Journal of the European Association for Chinese Studies

RESEARCH ARTICLE

Locating the Sea: A Visual and Social Analysis of Coastal Gazetteers in Late Imperial China

Sander MOLENAAR
University of Warwick, UK
sander.molenaar@warwick.ac.uk

Local gazetteers were important tools for local government in late imperial China as they helped officials familiarize themselves with their jurisdiction. Local gazetteers are also valuable historical sources for the study of state and society in late imperial China, but the reading of local gazetteers as historical sources requires careful examination of the process by which knowledge in local gazetteers was produced. Officials and local literati who collaborated in the compilation of gazetteers negotiated between the need for an accurate administrative tool and the desire to represent their locality on a supra-local stage. This negotiation informed decisions around the inclusion or exclusion of content. Agriculture and Confucian education were key aspects of the social order that benefited literati, and were therefore dominant elements in local gazetteers. Along the coasts of late imperial China, however, maritime interests competed with agriculture for influence in local society. This article examines the inclusion or exclusion of local forms of maritime knowledge in gazetteers from coastal counties to gain a better understanding of the process by which knowledge was produced. Moreover, while individual literati showed interest in the maritime world, the question remains to what extent such interests found their way into gazetteers. This article applies collective analysis to visual representations of coastlines to examine their role in the construction of maritime knowledge in the genre of local gazetteers as a whole.

中國明清時期，地方志是幫助地方官員瞭解轄區的重要工具，也是研究國家和社會寶貴的歷史資料。若用作歷史資料則需仔細研究其內容的生成過程。合作編纂地方志的官員和地方文人通常要在對有效行政工具的需求與向上級表達地方訴求之間進行權衡，對收錄的內容進行篩選。農業和儒家教統是建立一套有利於文人的社會秩序的關鍵，因而成為地方志的主導內容。然而明清時期的沿海地區，海岸經濟開始與傳統農業爭奪在當地的影響力。爲了瞭解相關知識的構建過程，本文考察了沿海郡縣地方志中對當地海岸知識的收錄與排斥。雖然個別文人對沿海海域表現出興趣，但這種興趣多大程度上體現在地方志中尚待厘清。爲了研究方志中構建的海岸知識與海岸線的相關性，本文對海岸線的視覺表徵進行了集體性分析。

In 1479, a saltwater flood broke through the sea dikes of Zhangzhou prefecture in Fujian. The prefect, a man named Jiang Liang 薑諒, immediately opened the doors of local granaries to support the farmers who had lost their harvest to the flood. He used famine relief to stop starving farmers engaging in banditry, a common response for officials of the Ming Empire (1368-1644), who governed an empire that was founded on agriculture (Brook 2010, 126-7). Moreover, only a few years earlier his predecessor had done the same after the Jiulong River flooded, and the people of Zhangzhou praised him for his actions. The starving farmers who received famine relief from Jiang, however, still resorted to banditry. Jiang had not considered the difference between a freshwater flood and a saltwater flood. The latter turned groundwater brackish and compromised the soil quality for years. His relief aid may have helped the farmers through one difficult year, but their livelihood would not be restored for several years. Only after banditry engulfed the prefecture did Jiang reach out to the affected farmers in an attempt to understand the root cause of the problem. They explained to him that the sea dikes had been in poor repair for years and offered inadequate protection against saltwater floods. Jiang then repaired the dikes and all seems to have been resolved, at least for as long as the sea dikes were properly maintained (*Zhangzhou fuzhi (Wanli), juan* 4, 317-8).

The saltwater flood of 1479 was recorded in a biography of Jiang in the *Zhangzhou fuzhi* 漳州府志 (Zhangzhou prefectural gazetteer), which was first published during the Zhengde reign (1505-1521). Jiang earned his biography in a section on "famous officials" (*ming huan* 名宦) because he suppressed banditry in Zhangzhou during his term, but the biography also shows that he initially struggled to understand why Zhangzhou residents had turned to banditry. There was a sharp distinction between his knowledge on governance of local society and local knowledge about the impact of the sea on coastal communities. Farmers in coastal counties were well aware of the vital importance of sea dikes for the protection of their fields, but the poor state of repair prior to the arrival of Jiang indicates that officials had not prioritised maintenance. Furthermore, Jiang initially followed in the footsteps of his predecessors and ignored local knowledge about the sea. Only after his conventional response to famine failed to solve the issue of banditry did Jiang turn to local knowledge. But why did Jiang fail to account for the influence of the sea on life in Zhangzhou?

Fertile land in Zhangzhou was scarce and coastal residents engaged in a variety of economic activities other than agriculture, including such maritime activities as fishing, gathering mussels, boiling seawater for salt, overseas trade, and, on occasion, piracy. Effective governance of Zhangzhou depended on an understanding of the role of such activities in local society, but the example of prefect Jiang shows that he overlooked, or at least underestimated, the influence of the sea on coastal communities, even the ones that did engage in agriculture. Officials like Jiang governed their jurisdiction for only a few years before they moved on to their next position, so they often relied on gazetteers with geographical, demographic, and historical information to familiarise themselves with local conditions. Although the gazetteer of Zhangzhou contains a list of dikes for each county, their specific locations remain unclear (*Zhangzhou fuzhi (Wanli), juan* 19, 1398-9). Moreover, gazetteers generally do not distinguish between regular dikes and sea dikes, nor emphasise the importance of the latter in the prevention of saltwater floods. In addition, the map of Zhangzhou (Fig. 1) included in this gazetteer provides names and locations for mountains, islands, administrative

units, and state institutions, but not for the dikes listed in the gazetteer (*Zhangzhou fuzhi (Wanli)*, *juan* 1, 65-6).
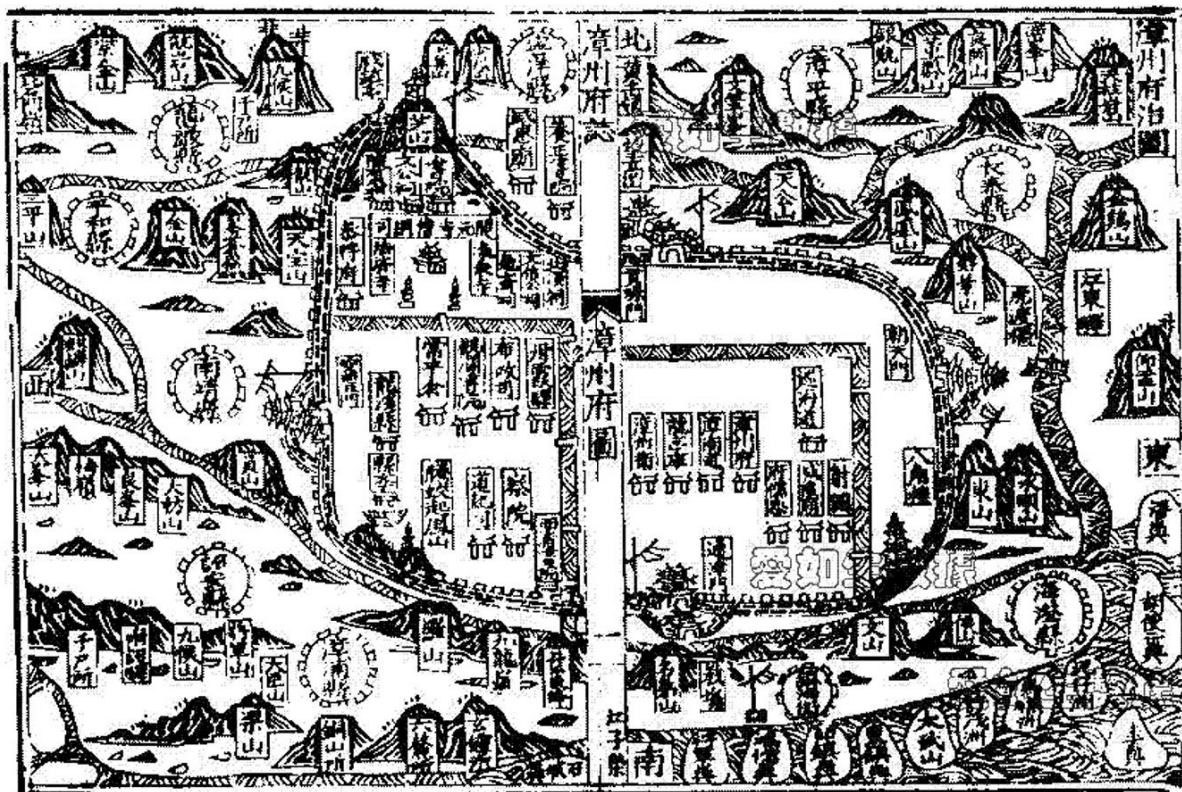

Fig. 1: Map of Zhangzhou, in Luo Qingxiao and Peng Ze, eds, 1573 *Zhangzhou fuzhi*, *juan* 1, 65-6. Image credit: *Zhongguo Fangzhi Ku.*

In other words, the gazetteer map did not draw the attention of imperial officials like Jiang to the importance of dikes, nor did the list of dikes emphasise the vital role of sea dikes in particular. Jiang was prepared for a freshwater flood, but handled a saltwater flood in the same way, and the gazetteer did not alert him to the disastrous consequences of this approach.

According to Cordell Yee, gazetteer maps "seemed to have served primarily as complements to the verbal description" (Yee 1994, 91). Alexander Akin similarly argues that gazetteer maps served "as an outline upon which the details of the text unfold", but also claims that gazetteer maps help to "orient the reader" (Akin 2021, 43-4). Thus, while text and visual material were juxtaposed, gazetteer maps guided readers in their understanding of the gazetteer texts. In addition, Kenneth Hammond states that maps are graphic representations of physical space that provide selected information "to allow a viewer to understand that space in a particular way" (Hammond 2019, 131). The inclusion or exclusion of map elements shaped how readers understood the physical space that was represented and that particular understanding affected their reading experience. In the case of the *Zhangzhou fuzhi*, the map does not include dikes and does not draw attention to the sea or its potential impact on coastal farmlands. The gazetteer map excluded the

kind of local knowledge about the maritime world that could have helped officials like Jiang prevent salt-water floods. Gazetteer maps helped late imperial Chinese officials to understand the physical space along the coast in a particular way, which affected how they read the gazetteer that familiarised them with their jurisdiction, and that in turn had an impact on how they governed coastal communities.

To understand how gazetteer maps shaped a particular understanding of the coast, this paper examines graphic representations of the sea in late imperial Chinese gazetteers.[1] Following Hammond, who argues that "maps can be seen as texts in themselves", this paper reads graphic representations of the sea with a focus on the inclusion or exclusion of map elements to analyse the cultural construction of the coast in late imperial Chinese gazetteers (Hammond 2019, 131). Whereas Yee and Akin consider gazetteer maps complementary to gazetteer texts, this paper argues that gazetteer maps played a crucial role in the construction of a particular understanding of the coast that marginalised the sea and hindered the inclusion of local knowledge about the maritime world in local gazetteers. The distinction between local knowledge and official knowledge on the governance of local society is already apparent in the *Zhangzhou fuzhi*, but to understand how gazetteer maps in general constructed a particular understanding of the coast first requires a closer look at the genre of Chinese local gazetteers.

Reading Chinese local gazetteers

Local gazetteers are considered a distinct genre in Chinese history, and they have been explored by numerous historians for their wealth of geographical, demographic, and historical information about localities throughout late imperial China. Nearly ten thousand gazetteers from the beginning of the Song dynasty (960-1279) until the founding of the PRC in 1949 are still extant today. Although seemingly simple repositories of historical material, according to Joseph Dennis local gazetteers were "complex texts" and sites of interaction between central government officials and local elites (Dennis 2015, 3). He argues that the production of each individual gazetteer was shaped by the underlying agendas of its compilers. In other words, local information in gazetteers was mediated by the local elites and officials involved in the editorial process. Gazetteers were living documents, and information was continually added, removed, or edited. Some editorial choices were informed by the conventions of genre, for example the biographies of women often focus on the preservation of their chastity, while the biographies of men range from martial heroics or selfless acts of filial piety, to academic success and administrative accomplishments. Other editorial choices were informed by the interests of gazetteer compilers, some of whom turned the local gazetteer into an extension of their family history. Thus, some compilers included the biographies of family and friends on the basis of personal relations rather than some generally perceived notion of merit.

Reading Chinese local gazetteers requires careful attention to the impact of mediation in the editorial process, and even one step prior in the acquisition of local information. Timothy Brook shows how mediators affected the accuracy and reliability of local information in gazetteers. In his discussion of Ye

---

Chunji's 葉春及 gazetteer cartography, Brook points out that Ye initially relied on local elders to provide him with local maps, but "it seems they met his request in good bureaucratic fashion: by simply sketching pre-existing drawings or maps … rather than actually surveying their areas" (Brook 2005, 47-8). Although Brook does not further explore the specific reasons why these local elders provided inaccurate information, the general issue of inaccurate maps may be explained through James Scott's concept of "illegibility" (Scott 1998, 29), or local forms of knowledge that were incompatible with the way central government officials viewed society. Ye Chunji's map-making project was an attempt to obtain "an unimpeded view of the territory that it was his job to tax" (Brook 2005, 43), and the information on local geography provided by local elders was incompatible with this aim. Whether on purpose or not, local elders resisted Ye's attempt to bring their locality clearly into the view of the government officials whose task it was to extract tax from this area. Scott and Brook both state that maps were vital tools for the state to locate taxable land, but, according to Scott, local society exercised the capacity "to modify, subvert, block, and even overturn the categories imposed upon it" (Scott 1998, 49). Ye Chunji was in a position to survey the land and produce his own maps, but most late imperial Chinese officials were not. They relied on local gazetteers for information about their jurisdiction, and they relied on local mediators to provide that information in the first place. Inaccurate information offered a degree of protection against state interference in society, and local mediators were in an excellent position to shape information to best serve their own interest. The social context of gazetteer compilation is therefore an integral part of reading gazetteers.

In addition to the importance of mediators in the stages of information acquisition and gazetteer compilation, I would argue that local gazetteers, as sites of interaction between local elites and central government officials, stimulated the construction of an official knowledge community that only selectively integrated local forms of knowledge. Although gazetteers circulated local information outside the locality and thus "helped bind locales to the centralizing state and dominant culture" (Dennis 2015, 3), I contend that the attempt to integrate local information into the dominant culture prioritised the kind of local information that was compatible with the dominant culture at the expense of local forms of knowledge that were not. For example, the aforementioned biographies of virtuous women emphasise the preservation of chastity even if the outcome was death. Gazetteers thus include biographies of women who had been captured by bandits and then committed suicide to preserve their chastity, but not biographies of women who married bandits and brought commercial wealth to their extended family. In other words, the pressure of dominant cultural values affected the production of individual gazetteers. Compilers included or excluded information to meet the conventions of the genre, but by their doing so, gazetteers created an official, supra-local knowledge community that resisted the integration of contradictory or alternative local forms of knowledge.

Genre conventions created a barrier for the inclusion of local forms of knowledge in late imperial Chinese gazetteers. John Brian Harley similarly argues for early modern European cartography that "intentional or unintentional suppression of knowledge in maps" creates silences that can be read as positive statements, rather than as mere absences of something else, and interpreted as "socially constructed perspectives on the world" (Harley 1988, 57-8). Silences tell us as much about the worldviews of gazetteer compilers as their utterances do. They help maintain the political *status quo* through the mediation of knowledge in

gazetteers, and through the intentional or unintentional suppression of incongruous local knowledge. However, officials whose image of their jurisdiction was shaped by official knowledge risked ignoring local forms of knowledge that were vital for efficient governance, either on purpose to maintain the power of the state or as a result of unconscious historical *a priori* assumptions. Although Ronald Po claims that "the Qing dynasty was more involved in maritime management than has previously been acknowledged" (Po 2016, 94), he also shows in his discussion of coastal maps that there was a pressing need to better evaluate coastal conditions and that late imperial officials could not rely on gazetteers to do so (Po 2016, 102-3). As the case of prefect Jiang has shown, even though he managed to learn from local informants, he initially understood coastal society in the same way as any other part of the agrarian Ming Empire, and therefore overlooked or underestimated the importance of sea dikes.[2] Mediators who represented local forms of knowledge pertaining to the maritime world struggled to penetrate the official knowledge community. This lack of accurate and relevant information in local gazetteers about the influence of the maritime world on local society hindered effective governance in administrative units along the coast.

A visual analysis of local gazetteers

Farmers along the coast were intimately familiar with the ways in which the maritime world affected their lives, and they were a potential source of information, but gazetteer compilers were selective in their inclusion of local knowledge. Although gazetteers contain traces of the rich and vibrant maritime world of fisherfolk, maritime merchants, smugglers, and pirates, this paper does not attempt to reconstruct that world, but rather aims to study traces of the maritime world in local gazetteers as evidence for the integration of local forms of knowledge. This paper thus benefits from the works of Brook and Dennis, who shifted the focus of historical inquiry from the relevance of gazetteers for our understanding of historical events to the socio-political negotiations around gazetteer compilation (Brook 2005; Dennis 2015). This paper is concerned with the formation of knowledge *in* gazetteers, not the study of the maritime world *through* gazetteers.[3] Moreover, where the early work of Dennis and Brook primarily studied gazetteer compilation through careful analysis of individual gazetteers in their historical context, this paper takes advantage of recent advances in digital humanities to undertake collective analysis of digitised gazetteers.

The development of the Local Gazetteers Research Tools (LoGaRT) at the Max Planck Institute in Berlin allows for the interrogation of a large number of gazetteers (Chen et al. 2017). Although this approach does not replace the careful contextualisation and analysis of individual gazetteers, the collective approach does open the way for an interrogation of the genre itself (Chen 2020a, 544). While analyses of individual gazetteers shed light on the role of mediators in the compilation of specific gazetteers, the question of local knowledge integration in the body of official knowledge requires collective analysis of a large number of local gazetteers. This paper takes advantage of the abundance of digitised gazetteers to study graphic representations of coasts as a collective, not as individual representations of specific geographical locations,

---

[2] For more information on official attitudes towards the maritime world, see Dreyer 2007, Li 2010, Po 2018, and Polacheck 1992.

[3] For a discussion of coastal maps and their relevance for the study of coastal geography, see Mills 1954.

but "the coast" as an element in the worldview of late imperial Chinese officials and literati, and as a space where the maritime world had an impact on their agrarian society. Furthermore, while textual descriptions of coasts are scarce and unequally distributed, nearly all gazetteers from administrative units along the coast contain administrative maps and other images that include the coast. This paper is therefore focused on visual material in local gazetteers from such coastal administrative units.

LoGaRT provides access to 4,410 digitised gazetteers from the *Zhongguo fangzhi ku* 中國方志庫 (Database of Chinese local records) and the Harvard Yenching Library Rare Books Collection (Schäfer et al. 2019). This is roughly a quarter of the estimated total of local gazetteers produced between the Song dynasty and the republican period (Chen 2020b). The Local Gazetteer Map (LG Map) function in LoGaRT allows for a visual representation of the spatial distribution of these digitised gazetteers, and facilitates a manual selection of all digitised gazetteers published in administrative units along the coast, leading to a subset of 253 gazetteers. Feeding the book IDs of these gazetteers into the Pages with Images (P.W.I.) search function results in a total of 10,520 images, and around 1,600 of these images contain representations of the coast. Considering that this subset resembles the overarching data set of 4,410 digitised gazetteers in everything except spatial distribution, including chronological distribution and administration type, we can assume that this spatial subset is as statistically representative of all gazetteers published in administrative units along the coast as the overarching database is of the genre. The remainder of this paper analyses these visual representations of the coast through a discussion of the form, focus, and content of these images.

Mapping the sea

More than three quarters of the visual representations of the coast in Chinese local gazetteers can be considered to be maps that show administrative units, or parts thereof, from a bird's-eye view. This dominance of maps in coastal gazetteers is also reflected in the wider genre and should come as no surprise considering the close connection between local gazetteers and administrative units. Less than one quarter of the images can be considered scenic depictions, which, as Luo Qi phrased it, "are closer to paintings than to maps in terms of their non-practical function of appreciating natural beauty" (Luo 2016, 55). According to Luo the visual representations in local gazetteers are too easily lumped together as "maps", even though a small number of illustrations depict a single scene, rather than "orient human beings in the universe" (Luo 2016, 55). Take for example a visual representation of the coast from the *(Chifeng) Tianhou zhi* (敕封)天后志 (Gazetteer of (conferring titles on) the Empress of Heaven), which was compiled in Putian, Fujian, and published in 1778 (Fig. 2).

This scenic depiction shows a ship in distress and several human figures either on the coast or on board the ship. The figure on the coast is Lin Mo 林默, a woman from Putian who was deified as *Mazu* 媽祖 (Maternal ancestor) and *Tianhou* 天后 (Empress of Heaven). Mariners prayed to her for safety at sea, as she was believed to have power over wind and water.

Fig. 2: Scenic depiction of a ship in distress, in Lin Qingbiao, ed., 1778 *(Chifeng) Tianhou zhi, juan* 1, 94. Image source: Harvard Yenching Library (persistent link: https://nrs.lib.harvard.edu/urn-3:fhcl:5112556?n=94)

The two human figures on board the ship can be seen to kneel with hands clasped in reverence. Unlike maps of administrative units, this visual representation places the coast in a religious context, not as the boundary on an administrative map, but as a landscape with spiritual significance. However, such scenic depictions are unequally distributed over late imperial Chinese gazetteers. Half the scenic depictions are contained in the *(Chifeng) Tianhou zhi* and one other gazetteer, entitled *Putuoshan zhi* 普陀山志 (Gazetteer of Mount Potala), which was compiled in Zhoushan, Zhejiang, and published in 1607. While most gazetteers are occupied with administrative units, such as counties, prefectures, and provinces, these two gazetteers focus on the Lin lineage in Putian and the Buddhist temples on Putuoshan Island respectively. Scenic depictions offer more diverse representations of the coast than maps, as maps were often confined to a stable "repertoire of visual representation" (Hammond 2019, 133). However, the large concentration of scenic depictions in just two gazetteers also shows that such diverse representations of the coast barely penetrated the genre as a whole. This example thus shows an internal boundary within the genre of local gazetteers that largely confined certain constructions of the coast to gazetteers with a religious focus.

Fig. 3: Map of Yangjiang, in Fan Shijin, ed., 1688 *Yangjiang xianzhi, juan* 1, 21. Image credit: *Zhongguo Fangzhi Ku.*

Considering the limited influence of scenic depictions on visual representations of the coast in local gaz-etteers, the remainder of this paper concentrates on gazetteer maps. Visual representations of the coast exhibit different degrees of focus on the sea. In roughly one third of the images the sea is a small sliver in the margin of the image, while in another third of the images the sea occupies a central position. The maps of Yangjiang 陽江 and Chaoyang 潮陽, two counties in Guangdong, illustrate the full range of this distri-bution (Figs. 3 and 4).

Fig. 4: Map of Chaoyang, in Huang Yilong and Lin Dachun, eds, 1572 *Chaoyang xianzhi, juan* 1, 48.
Image credit: *Zhongguo Fangzhi Ku.*

The map of Yangjiang relegates the sea to a small margin at the bottom of the map, while the sea in the map of Chaoyang covers half the map. The remaining images fall somewhere in between. The fair distribution along a range of representations from marginal to central shows that in the genre of local gazetteers as a whole the sea occupied an undeniable place. However, the presence of visual representations of the coast does not necessarily provide insight into the presence of local knowledge about the maritime world in the official knowledge community of local gazetteers: this requires collective analysis of the content of these visual representations with emphasis on the symbols that indicate interaction between coastal society and the maritime world. Although one-fifth of the images show no indication of any interaction with the maritime world at all, the remaining images include a wide variety of nautical information, including islands, bays, beacons, ships, and shipping routes.
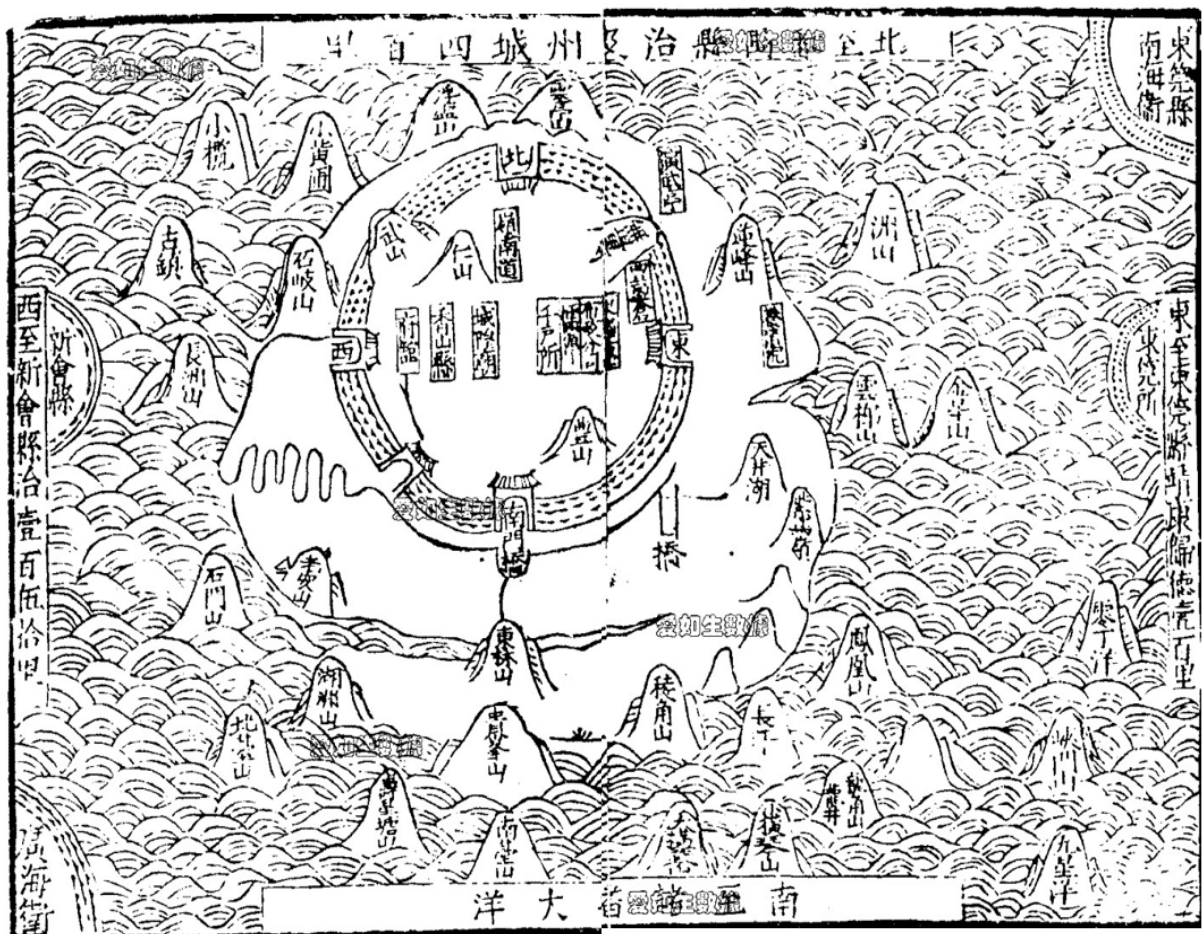

Fig. 5: Map of Xiangshan in Deng Qian and Huang Zuo, eds, 1548 *Xiangshan xianzhi, juan* 1, 15-6. Image credit: *Zhongguo Fangzhi Ku.*

Islands

More than half the images contain representations of islands, usually symbolised as rounded pyramids protruding from the waves. The 1548 *Xiangshan xianzhi* 香山縣志 (Xiangshan county gazetteer) provides a typical example (Fig. 5). The map shows Xiangshan in the centre and several neighbouring counties along the edges of the map. The rest of the image is occupied by waves from which several islands emerge. Their location is not precise and neither are their shapes, but their presence in this map indicates their presence in the mental landscape of the gazetteer compilers. The gazetteer map thus draws attention to the islands as part of the jurisdiction of any county magistrate in Xiangshan. However, the abstract representation of these islands also erased their uniqueness. As Harley argues, "the lack of qualitative differentiations in maps ... serves to dehumanise the landscape. Such maps convey knowledge where the subject is kept at bay" (Harley 1988, 66). As such the islands were incorporated in the official knowledge community, but stripped first of their qualitative differentiations and turned into abstract elements of the administrative space of Xiangshan.
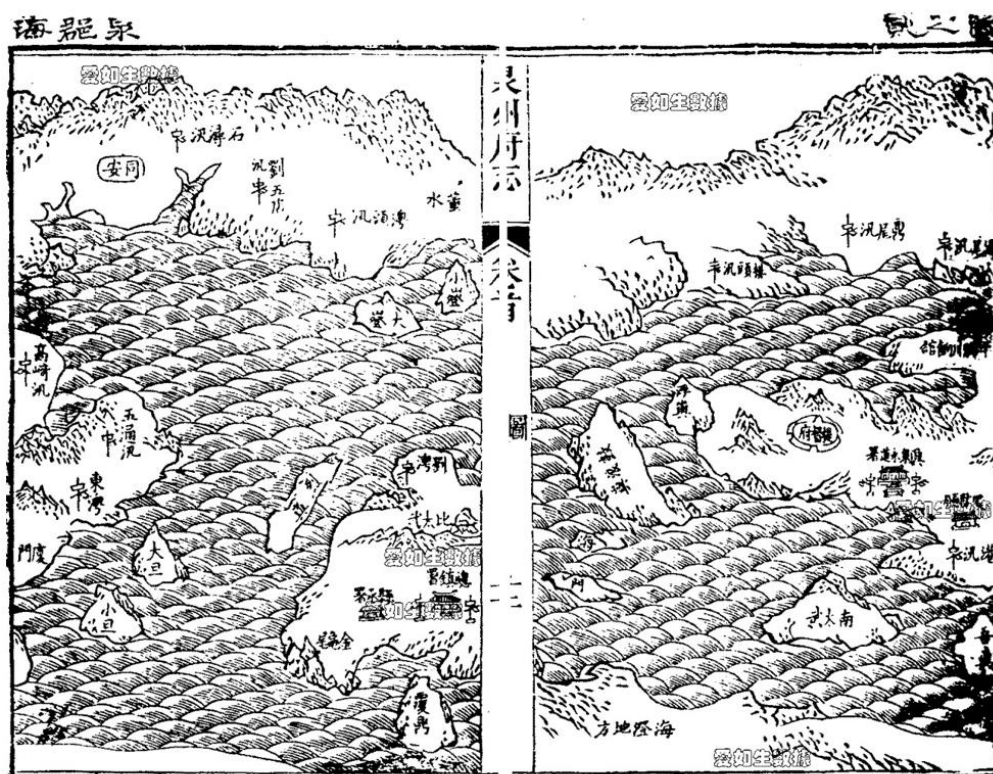

Fig. 6: Map of Quanzhou, in Huai Yinbu and Huang Ren, eds., 1743 *Quanzhou fuzhi, juan* 1, 162-3.
Image credit: *Zhongguo Fangzhi Ku.*

The 1743 *Quanzhou fuzhi* 泉州府志 (Quanzhou prefectural gazetteer) provides another example (Fig. 6), but here the islands have unique shapes and their location is represented in a way that provides a sense of direction, if not the actual shipping routes, between them. The *Quanzhou fuzhi* turns the islands into concrete and specific locations within Quanzhou prefecture. The map not only informs the reader of the abstract presence of certain islands, but includes information about relative size and location, thus turning the sea into a knowable, and to some extent navigable, space. Maps like the one in the *Quanzhou fuzhi*

also include signs of habitation on the larger islands. This gazetteer extends the prefecture to include the islands, in a way that the *Xiangshan xianzhi* does not, and in doing so incorporates the sea within the prefecture. The maritime world thus became more concrete to the prefects who would have relied on the *Quanzhou fuzhi* to familiarise themselves with this prefecture.

The unique shapes of the islands also indicate the influence of observations from mariners on the graphic representation of these islands in the gazetteer map. As Elke Papelitzky has argued, "the knowledge transfer seems to have been unilateral, running from sailor … to mapmaker, never in the other direction" (Papelitzky 2021, 112). Brook also indicates that coastal maps are "not nautical in the sense of being produced for navigational purposes", but rather, "the impulse for producing these maps came from the state, which was eager to document its borders" (Brook 2017, 4). Coastal maps, such as the gazetteer map of Quanzhou, were not designed as navigational support, but they were based on information from mariners, and they are evidence of the inclusion of local knowledge on the maritime world in gazetteers. The compilers who included unique, rather than abstract, graphic representations of islands helped their readers understand the coast as a maritime world that included offshore islands and their populations. The gazetteer map of Quanzhou, however, is one of only a handful of gazetteer maps that represent islands in this way. Most gazetteer maps depict islands as abstract circles or rounded pyramids dotted evenly along the coast, as in the gazetteer map of Xiangshan.

Beacon mounds, or wind vanes?

The second most common indicator of interaction with the maritime world, and certainly the most curious one, appears to be a wind vane (Fig. 7). J.V.G. Mills identified this symbol as a "beacon mound" (*feng hou* 烽堠), which was a military observation tower placed at regular distances along the coast (Mills 1954, 158). The beacon mounds on gazetteer maps invoke a sense of potential violence from the direction of the sea, against which beacon mounds provide protection.

Fig. 7: Cropped map of Ganshui, in Dong Gu, ed., 1566 *Xu Ganshui zhi*, *juan* 1, 5. Image credit: *Zhongguo Fangzhi Ku.*

This impression is further strengthened in gazetteer maps such as the *Guangzhou shu haifang tu* 廣州屬海防圖 (Map of the coastal defence [fortifications] in Guangzhou) (Fig.8) in the 1758 *Guangzhou fuzhi* 廣州府志 (Guangzhou prefectural gazetteer). This map shows a series of beacon mounds placed along the coast and next to major rivers, which hints at their significance for coastal defence. Beacon mounds may have been popularised as graphic representations of coastal defence structures through the publication of the *Chou hai tu bian* 籌海圖編 (Illustrated compendium on maritime security) (Fig. 9) in 1562. The maps in the *Chou hai tu bian* were surveyed anew and compiled by Zheng Ruozeng 鄭若曾 in response to an escalation of coastal violence in the 1550s. Similarities between these maps show that gazetteer maps and other coastal maps shared a repertoire of visual representations.
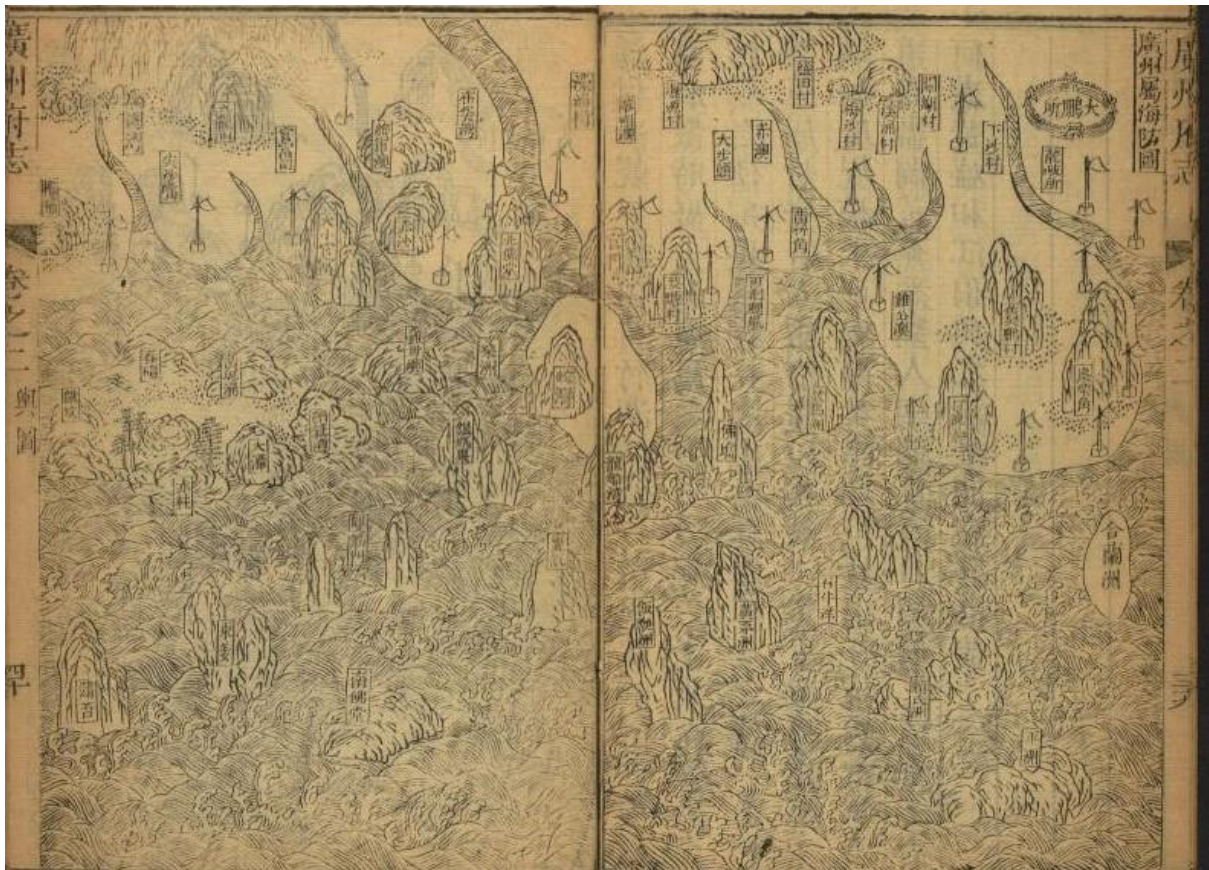

Fig. 8: Map of coastal defence [fortifications] in Guangzhou, in Shen Tingfang, ed., 1758 *Guangzhou fuzhi*, *juan* 1, 167. Image source: Harvard Yenching Library (persistent link: https://nrs.lib.harvard.edu/urn-3:fhcl:14816931?n=167)
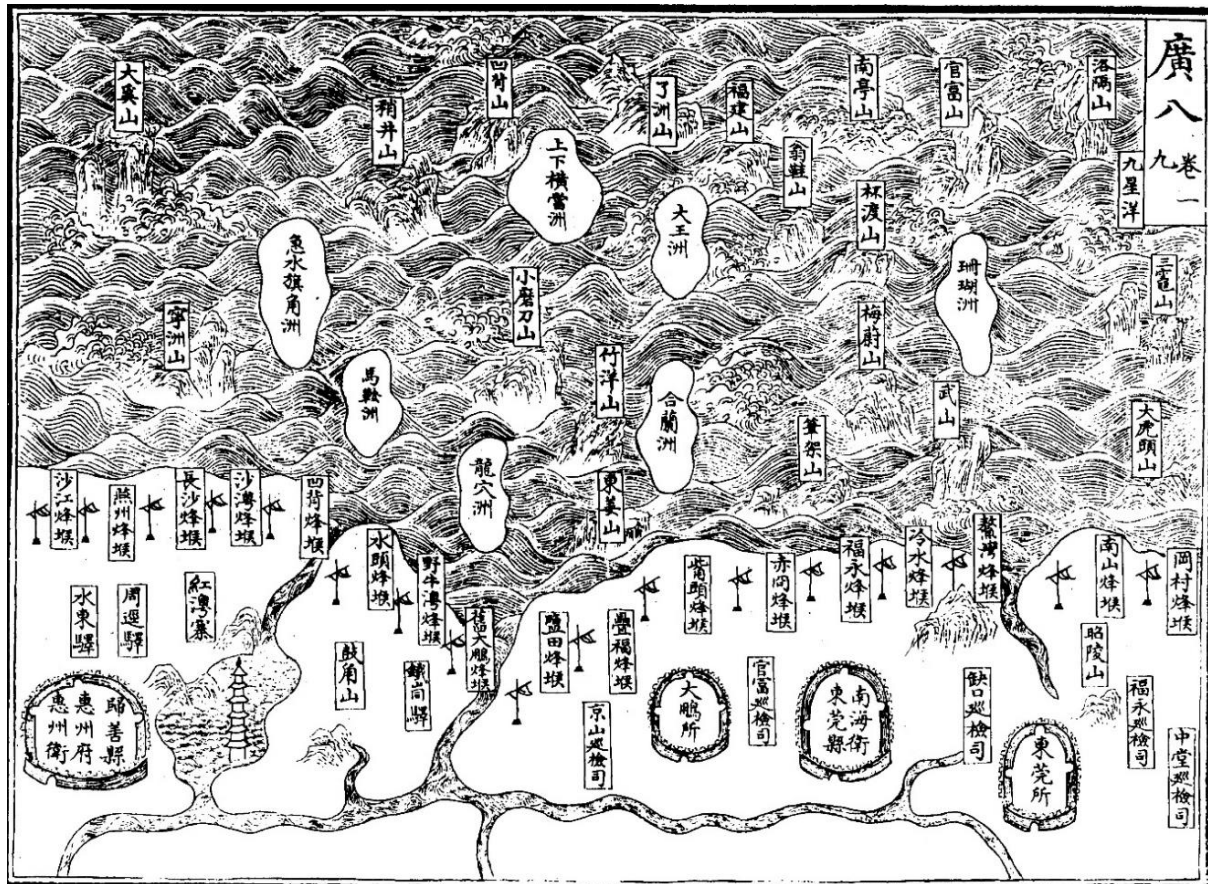
Fig. 9: Guang[dong map] eight, in Zheng Ruozeng, ed., 1562 *Chou hai tu bian, juan* 1, 9.

The *Chou hai tu bian* matches each symbol of a beacon mound with the name of a beacon mound, but the gazetteer map of Guangzhou leaves many beacon mound symbols nameless. Moreover, the map of Ganshui applied the "beacon mound" symbol to a *yan wu ting* 演武亭 (Pavilion for military performance), which was a structure from which military officers and others could overlook military training grounds. While gazetteer maps and other coastal maps shared a repertoire of visual representations, individual gazetteer compilers broadened the meanings attached to such symbols. In addition, the maker of the Ganshui map used nearly identical beacon mound symbols for the *yan wu ting* and for the masts of the ships anchored off the coast of Ganshui (Fig. 7). Rather than adding sails to the ships, the map maker added the flag-like symbol that also represented beacon mounds, which could indicate that the ships were military in nature, like the beacon mounds, or that the banners on top of beacon mounds performed a similar function to the flags on top of masts, which was to indicate wind direction and speed. Either way, the presence of this symbol in a quarter of the visual representations of the coast in local gazetteers indicates an awareness of the maritime world that goes beyond the mere presence of islands. Gazetteer maps that included beacon mounds, or wind vanes, directed the gaze of their readers to the sea. More specifically, the military connotations attached to the beacon mound symbol guided gazetteer readers to an understanding of the sea as a potential source of violence.

The inclusion of this map element in a quarter of the visual representations of the coast in local gazetteers shows that the beacon mound was a widely accepted symbol among gazetteer compilers. Beacon mounds even show up in scenic depictions of the coast. Take the 1673 *Penglai xianzhi* 蓬萊縣志 (Penglai county gazetteer) (Fig. 10) as an example. The gazetteer includes a series of ten scenic depictions, commonly known as *shi jing* 十景 (Ten views). According to Luo, many of the non-map illustrations in gazetteers are part of *ba jing* 八景 (Eight views) or *shi jing* series (Luo 2016, 47, 55). Such series of scenic depictions offered gazetteer compilers an opportunity to highlight the scenic attractions in their locality in a way that maps did not allow. This particular scenic depiction is the fifth image in a series of ten and shows several fishermen on a rock in the sea, as well as two ships, and a beacon mound on top of a steep hill. The title of this image, *Yu liang ge diao* 漁梁歌釣 (Singing and angling on the fishermen's bridge) turns the sea into an enjoyable space for leisure activities, but the presence of the beacon mound, which is only accessible via a steep path, casts a shadow over this scene. The beacon mound thus transcended the boundary between maps and scenic depictions, but constructed in both kinds of visual representation a particular understanding of the sea as a potential source of violence that required constant vigilance.
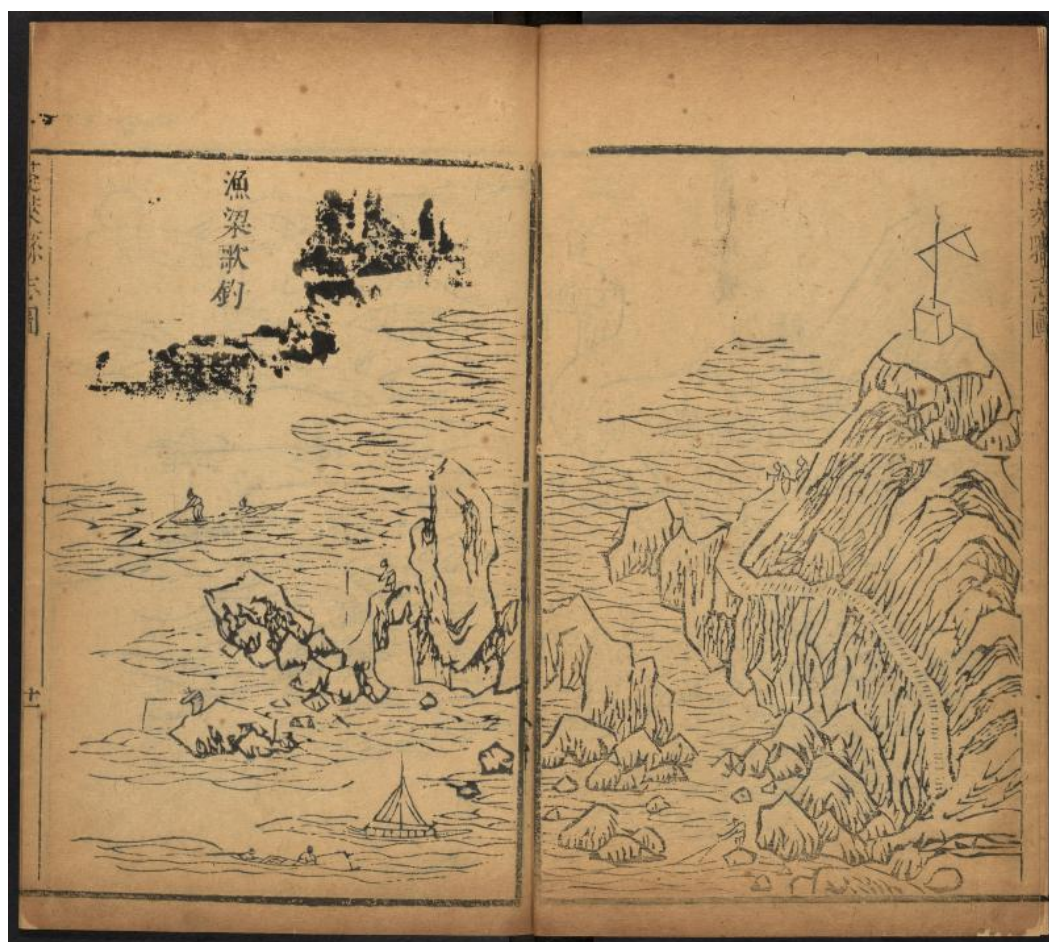

Fig. 10: Scenic depiction of fishermen angling, in Cao Yonghua and Gao Gang, eds., 1673 *Penglai xianzhi*, *juan* 1, 26. Image source: Harvard Yenching Library (persistent link: https://nrs.lib.harvard.edu/urn-3:fhcl:12229262?n=26)

Ships, shipping routes, and other nautical information

Brook argues that "nautical data appears on coastal maps, but only secondarily" (Brook 2017, 4). This holds true for visual representations of the coast in local gazetteers as well. Apart from islands and beacon mounds, ships were a common element in the repertoire of visual representations. Ships appear in sixteen percent of the visual representations of the coast, but like islands, most ships are shown by rudimentary symbols. The map of Ganshui (Fig. 7), for example, represents ships as a half moon shape with a flag on top. Most ships are simple depictions that break the monotony of the waves, as can be seen in the *Bianhai yingzhai tu* 邊海營寨圖 (Map of coastal fortifications) (Fig. 11). There is no indication of shipping routes or other nautical activities.

Fig. 11: Cropped map of coastal fortifications in Pinghu, in Guo Gaoying and Shen Guangzen, eds, 1745 *Pinghu xianzhi*, juan 1, 62. Image credit: *Zhongguo Fangzhi Ku*.

Only 32 images in the dataset visualise specific information about shipping routes, and more than ninety percent of these images come from the various editions of the *Chongming xianzhi* 崇明縣志 (Chongming county gazetteer) (Fig. 12). Chongming is a low-lying island in the river mouth of the Yangzi, now part of Shanghai, and one of the key connections between riverine traffic and maritime traffic. The maps show both the local shipping routes in the river mouth as well as several long-distance routes to Japan. These visual representations thus constructed an understanding of the coast, and Chongming in particular, as a space where riverine and overseas traffic connected. The inclusion of shipping routes brings maritime traffic alive in a way that the simple depiction of a ship does not. Although the *Chongming xianzhi* shows that local forms of knowledge about the maritime world did find their way into local gazetteers, the concentration of 29 out of 32 images in one gazetteer suggests that this was an exception rather than the rule.
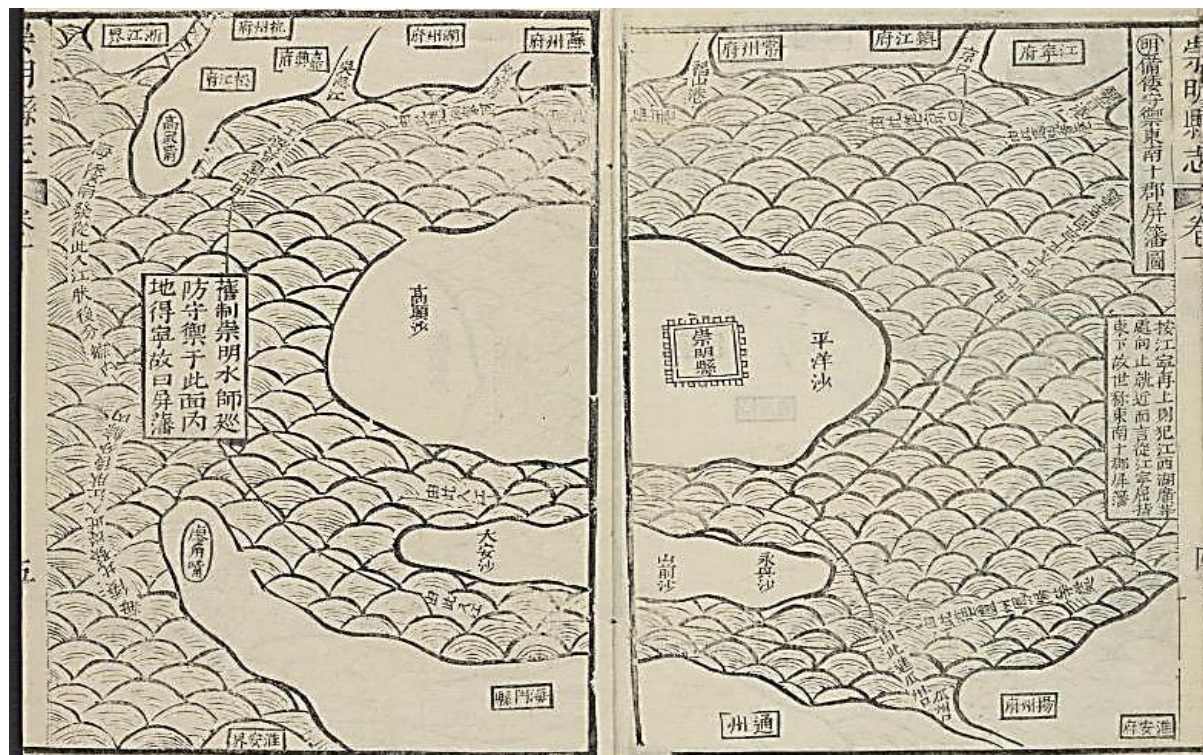
Fig. 12: Map of Chongming, in Shen Longxiang and Zhang Wenying, eds, 1727 *Chongming xianzhi*, *juan* 1, 93. Image source: Harvard Yenching Library (persistent link: https://nrs.lib.harvard.edu/urn-3:fhcl:14180976?n=93)

One other exception that deserves a mention here is the 1598 *Yue da ji* 粵大記 (Great record of Yue [Guangdong]) (Fig. 13). This gazetteer contains a map that covers 31 pages. The sea occupies a central position, covering the upper half of almost all images. Mills describes such maps as "strip-maps" (Mills 1954, 152). Brook refers to such maps as "route charts" and argues that unlike coastal maps, "route charts were drawn to depict itineraries of sea travel" (Brook 2017, 6).

The *Yue da ji* map is unique in the amount and kind of nautical information included, from names of islands, bays, and other landmarks, to details on anchorage and travel times, and even notes on locations where one can find clams or shrimp. This visual representation of the coast illustrates how local forms of maritime knowledge could be included in the official knowledge community of local gazetteers, but at the same time, as one of the few examples of such integration, how the genre of local gazetteers resisted the integration of local knowledge.

Fig. 13: Map of Guangdong, in Guo Fei, ed., 1598 *Yue da ji, juan* 32, 2112. Image credit: *Zhongguo Fangzhi Ku.*

Conclusion

Visual representations of the coast in late imperial Chinese gazetteers either marginalise the sea or construct an understanding of the sea as a potential threat. There are notable exceptions, such as the *(Chifeng) Tianhou zhi* or the *Yue da ji*, and these gazetteers require further research into the socio-political context of their compilation, but that falls outside the scope of this paper. Instead, this paper has argued, through collective analysis of visual representations, that gazetteer maps display a fundamental bias against local forms of maritime knowledge. Local gazetteers guided officials and other literati in their understanding of the coast, and although Po argues that late imperial Chinese officials showed more interest in the maritime world than studies usually acknowledge, this paper has shown that the majority of gazetteer maps marginalise the role of the sea in coastal society. Gazetteer maps orient their readers. Even when local forms of maritime knowledge enter gazetteers, like the impact of saltwater floods in the biography of Prefect Jiang, most gazetteer maps do not treat the maritime world as an integral part of their locality, and therefore draw attention away from local forms of maritime knowledge in gazetteer texts.

Gazetteer maps were not read in isolation. Readers often had access to other coastal maps, such as the 1562 *Chou hai tu bian*, and gazetteer maps even shared a repertoire of visual representations with non-gazetteer maps, for example in the form of beacon mounds that carried a military connotation. However, the presence of beacon mounds in a quarter of all images also shows that when the sea was not ignored, it was perceived as a potential source of violence. An extremely limited number of gazetteer maps constructed an understanding of the coast as a space for maritime trade, travel, leisure, or the source of maritime resources. Visual representations of the coast in most gazetteers are, if not silent, then at least quiet about the maritime world in a way that betrays the socially constructed perspectives on the world common among gazetteer compilers. The digital humanities approach in this article has exposed a selective inclusion of local knowledge about the maritime world in the visual material of late imperial Chinese gazetteers, which was difficult to perceive in case studies of individual gazetteers. Thus, while contextual analysis of individual gazetteers remains necessary, especially when it comes to exceptional gazetteers such as the *Yue da ji*, a digital humanities approach is required to understand why such gazetteers were exceptional in the first place, and to frame individual gazetteers in the context of genre-wide bias against local maritime knowledge.

Bibliography

Primary Sources

Chaoyang xianzhi (Wanli) 潮陽縣志(萬曆) (Chaoyang county gazetteer [Wanli edition]). (1572) 2009. Huang Yilong 黃一龍 and Lin Dachun 林大春 (eds). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Chongming xianzhi (Yongzheng) 崇明縣志(雍正) (Chongming county gazetteer [Yongzheng edition]). (1727) 2013. Shen Longxiang 沈龍翔 and Zhang Wenying 張文英 (eds). Cambridge, Mass.: Harvard-Yenching Library Chinese Local Gazetteers Digitization Project – Shan ben fang zhi.

Chou hai tu bian 籌海圖編 (Illustrated compendium on maritime security). (1562) 1990. Zheng Ruozeng 鄭若曾. Reprinted in *Zhongguo bingshu jicheng* 中國兵書集成 (Collection of Chinese military treatises), vol. 15-16. Beijing and Shenyang. Jiefang jun chubanshe and Liaoshen shushe.

Guangzhou fuzhi (Qianlong) 廣州府志(乾隆) (Guangzhou prefecture gazetteer [Qianlong edition]). (1758) 2013. Shen Tingfang 沈廷芳 (ed.). Cambridge, Mass.: Harvard-Yenching Library Chinese Local Gazetteers Digitization Project – Shan ben fang zhi.

Penglai xianzhi (Kangxi) 蓬萊縣志(康熙) (Penglai county gazetteer [Kangxi edition]). (1673) 2013. Cai Yonghua 蔡永華 and Gao Gang 高崗 (eds). Cambridge, Mass.: Harvard-Yenching Library Chinese Local Gazetteers Digitization Project – Shan ben fang zhi.

Pinghu xianzhi (Qianlong) 平湖縣志(乾隆) (Pinghu county gazetteer [Qianlong edition]]. (1745) 2013. Gao Guoying 高國楹 and Shen Guangzeng 沈光曾 (eds). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Quanzhou fuzhi (Qianlong) 泉州府志(乾隆) (Quanzhou prefecture gazetteer [Qianlong edition]). (1743) 2009. Huai Yinbu 懷蔭布 and Huang Ren 黃任 (eds). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Xiangshan xianzhi (Jiajing) 香山縣志(嘉靖) (Xiangshan county gazetteer [Jiajing edition]). (1548) 2009. Deng Qian 鄧遷 and Huang Zuo 黃佐 (eds). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Xu Ganshui zhi (Jiajing) 續澉水志(嘉靖) (Ganshui gazetteer continued [Jiajing edition]). (1566) 2009. Dong Gu 董穀 (ed.). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Yangjiang xianzhi (Kangxi) 陽江縣志(康熙) (Yangjiang county gazetteer [Kangxi edition]). (1688) 2009. Fan Shijin 範士瑾 (ed.). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Yue da ji (Wanli) 粵大記(萬曆) (The great record of Yue [Wanli edition]). (1598) 2009. Guo Fei 郭棐 (ed.). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Zhangzhou fuzhi (Wanli) 漳州府志(萬曆) (Zhangzhou prefecture gazetteer [Wanli edition]). (1573) 2013. Luo Qingxiao 羅青霄 and Peng Ze 彭澤 (eds). Beijing: Airusheng shuzhihua jishu yanjiu zhongxin.

Secondary Sources

Akin, Alexander. 2021. *East Asian Cartographic Print Culture: The late Ming publishing boom and its trans-regional connections*. Amsterdam: Amsterdam University Press.

Brook, Timothy. 2005. *The Chinese State in Ming Society*. London: Routledge-Curzon.

Brook, Timothy. 2010. *The Troubled Empire: China in the Yuan and Ming Dynasties*. Cambridge, Mass.: Belknap Press of Harvard University Press.

Brook, Timothy. 2017. "Chinese Charting of Maritime Asia." *Oxford Research Encyclopedia of Asian History*. https://doi.org/10.1093/acrefore/9780190277727.013.65

Chen, Shih-Pei, Calvin Yeh, Qun Che, and Sean Wang. 2017. *LoGaRT: Local Gazetteers Research Tools* (software). Berlin: Max Planck Institute for the History of Science. Accessed October 12, 2022. https://www.mpiwg-berlin.mpg.de/research/projects/logart-local-gazetteers-research-tools

Chen, Shih-Pei, Kenneth J. Hammond, Anne Gerritsen, Shellen Wu, and Jiajing Zhang. 2020a. "Local Gazetteers Research Tools: Overview and Research Application." *Journal of Chinese History* 4 (2): 544-558.

Chen, Shih-Pei, Sean Wang, and Calvin Yeh. 2020b. Exploring Harvard-Yenching Library's Rare Local Gazetteers with LoGaRT. Zenodo. https://doi.org/10.5281/zenodo.3909585

Dennis, Joseph. 2015. *Writing, Publishing, and Reading Local Gazetteers in Imperial China, 1100-1700*. Cambridge, Mass.: Harvard University Asia Center.

Hammond, Kenneth. 2019. "Cartography in the Ming." In *The Ming World*, edited by Kenneth Swope, 131-49. London: Routledge.

Harley, John Brian. 1988. "Silences and Secrecy: The Hidden Agenda of Cartography in Early Modern Europe." *Imago Mundi* 40: 57-76.

Luo, Qi. 2016. "Research on the Illustrations of Chinese Local Gazetteers: Overview, evaluation, and potential approach for future study." *Scientific Cooperations International Journal of Arts, Humanities and Social Sciences* 2 (1): 45-63.

Mills, J.V.G. 1954. "Chinese Coastal maps." *Imago Mundi* 11: 151-68.

Papelitzky, Elke. 2021. "Shallow Water at China's Coast: Depicting dangers on early modern Chinese maps." *Isis* 112 (1): 111-21.

Po, Ronald. 2016. "Mapping Maritime Power and Control: A study of the late eighteenth century *Qisheng Yanhai Tu* (A Coastal Map of the Seven Provinces)." *Late Imperial China* 37 (2): 93-136.

Schäfer, Dagmar, Shih-Pei Chen, Sean Wang, and Calvin Yeh. 2019. *Rare Local Gazetteers at Harvard-Yenching Library* (digitized collection). Berlin: Max Planck Institute for the History of Science. Accessed October 12, 2022. https://www.mpiwg-berlin.mpg.de/research/projects/rare-local-gazetteers-harvard-yenching-library-open-access-collection

Scott, James C. 1998. *Seeing Like a State: How certain schemes to improve the human condition have failed.* New Haven: Yale University Press.

Yee, Cordell D.K. 1994. "Chinese Maps in Political Culture." In *The History of Cartography Vol. 2.2: Cartography in the traditional East and Southeast Asian societies*, edited by J. B. Harley and David Woodward, 71-95. Chicago: The University of Chicago Press.