

Analyzing the Failures of the Self-Strengthening Movement

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ABSTRACT

When analyzing the late Qing Dynasty, the Self-Strengthening Movement is often regarded as a significant attempt at modernizing China's military, education, and industry. Initiated by reform-minded officials like Li Hongzhang, the movement sought to reinvigorate China by applying Western knowledge and technology to traditional Chinese institutions. However, while the Self-Strengthening Movement did establish a comparatively modern military, institutions for Western studies, and a nascent industry, it lacked the depth necessary to bring substantive change to the nation. Indeed, the Qing Dynasty would continue to suffer military defeats and political turmoil that led to its eventual collapse. Through investigating the limitations of the Self-Strengthening Movement from three directions - military, education, and industry - this paper aims to highlight the structural issues that plagued modernizing initiatives. The paper attributes the eventual failure of the movement to the lack of systemic changes to China's political institutions. The need to adopt not only Western technology but also its democratic institutions remains applicable to China today.

Keywords: Self-Strengthening Movement; Qing Dynasty; Modernization; Westernization; Industrialization; China; Li Hongzhang; First Sino-Japanese War; Institutional Reform.



INTRODUCTION

In the early 19th century, China's status on the global political stage encountered a seismic shift. The arrival of newly industrialized Western powers by sea greatly altered the scale of China's interactions with the outside world. Prior to their arrival, China only had tenuous connections with the rest of the world as a result of its unique geographical position. The relative seclusion of the country fostered a Sino-centric worldview among its rulers, who were content with their empire and reluctant to pursue progress. However, upon the disastrous defeat in the First Opium War against Great Britain, China's closed doors were forcibly knocked open. Its leading officials soon became aware of the dire need to modernize.

Encounters

China was not at its best when it first encountered the Western powers. The feeble empire was heavily impacted by cycles of dynastic decay, which manifested itself in disastrous revolts like the Taiping Rebellion that caused untold damage to its most prospering provinces. Vested interests and conservative sentiments also dominated the Qing court, emphasizing traditional Confucian beliefs and resisting reform initiatives. These reactionary attitudes slowed progress and further deteriorated China's position in the world.

Following the Taiping Rebellion, a brief period known as the Tongzhi Restoration, which emphasized development, temporarily provided vitality to the Qing regime. During this period, reformist officials launched the Self-Strengthening Movement, a government-led initiative that hoped to change Chinese society through Western technology. Officials who supported Westernization, like Li Hongzhang, envisioned creating a modernized military and bringing Western inventions, such

as industrial machinery, to China. They hoped that through learning from the West, China could strengthen its economy and protect its interests on the global stage. However, while the Self-Strengthening Movement came from a place of good faith, its efforts were proven futile by China's humiliating defeat in the First Sino-Japanese War in 1895. The unprecedented defeat to a small neighboring nation revealed the significant structural issues that had plagued the empire, demonstrating the ultimate failure of the movement.

Further attempts at modernizing the nation failed as well. The Hundred Days Reform, a movement seeking to establish a constitutional monarchy in 1898, was halted due to a reactionary coup, reverting all hopes of a change in China's political system. In the ensuing Boxer Rebellion, foreign powers struck a major blow to the Qing Dynasty, forcing it to sign another series of unequal treaties. These events greatly undercut the power of the Qing government. After the defeat, the Qing Dynasty attempted greater constitutional reforms. Still, it was clear that their efforts were mere "window dressing" and that the ruling class had no intention of giving up power. With systemic reform rendered impossible, the people grew disillusioned with the corrupt and autocratic Qing government. A revolution finally broke out in 1911 that overthrew the regime and created a republic in its place.

Ultimately, reforms failed to prevent the collapse of the Qing Dynasty and the establishment of a republic. The eventual failure of the Self-Strengthening Movement and the grave disappointment of the people fueled the inevitable demise of the regime. The movement only treated the symptom of a lack of technology, but not the disease of backward systems and autocratic government, failing to deal with entrenched issues in Chinese society properly. The lack of systematic changes to the military, education, as well as commerce



coupled with traditional conservative beliefs led to the ultimate failure of the Qing Dynasty and the inevitable revolution that overthrew it. Through analyzing the failures of the Self-Strengthening Movement, this paper helps illustrate the fact Western technology and democracy are codependent on each other and that the establishment of modern political institutions is the prerequisite for societal progress.

Military Modernization

Ever since the beginning of the movement, importing military technology was of the utmost concern to Qing officials. China had been thoroughly defeated in the Opium Wars, and the enormous difference in military equipment was evident to its rulers. As such, modernization in the military was prioritized due to the need to quash internal rebellions and catch up with the West. However, while the hardware improved deficiencies dramatically, in military organization, training, and institutions would prove fatal in forthcoming wars. Ultimately, the lack of motivation to create a modern military that adopted Western systems as well as equipment led to China's disastrous defeat in 1895.

Demand for a powerful military was always strong during the late Qing Dynasty. In a time of international and domestic turmoil, a well-regulated modern army was necessary to maintain stability for the Empire. The Taiping Rebellion, one of the largest revolts China has ever seen, broke out in 1851 and served as a major catalyst for military modernization. The enormous scope of the rebellion forced the Qing Dynasty to purchase Western firearms that outclassed those of the rebels.

Apart from quashing revolts, national defense against foreign attacks was also a priority for the Empire. The doctrine of "using the techniques of the barbarians against

themselves" was promoted by Westernization supporters hoping for a stronger military. This facilitated the process of military modernization. At the time, the weapons of the Oing Dynasty were far inferior to those of Western powers. Regarding firearms, the Qing only had matchlock muskets that played an auxiliary role, while the British widely used flintlocks and caplocks as well as breech-loading rifled artillery. This advanced weaponry allowed the British to fire at a far greater rate and accuracy, which made their land forces much more formidable. In addition, the British also had a far superior navy that was industrialized and capable of firing powerful cannons with great accuracy. These advantages in technology motivated the Qing officials to purchase Western weaponry.

Apart from the arms purchases, China also sought to improve its weapon manufacturing capabilities by building its own factories. The largest of these was the Jiangnan Arsenal, established in 1865 in Shanghai, which built both ships and firearms. Foreign specialists led technical work in the arsenal, and soon it could produce large numbers of breech-loading rifles and artillery shells. The Jiangnan Arsenal also acted as a navy shipyard, producing both wooden and iron-hulled warships using Western technology. Because of the scale of the entire project, the arsenal became the largest weapons manufacturer in East Asia.

However, initiatives like the Jiangnan Arsenal met significant challenges as well. Most of the fleet that was produced paled in comparison to Europe's newest ironclad warships, which due to their strong armor, were impervious to ordinary shells. Ventures like the Fuzhou Dockyard were also deprived of imperial funding due to vested interests in the court that deprioritized military spending. This slowed the pace of production and hindered the pursuit of the newest technology. In addition, financial troubles starting in 1876-77 plagued



these projects as well. The large expenditures funding arsenals required led to widespread corruption and nepotism, aggravating the financial situation. As a result, these military projects were drained of funding and lacked the technological capabilities to produce weapons of the highest caliber. These issues slowed progress and allowed similar initiatives in Japan to surpass China technologically.

Although initial modernization attempts like arms purchases and manufacturing succeeded in quelling multiple internal rebellions, they failed to enact systematic changes to the military system itself. Much of the focus was on obtaining the best weapons rather than creating a well-trained, modern army. This would prove disastrous in China's shocking defeat in the First Sino-Japanese War in 1895, an incident widely seen as proof of the failure of the Self-Strengthening Movement.

Firstly, the Qing military was poorly organized. Unlike Japan, which had a unified fleet, China had multiple fleets in the North and South without a coordinated command structure. Fleets were reluctant to come to each other's aid. allowing them to be destroyed separately in the Sino-French and First Sino-Japanese Wars. Moreover, inadequate funding caused different organizations in the Navy to vie for resources, further deteriorating its quality. The supply command structure was also plagued with corruption, resulting in a shocking lack of ammunition during the war. The substantial disadvantage of a disorganized and poorly funded military resulted in an enormous naval defeat in the Battle of Weihaiwei.

Another significant problem the Qing military faced was insufficient training for its soldiers. While there were enough guns, soldiers were extremely incompetent in using them in actual battles. No systematic drilling program taught soldiers the necessary skills for modern warfare. Though equipped with rifles, armies still focused more on old Chinese drills with

spears and cold weapons than on learning to shoot straight and coordinate firepower. The officer corps were bastions against new innovations, being resentful of Western instructors and unfamiliar with modern warfare. As a result of the deficiency in training, army discipline was poor, and desertions were common, which greatly impacted China's military capabilities. The lack of commitment to adopting the full Western method of drilling, which Japan valued, made the disaster inevitable.

Instead of learning from the entire modern military system the West developed, the Qing Dynasty thought that only borrowing weapons would solve the issues. More entrenched problems like training regimens and military organization, vital for success in warfare, were not given the necessary attention they deserved, causing the military collapse. In comparison, Japan had completely revamped its military system and created government offices that would best lead a modern army. The comparison between the reluctance of the Chinese rulers and the willingness of their Japanese counterparts to embrace complete Westernization in the military was the ultimate cause of defeat.

Ultimately, China's military reforms during the Self-Strengthening Movement ended in a complete failure. The thorough defeat of the Chinese military during the First Sino-Japanese War demonstrated the futility of adopting Western firearms without similar military institutions. The same lesson China learned from its military could be extrapolated to many different fields.

Education:

Parallel to changes in the military, the Qing Dynasty also recognized the importance of revamping the Chinese education system. However, such efforts were even more limited in scale since Confucian texts and traditions were always prioritized. Despite hopes of modernization, officials continued to place



insufficient emphasis on familiarizing all students with Western subjects. As such, education systems strongly favored traditional practices, while efforts for institutions to respect science and embrace Western education remained highly inadequate.

Initially, educational reform came out of necessity since interactions with the West required relative proficiency in their languages. As part of a comprehensive Westernization program, Prince Gong established the Tongwen Guan, or School for Foreign Languages, in 1862. Students learned English, French, and Russian concurrently with Chinese to bridge the gap between China and the West. Moreover, as modernization created a strong demand for engineers and technicians, Western science subjects taught by foreign instructors were also incorporated. These included practical subjects like math, astronomy, chemistry, physics, and mechanics, which helped with efforts at industrialization and modernization. The cities of Shanghai and Canton established similar institutions to pioneer Western education in China as well. Graduates from these institutions would take up many integral roles in China's reform, becoming diplomats, translators, and notable businessmen.

Apart from education itself, efforts to translate foreign works were also underway to introduce Western learning and thought. The Jiangnan Arsenal. while weapons manufacturing stronghold, was simultaneously a hub for classical scholars who were intent on bringing scientific and technical knowledge to China. Translation efforts prioritized works dealing with mathematics, military science, and manufacturing, producing hundreds of published volumes. These works were widely popular due to the strong demand caused by Westernization, selling over 30,000 copies in total. The Shanghai Polytechnic Institution also started publishing a new journal called the Chinese Scientific and Industrial Magazine to disseminate Western science further. Focusing on natural science, the journal distributed translated works in over 20 cities in East Asia, always selling out in a few months. The more popular science presentations through the journal, accompanied by the academic translations from the Arsenal, quickly brought Western science to the main stage of Chinese society.

However, resistance to Western learning was still prominent. Conservatives within the Qing court were a strong political force that believed in the traditional concept of a strict boundary between foreign nations and China. The belief that new initiatives would destroy this boundary caused a significant backlash to the reforms. The primary factor that motivated the resistance was the prevalence of a "Celestial Empire" complex, the belief that Westerners were barbarians and that their knowledge lacked utility for China. In the opinions of these conservatives, all Western influence, whether in terms of culture or technology, should be prohibited. Another central assertion of the conservatives was that only tenets of Confucianism should be considered proper learning. All Western learning not introduced by ancient sages was considered non-essential and a deviation from true knowledge. This ideology was the foundation for the systematic opposition to Western education. Indeed, the Tongwen Guan was seen by many as a dangerous institution that had the potential to subvert the dominance of Chinese culture. They believed that the lack of a defined boundary between Western and Chinese learning was outrageous and objected especially to teaching math and astronomy. These beliefs were not exceptions but rather widely prominent in society, greatly limiting the scope of the reform.

Aside from traditional education methods, a more ambitious program brought greater controversy to Qing Dynasty educational reform. Between the years 1872 and 1875, the Qing government meticulously selected 120



boys between the ages of 10 and 16 to be sent to the US and fully educated in Western schools. The students focused on military affairs, math, and manufacturing, which officials considered the most practical subjects. They were dispersed into American families and continued their studies as ordinary students, immersing themselves in the local culture. Such a program was undoubtedly a great innovation at the time, allowing students to gain Western knowledge directly from its source. Supporters viewed it as a long-term venture that would benefit the nation when the students returned.

However, while the program it encountered vociferous well-conceived. opposition within the Qing court. overwhelming suspicion toward Western powers among ruling figures cast a massive shadow of doubt over the mission's prospects. Questions were raised about whether the students would retain the roots of Chinese civilization. Critics believed these children might be knowledgeable but would be "of no use to China" due to their of traditional values. The commissioner for the project was particularly angry about the students refusing to prostrate before him, citing that as an example of the acquisition of foreign vices. Americanization of the students also displeased conservatives, who saw it as a repudiation of Chinese tradition and morals. Eventually, in 1881, the pressure against the initiative forced Prince Gong to abort the mission and recall all the students in the middle of their studies.

For the students themselves, what awaited was a long period of disillusionment. Filled with grand ideas of reform, they came home to a government indifferent to their knowledge and hostile to their practices. An official described them as "runaway horses" who had to be "bridled" to become loyal and subservient. Hence, many students were assigned menial jobs and given tiny salaries, completely incomparable to traditional scholar-officials. Students

gradually grew frustrated with the tyrannical mandates and the backward practices as well, specifically prostration. The juxtaposition between their education in the US and their treatment within the Qing hierarchy gravely disappointed them. Admittedly, some students did eventually achieve prominence due to their technological expertise. However, they did so by subscribing to the political establishment and the patronage of powerful Qing officials like Li Hongzhang and Yuan Shikai. Overall, there was no system that allowed the Western educated students to shine and pursue their political reform goals, which could have led to a participatory democracy. Instead, dynastic politics absorbed them and stifled their hopes for reform.

Commerce and Industry:

Simultaneous to advancements in education and the military, the Qing Dynasty also sought to improve its commercial and industrial capabilities on the world stage. Officials saw the potential for Western technology to revolutionize not only China's military, but also her civil industries. Overall, the Qing court conceived of an import substitution strategy, with modernization initiatives designed to vie for a profit with Western companies. Instead of allowing foreign companies to flood the Chinese market, officials hoped to retain economic rights manufacturing necessary goods themselves. Believing that closing the gates to the empire was no longer an option, they viewed commerce as a weapon to stop foreigners from deriving profits from China.

The advantages of this commercial strategy were evident. Officials recognized that the manufactured goods China imported were value-added products, which were more expensive than its raw material exports. By improving manufacturing, China could produce more industrialized goods with greater value in the international market. In addition, China also



had a great cost advantage due to its low price of labor, which would greatly decrease the price of domestic goods and increase competitiveness in the market. If China could manufacture products to the same standard as Western powers, then its decreased costs would allow it to dominate the market. However, officials ignored the crucial disadvantage of such a plan. Substantial exports in areas such as silk and tea were necessary to provide the funding that supported the introduction of Western science and technology to Chinese enterprises. With export processing sectors deemphasized China lacked a source for the capital needed to implement domestic industrial projects. As such, although the Qing Dynasty wanted to obtain the best technology and the most knowledgeable Western craftsmen, they lacked the funds to do so. Without the most advanced technology, the quality and price of domestic goods paled in comparison to those of their foreign counterparts.

The faltering silk production adequately demonstrates the failure of China's export sectors during the late 19th century. In 1873, China exported three times more raw silk than Japan, whereas, by 1930, Japan's exports were triple those of China. The unsatisfactory silk export statistics are quite shocking since China is widely known for its sericulture, with silk being one of its primary exports. Falling behind in the silk sector on the international stage showed a significant problem in China's development strategy.

Firstly, a lack of technology greatly damaged China's silk farmers. Japan widely promoted the most up-to-date sericulture technology by visiting Western countries and establishing modern research initiatives, while no such enthusiasm existed among their Chinese counterparts. While Japanese scientists reported extensively on the newest innovations, Chinese bureaucrats were much slower in distributing scientific works. Hence. significant technological advancements like the microscopic method of disease prevention were largely ignored in China. Most silkworm eggs were entirely produced with traditional breeding methods, creating much lower quality and productivity cocoons.

In addition, a lack of commercialization also limited progress in Chinese sericulture. Before the 1890s, there were no modern machine-reeled silk factories in China, and most silks were still handmade. The question of the legality of private modern industries like silk factories in the Qing Dynasty meant that there was no encouragement for individuals to modernize and commercialize their silk farms. The lack of railroads and steamships in inner waterways also increased transportation costs, thereby decreasing production. All these issues caused by an insufficient commitment to modernization led to the failure of silk production.

With the efforts to create a stronger industry, another significant problem emerged the ownership of modernized enterprises. While the government saw the importance of gathering capital from merchants through establishing joint-stock companies, they were more reluctant to relinquish the power to run these enterprises. For key projects important to the national economy, like railroads, the government insisted on retaining the power to construct and run the company. A parallel was made between managing a company and governing the nation. Officials believed that while the country could bring profit to businessmen and civilians, they could not be entrusted to rule it. Private merchants could manage less important trades, but government monopolies were established in key sectors like railways and steamships.

In such an atmosphere, the government facilitated the creation of a new company structure known as government-supervised and merchant-managed enterprises. Appearing in the 1870s, it reflected the government's will to raise capital from merchants while retaining absolute



control of the industries. In these joint-stock companies, the merchants provided all the funds based on public-private cooperation while the government acted as a temporary creditor. However, in the enterprise created, the merchants were only in charge of day-to-day management, with the government taking control of all overall decision-making. While such a structure was designed to ensure government planning, the significant imbalance in power put merchants at a substantial disadvantage. In these enterprises, government almost always obtained direct control over operations, sidelining merchants. This caused the management of these companies to be highly inefficient, which greatly damaged the interests of the shareholders and obstructed modernization across the nation.

A prominent example of such an enterprise is the China Merchants Company, a steamship navigation company established in 1872. Providing transportation services in Asia using advanced steamships, the company was conceived as a vessel for commercial warfare. Before its establishment, Western enterprises like Russell and Company dominated the Chinese steamship transportation market and monopolized its profits. Officials believed that creating such an enterprise would end the Western monopoly in transportation. Indeed, the company was initially very successful. After its acquisition of Russell's fleet in 1877, it became the largest steamship operator in China, operating a large total of 30 ships. In the ensuing years, although it engaged in many price wars with Western companies like Butterfield and Swire, it was always able to gain a plurality of the shipping volume on prominent waterways like the Yangtze River. Its investment in other self-strengthening initiatives, most notably the Kaiping Mines, also showed its strong positive influence.

However, even the most successful example of the government-supervised /

merchant-managed structure encountered substantial issues. As a joint-stock company, the company did not have a stock exchange in which its shares could be traded. This made investing in the company more difficult and its business less transparent to shareholders. The loss of Li Hongzhang as the government patron due to his decline also led to internal strife and falling profits. Such was the danger of a quasi-nationalized company in an era of political instability. In addition, after the government opened the waterways for all enterprises, smaller firms took a substantial portion of the shipping volume. This showed the susceptibility of a government monopoly to free market competition. Overall, structural problems limited commercial success of these government-supervised and ventures their societal impact.

Conclusion

Ultimately, the Self-Strengthening Movement initiated in the late Qing Dynasty was an impactful movement for the future of China. It successfully created a significant transformation in diplomatic attitude towards the West and brought advanced Western weapons to China. Notable achievements in adopting Western education and establishing competitive modern enterprises also brought significant change to the civilian sectors of society. These improvements were a meaningful first step for the ancient empire, laying the foundation for future developments.

However, the Self-Strengthening Movement failed to bring systemic change to China. Calls for implementing Western institutions like Parliaments continued to be ignored, while the military failed to completely modernize, suffering a humiliating defeat in the First Sino-Japanese War. There was also no intent to create an education system that prioritized Western learning and no hope of



developing a modern industry that prized technology and utilized an effective corporate structure. These downsides underscored the lack of fundamental change in the movement, limiting its scope and leading to its ultimate failure. In 1911, the people chose to revolt and create a republic instead of waiting on blank checks of reform.

Reflecting on the modern day, the failures of the Self-Strengthening Movement teach a grim lesson. While Chinese officials looked to the West for their superior technology and weapons, their arrogance and preconceptions hindered them from investigating further. They failed to see that modern institutions were also necessary, instead maintaining their view that only Western technology was notable. They continued viewing themselves as the "Celestial Empire," demonstrating their reluctance to see others as equals. Hence, during the process of Westernization, officials maintained their doubt about the need for such an upheaval and resisted fundamental change. Such an arrogant attitude from reforming officials led to the eventual disaster. The stark comparison between the Chinese officials' condescending attitude and their Japanese counterparts' humility in the face of Western civilization showed the cause for the failed reform.

From a larger perspective, the lesson of the reform goes to show the greater truth that technology and democracy Western codependent on each other. For a modernizing nation, it is impossible to only value superior Western technology, weapons, and science without adopting a democratic political system and universal values. Efforts to only reform the economy but not the social and political aspects of society fail to realize the fundamental cause of the strength of Western powers. Western institutions are the root of their advanced technology. For a developing nation, it is impossible to pick and choose between a strong industry and a vibrant democracy since a

developed economy and an autocratic government are essentially incompatible. The eventual failure of the Self-Strengthening Movement teaches the lesson that complete Westernization is the only plausible path to progress.

REFERENCES

- Elman, B. A. (2004). Naval Warfare and the Refraction of China's Self-Strengthening Reforms into Scientific and Technological Failure, 1865-1895. *Modern Asian Studies*, 38(2), 283–326. http://www.jstor.org/stable/3876516
- 2. Fung, A. (1996). Testing the Self-Strengthening: The Chinese Army in the Sino-Japanese War of 1894-1895. *Modern Asian Studies*, *30*(4), 1007–1031. http://www.jstor.org/stable/312957
- 3. Geng, Y. (2015). Evolution in Ideology and Culture after the Opium Wars and up to the Westernization Movement. In *An Introductory Study on China's Cultural Transformation in Recent Times* (2015 ed., pp. 29-77) [pdf]. Springer Berlin Heidelberg.
- Hacker, B. C. (1977). The Weapons of the West: Military Technology and Modernization in 19th-Century China and Japan. *Technology and Culture*, 18(1), 43–55. https://doi.org/10.2307/3103204
- Ma, D. (2004). Why Japan, Not China, Was the First to Develop in East Asia: Lessons from Sericulture, 1850–1937. *Economic Development and Cultural Change*, 52(2), 369–394. https://doi.org/10.1086/380947
- 6. Stephen R. Halsey. (2014). Sovereignty, Self-strengthening, and Steamships in Late Imperial China. *Journal of Asian History*, 48(1), 81–111. https://doi.org/10.13173/jasiahist.48.1.0081
- Xi, L. (2015). Returning to the Middle Kingdom: Yung Wing and the recalled students of the Chinese Educational Mission to the United States. *Modern Asian Studies*,



49(1), 150–176. http://www.jstor.org/stable/24494600

- 8. Xiaomin, Z., & Chunfeng, X. (2007). The Late Qing Dynasty Diplomatic Transformation: Analysis from an Ideational Perspective. *The Chinese Journal of International Politics*, *1*(3), 405–445. https://www.jstor.org/stable/48615607
- 9. Zhou, J. (2022). Westernization Movement and Early Thought of Modernization in China: Pragmatism and Changes in Society, 1860s-1900s [pdf]. Springer International.