Title: **Heart-Minds and Harquebuses: The Bozhou Rebellion in China (1587-1600)**

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Keywords: **Neo-Confucianism, Bozhou Rebellion, Wang Yangming, Harquebus, Guo Zizhang, Li Hualong, Yang Yinglong, minority uprisings**

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Short abstract:

Many of the south-western non-Chinese minorities rebelled during the course of the dynasty's existence, including the Miao, who at the end of the sixteenth century launched an uprising under the leadership of Yang Yinglong (1551-1600). The resulting insurgency was eventually supressed under the leadership of civil officials. During the early dynasty forceful suppression by the military had been the norm. In contrast, civil officials, like Neo-Confucian thinker Wang Yangming (1472-1529), conceptualized mixed policies emphasizing moral exhortations and social engineering, in combination with military force using advanced technologies, as integrated solutions to ethnic insurgencies in the course of the sixteenth century. This paper will look at the extent to which these mixed policies were advocated and applied, including the use of advanced firearms, and their relative measures of success.

Heart-Minds and Harquebuses: The Bozhou Rebellion in China (1587-1600)

The two most well-known theatres of military action during the Chinese Ming (1368-1644) dynasty are usually the long northern frontier facing the arid zone and roaming (semi-)nomads, and the south-eastern seaboard suffering frequent raids from Sino-Japanese pirate coalitions. A third significant theatre, however, was constituted by the south-western areas of the empire, containing the abodes of many ethnic minorities. Many of these non-Chinese minorities rebelled during the course of the dynasty's existence, including the Miao, who at the end of the sixteenth century launched an uprising under the leadership of Yang Yinglong (1551-1600). The uprising and the resulting insurgency were eventually supressed under the leadership of two civil officials, Guo Zizhang (1543-1618) and Li Hualong (1554-1611). Whereas during the early dynasty forceful suppression by the military had been the norm, by the late sixteenth century civil bureaucrats had assumed the overarching leadership of such operations. This phenomenon was exemplified by civil official and Neo-Confucian thinker Wang Yangming (1472-1529), who conceptualized mixed policies emphasizing moral exhortations and social engineering, in combination with military force, as integrated solutions to ethnic insurgencies in the course of the sixteenth century. This paper will look at the extent to which these mixed policies were advocated and applied, and their relative measures of success. Furthermore, the Bozhou Rebellion saw the use of Japanese harquebusiers and advanced firearms by the Ming empire, and a tentative assessment will be made of their impact on the course of insurgency warfare.

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Introduction

Perhaps a measure of the astonishing continuing success of imperial Chinese soft power is the fact that even now, more than a century after the demise of the last dynasty, many westerners, even trained sinologists, believe it possessed an inherently peaceful inclination abhorring the pursuit of war, largely caused by the hegemony of its civil scholar officials steeped in Confucian learning.[1] And not only westerners are influenced by this framing, Chinese intellectuals themselves often fall under the spell of edifying imperial rhetoric, which is eagerly exploited by the present Chinese leadership to soothe western anxieties over the possible consequences of the rise of China. Conversely, Confucianism and the anti-war mentality it supposedly inculcated, has also been utilized as an explanation and criticism of Chinese military weaknesses in various periods in its history.[2] A few of the most notable exceptions are military historians of China, who are perhaps better acquainted with hard power side of equation. Both Alastair Johnston and Yuan-kang Wang have demonstrated that far from being inhibited by Confucian sentiments, both the Song and Ming dynasties adopted aggressive pro-active military postures when the perceived power balance was in their favour.[3] Peter Lorge has furthermore pointed out the flawed reasoning that assumes too great an influence of Confucian discourse on Chinese military behaviour, by pointing out that the pacifist sentiments in Jesus Christ's message has not led generations of scholars to describe Western Christendom

[1] Christon I. Archer et al., *World History of Warfare* (Lincoln: University of Nebraska Press, 2002), 204; The classic statement can be found here: John K. Fairbank, 'Introduction: Varieties of Chinese Military Experience', in *Chinese Ways in Warfare* (Cambridge, Massachusetts: Harvard University Press, 1974), 6–11; Michael S. Neiberg, *Warfare in World History* (London and New York: Routledge, 2001), 39.

[2] The Portuguese sought to portray China as a potential glorious conquest and Matteo Ricci thought China was a positive examplar of a polity ruled by philosopher-statesmen. See: Tonio Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History* (Princeton: Princeton University Press, 2016), 119–23; Chen Hong, 'On Matteo Ricci's Interpretations of Chinese Culture', *Coolabah* 16 (2015): 89–90.

[3] Alastair Iain Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, New Jersey: Princeton University Press, 1995); Yuan-kang Wang, *Harmony and War: Confucian Culture and Chinese Power Politics* (New York: Columbia University Press, 2011).

as an inherently peaceful civilization.[4] More specifically related to the topic of insurgencies, Kenneth Swope has argued that in the context of proposing solutions for suppressing late Ming peasant rebellions, officials would often couch their ideas in Confucian discourse in a contest of self-serving virtue signalling to advance their careers in a competitive environment.[5]

While I share the more cynical and realist interpretations advanced by the military historians mentioned above, I wish to explore in this paper some of the ways Confucianism, or rather a variant of Neo-Confucianism which was current in the sixteenth century, had a more practical impact on the conduct of war during the late Ming dynasty.[6] Studying this phenomenon in the context of counterinsurgency warfare against minorities, also referred to as aboriginals in modern scholarship, is a fertile angle for several reasons. First of all, during the sixteenth century ethnic minorities inhabiting south-western provinces of the Ming empire started to rebel more frequently, necessitating more frequent governmental responses. Second, the decline of the hereditary military system set up at the beginning of the dynasty prompted the greater involvement of civil officials in military affairs and increased the scope for putting Neo-Confucian policies into practice. Third, for the same reason of military decline ethnic minorities were hired on a large scale to serve as military units for the empire. Civil officials and minorities thus came into increasing contact with each other in the context of military confrontations, both as allies and as antagonists. As I will argue, these confrontations seem to have stimulated a more nuanced understanding by civil officials of the potential for minorities to become acculturated to the dominant Han Chinese cultural paradigm, and increased the

[4] Peter Lorge, 'Discovering War in Chinese History', *Extrême-Orient Extrême-Occident* 38 (2015): 24.
[5] Kenneth M. Swope, 'Of Bureaucrats and Bandits: Confucianism and Antirebel Strategy at the End of the Ming Dynasty', in *Warfare and Culture in World History*, Second (New York: New York University Press, 2020), 127.
[6] 'Neo-Confucianism' is used by modern scholars to refer to several tendencies in Confucian thought. In its largest sense it is used to refer to the entire revival of Confucian learning from the Song dynasty onwards. In its smaller sense it often refers only to the School of Principle consolidated by Zhu Xi (1130-1200) and the more intuitive School of the Heart-Mind associated with Lu Jiuyuan (1139-1192) and Wang Yangming. For more background, see: Peter K. Bol, *Neo-Confucianism in History* (Cambridge, Massachusetts: Harvard University Asia Center, 2008).

importance of social engineering policies and moral suasion vis-à-vis military coercion. Last, but not least, the counterinsurgency campaigns showed the impact of new firearms technologies on this type of warfare. I will argue that it was again networks of Neo-Confucian officials and literati that played a leading role in appropriating and circulating the knowledge and artifacts related to these new technologies.

To trace this impact of Neo-Confucianism on the concrete conduct of counterinsurgency warfare, I will start with the campaigns the famous Neo-Confucian philosopher and civil official-cum-military commander Wang Yangming in the southern and south-western provinces at the start of the sixteenth century. I will then briefly consider the legacy of his combined civil-military approach during the *Wokou* piracy raids ravaging the south-eastern maritime provinces, before turning to the rebellion of Yang Yinglong, an important leader of the Miao minority in the south-west at the end of the sixteenth century. For a variety of posited reasons Yang Yinglong, an important chieftain leader of the Miao, rebelled against the Ming dynasty starting in the late 1580s. He controlled a territory called Bozhou, overlapping the frontier areas between the provinces of Sichuan, Guizhou, Huguang, and also controlling access to Yunnan.[7] His recorded rationale for this act varied from indignancy at the Ming exploitation of his military forces as vanguard troops in combat and political conflicts with other locally powerful minority families, to an outright desires for expanding territory and founding his own kingdom. Meanwhile, the Miao which joined him, numbering perhaps 200,000 at their height, might at least partly have done so in response to Han Chinese encroachment on their territory via migration and settlement. Largely because the Ming empire was preoccupied with fighting the Japanese in Korea during the Imjin War (1592-1598), the Ming government first allowed Yang Yinglong to redeem himself by paying fines and leading

[7] Yonglin Jiang, 'Thinking about "Ming China" Anew: The Ethnocultural Space in a Diverse Empire - With Special Reference to the "Miao Territory"', *Journal of Chinese History* 2 (2018): 48.

troops to Korea in aid of the Ming cause. When this failed, a massive military campaign was organized in 1599-1600 and led by civil officials, which eventually suppressed the rebellion. The resulting campaign featured sieges, pitched battles and guerrilla warfare, as well as the employment of newer firearms like the harquebus. By placing the suppression of the Yang Yinglong rebellion in a larger context of civil official-led military responses to internal disturbances during the sixteenth century, I will endeavour with the resulting overview to provide an analysis of the successes and limitations of the Neo-Confucian-inspired counterinsurgency measures. Therefore, this article will not primarily provide an overview of the Miao conflict, but will analyse the conflict from the Ming government's point of view in order to situate it in the spectrum of possible counterinsurgency responses during an age when these were often led by activist Neo-Confucian civil officials.[8] But first I will start with a few background considerations related to the applicability of the term insurgency on Ming military history and the role of minorities within it.

Insurgencies and military operations during the Ming empire

During its more than two-and-half centuries of existence, the Ming dynasty faced a number of internal and external threats that it tried to neutralize using military power. Kenneth Swope provided a comprehensive list of these, which included northern and north-western frontier nomads ("Mongols"), coastal pirates, peasant rebels and bandits, minority uprisings, sectarian rebels, troop mutinies, the Japanese invasions of Korea (1592-1598), and the protracted

[8] For a modern treatment of the conflict in western-language scholarship, see the following works by Kenneth Swope: Kenneth M. Swope, 'Civil-Military Coordination in the Bozhou Campaign of the Wanli Era', *War & Society* 18, no. 2 (2000): 49–70; Kenneth M. Jr. Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China' (Dissertation, Ann Arbor, University of Michigan, 2001), 386–453; Kenneth M. Swope, 'To Catch a Tiger: The Suppression of the Yang Yinglong Miao Uprising (1587-1600) as a Case Study in Ming Military and Borderlands History', in *New Perspectives on the History and Historiography of Southeast Asia: Continuing Explorations*, ed. Kenneth R. Hall and Michael Arthur Aung-Thwin (London and New York: Routledge, 2011), 112–40.

struggle against the Manchu (1619-1644) who eventually succeeded the Ming as rulers of the empire. To these can profitably added usurpation attempts of the throne by imperial family members and conflicts with south-east Asian polities in present-day Vietnam and Burma. As Swope already noted, the lines between these types of conflicts were often blurred.[9] Troop mutinies of Mongolians serving the Ming could expand into a larger crisis on both sides of the border, and conflicts with South-East Asian polities could involve bordering south-western minorities within the empire.[10] To add to this blurring of the lines, the Ming empire envisioned the empire often only implicitly in terms of an inner zone of direct political control, the empire proper, and an outer zone of polities and societies that were more or less civilized and expected to recognize China as the political and moral hegemon of the world. To engage in politically and economically profitable relationships with the Ming empire, ideally you needed to participate in the tributary system, which a entailed periodical reciprocal ritual recognition of suzerain-vassal status through the reception of tributary envoys bringing gifts. Yet this was not just expected from external polities, but also from autonomous minorities living in the inner zone of direct imperial political control. Although these minorities were thus within the Ming empire, they were within this concrete political entity still considered to be "external" to China as a culturally normative ideal, the source of civilization solely inhabited by acculturated Han Chinese.[11] It is this blurring of internal and external, that makes defining what constituted an insurgency in political terms during the Ming dynasty a hazardous task.

[9] Kenneth M. Swope, 'Chinese Ways of Warfare', in *The Cambridge World History of Violence, Volume III: 1500-1800 CE*, ed. Stuart Carroll, Robert Antony, and Caroline Dodds Pennock (Cambridge: Cambridge University Press, 2020), 122–23.

[10] Liew Foon Ming, 'The Luchuan-Pingmian Campaigns (1436-1449) in the Light of Official Chinese Historiography', *Oriens Extremus* 39, no. 2 (1996): 162–203; Kenneth Swope, 'All Men Are Not Brothers: Ethnic Identity and Dynastic Loyalty in the Ningxia Mutiny of 1592', *Late Imperial China* 24, no. 1 (2003): 79–129.

[11] This mental distinction between the spatially and temporally bounded Ming empire and the culturally normative ideal of China was recently persuasively made here: Jiang, 'Thinking about "Ming China" Anew: The Ethnocultural Space in a Diverse Empire - With Special Reference to the "Miao Territory"', 42–44.

In a recent issue of this journal, Rose Mary Sheldon has attempted to provide a definition of what exactly sets apart an insurgency from other kinds of rebellion in the premodern world: "We are looking for populist revolts, religiously based movements, and groups fighting centralization that threatened the established order."[12] Even this more specific definition leaves us with significant grey areas, although it implicitly dispenses with purely external wars and explicitly with regime change efforts. But where should we place the *Wokou* pirates, for example, who plagued the south-eastern maritime provinces during the mid-sixteenth century? These were maritime traders-cum-pirates of mainly Sino-Japanese extraction, who raided the inlands largely as a result of the restrictive maritime trade policy of the Ming government. Their political goal, beyond simply looting and plundering, was pressuring the Ming for an end to the maritime trade restrictions, which could be interpreted as "fighting centralization". In essence, they fought a highly mobile campaign of amphibious guerrilla warfare, but was composed of a membership partly belonging to the zone of internal political control and partly consisting of external adversaries.[13] Minorities on the other hand, mainly inhabited the empire's south-western internal zone, and their rebellions fitted Sheldon's definition more precisely, especially if they did not overlap with conflicts with South-East Asian polities. Yang Yinglong's rebellion, for example, was entirely internal in nature, and contained elements of a populist uprising and resistance to centralization.

Ming-era Chinese military theory meanwhile did not know a separate category we could recognize today as similar to our modern understanding of "insurgency". The bulk of the

[12] Rose Mary Sheldon, 'Introduction', *Small Wars & Insurgencies* 31, no. 5 (2020): 934.
[13] For an overview of the political and military dimensions of this conflict, see the following articles and edited volume: Charles O. Hucker, 'Hu Tsung-Hsien's Campaign against Hsü Hai, 1556', in *Chinese Ways in Warfare*, ed. Frank A. Jr. Kierman and John K. Fairbank (Cambridge, Massachusetts: Harvard University Press, 1974), 273–307; Ivy Maria Lim, 'From Haijin to Kaihai: The Jiajing Court's Search for a Modus Operandi along the South-Eastern Coast (1522-1567)', *Journal of the British Association for Chinese Studies* 2 (2013): 1–26; Y.H. Teddy Sim, ed., *The Maritime Defence of China: Ming General Qi Jiguang and Beyond* (Singapore: Springer, 2017); Harriet Zurndorfer, 'Oceans of History, Seas of Change: Recent Revisionist Writing in Western Languages about China and East Asian Maritime History during the Period 1500-1630', *International Journal of Asian Studies* 13, no. 1 (2016): 61–94.

literary canon of military thought consisted of texts written during the Warring States-era of pre-imperial China (c. 475 – c. 221 BCE), reflecting military competition between peer sedentary states, although they often contained abstract strategic and tactical military wisdom applicable on a variety of military circumstances.[14] By Ming times confrontations with peer sedentary states were a rarity. Contemporary manuals usually categorized conflicts with minorities using a variety of ethnic labels, of which *Man* was the generic term used for south-western aboriginals. The sixteenth century civil official Tang Shunzhi (1507-1560) characterized the south-western minorities and their military skills as follows in his military encyclopaedia:

> The southern *Man* barbarians, their nature is agile, bold, ruthless, and angry. They enjoy acting as bandits, but they are not able to consolidate their power. They only use javelins, side-shields, flying knives, ringed swords, and wooden crossbows as weaponry. They are skilled with poisonous arrows, and the ones who are hit cry out loudly and always die after two consecutive nights. They depend on mountains, obstructions, and waters and rely on places with difficult access. If there is an urgency they lie low, and if the coast is clear they loot. If you come with ships, then the water ways are mostly cut off; if you move on land, then dangers and obstructions prevent you from going forward. This is not what China is capable of. The method of defeating this benefits from level terrain using unorthodox stratagems to lure their men while lying low with crack troops, and quietly going forth and capturing them. The skill of inducing them greatly indulges in sowing dissension, expressing sweet talk and attaching importance to money. If this leads to them coming, then they can be included

[14] For a recent translation of this canon, see: Ralph D. Sawyer and Mei-chün Sawyer, eds., *The Seven Military Classics of Ancient China* (Boulder: Westview Press, 1993); Chen-Ya Tien, *Chinese Military Theory: Ancient and Modern* (Oakville, Ontario: Mosaic Press, 1992), 21–66.

> in our plans. In general the Chinese common people live in houses, cook their food and the clothes are made of red silk and spun silk. The lugubrious atmosphere of the north descends early, hands and feet crack and get chilblains, and you cannot cross the desert. In the summer heat and dampness of the south, the valleys are poisonous and terrible, and you are unable to cross the mountain ranges. If you use Chinese as garrisons, then ten will not be able to face one. Therefore, if the ancients used the *Man* barbarians to attack the *Man* barbarians, then the strong and the weak were a match. Therefore recruit the frontier families for use, open up the wilderness to feed them, and magnanimously reward them to enthuse them. Eagerness for venting aggression is that which they cultivate and accumulate, and the expenses of provincial officials and magistrates can be subtracted and transferred to the labour of providing food. Indulge greatly in spies and attach importance to bribing and inducing their chieftains, talents, and notables, and employ them to attack. Compared to using *Hua* ["civilized Chinese"], their benefit is tenfold. To control the northern *Di* [general term for northern frontier nomads], first restrict their horses; to control the eastern *Yi* [general term for the multi-ethnic maritime traders-cum-pirates], first restrict their ships; to control the southern *Man*, first restrict their darts and shields.[15]

This quote summarized the military challenge confronting the Ming empire. Indeed, many elements commonly associated with insurgency warfare seem to be present with regards to the south-western minorities. These included difficult to access terrain, the prevalence of diseases and difficult climactic conditions, the resort to guerrilla tactics, and the advantages of using locals instead of Han Chinese as military forces. Yet, the south-western minorities had political

[15] Tang Shunzhi 唐顺之, 'Wu bian (before 1560)' 武编 (before 1560), in *Chuanshi cangshu - zi ku - bingshu* 传世藏书-子库-兵书, ed. Zhang Xinqi 张新奇 (海南: 海南国际新闻出版中心, 1995), 1352–53.

weaknesses the Ming could exploit that negated the ability of the *Man* to engage solely in elusive guerrilla warfare. Another anonymous author of a manual reflecting late sixteenth century military realities, perhaps alluded to the political dilemmas facing would-be minority rebels:

> The *Man* people's military troops are certainly a formidable foe, but they also do not have high aspirations. Even if they start a war and violate order, they are merely a bad influence in the vicinity of the border areas, and recklessly loot and indeed expand their territories. Because the *tuguan* generally inherit their beginnings and enterprise and are satiated with wealth and honour, if they covet the distant, then they have to leave their lairs and also distance themselves [from their beginnings]. Using military force to inherit [distant domains] and not achieving their ambitions, while their foundational beginnings are overturned, is a hopeless position and courts destruction. Therefore, although there are plans to rebel, they also stop at being dogs guiding the door.[16]

Following the precedents established by the preceding Mongol Yuan dynasty (1271-1368), the Ming decided to recognize the political autonomy of minority leaders within the empire in exchange for a tributary vassal status. In practice this meant that minority leadership was free to exercise local political authority according to their own cultural norms, while pledging loyalty and military support, and supplying tributary goods to the Ming when needed. In return, they would receive political recognition of their leadership and legitimacy.[17] In practical military terms, hereditary chieftains were at least partially dependent on the Ming for their

[16] Anonymous Anonymous, 'Caolu jinglüe' 草庐经略, in *Chuanshi cangshu - zi ku - bingshu* 传世藏书-子库-兵书, ed. Zhang Xinqi 张新奇 (海南: 海南国际新闻出版中心, 1995), 1620; Anonymous, *Ruminations in a Grass Hut 草廬經略*, trans. Ralph D. Sawyer (Wroclaw: Amazon Fulfillment, 2020), x.

[17] John W. Dardess, *Ming China, 1368-1644: A Concise History of a Resilient Empire* (Lanham: Rowman & Littlefield Publishers, Inc., 2012), 6; Leo K. Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands* (Cambridge: Cambridge University Press, 2006), 56–105.

legitimacy and possessed concrete political centres as the seat of their power, which could be assaulted.

In the case of the Miao by the 1500s a distinction had emerged between "raw" or "uncooked" (*sheng*) aboriginals on the one hand, and "cooked" or "ripe" (*shu*) on the other. Although the "raw" Miao still outnumbered their cooked counterparts and were headed by their native Aboriginal Officials (*tuguan*) directly subordinated to the Ministry of War, the Ming empire had in places been able to strengthen its grip on the population and extended a mixed Han and Miao bureaucracy in the shape of the Aboriginal Office (*tusi*) system, which was subordinated to the Ministry of Personnel. Their subjects had been assimilated to the point of them having been entered into the Han Chinese population registers, obliging them to pay taxes and perform corvee labour. Hence, it was possible to detect a process of cultural and political assimilation taking place in certain areas of the south-west.[18] The *tusi* system was intended as an intermediate solution between aboriginal autonomous governance and eventual full integration into the empire, and it required the chieftains to pay taxes, maintain civil order, and supply military levies when so required by the empire.[19] A hereditary title that minority chieftain could acquire that carried even more prestige was that of *xuanweisi*, or Pacification Commissioner, who could hold sway of multiple subordinate *tusi* and control a comparatively large area. Yang Yinglong and his family had held this title since the Yuan dynasty and generally had exercised political authority over the area of Bozhou for over 700 years. Originally Bozhou had been attached to Guizhou province during the Ming, then acquired a certain independent status, before being attached to Sichuan province. The family was thus firmly entrenched in the area and was eventually able to muster around 200,000 men against

[18] Bian Li 卞利, *Hu Zongxian chuan* 胡宗宪传 (合肥: 安徽大学出版社, 2011), 57; Charles O. Hucker, *A Dictionary of Official Titles in Imperial China* (Taipei: Southern Materials Center, Inc., 1985), 547.
[19] Jeffrey G. Barlow, 'The Zhuang Minority in the Ming Era', *Ming Studies*, no. 1 (1989): 19.

the Ming armies.[20] The Yang family also had its own stronghold at Hailongtun, a massive fortress surrounded by steep walls. It had originally been built during the Southern Song in the late 1250s in a cooperative effort between an ancestor of Yang Yinglong and the imperial court to help resist the Mongol invasion. It was never tested in a battle, however, and was abandoned until Yang Yinglong purposefully sought to turn it into his military stronghold during Wanli's reign. He added nine fortified passes connected by a wall to the original design. Hailongtun was not a fortified civilian city, but a fully military fortification. According to inscription composed by Yang Yinglong himself, he rebuilt Hailongtun to serve as a foundation and safeguard for his family's future generations, while citing the Chinese *Classic of Changes* (*Yijing*) to legitimize his remote ancestor's choice to build the fortress as the act of a ruler seeking to defend his state.[21] Even if ironically informed by Han Chinese political models, this act of rebuilding can therefore be seen as a manifestation of Yang's wish to establish a proper state and secede from the Ming, but it would prove to be a costly mistake from a military point of view. Hailongtun being the political seat of Yang's power, it was here that he was forced to make his last stand in 1600 against the Ming army while fighting a conventional siege and battle of attrition, which played to the latter's strengths.

Even such a well-established hereditary chieftaincy was thus vulnerable to the political weaknesses alluded to in the military manual quoted above. Although the titles bestowed by the Ming were often hereditary, the chieftains ruled in conjunction with other local powerful families with whom they engaged in marital alliances. This could lead to multiple competing claims on the title from the chieftain's offspring issuing from different concubines and wives. Intra-familial competition could also occur. This situation was no doubt partly caused by

[20] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 386–97.
[21] Xi Yusong 郗玉松, 'Hailongtun tun ming kao' 海龙囤囤名考, *Guizhou wenshi congkan* 贵州文史丛刊, no. 4 (2017): 77–81.

primogeniture via the male line was not enjoying undisputed hegemony among minorities. It had to compete with notions of uxuric succession of inheritable titles via the female line.[22] The Ming often had to intervene militarily to quell the resulting disturbances, but they also provided an opportunity to divide and rule, as the empire could choose to grant and withhold recognition of the titles to competing members of the *tuguan* and *tusi* families.[23] The Ming would try this during the early stages of Yang Yinglong's rebellion as well, by taking his official title away and granting it to his son Yang Chaodong. He, however, later proved to be on the side of his father's rebellion.[24] Still, to solidify one's claim to a hereditary chieftaincy one first had to exert physical control over it. Yang Yinglong's grandfather, for example, favoured the son of one concubine, but was driven out of Bozhou to a neighbouring domain of another chieftain by his son, Yang Yinglong's father, begotten by his legal wife. Yang Yinglong's father thus held *de facto* control over Bozhou, but he was only able to acquire the official title when he gained control over Yang Yinglong's grandfather's body and the official Ming-granted seals of investiture by invading the neighbouring domain he had fled to.[25] Stable rule for chieftains thus depended on both physical control and possession of the official regalia as granted by the Ming empire. Yang Yinglong's grandfather could not physically control his former domain with just the regalia, but neither could Yang Yinglong's father secure the hereditary status of officially recognized chieftain for his line of the family without the regalia.

This political weakness usually gave Ming government forces a clear target when a chieftain rose in rebellion. In 1526, for example, a large Ming force converged on Tianzhou, in Guangxi province, the seat of the rebellious *tuguan* Cen Meng (1490-1526). Although he stationed his troops at strategic passes covering the approaches to Tianzhou, these were

[22] Erik Mueggler, 'Lady Qu's Inscriptions: Literacy and Sovereignty in a Native Domain, Southwest China', *The Journal of Asian Studies* 80, no. 1 (2020): 16–20.
[23] Mueggler, 2–5.
[24] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 402–3.
[25] Swope, 294.

predictable deployments and Cen was not able to implement true guerrilla tactics. In the end, Cen was forced to make a futile last stand with a large part of his army before the Ming forces could reach Tianzhou. The situation was not much different for Yang Yinglong at his stronghold of Hailongtun nearly 75 years later.[26] There were thus limits the minority chieftains faced when trying to implement an insurgency. Of course they tried to make the best use of the difficult terrain features and certainly fought in asymmetric ways when they could. However, if the Ming empire decided to march to the chieftains' seat of power, they could thereby force the rebels to engage in more predictable set piece battles.[27] In this sense, Sheldon's observation that there is no functional distinction between regular and irregular types of warfare holds true for minority insurgencies during the Ming as well.[28]

Adding to the chieftains' relative political weakness, as the late Ming empire started to depend more on more on the military forces of minority chieftains, officials also tried to create smaller *tusi*, which Leo Shin speculates were established to prevent empowering large minority domains, of which Bozhou was a representative.[29] But why did the Ming empire seek the employment of these minorities as military forces, and how was this phenomenon entangled with the increasing intrusion of Neo-Confucian civil officials into the military domain?

The rise of civil officials handling internal insurgencies

[26] Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 86–88.
[27] Some of the aboriginal chieftains fighting on the side of the Ming during the Bozhou campaign learned from Yang Yinglong's predicament when they launched their own She-An rebellion (1621-1627). Instead of falling back on a stronghold and ceding the initiative to the Ming, they kept the Ming off balance by westward and eastward movements and bundling forces, thus not presenting the Ming with a single political centre to attack. See: Yan Bingzhen 颜丙震, 'Mingdai "Bozhou zhi luan" dui "She-An zhi luan" de yingxiang fenxi' 明代"播州之乱"对"奢安之乱"的影响分析, *Ankang xueyuan xuebao* 安康学院学报 29, no. 5 (2017): 80–82, 94; Yan Bingzhen 颜丙震 and Cui Xiaoli 崔晓莉, 'Mingdai "Bozhou zhi luan" yu "She-An zhi luan" bijiao yanjiu' 明代"播州之乱"与"奢安之乱"比较研究, *Chongqing kexue xueyuan xuebao* 重庆科技学院学报, no. 10 (2017): 83–85.
[28] Sheldon, 'Introduction', 934.
[29] Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 92–93.

By the sixteenth century, the job of handling rebellions and insurgencies in the inlands of the Ming empire had come under the authority and leadership of the civil officials. This did not just mean that civilian administrators laid out the broad mission parameters in which the military professionals were allowed to perform their tasks, as we have come to expect of modern states in which strategic decision making and ultimate authority is ultimately in civilian hands. Ming civil officials at this time were also involved with the more practical aspects of military command, which included recruitment of troops, the dispensing of justice within the military ranks, logistics, and even command in the field itself.[30] The sixteenth-century Ming presented a panorama of civil-military relations which was even more skewed to civilian side of the balance than in modern democratic societies.[31] As we shall see below, this phenomena would have its repercussions on the normative discourse underpinning and influencing the conduct of the counterinsurgency campaigns waged by these officials in the course of the sixteenth century. But first, we should consider how this situation had come to be this way.

In the past Chinese culture has often been stereotyped as fundamentally unwarlike and denigrating of even its own military men and their achievements. Portuguese and Jesuits, for different reasons, conveyed this image to Europe in the sixteenth century, and various humiliating defeats at the hands of Western and Japanese imperialism in the nineteenth and twentieth centuries further solidified these impressions.[32] Within Chinese historiography itself this perception has also been internalized and instrumentalized as a device of cultural self-criticism to explain the relative weakness of China in the modern age. The culprit was often found to be the persistent underappreciation of military and martial values and activities, often prompted by the cultural and political dominance of a civilian leadership inculcated with a

[30] Kai Filipiak, 'The Effects of Civil Officials Handling Military Affairs in Ming Times', *Ming Studies* 66 (2012): 3–4.
[31] Thomas-Durell Young, 'Military Professionalism in a Democracy', in *Who Guards the Guardians and How: Democratic Civil-Military Relations*, ed. Thomas C. Bruneau and Scott D. Tollefson (Austin: University of Texas Press, 2006), 19–21.
[32] See above, note 2.

Confucian mindset.[33] Confucianism, in its various guises often the orthodox ideology of the Chinese ruling classes since the Han dynasty (206 BCE – 202 CE), was for this reason an excellent scapegoat. In the wake of China's humiliating subjection to foreign imperialism, Confucianism's ostensible inherent anti-war bias was one of many grounds for this scapegoating. Although Confucianism certainly did not advocate for aggressive military expansionism, it was certainly amenable to being creatively interpreted to justify military interventions and the dabbling in the military profession by the civilian elites, as we shall see below.

One much touted consequence of the purported Chinese anti-war spirit has been the perceived civilian dominance of military affairs. Whereas this state of affairs is seen as a major triumph of Western democratic institution building, in the case of China it had a rather less enthusiastic reception, as we have seen above. In fact, this state of affairs was only realized to a notable extent during the Song (960-1278) and the second half of the Ming dynasties. In both cases it is debatable this civilian dominance in any way made either dynasty militarily "weak". The Song civilian bureaucrats taking charge over military affairs were often by no means averse to arguing for and undertaking aggressive campaigns, despite their inculcation with Confucian values and their relative lack of engagement with the practical aspects of the profession.[34] What made the Song dynasty seem weak was the relative strength of the states that surrounded it.[35] In the case of the Ming dynasty, it can be argued that the influx of activist

[33] Nicola Di Cosmo, 'Introduction', in *Military Culture in Imperial China*, ed. Nicola Di Cosmo (Cambridge, Massachusetts: Harvard University Press, 2009), 1–2; Hans J. van de Ven, 'War in the Making of Modern China', *Modern Asian Studies* 30, no. 4 (1996): 737.
[34] Peter Lorge, 'The Rise of the Martial: Rebalancing Wen and Wu in Song Dynasty Culture', in *Civil-Military Relations in Chinese History: From Ancient China to the Communist Takeover*, ed. Kai Filipiak (London and New York: Routledge, 2015), 140–43; Wang, *Harmony and War: Confucian Culture and Chinese Power Politics*, 74–75, 99–100.
[35] Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History*, 22–23.

civilian bureaucrats greatly strengthened the faltering military establishment in its later years, rather than weakening it, because they often pushed for the adoption of new technologies.[36]

The early Ming had been conceived as an autarkic polity with a self-sustaining hereditary army assigned agricultural lands for its own upkeep. This model proved in practice to be too amenable to corruption and desertion, which meant that quite early on it had to be supplemented with mercenaries.[37] From the beginning it was also backed up by the militias and tribal levies of ethnic minorities, who were concentrated in the south-western provinces of the empire, especially Guangxi, Guizhou, Huguang (roughly present-day Hubei and Hunan), Sichuan, and Yunnan. These forces were under the leadership of the *tuguan* and *tusi* minority chieftains, whom, as part of the recognition of their political autonomy and legitimacy by the Ming state, were expected to provide military assistance to the dynasty in the case of an emergency. The minorities in the south-west also formed a buffer against bordering South-East Asian states.[38] These forces were sometimes a close analogue to the "martial races" employed by European colonial powers in Asia, like the Gurkhas in British India, to quell native uprisings in the colonies themselves. Like the Gurkhas, the Chinese martial minorities were not recognized as fully civilized subjects and therefore not accorded the same privileges as the politically dominant ethnicity, but they were certainly appreciated for their military usefulness and respect for imperial authority.[39] The "wolf soldiers" (*langbing*), for example, were composed of a minority from Guangxi, which enjoyed a reputation for fearsomeness and martial prowess. They were often called upon to suppress insurgencies by other minorities or

[36] The drive to adopt Portuguese breech-loading cannons was led by civil officials. See: Andrade, 137–43.
[37] David Robinson, 'Military Labor in China, circa 1500', in *Fighting for a Living: A Comparative History of Military Labour in Europe and Asia, 1500-2000*, ed. Erik-Jan Zürcher (Amsterdam: Amsterdam University Press, 2014), 47–49; David Robinson, 'Why Military Institutions Matter for Ming History', *Journal of Chinese History* 1 (2017): 297–309.
[38] Dardess, *Ming China, 1368-1644: A Concise History of a Resilient Empire*, 5–10; Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 89.
[39] Gavin Rand, ``Martial Races' and `Imperial Subjects': Violence and Governance in Colonial India, 1857-1914', *European Review of History - Revue Européenne d'Histoire* 13, no. 1 (2006): 14–15; Robinson, 'Military Labor in China, circa 1500', 55.

internal rebellions by, for example, Han Chinese peasants.[40] Of course, this utilization as military forces came with opportunities as well: it was a price paid for a degree of political autonomy and brought worthwhile opportunities for wartime plundering and financial reward.[41]

A number of developments in the second half of the fifteenth century conspired to facilitate the rise of civilian leadership over military affairs necessary and the employment of martial minorities both more necessary and more problematic. First of all, in 1449 a big portion, reportedly up to 500,000 men, of the Ming military establishment was lost in a disastrous campaign against the Mongols. Slightly earlier, a large military force of 47,000 men had been dispatched from the secondary capital at Nanjing to suppress a Han peasant revolt led by Deng Maoqi (d. 1449) in the south-eastern province of Fujian.[42] The force sent to suppress Deng was said to be composed of some the most experienced troops, perhaps partly explaining the catastrophic route of the inexperienced army at Tumu. This was probably partly a Ming boast to save face during subsequent negotiations with the Mongolian victors of Tumu, because the number of troops purportedly sent to the south were inflated to 200,000 as well by a Ming envoy.[43] However, the explicitly stated entangled nature of the campaign in the south and the defeat at Tumu did seem to signal several systemic problems. First, the old hereditary establishment was no longer able to supply the main fighting force on all fronts and had to be partially replaced by new arrangements, especially after the loss of so many men.[44] Second, the necessity to dispatch hardened capital troops from Nanjing to Fujian was indicative of a weak

[40] Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 147–49.
[41] Ivy Maria Lim, *Lineage Society on the Southeastern Coast of China: The Impact of Japanese Piracy in the Sixteenth Century* (Amherst: Cambria Press, 2010), 96; Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 92.
[42] Kai Filipiak, 'Der Bauernaufstand des Deng Maoqi 1448/1449 als Audrück einer Zäsur in der Geschichte der Ming-Dynastie', *Monumenta Serica* 54 (2006): 129.
[43] John W. Dardess, *More Than the Great Wall: The Northern Frontier and Ming National Security, 1368-1644* (Lanham, Maryland: Rowman & Littlefield, 2020), 178.
[44] Robinson, 'Military Labor in China, circa 1500', 47.

military presence in the southern provinces of the empire, which became increasingly problematic as the fifteenth century transitioned into the sixteenth. The southern part of the empire was experiencing demographic growth, economic development and diversification, but also increasing pressure on scarcer economic resources, the encroachment of Chinese Han settlers on the lands of the ethnic minorities, as well as the activities of overzealous and rapacious officials in these regions. Intra-ethnic conflicts within the minorities also became more common.[45] These tensions led to an upsurge in internal conflicts with qualities of an insurgency requiring at least a partly military solution. Ironically this led to a situation in which the Ming reliance on minority soldiers increased at the same time as the incidence of their insurgencies increased as well. Moreover, and echoing later European imperialist experiences, locally raised minority troops in the south-west were thought to be better able to deal with local diseases and climate than regular Ming troops.[46] This period was thus characterized by the contradictory policies of minority military empowerment alternated with frequent suppression campaigns. Of course, these campaigns were often characterized by the time-honoured tradition of divide and conquer by "using the barbarian to pacify the barbarian", yet the conquests were of limited duration and had to be periodically repeated.[47]

Nevertheless, this unhealthy dynamic would persist until the end of the Ming, because the military institutions of the dynasty would never be fundamentally reformed. The hereditary army was never officially replaced by a completely new organization, and instead the government had to rely on a patchwork of semi-permanent replacement institutions that showed enormous local variations across the empire. At the same time as the main job of

[45] Filipiak, 'Der Bauernaufstand des Deng Maoqi 1448/1449 als Audrück einer Zäsur in der Geschichte der Ming-Dynastie', 121–24; Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 112–17.
[46] Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 91–93.
[47] Guo Zizhang, a civil official in charge of suppressing Yang Yinglong's rebellion, even explicitly stated it was beneficial to have minorities attack each other. See: Jiang, 'Thinking about "Ming China" Anew: The Ethnocultural Space in a Diverse Empire - With Special Reference to the "Miao Territory"', 42.

officials in the south-west became suppression minority insurgencies, these same minorities would continue to be empowered serving as military units for the empire, often serving as the suppressing units.[48] This destructive dynamic would continue to plague the dynasty until the very end/ By the seventeenth century some Chinese literati even ranked the south-western minority uprisings as the second urgent military problem, behind the northern frontier, but before the *Wokou* pirate raids.[49] The best that can be said about such a system is that it kept the employed half of the south-western military labour market occupied fighting the unemployed other half, containing the violence in the region.

The legacy of Wang Yangming

As civil officials starting taking more charge of military affairs, and interacted more often with south-western minorities as a result. This started to influence the Neo-Confucian ideology of the officials, but conversely also impacted the way these officials deployed their imperial toolkit for suppressing minority rebellions. Perhaps the most famous exemplar of this tendency is Wang Yangming, a civil official who launched his own reinterpretation of Neo-Confucianism, while leading military campaigns against ethnic minorities and rebellious members of the imperial family in the early sixteenth century.[50] One of the key tenets of Wang's philosophy was that the comprehension of the principles of the world did not depend on the investigation of external phenomena, and thus external authority. Instead, the comprehension of these principles, the key to advancing your moral nature, could be find in

[48] Shin, *The Making of the Chinese State: Ethnicity and Expansion on the Ming Borderlands*, 90.
[49] Shiyu Zhao, 'Ethnic Relations and Imperial Border Strategy during the Reigns of Ming Emperors Longing and Wanli', *Chinese Studies in History* 52, no. 2 (2019): 105–6.
[50] For a recent treatment of Wang's military carreer, see: George L. Israel, *Doing Good and Ridding Evil in Ming China: The Political Career of Wang Yangming* (Leiden: Brill, 2014).

one's own heart-mind.[51] These could thus be uncovered and realized by inward moral cultivation through for example meditation, but above all by the their sincere implementation in outward activities.[52] Hand in hand with this realization that the key to moral progress lay within oneself instead of external factors, came an acceptance of the potential of non-Han, like the south-western minorities, to acculturate to Chinese standards of civilization.[53] Wang Yangming even reached this critical insight when he was exiled for a while in the south-west among Miao and Liao minorities, after falling afoul of a power struggle at the Ming court.[54] Perhaps as another consequence of this acceptance of the moral potential residing in everyone, many of Wang's later followers forged close personal bonds with minority chieftains during military campaigns.

The civil official who led the campaign against the Sino-Japanese *Wokou* in the 1550s and 1560s, Hu Zongxian (1512-1565), was a follower of Wang Yangming and seems to have closely modelled his career on Wang's example. Hu Zongxian spent time quelling aboriginal unrest by the Miao as a censorial official in the early 1550s, helping pacify and reconstruct post-rebellion society and forge working relationships of a military nature with those Miao who remained loyal to Ming suzerainty. Hu Zongxian was dispatched to the south-western border areas of the provinces of Huguang, Guizhou and Sichuan as a censorial official, recommended by a metropolitan official, in order to discipline the troops and enforce punishments and rewards, who had so far performed dismally against the Miao aboriginal insurgents.[55] The intermixed Chinese Han administration and Miao chieftains were accused of exploiting their

[51] In premodern Chinese conceptualization, the heart was both the seat of mental and emotional states, hence the term 'heart-mind'. See: Xinzhong Yao, ed., *The Encyclopedia of Confucianism: 2-Volume Set* (London and New York: Routledge, 2003), 686–87.
[52] P.J. Ivanhoe, *Confucian Moral Self-Cultivation* (Indianapolis: Hacket Publishing Company, 2000), 65–66.
[53] Leo K. Shin, 'The Last Campaigns of Wang Yangming', *T'oung Pao* 42, no. 1 (2006): 115–16.
[54] Wing-tsit Chan, 'Wang Shou-Jen', in *Dictionary of Ming Biography, 1368-1644*, ed. Chao-ying Fang and L. Carrington Goodrich, vol. 2 (New York: Columbia University Press, 1976), 1409–10.
[55] Bian, *Hu Zongxian chuan*, 61–63.

Ming court-granted status to increase their wealth and property at the expense of others.[56] As part of his official duties Hu Zongxian therefore advocated a Wang Yangming-esque approach of extending amnesty and providing juridical redress of grievances, in combination with more straightforward military measures leading to annihilation. After pacifying the area, Hu also worked diligently at re-establishing the Confucian schooling system and the provincial examinations, although it is unclear to what extent the Miao profited from these policies in comparison to their Han co-provincials.[57] Important for the later *Wokou* suppression campaigns were thus the ties Hu Zongxian established with the Miao and his appraisal of their martial capabilities.[58] Indeed, the south-eastern seaboard would witness the deployment of many Miao and also Zhuang minority troops in service of Hu Zongxian. He recommended their deployment even before he was given his assignment in the south-east.[59] Hu's intimate relations with his aboriginal commanders are attested by his recorded comforting of Miao leader Peng Jinchen (1510-1560, of the Baojing Pacification Office in Huguang province, after his defeat at the hand of the Wokou.[60]

Civil officials developed new integrated civil-military approaches to dealing with minority insurgencies and their aftermaths. Again, Wang Yangming and his followers played a central role in consolidating these approaches and providing them as a blueprint during the sixteenth century. The extent of the implementation of these measures then depended on the assessment of the situation by the civil officials, and understanding which had become more nuanced as result of the increasing closeness between officials and minorities and Wang's ideological influence. The aftermaths of insurgencies were often the time to decide whether to

[56] Bian, 57.
[57] Bian, 64.
[58] Chaoying Fang, 'HU Tsung-Hsien', in *Dictionary of Ming Biography, 1368-1644* (New York: Columbia University Press, 1976), 632.
[59] Bian, *Hu Zongxian chuan*, 81.
[60] Lim, *Lineage Society on the Southeastern Coast of China: The Impact of Japanese Piracy in the Sixteenth Century*, 84–85.

maintain minority rule, but featuring more chieftains counterbalancing each other and enforcing a strict boundary with the Han Chinese, or to impose direct imperial governance and try to acculturate the minorities through Confucian and community schools. Although Wang Yangming did desire eventual assimilation of the minorities, he did not always favour the second option. But when he favoured the first option, he did not do so out of a conviction of the inherent unchangeable barbarian nature of the minorities either. Instead, he would base this decision on a more pragmatic assessment that the minority in question was not ready yet for more pro-active assimilation policies.[61] This nuanced understanding of the minorities problematic then seems to have grown out of the more intimate relations civil officials like Wang enjoyed with minorities, partly as a result of military necessities, which in its turn mutually reinforced his Neo-Confucian convictions and the actions they inspired.

In terms of concrete pacification measures during the campaign, Ming practice ran the gamut from simply bribing the rebels into submission to extermination by military force and extensively resettling the area with Han Chinese settlers. Especially the influx of Chinese settlers threatened the expansion of regular Chinese bureaucracy into the domains of chieftains, with a resultant decrease in tax income derived from-, and political authority over the area's inhabitants. This very process may primarily have caused Yang Yinglong to make common cause with the "raw" Miao living in his domain. Wang tried to apply his measures on this continuum based on his assessment of the potential of the minorities to acculturate to Han Chinese norms of civilization and governance. Besides deploying military force, which was often used as a last resort, Wang first tried to appeal to the heart-minds of the insurgents by placing placards (*pai*) with moral exhortations to stop the rebellion, in order to separate the followers from the core leadership of the insurgency, sometimes under the threat of violence.[62]

[61] Shin, 'The Last Campaigns of Wang Yangming', 119–26.
[62] Israel, *Doing Good and Ridding Evil in Ming China: The Political Career of Wang Yangming*, 66, 151; Shin, 'The Last Campaigns of Wang Yangming', 114–15.

Tax reforms and remissions and other improvements in governance were sometimes implemented after the campaign to prevent resurgences.[63] When these measures had reached their fullest potential, military force was used against the remaining rebels. During and right after the campaign two further instruments could be deployed to aid in the pacification and reconstruction of the area: these were the *baojia* security system and the *xiangyue* "community compact". The *baojia* entailed organizing family units of the affected area into units of ten who were collectively responsible for their security. They were overseen by local officials and had to report the comings and goings of strangers in their units, or face collective punishments. These security systems could also serve as *ad hoc* tax collection agencies for the funding of the military campaigns and as military recruitment agencies for local militias.[64] The *xiangyue* went a step further into organizing local communities into covenants of civilians morally policing each other and upholding proper Confucian ritual norms of comportment and societal organization. The latter were especially useful for spreading Han Chinese cultural norms.[65] We do not know if military counterinsurgency campaigns waged by civil officials were less bloody than those waged by the military officers during the early Ming empire, as this topic awaits a statistical survey. However, thanks to Wang Yangming's well-documented campaigns, we know a lot more about the civil governance techniques used to suppress counterinsurgencies during the sixteenth century.

None of these measures were specifically invented by Wang Yangming himself. Moral admonishments to entice reform were already used before him by a civil official in the late fifteenth century against Han Chinese pirates raiding Guangdong province, and the *baojia* and *xiangyue* found their origin during the Song dynasty, interestingly when civil officials were

[63] Israel, *Doing Good and Ridding Evil in Ming China: The Political Career of Wang Yangming*, 213.
[64] Israel, 58–61.
[65] Israel, 101–7.

also predominantly in control of military affairs.[66] What Wang Yangming did contribute was employing all these measures in a consolidated way during his campaigns, which were then written down and passed on by his followers. Because Wang's Neo-Confucian reorientation was the most successful new current in the sixteenth century, and his military campaigns constituted another big reason for his fame, no doubt his pacification policies enjoyed a wide readership. Here lies arguably the second big reason why we should not underestimate the impact of Neo-Confucianism on the conduct of war: it provided a vehicle for knowledge circulation among officials. One of the civil officials Hu Zongxian cooperated with during the campaign against the Wokou was Hu Song(1503-1566), another Wang Yangming follower who was involved in the book printing business. Together with Hu Zongxian, he was busy compiling and publishing Wang Yangming's collected writings during this period of Wokou disturbances.[67] Hu Zongxian's private campaigns staff itself was also a involved in the compilation and dissemination of integrated knowledge. Zheng Ruozeng (1505–80), from Nan Zhili, was a cartographer and military strategists who was a follower of both Zhan Ruoshui (1466-1560) and Wang Yangming. As a member of Hu Zongxian's *mufu*, he would play a key role in the compilation of the statecraft activities undertaken by Hu Zongxian and his establishment to suppress the Wokou.[68] Zhan Ruoshui was a friend of Wang Yangming who was propagating a similar subjective interpretation of Neo-Confucianism. Their followers were often on friendly terms with each other as well. Arguably, the pinnacle achievement of this

[66] Timothy Brook, *The Chinese State in Ming Society* (London and New York: Routledge, 2005), 35–38; Yonghua Liu, *Confucian Rituals and Chinese Villagers: Ritual Change and Social Transformation in a Southeastern Chinese Community, 1368-1949* (Leiden: Brill, 2013), 167; Sander Molenaar, 'Turning Bandits into `Good Citizens': Coastal Violence on the South Coast of the Ming Empire in the Fifteenth Century', *The International Journal of Maritime History* 32, no. 3 (2020): 689–92.

[67] Cai Shumin 蔡淑閔, 'Yangming xuepai zhi jianli yu fazhan' 陽明學派之建立與發展, *Zhongguo wenxue zhi xueli yu yingyong - Ming Qing yuyan yu wenxue guoji xueshu yantaohui* 中國文學之學理與應用—明清語言與文學國際學術研討會, 2011, 267–70; Merrilyn Fitzpatrick, 'Local Interests and the Anti-Pirate Administration in China's South-East 1555-1565', *Ch'ing-Shih Wen-T'i* 4, no. 2 (1979): 35.

[68] Zheng Ruozeng 鄭若曾, *Chou hai tu bian (1562)* 籌海圖編 (1562), ed. Li Zhizhong 李致忠 (北京: 中華書局, 2007), 1, 205; Stanley Y.C. Huang, 'CHENG Jo-Tseng', in *Dictionary of Ming Biography, 1368-1644*, vol. 1 (New York: Columbia University Press, 1976), 204–8.

network's circulation of knowledge was the huge cartographical survey and technical summary of the anti-Wokou campaign compiled by Zheng Ruoceng, named *Chou hai tu bian* (*Illustrated Compendium of Maritime Security*). It details policy proposals, strategies, and background information concerning the Wokou, and it was sponsored by Hu Zongxian. These proposals did not only cover purely military matters, but also campaign finances.[69] The lessons learned by Wang Yangming in the earlier sixteenth century during his management of several military campaigns would still retain their relevance in the eyes of the leadership of the anti-piracy effort decades later. Significantly, Wang Yangming himself is quoted around fifteen times on various issues, again showing the continued importance of his ideas for the officials and literati leading the anti-piracy campaign of the 1550s and 1560s, almost three decades after he had passed away. In fact, Wang Yangming's campaigns earlier in the sixteenth century were the only source of recent historical examples explicitly cited in the *Chou hai tu bian*.

Guo Zizhang and Li Hualong, the two civil officials assigned to suppress Yang Yinglong in charge of the provinces of Guizhou and Sichuan respectively, were heirs to this tradition. Guo was certainly a disciple of followers of Wang Yangming's philosophy, while Li's affiliation is unknown.[70] Both however followed only few earlier precedents set by Wang Yangming and Hu Zongxian, which demonstrated the limits to Wang's approach when faced by the rebellion of the large Bozhou domain, which was joined by many "raw" Miao. Placards were issued, but these apparently did not cause the rebels to surrender.[71] Li Hualong implemented *baojia* security systems in the populations surrounding Bozhou, which were

[69] Lim, *Lineage Society on the Southeastern Coast of China: The Impact of Japanese Piracy in the Sixteenth Century*, 77, 102.
[70] Jennifer Eichman, *A Late Sixteenth-Century Chinese Buddhist Fellowship: Spiritual Ambitions, Intellectual Debates, and Epistolary Connections* (Leiden: Brill, 2016), 59. See note 123. Guo Zizhang was a disciple of Hu Zhi (1517-1585), who was a disciple of first generation Wang Yangming disciple Luo Hongxian (1504-1564).
[71] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 439.

already intermixed to a significant extent with Han Chinese settlers.[72] Guo Zizhang, on the other hand, did refer to the *baojia* system in his writing, but not in the context of the Bozhou rebellion, but during an instance of *Wokou* incursions along the south-eastern coast.[73] Guo Zizhang thought using *baojia* and *xiangyue* in Bozhou would encounter too much difficulties in a territory in which nine out of ten members of the population were hostile and fierce Miao. Instead, he advocated a more heavy-handed policy of increasing the military presence and construct schools in order to spread Han Chinese culture. Furthermore, the local government should be replaced by government officials and a system of fortresses staffed with rotating garrisons would be established to keep the Miao under control. The main drawback of the policy was its relatively high cost, which a poor province like Guizhou had difficulties bearing. Guo suggested diverting funds and the authority to levy salt tax from neighbouring provinces to finance the increased government presence.[74] Using the salt tax in this way was another approach utilized by Wang Yangming earlier in the sixteenth century to finance his own campaign costs.[75] In the end, these policies were implemented and Bozhou was divided up between Guizhou and Sichuan and integrated into the regular bureaucratic system. Han Chinese settlers were also moved in to solidify control. Nevertheless, smaller rebellions would continue to erupt in the years after.[76]

Social engineering techniques for insurgency repression and management of the aftermath therefore seem to have solidified into a set of policies that could be flexibly implemented by the end of the sixteenth century. These techniques circulated among a Neo-

[72] Swope, 'To Catch a Tiger: The Suppression of the Yang Yinglong Miao Uprising (1587-1600) as a Case Study in Ming Military and Borderlands History', 128.
[73] Chen Zilong 陳子龍, ed., 'Huang Ming jingshi wenbian wubai juan fuyi si juan (qi)' 皇明經世文編五百四卷補遺四卷（七）, in *Siku jinhui shu congkan: jibu di erba ceng muci* 四庫禁燬書叢刊：集部第二八冊目次 (北京: 北京出版社, 2000), 432–35.
[74] Chen, 408–32.
[75] Yü-chüan Chang, *Wang Shou-Jen as a Statesman* (Peking: The Chinese Social & Political Science Association, 1940), 141–46.
[76] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 443–46.

Confucian activist civil bureaucracy, which benefitted from personal networks forged within Wang Yangming's movement. Besides social engineering, other types of knowledge also benefitted from the circulation within this network.

The impact of new technologies: harquebusiers versus insurgents

In addition to social technologies, civil officials also played an active role during the late Ming in introducing new weapon technologies to aid in campaigns against minority insurgencies, piracy raiding, and peasant rebellions and banditry. Once again, officials who were also active followers of Wang Yangming's philosophy played an especially prominent role. This embrace of new military technologies was already in evidence during Wang's life, and perhaps this furnished an example to his followers.

By the early sixteenth century, Portuguese seafarers were arriving in Chinese waters and were attempting to gain trading privileges. A series of mutual misunderstandings and lack of patience on the Portuguese side eventually led to a number of naval skirmishes, which made the Chinese keenly aware of the power of Portuguese ship-borne cannons. Different stories circulated about the conditions and people involved in the appropriation of the breech-loading *folangji* ("Frankish machine"), perhaps reflecting the fact that this process was repeated during several separate occasions. Wang Yangming himself acquired the weapon around 1519, in the midst of his campaign against the abovementioned Prince of Ning. From the terse descriptions in his writings, it is impossible to ascertain if and how Wang really used the cannon against the Prince of Ning. He obtained the weapon from Liu Jin (1452-1527), another civil official who was a veteran of waging campaigns against Han bandits in the southern province of Jiangxi. Since the Portuguese only arrived in Chinese waters near Guangdong as early as 1517, the process of appropriation happened remarkably fast, although it is certainly possible the weapon

was acquired even earlier via Asian intermediaries in contact with overseas Portuguese elsewhere.[77]

Three decades later, around 1548-1549, Zhu Wan, on good terms with an erstwhile follower of Wang Yangming, Huang Wan, was involved in fighting the *Wokou* pirates and captured a number of new types of firearms they were using.[78] This was the *niaochong*, also called *niaozuichong* ("bird gun" or "bird beak gun"), a type of harquebus ultimately derived from Portuguese ancestors. By 1558 Tang Shunzhi, another erstwhile follower of Wang Yangming, was in command of groups of *niaochong*-armed harquebusiers fighting the *Wokou*. They were used very aggressively in battle, forming the vanguard of the attack.[79]

During the first half of the sixteenth century, therefore, new technologies were used and promoted by civil officials of a Neo-Confucian bent against primarily infantry Han bandits and pirates ravaging the southern inlands of the empire. By the late sixteenth century the legacy of both the *folangji* and the *niaochong* had not been forgotten by Guo Zizhang:

> Today when you talk about weapons beneficial for victory in battle you have to mention that firearms on the whole do not exceed the pair of *folangji* and *niaochong* and they divinely transformed them. However, these two weapons were not yet present in the early empire. During the Jiajing reign [1521-1567]. One came from the

[77] Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History*, 135–43; Wang Shouren 王守仁, *Wang Yangming quanji* 王阳明全集, ed. Wu Guang 吴光 et al. (上海: 上海古籍出版社, 1992), 1266–67.

[78] Huang Wan wrote a preface to Zhu Wan's collected writings. Huang later turned into a different philosophical direction from Wang Yangming. See: Roland Louis Higgins, 'Piracy and Coastal Defense in the Ming Period, Government Response to Coastal Disturbances, 1523-1549' (PhD diss., Twin Cities, University of Minnesota, 1981), 155–56; Laichen Sun, 'The Military Implications of Zhu Wan's Coastal Campaigns in Southeastern China: Focusing on the Matchlock Gun (1548-66)', in *Early Modern East Asia: War, Commerce, and Cultural Exchange. Essays in Honor of John E. Wills, Jr.*, ed. Kenneth M. Swope and Tonio Andrade (Abingdon, Oxon: Routledge, 2018), 121.

[79] Tang Shunzhi was heavily influenced by Wang Yangming's thought, but was more mindful of practical statecraft later on. He did remain in close contact with many of Wang's followers. See: Benjamin A. Elman, *Classicism, Politics, and Kinship: The Ch'ang-Chou School of New Text Confucianism in Late Imperial China* (Berkeley, California: University of California Press, 1990), 77–81; Sun, 'The Military Implications of Zhu Wan's Coastal Campaigns in Southeastern China: Focusing on the Matchlock Gun (1548-66)', 124–26.

> Franks and one came from the Wo, all eastern barbarian weapons. If these these two weapons could be used to prepare the seas to overpower the Chinese and prune them by the barbarians, then they can indeed be used to overpower the barbarians.[80]

Guo evidently thought the weapons would be of use against the Miao as well, since he brought artisans from Fujian with him capable of manufacturing the "Wo guns", by which he probably meant the *niaochong*.[81] Both weapons would be used during the Bozhou campaign, but especially the harquebus attracted much praise from Ming officials. So what was the impact of this new technology on counterinsurgency warfare as evidenced by this campaign against the Miao, and how did its use fit into the earlier patterns established by Ming warfare?

In recent years our understanding of the use of firearms by the Ming military has been greatly enhanced.[82] An older generation of scholars assumed the Chinese were already firmly behind the Europeans by the sixteenth century. Ming military officer Qi Jiguang (1528-1588), well-known for his innovative training manuals written during the mid-to-late sixteenth century, was thought to have disdained the use of the harquebus for example.[83] On the contrary, Tonio Andrade recently revealed that Qi Jiguang was an advocate of using the *niaochong* harquebus on a large scale against both the *Wokou* and the empire's nomadic enemies along the northern frontier, after studying these manuals closely.[84] Like Tang Shunzhi, Qi Jiguang was operating

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[80] Guo Zizhang 郭子章, 'Binyi sheng Qian cao ershisi juan, chuan cao ershier juan, shou yi juan' 蠙衣生黔草二十四卷, 傳草二十二卷, 首一卷, in *Siku quanshu cunmu yeshu, jibu, di yiwuwu ce* 四庫全書存目叢書, 集部, 第一五五冊 (濟南: 齊魯書社出版發行, 1997), 353.

[81] Guo, 353.

[82] A few representative examples of this trend are: Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History*; Peter A. Lorge, *The Asian Military Revolution: From Gunpowder to the Bomb* (Cambridge: Cambridge University Press, 2008); Sun, 'The Military Implications of Zhu Wan's Coastal Campaigns in Southeastern China: Focusing on the Matchlock Gun (1548-66)'; Kenneth M. Swope, 'Crouching Tigers, Secret Weapons: Military Technology Employed During the Japanese Invasion of Korea, 1592-1598', *Journal of Military History* 69, no. 1 (2005): 11–43.

[83] Ray Huang, *1587. A Year of No Significance: The Ming Dynasty in Decline* (New Haven, Connecticut: Yale University Press, 1981), 166–71.

[84] Tonio Andrade, 'The Arquebus Volley Technique in China, c. 1560: Evidence from the Writings of Qi Jiguang', *Journal of Chinese Military History* 4 (2015): 115–41.

against the pirates along the south-eastern coast in the 1550s and 1560s. Qi was also a follower of Wang Yangming's Neo-Confucian current and exchanged knowledge about fighting techniques with Tang.[85]

Not only were Chinese military and civil officials enthusiastically using harquebuses by the mid-sixteenth century, soon after they acquired them. They were also ahead of their European contemporaries in using them tactically. Europeans eventually learned to overcome one of the shortcomings of early handheld firearms, its long reloading time, by deploying the gunners in several ranks that would advance, fire, withdraw to reload, and advance to fire via a counter march. In this way a steady rate of fire in volleys could be kept up, protecting the gunners from being overrun easily. For a long time historians ascribed this innovation to reform-minded leaders of the Dutch Republic, who implemented it in 1598. A similar, but unconnected, innovation was ostensibly implemented in Japan by warlord Oda Nobunaga (1534-1582) in the 1570s.[86] Recent research by Andrade has, however, revealed that Qi Jiguang already prescribed tactics enabling continuous volley fire for his harquebusiers in a 1560 manual and battle reports seem to corroborate that he indeed deployed his gunners in this way against the *Wokou*.[87] Qi was even advocated the large scale deployment of the weapon against the northern frontier nomads.[88] Neither did this innovation take place in a conceptual vacuum: during the early Ming dynasty Chinese soldiers in the vanguard were already using more primitive handguns against the Mongols, sometimes firing in discrete volleys. Moreover,

[85] Filipiak, 'The Effects of Civil Officials Handling Military Affairs in Ming Times', 10; Barend Noordam, 'Qi Jiguang 戚繼光 (1528-1588): The Soldier as a Sage?', in *Image: Proceedings of the 2nd Rombouts Graduate Conference (2015)*, ed. Gina van Ling and Hanna Li (Leiden: Shilin, 2016), 52–57.
[86] See, for example: Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800* (Cambridge: Cambridge University Press, 1996), 140–42; Geoffrey Parker, 'The Limits to Revolutions in Military Affairs: Maurice of Nassau, the Battle of Nieuwpoort (1600), and the Legacy', *The Journal of Military History* 71, no. 2 (2007): 331–72.
[87] Andrade, 'The Arquebus Volley Technique in China, c. 1560: Evidence from the Writings of Qi Jiguang', 122–28; Sun, 'The Military Implications of Zhu Wan's Coastal Campaigns in Southeastern China: Focusing on the Matchlock Gun (1548-66)', 132.
[88] Andrade, 'The Arquebus Volley Technique in China, c. 1560: Evidence from the Writings of Qi Jiguang', 128–30.

Andrade has suggested that these tactics were possible because Chinese military culture of drilling was kept alive throughout various dynastic reigns. Indeed, previous dynasties used the crossbow in a similar fashion as the handgun and harquebus, deploying them utilizing countermarching tactics enabling continuous volley fire.[89] Yet, despite this remarkable continuity, when by the late sixteenth century the Imjin War broke out, these harquebus tactics were curiously absent on the Chinese side of this pan-East Asian war. A number of reasons for this have been advanced by modern scholars, for example a possible loss of interest of the Ming military in the harquebus after the *Wokou* incursions were mostly suppressed in the late 1560s, or a conservative northern Chinese military culture that was not interested in the southern Chinese innovations with the weapon. Andrade himself has suggested that the apparent marginal role of the weapon in late Ming warfare might be a "chimera", and simply the result of not enough research into the primary sources.[90] Below I will consider what the data about the use of the *niaochong* against south-western insurgencies like those of the Miao under Yang Yinglong can contribute to this debate.

Tools of empire: the harquebus in the south-west

The *niaochong* was quickly appropriated in the struggle against the *Wokou* and also found its way to the northern frontier thanks to the efforts of its advocates like Qi Jiguang. It took a bit longer for it to become a fixture of armed conflicts in the south-west, but once it did it proved to be one of the most decisive weapons in the hands of government forces. Once again it was a civil official associated with Wang Yangming's movement that first seems to have introduced it to the area on a significant scale. This was Tan Lun, a friend of Qi Jiguang, who took a brief

[89] Andrade, 134–35; Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History*, 144–65.
[90] Andrade, 'The Arquebus Volley Technique in China, c. 1560: Evidence from the Writings of Qi Jiguang', 130–33.

break around 1565 from fighting the *Wokou* to help suppress a rebellion which had spilled over into Sichuan, and which had been launched by Feng Jizu (dates unknown), a *tusi* chieftain of the Yi minority in Yunnan. Like Guo Zizhang three decades later, Tan Lun decided to bring his own artisans from Zhejiang province to help manufacture the harquebuses in Sichuan. On the battlefield the weapons managed to instil fear in the Yi rebels, although Feng Jizu was ultimately killed in a battle against the troops of an Yi *tusi* loyal to the Ming. A few other officials following Tan Lun similarly produced the harquebus locally in order to prepare for conflicts and had them stored. They were, however, of inferior quality and not fit for use when Yang Yinglong rebelled, which prompted local civil and military officers to produce new batches.[91] Once the Ming forces were able to deploy significant harquebusiers, they would have a devastating effect on the Miao forces. The Miao had already encountered the weapon fighting the *Wokou* on behalf of the Ming in the mid-1550s and feared them.[92] These fears would prove to be justified.

Meanwhile, the situation in Guizhou concerning the presence of the harquebus was not much better than in Sichuan. Although a local garrison of 300 *niaochong* gunners had been established in Bayang by 1572, it had apparently no lasting influence in the area by the time of Yang's rebellion. Civil official Sheng Wannian (dates unknown), for example, commented that Guizhou was a poor province with little military strength and possessed no firearms he had heard of. Only when military officer Chen Yin (? -1621), a veteran of the Imjin War, entered Guizhou with his troops specialized in firearms, did this situation change.[93] Perhaps for this reason of desultory local quality and quantity of firearms, Guo Zizhang and Li Hualong decided to rely more on the no doubt more experienced south-eastern Fujian artisans and military

[91] Pang Naiming 庞乃明, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong' 明中后期鸟铳在西南地区的传播与应用, 南开学报 4 (2018): 141–42.
[92] John W. Dardess, *A Political Life in Ming China: A Grand Secretary and His Times* (Lanham, Maryland: Rowman & Littlefield, 2013), 124–25.
[93] Mueggler, 'Lady Qu's Inscriptions: Literacy and Sovereignty in a Native Domain, Southwest China', 17; Pang, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong', 139, 141–42.

experts from outside of the affected provinces.[94] This included help from a surprising source: Japanese captives.

Kuba Takashi, a modern Japanese historian, has investigated Chinese and Korean records of the Imjin War and Yang Yinglong's rebellion to document the capture and use of Japanese troops and their harquebuses. In Li Hualong's record of the Bozhou campaign it is indeed recorded that his forces included incorporated Japanese prisoners of war and *niaochong* were used by a military official under his command, Liu Ting (1552-1619), although the prisoners and weapons were not mentioned in the same breath.[95] Li Hualong later recorded that Japanese harquebusiers were providing cover fire for his troops when they were storming Yang Yinglong's fortress' walls with the help of ladders.[96] Liu Ting was a hereditary military officer and the son of Liu Xian (?–1581), another military officer who was closely connected with Tang Shunzhi and Qi Jiguang during the campaign against the Wokou and used the *niaochong* against them and later against minority insurgents in Sichuan.[97] From an anonymous diary of the Bozhou campaign Kuba extracted information that Liu Ting was using Japanese soldiers with *niaochong*, which frightened the Miao rebels.[98] There are therefore some tentative clues that the Japanese harquebusiers, presumably already trained in their own volley fire tactics played an important role during the Bozhou campaign. In a twist of irony, instead of Yang Yinglong coming to the aid of the Ming against Hideyoshi's forces in Korea, Japanese prisoners of war were fighting against Yang's forces in Bozhou instead. The Ming had

[94] Guo, 'Binyi sheng Qian cao ershisi juan, chuan cao ershier juan, shou yi juan', 353; Pang, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong', 144–48.
[95] Kuba Takashi 久芳崇, 'Chōsen no eki ni okeru Nihonhei horyo: Myōchō ni yoru rengō to shochi' 朝鮮の役における日本兵捕虜--明朝による連行と處置, *Tōhōgaku* 東方学, January 2003, 42.
[96] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 441.
[97] Filipiak, 'The Effects of Civil Officials Handling Military Affairs in Ming Times', 8–12; Pang, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong', 143–44, 148.
[98] Kuba, 'Chōsen no eki ni okeru Nihonhei horyo: Myōchō ni yoru rengō to shochi', 47.

originally offered Yang Yinglong to redeem himself in this way in an earlier attempt to defuse his rebellion, but in the end he chose to renege.[99]

Yet, what light does this utilization of captured Japanese firearms expertise and weaponry shed on the continued use of the harquebus combined with volley fire tactics after the *Wokou* piracy crisis subsided in the late 1560s? On the one hand it could simply point to the Ming officials pragmatically using skills and technology that were already available in the shape of Japanese prisoners of war, instead of creating their own trained troops. Indeed, it seems the artisanal skills for manufacturing the *niaochong* were already well entrenched in Fujian and Zhejiang and could be transferred to south-western areas when needed. On the other hand, there were serious quality issues with the harquebuses produced in the south-west prior to Yang Yinglong's rebellion, indicating difficulties in perpetuating the transfer process of these artisanal skills to south-western provinces of the empire. Hence, south-eastern artisans and Japanese prisoners were necessary to provide the Ming forces with the latest in harquebus technology, but the Japanese were therefore by no means the only source the Ming could draw on.

In terms of harquebus tactics, again there are strong indications that indigenous traditions of volley fire were still going strong and did not necessarily require Japanese models. Guo Zizhang wrote a number of guidelines on how to use the *niaochong* harquebus during the Bozhou campaign, which were very similar to those prescribed by Qi Jiguang and Tang Shunzhi four decades earlier. First of all, the soldiers in the vanguard, which explicitly included the harquebusiers and other firearms users, were not allowed to leave the ranks during battle to collect heads of fallen enemy soldiers. Presenting the heads of enemy soldiers was the primary way for soldiers to collect rewards, but for the gunners this was difficult because they killed

[99] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 398.

their enemies at a distance and were vulnerable out of formation and operating close to enemy lines. If the harquebusiers engaged in this behaviour, their formations would fall into chaos and they would presumably be vulnerable to counterattacks. On the other hand, this would prevent the gunners from acquiring their rewards and take away incentives to perform. Therefore, Guo Zizhang stipulated that unit commanders had to assign the correct number of enemy heads to each combatant to determine the rewards, while every soldier in the vanguard breaking formation to gather enemy heads would be beheaded himself.[100] This stipulation closely resembles a similar prescription recorded by Tang Shunzhi for his harquebusiers to ensure the harquebusiers would gain their due rewards after battle, while preventing them from leaving their formations.[101] Guo Zizhang's stipulations further provided insight in how the *niaochong* would be used in battle:

> Firing the *niaochong* firearms. All await until the enemy is within 70 to 80 paces [105-120 meters] and listens while holding [the harquebus] in the hand for the sound of the buglers blowing the swan horn, and just then they are permitted to ignite and fire. If the swan horn has not been blown yet and the enemy is within 50 paces [75 meters], they are not allowed to fire first. If they dare to disobey orders, fire chaotically, [let] the enemy reach them when they are empty-handed and without order, and fire the harquebus without using the gunsights, behead them.[102]

Although Guo Zizhang does not describe volley fire explicitly, it is clear from his description that his harquebusiers were expected to never be empty-handed when the enemy reached them,

[100] Guo, 'Binyi sheng Qian cao ershisi juan, chuan cao ershier juan, shou yi juan', 309.
[101] Tang Shunzhi 唐順之, *Tang Shunzhi ji* 唐順之集, ed. Ma Meixin 馬美信 and Huang Yi 黃毅, vol. 3 (杭州: 浙江古籍出版社, 2014), 875–76.
[102] Guo, 'Binyi sheng Qian cao ershisi juan, chuan cao ershier juan, shou yi juan', 309; Quote via: Pang, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong', 144.

which indicates he expected them to reload continuously. Furthermore, his stipulations closely match those of Qi Jiguang, used by Andrade to prove Qi had conceptualized volley fire tactics with the weapon around 1560. Qi expected his troops to start firing at 100 paces (150 meters), which would be done in ordered sequences indicated by horn blasts as well. Indeed, if the enemy came within 50-60 paces (75-90 meters), Qi also advised the harquebusiers to stop firing.[103] The stress on the soldiers also using the gunsights indicates Guo Zizhang also expected accuracy from his harquebusiers, an expectation he again had in common with both Qi Jiguang. The overall similarity in the harquebus usage between Qi Jiguang, Tang Shunzhi, and Guo Zizhang, indicates that by the late sixteenth century the innovations of the *Wokou* period had not been forgotten. Guo was also a beneficiary of military knowledge exchange on the topic of (fire)arms, when he received a treatise on weapons from a friendly civil official named Wen Chun (1539-1607) to help him prepare for the campaign against Yang Yinglong. Networks of civil officials were therefore still at the forefront of sharing and disseminating knowledge about the latest military technologies that could be beneficial to the empire. Despite the seeming low profile of the *niaochong* during the Imjin War on the Chinese side, civil officials dealing with the contemporaneous Bozhou rebellion were well convinced of the weapon's advantages and deployed it in line with precedents established almost half a century earlier. The Japanese contribution to the conflict might simply have been a question of convenient availability of trained harquebusiers for transfer to a region of the Ming empire where the harquebus and its associated production techniques had not made a big impact yet. Explanations for its relative absence during the Imjin War and later seventeenth century conflicts therefore seem to be indeed simply a matter of scanty research, as Andrade has suggested, although there are indications the Ming had trouble transferring the artisanal skills

[103] Qi Jiguang 戚继光, 'Ji xiao xinshu (1560)' 纪效新书 (1560), in *Chuanshi cangshu - zi ku - bingshu* 传世藏书-子库-兵书, ed. Zhang Xinqi 张新奇 (海南: 海南国际新闻出版中心, 1995), 982–83, 997.

involved in producing the harquebus beyond the south-eastern provinces of Fujian and Zhejiang. A lack of official interest caused by Confucian biases was however not one of the reasons behind the apparent spotty record of harquebus use by late Ming armies, as it were civil and military officials who were often part of Neo-Confucian movements that were primarily responsible for the weapon's appropriation and dissemination.

The usefulness of the weapon during counterinsurgency warfare was also attested by the Bozhou campaign, and a contributing factor was no doubt that the Miao themselves generally did not possess firearms other than those they captured from the Ming.[104] Both Guo Zizhang and Li Hualong were enthusiastic proponents of the weapon, and after the Bozhou rebellion the latter instructed Guizhou, Huguang, and Sichuan provinces to produce more harquebuses.[105] Although rows of harquebusiers volley firing might not seem very useful fighting an elusive opponent fighting on difficult terrain, two mitigating factors existed. One is the Ming emphasis on exploiting the greater range and accuracy of the harquebus versus the poisonous crossbows and other projectile weapons the Miao were using. Western military historians usually assume smoothbore hand-held firearms like the harquebus and the musket lacked accuracy and were only suitable for massed and indiscriminate volley firing on the battlefield, but data from East Asia continues to suggest otherwise. The range and accuracy of the harquebus appear to have been big advantages against the Miao, and this was testified by Ming officials on many occasions. Both Qi Jiguang and Guo Zizhang believed the harquebus could be accurately used from a distance between 105 and 150 meters in coordinated volleys until the enemy came within 50 meters, after which presumably other units took over the fighting. This created a considerable kill zone covered by accurate harquebus fire the Miao had to cross, before even having a chance to engage with Ming soldiers in hand-to-hand combat,

[104] Zhang Wen 张文, 'Huoqi yingyong yu Ming-Qing shiqi xinan diqu de gaituguiliu' 火器应用与明清时期西南地区的改土归流, *Minzu yanjiu* 民族研究 1 (2008): 89–91.
[105] Pang, 'Ming zhonghouqi niaochong zai xinan diqu de chuanbo yu yingyong', 146–47.

while their projectile weapons were outranged as well. The harquebus' advantage of range and accuracy also explains why this weapon had such a big impact on the war, while earlier indigenous Chinese handguns do not appear to have been game changers in these kinds of conflicts with south-western minorities. Kenneth Swope and Pang Naiming have compiled many instances of Ming forces carrying the day against their Miao opponents in the field because of the advantages their firearms, especially the harquebus, provided them. Furthermore, although the Miao forces tried their best to make use of the hilly and inaccessible terrain and preferred to fight from behind barriers and heavy growth, they did not seem to have relied on full guerrilla tactics. Miao and Ming units often fought each other head on in pitched confrontations, which allowed the latter to enjoy the advantages of their longer-ranged and more accurate firearms.[106] The political nature and fragility of Yang Yinglong's authority perhaps played a role in this. In the end he felt the need to defend and make a last stand at his fortified political centre during the siege of Hailungtun, which hindered the implementation of a guerrilla strategy and which gave the Ming the initiative by presenting them a clear military objective to settle through the application of military force. Yang Yinglong was forced to deploy his forces in predictable locations in order to defend the approaches to his stronghold. When the Ming forces finally reached this stronghold, they were again in a technologically advantageous situation, because they could use their superior gunpowder artillery to decide the siege in their advantage.[107]

Conclusion

[106] Pang, 144–45; Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 433, 435–36, 441.
[107] Swope, 'The Three Great Campaigns of the Wanli Emperor, 1592-1600: Court, Military, and Society in Late Sixteenth-Century China', 441–42.

The Ming empire did not develop a specific counterinsurgency doctrine, for it did not require one. The conflicts its armies fought that came closest to constituting an insurgency, namely those against the empire's inner minorities, where at best hybrid conflicts with characteristics of regular and irregular warfare. This was largely because these minorities had their own political structures that depended partly on Ming legitimization practices. These same political structures, characterized by hierarchical forms of rulership, were also inherently vulnerable to manipulation, because the modes of succession were often not settled. The Ming court could often keep control over its minorities by manipulating these political vulnerabilities. When an organized rebellion did occur, the Ming court could mobilize other minorities as a military force to suppress the rebelling minorities, according to the ancient practice of "using barbarians to fight barbarians". By the late fifteenth century, however, the Ming empire had to rely more and more on its minorities as ready-made military forces, because its own hereditary military had decayed to the point of no longer being able to provide the necessary military force to supply all its security needs. This inevitably brought civil officials and minorities closer together, and this would have momentous consequences for both counterinsurgency operations and Neo-Confucianism. Eventually one civil official would develop a new and popular strain of Neo-Confucianism, that was at least partly indebted to his intimate experiences living among minorities. The nuanced understanding of minority conditions this yielded, coupled with the belief in the potential of minorities to acculturate to Han Chinese standards of civilization, led Wang Yangming to consolidate a toolbox of civil and military policies to handle their rebellions. A second, unrelated, feature of Wang's strain of Neo-Confucianism was its openness to accepting new military technologies. Last, but not least, Wang's followers would often follow in his footsteps in the course of the sixteenth century and serve as civil officials leading military campaigns, in the process circulating knowledge of Wang's counterinsurgency toolbox and the techniques associated with new weapons. War and Confucianism therefore had

a significant mutual impact in sixteenth-century China, defying the stereotype of violence-averse Chinese civil officials. The process of knowledge circulation would come to good use during the Bozhou rebellion led by Yang Yinglong. Although the counterinsurgency toolbox' civilian solutions proved to have limited value against the large Bozhou domain only sparsely influenced by Han Chinese culture, new military technologies like the harquebus would prove to be major assets. At the same time, the Bozhou campaign proves that the indigenous Chinese knowledge associated with producing the weapon and employing them in precision volley-firing formations was still a living tradition by 1600, a phenomenon largely indebted to Neo-Confucian officials. Nevertheless, minority uprisings continued to plague the dynasty until its end in 1644, but considering its reliance on the minorities as a military labour force, it could be argued that the Ming empowered its own domestic adversaries. This created a never-ending cycle of violence comparable to the present-day War on Terror and War on Drugs.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Barend Noordam is a historian of Ming China, specialising in global military history, the history of science and technology, and early modern interactions between East Asia and Europe. He is currently part of the ERC-funded Horizon 2020 Aftermath of the East Asian War of 1592-1598 project hosted by the Universitat Autònoma de Barcelona and tracing the development, textual consolidation, and diffusion of military technology in Ming China and Chosŏn Korea after 1592.

Acknowledgements

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 758347).

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