

Cryptologic Updates: The Sino-Japanese War of 1894-1895 May 11

Teaser: Which country used codebreaking to determine exactly when to declare war against China?

The Sino-Japanese War of 1894-1895 was fought over control of Korea. China, long the dominant power in the region, was undergoing a historic decline -- a decline it did not fully appreciate until it was humiliated militarily by an upstart Japan, a country that had only started its modernization in 1868. The battlefield victory was complete with Japanese success on both sea and on the ground. Although fought over Korea, the Japanese Army advanced to within striking distance of Beijing (Peking), and Tianjin (Tientsin) the respective capital and power base of China's ruling Qing Dynasty (1644-1911). The resulting April 1895 Treaty of Shimonoseki ended Chinese domination in Korea and gave Japan control over Formosa (Taiwan), which it would maintain until the end of WW2.

CCH has reported in the past about Japanese success in reading Chinese encrypted messages in the days leading up to the Sino-Japanese War of 1894-1895. The Japanese, for example, had access to the secret correspondence of the following individuals: Wang Fengzao (China's envoy to Japan); General Ye Zhichao (defeated by the Japanese in the Battle of Pyongyang at the start of the war); Yuan Shikai (the eventual ruler of China) and Li Hongzhang (China's leading strategist in the war against Japan). From this, the Japanese learned that the Chinese, in the days leading up to the war, were clearly concerned about the Japanese reaction to any Chinese action within Korea. Furthermore, the messages showed that the Chinese did not trust the Koreans. Since the sources of this information were all legitimate voices for the Chinese government, the Japanese were undoubtedly delighted with their cryptologic coup d'état.

In fact, the Japanese were able to read at least 58 encrypted messages between Envoy Wang and the Zongli Yamen (the Chinese Foreign Ministry) in the six weeks leading up to the war. CCH recently learned the contents of one of those 58. On July 30, 1894, the Zongli Yamen sent a dispatch to Wang, instructing him to come home since the Japanese had recently sunk a Chinese vessel and hostilities had

already commenced. The Japanese, intercepting the message on the 31st, presumed correctly that the Chinese would next declare war. This happened the very next day (August 1). The Japanese waited until the Chinese declaration before issuing their own declaration (also on August 1). According to the secretary for Mutsu Munemitsu, the Japanese Foreign Minister, timing was everything. The Japanese did not want to declare war first lest they be seen as the aggressor. They also did not want to wait too long to respond to the Chinese declaration lest they appear weak. Since they knew what the Chinese were going to do, they simply waited for the right time.

The Japanese exploited a Chinese code known as MIHONG 密红, used by Chinese diplomats as early as 1893. It was essentially a codebook-based system, whereby the Chinese transmitted numbers by telegraph. Although the Chinese tried to rearrange the numbers (or even added Romanized letters) for security reasons, the system was never a good one since simple possession of the codebook by an adversary made it inherently insecure. Ironically, the declaration of war message might well have been the last message the Japanese intercepted from Wang, who headed home in light of the war declarations.



Li Hongzhang

When the Li Hongzhang-led Chinese delegation returned to Shimonoseki, Japan, for peace talks in March 1895, it reemployed MIHONG, allowing Japanese access once again. It has been argued by some historians that Japan dominated the Chinese at the peace talks because of this cryptologic advantage. CCH however has seen no specific instances where this was actually the case, as the decrypted messages were of an administrative or routine nature. It continues to research this topic however, a task made all the more difficult because almost nothing of any substance about Japanese cryptologic successes

against China during this time period is written in English.

SOURCES: Decryption in Progress: The Sino-Japanese War of 1894-1895, Greg Nedved, March 2017 issue of *Cryptologic Quarterly*; Jiaxing City National Defense Education Committee Office Publication; 9th Issue of *National Defense and Education Reference Material* (extracted from *ZHISHIBOLANBAO*), August 2014 (translated by author)

502 caption: a portrait of Li Hongzhang, a distinguished, bearded gentleman in traditional Chinese garb.