6. Pictures of Sea Fish (Haiyu tu) and Knowledge of Nature in Eighteenth-Century China

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Abstract: This chapter examines an as yet unknown Chinese album, *Pictures of Sea Fish* (*Haiyu tu*) in the collection of the Asian Art Museum in Berlin. It depicts more than 130 species of sea fish. It is a world away from the traditional artistic representation of fish and has more in common with objective scientific investigation of natural history. This article serves as fundamental research of the album. It examines this newly discovered album and subsequently situates it in the different contexts of nature studies and visual culture in early modern China. As the first research on this album, the article sheds light on the role of scientific illustrations within the formation of knowledge of the natural environment in China in the eighteenth century.

Keywords: *Haiyu tu*, Han Liangqing, *Haicuo tu*, Nie Huang, Guangdong

Introduction

In the collection of the Museum of Asian Art, Berlin State Museums, is a heretofore unknown Chinese album, *Pictures of Sea Fish* (Haiyu tu). The original binding of the album has been lost; at some stage it was rebound in Europe as a book. Its cover carries a label in the lower left corner with a collection stamp, a handwritten bibliographic description, and two inventory numbers. The stamp makes it clear that this album was originally in the collection of the library of the Royal Museum of Decorative Arts (now Museum of Decorative Arts, Berlin State Museums). The handwritten description contains three lines:

Fan Lin and Doreen Mueller (eds), *Picturing Animals and Plants in Early Modern China and Japan. Innovation, Experiments, and Anxieties*. Amsterdam: Amsterdam University Press 2025
DOI: 10.5117/9789048559091_CH06

Betsu-tschi-tschu-jin [Japanese: Betsuchi Shujin, Chinese: Miechi Zhuren][1]
Bilder von Fischen mit Erläuterungen [Pictures of fish with explanations]
Chines. Handzeichen. Peking 1739 [Chinese. Hand-drawing. Beijing 1739]

The first line gives the Japanese pronunciation of the author's Chinese name, Master Miechi (Miechi Zhuren). The second is a German title or description of the album; the third line indicates that it contains Chinese drawings and gives the place (Beijing) and the date (1739) of its creation. There are two inventory numbers: 'J532mtl.' and 'Bi 95, 403'. The letter 'J' indicates that this album was purchased in Japan (which explains the Japanese transcription of the author's Chinese name), the acronym 'Bi' stands for library (Bibliothek), and the number '95' indicates it was purchased or incorporated into the collection in 1895. This album was possibly transferred from the library of the Royal Museum of Decorative Arts to the collection of the Museum of East Asian Art (now Museum of Asian Art) in the 1950s on the occasion of its reopening after the Second World War.[2] But as there is no inventory number for the latter, it is not known when exactly this album was placed in the stacks.

I first found this extraordinary album in storage in 2016 when I was curator of Chinese art at the Museum of Asian Art. The significance of the illustrations, as I will demonstrate, is apparent. Since it is unknown to the field, this article serves as fundamental research of the album. It first examines this newly discovered album, and subsequently situates it in the different contexts of nature studies and visual culture in early modern China. Being the first research on this album, the article sheds light on the role of scientific illustrations within the formation of knowledge of the natural environment in China in the eighteenth century.

The Album, *Pictures of Sea Fish*

The album, *Pictures of Sea Fish*, has eighteen leaves in total (Figures 6.1 and 6.2). The first leaf is the title page with its original Chinese title *Haiyu tu*, written in running script. The second and third leaves contain a preface signed by Master Miechi (Miechi Zhuren). The following fourteen leaves, which are the album's main content, present pictorial representation of more than 130 species of sea fish and other marine creatures, such as squid and octopus. The final leaf has a colophon written by Wang Jian.

1 The Japanese spelling here is unconventional, hence a bit confusing.

2 I thank Prof. Willibald Veit, emeritus director of the Museum für Asiatische Kunst for sharing this information in email correspondence.

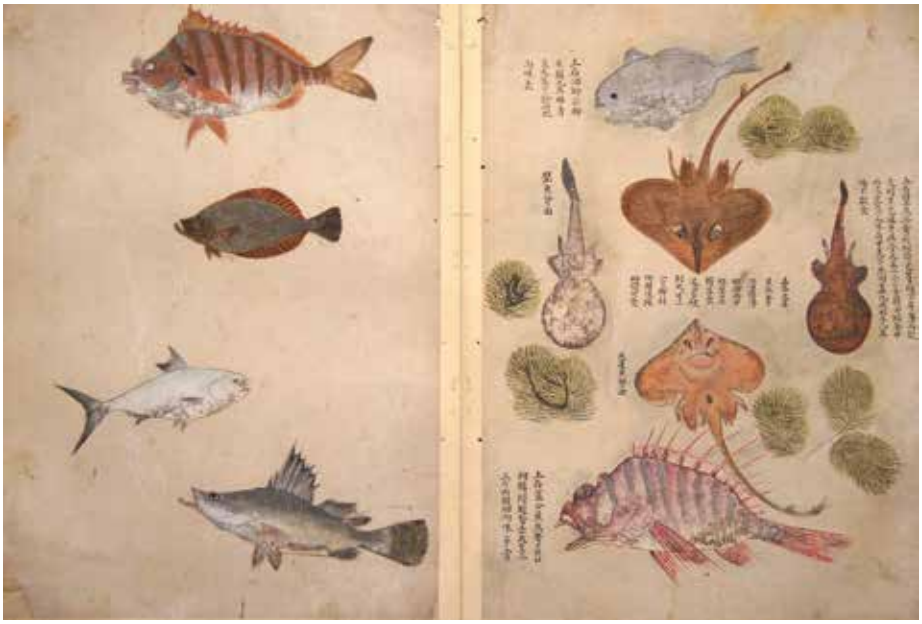

Figure 6.1: Han Liangqing, *Haiyu tu*. 1739. Manuscript, p. 4. Museum für Asiatische Kunst, Staatliche Museen zu Berlin. Photo by Ching-Ling Wang.

Figure 6.2: Han Liangqing, *Haiyu tu*. 1739, p. 5. Museum für Asiatische Kunst, Staatliche Museen zu Berlin. Photo by Ching-Ling Wang.

The preface signed by Master Miechi explains why and how the album was made:

> Things are normal by nature; [only] those who have limited knowledge and scanty information think they are strange. How can a thing be strange? No one in this world would think that the sun, the moon, a mountain, a river, a horse, cattle, a chicken, and a dog are strange, because they are accustomed to them. I have been posted as an official in the western regions for more than thirty years and have travelled frequently to the front. I never thought that the animals and plants I encountered through my eyes and ears were strange.
> In the *dingsi*-year [1737] I was entrusted with the surveillance of [the coastline] at Jieshi in east Guangdong. When at sea on patrol, [I saw it] as a boundless and vast expanse of water. The waves and the spray were high, I suspected that there were unexpected creatures on the blurry boundary between sky and water. I dived into the water, the servants and sailors were all frightened and did not know what to do, but I bore it with equanimity. What I heard with my ears and saw with my eyes [while at sea], the sounds are like thunder, or like drums and trumpets, or like the sounds of nature under the sky in autumn; the shapes are like pointed peaks and hard rocks, or like architecture, human figures, chariots and horses. They came and went continually and without warning and changed infinitely within a day. But what startled and surprised us was the interaction between winds, clouds, and waves, and creatures: fish, turtles, and shells. 'Odd,' I sighed, 'this is really strange. Why are the things I encounter at sea so unusual?'[3]

As we can see, the text begins with a brief philosophical discourse on what is 'normal/common' and what is 'strange/uncommon.' It further indicates (see below) that its author, Master Miechi, commissioned the album. He had worked in the desert regions of China for more than thirty years before he was put in charge of coastline surveillance at Jieshi, in Guangdong, in 1737. In his new post, he encountered scenery, climate, and creatures that were unusual to him. But who is Master Miechi? Since the text mentions his governmental posts and dates, he can be identified with the help of the *Biographies of officers of the Qing Dynasty* (Guoshi dachen liezhuan); the official posts mentioned by Master Miechi in the preface match the record of a certain Han Liangqing (?–1740):

> [Han] Liangqing held the *jinshi* title for martial arts and was given the position of imperial guard. In the fifty-eighth year of Kangxi's reign [1719] he was appointed lieutenant [*shoubei*] of the central camp at Xining town in Shaanxi province. In the sixtieth year [1721] he was transferred to Lanzhou city as major [*youji*] of the

3 See appendix, no. 1.

> guarding camp. […] In the second year of Qianlong's reign [1737] he was promoted to major general of Jieshi in Guangdong, and later transferred to Shaanxi as major general of Suzhou. In the ninth month of the fifth year [1740] he was given the position of lieutenant general [*tidu*] of Gansu and he died in the eleventh month.[4]

It seems clear that Master Miechi can be no other than Han Liangqing. In the preface, Master Miechi further writes:

> The cook prepared sea fish, the taste was rather delicate. I asked the servant what kind of fish it was. He answered: 'It was what we bought on the market today.' The fish all had strange appearances, some with their fins spread like arms and lifted like a beard, others with radiant colours like makeup. All these different kinds of fish made my heart palpitate. I asked the cook [about their names], he told me they were, 'Just fish.' Then I realised that I had never experienced how strange they actually were. Now that I have been on patrol at sea, I do know. This is why I commissioned the illustrations [of the fish]: to show them to those who will find them strange because they have never seen them. To them [i.e. local people], these [matters are normal and] not worthy of mention.
> I regularly asked fishermen to go out to catch fish, turtles, and shells, had all of these sent to my local magistrate's bureau, and asked a painter to depict them. My intention was to arrange them according to different categories, starting with fish. I collected nearly one hundred and thirty kinds of them. I did not know the names of most of them, so I recorded the names used by local people, and added comments [in the album].[5]

The fish were "normal" and "just fish" for the locals, but for Master Miechi it was another matter. With the help of the local fishermen, Han Liangqing was able to conduct his research on local fish, based on what they had caught. He also involved a local painter to visually document the species. It is worth noting that the local painter hired by Han Liangqing drew the fish in a descriptive and naturalistic way without following established schemes or patterns. The painter focused on capturing the colours of the fish and their biological features, such as the shape of the fins, and the texture and colour of the scales, and rendered them in a lively sketch-like way. For instance, from the depictions of *bi*-fish (*biyu*) and *shigong*-fish (*shigongyu*) on the fourth leaf one can tell that the texture of the body of the former is soft and without

4 *Guoshi dachen liezhuan* (Qing guoshiguan edition), vol. 98, pp. 125–126, archive number: 701005630, collection National Palace Museum, Taipei. My translation, original text see appendix, no. 2; I thank Dr. Zhou Wei-Chiang from the Hong Kong Palace Museum for helping me identify Han Liangqing.

5 See appendix, no. 1.

scales whereas that of the latter is hard and has tiny scales. In the representation of *shigong*-fish the painter paid special attention to the depiction of the shape of the head with its bulging eyes, the spiky and thorn-like dorsal fin and the colour gradations of the scales. He prioritised capturing the specimens' physical features over pursuing a certain quality of line or painterly effect. Since most of the fish are symmetrical, only one side of the fish is shown in the album; in cases of asymmetry, both sides are shown – the *bi*-fish just mentioned is a case in point (fig.1). One might say that the depictions in *Pictures of Sea Fish* show the intention to be faithful to the natural appearance of the fish. The arrangement of fish in the album appears to be random and, on occasion, the painter also paints seagrass in the background with a light colour wash, which gives the viewer the impression that it is swaying in the sea.

The comments accompanying the images of the fish follow a fixed format: first, they document the names by which the fish was known locally; second, they attempt to find a more common name in order to identify the fish; third, they document the physical attributes of the fish including its colour, shape, and size; and fourth, they describe how the fish tastes and occasionally also how local people cook it. For example, in the case of the so-called horsewhip-fish, which in English is known as the red cornetfish (*Fistularia petimba*), Han Liangqing wrote:

> The local name is horsewhip-fish [*mabianyu*], because its shape is like a horsewhip, the actual name is unknown. Its length can be four to five *chi* [1 *chi* = 33.33 cm.], The part from its mouth to its eyes looks like a bamboo joint, the tip of its tail is like a line, just like the tip of a whip. Its appearance is also odd. Its flesh is tender, and it has a delicate flavour.[6] (Figure 6.2)

Han Liangqing tasted most, but not all the fish himself. About the fish he refers to as *bi*-fish he wrote, for example:

> The local name is *bi*-fish [*biyu*], actual name unknown. Its shape resembles a purse [*hebao*]. Its mouth is on the side of its stomach. Its body is thin and soft, the tip of its tail is blackish. The whole body is boneless. It can grow to around two to three *jin* [1 *jin* = 604.8 gr.]. When cooking it, one must wait until the water is boiling, then place it into the water, otherwise the flesh will dissolve in the water. The flavour is somewhat sweet and refreshing. I found it odd, so I did not dare eat it.[7] (Figure 6.1)

He also documented some poisonous fish, for example a type of globefish local people called *mianguai*:

6 See appendix, no. 3.

7 See appendix, no. 4.

> The local name is *mianguai*. Just like the globefish its character [as food] is extremely hot [*re*] in nature; its flavor is sweet and refreshing, but it is poisonous. People are often poisoned because of eating it. It can grow to seven or eight *jin*. It can only be eaten when dried.[8] (Figure 6.2)

Not all fish in the album are accompanied by text. This suggests that the album is unfinished. It would seem that only the fish that have texts were researched by Han Liangqing and that those without texts had yet to be studied or identified. According to his preface, this was intended to be a long-term project; he planned to first collect all local fish, then shells and other entities.

> [...] The number I have now is just ten or twenty percent of all the various species. This project is still incomplete; the shells have not yet been depicted.
> Not so long ago I went up north to present myself before the emperor and received the emperor's order to transfer back to the western regions. This is why the project was never finished. Ah, it was probably the wish of Hairuo [the Sea God] not to have the names of these fish made known to the world! I am also afraid that those who are not used to seeing strange fish like these would think they are just too peculiar and would find this work ridiculous. Although only ten percent has so far been completed, I hope that in the future there will be someone with great knowledge who will collect all species and complete it, to broaden our knowledge.
> Two days before the Chongyang festival [ninth day of the ninth month] in the fourth year [1739] of Emperor Qianlong's [r. 1736–1795] reign, inscribed by Master Miechi [Miechi Zhuren] at the governmental bureau in Jiuquan.[9]

Unfortunately, this project was interrupted when Han Liangqing was posted back to the west regions at Gansu in 1739 and eventually died there in 1740 – *Pictures of Sea Fish* is only the first part of his ambitious project.

Pictures of Sea Fish in the Contexts of Nature Studies and Visual Culture in China

Fish have been depicted in China as early as the Neolithic period. Many archaeological excavations have brought to light images of fish or fish pattern decoration on pottery made in this period. It reflects the lifestyle of a fishing and hunting

8 See appendix, no. 5.

9 See appendix, no. 1.

society.[10] In archaeological finds of later periods and dynasties, such as Zhou (510–314 BCE), Qin (221–207 BCE), and Han (206 BCE–220 CE), fish appear as a common motif in the decoration of objects, such as bronzes, lacquer ware, stone reliefs, tiles, and so on. But although the depiction of fish in China can be traced back to Neolithic pottery, it did not become a major subject for painting until the tenth century.

The earliest textual record relating to fish as a subject of representation in painting history appears in *A Record of the Famous Painters of All the Dynasties* (Lidai minghua ji) written by Zhang Yanyuan (active in the ninth century). Here, Zhang documents an ancient cartographic painting titled *Yellow River Map with Dragons and Fish* (Longyu hetu), and mentions a painter by the name of Xu Miao (171–249) from Wei, one of the Three Kingdoms (220–280), who was proficient at painting fish.[11] According to *A Record of the Famous Paintings of the Tang Dynasty* (Tangchao minghua lu) by Zhu Jingxuan (active in the eighth century), the painter Zheng Qian (691–759) was also a capable painter of fish whose works were praised by his contemporaries.[12]

By the time of the Five Dynasties (907–960) and Northern Song (960–1127), fish painting had become established as a specific genre, as is evident from the *Xuanhe Catalogue of Paintings* (Xuanhe huapu, 1120), the catalogue of the painting collection of Emperor Huizhong (r. 1100–1126), which contains twenty chapters. The recorded paintings were divided into ten categories or genres, with 'dragons and fish' listed as one of them.[13] Famous painters such as Teng Changyou (d. 881), Xu Xi (886–975), Xu Chongsi (active in the tenth century), as well as many others, enjoyed the reputation of being skilled in painting fish. The fact that dragons and fish were seen as belonging to the same category or genre is probably due to a legend describing the transformation of a carp into a dragon or to the Buddhist and Daoist use of images of dragons and fish to pray for rain.[14]

Not only did it become one of the major painting genres, the representation of fish also reached a peak in naturalistic depiction in the Song dynasty (960–1279).

10 See Zhongguo kexueyuan kaogu yanjiuyuan ed., *Xinzhongguo de kaogu shouhuo* (Beijing: Wenxu, 1961), p. 10; Xiaonan Yang ed., *The Golden Age of Chinese Archaeology: Celebrated Discoveries from the People's Republic of China* (Washington D.C.: National Gallery of Art, 1999), pp. 60, 64–67.

11 Zhang Yanyuan, *Lidai minghua ji*, reprint (Beijing: Renmin meishu, 1963), ch. 3, p. 73; ch. 4, pp. 82, 104.

12 Zhu Jingxuan, *Tangchao minghua lu*, reprint in Pan Yungao ed., *Tang Wudai hualun* (Changsha: Hunan meishu, 1997), p. 113.

13 *Huanhe huapu*, 1120, reprint (Taipei: Taiwan shangwu, 1967). For painting activities during the Huizong court and the establishment of different painting genres, see Yun-Ru Chen, "Hua yi yi ye: Chonggu Song Huizongchao de huaihua huodong," Ph.D. dissertation, Graduate Institute of Art History, National Taiwan University, 2008.

14 Tokyo National Museum ed., *Kisshō: Chūgoku bijutsu ni komerareta imi* (Tokyo: Tokyo National Museum, 1998), pp. 240–255.

Figure 6.3: Liu Cai, *Luohua youyu tu*. 12th century. Detail. Saint Louis Art Museum.

For example, the scroll *Fish Swimming amid Falling Flowers* (Luohua youyu tu, Figure 6.3), attributed to Liu Cai (fl. 1080–1120) and *Fish and Waterweeds* (Yuzao tu), attributed to Fan Anren (active in the mid-thirteenth century) are considered masterpieces of fish painting.[15] Both are a symphony of rhythm and movement and depict the impression of swimming, darting, drifting fish, and clusters of fish. According to zoologist Dietrich Neumann's detailed observation, in the scroll *Fish and Waterweeds*, Fan Anren depicts a total of forty-seven fish known as sharpbelly (*Hemiculter*), each caught in a different fleeting movement, allowing the viewer to follow and understand the typical sequence of the reproduction process of the fish: from the tracking of sexually mature females (spawners) by males that are ready to mate (milters) up to the males' whirling in circles while releasing their seminal fluid over the eggs laid among aquatic plants by the females. No other painting captures the reproduction process of fish in a similarly logic and vivid manner.[16]

After the Song dynasty, images of fish, both in painting and in the applied arts (such as ceramics, textiles, lacquerware, bronzes and so on), often contained something like a rebus and conveyed auspicious symbolic meanings; for example, goldfish (*jinyu*) would symbolise "gold and jade filling the hall" (*jin yu man tang*); a combination of lotus and fish would symbolise "every year ends with an ample

15 Li Lincan, "Yucao hua de houpo sheenyi," in *Zhongguo meishushi gao* (Taipei: Xiongshi, 1987), pp. 201–206.

16 Dietrich Neumann, "Experiencing and Depicting Nature," in Dietrich Neumann and Josefina Ogando, *Fascinated by Nature: Landscapes, Plants and Animals in the Tradition of Chinese and Japanese Painting from the Neumann-Ogando Collection* (Berlin: Staatliche Museen zu Berlin, 2012), p. 22.

surplus" (*lian nian you yu*), etc.[17] In some rare cases, fish became a vehicle for the artist to express his emotions and philosophy of life, for instance the fish depicted in Bada Shanren's (Zhu Da, 1626–1705) paintings, where the fish are portrayed in a comic and exaggerated manner, almost like a caricature, especially in the eyes, which reflects the contempt and discontent of the painter towards the circumstances of his time.[18]

The illustrations in *Pictures of Sea Fish*, however, do not carry any auspicious symbolic meanings and are not meant to be 'artistic'. They clearly function as illustrations of natural studies and in this respect are closer to illustrations in the tradition of naturalistic enquiry into animals, fungi and plants, and inorganic material, such as minerals, used as *materia medica* (*bencao*) in traditional Chinese medicine.

The Chinese pictorial tradition of illustrated texts on *materia medica* can be traced back to the Sui dynasty (581–619). *A Record of the Famous Painters of All the Dynasties,* mentioned earlier, documents several works, such as *Exemplary Illustrations from Shennong's Canon of Materia Medica'* (Shennong bencao litu), *Exquisitely Executed Materia Medica Illustrations* (Lingxiu bencao tu), and *Illustrations of Materia Medica* (Bencao tu).[19] Although we do find illustrations of fish in books on *materia medica*, for example depictions of sharks (*shayu*) in *Revised Zhenghe Edition of Classified and Practical Basic Materia Medica Based on Historical Classics* (Chongxiu Zhenghe jingshi zhenglei beiyong bencao, Figure 6.4), their purpose differs from that of the images in *Pictures of Sea Fish* – they are there to help the reader identify specimens for medical purposes, whereas the images in *Pictures of Sea Fish* serve as a collection of pictorial documents of unknown creatures.

It should also be mentioned that, usually, new woodblock-printed illustrations were made when existing texts on *materia medica* were re-published. The *Revised Zhenghe Edition of Classified and Practical Basic Materia Medica Based on Historical Classics* was compiled in the Northern Song dynasty by Tang Shenwei (c. 1056–1093),

17 For the development of fish painting in China, see Liu Zhigui, *Zhongguo huihua yuanliu* (Changsha: Hunan meishu, 2003), pp. 418–423. For the symbolism of fish, see Noriko Miyazaki, *Kacho sansuiga o yomitoku: Chugoku kaiga no imi* (Tokyo: Kadokawa Sosho, 2003), pp. 157–171; Hou-mei Song, *Decoded Messages: The Symbolic Language of Chinese Animal Painting* (Cincinnati, OH: Cincinnati Art Museum, 2010), pp. 207–244; Tokyo National Museum ed., *Kisshō*, pp. 26–75; for the rebus play of auspicious meaning in Chinese art, see Tokyo National Museum ed., *Kisshō*; in Chinese painting, see Bai Qianshen, "Image as Word: A Study of Rebus Play in Song Painting (960–1279)," in *Metropolitan Museum Journal* 34 (1999), pp. 57–12.

18 Wang Fangyu, Richard M. Barnhart, Judith G. Smith, eds., *Master of the Lotus Garden: The Life and Art of Bada Shanren* (New Haven, CT: Yale University Press, 1990), pp. 102–104, 128–129, 148–151; Hui-Shu Lee, "The Fish Leaves of the *Anwan Album*: Bada Shanren's Journey to a Landscape of the Past," in *Ars Orientalis*, vol. 20 (1990), pp. 69–85; Hui-Shu Lee, "Bada Shanren's Bird-and-Fish and the Art of Transformation," in *Archives of Asian Art*, vol. 40 (1991), pp. 6–26.

19 See Zhang, *Lidai minghua ji*, vol. 3, pp. 77–78.

Figure 6.4: Tang Shenwei, *Revised Zhenghe Edition of Classified and Practical Basic Materia Medica Based on Historical Classics* (Chongxiu Zhenghe jingshi zhenglei beiyong bencao) (Beijing: Renmin weisheng, 1957[1249]), p. 434.

a doctor who distilled it from over two hundred Buddhist and Daoist reference works on herbal medicine. The work lists 1,746 herbal medicines; the illustrations were added later when the work was printed in 1249. It was widely known and recommended in medical circles for its rich content and practical applications and continued to be published into the Ming Dynasty (1368–1644). In some cases, the added illustrations and the texts do not match. Also, during the process of transfer from painted illustration to woodblock print and reprint, certain distortions would occur so that the illustrations lack the fidelity of the painted originals, hence, the images in *materia medica* books do not have the same descriptive function as those in *Pictures of Sea Fish*.[20]

In their function as pictorial documents of unknown creatures, the images of fish in *Pictures of Sea Fish* are actually similar to illustrations in books on material culture and nature studies (*pulu*). According to *Complete Library in Four Sections* (Siku quanshu, 1782), *pulu* are a subcategory of traditional Chinese bibliographies

20 Roel Sterckx, "The Limits of Illustration: Animalia and Pharmacopeia from Guo Pu to *Bencaogangmu*," in Vivienne Lo and Penelope Barrett, eds., *Imaging Chinese Medicine* (Leiden: Brill, 2018), pp. 135–150. For illustrations of *materia medica*, see Zheng Jingsheng, "Observational Drawing and Fine Art in Chinese Materia Medica Illustration," in Vivienne Lo and Penelope Barrett eds. (2018), pp. 152–160.

and part of the category of 'Masters and Philosophers' (*zibu*), which was divided into three parts: firstly, books of 'tools and objects' (*qiwu*) including research on antiques, objects associated with the scholar's study, money, machines, and so on; secondly, books of 'eating and drinking' (*yinshan*); and thirdly, books of studies on 'plants and animals' (*caomu qinyu*). The first *pulu* on fish in China is *Illustrated Eulogies of Remarkable Fish* (Yiyu tuzan, preface dated 1544) by Yang Shen (1488–1599). Yang Shen meant his work to be a kind of response to *Illustrations of Exceptional Fish* (Yiyu tu) of the time of the Southern Dynasties (420–589), which, however, has been lost.[21] The book describes eighty-seven kinds of fish and thirty-five kinds of river snails, shells, conches, clams, and other marine life. We might also mention Tu Benjun's (1542–1622) *Notes on the Sea Creatures of Fujian* (Minzhong haicuo shu) published in 1596. The book describes 167 kinds of fish and ninety different types of shells, clams, and turtles. It also includes some freshwater fish, such as carp, and various kinds of frogs and toads. Moreover, the geographical range of the book not only covers the province of Fujian, but also extends to the shores of Guangdong and Zhejiang.[22] Tu quotes from ancient texts and makes use of fishermen's knowledge, to which he adds his own findings. Supplements to both books were published in later periods, but none of them contain any images.[23] The usage and functions of the imagery and the interplay of text and image in *pulu* books are extensively discussed by Martina Siebert in Chapter 7 of this volume.[24]

Fish and their illustrations were also included in encyclopaedias, for example, in the *Illustrated Compendium of the Three Powers* (Sancai tuhui, 1609), intended for common household use (*riyong leishu*) and contained entries on subjects such as astronomy, geography, famous persons, agricultural activities through the year, palaces, tools and implements, the human body, clothing, human affairs, rites and etiquette, jewels, writing, and animals and plants. Another example is the imperial encyclopaedia *Complete Collection of Illustrations and Writings from the Earliest to Current Times* (Gujin tushu jicheng, 1700–1725), a vast work compiled during the reigns of the Qing-dynasty emperors Kangxi (r. 1661–1722) and Yongzheng (r. 1722–1735).[25] The images in *materia medica*, books on material and natural study,

21 See Martina Siebert's article in this volume.

22 Liu Changzhi, "Woguo xian cun zui zao de shuichan dongwu zhi: *Minzhong haicuo shu*," in *Ziran kexue shi yanjiu* 1982: 12, pp. 333–338.

23 For Yang's book, there are both Hu Shi'an's commentary with the title *Yiyu tuzan jian* (Notes on Illustrated Eulogies of Remarkable Fish) and his supplement titled as *Yiyu tuzan bu* (Supplement of Illustrated Eulogies of Remarkable Fish) of the Qing dynasty; as for Tu's book, Xu Bo (1563–1639) wrote a supplement with the title *Minzhong haicuo buzhi* (Supplement of Notes on the Sea Creatures of Fujian).

24 See Chapter 7 in this volume.

25 Chen Menglei and Jiang Tingxi, eds., *Gujin tushu jicheng* (Qing imperial edition, 1700–1725), in the collection of the National Palace Museum, Taipei.

and encyclopaedias were usually added later and are subordinate to the text. The images of fish in *Pictures of Sea Fish*, however, seem to play a more dominant role in the album and they are the source of Han Liangqing's work of natural study and investigation. Moreover, the album uses descriptive images to create an epistemic order.

Han Liangqing's work can also be put into the context of what is known as 'evidential research and learning' (*kaojü* or *kaozheng*), a school and approach of study in late Ming and Qing China from about 1600 to 1850. The approach corresponds to methods of textual studies and is sometimes associated with empirical studies and philology.

One example that is of significance for our context is Nie Huang's (active in the second half of the seventeenth century) album *Pictures of Marine Creatures* (Haicuo tu) of 1698. Nie Huang's work consists of four albums. The total number of illustrated sea creatures and creatures living in the littoral zone in the four albums is three hundred and seventy-one, including fish, crabs, shrimps, turtles, shells, corals, insects, plants, and birds.[26] According to Nie Huang's two prefaces, the reason he started illustrating sea creatures was that it had never been done before. Although there were historical books documenting fish, none of them contained illustrations. The illustrations published in the fish sections included in the books on *materia medica*, according to Nie, were lacking in fidelity.[27] The illustrations appear as afterthoughts or interpretations, rather than observations, and in most cases were inserted later.

Nie Huang's *Pictures of Marine Creatures* is a combination of text and illustration. For each specimen represented in the work, there is an illustration, the creature's name, a poem, and a text describing its appearance, habitual behaviour, and place of habitat. In some cases, Nie Huang even related legends or its application in daily life, such as how to cook it and what it tastes like. Moreover, the text is based on Chinese and European sources. Most of the illustrations are naturalistic depictions of the actual creatures and have been rendered faithfully from life. Some of the illustrations, however, were clearly influenced by images in European works. For example, the image of a whale (which is not actually a fish) in Nie Huang's work (Figure 6.5) was copied directly from the Flemish Jesuit missionary Ferdinandus

26 The first three albums are in the Palace Museum in Beijing and the fourth is now in the collection of the National Palace Museum in Taipei. The complete publication of the first three albums of Nie's *The Marine Creatures* collected in Palace Museum in Beijing, see Gugong bowuyuan ed., *Qinggong haicuo tu* (Beijing: Palace Museum, 2014).

27 Gugong bowuyuan ed., *Qinggong haicuo tu*, pp. 34–37, 40–47. For the fidelity of the images in the natural study books before the use of photography, see Maki Fukuoka, *The Premise of Fidelity: Science, Visuality, and Representing the Real in Nineteen Century Japan* (Stanford, CA: Stanford University Press, 2012); also see footnote 20.

Figure 6.5: Nie Huang, "Whale," in *Pictures of the Marine Creatures* (Haicuo tu), in Palace Museum ed., *Pictures of the Marine Creatures of the Qing Palace* (Qinggong haicuo tu) (Beijing: Place Museum, 2007 [1698]), p. 83.

Figure 6.6: "Whale" in Ferdinandus Verbiest, *Illustrated Explanation of the World* (Kunyu tushuo) (1674 edition, Collection of the National Library of France), vol. xia, p. 10.

Verbiest's (also known as Nan Huiren, 1623–1688) book *Illustrated Explanation of the World* (Kunyu tushuo, 1674, Figure 6.6). It is interesting to point out that Nie Huang's *Pictures of Marine Creatures* includes both actual and imaginary creatures, such as the dragon and the merman, which, incidentally, is also the case for the encyclopaedias *Illustrated Compendium of the Three Powers* and *Complete Collection of Illustrations and Writings from the Earliest to Current Times*. The legends he refers to include stories about, for example, shrimps transforming into dragon flies and sharks transforming into tigers. He also includes the legend surrounding the phenomenon of mirages.[28]

Despite the legends and exaggerations, most of the illustrated creatures in Nie's work can be identified as real.[29] According to Nie himself, his method for putting together *Pictures of Marine Creatures* was "first painting the illustration of the specimen then identifying its name, then composing a poem for the species, then conducting textual research on the species, and eventually making the final

28 For the research of *Picture of Marine Creatures*, see Wu Songfeng, "*Haicuo tu*," in *Gugong wenwu yuekan* 363 (2016), pp. 66–73; Zou Zhenghuan, "*Haicuo tu* yu Zhong Xi zhishi zhi jiaoliu," in *Zijincheng* 266 (2017), pp. 124–131.

29 For the identification of the species in Nie's *Pictures of Marine Creatures* in Chinese, English and Latin, see Gugong bowuyuan ed, *Qinggong haicuo tu*, pp. 298–305.

judgement of what the specimen is."[30] Nie also paid attention to the relative size of the species by juxtaposing them, and to the entire visual composition of the album leaf; he arranged the text and the images in a manner full of dynamism and coherence. Nie's work differs from Han Liangqing's in that his *Pictures of Marine Creatures* combined his own investigation with knowledge he had gained from other books (both Chinese and European) and hearsay, whereas Han Liangqing's *Pictures of Sea Fish* was the result of first-hand field investigation.

In 1861, the painter Zhao Zhiqian (1829–1884) produced *Illustrations of Exceptional Fish* (Yiyu tu), a visual record of marine creatures in the regions of Wenzhou and Ruian along the coast of Zhejiang province. Next to each creature he added his commentary (Figure 6.7).[31] His own inscription on the painting states:

> In the *xinyou*-year [1861] of the Xianfeng reign, I [Huishu] travelled to Wenzhou, [I] saw that there are sea creatures with strange appearances, hence I depicted them on this paper and conducted textual research into their names. This is how master painter Gu Kaizhi (345–406) could depict things in a lively manner![32]

Although, on the one hand, the octopus (*zhangjü* [*zhangyu*]), red cornetfish (*mabianyu*), butterfly ray (*yanhong*), and other sea creatures are depicted realistically in this painting, on the other hand, the dolphin (*haixi* [*haitun*]) is depicted as a fish with a pig's head. Furthermore, the so-called dice-fish (*shaiziyu*) depicted in the painting refers to the boxfish (*Ostraciidae*), which oddly looks like a small gaming dice with the head, fins, and tail of a fish: s*haiziyu* literally means 'dice fish', but the name probably merely refers to its boxy shape and spots. Some of the images seem to be based on existing texts rather than direct observation. All of this suggests that Zhao Zhiqian did not see all sea creatures with his own eyes. In this sense, the images in *Pictures of Sea Fish* are more accurate than Zhao's painting. Zhao's painting may be said to fit the context of *kaozheng* study, since his inscription indicates his pursuit of the knowledge of natural history. However, it would seem that he was mainly aiming to depict local species from Wenzhou that he saw as exotic and intriguing. Apart from *Exceptional Fish*, during his stay in Wenzhou, Zhao created several other paintings of plants and fish of the region, for example, four hanging scrolls titled *Plants and Trees in Wenzhou* (Ouzhong caomu tu, in the

30 Gugong bowuyuan ed, *Qinggong haicuo tu*, p. 36; Wu, "*Haicuo tu*," p. 68.

31 Wu Chaoran, "Zhao Zhiqian yibaliuyi nian de sanjian zhuopin *Yiyu tu*, *Ouzhong wuchan tujuan*, *Ouzhong caomu siping*: Jinshi huapai yu Haipai guishu zhi shangque," in Yang Dunyao ed., *Shibian, Xingxiang, liufeng: Zhongguo jindai huihua 1796–1949 xueshu yentaohui lunwenji* (Taipei: Hongxi wenjiao jijinhui, 2008), pp. 451–469; Sheng Wenqiang ed., *Zhao Zhiqian Yiyutu* (Hangzhou: Zhejiang renmin meishu, 2020).

32 For original text, see appendix, no. 6.

Figure 6.7: Zhao Zhiqian, *Illustrations of Exceptional Fish*. 1861. Wenzhou Yanyuan Museum. Also in Sheng Wenqiang, *The Extraordinary Fish by Zhao Zhiqian* (Zhao Zhiqian Yiyutu) (Hangzhou: Zhejiang renmin meishu, 2020).

collection of Tokyo National Museum) and *Local Products of Wenzhou* (Ouzhong wuzhan tu).[33] In these paintings, the depicted specimens function as natural illustrations and as compositional elements of an artwork at the same time; they are not mere studies of local fish or plants. By depicting these fish and plants in this way, Zhao created a new style within the framework of the traditional category of flora and fauna painting.

Finally, it should be mentioned that the descriptive and naturalistic depiction of fish in *Pictures of Sea Fish* is similar to Western natural history illustrations. The origins of nature studies in Europe can be traced back to Greek and Roman antiquity, but illustrations in the field of natural history studies first flourished during the Renaissance and were seen by contemporary scholars as a 'combination of art and science.'[34] European illustrated books on natural history studies had been introduced to China by missionaries and had their impact on Chinese visual culture. One example showing the impact of Western illustrations is the anonymous and undated album *Manual of Sea Oddities* (Haiguai tu, Figure 6.8), now in the collection of the National Palace Museum, Taipei. Daniel Greenberg first noticed this album and pointed out that its illustrations were based on those in European books on natural science, such as Conrad Gessner's (1516–1565) *Historiae Animalium* (1558), John Jonston's (1603–1675) *Historia Naturalis* (1649–1650) and Johann Zahn's (1641–1707) *Specula Physico-mathematico-historica* (1696), all introduced into China by Jesuit missionaries. Based on the inscription on the cover of the album, Greenberg proposed to date this album to 1688 (*wuchen*-year) and he linked it to the Kangxi emperor, who took a great interest in European sciences.[35] There is, however, no

33 Wan Qingli, *Bingfei shuairuo de bainian: shijiu shiji Zhongguo huihua shi* (Taipei: Xiongshi meishu, 2005), pp. 205–207; Wu, "Zhao Zhiqian yibaliuyi nian de sanjian zhuopin," pp. 451–469; also see the article in this volume by Martina Siebert.

34 Maria Elena De Luca and Gerhard Wolf, "Ligozzis Naturstudien zwischen Kunst und Wissenschaft," in Bundeskunsthalle ed., *Florenz!* (München: Hirmer, 2013), pp. 292–294; For natural history and its imagery in Europe, see Therese O'Malley and Amy R. W. Meyers, eds., *The Art of Natural History: Illustrated Treatises and Botanical Paintings, 1400–1850* (New Haven, CT: Yale University Press, 2008).

35 Daniel Greenberg, "Weird Science: European Origins of the Fantastic Creatures in the Qing Court Painting, the *Manual of Sea Oddities*," in Jerome Silbergeld and Eugene Y. Wang, eds., *The Zoomorphic*

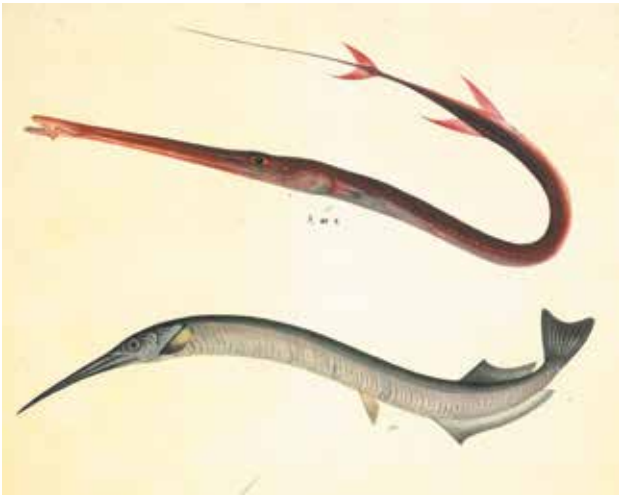

Figure 6.8: Anonymous, *Fistularia petimba, red cornet fish and Strongylura leiura*, ca. 1826-1831, Natural History Museum, London. Also in Judith Magee, *Chinese Art and the Reeves Collection* (London: Natural History Museum, 2011), p. 91.

strong evidence to support this date, as the album could have been painted in later *wuchen*-years, such as 1748, or even 1808 or 1868. It is worth mentioning that *Manual of Sea Oddities* contains no text but only images; its function and purpose are therefore unclear. It may simply have been produced to satisfy curiosity or to provide visual amusement. Furthermore, the style of the depictions resembles export paintings produced in the late eighteenth and nineteenth centuries in Canton. Since the album's production context is unclear, there is also a possibility that it was not produced by the imperial workshop, but made in Canton and presented to the court as a local tribute.[36]

What could have been the context in Canton? Botanical and zoological illustrations were part of the vast scope of export paintings produced in Canton during the second half of the eighteenth century and the nineteenth century. Foreign scholars, such as the botanist John Bradby Blake (1745–1773), the naturalist John Reeves (1774–1856), and others, were engaged in their production.[37] This applies especially to Reeves who was in Canton and personally involved in the making of botanical and zoological illustrations with local painters. During his stay in Canton, he also commissioned four sets of illustrations of fish. According to his

Imagination in Chinese Art and Culture (Honolulu: University of Hawaii Press, 2016), pp. 379–400.

36 In her insightful article, Lai Yu-chih reminds us of the interaction between the court painting and the export painting produced in Canton, see Lai Yu-Chih, "Qinggong yu Guangdong waixiao huafeng de jiaohui: wumingkuan *Haidong cejing tuce* chutan," in *Gugong wenwu yukan* 363 (2013), pp.74–86.

37 Chen Yin, *Lingnan huaniaohua liubian 1368–1949* (Shanghai: Shanghai guji, 2004), pp.265–306; Jiang Yinghe, *Qingdai yanghua yu Guangzhou tongshang kuoan* (Beijing: Zhonghua shujü, 2007), pp. 222–226; Judith Magee, *Images of Nature: Chinese Art and the Reeves Collection* (London: Natural History Museum, 2011), pp. 4–13.

notes, these illustrations were painted by four painters: Akut, Akam, Akew, and Asung.[38] The illustrations commissioned by Reeves painted by Cantonese local painters can be seen as a combination of Chinese art (executed in the Western manner) and European natural history. The artists who worked with Reeves used gold and silver powder to reproduce the iridescence of fish scales. A comparison of the illustration of the red cornetfish in *Pictures of Sea Fish* (Figure 6.2) with the one in Reeves' collection (Figure 6.8) shows that, although the image in Han Liangqing's *Pictures of Sea Fish* is less vivid, it captures the biological characteristics of the fish accurately. Judging from the techniques, however, the local painter commissioned by Han Liangqing may not have been professionally trained and was obviously less skilled than the professional painters active in Canton. On the other hand, due to the enormous volumes of production by various workshops, the quality and accuracy of Canton export paintings also vary.

Despite their 'scientific' aura, Canton illustrations also include imaginary creatures. For example, the collection of the Wereldmuseum Leiden contains twelve fish albums formerly in the possession of Jean Theodore Royer (1737–1807), an amateur sinologist and lawyer from The Hague. The albums may be dated to the late eighteenth century, around 1770. Each contains twenty-four pictures, 288 different fish in all.[39]

In Royer's albums, the fish are depicted individually in a natural setting with background on each leaf and each fish has its Chinese name written next to the illustration. The images have been executed in a Western manner with shading and colour wash to depict the creatures' spots and patterns in detail and to create a three-dimensional representation. Although each album consists of twenty-four leaves, there seems to be no system or order; each album presents a mixture of different species, both freshwater and sea fish. Take the first album for example: it includes a crab, a lobster, various carps, goldfish, several kinds of perches, different squids, loaches, a marble goby (*sunkeyu*, *Oxyeleotris marmorata*), a rhino-fish (*xiniuyu*), and others. Apart from this, most of the names of the fish documented in the albums are not formal names but local names or made-up names, making them difficult to identify.

Although the fish in Royer's albums are portrayed in a naturalistic manner, some of the species do not exist. For example, the *pi*-fish (*piyu*) on leaf nine is a fish with a bird's head, documented in the *Classic of Mountains and Seas* (Shanhaijing), an ancient compilation of mythical geography and beasts.[40] The so-called rhino-fish

38 Judith Magee, *Images of Nature*, p. 11; Kate Bailey, *John Reeves: Pioneering Collector of Chinese Plants and Botanical Art* (London: ACC Art Books, 2019), pp. 108–109.

39 For an overview of Royer's collection, see Jan van Campen, *De Haagse jurist Jean Theodore Royer (1737–1807) en zijn verzameling Chinese voorwerpen* (Hilversum: Verloren, 2000).

40 Inv-no.: RV-360–379a9, Wereldmuseum Leiden. For the animals, plants and fish documented in the *Shanhaijing*, see Zhang Yan, *Shanhaijing yu gudai shehui* (Beijing: Xinhua, 1999), pp. 36–98.

on leaf twenty-three is depicted as a fish with a buffalo's head (and two forelegs). It resembles the buffalo-fish (*qianniuyu*) depicted in Nie's album; the depiction has its source in a legend told by local people.[41] The images in Royer's fish albums come from various sources. Some of the species were probably painted from life, but many of the depictions were based on descriptions in ancient texts or legends and some of them are plainly imaginary, such as the horse-fish (*mayu*) and the monkey-fish (*houyu*).[42]

This kind of export painting produced by anonymous workshop painters in Canton often served as souvenirs – exotic visual sources of wonder or amusement for Western consumers. When examining the content of all twelve albums, one does not find any order or system. Some of the fish appear several times. These illustrations were probably made as single sheets with multiple copies and randomly assembled by the workshop. The cases of John Reeves and Jean Theodore Royer illustrate the different qualities of export painting produced in Canton as well as the different degrees of involvement of Western naturalists.

As in *Pictures of Sea Fish*, the fish depicted in the illustrations commissioned by Reeves were collected at the local market.[43] This suggests that all the fish depicted in Reeves' illustrations are edible. By contrast, Han Liangqing asked the fishermen to bring in everything they caught, including poisonous sea creatures or species unsuitable for consumption. The fish illustrations commissioned by Reeves were sent to England, where they met with the approval of the famous naturalist John Richardson (1787–1865). In his "Report on the Ichthyology of the Seas of China and Japan" of 1845 Richardson wrote:

> John Reeves, [...] who was long resident at Macao, filling an important office in the employ of the India Company, with an enlightened munificence, caused beautiful coloured drawings, mostly of the natural size, to be made of no fewer than 310 species of fish which are brought to the market at Canton. These drawings are executed with correctness and finish which will be sought after in vain in the older works on ichthyology, and which are not surpassed in the plates of any large European work of the present day. The unrivalled brilliancy and effect of the colouring, and correctness of profile, render them excellent portraits of the fish [...][44]

The naturalistic illustrations produced in Canton in collaboration with foreign scholars were sent back to Europe and made an impact on scholarship there. In

41 Gugong bowuyuan ed, *Qinggong haicuo tu*, p. 178.

42 Inv-no.: RV-360-379d22, RV-360-379e22, Wereldmuseum Leiden.

43 Bailey, *John Reeves*, p.108.

44 J.M. Richardson, "Report on the Ichthyology of the Seas of China and Japan," in *Report of the British Association for the Advancement of Science* (1845), quoted from Bailey, *John Reeves*, pp. 113–115.

contrast, these illustrations seem to have had little or no impact in China, and the same holds true for Han Liangqing's *Pictures of Sea Fish*.

Conclusion

Although *Pictures of Sea Fish* was the result of Han Liangqing's own curiosity about sea creatures he had never seen before, the painter he commissioned faithfully documented the fish. The album is Han Liangqing's first-hand field investigation of local fish in Jieshi, Guangdong province. The comments were based on his own observations. He carefully described the appearance of the fish including their size, colour, shape, and features in his text; the taste of the fish he included in the album was likewise based on his direct experience. The text is based on facts and the illustrations are naturalistic.

In addition, Han Liangqing set out to make a complete record and collect as many fish as possible, instead of selecting a few for their aesthetic qualities – he did not have a work of art in mind. Most importantly, the purpose of the album was to inform viewers that these creatures were not strange, but quite normal. This was a world removed from Chinese traditional artistic representation of fish and it foreshadows illustrations of natural history produced later in Canton.

Han Liangqing's method consisted of first commissioning the fish from the local fishermen, then obtaining illustrations from local anonymous painters and subsequently using these for his studies. The illustrations in *Pictures of Sea Fish* thus became his primary source material. This approach differs from the traditional Chinese *kaozheng* method in which text forms the basis of research.

His album *Pictures of Sea Fish* is an extraordinary example of the pursuit of empirical science in eighteenth-century China. The album was made to form part of a book of ichthyological studies. Unfortunately, this original grand project was never accomplished due to Han Liangqing's transfer and death. What we are left with is a remarkable collection of images highlighting an approach which has remained hidden until now.

Appendices

1.
物本常也，而寡聞渺見者以為恠。夫物亦安有怪哉? 世固未有以日月山川、馬牛雞犬為怪者，習見之常也。余宦跡西域垂三十年，數四行間頻游塞上，凡耳目所經禽獸草木，未嘗見所為怪者。及丁巳歲，奉命守粤東之碣石，巡行海上，浩渺

無垠，波撼氣蒸，天水混茫中疑有靈怪不測者。潛遊其下，僕從、篙師，戰兢股栗，莫之所謂，余安之若素也。耳之所得，目之所遇，或聲如雷霆、如鼓吹、如秋空天籟；或狀如兀峰磐石、如樓臺人物車馬。傾刻之間，往來莫定，一日之內，變幻無窮。蓋無非風雲波濤，魚鱉鱗介之屬相與動心而駭目也。乃喟然曰：「異哉。此真怪矣」。何聞見之奇如此耶？已而。庖人以海魚進食，甚鮮。問其僕：「何魚也」。對曰：「日之所市」。怪狀奇形，張手怒鬣，傅粉施朱，金碧燦爛，種種色色，令人心悸。詢於庖人，皆曰魚也。乃耳目之所未接者，予笑曰而怪乎，向游海上，已知之矣。方將圖以示天下之不見怪而恠者，此何足云。於是數命罟師，摻舟入海，凡日之所得魚鱉鱗介，悉□（破損，缺字）于署，令善畫者逐照而寫之。意以鱗介分類成帙，先自魚始。甫得一百三十餘種，名多無考，因土人之名而註之，不過得種類十分之一二。事未竣，其介族尚未搦管。予適入覲北上，旋奉調西來，遂不果其事。嗟乎!望海若之靈，不欲留諸天壤耶！抑恐不習見者之以為怪而故靳其工耶！姑存什一，俟閎博君子積類而成，以廣聞見之異云。時乾隆四年重陽前二日，蔑癡主人識於酒泉官署。

2.
良卿由武進士授侍衛。康熙五十八年授陝西西寧鎮中營守備。六十年遷蘭州城守營游擊。雍正元年遷莊浪營參將。時青海羅卜藏丹津叛莊浪，賊番助逆，良卿隨涼州總兵楊盡信等擊賊於碁子山有功，賜孔雀翎並銀千兩。四年遷寧夏中尉副將。乾隆二年擢廣西 [字誤，應為：東] 碣石總兵，尋調陝西肅州總兵。五年九月授甘肅提督，十一月卒。

3.
土名馬鞭魚，以其似馬鞭也，無考。有長至四五尺者，自嘴至眼若竹筒，尾後一線，儼然鞭稍，亦怪像也。其肉細，其味鮮。

4.
土名壁魚，無考。形似荷包，口生腹下，身薄而軟，尾稍黑色，週身無骨，大至二、三斤。食時必候釜中水滾，方可下入，味尚甘美，不然肉盡化成水，予以其怪，不敢食。

5.
土名麵乖，即河魨。性大熱，味甘美而多毒，常有食而受其害者，大至七八斤，惟晒脯可食。

6.
咸豐辛酉，搗叔客東甌，見海物有奇形怪狀者，雜圖此紙，間為考證名義，傳神阿堵，意在斯乎？

Glossary

Bada Shanren (Zhu Da)	八大山人（朱耷）
bencao	本草
Bencao tu	本草圖
biyu	壁魚
caomu qinyu	草木禽魚
chi	尺
Chongyang	重陽
Chongxiu Zhenghe jingshi zhenglei beiyong bencao	重修政和經史證類備用本草
Fan Anren	范安仁
Gu Kaizhi	顧愷之
Gansu	甘肅
Guangdong	廣東
Gujin tushu jicheng	古今圖書集成
Guoshi dachen liezhuan	國史大臣列傳
Haicuo tu	海錯圖
Haiguai tu	海怪圖
Hairuo	海若
Haiyu tu	海魚圖
haixi (*haitun*)	海稀（海豚）
Han Liangqing	韓良卿
Huizong	徽宗
hebao	荷包
houyu	猴魚
Jieshi	碣石
jin	斤
jinyu	金魚
jin yu man tang	金玉滿堂
Kangxi	康熙
Kunyu tushuo	坤輿圖說
lian nian you yu	連年有餘
Lidai minghua ji	歷代名畫記
Lingxiu bencao tu	靈修本草圖
Liu Cai	劉寀
Longyu hetu	龍魚河圖
Luohua youyu tu	落花游魚圖
mabianyu	馬鞭魚
mayu	馬魚

mianguai	麵乖
Miechi Zhuren	篾癡主人
Minzhong haicuo shu	閩中海錯疏
Nan Huiren (Ferdinandus Verbiest)	南懷仁
Nie Huang	聶璜
Ouzhong caomu tu	甌中草木圖
Ouzhong wuzhan tu	甌中物產圖
piyu	魮魚
pulu	譜錄
Qianlong	乾隆
qianniuyu	潛牛魚
qiwu	器物
Wang Jian	王建
Wenzhou	溫州
re	熱
riyong leishu	日用類書
Sancai tuhui	三才圖會
Shanhaijing	山海經
shaiziyu	骰子魚
shayu	鯊魚
Shennong bencao litu	神農本草例圖
Shigongyu	筮公魚
Siku quanshu	四庫全書
sunkeyu	筍殼魚
Tangchao minghua lu	唐朝名畫錄
Tu Benjun	屠本畯
wuchen	戊辰
xingshu	行書
Xu Chongsi	徐崇嗣
Xu Miao	徐邈
Xuanhe huapu	宣和畫譜
Yang Shen	楊慎
yanhong	燕魟
yinshan	飲膳
Yiyu tu	異魚圖
Yiyu tuzan	異魚圖贊
Yongzheng	雍正
Yuzao tu	魚藻圖
zhangjü (*zhangyu*)	章拒（章魚）
Zhang Yanyuan	張彥遠

Zhao Zhiqian	趙之謙
Zheng Qian	鄭虔
Zhu Jingxuan	朱景玄
zibu	子部

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