### Haifang 海防 and the Ming-Qing Transition: A Few Notes on Coastal Defence, Navies and Military Writings

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#### Introduction

During the Ming IJ dynasty (1368–1644), coastal defence was an important and at times very urgent issue in the maritime policies of its rulers. The Ming not only faced external threats, which came from beyond continental borders, like several dynasties before, but also that of the Mongols, the Ming's predecessors. They remained formidable and tenacious adversaries with which the Ming never really settled matters on a definite basis, even after they were chased out of the empire. The sea continued to be particularly problematical as a platform from which pirates and foreign enemies could endanger the stability of coastal regions.

Although pirates had always been active along the coasts, from late Song 宋 (960–1279) times onward, the coastal regions of China (and Korea) began to be raided by particular groups of Japanese, Sino-Japanese, and other pirates known as (Chin.) Wokou or (Jap.)  $Wak\bar{o}$  倭寇. Consequently, imperial authorities urgently needed to work out a policy aimed at protecting the sea borders. Drawing on earlier efforts of the Song dynasty, the initial decades of the Ming dynasty saw the establishment of a steadily growing number of military stockades and fortresses, a line of fortifications which was designed to defend the empire and protect its coastal populations against the inroads of Japanese and later, Sino-Japanese pirates. While this chain of military installations contributed to success in curbing the pirate threat, it was not enough to effectively neutralize the more serious and massive threat of Manchu advance.

The last one hundred years of the Ming dynasty were characterized by a boom in the development of military know-how in order to successfully deal

<sup>1</sup> For a discussion of the categories of people that are identified as *Wokou*, see Perdue 2015, 91ff. For a detailed overview of the main literature on *Wokou* in Chinese and Japanese, as well as a discussion of the main themes and trends in *Wokou* research throughout the years, see Fan Zhongyi 2004, Introduction, 1-50.

with external threats, as well as respond to the growing Manchu problem. Not in the least is this illustrated by the number of military works which appeared during the late Ming period. They were either written after successful campaigns or when the dying empire was in dire need of manuals, which for obvious and urgent reasons could hopefully be put into practice. Outstanding generals such as Qi Jiguang 威繼光 (1528–1588) and Yu Dayou 俞大猷 (1503–1579) published influential texts on tactics and training, and as late as 1628, the vast *Wubei zhi* 武備志 (Treatise on Military Preparedness) appeared offering readers an array of instructions and techniques in order to be successful in war. Eventually, the Ming did not hold out, but for the Ming's successor dynasty, naval affairs and coastal defence remained a serious matter.

With the establishment of the Qing 清 dynasty (1644–1911), a new and foreign power took control of China. As a non-seafaring ethnicity in origin, the Manchus adopted relatively quickly the Ming's naval legacy and continued its coastal defence system. After the hard-fought defeat of the Zheng empire (1661–1683, founded by Zheng Chenggong 鄭成功, 1624–1662, also known as Koxinga 國姓爺, chin. Guoxingye), the Qing remained well aware of the possible dangers that might lurk from beyond the maritime borders. Therefore, imperial administrations were not to neglect coastal defence. This paper aims at highlighting the main aspects of coastal defence in view of historical retrospect and during the Ming-Qing transition. It will also focus on the continuity of border control into the Qing era and will seek to open a window on the importance of military writings from the Ming.<sup>2</sup>

## Coastal Defence in Theory and Practice before Ming Times: A Short Overview

In general, coastal defence forms part of a larger program which a political entity, state, or nation state develops in order to keep its maritime borders unscathed. The defence of the sea borders in pre-modern societies essentially constituted an extension of the existing border defence systems, operational on

<sup>2</sup> While in the literature the coastal defence system of the Ming dynasty as well as the emerging modern navies of the late Qing period have to some extent received attention, studies that investigate the specific conditions of the coastal defence system during the Ming-Qing transition have so far been relatively rare. However, two major publications need to be mentioned: Calanca 2011 and Cheng 2013. An early work in the field is Higgins 1981. I must also mention Wilson 2009. The present paper is partly inspired by Peter Lorge's suggestion that naval warfare still offers many opportunities for future research. Cf. Lorge 2002, 96.

land. Coastal defence is a military phenomenon within the broader context of coastal and maritime activities. It may point to simple patrol operations along a coastline, which is vulnerable to attacks from overseas. In a more sophisticated and permanent way, it may also entail the establishment of a chain of fortified positions along the coastline that needs to be guarded. In any case, border defence necessitated the maintenance of a second, non-continental military tier, namely an operational naval force. The area to be guarded could be a coastal or riverine shoreline. This was especially relevant in the case of China with its large rivers and river estuaries which in peacetime allowed trade ships easy access to the hinterland and also made it possible for enemy forces (pirates) to penetrate deeply into the interior of Chinese territories.

The history of coastal defence and thus, also the theorization of its principles goes back to ancient times, especially the times of empires and states which had a distinctly maritime nature and therefore, were very much involved in maritime activities, whether it be fishing, naval operations, or maritime trade.<sup>3</sup> In Chinese history, coastal defence is characterized in practice by a gradual process from initial coast patrolling towards a more permanent vigilance in the form of what could be considered as a line of fortified positions.

This was facilitated with the establishment of a navy. In early imperial times, navies or their prototypical forebears suited the more aggressive strategies. Han dynasty warships patrolled the coasts and participated actively in operations aimed at expanding the Han Empire towards the south. As in later ages, coastal cities with their seafaring populations and shipbuilding installations, and their standing garrisons played important roles in the dynamics of the coastal defence system. However, there is yet no indication in the sources that there existed a systematic coast guard system which consisted of a defensive line of manned fortifications early on. Most probably this can be explained by the circumstance that there were no seaborne adversaries that

<sup>3</sup> Historical sources from classical Greece reflect the importance that was given by the maritime states to the defence of maritime borders. Furthermore, over a longer period of time it becomes visible how the approach of political and military entities of the maritime states of classical and post-classical Greece towards coastal defence was subject to change. Aggressive policies made way for a more defensive approach. Cf. Ober 1985, 69ff. For the history and the importance of coastal defence in the Roman Empire and Republic including a discussion of passive and active defence, see Starr 1943.

<sup>4</sup> Cf. Lo and Elleman 2012, 34-38. For an overview of the history of naval warfare in the classical and early dynastic period, see Lorge 2002.

could seriously threaten the integrity of Han territories.<sup>5</sup> In fact, the empire was much more concerned with the protection of the empire's northern continental borders maintaining the "Great Wall" as a line of defence against marauding nomadic peoples. In spite of a concern with maritime border security this policy does not seem to have extended to the coastal areas.<sup>6</sup>

In the centuries after the Han, navies were deployed within the contexts of aggressive strategies. The Sui 隋 dynasty (581–618) was established after naval operations had been targeted against the southern state of Chen 陳 (557–589). Furthermore, Tang 度 (618–906) emperors expanded the might of the Chinese navy through expeditions against the Korean states of Koguryŏ 高 句 麗 and Paekche 百濟, and multiple clashes with the Japanese navy. $^7$ 

The need for an effective coastal defence system surfaced at the very beginning of the Song dynasty. A reunited China under native Chinese rule sponsored the expansion of maritime trade activities in an exceptional and unique way. The Song dynasty founded their naval forces on the achievements of the past and added to this a substantial number of new developments, not in the least in the field of nautics. However, the Song was in a different position than the preceding dynasties or reign periods. Song rulers almost permanently experienced the threatening presence of the northern non-Chinese states with which it maintained a fragile peace. 9

As the survival of the dynasty depended on access to the sea, and the coast-line thus had to be protected, the Song government devoted gradually more attention to the establishment of a permanent chain of fortifications. Especially after the Song was forced to retreat to south China, the naval forces were largely expanded through an extensive shipbuilding program. As Yang Jinsen 楊金森 and Fan Zhongyi 范中義 point out, coastal defence was always about two main objectives: to face or forestall pirate attacks and for warding

<sup>5</sup> Han authorities were concerned about illegal activities on the maritime borders of the empire. On the early history of Chinese piracy, see Lin Yongqiang 2011.

<sup>6</sup> The Han 漢 dynasty (206 BCE–220 CE) was not yet a period of systematic maritime traffic and networks. To some extent it could still be considered as a phase of exploration. The *Hanshu* 漢書 by Ban Gu 班固 (32–92) contains no small number of references to exploratory voyages in the Eastern Ocean, albeit some of these voyages seem to have been mythologized. For an overview of Han dynasty naval operations, cf. Lo and Elleman 2012, 31-38.

<sup>7</sup> Lo and Elleman 2012, 44–54; Inoue and Brown 1993, 202-216.

<sup>8</sup> Lo and Elleman 2012, 11-126.

<sup>9</sup> See e. g. Rossabi 1983.

<sup>10</sup> Lo and Elleman 2012, 130-135.

off threats of larger rivaling states. This would not be different under the "foreign" rule of the Yuan  $\pi$  (1279–1368). In view of an incipient conflict situation with harassments by Japanese merchant (or pirate) ships under Külüg Khan (Wuzong 武宗, r. 1307–1311), Yuan authorities took measures to ward off this threat. The need for a more systematic approach towards the defence of the sea borders was felt by the beginning of the Ming dynasty and it would be a permanent issue until the end of Ming rule and beyond.

## The Ming Maritime Policies: A "Maritime Great Wall" and Sea Ban

As the newly founded Ming dynasty aimed at controlling all foreign trade, a sea ban (haijin 海禁) was established, and it was combined with the tribute trade system in the form of the kanhe or tally trade (kanhe maoyi 勘合貿易).<sup>13</sup> In order to effectively control all incoming and outgoing traffic, and to protect the coastal zones from Wokou attacks, the Hongwu 洪武 Emperor (r. 1368–1398) ordered the establishment of a chain of garrisons all along the coast from Liaodong 遼東 to Guangdong 廣東. These measures must be seen within the context of the organization of the Ming army which is characterized by the system of weisuo 衛所 ("guard posts" or "guards and battalions"),<sup>14</sup> autonomous garrison command posts in which soldiers served as self-sufficient farmers.<sup>15</sup> The establishment of the fortified posts in combination with the fortification of existing cities and towns in the coastal areas specifically contributed to what to some extent could be considered as a "maritime

<sup>11</sup> Yang Jinsen and Fan Zhongyi 2005, 17.

<sup>12</sup> Cf. Yuanshi 元史 (Historical Records of the Yuan Dynasty), ch. 65 (27b ff) on haifang 海防. For an overview of references to the conflicts with merchant or pirate ships in the Yuanshi, see Yang Jinsen and Fan Zhongyi 2005, 18ff. Measures entailed the establishment of naval stations (haizhan 海站) with ships and troops which patrolled coastal stretches and could oppose enemy presence.

<sup>13</sup> Cf. Lim 2013; for a pioneering work see Wiethoff 1963. On the tally trade, see also Fan Zhongyi and Tong Xigang 2004, 77-96. See also Schottenhammer 2013, 120-123.

<sup>14</sup> For a concise description of the weisuo system, see Zhongguo gudai junshi wenhua da cidian, 969.

<sup>15</sup> As opposed to the *fubing* 府兵 of the Tang dynasty which were military men with professional careers, Ming soldiers belonged to a hereditary caste. Cf. Hucker 1998, 62ff. See also Filipiak 2008, 50-56.

Great Wall."<sup>16</sup> In early Ming times, the pitiable state in which many walls of coastal cities in several coastal cities found themselves caused the Ming authorities to develop a rigorous program of rebuilding and renovation that was continued. Coastal towns were walled and existing city walls were reconstructed, enlarged, or fortified, and new positions were manned with officers and new recruits.<sup>17</sup> Moreover, a naval force was established which could sail out in order to confront piratical threats at sea.

However, the vigorous approach towards the coastal security issue would not be sustained. Over the years, a gradual tendency towards neglect can be seen, and it was only through the initiative of outstanding military personalities, such as Qi Jiguang and Yu Dayou in the latter part of the sixteenth century, that the fortification policy was reinvigorated.<sup>18</sup>

The conditions of the coastal defence in the Ming dynasty is well documented in numerous works ranging from standard histories to specific monographs on coastal defence itself. One of these is the Chouhai tubian 籌海圖 編 (Compilation of Maps on Managing the Sea) (1561-1562) written by Zheng Ruozeng 鄭若增 (c. 1505-1580) and supervised by Hu Zongxian 胡 宗憲 (1512–1565). Born in the important maritime center of Suzhou 蘇州, Zheng Ruozeng had plenty of opportunity to familiarize himself with the specific conditions of China's sea border security. His Chouhai tubian is a geographical work and military atlas which provides a detailed survey of the defence measures that were at the empire's disposal to ward off imminent attacks or to prevent raids.<sup>19</sup> Zheng's chef d'oeuvre maps the complex of coastal defence infrastructure, and apart from its cartographical representations, it listed all major locations which played a functional role in the surveillance of the coastal zones. This includes fortified garrisons, but it also mentioned smaller constructions. Coastal defence installations also consisted of other, more or less permanently manned locations that were built in-between or in the neighborhood of major guard locations. There were hundreds of fortresses (bao 堡), patrol offices (xunjiansi 巡檢司), lookouts (tai 臺), en-

<sup>16</sup> An example in this respect is Tang He 湯和 (1326–1395), a Ming commander who was charged with the inspection and fortification program of the maritime borders. Cf. Dreyer 1976; see also Calanca 2011, 211.

<sup>17</sup> Paola Calanca (2011, 211-220) analyses these rebuilding programs with a specific focus on the maritime borders of the Fujian area.

<sup>18</sup> Cf. infra.

<sup>19</sup> As many of the early pirates (Wakō) came from Japan. On Zheng Ruozeng, see Huang 1976.

campments (ying 營), military stations (tangpu 塘鋪), naval stockades (shuizhai 水寨), defensive walls (cheng 城), beacon mounds (dun 墩), and beacon towers (fenghou 烽堠) where fires could be lit to warn nearby garrisons or other military positions in case an area was under attack.<sup>20</sup>

Furthermore, the *Chouhai tubian* provides insight into the strength of the armed forces in each of the guard posts, as well as the weaponry that was assigned to them. Substantial attention was also devoted to the selection and training of troops, and it also provides a historical survey of piracy in the East China Sea as well as the Sino-Japanese relations.<sup>21</sup>

The border defence system did not in the first place consist of a network of physical walls, none the less, the diversity of these smaller and larger defensive constructions scattered along the coasts seems to suggest that this defensive complex worked in the same way as its northern continental counterpart.<sup>22</sup>

Based on the data in the *Chouhai tubian*, Fan Zhongyi and Tong Xigang had drawn up a list of all fortified positions that were established along the coast. This makes a total of about 180 garrisons.<sup>23</sup> Notably, the vast majority of them were established in the first three decades of the dynasty.<sup>24</sup> Furthermore, in order to carry out an effective surveillance in a maritime context, a naval force was created which could sail out to chase enemy vessels. The defence policy consisted of defensive and aggressive strategies.<sup>25</sup>

<sup>20</sup> See for instance the military infrastructure of Fujian, Zheng, cf. *Chouhai tubian* 4.250-269. Cf. also Zhang Tieniu and Gao Shaoxing 1993, 191. As Calanca (2011, 215) shows in her analysis of the Fujian situation, the sources show an even larger variety of technical terms (*tulou* 土樓, *tucheng* 土城, etc.) that refer to fortified positions along the coast.

<sup>21</sup> In fact, Chouhai tubian (2b.175-216) also contains by far the most comprehensive account of Ming time Japan. On defence manuals from the sixteenth century, see Suganuma 2000, 61-65.

<sup>22</sup> For the organizational aspects of the armed forces that were active along the border walls, see Waldron 1990, 55ff; Dreyer 1982, 193ff.

<sup>23</sup> Fan Zhongyi and Tong Xigang 2004, 365-381; Yang Jinsen and Fan Zhongyi 2005, 82-91. In their standard monograph on Chinese naval history, Zhang Tieniu and Gao Shaoxing (1993, 191-205) also present a comprehensive list of all *wei* and *suo* that were established on the coast and (for most of them) the number of soldiers that manned them. Zhang and Gao mainly draw on earlier works by Fan Zhongyi for this purpose. The *wei* and *suo* are listed and shown on maps per coastal province.

<sup>24</sup> Remains of a few of these fortifications in the southeastern coastal area can still be seen today. Cf. Du Meiyan 2012.

<sup>25</sup> For an elaborate discussion of the naval forces which were established to carry out patrol operations, see Niu Chuanbiao 2014. Cf. Calanca 2011, 25ff; Wilson 2009, 289.

In the beginning of the Ming dynasty, ship-building programs were developed in order to make sure that every police station or garrison had at least two naval ships at their disposal. The construction of ships was continued for quite some time. Shipbuilding would reach an apex under the Emperors Yongle 永樂 (r. 1402–1424) and Xuande 宣德 (r. 1425–1435) who dispatched seven large-scale oceanic expeditions to the countries of the Indian Ocean in what was largely a eunuch initiative. The experiments of the Indian Ocean in what was largely a eunuch initiative.

In the beginning of the Ming dynasty, vigorous coastal defence policies were combined with restrictive laws, which limited the dynamics of commercial transactions. This sea ban would have its effects on the local economies. As Ivy Maria Lim has pointed out, the sea ban created a counterproductive effect. The restrictive policy caused more people to resort to illegal commercial activities. By the second half of the sixteenth century, it was clear that the ban was not to be maintained, and hence, it was lifted (kaihai 開海) in 1567. In the long period between 1372 and 1521, times were relatively peaceful on the southeast coast. Because of the sea ban, the frequency of Wokou raids was rather limited and this would affect the operational capacities of the military forces in the coastal areas. Slowly but surely the conditions of the garrisons deteriorated. After some time, the garrisons faced a multitude of problems in these garrisons: a lack of personnel, lack of ships, and poor or no salaries at all.<sup>29</sup>

### Coastal Defence: The Ming Collapse and the Manchu Conquest

Although the *Wokou* problem can be monitored in sources such as the *Mingshi* throughout the entire span of the dynasty, the worst phase in the crisis is largely to be situated in the Jiajing 嘉靖 period (1507–1567), more importantly in the 1550's. Cheng Wei-chung (Zheng Weizhong 鄭維中) shows how the establishment of the *weisuo* system, as mentioned above, had a counterproductive effect on the number of the troops in the border areas. Hereditary soldiers became farmers who would gradually turn away from the military profession, and the land allotted to them became a subject of trade over

<sup>26</sup> In order to keep pirates off the coast and chase them away, coastal troops needed fast ships. One example is the *lukuai chuan* 檜快船 (fast sculling boat). Cf. Calanca 2011, 211.

<sup>27</sup> On this extraordinary episode of Ming naval history, see Dreyer 2007; Church 2005.

<sup>28</sup> Lim 2013, 9. See also Fan Zhongyi and Tong Xigang 2004, 77.

<sup>29</sup> Calanca 2011, 215.

time.<sup>30</sup> The severity of the *Wokou* crisis spurred a new wave of operations to strengthen the coastal defence.

The success of the Chinese forces against the marauding pirates was largely due to innovative initiatives of military officers, such as Qi Jiguang, whose approach had also been fruitful in the defence of the northern border. Qi was instrumental in molding a force of well-paid mercenaries which were instrumental in chasing the pirates away. Commanders like Qi would also receive an unprecedented form of autonomy in organizing the defence which led to better trained and better fed soldiers. Not only did Qi's operations curb the pirate attacks, also under their initiative several reforms in the coastal defence management were pushed through, such as the division of Ming China's coastal stretch into different zones and the installment of naval outposts on outlying islands, a reiteration of an earlier policy. This dynamic approach towards a better control was continued well into the beginning decades of the sixteenth century under the rule of the Wanli 著曆 emperor (r. 1572–1620).

During the last fifty years of the Ming period, fortifications in great measure had started to be abandoned at a slow but steady pace. By the turn of the century the *Wokou* problem became less urgent, and this reduced the function of the fortresses back to basic guarding and surveillance. At the same time, coastal defence caused a serious drain of financial resources. Amidst the turmoil of a collapsing dynasty, the Ming invested less in border defence. Yang Jinsen has calculated that by the end of the sixteenth century the number of fortifications and the equivalent number of troops serving in these posts started to decrease. Naturally, this development needs to be seen within the context of an increasingly disabled regime heading for its collapse. An illustrative case in this respect is the situation in the Tianjin garrison, which in 1592, under the Wanli emperor, still counted more than 20,000 soldiers, whereas more than thirty years later, under the rule of Tianqi 天序 (r. 1620–1627), the number of troops had crumbled to around 2,500.<sup>33</sup>

For Zhejiang 浙江 province, Yang Jinsen found figures of decrease between 8.8% and 17% in the number of troops stationed in the coastal fortresses. The same trend can be seen in the number of ships that were in use in

<sup>30</sup> Cheng 2013, 12.

<sup>31</sup> Idem, 13-14.

<sup>32</sup> For a detailed discussion and analysis, see Calanca 2011, 215-216.

<sup>33</sup> Yang Jinsen and Fan Zhongyi 2005, 318.

the marine camps (stockades). Sometimes the number of war vessels had increased, but when one studies the active fleet in detail, it appears that while the number of smaller boats had increased considerably, large ships had decreased in numbers.

While the navy grew weaker, the events during the final decades of the Ming show that, all in all, the coastal defence forces were still to some extent effective in warding off foreign threats and attacks. They performed rather successfully in confronting the Dutch who strived to obtain a foothold in coastal China at the end of the dynasty in order to open up Chinese markets.<sup>34</sup>

Even when the odds were against the Ming, it still had the advantage of its naval strength and knowledge of the sea and sea lanes, which might be used when circumstances called for it. In fact, they were considered one of the last able to turn the tide of the Manchu conquest. This is particularly exemplified by the figure of Mao Wenlong 毛文龍 (1579-1629), the Ming commander who was in charge of the defence of the waning empire in its decisive phase. In assessing the acuteness of the military situation, Mao was very much in favor of halting the Manchu advance through an aggressive strategy in which the navy played an important role. Through its historical ties to the Choson 朝鮮 Dynasty (1392-1905) in Korea, the Ming could in those days to some extent rely on their Korean allies who had proven in their war against Japan that they could more than stand their ground in naval confrontations.<sup>35</sup> Only a few decades earlier, in the 1590s, large Ming armies had been sent to Korea to assist the kingdom in its war against the Japanese invaders under Toyotomi Hideyoshi 豊臣秀吉 (1536-1598). The Chinese role in this conflict, which is highlighted by Kenneth M. Swope in several recent publications, also entailed a substantial transfer and use of Chinese military technology in Korea.<sup>36</sup>

As a matter of fact, the Manchus were in essence a land-based, seminomadic ethnic group with little affinity to the sea. With the progress of the Ming-Qing conflict, the Manchus, however, relied on allies, whether it be collaborators or defectors, or groups altogether subjugated, to assist them and equip them with what they lacked. Of course, this practice was not new. It had its forebears in history. The Mongol rulers of the Yuan dynasty heavily relied on Chinese defectors who supported their naval enterprises.<sup>37</sup> Earlier

<sup>34</sup> Idem, 321.

<sup>35</sup> Swope 2014, 39-42. On Mao Wenlong's garrison post, see Jung 2006, 43-45.

<sup>36</sup> Swope 2005; Swope 2009.

<sup>37</sup> On Yuan naval history, see Lo and Elleman 2012, 211-319.

on, the ancestors of the Manchus, the Jurchen Jin 女真金 (1115–1234), whose territory bordered the sea on the east, had developed substantial skill in seafaring and naval warfare, which to some extent even surprised their Song contemporaries. $^{38}$ 

In their gradual development from a semi-nomadic to a full-grown sedentary empire, the Manchus would combine their own military structures represented by their unique baqi  $\wedge$  棋 system with know-how they obtained through defecting Ming military men. For their naval affairs they were fortunate to be able to rely on such an outstanding naval personality as Shi Lang 粮 (1621–1696) who would in the end show his brilliance by defeating the Zhengs and annexing Taiwan to the Qing territory.  $^{39}$ 

As soon as the Manchus had conquered the majority of Ming territories, they quickly took to restoring the coastal defence line. Paola Calanca distinguishes two phases in this process. First, the Manchus assured themselves of the complete control of the coastal areas, which amounted to decisive confrontations with the Ming loyalists, members of the Zheng clan and all sorts of other opponents. A second phase pertains to the period in which the Manchus reorganized coastal defence. From 1660 onward the traditional coastal defence system was temporarily replaced by a unique measure which consisted of creating an evacuated zone (qianbian 邊) along the coasts. After the newly established court managed to secure control of the region, they would soon address the organization of the former coastal defence infrastructure and establish a more or less stable military administration.

Yang Jinsen and Fan Zhongyi have shown that the new Manchu rulers in a relatively short period of time invested a lot of effort and state budget into the strengthening of coastal defences. The necessity to maintain the system and keep it operational was not far-fetched. The pirate problem which had harassed Chinese coasts for centuries and which seems to have been subsided at the end of the Ming dynasty, did not disappear after the Qing take-over. In fact, it re-emerged rapidly, and the Qing had to intensify their efforts to organize their defence system in order to ward off piratical attacks, as in the case

<sup>38</sup> Idem, 135ff.

<sup>39</sup> Elman 2005, 193; Calanca 2011, 226f, 315f, 331f.

<sup>40</sup> For an elaborate discussion, see Chin 2014.

<sup>41</sup> Ho 2013.

<sup>42</sup> Calanca 2011, 220-224.

of coastal Guangdong. Apparently, the Qing navy was keen on continuing the operational preparedness of the naval garrisons and vigilance in the coastal areas, which had a positive effect on commercial seafaring in the area. A report in the Ka-i hentai 華夷變態 (Changing Conditions of Chinese and Barbarians), compiled by Hayashi Shunsai 林春齋 (1618–1680) and Hayashi Hōkō 林信篤 (1644–1732) containing ship reports (Tōsen fusetsu gaki 唐船風説書) refers to a Nagasaki bound Chinese ship that came from Ayutthaya (Siam) and ventured into Chinese coastal waters. Its crew noticed that Qing naval ships were patrolling the area. However, piracy would not occur again as a major issue in the coasts, or at least not to the extent that characterized the Jiajing period.

# The Importance of Military Writings in the Ming Era and Their Legacy

Not only were the major military personalities in the sixteenth century successful, they also put down their experiences in influential writings. The large amount of monographs that appeared almost until the end of the dynasty shows how much attention was paid to the problem and how active military writers, whether it be geographers or military commanders, were essentially elaborating on ways to rid the empire of the pirate plague, and later on how the dynasty could be protected against the Manchus.<sup>47</sup> Apart from the abovementioned *Chouhai tubian*, compiled by geographer Zheng Ruozeng, which constituted one of the works growing out of the empire's experiences with the defence of its maritime borders, there were lots of other writings contributing to the quelling of the pirates. At some point the compilation of works that could enhance the empire's military strength, and arsenals of techniques and measures against external threats were much welcomed.

<sup>43</sup> Zeng Xiaoquan 2006.

<sup>44</sup> Perdue 2003, 66.

<sup>45</sup> These *tōsen fusetsu gaki* reports were compiled on behalf of the authorities in Nagasaki after an interview with the captain of every incoming Chinese ship, cf. Ishii 1998, 33ff.

<sup>46</sup> Looking beyond the initial decades of the Qing, very many changes of reforms were instituted after the 1730s and certainly not during the Qianlong era. Crossley, Siu, and Sutton 2006, 235.

<sup>47</sup> For an exhaustive overview of military works from the Ming dynasty, see Franke and Liew Herres 2011, vol. 2, 633-675.

One of Zheng Ruozeng's other works was the *Jiangnan jinglüe* 江南經略 (A Strategy for the Jiangnan Region) which discusses riverine and coastal defence in a detailed way, showing a definite influence of the previously published *Chouhai tubian*. Qi Jiguang's *Lianbing shiji* 練兵實紀 (Records of Military Training) and *Jixiao xinshu* 紀效新書 (New Book on Effectful Discipline) were groundbreaking manuals on military training, one of them directly based on personal experiences. In the *Jixiao xinshu*, a chapter is devoted to naval affairs.

Since the battle against the *Wokou* also required naval skills, chapter 12 of the *Jixiao xinshu* was devoted to this important aspect of the more aggressive approach to the *Wokou* problem. It is a prominent part of this work. Qi discusses formations, armaments, training and many other aspects of army. As shown above, Qi Jiguang's work would continue to exert influence in the military sphere. Beyond the borders of China, Qi Jiguang's military handbooks attained a high status that made them also appreciated in Korea where his works were disseminated. Qi's innovative approach towards fighting inspired military commanders during the Imjin War (Imjin Waeran 壬辰倭亂, 1592–1598). Furthermore, Paola Calanca points out how Qi's chapter on naval forces was even copied into the *Haifang jiyao* 海防輯要, an eighteenth century work on coastal defence by Yan Ruyu 嚴如煜 (1759–1826). 50

The success that Qi Jiguang attained in his struggle against the Sino-Japanese pirates would not go unnoticed in the decades and centuries to come. Apparently, his fame and legacy continued in China and spread beyond its borders into neighboring Japan. Consequently, his works spread, circulated, and were reprinted not in China alone but also in Japan.

In 1629, with the collapse of the dynasty almost within sight, Guo Yingxiang 郭應響 (?–1632) remarked that Qi's works represented the "golden guidebooks" (jin zhen 金針) for military affairs, and his works received praise in Qi Jiguang's biography in the dynastic history of the Ming (Mingshi 明史). Much later, the works of Qi Jiguang were mentioned among the standard works of great significance (da yi 大意) by Shen Zhaoyun 沈兆澐 (1786–1877) in his Bingwu wenjian lu 兵物開見錄 (Record of Military Things Heard and Seen). Among the twenty military works that were copied into the late eighteenth century imperial collectaneum Siku quanshu 四庫全書, the largest col-

<sup>48</sup> Fan Zhongyi 2007, 244-255.

<sup>49</sup> Swope 2009, 19, 163, 179.

<sup>50</sup> Calanca 2011, 249f.

lectaneum of Chinese literature, there are Qi Jiguang's *Jixiao xinshu* and *Lianbing shiji.*<sup>51</sup>

In 1628, less than two decades before the official end of Ming rule, a great military compendium, the *Wubei zhi* was published. The interesting aspect of the authorship of this 240 chapter classic work about military technology, strategy, and tactics is that it was written by a marine commander named Mao Yuanyi 茅元儀 (1594–1640?). Viewed in retrospect, the publication of such an extensive work on military know-how in such a late phase is meaningful in that it seems that despite the Ming's unavoidable downfall, the minds of the military men were apparently still very much focused on saving the dynasty.

The publication of military knowledge undoubtedly helped to propagate tools to organize the defence against the Manchus. The *Wubei zhi* is often denominated as the most comprehensive work on military affairs. It comprises a large amount of relevant knowledge including parts from earlier works such as the *Wujing zongyao* 武經總要 (Compendium of Essentials of Military Scriptures) from the Song dynasty, as well as the first military writers of classical times. It includes chapters on every aspect of the military profession such as commentaries on military theories from the past, formation and training, logistics, and weather and geographic feature. It also contains a substantial part about naval affairs. Mao Yuanyi's work remained an important reference work for military affairs and not much later it was republished in Japan. Parts of it were also integrated in the *Gujin tushu jicheng* 古今圖書集成 or the *Imperial Encyclopedia* from 1725. <sup>52</sup>

#### Conclusion

Border control and defence represented an important task for the Chinese empire. None the less, the *Wokou* pirate threat was at times overshadowed by far larger threats. Pirates were able to cause upheaval to coastal economies, but they were not able to topple a state.

In military respects, the sixteenth century, especially the latter half, can be characterized as the last period of relative success for the Ming dynasty. The pirate problem was largely quelled, and Ming forces were victorious as allies to the Koreans against the aggressive Japanese expansionism. All in all, we may

<sup>51</sup> Fan Zhongyi 2007, 51.

<sup>52</sup> On the Wubei zhi, see Franke and Liew Herres 2011, vol. 2, 636f.

point at the circumstance that militarily Ming China had everything in its arsenal to successfully oppose external threats. To a large extent this is illustrated by the publication of a large number of military works, even into the final decades of the dynasty. Several of the military works published in Ming times achieved the status of classics in their genre and would become part of a selection of works that circulated in the East Asian world.

The Ming's successors, the Manchu, maintained the continuity of the coastal defence system. Piracy never really disappeared, and after the Manchu conquest and subjugation of the last remnants of Ming resistance, attention again turned to security of the maritime borders. However, the coastal defences were not the subject of spectacular reform policies as the beginning of the Ming dynasty had witnessed. At large a status quo was the objective. Qing coastal defence would slowly but surely wither away in the next century until finally the advent of the vanguard of Western naval technology shifted the balance of naval power relations in the region for good.

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