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Beggars, Black Bears, and Butterflies: The Scientific Gaze and Ink Painting in Modern China

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Abstract

The ink brushes of the painters Chen Shizeng (1876–1923), Liu Kuiling (1885–1967), and Gao Jianfu (1879–1951) were employed as tools of the nation in early twentieth-century China. Yet the expression of a radical idealism about the new republic in their ink paintings was tempered early on by a tentative and self-conscious exploration of new ways of seeing. By synthesizing a "universal" scientific gaze with their idiosyncratically trained vision as artists, they created pictures that encouraged their viewers to cross the boundaries and binaries that would come to define the discourse about *guohua*, or "national painting": East versus West, oil versus ink, modernity versus tradition, painting versus graphic arts, and elite versus folk. This article explores that extended moment of synthesis and experimentation. It argues that it was through the scientific gaze of these brush-and-ink artists that idealism and learning came to cooperate, and through their paintings that possibilities for news ways of seeing the nation emerged.

Keywords: scientific gaze, modern Chinese painting, Chen Shizeng, Gao Jianfu, Liu Kuiling

In 1919, Cai Yuanpei (1868–1940), chancellor of Peking University (1917–1926) during its most vibrant period as a revolutionary cultural force, presented a lecture in which he proposed that the relationship between science and art was one that tracked culturally: China's art, like its literature, philosophy, or studies of morality, he averred, depended on the copy, whereas "Western art" relied scientifically on firsthand observation of objects in the flesh. Such a cultural mapping of art was complex, however, because "today the world [witnesses] a period of the blending of Eastern and Western cultures, and the strengths of the West are what our nation ought to adopt" (Cai [1919] 1999, 36–37). Just as painters in "the West" historically had incorporated painting styles from China (Cai mentions Chinese schools [*Zhongguo pai*] in eighteenth-century France, Renaissance Italy, and among the nineteenth-century French Impressionists), so, too, should artists in China be open to "Western art"—and by that, he

specified, he meant the descriptive natural sciences that depend on direct observation: "Today those of our generation who study painting should utilize the methods of researching science to focus their efforts."

This was an idea that Cai would refine five years later in a 1924 lecture, "On Art and Science," at the Palais du Rhin, Strasbourg, presented in conjunction with an exhibition at the Exposition chinoise d'art ancien et moderne:²

There are people who wonder if scientists and artists are of the same ilk, and from the perspective of science, feel that artists are too free, and lack not a little clear-cut thinking. From the perspective of art, they feel that scientists are too dry and dull, and lack not a little liveliness of spirit. But such is not true, because the characteristics of loving truth and loving beauty are something that everyone has. So although in the course of daily labors there are preferences for truth or for beauty, people who study the arts will by no means renounce the lifestyle of scientists, while people who are specialists in science likewise will never completely reject the pleasurable enjoyment of the arts. In cultural history, science and art always develop at the same time. Artists grasp for the help of scientists, so that techniques can advance, and scientists reach for the aid of artists, so that their research becomes more interesting. (Cai 1924, 4)

Cai positions the paintings, porcelains, and sculptures at the exhibition as things through which, once again, science can be artistically embodied. Rather than rejecting out of hand the notion that science and art mutually inform each other, he asks that one consider that there is both technique and imagination to science; painters, similarly, are poised to merge the regulated skills of science with an inner vision. For painters, sketching from real life was an essential part of bringing science into their art, but it went beyond the fundamentals of art practice to universally shared ways of knowing and learning—and seeing. Art thus served as a means not to distinguish between cultures, but to find similarity among them. Cai concludes:

There are people who wonder if the contact between the two nationalities [France and China] won't necessarily give rise to conflict on account of competition to survive. But if you broaden your perspective just a bit wider, what will you see? That the interests between the two nationalities overlap more than their conflicts. (Cai 1924, 4)

This article takes Cai's observations about art and science seriously by looking to arenas of modern science that were emerging in early twentieth-century China—distinct from imperialera investigations into things (*gewu*) and natural science (*bowu*)—through the study of brush-

and-ink painting. It asks: How did the long-lived art of the brush serve as a means of creating new visual experiences of modern sciences, which were purportedly universal and universalizing? What did it mean to see and to know, through a fusion of brushstroke and scientific diagram? And were such artfully scientific pictures intended for the benefit of the nation, as Cai believed?

Somewhat indirectly, this project deals with a central term of discourse about modern visual culture in China, haunting Cai's praise of "truths": realism. It does so with a certain hermeneutic optimism. That is to say, it does so with an acute appreciation of realism as an unstable term and one difficult to grasp, a production of the artist's visits to the museum, zoo, laboratory, or science classroom, and into the artist's studio, embroidery workshop, or potter's studio as well. "Realism" was generated from a complex apprehension of form and subject, or what cultural historian Oliver Moore aptly calls "a particular mode of celebrating trivial appearances as well as the contemporaneity of . . . content" (Moore 2011, 11). By focusing on realism in early twentieth-century ink painting as an experiential product of particular painterly observation, and experiments with seeing and knowing, this article also steers away from painting's most self-interested discourses, which cluster around binaries of East versus West, oil versus ink, modernity versus tradition, painting versus graphic arts, and elite versus folk. Yet it does so with the knowledge that many of those binaries developed or were institutionalized through the popularization of scientific thought and the coincident emergence of "national painting" (guohua) in the early twentieth century.

Cai's lecture in Strasbourg demonstrates the value of case studies looking into the fluid boundaries of art and science; that "nationality" (*minzu*) figures into his discussion speaks partly to Cai's own preoccupation with the congeries of sciences of anthropology, ethnology, and ethnography—in which "nationality" was a category of analysis, and looking at a culture through its art a means of divining its "national level" of civilization. And as an educator, Cai's desire to approach the arts as universal ways of seeing and studying the world—and even as concrete traces of cognitive processes—also accorded to a marked extent with notions about the value of science to education as represented early in the twentieth century in the journal *Kexue* (Science): "Arts are nothing but descriptions of natural phenomena with languages, letters, images, and sounds." Further, the importance of science to education "is not material or specific knowledge, but the method of studying things. It is not only the method of studying things, but what this

method lends to mental training" (Ren [1915] 2009, 103n43). Yet while the article's author, President of the Association of Chinese Scientists, Ren Hongjun, found the arts to be "nothing but" natural history, for Cai, in art there always was present the promise of something more—something imaginative, joyful, and at the edge of belief, as if aesthetic feeling were synonymous with religious feeling⁵—that could shape science as well as help to bring it into material being.⁶

In that vein, this article explores Chen Shizeng's (1876–1923) album *Beijing Social Life* and Customs (Beijing fengsu tu) as an urban ethnography of the capital city; the animal paintings of Liu Kuiling (1885–1967) in northern Tianjin as zoological "habitat dioramas"; and Gao Jianfu's (1879–1951) earliest engagement with entomology through his teacher Ju Lian in the southern port city of Canton, in what would expand through subsequent study of insects in Japan to shape his singular porcelain design. Despite their different focuses—human, animal, insect—each of these artists approached his practice with a keen sense of the possibilities that seeing scientifically could offer to mark-making with brush and ink. Further, since all three identified strongly with the emergent nation, their art production was addressed to local audiences and also to what each imagined the nation to be.

These case studies are presented here as a series of propositions (or perhaps, in keeping with the scientific bent of the artists, they might be considered a series of hypotheses). Each of these artists took up painting as practice—"practice" in the sense of making pictures out of paper, ink, and pigment, but also "practice" as a means of shaping and participating in expanding systems of self-knowledge, those "methods of studying things." By paying close attention to their modes of seeing through the case study approach, this research takes up what art historian Richard Vinograd describes as the "illuminating questions" not only of "where" visual modernity can be found, but "how" it was seen, rather than invoking the image of one singular modernity through questions of "what" modernity was and "when" it happened (Vinograd 2001, 163). In the conclusion, I review the process by which brush and ink were repositioned from treasures of the scholar's studio to tools for science in the decades surrounding the collapse of the Qing dynasty and the establishment of the Republic in 1912. I ruminate on the stakes for the artists of making scientifically artful pictures, and on how giving oneself up to the process of seeing—as Cai advocated, again and again (as they did, and as we do when we study their work)—may not only bring with it few certainties about social life and the natural environment in the late Qing and Republican era. It also—through something in the pictures far more elusive and poetic—may

provoke viewers to ask again how seeing the overlooked denizens of a city, or a wolf in a prairie, or the wings of a butterfly, matters today in our increasingly homogenized global culture and as we confront the environmental disasters of climate change.

Chen Shizeng's Urban Ethnography

The first ethnological study introduced to China was *Völkerkunde* (1900), by the German scholar Michael Haberlandt (1860–1940). In 1903 it was translated into Chinese (from an English translation of the German) as *Minzhongxue* by Lin Shu and Wei Yi, and published by the Beijing Imperial Academy Press. Like physical anthropology (which, through European missionary and Japanese scholarly activity dating to the 1870s, was also developing as an area of study in China) (Ishikawa 2003, 9–12), *Völkerkunde* emphasized the physical and social characteristics of the *volk*, or folk (*min*). In the preface of their translation, Lin and Wei explain why two translators of Shakespeare bothered to delve into the emergent science of ethnology: "Readers of this book know that the colonial desire of Westerners [*xiren zhi zhimin xin*] can't be neglected for even one day. We in China need to rigorously reflect on the reasons for which Westerners have lashed out at and poked fun at other races, and use these reasons to keep ourselves vigilant. Only by doing so will our effort in translating this book not go to waste" (Lin and Wei 1903, prefatory 2a).

The mistrust that Lin and Wei felt toward "Westerners" in their approach to all things ethnographic took on an added immediacy that same year, when such vigilance was called into play at the controversial Hall of Mankind (Jinruikan) at the 1903 Domestic Industrial Exhibition in Osaka. The Hall of Mankind featured "primitive peoples" from South and Southeast Asia, as well as Koreans, the Ainu, Okinawans—and the Chinese. For Chinese visitors to the expo, including students based in Tokyo like Chen Shizeng, the exhibition moved beyond being a pragmatic means of organizing and presenting knowledge to something more political. That is, the exhibition plan itself—the codes of vision, the regulations about how to move through the hall, the literal taking in of the primitive—was recognized to create the subjects of display. Even before the exhibit opened, there was a series of vehement protests by the local Chinese students. These were directed at how anthropology was wrongly called on to support a particular power relationship and politics, or what the translators Lin and Wei might have called a "lashing out at and poking fun at other races" (Claypool 2013). The point of contention was not the science

itself—or even the authority of the curator Tsuboi Shōgorō (1868–1913), a noted professor of anthropology at the Tokyo Imperial University—but rather the fact that he and the Japanese had failed quite literally to maintain an objective eye.

Roughly ten years after the introduction of modern ethnography to China, Chen Shizeng painted an album that he titled *Beijing Social Life and Customs (Beijing fengsu tu)*. He had just moved to the capital city from a post in Nantong, where he had worked with Zhang Jian at China's first domestic museum by writing the catalogue of the collection, drawing from his earlier training in the sciences in Tokyo. From 1913 through 1915, when the album was painted, he held positions as a painting teacher and as a teacher of natural history in local high schools. The album is composed of thirty-four paintings, each accompanied by a page of inscribed poems and short prose pieces. It features flower peddlers as well as rickshaw coolies. It also contains pictures of spies, beggars, displaced court attendants, and other figures from the shadowy, darker side of the street (pl. 2–6).8

Textbook accounts of the *Beijing fengsu tu* album today characterize it as an urban "ethnography" (Thorp and Vinograd 2001, 389), and, indeed, it was loosely described as an ethnography by contemporary inscribers, who referred to its "folk" content and to the vanishing customs that it documents. But we might pause to consider what that means. Do the colonial desires of the ethnographic gaze so worrying to Lin and Shu find pictorial form in Chen's album? Does the call for "objectivity" in the three intertwined sciences of ethnography, ethnology, and anthropology take material form? What was the relationship of the album to the "objective" ethnographic gaze? And is there any local tradition of looking at "the other" that may also have shaped such a gaze? To answer these questions, I first consider the theoretical positioning of the pictorial in ethnography, and then turn to the album itself.

During the 1910s, ethnography and the related sciences slowly took on a more definitive shape in China, and the embrace of ethnography as a means of judging the civilization of a nation deepened. Institutional support for its study, nonetheless, was slow. Although the Qing court had issued the *Zouding xuetang zhangcheng* (Educational system and disciplines of the universities), which featured one new course on race and anthropology (*renzhong ji renleixue*) as part of the program on geography in 1903 (Zhang [1903] 1972), it was not widely adopted, and similar courses remained marginal in the early years of the Republican era. When the Ministry of Education promulgated a new educational system and university disciplines in 1912, "one course

named *Human Beings and Study of Race* was included. However, among colleges and universities across the country, only Peking University established this course" (M. Liu 2003, 217).

The Peking University professor Chen Yinghuang's 1918 book, *Renleixue* (Anthropology), provides some sense of the course content. The book begins with a discussion of how maps of the world were gradually taking shape; as travelers returned home, they made reports about natural environments and also the folk customs they had encountered, filling in the blank spaces of knowledge. To understand a people, Professor Chen argued, was to rely on the eye of the anthropologist turned toward the world, objectively gauging levels of civilization (Y. Chen 1918, 1–3).

Visual representation from the very beginning held an uneasy place between the drive for a scientific, systematic study of culture (the disembodied gaze of the anthropologist turned toward the world) and the desire to pay attention to how looking itself (where to look, what to look at) developed out of a colonial imperative, as indicated early on by the reaction to the controversial visual display at the Hall of Mankind in Osaka. Art, in the first sense, as Lin Shu and Wei Yi rendered it in their translation of Haberlandt's work, "is a universal part of a people's intellectual ability. Its practical use for human beings may not be as important as language, although its techniques in fact range broadly [in all cultures]" (1903, shang juan, 31b). Art is a universal language that communicates across cultural boundaries. However, in their translation, Lin and Wei depart radically from Haberlandt's text as well, adding to it in their own voice:

We in the beginning considered art to have a flimsy connection to the living world. Indeed, the common people under the heavens, regardless of whether they are knowledgeable or ignorant, constantly exhaust their mental power in order to survive another day. Just as they succeed or fail, their nation flourishes or falls apart. The way it works is frightening. Therefore, we see people constantly sacrificing their lives to redress the slightest injustice, to avenge the most trivial wrong. Why? So that even though art is a minor form of intelligence, it still is enough to inspire the intellectual strength of everyone under heaven. (Lin and Wei, 1903, shang juan, 31b)

Art, in Lin and Wei's view, is not simply to be judged as an abstract artifact of a civilization that had little to do with the living world (i.e., as a symbolic universal language), but indeed its study and production were critical to the survival of a nation in a living world that was

hostile, and where self-sacrifice was too common; art inspires people, and as such, may aid that survival (negotiating a subtler, more systemic form of violence). The stakes of making and looking at art in this view are deeply political. In 1916, Peking University professor Sun Xuewu began an essay on anthropology in Europe and North America by associating it with natural science and specifically with Darwin's theory of survival of the fittest. He describes ethnology (*renzhongxue*) as a comparative study of cultures from a theoretical viewpoint and an objective study of culture as practiced. "And if I am going to study a culture," he observed, "the very first thing I do is to look at its art" (Sun 1916, 437).

Thus, it is not surprising that when the sinologist and missionary Richard Wilhelm (1873–1930) met Chen Shizeng, he remarked: "He has assimilated in a perfectly free manner, on the basis of the Chinese technique of ink drawing, the stimulus supplied by French artists, and he has created from it a new national Chinese art, which, because it is art, is universally comprehensible" (Wilhelm 1926, 251). Such an elevated opinion of Chen's painting and its connection to the nation was echoed by others.

Yet art as an object of cultural analysis typically held a different status from art as illustrative of ethnography. While Chen's painting style was deemed representative of the nation, the way in which Chen painted this album drew on what might be called a foundational ethnographic picturing practice. The essayist Zhou Zuoren (Zhou Xiashou) (1885–1967) recorded the following story about his older brother Lu Xun and the production of the album by Chen, an intimate friend of his brother:

Around 1914, when Lu Xun was teaching at the Ministry of Education, he often invited two or three friends to the Muslim restaurant at the south end of Rongxian Alley to eat beef noodles. From the eastern Tiejiang Alley you would go a bit farther, and the road wasn't that far away. There was one time that just at that moment a wedding procession was passing through, and Chen Shizeng separated himself from everyone else, following the bridal sedan chair, as if officially a member of the wedding party, so that his friends began to tease him and say that Shizeng's heart wasn't that old, since he was transfixed by the sedan chair. Later we learned that he was just then painting the pictures of customs, and only then understood the meaning of his pursuit of the sedan chair. Among the pictures there is one of flutes and drums from such a procession that belonged to this type of thing. (Zhou 1962, 169)

Pencil lines visible beneath the brushstrokes in the album reinforce the sense that Chen was trying to get the pictures just right; pencil lines also testify to the "objectivity" demanded by the "universal" gaze of the ethnographer. In the album, however, Chen's stubby, dark line has rough and crude edges, sometimes slipping away like a crack in the surface of the painting. Opaque color deadens the faces, and masks them. In one leaf, a scowling tea drinker, heavy arms lifted over his chest, boulder-shaped face the color of clay, nonetheless floats free from gravity in the blank space, feetless, as if a ghost (pl. 2). In another, a spidery ritual attendant stands at attention in ill-fitting robes. His horizontal banner and iron-red tasseled cap belies a slight hunch forward (a dull and uncomfortable echo of the officials depicted upright, as if to better display the intricacies of robe design in the trade pictures). Other pictures show an emaciated street collector of trash, his face as though a skull; a fortune teller standing quietly alone, his queue trailing down his back (pl. 3); an idle Manchu bannerwoman, facing her dog, pictured from the back as if studiously ignoring the viewer, yet nonetheless described in the inscription as being flirtatious and easily able to get a rise from the market crowd through which she wanders with pipe in mouth. Where there is more than one pictured figure, the implied suspicion or disconnection between them can be visibly clear, if darkly humorous: a bespectacled rickshaw driver bends over while pulling along his rider, giant in size, whose face and hair are articulated in the shape of a flaming mandorla with simple contour lines left empty of features (pl. 4); in the most fully fledged scene, two men, heads bent forward slightly, listen at a closed door (the Chinese title "Walls Have Ears" is more pointedly rendered as "Spies" in English in the Beiyang *Pictorial News* in which the album was reproduced and circulated from 1926 to 1928).

Comparison with contemporary images of street beggars highlights what is formally distinctive about this album. There is evidence, to cite one roughly contemporary example, that a picture of a beggar by the late Qing Jiangsu painter Wang Zhimei (J. Ö Yabai, flourished 1853–1889) was referenced by Chen Shizeng as a stylistic and compositional template. Wang's picture was published in a manual when he was a sojourner in Japan, and it was rendered with a deft brushstroke that was itself within the iconic style of painting manuals (such as the first edition of the *Jieziyuan huazhuan* [Mustard seed garden painting manual], 1679). The beggar, dressed in a patched coat over ragged pants and scabby knees, holds the leash of a dog and a long staff. He looks up with a wide, gaping grin, seemingly amused at the calligraphic inscription above his head that puns on the connectedness of the wandering mendicant to the world and to

religious pathways, and offers a word play on the fierceness of his dog and of Confucian ministers (figure 1). A picture of a beggar by Chen Shizeng in an issue of *Taipingyang bao* (The Pacific news), produced after he returned to China from a study of natural history in Tokyo, similarly shows in profile a sparsely bearded man in shabby dress and his dog with begging dish (figure 2). The even closer mirrored composition and physiognomy with a painting of a beggar by another prominent artist who sojourned in Japan, Wang Yiting (1867–1938), further serves to indicate the manual's and subject's popularity at the time (pl. 7; see also pl. 8 and 9).



Figure 1. *Shangxin suibi* (Sketches for pleasing the mind) by Wang Yin [Wang Zhimei], 1882. *Source*: Jiang (1984, 204).

And if the quick brushstroke used in such pictures was part of the newly popular *manhua*, or sketched paintings, ¹¹ Chen's painting also harked back to the late eighteenth-century figure paintings of Huang Shen (pl. 10), as the artist himself observes:

There is the so-called *manhua*. The brushstrokes are simple and unsophisticated. It is imbued with humorous ideas and contains some thoughts. In Japan no one did it better than Hokusai. In our country, Yingpiaozi [Huang Shen] and Bada Shanren were similar but they were not specialized in it. (quoted in Lai 2006, 144)

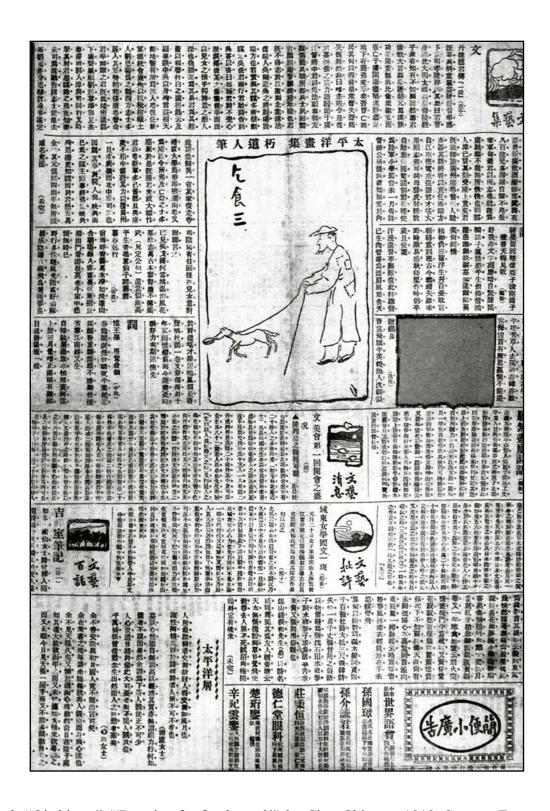


Figure 2. "Qi shi san" ("Begging for food, no. 3") by Chen Shizeng, 1912. *Source: Taiping yang bao* [*The Pacific news*] 47: 12.

And yet in Chen's paintings the humorous, light touch of Huang Shen—or even of his own earlier work—is abandoned. Further, albums of street figures and trade pictures had, until this time, used the surface on which they were depicted as a perfect, identical frame. As if weighting the page or paper, figures were featured at the center of the page. When the roughly contemporary Tuhua ribao (Daily pictorial) documented 360 street professions in an ongoing series (vingye xiezhen) over two years (1908–1909), it, too, maintained this practice. Chen does away with this convention. His beggar, for instance, floats between the inscription and a man to which she pleas for a coin, who moves away from her in a rickshaw pulled through the edge of the page (see pl. 5). Eight other figures similarly break through the frame of the page, drawing the viewer into an uncertain set of bodily orientations in relation to them. (This sense of uncertainty is heightened when the face of the street figure is turned away from the viewer or left blank). The inscriptions themselves, which might regulate the viewer's relationship to the pictorial space through standard script and placement, instead cramp the image or leave it floating at a distance, and increase the ambiguity of how to look. The words that are inscribed in a sketchy style—characters looming large and dark or traced with tiny thread-like strokes, in seal script and regular cursive writing by various hands—amplify the wavering and plunging irregular line of the pictures.

Like the disorienting aspect of the compositions that introduces a shifting, unstable distance between the figures and the viewer—which, along with the shifting and unstable brushstroke sometimes makes it difficult to actually see the figures—inscribers of the album comment on the marginal presence of the figures who are there and yet also describe them in the same language used in prose descriptions of ghosts. One observes:

With smudged face and disheveled hair, they are following wind and frost.

Begging for food and covered with dust, they are crying on the roadside.

Don't laugh—when you turn around in this journey. In the world of men, both the rich and the poor are as vast as the ocean.

(S. Chen [1914–1915] 2002, 33)¹²

Another directly raises a question about the status of these pictures as sketched, similar to cartoons (and their implications of humor, subversive or as a means of avoiding harsh reality, as

signaled in the command "Don't laugh"). The writer asks: "Could this album be just a mischievous work? When I look at it now, the sentiment of grieving over the present and meditating on the past contained in this work can be touched off by the brush and paper" (S. Chen [1914–1915] 2002, 79).

For these inscribers, Chen's album evoked quiet meditative grief. This grief is touched off by the brush and paper—by the lines of ink and pigment, the object quality of the album. The violence to which this grief responds is the dehumanizing poverty against which these figures struggle and the sense of abrupt social upheaval and slow disappearance of the figures that had been an integral part of city life—what another contemporary likened to a lost poetic melody.¹³

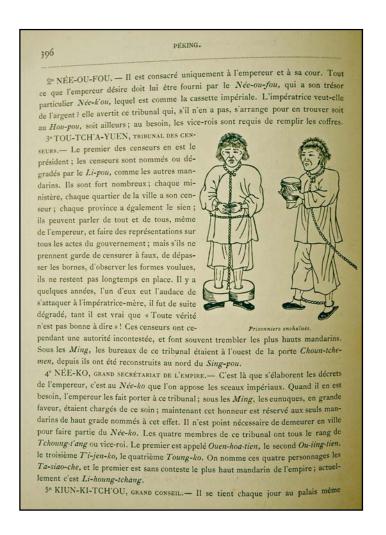


Figure 3. *Prisonniers enchaînés* (Prisoners in chains) by anonymous, late nineteenth century. *Source*: Favier (1897, 396). Image courtesy of the Bruce Peel Special Collections Library, University of Alberta.

But the violence limning the strokes of the album also can be traced to nineteenth-century trade pictures made in Canton (Guangzhou City). Art historian Yeewan Koon has demonstrated that figural trade albums and local genre paintings belonged within the same open circuit of picture-making earlier in the century, and moreover, that trade pictures produced in Canton also were formally related to the sort of court ethnographies studied by historian Laura Hostetler (Koon 2014, 53–67). Koon traces a nexus of pictorial and patronage relationships that extends from Guangdong to Zhejiang and Fujian Provinces, and includes within it Huang Shen (whom Chen Shizeng cites as one of his own inspirations). Koon's interest is not in late nineteenthcentury Beijing, however, and hence, to further flesh out such an ethnographic impulse within Chen's own visual surroundings, we might consider a worn leather-bound album—the words La Rue à Peking and the year 1890 stamped in gold on its spine—containing delicately rendered watercolor and ink paintings of Chinese figures—which serves as an example of such picturing practices later in the century, and in the north. Next to pictures of a tinker, a tailor, a solider, a noodle maker, monks, sculptors, students, and others (pl. 11), rendered as at workshops in the south, are pictures of criminals who are chained or immobilized by ankle presses and other wooden devices while being strangled and beaten with whips or split bamboo canes (pl. 12). The figures are neither contorted nor in the final throes of death, and their faces are practically as empty as those administering punishment. In this album, the punished body is rendered as simply one more category of being in China.

Reproduced in French Lazarist father Alphonse Favier's (1837–1905) *Péking: Histoire et description* (1897), the pictures are contextualized within a narrative of race and nation (figure 3). The trade pictures of the street thus begin to serve in modern ways—Favier insists that his account is up-to-date—as an index to China itself. Five years later, an article in the 1902 Parisian *Almanach Hachette* introducing the implements of corporal punishment reproduces two of *La Rue à Peking*'s pictures from Favier's book, and similarly frames them in relation to a Chinese corporate body. The article concludes:

Here is what was happening at the beginning of the twentieth century, and a few kilometers away from our large [trading] ships, on the border of our Indo-China, where all of these atrocities have long since disappeared. At once civilized and barbarian, China has stayed the same, for it is two thousand years old. She has learned nothing, and forgotten nothing. ("Supplices Chinois" 1902, 248)

The torturous fragmentation of the human body made clear through the pictures and labels finds an unwitting analogue in the carving up of the world into modern colonies or spheres of influence with shorter—and more modern—histories, where such atrocities have "disappeared." And indeed, this is a dominant narrative in Chinese media commentary on illustrations of corporal punishment at the turn of the century.

In relation to Chen Shizeng's album, it is the indexicality of these pictures to the street to which we should be paying attention; the seamless integration of violence into such a project of categorizing and seeing the Chinese "race and nation" naturalizes violence into what could be called the nineteenth-century ethnographic gaze. It is this ethnographic view that tempers response to a poetics of violence (the violence of grief, of loss, of poverty, of the brushstroke itself) in Chen's album, even as it encapsulates it. It doesn't cancel out the uncertainties of the viewer's orientation, but it gives them a different kind of weight. The pictures present a view of Beijing that the viewer can never hope to enter—everything about the unstable position of the viewer makes that kind of engagement questionable—but it is their very representational meaning as "ethnographic" that makes them familiar and tangible and immediate. And yet, paradoxically, it is the violence inherent in that ethnographic view—whether considered as a purportedly universal objective mode of seeing that was nonetheless vulnerable or shaped by politics, or, in more nuanced historical terms, as developing from an era when the punished body represented the body politic in China—that also creates a distance from those figures, binding them to an outsider view of the Republican nation.

Habitat Dioramas: Liu Kuiling's Animal Paintings in Republican-Era Tianjin

Here we take up the screen paintings of the painter Liu Kuiling. We find Liu in early Republican-era Tianjin obsessing over "truthful" details in his paintings, in one case taking five years to complete a painting of a peacock (pl. 14) that began with a study of one of its feathers (figure 4). The paintings that made him famous during his lifetime are meticulously rendered animals on full-size screens, such as a black bear shuffling around a tree; a pair of wolves standing alert in prairie grasses (pl. 15); and two lynx crouching low on a cliff. Liu's ink menagerie was painted with the sensuous colors and brush styles that he adapted from earlier generations of Tianjin artists (into which he synthesized Japanese and European painting techniques that he encountered in his hometown); the animals portrayed in his paintings were

domestic and also exotic animals that belonged within a zoo or natural history museum, a scientific arena of "facts" about the natural world culled and categorized at that time mainly by Europeans, Japanese, and North Americans. Indeed, Liu collected specimen books from the local Musée Hoangho Paiho de Tiensin, ¹⁴ and there is visual evidence to indicate that he sketched taxidermied animals on view in its galleries.



Figure 4. Peacock feather (untitled), by Liu Kuiling, undated. Draft, ink and color on paper. *Source*: He (2003, 72).

A number of scholars have attended to questions about Liu's production and technique that speak to the role of the artist in weaving the fictive with the nonfictive, the poetic with the "real." Such studies dwell on the limpid quality of Liu's brushwork, his self-training, and the multiplicity of his pictorial sources (which include, for instance, commodity advertisements, calendar posters, and the twenty-eight imperial-era artists to whose work Liu says he is indebted in painting inscriptions). For Liu's training as a painter was experimental and ecumenical, independent of a conceptual or practical agenda tied to a particular painting master or manual. It began when his childhood nanny introduced him to the art of the print and to paper cuts of birds and animals, which he trace-copied, along with other printed designs. He continued to engage in one-to-one copying throughout his career, and to develop the decorative aspect of

popular prints in his own work. While still a student, he studied oil painting, perspective, and chiaroscuro, and further developed his interest in European styles of rendering plasticity of form in close object studies at home. The style of the Japanese artist Yokoyama Taikan (1868–1958), famous for his "blurred style" of painting (J. $m\bar{o}r\bar{o}$), also was to have an impact on Liu, who met him on a trip to the southern Jiangnan delta area. Hence, in addition to a synthesis of Chinese calligraphic techniques with European representational styles, Liu sought out and absorbed the ornamental aesthetic programs of contemporary Japanese *nihonga*; he became especially interested in the work of Takeuchi Seihō (1864–1942), who also painted animals on screens.

Yet the paintings raise another set of questions as well. Key to their visual and material impact is that they could also be considered pieces of furniture, and they were sold at a painting and calligraphy shop located in a Tianjin furniture market. The screens Liu painted altered the home through their placement and position and asked people who encountered them to look at that space through new eyes. Hence, we might ask: what did it mean to invite a polar bear into your home? To echo art historian John Berger's well-known essay, why look at animals?

Berger (1980) writes about the incomprehension in the looks exchanged between animals and humans that has deepened as animals have become increasingly marginalized by economic and social technologies. The closer modern industrialized society gets to the animals in its sights, the more they disappear—a process eloquently captured in the dead eyes of the animals exhaustively photographed in the Tianjin area by one of Liu's contemporaries, the British naturalist Arthur de Carle Sowerby (1914) (figure 5). Sowerby and European zoologists in the Tianjin area were engaged in trophy hunting, by which they hoped to possess China's natural world. Their construction of the order of things through display and print publication was based in "universal" science; it possessed a distinctive visual presence, constituting a scopic regime through which the human gaze toward animals was regulated, and the relationship—one of authority and power—between themselves and China made clear (Jay 1989).

I propose that Liu's screens serve as objects within this "empire of scientific visuality." I position them between science and long-lived elite ways of looking at animals. The screens mediated cultural tensions of seeing, studying, and displaying animals. They did so by functioning as "habitat dioramas" in the home. Central to my analysis is the notion that, as art historian Alex Potts wrote of the politics of picturing animals in Europe and North America during the first part of the twentieth century, "if one thing consistently characterizes ideas of

natural order, it is that they are not permanent, but arise out of changing conceptions of social order" (Potts 1990, 12). Looking at animals in the home—looking at the natural order—at a time when the social order was exceptionally fluid and chaotic in China underscores the critical importance of understanding how Liu's paintings embodied and shaped perceptions of them. This case study of Liu's screens thus provides an opportunity to reconsider the problem of seeing and defining the self from emergent, conflicting, and contested perspectives—in this case, perspectives toward representations of animals—that were, through Liu's paintbrush, rendered scientifically modern, deeply experimental, and national (Jay 1989).

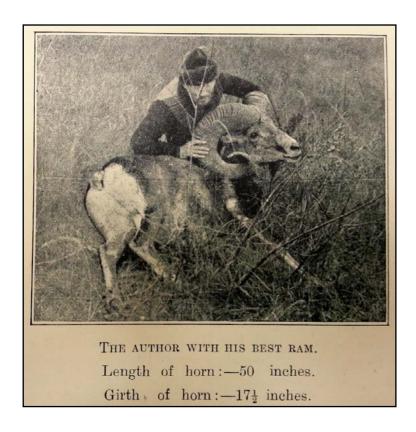


Figure 5. "The Author and His Best Ram." Half-tone plate. Source: Sowerby (1914, pl. V).

Liu Kuiling's screen paintings are distinctive for their narrow vertical formats, and they were sold in even-numbered sets of four, six, eight, or twelve pictures. He accepted private commissions. Typically, Liu sold his work locally through the Nanzhiju, a collective of stationery and artist's materials shops in Tianjin (*nanzhi*, or "southern paper," was Tianjin shorthand for the *xuanzhi* paper used by artists). Tianjin residents who bought Liu's paintings

included the moneyed gentry who had connections to his family, and an even greater number of wealthy merchants and compradors. For the most part, they displayed his screens in their homes rather than in their businesses (S. Wang 2010, 149).

Comparing an illustration of what appears to be a screen from the local illustrated newspaper *Xingsu huabao* (to which Liu had contributed drawings early in his career) with an undated but roughly contemporary photograph of a home in Tianjin illuminates some of the ways in which the paintings would have been displayed (figures 6 and 7). In both, figures are posed before a table or sideboard, behind which is displayed a "screen" of animal paintings much like Liu's. In the photograph, the pictures, mounted so that the silk or paper backing is not obviously visible, stiffly hang together on the wall. One of Liu's students recalls that Liu's screens (*pinghua*) might be displayed on either side with rhymed couplets by one of the so-called "four greats" of calligraphy in Tianjin, indicating, as the photograph attests, that they would be hung in a distinctive mural-like format. ¹⁹ When framed in wood with a metal hook at the top, these pictures would be more widely recognized as a "hanging screen" (*guaping*). One similarity connecting each of the differently formatted screens is that they are displayed in public spaces—even within the home.



Figure 6. Home in Tianjin. Undated black-and-white photograph. Source: Lin (1998, 206).



Figure 7. Xingsu huabao illustration. Undated lithograph. Source: Hou (2005, 33).

One might wonder about the popularity of animals as subject matter in particular. It is true that animal paintings could operate as rebuses having to do with the attainment of wealth and good health connected to the flourishing commercial life of the port city of Tianjin (Jie and Yu 2010, 15). For instance, the word for "cat" 貓 (mao) is a homophone of the word for "elderly" 耄; when painted with butterflies 蝶 (die), a homophone of the word for "aged" 耋, the meaning the painting conveys is hope for and congratulations about longevity.

But this explanation does not go far enough. That Liu Kuiling emphasized accuracy in depicting animals to some extent denies them symbolic meaning (by accuracy, I mean that the visual evidence indicates that he made pictures of taxidermied animals at a local natural history museum [figures 8, 9, and 10]). More to the point in the discussion of public display is the nature of the space created by the screen. Much of the complexity of the screen arises from the relationship of the surface of the paintings incorporated into them (what might be called pictorial fictions of space) against those forged by the architectonic frames (a material reshaping of the space of the dwelling). This relationship calls for focus on how space is represented in Liu

Kuiling's paintings. The screen painting of the leopards, for instance, shows the two animals on an elevated grassy ridge painted in mineral greens, cut away below to reveal the bones of a mountain fading into a ravine of mist (pl. 16). Displayed next to the leopards' mountainous home were pictures of an animal in a wooded glen, a marsh, a field of grass. The nature of the space is kaleidoscopic nature itself. But it is informed by a gesture to Chinese brush-and-ink landscape traditions—to texture-dotted rocks, mist, and calligraphic lines of branches and flower stems. The Tianjin painter Xue Yongnian, writing about Liu's facility with painting environments, observes: "He investigated through his sketches how tree leaves were at the front and back in shadow and light, from deep to light, and expressed concrete spatial layers, without neglecting the relationship of tree bark to the rough surface of rocks. In other words, he stressed using the movement of brush to sketch tree leaves, flowers, and grasses, but also to preserve a definite ornamental beauty of traditional flower and bird painting" (Xue 1992, n.p.).

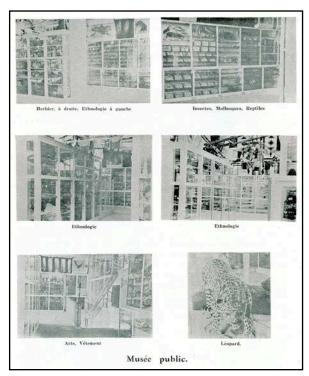




Figure 8. Leopard in the public galleries of the Musée. Photograph. *Source*: Licent (1935, 22). Figure 9 (left). Liu Kuiling. Leopard (untitled). Draft, ink and color on paper. *Source*: He (2003, 22).

The painted environment can be positioned somewhere between the decorative and the real. Liu himself notes, "You don't want to overlook the background and environment, because it is related to the entire composition, and if painted well, it can complement the space of the village home, bring out the subject of the painting, and what is more, harmonize everything. [Doing] otherwise damages the painting" (Jie and Yu 2010, 18). That is to say, screens can be disruptive if the natural environment is regarded by the artist as being entirely ornamental and patterned, but painting surfaces also are vulnerable to damage if they do not harmonize—that is, extend or connect with—the space of the home. In a way, it can be said that it is both the viewer's home and the animal's home that are produced through the screen paintings; domestic space is captured in the pictorial, and the pictorial merges into the home.

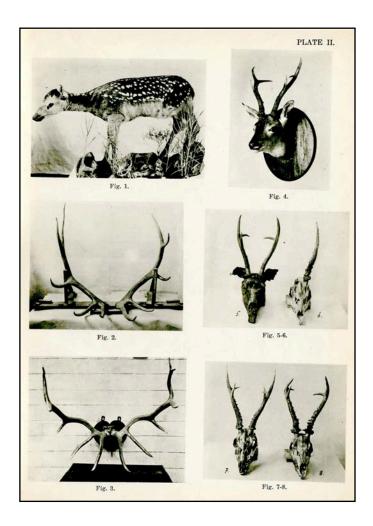


Figure 10 (right). Ungulates. Photograph. Source: Jakovleff (1935, pl. II).

The conjoining of human space and animal space as represented by the screen produces a peculiar kind of habitat diorama. Liu's paintings are "dioramas" in the sense that the three-dimensional spaces created by the screens could be entered into by the viewer, connecting —and expanding—the spaces of the depicted animals. Liu's insistence on formal accuracy further connects them to early twentieth-century European and North American conceptualizations of the diorama. At the time that Liu Kuiling was painting his screens, habitat dioramas were regarded as "masterpieces of illusion" that "could hardly be distinguished from the same subjects in real life" (Wonders 1990, 94).

Liu Kuiling's screens create medial spaces through their formal and material qualities, where form and content merge. The animals and their environments in the screen paintings are what they seem (i.e., furniture created by a named artist), but they are also more than what they seem. There is a certain quiddity to the lions and bears, and to the wild places in which they are depicted. This sense of being there, in nature, outside the social order, is never complete, however. It is precisely because these adventurous images were mediated multiple times through Liu's self-designed practice (through drafts, photographs, and stylistic prisms of Japanese and local or historical arts, and through his own imaginative eye in his shabby studio), in combination with the obtuse medium of the screen, which also mediates space in multiple, layered ways, that we are left still puzzling over how to locate his animals in relation to the social and cultural world that Liu and his fellow Tianjiners inhabited, and hence, over the question: what did it mean to bring a polar bear into your home?

Before we can arrive at an answer to this question, however, we must first consider a more basic question: what was an animal? In the larger research project from which this article originates, I consider how the language used to denote "animal" shifted during the late Qing in relation to an emerging understanding of a new and scientific forum for modern knowledge: the zoo. This shift reveals an empathetic sensibility giving way to a more object-oriented understanding of animals. The different views deeply connected literally to new ways of seeing animals. To the extent that these new perspectives bolstered and culturally authorized particular viewing positions, we can begin to ascertain how seeing animals reflected on the social order.

In 1906, the Imperial Ministry of Agriculture, Industry, and Commerce (Nonggongshang bu) established an experimental agricultural farm (Nongshi shiyan chang), at the Summer Palace in Beijing, which held a small menagerie. The viceroy of Liangjiang, Duanfang, purchased a

group of animals from Germany and deposited them there.²⁰ The empress dowager and Guangxu emperor both visited the zoo twice. The empress dowager appropriately enough stayed at the Changguanlou, the "Tower of Expansive Viewing," an elaborate Baroque-style country palace designed by a French architect for her and built in 1908 on her circuit of "traveling palaces" (*xinggong*); from this palace, she was able to view her European-style zoo from an imperial, panoptic position.

Such a possessive, connoisseurial gaze at animals percolated into society and continued to be central to the experience of the Beijing zoological garden throughout the Republican era, as the public was encouraged by the zoo's literature to visually savor the animals (*guanshang*) as if they were singular possessions in their own shared collection (Yang 2002, 1). This mode of pleasurable looking, a kind of cultural performance that mimicked older connoisseurial practices and performances of identity, was rewarded at the zoo by glimpses of the strange and wonderful, such as a five-legged cow that harked back to auspicious phenomena (*ruiying*) of the dynastic era, through which heaven offered its blessings (figure 11).

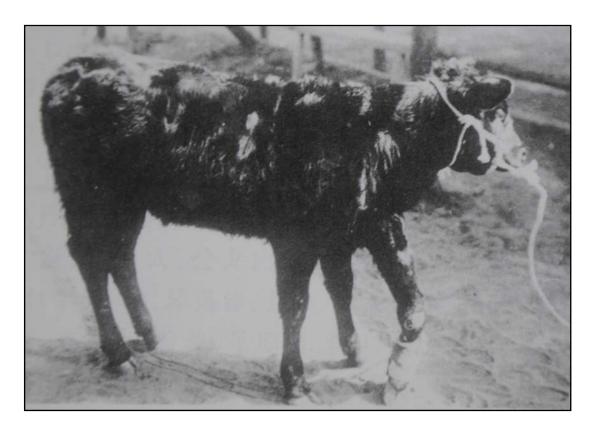


Figure 11. Five-legged cow, undated black-and-white photograph. Source: Yang (2002, pl. I-47).

But this is only part of the story. In Tianjin, we find that Father Licent and his Jesuit colleagues also were deeply engaged in the project of defining animals, and that this, too, had an impact not only on Liu Kuiling's painting practice but also on the local reception and interpretation of Liu's screens. The Jesuits' Musée, conceived in 1912, opened in 1914.²¹ To be sure, the Musée was not a zoo, and it was to be entirely unlike the botanical-zoological garden in Beijing of which Licent was highly critical, observing after his visit in late May 1915, "It was in a poor state: the animals for the most part are stuffed [i.e., through taxidermy] in cages in a grand pavilion; the latest collection for me is in an excellent state, but the installment is mediocre if one wants to ensure the conservation of the specimens . . . the system of the botanical garden is disorganized; I only encountered a few labels" (Licent 1924, 1:115).

Instead, the Jesuits uncovered in their workrooms, amid piles of bones and dried skins, an order based on the taxonomizing logic of species, genus, family, and class. To bring the order to life required that the limp feathers and gutted furs of specimens deemed perfect be sent to Hataman Street in Beijing (Seys and Licent 1933, 150) or stuffed in their own laboratories by the "talented taxidermist" and zoologist B. P. Jakovleff for gallery display (Licent 1936, 3:514). This was a complex visual operation; as new techniques of animal photography were developed, establishing the liveliness of the obviously dead, "increasingly the problem [confronting taxidermists] became one of how to suggest movement without motion" (Wonders 1993, 24). To document animal behavior and movement in natural environments, the Musée developed a library of research photographs that numbered nine thousand by 1935. Such photographs were generally understood to be "truthful" (Brownell 1904, 3). The aim for the Musée was to give expression to science without the artfulness of the expression becoming apparent. For, unlike the zoo, the Musée encouraged visual inspection of the stuffed animals as a form of connoisseurship—but it took a form different from the appreciative, pleasure-seeking gaze of a collector. Licent notes that the point was intent observation of both the animal and its position in the gallery, at whatever angle possible, with an eye to the animals' specimen status: "the cases and shelves being made of glass, visitors will have no difficulty in observing, from underneath, the specimens exhibited on the upper shelves (Licent 1930, 2) (figure 12).

For the thoughtful visitor, there was perhaps a tension between explanation and description here: the system of classification and organization used by the Jesuits was hierarchical, based on physiognomic similarities and differences of specimens, and dedicated to

explanation. In these respects, such a system of display encouraged visual practices that could be analogous to the connoisseurial gaze of the Chinese educated elite. The display, however, also asked for an attention to fragmentary views, opening up through the juxtaposed zoological and ethnographic objects to the "detailed and richly articulated surface of the world it is content to describe rather than explain" (Jay 1989, 13).

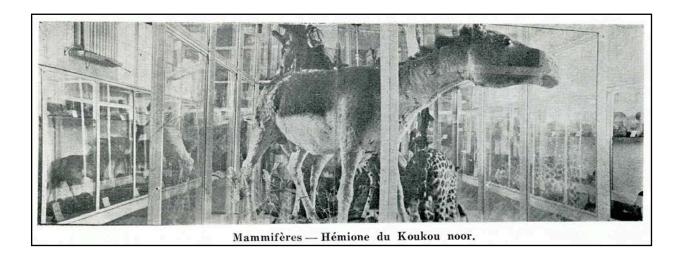


Figure 12. "Mammifères – Hémione du Koukou Noor" ("Mammals – mule of Koukou Noor") in the Zoological gallery of the Musée. *Source*: Licent (1935, 23).

To conclude this section of the essay, I want to suggest that the peculiar function of the screens as habitat dioramas disrupts the two scopic regimes that I have roughly laid out (elite and connoisseurial) and, in doing so, creates a third mode of visualizing animals that connects to yet one more aspect of animal definition and, finally, answers the question of why we look at animals.

The sense of this becomes clearer when we consider that this third vision of animals was taken up in Tianjin by the self-styled "First Museum of Hebei," in the first of its bimonthly periodicals, published in 1931 (figure 13). Like the first domestic museum in Nantong, this Tianjin museum contained in its collection manufactured things dedicated to history (such as coins, relics of the past, and copies of imperial exams), fine art (*meishu*), and zoological and botanical specimens in the nature galleries (*tianran*). The lead article of the periodical drew explicit links between the museum's project and social and national health:

This is an ordinary museum, and is not a specialist's museum; its basic nature lies in illuminating culture and enhancing our national splendor (*guoguang*) in order to supplement the points where the education of schools and society have fallen short, "to take as responsibility a mission that is heavy and great." The primary aim of this periodical's circulation lies in disseminating cultural education—and not only in encouraging the average person to pay attention to the museum itself.²³

The museum's collections, animals among them, were dedicated to the cultural education of the average person. To cement the importance of this connection, a portrait photograph of the first president of the Republic, Sun Yat-sen, appeared on the same page, directly beneath the banner head.

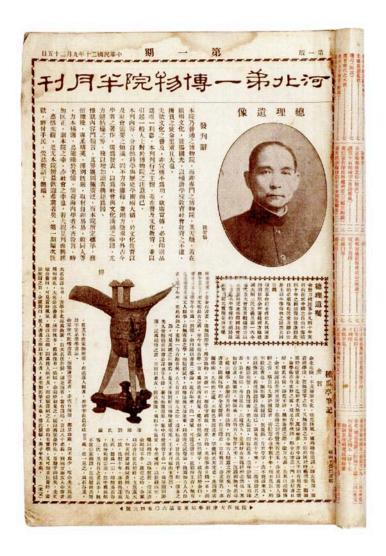


Figure 13. Cover page featuring portrait photograph of Sun Yat-sen, September 25, 1931. *Source: Hebei diyi bowuyuan banyuekan* [Hebei's first museum half-monthly] 1 (1): 1.

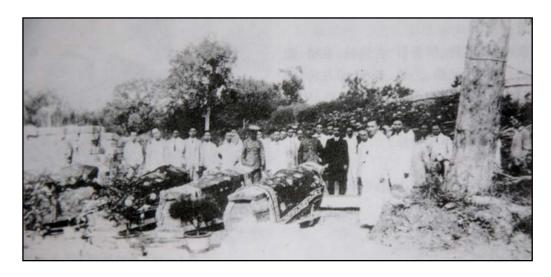


Figure 14. Sun Yat-sen attending the interment of the Four Martyrs of the Xinhai Revolution. *Source*: Yang (2002, pl. 1–30).

The periodical prods its readers, effectively, toward an understanding that from the very beginning of the Republic, what the periodical editors call the "average person" would be put on a "footing of equality" globally, through the kinds of museological objects on display in its galleries. The attentive reader might further recall that in late August 1912, President Sun had visited the Beijing zoological gardens and attended the interment, behind the panda cages, of four martyrs of the revolution (figure 14).²⁴

In the most revolutionary sense, for the editors of the museum periodical to see an animal was to see the possibilities of nationhood. Liu's paintings more delicately raise the possibility of communicating how a subtle seeing and feeling mind's apprehension of animals could resonate among "average" viewers. They do so by "displacing" the truths about animals within elite and colonial visions of the natural and social order. Liu's paintings instead aptly serve as a screen through which human and nature confront each other. Hence, the paintings bear the weight of being in nature *and* connecting to the ornamental styles dominating the visual arenas and market of Tianjin. The screens present animals that are meaningful precisely—if frustratingly—because of their imaginative ambiguity, the way they occupy the space between nature and the home. Such spatial ambiguity opens up to a freedom of differentiated ocular experiences, bringing the viewer closer to a natural order by bringing it home in the form of animals, but leaving it always at a slight distance that the imagination must fill—a perfect analogy for experiencing and imagining the nascent nation.

Gao Jianfu's Insect Studies

Mantises of pea pod green and tobacco brown twist together at the center of a white porcelain dish (pl. 23). Papery wings fan out from the two largest insects. In its arms, one mantis cradles a moth pupa, made ready to devour. In contrast to the lifelike insects at the center, the dish's rim is beribboned in patterns of stylized fishes, flowers, and birds on a ground of Japanese shibori tie-dyed textile design. Underneath, the mark at the dish's bottom reads, "Guangdong bowu shanghui zhi," indicating a "manufacture of the Guangdong Natural History Association." The artist who designed this dish was the ink painter and revolutionary Gao Jianfu (1879–1951). Gao's dish encodes a story about intersections between science and design that formed at the very moment at which the Chinese nation was violently emerging from the ashes of China's dynastic age. This story has many chapters: Gao's 1903–1907 travels to Japan, where he studied the new, modern science of entomology; his establishment of the "fine arts kiln" (meishu ciyao); the essay about porcelain's value to the nation that he presented to Sun Yat-sen; his theories about zhezhong, or "eclecticism," that linked synthetic objects to his painting practice; and his abandonment of porcelain design in 1920 in favor of the brush-and-ink painting for which he became famous. This story—indeed, this short essay—forsakes the typical thesis about the development of China's national modernism as a response or reaction to exogenous "Western scientific education" and replaces it with a new one that recognizes the more nuanced role of scientific knowledge without specific origin or bounded entity in the creation of a national modern culture.

Insect painting illustrates this phenomenon well. An important new form of insect painting on porcelain (as well as paper) emerged in the works of Gao and others at the turn of the twentieth century that did not evolve from within the realm of Chinese art specifically, or even from art generally. Instead, it evolved from a more complex process that began in the trade pictures of insects produced for a scientifically minded European clientele in the eighteenth and nineteenth centuries—the progenitors of modern-day entomologists. The industry that produced these paintings involved not only the Europeans who oversaw their production and drew the insect forms but also the Chinese artists who typically provided the color. Through them, new techniques of painting for scientific illustration developed.

By the twentieth century, as entomology took shape as a popular, standardized science, the fragile bodies of insects had come to embody new forms of relationships among distant urban

centers like London, Paris, and Canton. Cultural confrontation and empathic response was made real through butterflies, beetles, and bees—and most importantly, through *pictures* of insects that circulated in and out of China during the nineteenth century (see pl. 24–25). Entomology was defined in large part by its visual practices, perhaps even more than other sciences because it made such obvious demands on the eye to see things so small that they were at the edge of vision. At the beginning of the century in Paris and London, the insects one could find in one's garden minute in size, and nearly invisible to the eye—analogically served as tiny placeholders for the Orient; yet rather than their tiny bodies, a faith in images as a means of understanding was fully conveyed by the British entomologist Edward Donovan (pl. 26), the first to dedicate an entire study to Chinese insects, when he relied on trade pictures to illustrate his book. He writes in the preface to his book about the Macartney mission's failures that "though, in common with every friend to the commercial advantages and scientific inquiries of this country, the Author must regret its issues, it is perhaps, on the whole, more favourable to the present publication than if the event had been different" (Donovan 1798, n.p.). 26 His book was to provide an "Epitome of the Chinese Insects [which] exhibits a splendid display of this beauteous race" (Donovan 1798, n.p.)—meaning, somewhat ambiguously, the insects themselves, and not the Chinese. In time, however, word and diagram overtook picture as the primary medium for communicating knowledge in the entomologist's nascent discipline (see pl. 27, 28).

Abandoned by science toward the end of the century, the "realist" technique of painting insects for trade did not entirely disappear, but instead found a new home in ink painting, as exemplified by the art of Gao Jianfu. In other words, an artistic genre evolved by twists and turns from a scientifically motivated genre of empirical description in early science. Trade pictures of insects nonetheless continued to be produced through the end of the century, though in what appears to be coarser and more swiftly produced forms, in which the design (patterns on insect bodies and wings, composition, and perhaps above all, color) became paramount (Williams 2001, 46). Leached of their scientific utility, their silvery greens, deepest purples, and pale pinks still appealed, as remarked on from the beginning: "The [Chinese artists] paint insects, birds, fishes, fruits, flowers, and the like, with great correctness and beauty; the brilliancy and variety of their colors cannot be surpassed" (Wines 1839, 81).

Through tiny brushstrokes, nature was being asked by the anonymous art factory artists to divulge the anatomical structures of the insect bodies, an intelligibility that encouraged the

viewer to lean in close for careful observation and "scientific" analysis, real or pretend. Color conversely welcomed, in a sense, an inattentiveness. Its saturated tones spread over the paper created a pattern-like redundancy, a gleaming brightness that was amplified as one moved from picture to picture. That aspect of the insect illustration may have spoken to a romantic sensibility about the insect world captured in an 1874 review of a mid-century book on insects by the historian Jules Michelet (1798–1874), which found natural scientists accused of "withering the soul, and robbing Nature of poetry and life of enchantment" in favor of dry accuracy of detail (Monod 1874, 231–232). Michelet writes of the "eloquent appeal of the indigenous arts of the insect," which to some resolved itself by becoming an art—appreciated by the artists Gros and Lyonnet, he notes, but by others as well ([1858] 1875, 67–68). A cabinet of colorful butterflies also was housed at one of the first design schools in London. It is for these reasons, in part, that trade pictures of insects served as sources of visual pleasure, and took on less scientific purposes (see pl. 29).²⁷

Color was deemed one of the most difficult things to get right in insect illustration; after all, it was an entomologist, Moses Harris (1730–1785), who codified it in a color wheel (in a publication dedicated to the painter Sir Joshua Reynolds [1723–1792], later quoted and reconfigured by another famous British artist, J. M. W. Turner [1775–1851]) (Parkhurst and Feller 1982, 217–230). Its scientific accuracy was wholly attributed to the artist: "whatever defects . . . are to be observed in comparing [insect specimens] with the colored figures must be imputed to the artist, as it would not be proper to describe them according to the prints, but to nature" (Westwood 1837, 1: vi). Hence, we might consider how the anonymous Chinese artist laid those colors on paper.

One keen observer of the early nineteenth-century port city, Charles Toogood Downing, wrote of "the way in which they [the artists] work to produce that extreme fineness of detail, which is so conspicuous in the best specimens of these drawings":

The fine down or rather feathers on the back of a butterfly are often so perfect, that it would appear almost as if they had been counted for the purpose. Although a great part of this effect is produced by the natural texture of the rice-paper, still a considerable portion of merit is due to the way in which the colors are laid on. (Downing 1838, 2:99–100)

That "way in which the colors are laid on" what actually was local bone-white pith paper or European paper can be fleshed out through the more fully documented process by which the plants with which the insects often were pictured were made. Rendering specimens seems to have largely relied on the instruction of supercargoes (investigators) of the Honorable East India Company. In some instances, pictures of specimens would be sketched by a supercargo with pencil and colored by a Chinese assistant hired for precisely that purpose. In other cases, pictures could be copied from imported books or possibly from specimen drawings or collected specimens produced on the trade routes, so that what might be assumed to be accurate images of insects of China on closer inspection turn out to be insects local to Australia, India, and Southeast Asia.

Pictures of insects also appear at times to be copied from locally crafted stock forms or templates, with little attention to accuracy of color or line. Indeed, this is the form of pictorial production that seems to have become dominant once the value of the image had eroded. Such pictures appeared not only in collections of amateur scientists such as John Russell Reeves (1804–1877), whose folios of paintings feature among them a picture of a butterfly bearing the feathery antennae of a moth. They also became available for general purchase at the Old and New China Streets just outside the walled city of Canton (Ching 2007, 47). In nearby Hong Kong, lushly ornamental pictures of botanical specimens featuring insects could be ordered from the studios of Tingqua and Youqua, specializing in paintings of butterflies floating above flowering plants in Chinese album formats. The templates used to trace copies can be quite clear, as the studio artists did not necessarily paint within the hastily sketched lines (pl. 30).²⁹

Art historian May-bo Ching has argued that the process of illustrating specimens might also have taken place in the gardens of the Hong merchants, which, in addition to permitting study and purchase of plants and insects in situ, also functioned as sites of social and cultural interaction through which foreign supercargoes could become acquainted with local elites—who may also have been patrons or amateur painters of insects themselves (Ching 2007, 47).

That final case in particular prompts the question of how the mode of making trade pictures—with its emphases on details and veristic, glowing color—links, or fails to link, to histories of insect depiction in China. In a study of British naturalists in Qing China, historian Fa-ti Fan (2004) makes the general observation that the style of rendering natural history specimens demanded by the British of the Chinese artists who worked with them was foreign to

the Chinese, who instead appreciated expressive brushwork over the meticulously fine lines of the trade pictures. This is a generalization that has some historical grounding in one of painting's most self-interested discourses linking the art of the brush to the calligraphic writing brush of men of letters (Fan 2004, 50), and indeed, there is at least one record by a local artist caviling at the choice of insects as subject matter (Zheng ([1866] 2003). But as a generalization it fails to take into account local picturing practices that Gao Jianfu himself later traced to the Five Dynasties, and that, indeed, were evident across China in various contexts for centuries as a meticulous fine-line, *gongbi* style (Gao 1941, 696). Notably, it privileges, as a result, a particular gendered and elitist view of painting that excludes the precise renderings of flowers and insects by women, by the truly amateur, and by the professional. But it also fails to understand this mode of painting to be one adopted by the very elites who embraced gestural styles of painting.³⁰

Such *gongbi* traditions were codified (along with other painting styles) in the popular late imperial "how-to" manual, the *Jieziyuan huazhuan*. In the volume on painting flowers, grasses, and insects, the latter are described, like those of the European insect orientalism texts, as possessing a "minute size containing significance" that made them attractive to poets, and likewise, analogy is drawn on to instruct painters to render mantises, for instance, as if tigers. Like the trade pictures, the pictures in the *Jieziyuan huazhuan* show sketched insects scattered on the page, followed by color prints in which they are balanced on the leaves of blooming plants (figure 15). Color is for flowers; the finer strokes of black ink delineate the insect bodies that are to lightly embellish them. As for butterfly wings, the manual observes, "Use of powder, ink, yellows and the three colors [white, blue, red] is proper" (Guojia tushuguan, ed. 2008, 19).

Notably, the Guangzhou artist Ju Lian (1828–1904), with whom Gao Jianfu studied from age fourteen, worked within this mode of making pictures and, according to Zhu Wanzhang, the preeminent scholar of Ju Lian and his older cousin and painter Ju Chao (1811–1865), roughly nine out of ten of his extant paintings in China and Hong Kong collections feature birds, flowers, insects, and grasses as their subject matter (Zhu 2004, 29; 2003, 29). If Ju Lian did not himself study the manual, his pupil Gao Jianfu appears to have done so: the latter's comment on the quality of Ju Lian's insect painting uses the language of the *Jieziyuan huazhuan* nearly verbatim.³¹

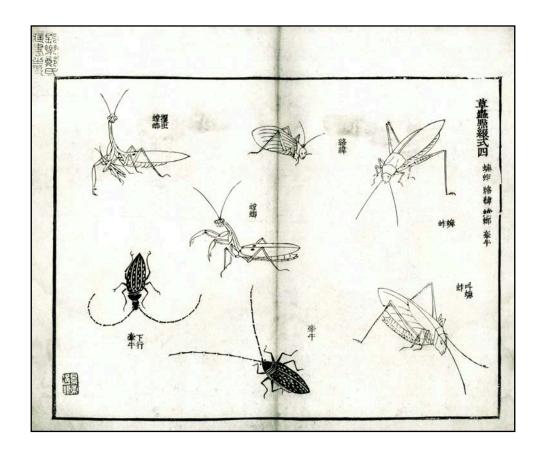


Figure 15. "Caochong dianzhui shi si" ("Style of embellishing with insects, no. 4"), Kangxi era. Woodblock print. *Source*: Guojia tushuguan, ed. (2008, 41). Courtesy of the National Library of China.

Ju Lian's paintings, as well as those of his cousin Ju Chao, with whom he studied and whose paintings eventually figured into the painting tutorials he gave in the Shixiangyuan (Ten Fragrances Garden) in Geshan Village, Panyu County of Guangdong,³² can be situated in a genealogy of centuries-old delicate paintings of insects and flowers that show the fuzz of a bee's coat, the thinness of a spider's legs, and the gossamer of dragon wings. According to Gao Jianfu, Ju Lian's style can be related to the Northern Song–dynasty painter Xu Chongsi (act. early eleventh c.), grandson of the canonized painter Xu Xi (937–975); Chongsi developed a style of veristic painting using color and no contour line called the *mogu tu*, or "boneless diagram," which was pictured in the painting manual as well. For color, both Ju Lian and his cousin studied the *mogu fa*, or "boneless method," of the early Qing bird-and-flower paintings of Yun Shouping (1633–1690), who, with a few wet strokes of his brush, created flowers that spilled out of two-dimensional paper and silk with a fragile three-dimensional movement. If the artists were not

able to view Yun's flower paintings in person, they might have studied their interpretation by Jiangnan flower painters Meng Litang and Song Guangbao (act. nineteenth c.), both of whom sojourned as painting instructors at the retired eunuch Li Yunfu's (1783–1842) atelier at the Huanbi yuan (Ringed-by-Green Garden) in neighboring Guangxi Province. There, Ju Chao and, through him, Ju Lian, encountered their work during an extended sojourn in Guangxi as assistants for the high-ranking military and judicial official Zhang Jingxiu (1824–1864).

Contemporary imperial-era records remark extensively on the two Jus' literary activities and their interaction with men of letters in southern China (including Zhang and his family members, whom they visited when he retired to his famous Ke yuan [Delightful Garden] in Dongguan, Guangdong, after pacifying the local violence of the Taiping Rebellion). From childhood, Ju Chao was trained by his father in the meticulous analysis of Han-dynasty bronze seals that was demanded by literary epigraphic study. Ju Lian's father was a scholar who omnivorously studied ancient poems and prose of the southern dynasties (Zhu 2005, 35). While Zhu Wanzhang describes Ju Chao as an artist with the sensibility of a man of letters, and Ju Lian as an artist's artist, the latter nonetheless embraced literary culture (Zhu 2003, 36–37). Both artists wrote and published compilations of poetry. Cultural historian Li Weiming observes that, contrary to some speculation about the isolated and lonely status of Ju Lian in Guangzhou in relation to educated peers later in his life, he was tightly integrated into the intellectual life of the city (Li 1999; Zhu 1996). For instance, Li points out that in 1887, fifty-nine scholars and painters contributed poems to mark the occasion of Ju Lian's sixtieth birthday, including the famous scholars Chen Feng (1810–1882, *juren* presented scholar 1832–1833) and Chen Pu.³³

Ju Chao makes the connection between literary practice and the study of insects in a preface to his collection of seals published late in life, in which he concludes that such a book was intended both for those who enjoy authentic seals as well as for those who appreciate carved jade insects of the ancient past. He thereby aligns the practice of close visual analysis demanded by epigraphy to the historical study of insects (Ju [1879] 1983, 15). The literary dimension of Ju Lian's interest in painting insects finds slightly different shape in his poems and painting inscriptions (Jiang K. 1920, 2). Ju Lian inscribes an undated fan painting of a round spider hanging by a thread from the branch of an Osmanthus tree, for instance, as follows: "In the willows [by the light of] the sinking moon I saw a spider's web. Painted in the style of Old Man Southern Fields by the Old Man of the Divided Mountain, Ju Lian." He directs readers'

attention to the Song-dynasty poet Su Shi, from whom the first line is modified, as well as to Yun Shouping, or "Old Man Southern Fields," mentioned by Gao Jianfu as an inspiration for Ju Lian. Still, in spite of the elegance of the references, the painting itself operates as a somewhat hackneyed rebus wishing prosperity, as a homophone for Osmanthus (*gui*) is wealth, and a homophone for spider (*zhu*) is jewels or pearls, and its web for ensnaring wealth. It thus also points to the professional status of the artist, and to the wide popularity of his paintings in both private homes and commercial premises (Szeto 2008, 26).

Unlike his cousin, Ju Lian avidly looked to nature for inspiration, quite literally. Gao Jianfu relates that Ju Lian's "philosophy broke away from [Ju Chao's] and he specialized in seeking subjects to paint from nature (*da ziran*), taking nature as his teacher (*yi zaohua wei shi*)." Firsthand observation aligned Ju Lian's practice with that of the artists who produced insect paintings for trade. Gao Jianfu again comments:

Whenever the master sketched an insect, each time he would stick a pin through the insect's abdomen or keep it in a glass box, so that he could draw it from life. When he had finished painting, he would then use it to document the various insect families and pin it into another glass box, like today's books of specimens, so that he could look at it and copy it at any time. He also spent a little time in the garden's pea trellises and melon arbors, or simply buried himself in flowers and grasses, to carefully observe how insects live and move. At the time this lifestyle truly embodied the philosophy of "I don't know where I begin and the insect ends." (Gao 1941, 696)³⁵

Another of Ju Lian's students also commented on what he called "the design of a painting" (*she hua'an*) that involved placing the jars of live insects directly on the surface to be painted.³⁶ And like the anonymous Chinese artists who painted insects that were new to foreign entomologists, collecting and pinning them into cabinets for export, Ju made a concerted effort to paint new and unusual specimens: Zhang Jingxiu asked his servants to collect exotic plants and a variety of insects for Ju to study and illustrate (Ching 2007, 45).

A comparison of the ways in which Ju Lian and Ju Chao rendered the thick body of a cicada clarifies their different approaches. Ju Lian's painting shows the insect balanced upside down on a branch next to a cluster of lychee fruit (pl. 31). In contrast to the wet vegetal reds of the fruit, Ju used a fine brush to delineate the boned wings and texture of the cicada's hard carapace, its bulging eyes, and the spines extending from its legs. Ju Chao, in contrast, presented

the cicada with a few deft brushstrokes, using a boneless technique to suggest the plastic quality of the cicada's back in contrast to the patterned surface of the lychee fruit on which it stands (pl. 33).³⁷

Gao wrote of a technique that Ju Lian developed that effectively located the former's insects at that intersection between verism and ornament also evident in the trade pictures:

When he was drawing a butterfly's wings, most of the time he would do a few quick brushstrokes with thick and light ink. However, when it comes to the body parts of the butterfly's head, neck, abdomen, waist, and legs, he tended to add powder and water when the pigment was still moist. Such seemingly effortless technique unexpectedly (but reasonably) brought a rounded and semi three-dimensional effect to the butterfly's body. In rendering the eyes he also would lightly add some powder, which gave them a sense of roundness and light, and this also was part of his unique method and style. (Gao 1941, 696)

While not as entirely new a technique as Gao makes it out to be—and, indeed, possibly connected to the opacity and sometimes powdery, glinting quality of the gouache paint used in trade pictures (C. *shuifenhua*, literally "water-powder paintings"), or even in the *Mustard Seed Garden* painting manual—Ju Lian relied so consistently on this technique that it became a hallmark of his painting, and was utilized by his cousin as well. It required the painter to drip water or to sprinkle powder onto the drying paint, thereby enhancing the illusion of three-dimensionality through texture and tonal gradation, as well as merging the contour line with the color pigment.³⁸

How Gao Jianfu related Ju Lian's descriptive brush to the more traditional style demonstrated in Ju Chao's paintings, which he may have copied, is evident through a simple comparison. Ju Chao renders in a fan format on gold-speckled silk a white-breasted bird tethered with a delicate red thread to a spotted-bamboo perch and feeder (pl. 34). Dangling to its left are three grasshoppers. The ink is light, even the nearly invisible contour lines rendered in matching pale colors. Gao's painting, in contrast, is crisper in its lines—the thread has thin black contours, the pink feet are carefully marked with a dark red line. Where Ju Chao created texture by letting the gold spots of the paper remain visible beneath the body of the bird, Gao's colors are densely opaque against gray paper (pl. 35). Gao's grasshoppers are not quickly sketched, as they are in Ju's fan painting, but he painted them so that the ribs on the insect bodies and the spines on their extended legs and on the antennae are clear. Gao reworks the uniform pattern Ju Chao

had created out of the insect bodies by bunching the insects together as well by varying their size and color.

Mapping visual attention to detail against either painter's practice in Gao's early forays into insect depiction is difficult, however. Another early sketch after Ju Lian by Gao Jianfu, one of a set of four dated to 1887, shows a moth that is rendered with more attention than the peony blossom over which it is hovering to get nectar (pl. 36). However, like Ju Chao's more impressionistic paintings, it may be a hybrid insect of sorts, something between a hummingbird moth that gathers nectar in this way (family Sphingidae) and the moths in the region of China that have prominent eyespots on the front wings (family Brahmeidae), which don't ever take nectar as shown in the drawing.

In sum, while the trade pictures of insects had drifted away from their scientific moorings by the end of the century in Europe and North America, and the impetus for veristic rendering of insects with them, the practices used in creating specimen pictures continued locally in the work of Ju Lian. There may seem to be a gap between the relatively straightforward mimetic copying of insects on paper for trade in what complexly could be modular production, involving more than one pair of hands or a template, and the painstaking practice of rendering insects onto silk or paper—still with an eye to past traditions, or what Gao Jianfu calls, in Ju Lian's case, the "synthesis of ancient paintings and nature, transforming the two into the very embodiment of self" (Gao 1941, 696). Yet in a different light, the way in which Ju Lian artfully rendered the image of the insect was as a weird simulation of those representations produced for trade, at once faithful (painting as if creating a specimen book) and distorted (with poetic elements). Paradoxically, the sameness between the two reveals a basic truth about the ontological status of insect images, where any assumed opposition between pictures for trade and local representations of insects is completely undone.

And critically, for Gao Jianfu, Ju's mode of seeing and laying on color remained at play in what became, for Gao and his fellow revolutionaries, a design revolution—not one based on modern science as a "Western" import, but a science filtered and shaped by art practices and modes of seeing in his hometown. Although the next chapter of the story about design is an equally complex one (as it takes Gao to Japan), it is worth noting that Gao's mode of seeing insects informed his design sensibility—and as such, it opened up possibilities for participation in visual systems of societal and productive meaning (*jiazhi xitong*) (Kao 2000, 27).

Conclusion

The traditional "four treasures of the scholar's studio"—brushes, ink, ink stones, and paper—were intimately associated with the literary culture of a particular kind of scholar-elite, distinguished by class and social station. During the waning years of the Qing dynasty and the early decades of the Republican era, however, newly manufactured tools for calligraphy and painting no longer strictly emblematized the elegant taste and refinement of men and women of letters, but often were artifacts of the new urban and commercial centers of art production, like Shanghai. Ink sticks were designed by the Shanghai celebrity artist Ren Bonian (1840–1896) with the master ink maker Hu Guobin (1848–1931), for instance, or might be imprinted with the names of the Shanghai Zhonghua Shuju book publisher (est. 1912), or other commercial concerns, and decorated with pictures of skyscrapers and urban scenes. Ink stones, likewise, expanded in styles to feature international art deco designs also found in urban architecture. The artist's soft *xuan* paper, as revealed in the case study of Liu Kuiling, was still identified with the regional cultures of the south, as it had long been during the imperial era.

Of these treasures, it was brushes in particular that gained new and complex meaning—though perhaps less through a new materiality and look, or even through the brand names emblazoned on their handles, and more immediately through the new visual practices and performances of brush-and-ink painters such as Chen Shizeng, Liu Kuiling, and Gao Jianfu. To be sure, the "newness" of what these artists were doing can be questioned by positioning them in a genealogy of artistic heritage—Chen with Huang Shen, for instance, or Liu with any of the twenty-eight artists he claimed inspired him (Jie and Yu 2010, 43–44)⁴¹, or Gao with Ju Lian. Yet in each case study, it is clear that these artists were revolutionary not because of their ability to bring the past into the present—or rather, not only because of that ability. The past may have permeated their present, but it was nonetheless the past. Instead, their paintings were revolutionary because of their ability to work synthetically and experimentally. During this extended historical moment, these artists' brushes moved across cultures, art mediums and styles, and bodies of scientific knowledge that were increasingly codified, but at this early juncture were themselves in a state of fluidity.

How might we interpret such boundary crossing? In the social history of art this might be considered a painterly expression of political commitment and one more iteration within a politics of representation. Indeed, the stakes for each of these artists were political; each painter

was clearly dedicated to embodying one dimension of the nascent Republican nation. For these artists, to lift the ink brush ended up being, as Cai Yuanpei put it, a project of finding synonymy and shared interest for a new China within an international context. It meant crafting a reality from within a constantly changing society and environment that, in some large sense, was itself a rapidly changing fiction (which is to say, the stake of painting was to make real what the contemporary culture critic Liang Qichao [1873–1929] described as a social reality indebted to fictions). More specifically, it was a project of locating China's national identity within structures and rubrics of meaning and knowledge that seemed to stretch across the globe.

Yet to position Chen, Liu, and Gao solely in terms of their politics is to miss the complexities inherent to scientific seeing that ink practice itself could bring into play: an innerturning, imaginative vision; a point of view tinged by emotion; a brushstroke that was appreciated in part for resisting full conscription into "scientific" pictorial grammars of form even as it so carefully brought that form into being. That these artists' paintings of street figures, animals, and insects encouraged a multifocal gaze incorporating and going beyond diagram, regulation, and "universal" pictorial conventions, may, in fact, be the more significant thread linking them.

There is both a darkness and a promise to this project of working out how to see. And it is the slippage between the two that makes the paintings more than historical artifacts. The feeling of loss that was recorded most straightforwardly as a reaction to seeing Chen's urban ethnography in his album echoes today. By immobilizing their subjects through ink and pigment on paper or porcelain, these brush-and-ink painters captured what was quickly moving toward the edge of vision: disappearing social roles; wild animals extinct from their natural habitats; insects stilled in sickened gardens. The desired processes of modernization and globalization that were part of becoming a nation ensured that. But the artists also threw the images back into the flow of time by questioning the nature of seeing itself for the nation. It is this dimension of their painting that indeed makes it not only relevant, but urgent, to look at it—again, and again—as we question today whither China.

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Notes

- The text continues: "The West has developed through natural science, as Francis Bacon said: 'People need not read text-based books, but should read the book of nature.' The Greek philosophers' discussions about the origin of species all rely on natural science. When Aristotle followed Alexander the Great in his eastern campaigns, he began to pay attention to the knowledge of naturalists. The famous German author Goethe liked to study animals and plants (zoology and botany), and discovered that the myriad variations of plants came from [different morphologies] of the leaf. The weight with which Westerners regard natural science being like this, therefore art also starts from descriptive sketching of things in the flesh." Cai ([1919] 1999, 36–37).
- The exposition was organized jointly by the Association des artistes chinois en France and the Société chinoise des Arts décoratifs à Paris.
- For a well-researched, short essay that recapitulates secondary literature on the discourse of modernity versus tradition, see Dal Lago (2009).
- For a discussion of how *guohua* was debated in the decade after the 1911 Republican revolution, see Lu, Zhang, Sun, and Pan (2005) and Wong (2006).
- A 1917 speech by Cai on religion and art entitled "Yi meiyu dai zongjiao" ("The theory of replacing religion by aesthetic education") has been frequently cited in art historical literature as representing Cai's Kantian understanding of the value of art to education. For instance, see Andrews (1994, 28). Cai argued that aesthetic sensibility should replace organized religion because it was through art that pure feelings are revealed, without the limitations on intellectual inquiry and the life of the mind that he felt resulted from religious indoctrination.
- Chen Baozhen (1995, 103–104) points out that Cai was a student at Leipzig University from 1907 to 1911, when the Swiss art historian Heinrich Wölfflin (1864–1965) was professor at the University of Berlin (1901–1910) and was developing and circulating through public lectures and newspaper articles the ideas that would inform his 1915 book *Principles of Art History*. The book reveals that Wölfflin was interested in the science of art, as was Cai.
- They are fleshed out in longer projects, which, along with explorations into the brush-and-ink geologies of the landscape painter Fu Baoshi (1904–1965) and the bird-and-flower painter Yu Fei'an's (1888–1959) investigations into ornithology and embroidery, will form a book. On Liu Kuiling, see Claypool (2014 [in press]).
- The plates cited throughout this article refer to images included in "Picturing Science in Modern China," an accompanying photo essay curated by the author that is also featured in the March 2015 issue of the online journal *Cross-Currents: East Asian History and Culture Review* (https://cross-currents.berkeley.edu/e-journal/issue-14).
- 9 Cai Yuanpei's 1926 article "On Ethnology" was instrumental in clarifying the relationship of this science with ethnography and anthropology. On the autonomous development of ethnology, see Dirlik, Li, and Yen (2012, 12–13).
- The manual was entitled *Shangxin suibi* [Sketches for pleasing the mind]. See Jiang J. (1984, 200–206), whose research is republished in Hu (2012, 210). See also Wang Y. (1882).

- The loose "sketching the idea" (*xieyi*) painting to which *manhua* is formally connected was hugely popular at this time (see Claypool 2012b).
- This is a modification of an unpublished translation by University of Alberta graduate student Lulu Yu (2012).
- The *Guangling san* is a legendary piece of music dating to the Six Dynasties (Zhou 1962, 169).
- The museum was renamed in 1922 as the Beijiang bowuyuan (Beijiang Museum) to more concisely reflect the geographic scope of the collection, though it nevertheless continued to be called by its original name in museum publications.
- The Tianjin Art Museum, which offered studio classes, was established in October 1930 under the direction of Yan Zhikai, after his experiences of studying abroad in Japan and the United States.
- These included pictures in his textbooks, postcards of exotic foreign places and animals, and the labels on manufactured goods (Liu X. 1986).
- The editors of the Tianjin gazetteer even referred to his "adventurous and studious" eye (bolan 博覽) (see Zhongguo renmin zhengzhi xieshang huiyi et al. 1987, 105). For further discussion of bolan as a mode of vision, see Claypool (2005).
- According to He Yanzhe, in the early years of the Republic, "a not inconsiderable number of Japanese paintings—because their prices were lower than Chinese paintings—entered the Chinese calligraphy and art market" (2003, 17).
- That the paintings in the photograph slip into an object status somewhere between 19 traditional hanging screens and mounted paintings and still can be called "screens" is perhaps unexpected, although it must be acknowledged that such sets of paintings had been produced to be hung in the capacious halls of the Qing palaces beginning in the Kangxi reign era. It is important to note that these screens were not like twentieth-century wallpaper, which although a modern luxury and a wall covering, connected to a practice dramatically different from interior furnishing at the court. The walls of northern middle class and poorer homes were covered with layers of newspapers and pictures, replaced as soon as they became blackened by dirt and smoke. (On the topic of wallpaper, see Dikötter 2006, 173.) Further, they differ from descriptions of homes of wealthy elite in nearby Beijing at the turn of the century, who also covered their walls, though with elegant embroideries or paintings instead of print media. The French Lazarist Armand David observes, "Besides . . . large pieces [of furniture], we see again very beautiful portières [heavy curtains often richly decorated and usually on a rod in doorways that often separate rooms] where fine embroideries representing flowers, landscapes, pagodas and occasionally hundreds of children are graciously laid out. The walls which are not covered with embroideries, are set with painted silk panels representing the image of three felicities, of the phoenix or other gracious subjects" (Favier 1897, 461).
- The animals were purchased on February 27, 1907, and deposited on June 6, 1907 (Yang X. 2002, 4).
- Shang Keqiang correctly observes that it was not the first museum in Tianjin, which was the small Huabei Museum, part of what Shang calls the "New Study Academy" (*Xinxue xueyuan* [sic; should be *shuyuan*]) or Tientsin Anglo-Chinese College. The Huabei Museum actually was founded two years later than Shang believes, in 1904, under the guidance of the British Protestant missionary Samuel Lavington Hart (1858–?, Chinese

name: He Lide), while he was the college's principal (1901–1925). Unlike the Musée, it was solely for the use of the students at the college, and it is unlikely that Liu Kuiling or the public visited it. Students in the first years were largely drawn from the merchant and official classes. It should be noted that Shang's description of Licent's activities in the same passage is likewise generally correct, but the specifics are not (Shang 2008, 93). On the composition of the student body, see Cullen (1946, 22).

- The Museum of Tianjin, established four years after the Musée on Guanghua Road, was thusly renamed in 1928. On the Nantong Museum, see Claypool (2005).
- 23 Hebei diyi bowuyuan banyuekan 1, no. 1 (September 25, 1931): 1 (see figure 13).
- The four revolutionaries were Peng Jiazhen, Yang Yuchang, Huang Zhimeng, and Zhang Xianpei. Sun visited the graves while attending meetings of the Guangdong Association, the National Railway Association, and the Postal Service—all held at the newly renovated "Tower for Expansive Viewing," now employed to provide a Republican perspective (Yang 2002, 56, 64). A monument in the shape of a pagoda was built in 1913. According to the zoo gazetteer, a new monument was erected in 1934; according to Madeleine Yue Dong, it was 1928 (Dong 2000, 131).
- In the larger project in which this research figures, the cultural history of entomology during the nineteenth century is carefully traced through a study of the vast collection of rare books on entomology in the University of Alberta Bruce Peel Special Collection.
- Lord George Macartney (1737–1806) led a mission in 1792–1794 to the court of the Qianlong emperor (1711–1799; r. 1736–1796) to establish a British trade presence in northern China.
- For instance, in a letter of December 14, 1825, to Isaac Cooper Jones, Philadelphia merchant and philanthropist Nathan Dunn writes, "For thy youngest daughter I have sent . . . a book of paintings of some of the flowers and birds of this country [including flowering plants with butterflies, flies, grasshoppers, caterpillars, and bugs], of both I perceive they have been selected those of the richest colors, of which the observations of some of our ablest naturalists are completely verified, that the gaudy colors of flowers of warm climates are destitute of fragrance, and the beautiful plumage of Birds of note" (Lee 1984, 142).
- As John Curtis, a prominent British illustrator and scholar of insects, put it of his own paintings, "The value of correct figures of wild specimens of our *native Plants* to the entomologist, as well as the beauty which they must always give to a drawing, have made me very desirous to render this department as interesting and useful as I could, and . . . I am happy to find that this portion of the work is not viewed with indifference, even by Botanists" (Curtis 1839, 1: 5). Indeed, the two sciences came to be linked by the early nineteenth century in England, "as well [as] on the continent, where, from being equally slighted, Entomology now divides the empire with her sister Botany." Kirby and Spence (1822, 1: v–vi). Pictures of plants in illustrated entomologies sometimes were verified as accurate representations by trained botanists who had traveled to China, such as George Staunton (see Donovan 1798).
- Two such anonymous albums can be found at the Harvard University Gray Herbarium. On Youqua, see Wan (2005, 87).
- Jiang Yinghe (2007) agrees that the trade pictures were not entirely a product of European painting styles and techniques, but were connected to painting styles in China.

- She cites Álvaro Semedo, the Portuguese vice provincial of the China mission, who commented early on that, "In painting [the Chinese] have more curiosity than perfection. They know not how to make use either of *Oyles*, or *Shadowing* in this Art; and do therefore paint the figures of men without any grace at all, but trees, flowers, birds, and such like things, they paint very much to the life" (Semedo 1655, 1:56, cited in Jiang Y. 2007, 222–226).
- "He painted butterflies in spring and autumn in different ways: those in the springtime were depicted with delicate wings and full abdomens, since they had just finished their metamorphoses, while those in autumn appear to have stronger wings and thinner abdomens, because they were getting old" (Gao 1941, 696). The passage from the manual with which this statement may be compared can be found in the *Jieziyuan huazhuan* (Guojia tushuguan 2008, 20).
- Today the studio can be located on Jiangnan Middle Street in the Zhuhai District of Guangzhou. Built in 1856, it was transformed into a small academy in 1864.
- The compilation of poetic inscriptions, with an unidentified editor and publisher, is entitled *Deshou tu tiyong* [Inscriptions on the picture wishing the attainment of long life] (ca. 1887). Some of the poems were reprinted in the *Xiaoyue qin guan shouyan* [Words for long life at the Hall of the Zither Whistling to the Moon] (1887). For short biographies of Lingnan painters, see Wang ([1919] 1988) and for an exhaustive compilation of scholars and artists with whom Ju Lian interacted, see Zhu (2007, 52–60).
- Unpublished, private collection. Featured in the exhibition "Ju Chao, Ju Lian shuhua wenxian zhan" ["Calligraphy, Painting, and Literary Work of Ju Chao and Ju Lian"] at the Shixiang yuan in August 2014. For the poem "Zhouzhong yeqi" ["Getting up at night in a boat"] by Su Shi, see Su (2001, 2: 910). The line inscribed by Ju on the painting from it reads "... the sinking moon hung in the willows which I saw as a spider's web." Translation by Owen (1996, 667).
- This method of capturing and displaying insects from China was documented in England earlier in the century, when the image itself began to lose its power and possession of cabinets of insects became more desirable.
- 36 This student was Zhou Shaoguang (1875–1952). See Zhu (2007, 37).
- 37 These paintings also are examples of pictorial rebuses for auspicious fortune. The *li* in lychee indicates wealth and the cicada (which buries itself underground and emerges as if resurrected) is a symbol of longevity.
- Wan Qingli connects this process to the humid climate of Guangzhou, where paint after application easily degraded (Wan 2005, 148).
- In the inscription Gao notes that the painting is after Luo Ping (1733–1799) (possibly a faked painting by the Yangzhou artist in the collection of Zhang Jingxiu); alternatively, he may have used Ju Chao's painting (see pl. 34) as a model.
- 40 See object entries in Claypool (2012b).
- Note that often in art historical literature in China, in an effort to recuperate Liu from the charge that he was simply "documenting" his subjects, there has been a concerted effort to place him into such a genealogy of artists, and especially to connect him with the artist Giuseppe Castiglione.

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