the Heavenly coffer will be empty” (Bao 40). New proposals to raise money for the Heavenly Court are also stalled, because, “the sublunary world clamors ‘no taxation without representation’” (*Da Huiyi* 41). While the gods are debating over the fiscal crisis, millions of souls surround the Heavenly Court, demanding justice. It turns out that every year “countless treacherous people sell their lands to foreigners,” resulting in Chinese *genius loci tundi* losing jurisdiction over these lands. Thus, no one is available to hear cases made for dead souls trapped in these now foreign-owned lands. The gods then mention recent negotiations over land purchases allocated for constructing Shanghai electric tram lines. As soon as the issue of electricity is mentioned, Mother of Lightning Dianmu complains that, “now batteries stored in my palace are often stolen, as many market items rely on electricity. The selling of electricity to foreign lands is also a huge problem” (Da Huiyi 44). The heavenly litany of woes goes on. The Dragon King of the East Seas has lost control of his waters to foreign powers, the netherworld is filling up fast because of widespread opium abuse, while heavenly matchmakers, Zhou Gong and Yue Lao, are concerned they may soon be out of a job, with increasing numbers of people in the earthly world embracing the idea of free love. In the end, a proliferation of bombs and pistols stored up by revolutionaries on earth make the Gods so uneasy that the God of Fire proposes constructing an exhibition hall in Heaven for modern weaponry.

The story is billed as a comic one, and these problems experienced by the Heavenly Court are recognizable as thinly veiled ironic projections of late Qing China social issues. As Bao Tianxiao wryly observes in a post-script, this short story consists of “wild guesses based on contemporary situations” (*Da huiyi xu* 6). More importantly, however, humor arises from subtle cognitive mismatching, as the magical world of the immortals is thrown into disarray by things that should clearly not be there. From the political slogan ‘no taxation without representation,’ shouted by American revolutionaries, to modern technoscientific products such as batteries and tram cars, as well as bombs and pistols, an alien world of modernity forces its way onto the familiar topoi of Chinese supernatural

tales. A slight sense of disorientation accompanies the story's satirical edge.

This paper focuses on an epistemological hesitation in the story's narrative, one that arises from gods of celestial realms being juxtaposed with artifacts of modernity. Such a juxtaposition constitutes more than merely the personal quirks of Bao Tianxiao, serving rather as a feature of late Qing writings in general. Similar disorientations can be found in writings that depict China's contact with the outside world, particularly in the nascent genre of *kexue xiaoshuo* (science novels). While intended as a genre to educate the Chinese populace on the wonders of modern science, *kexue xiaoshuo* often mix traditional Chinese narrative elements with wonders of technoscience, such as we find in Bao's short story. This mixing of horizons is so common in *kexue xiaoshuo* as to be pointed out as a weakness of the genre, betraying "the wavering and embarrassment of a genre that is trapped between China and the West, between tradition and modernity, as well as between science and fiction" (Zhang 95). However, such moments of contention between Chinese narrative convention and technoscientific knowledge, referring also to knowledge surrounding artifacts in these narratives, could also be read in a more positive light. They may constitute signs of a new type of subjectivity generated out of such encounters. The worlds *kexue xiaoshuo* conjure consist in hybrid spaces belonging neither to a traditional China nor a Western modernity, but rather to a site wherein the two come into contact, that is—in the contact zone.

The concept of a contact zone was coined by the American critic Mary Louise Pratt (1948-) in her paper "Arts of the Contact Zone" (1991). Subsequently, she elaborated on this concept in her 1992 book *Imperial Eyes: Travel Writing and Transculturation*. Pratt defines a contact zone as:

(...) the space of colonial encounters, the space in which peoples geographically and historically separated come into contact with each other and establish ongoing relations, usually involving conditions of coercion, radical inequality, and intractable conflict" (6).

Such a contact zone:

(...) foreground[s] the interactive, improvisational dimensions of colonial encounters so easily ignored or suppressed by diffusionist accounts of conquest and domination. A ‘contact’ perspective emphasizes how subjects are constituted in and by their relations to each other. It treats the relations among colonizers and colonized, or travelers and ‘travelees,’ not in terms of separateness or apartheid, but in terms of copresence, interaction, interlocking understandings and practices, often within radically asymmetrical relations of power. (7)

While Pratt makes her case by looking into dealings between indigenous people of the Americas and the Spanish Empire, her exegesis provides insight into *kexue xiaoshuo* as an epistemological contact zone. The awkward hitching together of science and fantasy in these texts implies, to paraphrase Franco Moretti, a compromise between Western systems of knowledge and local Chinese narrative forms (58). The historical “copresence, interaction, interlocking understandings and practices” identified by Pratt then become literary maneuvers found in *kexue xiaoshuo* as Chinese writers attempt to acculturate Western knowledge in locally significant ways. The genre’s narrative and epistemological incongruities should not be dismissed as failures to imitate Western models but should rather be acknowledged as indications of the gestation of something new. In other words, the chimera that is *kexue xiaoshuo* highlights epistemological as well as material exchanges giving rise to it. As a product of the contact zone, *kexue xiaoshuo* crystallizes interaction, resistance, and improvisation taking place when, to borrow Theodore Hutters’s expression, China tries to ‘bring the world home.’

A Literary Chimera

As many scholars have noted, the genesis of *kexue xiaoshuo* is isomorphic with China’s entrance into a modern world order dominated by European powers. The gravitational pull of the social-historical crisis of late Qing China compels even fictional genre to contemplate plans of national rejuvenation. David Der-wei Wang argues that, “by imagining and writing out the incredible and impractical, late Qing writers set forth the terms of China’s modernization project, both as a new political agenda and as a new national

myth” (253). In a similar vein, Ming Feng-ying defines late Qing novels as “polygeneric novels,” providing a “creative imaginary space” for literati to “fuse [hybrids of conventional narrative genres] with modern Western ideas in order to produce literary solutions to China’s real-world social crisis” (155). Theodore Hutters underlines late Qing literature’s centrality in China’s project of modernization by pointing out that it both “provides the most attractive packaging to that sense of history required by nationalism” and “presents itself as the keenest example of the paradox of modern Chinese nationalism” (15). Late Qing literature is challenged to “fashion itself from the ‘plentiful store of (...) national recollections and associations,’” and the “denial of the critical weight of this heavy legacy” is also “central to [the reformer’s] modernizing project” (Hutters 15). These scholars consistently point out that late Qing literature crucially breaks new epistemological ground, presenting new knowledge in the name of modernization while maintaining the very Chinese tradition it seeks to modernize.

Nathaniel Isaacson sees the birth of *kexue xiaoshuo* as the combined effect of a “transnational traffic of ideas, cultural trends, and material culture (...) engendered by the presence of colonial powers in China’s economic and political centers” (1). He then draws on studies of European science fiction and imperial imagination to argue that *kexue xiaoshuo* was also born in the shadow of an empire. Inspired by Tanni Barlow’s concept of ‘colonial modernity,’ Isaacson stresses the role of Orientalism and imperialism in shaping the thematic content of *kexue xiaoshuo*. To him, “a central concern for (...) the writers of early Chinese science fiction was whether Western science and science fiction could be coopted to turn the knives of empire upon their wielders, and in so doing, what issues inevitably arose” (7). As such, *kexue xiaoshuo* is one of the textual sites where semi-colonial China confronts imperial powers while attempting to assert itself.

This paper agrees with Isaacson and earlier scholars in stressing *kexue xiaoshuo*’s connection to the question of Chinese modernity as well as wider issues of coloniality. It intends, however, to focus on related but more specific question of how Western learning is imagined and presented in these texts.

For, while *kexue xiaoshuo* takes on the imagination of a collective national future for China in the perilous seas of the modern world, the manner of its first steps should not be taken for granted. *Kexue xiaoshuo*'s maneuvers to co-opt Western science and science fiction involve imagining what lies outside the epistemological and cosmological scope of the Chinese tradition, whilst coming up with a method to make it visible in meaningful ways.

The often-recounted birth story of *kexue xiaoshuo* attests to the genre's connection with an epistemological shift in the late Qing. As one of the genres proposed by Liang Qichao in his call for 'new fictions,' *kexue xiaoshuo*, together with political and philosophical novels, are part of Liang's plan to revitalize the Chinese nation by educating Chinese people through the vehicle of fiction. Literature, as Liang sees it in his "*Lun xiaoshuo yu qunzhi zhi guanxi*" (On the Relationship between Fiction and the Government of the People) plays a utilitarian role, slipping modern knowledge to unsuspecting readers whilst they enjoy a delightful story. This necessity of popularizing modern Western knowledge partly resulted from China's defeat in the First Sino-Japanese war (1894-5), when earlier illusions of mid-century reformers were shattered. These reformers came to realize that China could maintain Chinese learning as an epistemological framework while at the same time reaping practical benefits from Western learning. Thus, an epistemological crisis occurred at the close of the nineteenth century, together with a sense of impending national political crisis. As Jia Liyuan sees it, "the pressure of a competition between races" forced late Qing literati to "accept new ways of understanding the world." As a result, "When contemporary new knowledge begins to discipline and incorporate pre-scientific illusions, as well as encourage people to explore the unknown with new methods, science fiction is born" in China (17). However, presenting new knowledge as one that "disciplines[s] and incorporate[s] pre-scientific illusions" might be an oversimplification, as it is not immediately clear which side is winning. In fact, "[t]he relationship between domestic and foreign learning" continues to cause so many problems that it becomes "one of the most enduring issues in determining the intellectual direction of modern China" (Huters 23). Western

technoscience may have forced China's doors to open, but these strange ideas from foreign countries were yet to settle in the Chinese literary imagination. Traditional Chinese narrative conventions proved to be tough opponents. The reshaping of Chinese cosmology based on modern technoscience may have been underway, yet this process was drawn-out due to the resistance, appropriation, and acculturation resulting naturally from contact between a Chinese epistemological tradition and Western knowledge. What *kexue xiaoshuo* record are hesitant moments of arrival for ideas and artifacts of modernity, as they groped for footholds in the Chinese cultural imagination.

The indeterminable battle between traditional Chinese narrative and new technoscientific knowledge in *kexue xiaoshuo* can be illustrated by one of its representative stories, *The New Story of the Stone* (1905) by Wu Jianren (1866-1910). As its title suggests, the novel is a sequel to the great eighteenth-century Chinese novel by Cao Xueqin, *The Story of the Stone*. Wu's novel begins from where Cao's novel ends, showing how Jia Baoyu, who has been living a reclusive life, remembers his origin. Jia is the human embodiment of one of the stones used by goddess Nüwa to mend a crack in heaven. He then decides to fulfill his destiny by contributing to China's rejuvenation. Jia Baoyu returns to the human world, shocked to find that hundreds of years have elapsed. The heart-breaking romance between Jia Baoyu and Lin Daiyu is only a matter of fiction now, as technological novelties like steamboats and matchboxes now capture everyone's attention. He travels to Shanghai and marvels at a burgeoning modern metropolis. He then meets Xue Pan, his cousin who is also waking up from a slumber of hundreds of years, once again plying his trade as a merchant. Jia Baoyu and Xue Pan travel together to Beijing, only to be caught up in a whirlwind of the Boxer Rebellion.

After Jia escapes from Beijing, he is framed and imprisoned for mocking a minor official. After getting out of prison through a friend's intervention, Baoyu decides to travel around China. When he reaches Shandong, he chances on a utopian place called 'the Realm of Civilization.' People there have learned to manipulate the weather, to distill the essence of all kinds of food, and to cook as well as illuminate rooms with fire drawn

from deep under the earth. They also possess all manner of wonderful machines, such as flying cars or submarines, as well as diverse types of lenses for seeing into the human body. Jia leads a busy life in the Realm of Civilization. Lao Shaonian, his guide there, takes him on various tours around the Realm. They visit fully automatic factories, watch military exercises, and ride a flying car on an African safari, where they shoot down the mythological *peng* bird, and make a submarine journey to the South Pole, where they capture the equally important mythological *kun* fish.

By the end of the novel, Baoyu dreams of a prosperous future China where the World Expo is about to be held in Shanghai, waking up, however, to find out that the leader of the Realm of Civilization is no other than his double, Zhen Baoyu, from *The Story of the Stone*. As leader of the utopian Realm of Civilization, Zhen Baoyu has already transformed China into a once again great power. This makes Baoyu realize that his ambition has been once more thwarted before he even begins, knowing now that he is destined for yet another failure. Thus, he decides to remain in the Realm of Civilization, gifting the precious jade he was born with to Lao Shaonian, who on his way home drops it accidentally into a cave. When he goes into the cave to search for the jade, Lao Shaonian discovers a text inscribed in a stone, which he copies and translates into vernacular Chinese. The inscription found by Lao Shaonian is none other than the story we have just read.

This rough synopsis of *The New Story of the Stone* is enough to illustrate several fault lines between Western technoscience and Chinese literary imagination as expressed in the form of a novel. While Wu conjures up a vast array of technoscientific wonders, they remain “a superficial overlay on a deeper base of traditional literary wares” (Ming 161). Jia Baoyu’s journey from one scientific sensation to the next reads like a visitor’s experience in a badly curated exhibition of scientific miracles. Each exhibit is wonderful on its own, yet the entire exhibition viewing expresses nothing more than a repetition of a singular wide-eyed surprise. From powerful laser-like weapons to fully automated factories, from flying cars to submarines, the Realm of Civilization stages a dazzling show of

technoscientific wonders whose connection to real-life science is slim at best.

A magic-like aura serves, in fact, to surround the inventions of the Realm of Civilization, as their names seem to work as incantations imparting them with formidable powers. This is most obvious when Jia visits the hospital, where there are various lenses for revealing different layers of the human body. Apart from informing the readers that lenses are mounted on a tripod and housed in a camera-like contraption, the novel provides no further explanation regarding how or why they work. The ‘bone examining lens’ displays the human skeleton, and the ‘marrow examining lens’ reveals bone marrow. The ‘blood examining lens,’ ‘meridian-collateral examining lens,’ and ‘internal organs examining lens’ all work as their names suggest. While these lenses may reflect a cultural sensation caused by the X-ray at the turn of the 20th century, they are so much more potent than the X-ray can ever dream to be. As these lenses are named in quick succession, this piece of utopian technoscience bedazzles the reader with the very impossibility of its sense of wonder. A similar sense of wonder permeates the novel as other astounding gadgets jostle each other for the reader’s attention.

Yet such scientific spectacles remains just that—spectacle. *The New Story of the Stone* is not interested in science for its own sake, and the narrative revolves mainly around the legend of the stone from Cao Xueqin’s original novel, and less so around futuristic visions of science. In Cao’s story, Jia Baoyu is the incarnation of one extra stone left behind by Nüwa and is as such cursed with the fate of being meant for something important yet denied the chance of ever fulfilling this destiny. In Wu’s retelling of the story, “Baoyu maintains his ‘superfluous’ role” and is again “denied entrance into history where he should have realized his ideals” (Song 90, 91). Wu also retains the doubling of Jia (fake) Baoyu and Zhen (real) Baoyu, another plot device from Cao’s novel. This doubling reinforces the theme of Baoyu’s superfluidity. Any modern knowledge Baoyu picks up in late Qing Shanghai is no match for the utopian *fait accompli* of Zhen Baoyu in the Realm of Civilization. Even the very ending of Wu’s story reenacts Cao’s original denouement by again claiming that the text of the novel was

found by Lao Shaonian as an inscription on a magical stone. Wu updates Cao's supernatural end by adding a further layer of inscription. It turns out that inscriptions on the magical stone can only be viewed by "patriotic gentlemen" (576). For people who slavishly betray China, only English doggerel awaits them. Overall, the narrative framework of *The Story of the Stone* provides Wu with a vehicle to concretize Jia Baoyu's superfluidity as late Qing literati frustration with confronting historical and epistemological crises. While a Sinicized and highly utopian version of technoscience seems to provide a way out of the crisis, this narrative framework precludes any substantive resolution. The lure of technoscience with Chinese characteristics, like Jia Baoyu's ambition, remains unsubstantiated.

But the very fact that Wu's novel ends with an English doggerel demands a second look. Wu's doggerel is designed as a pointed satire on people whom he calls "excrement-eating-and-foreigner-pleasing slaves" (576). It goes like this:

All foreigners thou shalt worship,
 Be always in sincere friendship.
 This is the way to get bread to eat and money to spend.
 And upon this thy family's living will depend,
 There is one thing nobody can guess,
 Thy countryman thou canst oppress. (Wu 576)

Wu provides a translation after the English original, which translates the last line as "Your countryman will never bear it" (*Nide tongbao jue bu hui rennai*). Clearly, the discrepancy between the translation and English version of the last line cannot be overlooked. It could be the result of a typographical error, but it could also be caused by Wu's faulty command of English. However, bracketing the issue of Wu's linguistic competence, what really matters here is the simple co-presence of an English doggerel and its translation. That such a strong statement of national feeling needs to be presented in English already points to a translingual world where both languages have come into contact and have clashed. In other words, the need to write both in English and Chinese at the end of Wu's novel underscores again the chimerical nature of the world from which it emerges.

However, highlighting a disassociation between technoscientific artifacts and narrative framework in late Qing *kexue xiaoshuo* is not to denigrate its

significance but rather to underline its unique conditions of emergence. “With no constraints from any standards, Chinese of the early 20th century freely arranged a marriage between science and fiction according to their own understanding and needs,” as *kexue xiaoshuo* writers make use of “fragmentary and often contradictory ‘new knowledge’ found in books and newspapers,” in an effort to satirize China’s backwardness, imagine “a charming image of the future,” and summon China’s revitalization (Jia 4). For *kexue xiaoshuo* like *The New Story of the Stone*, their purpose is not to project a scientific vision, but to call forth a glimmering future wherein China is once again center of the world. It is all the better if science seems to be a form of future magic, since it can then be readily accommodated within a fictional tradition that has always had room for the supernatural. Yet, what enables the creation of such literary chimera is not just late Qing literati nationalism, but also the rather messy epistemological process of China’s embrace of modern technoscience.

Baoyu Learns to Spell

To glimpse the epistemological context of *kexue xiaoshuo*, we need to look no further than Jia Baoyu’s reading list in *The New Story of the Stone*. Arriving in a completely unknown China, Jia relies on reading to re-orient himself in the late Qing world. While books such as *Lidai mingren nianpu* (Chronologies of Historical Figures) and *Zeng Wenzhenggong dashiji* (Major Incidents in the life of Zeng Wenzhenggong) give him a crash course on the Chinese historical development, he also relies on contemporary newspapers such as *Shiwu bao* to find out what is happening at present around him. He even asks Xue Pan to take him on a tour of the Jiangnan Arsenal, where he purchases a complete set of books published by the Arsenal’s translation department. Reading translated books fails to satisfy his thirst for knowledge. Soon Jia Baoyu starts learning English with the help of books such as “*Spelling Book, Mastering English without a Teacher: Introductions*

to *English Words*, and *A Sino-English Dictionary*” (Wu 372). Jia has a busy learning schedule as he “reads translated books in the morning and learns English in the afternoon” (Wu 372). The idea that Jia Baoyu from *The Story of the Stone* learns to spell may sound ludicrous, but this book list intimates a larger world of reading wherein late Qing literati devoured books on Western learning to relocate themselves in a shifting intellectual landscape.

Book lists or catalogs are in fact no trivial matter in the late Qing world. They furnish road maps to new terrains of knowledge. With more translations being published, books on Western learning multiplied so fast that bibliographies were needed to navigate this brave new world. Liang Qichao compiled his *Xixue shumu biao* (Catalog of Western Learnings) in 1896. Soon, many others followed him, producing their own introductions on how to read books on Western learning. As Pan Guangzhe comments in his study of late Qing reading culture, efforts like Liang’s to create an “order of reading” serves to impose a hierarchy upon new books. This ‘order’ is not completely disinterested, and readers fail to be easily homogenized by these efforts (43). People who take on such a “stock of knowledge,” as formed by these new books, insist on reading them on their own terms and out of their own interest (Pan 7). The readers’ “responses, negotiations and debates” with the authors shape a “multifaceted nature of the late Qing intellectual world” that resists easy generalization (Pan 8). As such acts of resistance mobilize readers’ autochthonous intellectual resources, their engagement with and appropriation of these new books on Western learning can be as radical as we find in Wu’s fiction, where technoscience and Chinese mythological creatures become strange bedfellows.

For instance, late Qing readers’ intellectual engagement with technoscience can be witnessed in detail in the Chinese Prize Essay Scheme of Gezhi Shuyuan. The Chinese Polytechnic Institution and Reading Room, or Gezhi Shuyuan, was founded in 1874 by a group of missionaries and local gentry under the proposal of the English consul in Shanghai, Walter H. Medhurst. The Polytechnic proved to be an important channel for popularizing Western science until its closure in 1914. The classes and free

lectures offered by the Polytechnic both succeeded and failed to various degrees, but its Chinese Prize Essay Scheme was quite a success. Every quarter, a high or middle-rank Chinese official was asked both to set a topic and grade essays submitted. The essay topics usually involved current affairs as well as science. Typical subjects included: “A discourse on the naval defenses of China,” “What advantages and disadvantages would China realize by the establishment of railways?” as well as “Compare the sciences of China and the West, showing their points of difference and similarity” (Biggerstaff 142). Thousands of people all over the country, though primarily in and around Shanghai, submitted essays, and these writings grew to be seen as an ideal gauge of late Qing literati engagement with modern science. The missionary John Fryer, secretary to the committee managing the Polytechnic, was quite satisfied with the scientific knowledge demonstrated by some contestants. He wrote in a report that:

Some of the essay writers aspire to the show of a wide knowledge of statistics and other facts relating to foreign countries. Some of them have embellished their essays with maps and diagrams drawn from foreign or native sources (...) All of the writers display an astonishing amount of general knowledge compared with what might have been expected and show that they have read extensively what has been published in the Chinese language, whether in newspapers, serials, or translated works of a scientific or political character (Biggerstaff 142).

When one reads the essays, however, one may conclude that Fryer painted too rosy a picture. The essay writers’ relationship to modern knowledge is far more complex than he presents. While they may be eager to absorb new knowledge from foreign sources, they are also troubled by the incongruities between Chinese and Western learnings. When one essay comments on the idea that comets are merely objects traveling in their orbits and do not influence the events of the world, it states:

There is the idea that comets have nothing to do with disasters on earth. If this is true, why is it that past histories have shown whenever a comet appears, there is always some disaster under heaven? If the sovereign takes heed of the warning from the com-

ets, he might have a chance of dodging the disasters before they materialize. If what Tan Tian says is true, this is enough to let the sovereign do whatever he wants, as the changes in heaven are no longer to be feared. As a result, for a book such as *Tan Tian*, its talks about the revolution of the sun and the moon and its ideas about longitudes and latitudes as useful for making calendars, but as regards its other ridiculous ideas, scholars must be aware of them and discard them. (Xiong 291)

On the one hand, this writer acknowledges that Western astronomy propagated by Tan Tian is useful for making calendars; on the other hand, he also insists that comets certainly influence the events on earth, or else the earthly sovereigns can do whatever they desire and “changes in the heaven are no longer to be feared.” He does not appear to be aware of any contradictions in insisting on the portentous nature of comets while accepting the orbital theory of modern astronomy. Yet again a distinct feature that is both Chinese and Western, both new and old can be detected in such complacency. The epistemological parallelism here is obvious. If late Qing literati did not shy away from understanding astronomy through the lens of the Chinese epistemological traditions, then when imagining a fictional world shaped by Western science, they naturally did so by locating a place for science in the Chinese literary tradition. Given their fragmentary and selective understandings of Western science, the creators of *kexue xiaoshuo* were more interested in grafting science onto the Chinese tradition, instead of replacing the latter with a world whose first principles are based on science.

The chimerical nature of *kexue xiaoshuo* and the late Qing understanding of science could be extrapolated even further in talking about a certain spatial entity known as the ‘treaty-port.’ Opened by a series of treaties, the treaty ports are where China has encountered the world. Instead of being “merely a geophysical concept”, these ports also imply a full range of cultural significance, as “modern Chinese treaty-ports are a combination of many qualities: coastal, southern, as well as open and mixed” (Duan 7). Or as Xiong Yuezhi points out in the case of Shanghai, as modern Shanghai locates in “peripherals between two types of powers, China and the West, as well

as in a hybrid zone of multicultural influences,” the complex heterogeneity inherent in Shanghai culture is unprecedented (Yizhi 3). Both *kexue xiaoshuo* and the epistemological shift that produced it belong to this space of contact, and they both demonstrate a new cultural morphology. They are in fact unique cultural formations that could only arise in the contact zones of treaty-ports. This in-betweenness records not just singular elements from each culture, but also ways in which these elements reposition themselves through constant interactions and contact, forming a new wholeness.

Coda: *Bieqin* Science Fiction

Zooming in on epistemological and narrative fault lines within *kexue xiaoshuo* is, of course, hardly new. Nor is an emphasis on the heterogeneity of treaty-ports. Yet, by traveling down these familiar paths once again, this paper intends to advocate an alternative approach to reading in-betweenness, clumsiness, and inherent heterogeneities of *kexue xiaoshuo*. The freewheeling combination of science and fiction (or fantasy) in this genre often makes it vulnerable to criticism, particularly critique launched on the ground of scientific rigorousness. Yet as David Wang reminds us, “[late] Qing science fantasy is at its most tantalizing when it unites two seemingly incompatible discourses: that of knowledge and truth and that of dream and fabulation” (Wang 253). The combination of two impossibly heterogeneous discourses/traditions in *kexue xiaoshuo* is in fact why it attracts us. Yet why would the copresence of science and fantasy be so tantalizing? As this paper has demonstrated, one probable reason could be that such a strange fellowship underscores and serves to record early attempts on the part of late Qing intellectuals to make sense of Western technoscience, presenting it in ways compatible with Chinese tradition.

Perhaps a parallel example from the field of linguists can be of use in demonstrating the improvisational nature of contact-zone culture and the hybrid contact subjectivity that arises from it. Pidgin English, or Yangjing Bang English, was the lingua franca between Chinese and foreign traders, originating from Cantonese in the seventeenth century.

Later as the center of China's foreign trade moved to Shanghai, it was formalized in Shanghai and acquired the name of Yangjing Bang English, named after a local river. The word 'pidgin' is held to be a transliteration of the corrupted pronunciation of 'business' (Zhou 249). In 1873, Yang Shaoping, a graduate of Guangfang Yan Guan, the government foreign language school in Shanghai, serialized one hundred *piqin* ditties in Shen Bao. *piqin* means 'alternative lute,' a humorous way of translating Pidgin into Chinese. These ditties record the pidgin English that facilitated trading in Shanghai, cast in an ironic tone. One of the ditties goes like this:

Business turns out to have an alternative lute,
All the interpreters are good connoisseurs of it.
There is no need to learn more English words,
'Three,' 'one,' and 'two' get you loads of gold. (Zhou 254)

In Yang's own preface to his serializations, as a proper student of English, he expresses his disdain for Pidgin English. As he sees it, among interpreters, "the person who does not speak Pidgin numbers one in a hundred, or even less." While Westerners may put up with such lousy performances, they are "all crying" over such butchering of their language. Yang believes that as an expediency, Pidgin English can only deteriorate. As a result, he pens the *bieqin* ditties to "point out the problems with it," as well as to advertise his own book, *Pinfa juyu* (Examples of English Spelling) (Zhou 254).

Yet despite the problems Pidgin English presented, it got the job done. Like many other languages born from the process of contact and trading, Pidgin's development demonstrates an improvised process of communication, passing through successive failures to arrive at mutual understanding.

In a similar vein, *kexue xiaoshuo* is also a product of cultural improvisations in the contact zone. One may venture so far as to view *kexue xiaoshuo* as a sort of *bieqin* Science Fiction as, similarly to *bieqin* English, *kexue xiaoshuo* communicates through being chimerical. Hesitation or in-betweenness in *kexue xiaoshuo* reveals itself as a moment of possibility, one in which modern technoscience was being presented in an imagined form. Picturing an idea of the X-ray through magical lenses does not score exceedingly high scientifically, but it does provide

an initial foothold for this technoscientific artifact to enter the popular imagination. A completely new modern world of technoscience is gradually grafted, through trial and error, onto the Chinese literary imagination.

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