When the Sea Dragon Roars: Hydrological Disasters and the High Qing Emperors[#]

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Natural catastrophes that show no mercy to human sufferings have always threatened Chinese society. Among various types of natural cataclysm, hydrological disasters (largely to be related with floods or tsunami)¹ created the most frequent and distressing tragedies that irked the Qing empire (1644-1912). In accordance with the *DaQing Shichao shengxun* 大清十朝聖訓 (The sacred instructions of the ten reigns [1616-1874]) and the *Qing shilu* 大清歷朝實錄 (The veritable records of Qing dynasty), hydrological disasters of large magnitude occurred regularly since the reign of Kangxi 康熙 (1662-1723).² In most of the studies which deal with natural devastations in Qing China, contemporary scholars estimated the "average number" of water hazards which occurred and sketched their catastrophic impact from the seventeenth century to the nineteenth century. Most of these researches, however, did not fully demonstrate the confrontation between natural calamities and emperors' behaviors, let alone how rulers understood and responded to natural catastrophes.³ By

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¹ Hydrological disasters can be interpreted as hydrologic disasters, hydrological calamities, water disasters or water hazards. The above terms are interchangeable. See "IDNDR-ESCAP Regional Meeting for Asia: Risk Reduction & Society in the 21st Century," (Website: http://www.unescap.org/enrd/water_mineral/disaster/watdis7.htm); "Eionet GEMET Thesaurus: Definition: hydrologic disaster," (Website: http://www.eionet.europa.eu/gemet/concept?cp=4111&langcode =en&ns=1); and Vijay P. Singh, *Hydrology of Disasters* (Dordrecht: Kluwer Academic Publication, 1996), p. 41.

² See Zhao Zhiheng 趙之恆, Niu Geng 牛耕, Ba Tu 巴圖(eds.), *DaQing shichao shengxun* (Beijing: Beijing Yanshan chu ban she, 1998); *DaQing lichao shilu* (Beijing: Zhonghua shuju, 1985-1987). The entire collection of *DaQing shichao shengxun* has ninety-nine volumes. The first preface is from 1666, while the last from 1880.

³ Besides Andrea Janku's paper which explores how natural disasters "monitor" the behaviors of emperors and cultural elites in late imperial China (See Andrea Janku, "'Heaven-Sent Disasters' in Late Imperial China: the Scope of the State and Beyond," in Mauch Christof, et. al. (eds.), Natural Disasters, Cultural Responses: Case Studies toward a Global Environmental History (Lanham: Lexington Books, 2009), pp. 233-264, in the past few decades most researchers pay much attention to how catastrophes affected and irked the nation either in a socio-economical or an environmental historical approach. See Gao Wenxue 高文學 (ed.), Zhongguo ziran zaihai shi 中國自然災害史 (Beijing: Dizhen chubanshe, 1997); Yu Yanquan 于運全, Haiyang tianzai: Zhongguo lishi shiqi de haiyang zaihai yu yanhai shehui jingji 海洋天災: 中國歷史時期的海洋災害與沿海社會經濟 (Nanchang: Jiangxi gaoxiao chubanshe, 2005), Zhang Chongwang 張崇旺, Ming Qing shiqi Jiang-Huai diqu de ziran zaihai yu shehui jingji 明清時期江淮地區的自然災害與社會經濟 (Fuzhou: Fujian renmin chubanshe, 2006) and Mauch Christof, et. al. (eds.), Natural Disasters, Cultural Responses: Case Studies toward a Global Environmental History. Published in 2009 The complete history of natural disasters: Qing Dynasty (Zhongguo zaihai tongshi. Qingdai juan 中國災害通史: 清代卷) deals with various natural tragedies

scrutinizing the *DaQing Shichao shengxun*, this article seeks to examine very briefly how emperors narrated the origins and the destructive power of hydrological disasters in the High Qing, so as to reconstruct a darker, yet fuller picture of the history of natural disaster in Qing China.

To begin with, I will define the nature of hydrological disasters and briefly illustrate how Qing Chinese described hydrological calamities in their writings. According to the United Nations, water hazards can be divided into three categories: ice-storm, tsunami, and floods. We will not find hard to understand that hydrological disasters occur mostly because of heavy rainfall, earthquakes, or hurricanes.⁴ In essence, hydrological disasters denote violent, sudden and destructive changes in the quality and quantity of the earth's water.⁵

Before we discuss how emperors narrated hydrological disasters, we should be aware that the concepts of tsunami and floods nowadays are dissimilar from the ones recorded in the imperial era. In modern times, whether a hydrological disaster is a tsunami depends on its destructive range or level which can be calculated by systematic and accurate scientific technology. Obviously people in the Qing period did not have such calculation. Therefore, besides the term *haixiao* 海嘯 (meaning tsunami in Chinese today), emperors as well as cultural elites applied various vocabularies to describe tsunami. For example Cha Shenxing 查慎行 (1650-1727) used *haizai* 海災 (the sea tragedy); Xu Fengen 許奉恩 (1862-?) used *haihou* 海吼 (roaring of the sea), and Chen Zuolin 陳作霖(1837-1920) used *haifei* 海沸 (the sea boils up).⁶ For that reason it is difficult for us to compare whether a *haixiao* in imperial China had similar impacts and devastating powers as the one we have

which existed in the Qing period, but not only focuses on the disastrous impacts that harmed the state-economy, as the editor Zhu Fengxiang 朱鳳祥 tried to examine how natural calamities alter human behaviors in a cultural perspective, although he omitted to address the tension between emperors' attitude and water disasters. See Zhu Fengxiang, *Zhongguo zaihai tongshi. Qingdai juan* (Zhengzhou: Zhengzhou daxue chubanshe, 2009).⁴ See Chennat Gopalakrishnan (ed.), *Water and Disasters* (London: Routledge, 2007), "introduction;"

⁴ See Chennat Gopalakrishnan (ed.), *Water and Disasters* (London: Routledge, 2007), "introduction;" Fu Congbin, *Regional Climate Studies of China* (Berlin; Heidelberg: Springer, 2008), p. 5-9; Karsten Schwanke, *Naturkatastrophen* (Berlin; Heidelberg: Springer, 2009), pp. 88-153.

⁵ See Robin Clarke, Wasser: Die politische, wirtschaftliche, ökologische Katastrophe - und wie sie bewältigt werden kann (München: Piper, 1994); Vijay P. Singh, Hydrology of Disasters, pp. 42-43.

⁶ See Cha Shenxing 查慎行, *Jingyetang shi xuji* 敬業堂詩續集, in *Siku weishou shu jikan* 四庫未收書 輯刊 (edition of Qing Qianlong Zha Xue keben; Beijing: Beijing chubanshe, 2000), vol. 8, no. 24, *juan* 4, "qiyue shijiu ri haizai jishi wushou 七月十九日海災記事五首"; Xu Fengen 許奉恩, *Licheng* 里 乘 (Hangzhou: Zhejiang guji chubanshe, 1989), "*haihou* 海吼"; Yu Yonghe 郁永河, *Cailiu riji* 采硫日 記 (Beijing : Zhonghua shuju, 1985), "shisiri yinmai dayu bude xing 十四日陰霾大雨不得行; Chen Zuolin 陳作霖, *Keyuan shicun* 可園詩存, in *Xuxiu siku quanshu* 續修四庫全書 (edition of Fudan daxue tushuguan cang Qing Xuantong yuan nian [1909] ke zengxiuben yingyin, Shanghai: Shanghai guji chubanshe, 1995), "mengfeng chui haifei 猛風吹海沸."

experienced today. However, in order to make readers more familiar with what I am talking about, in this article I will still apply the word "tsunami" to include all hydrological disasters which are related to the extreme rising of sea level in the Qing period.

According to the *DaQing Shichao shengxun*, almost all emperors in the Qing era, except the last one, commented on the origins and the nature of hydrological disasters, even though they had different personalities, preferences and practices in acting towards natural tragedies. Among them, emperors Kangxi (Aixinjueluo Xuanye 愛新 覺 羅 玄 燁, 1654-1722, 1661-1722 on throne), Yongzheng 雍 正 (Aixinjueluo Yinzhen 愛新覺羅胤禛, 1678-1735, 1722-1735 on throne) and Qianlong 乾隆 (Aixinjueluo Hongli 愛新覺羅弘曆, 1711-1799, 1735-1796 on throne) were the three emperors who meticulously narrated hydrological disasters in the seventeenth and eighteenth century.

Doubtless the period of High Qing has long been regarded as the most prosperous phase ($\underline{\alpha} \pm shengshi$) throughout the Qing Dynasty,⁷ but unfortunately, hydrological disasters existed recurrently in this golden age (*pax sinica*).⁸ As the only leader of the country, Qing emperors paid special attention to tsunami and floods. In general they expressed sorrow over victims suffered in these kinds of natural disasters after they received memorials submitted by local officials. Along with their grief and anguish over hydrological hazards, the three emperors sought to question why water calamities existed during his reign. According to Mark Elvin, one view in late imperial China was that "people were responsible for their weather." Natural disasters, in addition, are thought to have particular relevance to what the Upper sky thought of the emperors' conduct.⁹ Elvin's idea even helps explain why High Qing emperors

⁷ Very probably "High Qing" is the term which is widely and frequently applied by contemporary historians to describe the years from 1683 to 1839 after Frederic Wakeman's famous article entitled "High Qing: 1683-1839" was published in 1970. Mostly this period is regarded as the golden era of the Qing Empire and acknowledged as the most flourishing and pleasant time. Basically Wakeman's idea on High Qing derived from the research conducted by Ping-ti Ho. Ho saw the eighteenth-century as the "Peak" of the Qing rule. See Ping-ti Ho, *Studies on the Population of China* (Cambridge, Mass.: Harvard University Press, 1959). He even highlighted China's long eighteenth-century the era of *Pax Sinica* (Latin for Chinese Peace) – heralded by the pacification of the last stronghold of anti-Manchu resistance in 1683 and ended with the rise of rebellion and signs of corrupt administration in the 1790's. For more details see Ping-ti Ho, *Studies on the Population of China*, p. 214; Frederic Jr. Wakeman, "High Qing, 1683-1839," in James B. Crowley (ed.), *Modern East Asia: Essays in Interpretation* (New York: Harcourt, Brace and World, 1970), pp. 1-28. In one of his recent monographs, William Rowe even contributes a whole chapter illustrating the prosperity of the High Qing. See William T. Rowe, *China's Last Empire: The Great Qing* (Cambridge, Mass.: Belknap Press of Harvard University Press, 2009), p. 63-89.

⁸ See Sato Taketoshi 佐藤武敏, *Chugoku saigaishi nenpyo* 中国災害史年表 (Tokyo: Kokusho Kankokai, 1993).

⁹ Mark Elvin, "Who Was Responsible for the Weather? Moral Meteorology in Late Imperial China," in

adopted an attitude to the verification by observation of moral-meteorological causality. In fact, doctrinal moral meteorology did not appear in Qing decrees until 1653 (the period when emperor Shunzhi was on the throne). Faced with huge floods in the capital, Shunzhi declared, "I suspect this (the flooding) must originate from my lack of virtue. I should, therefore, reform myself."¹⁰ Following this ideology, Kangxi declared in an edict of 1678 that, "if human affairs go amiss down here below, then the response of Heaven above will be as swift as that of a shadow or an echo."¹¹ On another occasion, he announced he had deliberated within the Palace on the reason why such disasters occurred, and arduously sought ways to scatter it.¹² Similar to his grandfather, Qianlong also wrote a prayer in which he declared guiltily in 1747, "The fault is not on the officials, or on the common people, but with your minister (stating himself as the Heaven's minister), whose management grows worse day by day... How can Heaven above, on account of the mistakes of one minister, tumble down hydrological disasters that afflicts multitudes of common people."¹³

Notwithstanding High Qing emperors continued censuring their performances when the country was troubled by tsunami/ floods, hydrological disasters are not solely a matter between the Heaven and the rulers if we try to have a closer look at how emperors narrated the origin of hydrological calamities. Besides blaming his "lack of virtue," Kangxi sometimes attributed problems to the whole government as it also formed an integral part of the ruling mechanism. He saw cruel, ill-judged, or ill-motivated actions by the government and its officials as a material force that did violence to the harmony of Heaven, because of these reasons, hydrological disasters occurred. In 1679 he wrote, "this is all because the local officials have toadied to the higher officials, and imposed unauthorized levies on the common people....The aggrieved and resentful energy-vitality of the modest (or the destitute) reaches Heaven, thereby causing the summon of such untoward events as floods."¹⁴ Obviously the emperor sought to use moral meteorological disasters were to recur they would be blamed and would be held responsible by the people.

Osiris, 2nd series, vol. 13 (1998), pp. 213.

¹⁰ Da Qing Shizu Zhanghuangdi shengxun 大清世祖章皇帝聖訓, juan 1, p. 4b.

¹¹ Da Qing Shengzu Renhuangdi shengxun 大清聖祖仁皇帝聖訓, *juan* 10, p. 2a. (Translation of Mark Elvin, see Mark Elvin, "Who Was Responsible for the Weather? Moral Meteorology in Late Imperial China," p. 216.)

¹² Da Qing Shengzu Renhuangdi shengxun, *juan* 10, p. 2b.

¹³ Da Qing Gaozong Chunhuangdi shengxun 大清高宗純皇帝聖訓, juan 28, p. 4b.

¹⁴ Da Qing Shengzu Renhuangdi shengxun, *juan* 10, p. 2a and 2b. (Translation of Mark Elvin, see Mark Elvin, "Who Was Responsible for the Weather? Moral Meteorology in Late Imperial China," p. 220.)

Yet the above examples, which correlate with moral meteorology, are not enough to entirely illustrate how High Qing rulers examined the causes of hydrological disasters, for example emperor Yongzheng saw natural catastrophes in a rather "scientific way." Responding to a tsunami in 1724, Yongzheng tried to determine whether water causations were at a local or a national level. If the hydrological disasters happened in a local region which is apart from the central capital, local officials as well as ordinary people should be responsible for those misfortunes. He stated, "if there are numerous good people (in the local area), and few bad people, then Heaven will bless the locality with good fortune. Even if there are larger portions of people with bad conduct, the locality will still receive protection from the God. If bad people are the majority and good people the minority, then Heaven will send below the punishment, affecting even the innocents."¹⁵

Emperors in the Qing Dynasty not only narrated the causes of hydrological disasters, they also provided solutions to overcome these catastrophes. In most of the time they believed they themselves should first reform and apologized to Heaven on behalf of their officials or citizens. In order to express their sincerities and to make requests to the God, most emperors organized grand ceremonies in places where they believed they could closely communicate with the Upper Sky (*jitian* 祭天). For example, Yongzheng declared in 1725, "from the flooding disaster sent down as punishment by the Heaven, it is an especial warning and an urgent calling messaged by the Heaven. If we swiftly and sincerely responded to these admonitions, immediate responses from the Heaven will be delivered." He further promulgated that "we may have no means of using self-examination and abstinence to bring back the heart of Heaven, so allowing these floods to become disasters."¹⁶

All in all, in this article I have tersely showed to readers how the three emperors narrated hydrological disasters. Noticeably most rulers' narrations were not only confined to the chapters on showing respect for Heaven, applying Mark Elvin's eloquent summary, they also occurred in decrees on "loving the people," "giving instruction to officials," "extending the avenues of communication to the emperor," and "consolidating customs."¹⁷ Above all, in their philosophy hydrological disasters existed because of the "sins (*zui* \mathbb{F})" committed by the emperor himself, by the government officials, or by the local people. When they explained the causes of water hazards, the three emperors did not separate the upper classes and the lower classes.

¹⁵ Da Qing Shizong Xianhuangdi shengxun 大清世宗憲皇帝聖訓, juan 8, p. 1a-1b.

¹⁶ Ibid., *juan* 8, p. 1b.

¹⁷ Mark Elvin, see Mark Elvin, "Who Was Responsible for the Weather? Moral Meteorology in Late Imperial China," p. 231.

Significantly this attitude is similar to the traditional Chinese notion that "the emperor should be punished at the same level as the local people if they committed crimes (*tianzi fanfa yu shumin tongzui* 天子犯法與庶民同罪)." Furthermore, compared with the previous dynasties, Qing rulers had further consolidated the power of interpretations of why "Cosmo-misfortunes" existed, just like how they highly centralized their ruling and administrative strength in the empire. In addition, unlike the mid and late Ming leaders, Kangxi, Yongzheng and Qianlong were more active and adroit to construe ways of resolving "punishments messaged by the Upper Sky." It is, thus, always possible for us to analyze and compare emperors' political skills to command the country by evaluating how they narrated and explained hydrological disasters, or perhaps, any other kinds of natural tragedies in their own way.

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