

**Risking Wrath for the Sake of Strategy:  
Liu Ming-ch'uan Disobeys the Emperor on Taiwan, 1884-85**

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Note for CPW participants: Thank you all so much for taking the time to help me with this paper, which is a first, very rough draft of the second empirical chapter of my dissertation. It examines one of four cases that together test what I am calling a social theory of military disobedience, so in order to place it in the context of the larger project, I include here a short summary of the theory. This is very much a work in progress, so I look forward to any and all comments or feedback you might have.

### Summary of Dissertation Theory

My dissertation theory starts from the straightforward proposition that if commanders deem their orders appropriate, we should expect them to obey. Even when orders are judged to be inappropriate, however, there are many other reasons individuals choose to obey authority.<sup>1</sup> In order to understand how commanders respond to their orders during war, therefore, it is necessary to explore why only some inappropriate orders are disobeyed, as well as the forms such disobedience takes.

I argue that after commanders judge an order to be inappropriate, two factors rooted in their social network connections drive their responses: brokerage and command-centrism. Brokers are individuals occupying social positions in which they link otherwise unconnected groups. For commanders at war, brokerage serves as both an enabler of disobedience and a constraint on leaving the military. Brokerage enables disobedience because it provides leverage, better information, and "a vision of options otherwise unseen." Brokerage discourages exit from the military because commanders in such positions want to maintain their advantages; they are thus reluctant to take action that would change their social networks in unpredictable ways.

Command centrism describes the degree to which a commander's network of social connections is aligned with the military's command structure – whether or not the apparatus of command is the primary authority to which that commander feels himself subject. A command-centric commander identifies strongly with his superiors and the organization that produced the order. Command centrism thus determines how likely a commander is to engage with the command structure in response to inappropriate orders. For brokers (who are unlikely to exit the military), this means command centrism determines the type of disobedience pursued, while for non-brokers it determines whether they obey or exit the organization.

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<sup>1</sup> See, e.g., Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*; Scott, *Weapons of the Weak: Everyday Forms of Peasant Resistance*.

These two factors interact to produce four categories of responses to inappropriate orders: (1) loyal disobedience, in which commanders disobey outright while nonetheless remaining in the military; (2) cooperative transgression, in which commanders engage directly with command to push back against their orders, rather than defying command; (3) obedience; and (4) exit from the military. Figure 1 summarizes the interaction that produces these responses.

**Figure 1: Responses to Inappropriate Orders**

	<b>Broker</b>	<b>Not a Broker</b>
<b>Command Centric</b>	Cooperative Transgression	Obedience
<b>Not Command Centric</b>	Loyal Disobedience	Exit

To reiterate, however, the interaction of these two drivers only determines responses to inappropriate orders. The process through which commanders respond to orders also involves their judgments of the orders' appropriateness. I argue that such judgments ultimately rest on two bases: commanders' perceptions of personal risk and their concerns about others' reactions to the orders. Often orders will simply seem orthogonal to the concerns of a commander (not risky) and her social groups (not relevant to others), in which case the commander will likely see an order as appropriate and obedience is virtually assured. When commanders worry that obeying orders will, for instance, put them in additional danger or cause their families to shun them after the war, those orders are likely to be deemed inappropriate.

## Introduction

In Chapter 2, I showed that Xu Yanxu pursued “loyal disobedience” in response to the emperor’s orders to personally supervise troops at the battlefield, for three reasons. First, he judged this order to be inappropriate, in a variety of ways. Second, he found himself newly thrust into a prominent brokerage position immediately before the war heated up in Vietnam – he was recommended by prominent patrons in the capital, but most important, his position in the *structure* of his social network connections improved in several respects. Third, a careful examination of his history, experience, behavior, and writings showed that he was not “command centric” – he identified with sources of authority other than that which produced and issued the order that he, in the end, disobeyed.

This chapter turns to a different type of response to orders during the same war. Liu Ming-ch'uan (劉銘傳) was a patriotic career soldier who ignored the emperor’s repeated, forceful, and at times furious orders to retake Keelung (基隆) in northern Taiwan from the French; while the French suffered from guerilla attacks and malaria, they held the area until the armistice was signed in the spring of 1885. This case differs from that of Xu Yanxu in several ways that help address potential alternative explanations to my theory. Perhaps most importantly, while the stakes in Xu’s case were comparatively low – claimed Chinese territory was not under threat, for instance, and the battles Xu was overseeing were not crucial to the outcome of the war – in Liu’s case, all of Taiwan was at stake. The emperor’s orders made little sense in the strategic context on Taiwan, and following them would have been much more likely to result in the loss of the island’s capital, Taipei. This, in turn, would have given the French a much stronger position from which to demand indemnities, and would have freed up much of their fleet to harass the economically important coastal cities on the mainland of China. By disobeying these orders from the emperor, therefore, Liu essentially saved Taiwan’s capital, kept the island’s administration intact, and tied down a large portion of France’s forces in Asia. At Liu’s hands in Taiwan, the French were also humiliated by what were their first substantial military defeats in Asia, and, in the end, this was the closest the Chinese came to winning a war against a European power in the 19<sup>th</sup> century.

As I will show below, Liu was also similar to Xu in an important respect: his position in the structure of his social network connections had also substantially improved in terms of brokerage just before his decision to disobey during this war. In this chapter, I therefore argue

that, even though Liu was similar to Xu in that he judged his orders to be inappropriate and became a broker in the runup to the war, the fact that he was command centric led him to pursue a different type of disobedience, which I term “cooperative transgression” (see summary above for more on how this fits into my dissertation’s theory).

I proceed in five sections below. First, I describe the content of the emperor's instructions to Liu, in order to establish that this was a clear, explicit order that Liu received and knowingly disobeyed. Second, I assess the “egocentric appropriateness” of this order from Liu's perspective. Third, I assess Liu’s judgment of the order's appropriateness in terms of my theory, on both egocentric and altercentric bases. Fourth, I analyze Liu's network position in the years prior to the Sino-French War, using a novel database of Liu’s co-commanders in the Huai army and their career progressions. Fifth, I show how Liu was command centric during this war. Sixth, I address several potential alternative explanations to the social theory of disobedience I propose here. I summarize by placing Liu’s disobedience in the context of my theory and compare it with that of Xu Yanxu.

#### Background: Liu Ming-ch'uan

Military roles of various types were the focus of Liu's entire career — he had at various points been a murderer and outlaw (Speidel 1967, 4; Chin 2002), the head of his own force of local troops defending his hometown against the Taiping rebels (Chu 1963, 2), a commander in Li Hongzhang’s famed and locally-based Huai Army (Spector 1964), a military official for the Qing government in various posts, and ultimately the modernization-focused first governor of Taiwan (Chu 1963). He did not receive his first civilian post (as governor) until after the Sino-French War ended, once Taiwan had been incorporated into the Qing empire as a new province. He remains famous today for his efforts to modernize Taiwan in that role, but he first achieved renown as a commander in the Huai Army (淮軍), which was instrumental in helping the Qing dynasty beat back the Taiping Rebellion (1850-1864). Prior to achieving a national reputation, he also reportedly organized a band of rebels near his hometown. Between the end of the Taiping rebellion and the Sino-French War, he also accepted a series of more official military postings.

In the middle of the Sino-French War, as the French naval threat to the coasts of China and Taiwan became more prominent, Liu Ming-ch'uan was placed in charge of defending Taiwan. He brought some Huai Army troops from his own battalion (銘軍) with him, but also needed to

coordinate with other Chinese officials on the island and raise additional troops to support the defense.

### The Order

In contrast to their continual dissatisfaction with the management of the French threat on the southern land border (as seen in the Xu Yanxu case), the Empress Dowager, the young Guangxu emperor, and the rest of the court in Beijing were generally strongly supportive of Liu Ming-ch'uan's efforts to defend Taiwan during the Sino-French War. He was repeatedly praised in communications between the Grand Council and the emperor; such praise was also repeated in publicly promulgated edicts. All of this, too, was very much in line with Liu's previous relationship with the court — he advanced very quickly thanks to the consistent support of Li Hongzhang, one of the most powerful officials in the empire throughout the last half of the 19<sup>th</sup> century, and he had been more than once called out of comfortable retirement to help the court with new military challenges.<sup>2</sup>

However, as one scholar of Liu Ming-ch'uan's career put it, "There was one aspect of Liu's handling of the Taiwan defense which the Court could not tolerate...his refusal to counterattack against the French at Keelung and drive them off the island."<sup>3</sup> Keelung was, along with Tamsui, one of two ports in the north of Taiwan that offered easy access to the capital, Taipei — other ports existed at Tainan in the southwest and [Ilan?] in the east, but transport links on Taiwan were still underdeveloped at this point. The French, therefore, focused their efforts almost entirely on the two northern ports, in hopes of gaining control of Taipei. (See the map below.)

After over a year of covert hostilities outside China's southern border with Vietnam, what we now know as the Sino-French War became overt on August 4, 1884, when the French first bombarded Keelung harbor. The bombardment continued for two full days, but the Chinese forces under Liu Ming-ch'uan repulsed the French troops' attempt to land and establish a foothold on the island. A few weeks later, on August 23, 1884, the French assaulted Fuzhou on the eastern coast of the Chinese mainland, hoping that this would succeed in impelling China to concede to their demands. They miscalculated; the attacks actually strengthened Chinese resolve

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<sup>2</sup> Citations forthcoming here: the Nien, the Ili crisis with Russia, and then the Sino-French War on these — Nien, Ili, Sino-French War.

<sup>3</sup> Speidel 1967, 48.

to resist. As Eastman puts it, "The rising truculence of the Chinese left the French with no alternative but to continue the attacks."<sup>4</sup>

After some debate about the best target through which to coerce the Chinese into submission, the French decided to concentrate the escalation of their attacks on Taiwan. On October 1, therefore, a French landing force of 2250 men again attacked Keelung and captured the port after only one day of fighting.<sup>5</sup> Liu was forced to retreat with his forces behind the hills surrounding the city, where he was able to prevent the French from advancing further towards the capital. While French land forces were contained at Keelung — where Liu had already ordered the shutdown of the coal mines to make the area less useful for the French — the French used their almost complete naval superiority to blockade the entire island starting on October 23, 1884.

The French capture of Keelung reverberated throughout Qing officialdom, and Liu found himself under strong pressure to rectify the situation. One foreigner's report, for instance, reported that Liu's decision to move a substantial portion of his forces south to defend against an anticipated attack on Tamsui led to rumors that he was fleeing to southern Taiwan; due to these rumors, Liu was reportedly greeted in Taipei by riots and several days of imprisonment.<sup>6</sup> More importantly, though, the emperor was in a panic about the French incursion and, on October 10, he ordered Liu to retake Keelung, while also giving a variety of suggestions about how best to hire new troops and improve the island's defenses.<sup>7</sup>

While he successfully defended Tamsui and preserved Chinese control of Taipei, Liu never did retake Keelung, which remained a sore spot for the emperor for the remainder of the war. After his initial order to Liu to retake the city, the emperor mentioned the imperative of retaking Keelung no fewer than 24 times between October 1884 and April 1885.<sup>8</sup> While communication between Beijing and Taiwan was sporadic due to the French blockade, we know that Liu received this order because he actually replied to argue with the emperor, saying that he had insufficient numbers of troops; he argued that if he were to attack and try to recover Keelung,

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<sup>4</sup> Eastman 1967, 165.

<sup>5</sup> Garnot 1960, 22–24

<sup>6</sup> Citation forthcoming – from a European observer in Taipei.

<sup>7</sup> Much of this appears due to the emperor/empress dowager wanting to get something done immediately. But it probably also reflects an awareness that sending aid to Taiwan was going to be very difficult — this is reflected throughout the record from the time in the repeated exhortations for coastal officials to send further aid to Liu.

<sup>8</sup> QSL, various. Some in court letters, some in edicts to the Grand Council, some public edicts.

Taipei would be lost very quickly.<sup>9</sup> The emperor for a while simply exhorted Liu to obey, noting that additional troops were (supposedly) on their way, and that someone of Liu's talents should be able to inspire his men to great feats.

This tactic did not impel Liu to obey, so in February 1885 the emperor began threatening Liu with punishment if continued to "dally" without retaking Keelung.<sup>10</sup> The emperor even begins shaming Liu personally, calling him, for instance, "cowardly,"<sup>11</sup> or "blind" for missing what the emperor heard was an opportunity to take Keelung back from the French.<sup>12</sup> Nonetheless, Liu stood firm in his disobedience while engaging to argue that his choice of strategy was the better one in light of the emperor's goals and China's needs. He also understood his actions as transgressive — after the war concluded, he actually submitted a memorial requesting punishment for his decision.<sup>13</sup> Just like Xu Yanxu, therefore, Liu Ming-ch'uan defied a direct order from the highest authority in Qing China in order to act on the dictates of his own assessment of the situation on Taiwan. Unlike Xu, though, he engaged more carefully and directly with command in order to make his case, which itself was much more plausible than Xu's claim that logistics behind the front were more important than command at the battlefield. In the following section, I turn to an analysis of how Liu assessed the order he received from the emperor.

### Appropriateness

My theory argues that commanders will simply obey orders that they find appropriate. In order to establish my theory's applicability to this case of wartime disobedience, therefore, I must first establish that Liu Ming-ch'uan found his orders to be inappropriate. I examine two analytically distinct bases upon which commanders judge appropriateness — two "logics of appropriateness"<sup>14</sup> — which I term egocentric and altercentric. Egocentric appropriateness rests on judgments of risk (broadly defined) to self, while the logic of altercentric appropriateness rests on commanders' judgments of how the *others* most important to them would respond to a choice to carry out the order. Such judgments are drawn from commanders' self-conceptions — their identities — and rooted in their social experiences, and the varied content of orders and

<sup>9</sup> See, e.g., QSL January 21, 1885. See also Speidel 1967.

<sup>10</sup> QSL, February 9, 1885.

<sup>11</sup> QSL April 2, 1885

<sup>12</sup> QSL February 19, 1885.

<sup>13</sup> 黄 2000, 9 (Huang Zhennan). FIND ORIGINAL.

<sup>14</sup> Citation forthcoming (from networks paper).



perceived risks will affect how and to what degree orders interact with the varied social groups that constitute commanders' identities. These judgments occur simultaneously and in conversation with one another – they are *not* independent processes – but an analytical separation allows for more useful discussion of commanders' decision-making processes. I discuss each in turn below.

### *Egocentric Appropriateness*

In terms of my theory, there are two basic ways in which an order can be egocentrically inappropriate: 1) following it could result in increased physical risks to the commander (or at least, following it would not increase the commander's chances of survival); and 2) following it could lead to reputational, professional, or social costs. The first question I need to answer, therefore, is whether Liu felt himself to be physically at risk at this point in the war.<sup>15</sup>

Liu almost certainly felt himself to be at substantial risk by this point in the war. Personally, he was not a young man and had been called out of a very comfortable retirement to help the empire in its war against the French. He had also for months been nursing an eye injury, for which he repeatedly requested leave both before and after the war with the French. Further, Liu was operating in a context in which fear of the French threat was running extremely high — the entire empire had moved to a war footing (which involved a variety of concrete changes, as detailed in Chapter 3), the country was still reeling<sup>16</sup> from the 14-year Taiping Rebellion (during which the French, in alliance with the British, also fought the four-year "Arrow War" with China in an attempt to further open Chinese ports to foreign trade), smaller-scale rebellions were simmering throughout the empire, and China had only a few years before settled a tense border conflict with Russia in the north. As a close friend of one of the empire's top officials and an educated, prominent official in his own right, Liu was certain to have been aware of and sensitive to these issues. In the summer of 1884, for instance, the emperor himself even noted in a court letter to another official that China was in a "state of war."<sup>17</sup>

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<sup>15</sup> War is often conceived of as a uniformly very dangerous environment, one which is fundamentally different from peacetime environments. Cite Kalyvas here. However, scholars of violence in both domestic and interstate contexts commonly note just how "boring" war can be — many areas will barely feel the war's effects at all, and rates of violence vary such that a commander may not be at much physical risk. CITE.

<sup>16</sup> More specifically, the "national" military forces were in shambles, the country was in desperate need of managerial talent, finances were extremely tight, and debate was ongoing over whether and how to incorporate Western scientific and military techniques into the Chinese context. CITATIONS.

<sup>17</sup> Edict of August 10, 1884.

More locally, the wartime context on Taiwan during Liu's command of the defenses there was also extremely dangerous. Liu himself is reported to have been imprisoned briefly by local officials in Taipei who thought his transfer of troops to another location meant that he was fleeing from the French threat.<sup>18</sup> This story is difficult to verify, but even if it is apochryphal, it does indicate the tension that one foreigner felt on Taiwan during this war. Other foreigners, too, reported high tensions<sup>19</sup> on Taiwan. While the fighting was on a small scale — Spector estimates that around 700 French died, 270 of them in combat, and that "Chinese deaths probably were several times larger" — the thousands of Chinese casualties likely constituted a substantial portion of the effective forces Liu had at his command. He had only taken around 1000 of his elite Huai Army men with him to Taiwan when he took up his post, and by many accounts the local defense forces on Taiwan were in disarray. They were also divided between the seat of administration in the north of Taiwan and the ports in the south, and in any case were unlikely to number more than 10,000 or so.<sup>20</sup>

The French were also capturing local Taiwanese as slave labor to work the mines in Keelung (which Liu Ming-ch'uan had previously shut down in the runup to the French attack), and, perhaps most importantly, men, munitions, rations, and pay were all critically and consistently short on Taiwan. Internal communications among the emperor, high provincial officials, and the Grand Council repeatedly noted this problem throughout most of 1884. For example, in an edict of August 27, 1884, the emperor highlights material shortages throughout Fujian province (of which Taiwan was a part at the time), while also implicitly noting that Taiwan needed more troops.<sup>21</sup> Finally, disease was likely to have been a factor for all of the men (including Liu) who transferred to Taiwan from northern climates and who were thus not accustomed to the malarial southern climate of Taiwan.

Liu was thus likely to have perceived a substantial risk to his person from the conflict on Taiwan, and attempting to retake Keelung as the emperor ordered was likely to increase that risk. Because Liu's troop strength on Taiwan was so limited, he was unable to defend both of the ports — Keelung and Tamsui — that gave easy access to Taipei. In addition, Liu had been able to use relatively few troops to keep the French bottled up in Keelung behind the hills that isolated it from the approach to Taipei. An attempt to retake Keelung would therefore have placed Taipei

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<sup>18</sup> Garnot? CITE

<sup>19</sup> Diary of a Resident of North Formosa. Pull quote if time allows.

<sup>20</sup> CITE

<sup>21</sup> QSL. The implicit need for more troops is acknowledged in the context of an order to a reluctant Zeng Guoquan to transfer more from Guangdong. See also August 13, 1884.

at risk, killed a large number of his limited troops, and worsened the overall strategic situation for Liu. In short, obeying the emperor's order would have placed Liu, his men, and Taiwan itself at substantially greater risk. Indeed, both Western and Chinese scholars seem to have come to an agreement that Liu was making the best choice from of a series of bad options.<sup>22</sup> One Chinese scholar, for instance, in summarizing current research on Liu Ming-ch'uan's career, argued that most scholars now think that Liu's choice to retreat and protect Tamsui while containing the French at Keelung (and thus to disobey the emperor) was a case of "sacrificing the knights to save the king" (丟車保帥).<sup>23</sup>

[Additional passage forthcoming on the risks to Liu's career. Upshot: The official statutes of the Qing dynasty allowed for substantial punishment of this kind of disobedience (Liu appears to have been aware of this, and tried to head it off by requesting punishment after the war to show he knew he was in the wrong), and furthermore, the court routinely punished failure. This was the case in Xu Yanxu's case – he was likely punished more for the battle losses on his watch than for his relatively minor disobedience. Liu, interestingly enough, was only punished very lightly; he retained his position but was demoted in official rank. He was then quickly promoted.] It is thus clear that Liu found his orders inappropriate from an egocentric perspective, based both on personal and career risks.

### *Altercentric Appropriateness*

While Liu certainly decided the emperor's orders to retake Keelung were risky to his person in several ways, this assessment was performed at the same time as and in interaction with his assessment of the orders' *altercentric* appropriateness. In other words, in addition to assessing whether obeying orders would have placed him at increased risk, Liu also assessed whether his primary social groupings would have approved of the actions to which his orders would have led. The kinds of social groupings to which one adheres in this way are often referred to as "identities;" more concretely, though, in the terms of social network analysis such identities can be conceptualized — and measured — as groupings of robust ties between the individuals that make up communities.

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<sup>22</sup> 黄 2000, 10 (Huang Zhennan); Chu 1963, 3

<sup>23</sup> Also Huang Zhennan?

In Chapter One (theory) I argued that three types of "others" — three different kinds of identity — are most likely to impact a commander's decision-making process during war: kin, country, and community. In Liu's case, careful readings of official dynastic histories, observations of contemporary observers (both Chinese and European), his official communications with the court, local histories, and secondary historical work supplemented by contemporary newspaper and diplomatic reports indicate that he identified primarily with three social groups: 1) his family and friends from his hometown in Anhui province (kin/community); 2) his mentors and peers in the Huai Army, as part of which he was instrumental in putting down the Taiping Rebellion in the 1860s (community); and 3) his acquaintances at the court and throughout Qing officialdom (country).

In this section, therefore, I will first describe the nature of Liu's social groupings. I will then go on to situate his own reasoning for disobeying the emperor's order in light of his social connections. I argue that his adjudication between these identities — his projection of their merged imperatives onto the decision frame of the emperor's orders — led him to decide that his orders were also altercentrically inappropriate. I first turn to his earliest set of connections in his home region.

#### Family and Community in Anhui Province

Information on Liu Ming-ch'uan's earliest years is scant, as he did not come from a family that had produced many officials or otherwise prominent individuals. We do know that for generations Liu's family had been farmers<sup>24</sup> in the Hefei (合肥) region of Anhui Province.<sup>25</sup> Liu, however, was "discontented with his father's occupation," so before he was 19 years old he had become the leader of a band of freebooters who illegally sold salt.<sup>26</sup> He is perhaps best described as a bandit at this point in his life — while illegally selling salt was relatively common infraction at the time, he is also reported to have killed a wealthy individual<sup>27</sup> from another village who had insulted his father.<sup>28</sup> In any case, it is clear that he was operating outside the bounds of the "traditional" authority structure emanating from the Qing government.

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<sup>24</sup> ECCP

<sup>25</sup> QSG bio, paragraph one.

<sup>26</sup> ECCP p. 526

<sup>27</sup> ECCP

<sup>28</sup> QSG.

However, the official history of the dynasty reports that Liu gained a prominent reputation after this killing, such that he was strongly recommended by notables from various other villages. At the time his home area was under threat from "bandits from Guangdong,"<sup>29</sup> probably referring to the Taiping rebels. He then went on, presumably with his own group of salt-selling "bandits," to help the government troops recapture nearby Lu'an and rescue the entire Shouzhou area from the rebels. As a result, he was rewarded with an official title in the Green Standard troops<sup>30</sup> of the Qing empire. The local force Liu raised and fought with against these rebels was later eponomously named the "Ming Army" (銘軍).

This army was central to the remainder of Liu's career (as discussed further below), but the important point here is that Liu Ming-ch'uan first began developing his military experience and leadership skills outside of — indeed, partially in opposition to<sup>31</sup> — the authority of the Qing government. He was not part of any national, official military when he first came to the notice of the court. Liu's strong ties to his hometown community are further evidenced by the fact that he attempted several times to retire there — for instance, he returned there for several years after the end of the Taiping Rebellion, having reportedly become quite wealthy. He apparently acquired no fewer than eight concubines,<sup>32</sup> which is perhaps why he at times did his utmost to linger at home even when summoned directly by the emperor.<sup>33</sup>

#### Li Hongzhang's Huai Army

Liu Ming-ch'uan did not only attract the notice of the government troops he helped near his hometown, however — he also attracted notice from Zeng Guofan (曾國藩), one of the most famous generals of the entire Qing dynasty. During the 1850s and early 1860s, supporters of the "Taiping Heavenly Kingdom" rebelled against Qing authority and came very close to taking control of the entire country. The Qing court quickly discovered that its regular standing military forces — the Eight Banners (八旗軍) and the Green Standard troops (綠營) — were both decayed and largely useless in fights against the determined, numerous Taipings.<sup>34</sup> Into this void

<sup>29</sup> QSG. Probably the Taipings.

<sup>30</sup> The Green Standard was one of two national military forces that were operational in mid-19th century China. They were extremely corrupt and underfunded, and were of little use. Titles like the one Liu received therefore carried prestige but little else. CITE

<sup>31</sup> Speidel 1967, 4; Chin 2002.

<sup>32</sup> Three Sisters of Hofei

<sup>33</sup> Memorial from the First Historical Archives, Tongzhi, #2 in listing.

<sup>34</sup> CITES

stepped Zeng Guofan, "a scholar of excellent reputation in the highest academic and political circles of the capital."<sup>35</sup>

Zeng had the opportunity, the means, and the creativity to institutionalize a new type of "local army" to fight back against the Taiping threat. Unlike the standing armies of China during previous several hundred years, which were structured so as to prevent commanders from developing close connections with their troops (in order to help prevent them from developing bases of power independent from the central government), Zeng built his "Hunan braves" or "Xiang Army" (湘軍) around personal loyalty (see also Chapter Four on Bao Chao [鮑超], who began his career in this army under Zeng). Along with several innovative financial mechanisms and a willingness to adopt some new techniques from the West, this made Zeng's army far and away the most effective fighting force in the empire.

This success meant that Zeng "furnished the theory, the philosophy, and the pattern that became the model for" ensuing military organizations in Qing China.<sup>36</sup> Because he feared the emperor would see his unparalleled military authority as a threat once the Taiping Rebellion was suppressed, he actually nurtured the creation of one such ensuing force himself. He helped Li Hongzhang (李鴻章), one of his most trusted lieutenants (and towards the end of the century one of the most powerful men in the country) develop an offshoot of the Xiang Army into a comparably powerful force called the Huai Army (淮軍). [Expand here]

It is difficult to overstate the prominence of both Li Hongzhang and his Huai Army in the history of 19<sup>th</sup>-century Qing China — for instance, Huai forces and commanders played key roles in the Sino-French War — and Liu Ming-ch'uan was one of Li's most important subordinate commanders. One story, while possibly apocryphal, nonetheless highlights the kind of reputation Liu developed. In it, Li Hongzhang and Zeng Guofan together went to Anhui province in search of able men to serve as commanders of the new Huai Army. Upon entering the guesthouse where new recruits were staying, so the story goes, they saw:

"At the southern window there was a man squatting with his belly exposed; in his left hand he was holding a book, and in his right he was holding wine. He recited one page, and then drank his wine, whistling as he moved in his

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<sup>35</sup> Spector 1964, 6.

<sup>36</sup> CITES

seat and then returning to read his book. He very much had a self-assured spirit; upon looking at his book, [they] ascertained that it was Sima Qian's Historical Records.<sup>37</sup> Upon finishing their inspection they left the guesthouse; no one recognized Zeng Guofan, nor did anyone hasten to greet Li Hongzhang. Zeng Guofan said to Li Hongzhang: 'All of [those] men can achieve great things and take on great matters, [but] the one who will have the highest achievements is the man at the southern window who was reading with his belly exposed.' That man was none other than the famous Huai Army man, Liu Ming-ch'uan."<sup>38</sup>

In other words Liu, despite his lack of formal educational credentials — unlike Zeng and Li, he never went through the civil examination process that was such a critical credential for most other high officials in China — was therefore seen by his superiors in the Huai Army as an independent, innovative individual who nonetheless understood and valued the Chinese classics. Li Hongzhang, for instance, wrote to the emperor saying that, unusually for Chinese military commanders in this time period, "Liu Ming-ch'uan is gradually gaining some understanding [of foreign technology]."<sup>39</sup> Indeed, Liu's Ming Army was "known as the most vigorous force in the Yangtze [Yellow River] and Huai [Anhui province] regions," and Zeng relied on him to shoulder much of the responsibility for suppressing the Nien Rebellion of 1851-1868.<sup>40</sup> As one prominent scholar of the Huai Army put it, "[Zeng Guofan] needed particularly the loyalty of the Ming-chün [Ming Army] of Liu Ming-ch'uan...which he described as his 'heart and stomach,' his 'city wall and spears.'"<sup>41</sup> As another put it, "Fighting was what Liu knew best...For years he had been fighting the [Qing] authorities, the Taipings, the Nien, other hoodlums, and even other militia corps."<sup>42</sup>

While Zeng Guofan died over a decade before the beginning of the Sino-French War, a strong bond of loyalty persisted between Liu Ming-ch'uan and Li Hongzhang. "Li was to use his

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<sup>37</sup> Expand on bit on the importance of this work here. Probably the most important historical work in the pantheon of Chinese classics – it formed the basis for historical work for centuries and still has an enormous influence.

<sup>38</sup> 世載堂雜憶 - Translation mine.

<sup>39</sup> Spector, p. 84.

<sup>40</sup> Double-check dates and include citations.

<sup>41</sup> Spector, 111.

<sup>42</sup> Chin 2002

influence on Liu's behalf on numerous occasions, and Liu came to be known as a 'Li man.'"<sup>43</sup> This also meant that, when a rivalry developed in the late 19<sup>th</sup> century between the Xiang Army loyalists and the Huai Army commanders, Liu became embroiled in the tension. For instance, this is likely why Liu was unable to work with Zuo Zongtang, who during the Sino-French War was one of the most prominent advocates of a more aggressive approach against the French and, late in the war, a commander in Fujian province on the coast of China opposite Taiwan, where Liu was commanding the defense against the French.<sup>44</sup>

For the purposes of understanding Liu's choice to disobey the emperor late in the Sino-French War, two central conclusions can be drawn from this exegesis of his identity as a Huai commander. First, while he served the empire loyally in this capacity, his service was channeled through his loyalty to Li Hongzhang and based on a battalion that he had raised independently and, at first, *in opposition to* the empire's laws. Second, he was granted substantial respect and authority on the basis of his successes against local rebels, the Taipings, and the Nian rebels. This meant, for instance, that his military advice to the emperor led to at least some policy changes.<sup>45</sup>

### Officialdom

The close relationship Liu Ming-ch'uan maintained with Li Hongzhang was reflected not only in the responsibilities that he shouldered as a Huai Army commander; it was also reflected in posts he received in the official government hierarchy running parallel to (and eventually intertwined with) the Huai hierarchy. Archival records in Beijing of Li Hongzhang's official communications indicate that he recommended Liu as early as 1864 as a brigade commander<sup>46</sup> — and Li continued forcefully recommending Liu throughout his career.<sup>47</sup> For instance, on May 15, 1868, Li submitted a memorial conveying very high praise of Liu and requesting that he take charge of all cavalry at the battlefield,<sup>48</sup> and in a memorial of March 19, 1875, Li promotes Liu as one of

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<sup>43</sup> Chu 1963, p. 1

<sup>44</sup> Speidel 1967, p. 5 Zuo may in fact be the reason that Liu's supply and personnel shortages were so acute.

<sup>45</sup> Quote from Spector on his memorial regarding military affairs; memorial was so influential with the Court that it began ordering the purchase of foreign books in accordance with Liu's suggestions.

<sup>46</sup> Yishiguan #1 in my list.

<sup>47</sup> With a possible pause during the suppression of the Nien Rebellion, when the ECCP (p. 526) briefly notes that they were "at variance" temporarily.

<sup>48</sup> Which battlefield is unclear, this was probably a fight against the Nien rebels, given the location indicated in the memorial. Yishiguan #9 in my list.



the hard-to-find (at the time) Chinese officials who were versed in the use of Western weapons and training techniques.<sup>49</sup>

As Li Hongzhang himself rocketed to preeminence among Chinese officials, his support of Liu translated into wider renown. In 1862, with the court's assent, he was granted the honorary title "brave" (巴圖魯), which indicated military merit demonstrated in battle.<sup>50</sup> In 1864 he was also granted the right to wear the "yellow riding jacket" (黃馬褂), a costume granted only to Qing officials in good standing, and, due to his role in suppressing the rebellion in Jiangsu, as one definitive biography of him puts it, "this rustic of only twenty-nine *sui* [age] was made an official of the first rank and commander-in-chief of Chihli [the administrative region containing the capital, in 1864]"<sup>51</sup> due to his role in suppressing the rebellion in Jiangsu. As one scholar put it, "Li [Hongzhang] was to use his influence on Liu's behalf on numerous occasions, and Liu came to be known as a 'Li man.'"<sup>52</sup>

Liu actually never took up this post in the capital, though, instead going elsewhere to fight. The throne continued to take notice of his successes and, in 1870, granted him the privilege of submitting official memorials directly to the throne. This was a clear recognition of his military and intellectual credentials — it meant the throne both welcomed his advice and trusted his ability to write and think clearly<sup>53</sup> — and was "a concession not ordinarily granted to one of his rank."<sup>54</sup> Further, even though Liu had comfortably retired to his estate back in Anhui after helping suppress the Nien Rebellion, the emperor called him out of retirement to help defend the empire against the French. One former student of Liu believed he "was determined not to go back into service. He was in comfortable retirement, thanks to the fortune which he had accumulated while fighting the insurgents, and was not interested in public life." However, upon the urging of Li Hongzhang, the emperor eventually decided to offer Liu a governorship — a position that was, reportedly, too high for him to refuse — and Liu indeed came out of retirement to again serve the empire.<sup>55</sup> In this sense, he was a patriot.

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<sup>49</sup> Yishiguan #25 in my list.

<sup>50</sup> Brunnert and Hagelstrom, p. 498-499: "conferred solely for active service in the field...This distinction carries with it the right to wear the Peacock Feather should the recipient not already have attained this privilege."

<sup>51</sup> ECCP p. 526.

<sup>52</sup> Chu 1963, p. 1.

<sup>53</sup> More on context here? Some emperors even chastised memorialists for calligraphy. Form and propriety were extremely important.

<sup>54</sup> EDDP p. 527.

<sup>55</sup> Spector, p. 71 note 3.

And despite his semi-independent base of political power, Liu took advantage of his privilege of being able to memorialize to the emperor to make suggestions for improvement of the empire's defensive situation. He was under no obligation to do so, although good suggestions would have been helpful to his advancement if that had been his goal. In one famous memorial, for instance, Liu sang the praises of railroads as multipliers of military power: "The benefit of the railway is that it cannot be exhausted...China is a country with a vast territory that is impossible to defend effectively, but with the construction of railroads, all areas of China can be connected to one another."<sup>56</sup> While the Empress Dowager was skeptical and this advice was not adopted, in the years immediately prior to the Sino-French War, the court adopted all of the ten recommendations Liu submitted in a memorial about coastal defenses.<sup>57</sup>

Liu Ming-ch'uan was therefore well-known and respected by the emperor and the Empress Dowager. The court in Beijing also thought highly of him; one prominent cabinet minister described him in a memorial during the Sino-French War (a memorial that was, further, re-issued by the emperor as a public edict to all officials in the empire) as "a great official who understands military affairs."<sup>58</sup> His reputation also reached beyond the government; a *jinsbi* scholar<sup>59</sup> in the capital named Liu Enpu also memorialized during the war to request that Liu be appointed to high office in Fujian province.

Despite his humble — and briefly anti-government — origins, therefore, Liu chose to cultivate his identity and reputation as a successful military commander *loyal to the dynasty*. This was also evident in his commitment to and successes in developing Taiwan as its first provincial governor in the years following the Sino-French War; he did not simply go back to Anhui and retire, as he probably wished. As Li Hongzhang noted, commanders in the Huai Army like Liu Ming-ch'uan would "worry about their country in the same way they worry about their family and regard matters far away as something near at hand."<sup>60</sup>

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<sup>56</sup> QSG bio quotation. Translation my own.

<sup>57</sup> CITE

<sup>58</sup> Shangyudang June 16, 1884.

<sup>59</sup> This was the highest civilian degree available in the empire — those who passed it were the intellectual elite and the pool from which the majority of central government officials were drawn.

<sup>60</sup> Chin 2002.

### Discussion of alter connections

Liu's primary "alter" social groupings — those concatenations of social ties and identity-forming experiences discussed above — formed a critical basis upon which he assessed the appropriateness of his orders from the emperor to retake Keelung from the French. In this simplest possible terms, he found his orders to be inappropriate in an altercentric sense because: 1) they drove directly against his own assessment of the strategic situation on Taiwan, an assessment that drew on his decades of highly decorated experience as a commander; and 2) they (in his own, aforementioned assessment) placed at risk the integrity of the empire to which he had dedicated himself as a loyal official.

While the throne was furious with Liu during the later phases of the war for disobeying its command, it appears to have belatedly come to agree with Liu's assessment of the strategic situation — after the war ended, Liu was demoted but allowed to remain in office, a mere slap on the wrist. He was then quickly promoted to governor of the newly incorporated province of Taiwan, a post in which he had great success and for which he remains revered in Taiwan to this day. Compare this response, for instance, to the imprisonment and exile that awaited Xu Yanxu after his choice to disobey. Liu therefore judged his order to be both altercentrically and egocentrically inappropriate, opening up the possibility that he would decide to disobey.

### Network Analysis

As laid out in my theory chapter, though, a case in which a commander judges her orders to be inappropriate and begins considering disobedience does *not* mean she will ultimately decide to disobey. Once an order is judged inappropriate, I argue, a commander's response is determined by the interaction of two factors: brokerage and command centrism. In this section I examine Liu's brokerage position, which improved markedly immediately prior to the Sino-French War and his decision to disobey.

While Liu moved in many networks, his primary affiliation throughout his career was with the Huai Army that Li Hongzhang had created. Most of the Huai Army commanders — of whom Liu quickly became one of the most prominent, as discussed above — were recruited in early 1862 in Anhui province. At that time, Zeng Guofan's Hunan Braves (the Xiang Army) were

struggling to defend Shanghai and the Jiangnan area from the Taiping rebels, so Zeng sent Li Hongzhang back to his home province to raise more troops.

Fortunately for my purposes here, Wang Erh-min, one of the foremost historians of the Qing military, compiled a listing of Huai commanders that in most cases includes the date on which they joined the Huai Army, any major awards they received, the date and circumstances of their deaths, and their home provinces. He lists a total of 425 individuals who served as Huai officers.<sup>61</sup> While few other records exist for many of these men, a large number went on to positions of prominence in both the military (武) and the civilian/literary (文) governmental hierarchies. These individuals were the most likely sources of aid for someone like Liu if he encountered political problems, and many of their work histories are recorded in the same database I used for Xu Yanxu's network in Chapter 2.<sup>62</sup>

I therefore take the list of Huai commanders as the possible universe of Liu Ming-ch'uan's political connections. Within this universe, I draw network connections between two commanders whenever they worked in the same province in the same year — a reasonable proxy, as I argue in Chapter 1, for the formation of an all-important face-to-face tie of Chinese *guanxi*.<sup>63</sup> While this is unlikely to capture all critical connections, it nonetheless suffices to give a rough picture of the structure of Liu's network as it evolves from his first entry into officialdom until his choice to disobey in the Sino-French War. [More on the conceptualization here?]

The database of prominent officials I use here has career information on 87 of the 425 Huai commanders that Wang Erh-min lists, 17 of which passed away prior to the Sino-French War.<sup>64</sup> Since an identity as a Huai commander is the scope condition for this network analysis, I do not code the commanders' entry into the Huai Army as a tie<sup>65</sup>; I only consider their previous positions and their next (concurrent) official positions as tie-forming experiences here. After

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<sup>61</sup> 淮軍志.

<sup>62</sup> The Academia Sinica 人名權威 database, which combines Chinese biographical sources for relatively prominent individuals throughout Chinese history.

<sup>63</sup> Citations here

<sup>64</sup> Individuals who passed away were removed from the network analysis shown here, since they would no longer have been able to provide some of the informational and support advantages upon which the usefulness of brokerage in my theory is based. The results are not substantively different even if the dead individuals are included in the data, however, which makes some sense given that some of the mechanisms through which brokerage works in my theory are ideational, and thus could persist even after an individual is “removed” from the network.

<sup>65</sup> Secondly, I exclude this tie because the exact positions of many commanders immediately after joining the Huai Army was unclear, as they were moving about fighting the Taipings. Any ties developed in their training are captured in my scope condition.

constructing a relational event-based database,<sup>66</sup> I draw network samples for 1875, 1880, and 1884 (the year of Liu's choice to disobey) to show how the structure of Liu's network evolved in the years before he chose to disobey the emperor.

The network statistics are reported in Tables 1-3 below. The critical prediction my theory makes here is that Liu's position in his network will have improved — he should have become more important as a broker between individuals in his network. Such an improved position would have led him to expect his ability to manage political challenges would also have improved. As the statistics and graphs both show, this is indeed the case. The shifts in this network between 1875 and 1880 are subtle, and Liu's position based on the statistics remains all but identical. However, the changes from 1880 to 1884 (the year in which Liu decided to disobey) are striking. As shown in Figures X, Y, and Z (1875, 1880 and 1884), the network becomes much more clustered in 1884, with several vague groupings taking shape. Various measures of the ways in which Liu's importance as a broker between individuals also show an improvement from 1880 to 1884. Most clearly, his brokerage score, which directly measures the degree to which Liu was a “go-between” for others in this network of prominent individuals, increased from 2 to 5. The effective size of his network also increased, showing that he had more connections in comparison with the rest of the individuals in this network – crudely, this can be considered a measure of Liu's “total impact.”<sup>67</sup> His constraint measure also dropped from 1880 to 1884, indicating that he was (slightly) connected to more individuals that were not connected to each other – again, this is a measure of how Liu straddled different groupings and came to be in a better position to help others.

[Expand discussion of statistical results here.] Finally, to ensure that this network conceptualization was not simply producing spurious results that do not represent the true social situation at the time, I also checked the position of Li Hongzhang, one of the most prominent officials in China at this time by any measure. His node is colored green in the diagrams appended to this chapter, and it is easy to see visually that he was, in accordance with his prominent position, tied to a large proportion of individuals in this network. This is as we should expect if the network is capturing important ties among these individuals.

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<sup>66</sup> With a total of 862 events. Note that, while the Huai network is somewhat larger than each of the *jinsbi* classes to which Xu became connected, it is spread over many years. Especially because this is a primarily military network — Xu's was primarily a civilian network — the Huai network loses many individuals to deaths over the years in which Liu was a member.

<sup>67</sup> Hanneman et al, *Introduction to Social Networks*, Chapter 9.

In addition to simply being promoted before the war, therefore — which could just as easily have placed Liu in a structurally isolated position — Liu's structural position within the network of Huai commanders improved markedly just before his decision to disobey, as my theory predicts. Like Xu Yanxu, Liu Ming-ch'uan became better positioned to serve as a broker just before the war, which had important effects on his response to his orders. Based on my theory, it also predicts that he would neither have exited the military in response to inappropriate orders nor chosen to simply obey. His improved position improved his social power, which both made him disinclined to give it up by exiting the military and also gave him more confidence in his ability to disobey without facing severe consequences.

### Command Centrism

[This section is in development; for the time being I present an annotated outline of the arguments I will combine to show that Liu was command centric during this war.]

- 1) His repeated willingness to come out of “retirement” to help the empire in crisis – this often required a personal request from the emperor and some degree of enticement, but he never refused. Indicates strong identification with the empire and its needs.
- 2) He did so in the Sino-French War despite illness, further demonstrating his willingness. (Illness was a common claim in this time period; many officials successfully used it to evade duties they wished to avoid. See the case of Bao Chao in the next chapter, who resisted calls to service for almost a year even as Liu Ming-ch'uan was fighting on Taiwan.)
- 3) He was a “Li [Hongzhang] man,” and had remained utterly loyal to his patron throughout his career. During the Sino-French War, Li Hongzhang was himself utterly loyal to the throne, despite his semi-independent army and political prominence. Liu's loyalties and identification therefore pointed him directly to the throne; he was centered on command in this respect.
- 4) He didn't simply silently refuse to obey his orders, as Xu Yanxu more or less did. Liu submitted a detailed justification of his choice – a choice that, in retrospect, most observers agree was better than the orders he had been given. He was working for the empire, rather than simply disengaging from command and pursuing his own course.

- 5) Post-hoc evidence: he remained on Taiwan after the war to take up a governorship, despite his illness and previous attempts to “retire” at home in Anhui. By all accounts, he committed himself fully to this work and is known as the island’s great modernizer.

### Alternative Explanations

The usual alternative explanations for disobedience also do not apply neatly to Liu Ming-ch'uan's case. He was a highly decorated commander with many years of experience and success behind him, and he had further received special permission to communicate with the emperor (indicating an ability to write intelligently and with decorum), so arguments that lax training and discipline led to his choice to disobey are unconvincing. Similarly, his position was high enough that he was unlikely to have faced personal privation or harsh physical conditions that would have spurred him to disobey — he was also personally wealthy, further undermining the possibility that his physical conditions led him to disobey. Arguments that civilian intervention spurred him to disobey also do not apply here, so far as the record shows; similar to Xu Yanxu, the highest civilian authority in the empire was in fact issuing the order that he chose to disobey.

Some elements of intramilitary competition did exist in this case, though. Liu Ming-ch'uan was in desperate need of additional men and supplies on Taiwan, and the emperor repeatedly urged Zeng Guoquan in Guangdong to send aid to him. (He never did; see the Zeng Guoquan case in Chapter 4.) However, for theories of intramilitary competition to explain a case of disobedience, the disobedient act must plausibly further the transgressor's interests vis-a-vis the other part of the military she is competing with. In this case, it is hard to see why what was essentially a tactical decision to retreat and defend Tamsui would have undermined an official across the Taiwan Strait in Guangdong.

Finally, while survival pressure was certainly an issue for Liu on Taiwan, as discussed above, my theory actually incorporates such pressures into a more general framework for explaining when disobedience is most likely. Liu's assessment that his survival was at risk if he obeyed was one component in his assessment of his orders' egocentric appropriateness — in conjunction with the threat to his reputation if Taiwan had been lost, the survival threat helped him reach the conclusion that his orders were egocentrically inappropriate. I argue in this dissertation that survival pressure — which in this case can also be conceived of as strategic pressure — was,

however, only one among many considerations in Liu's decision to disobey. Strategic imperatives and survival pressure are, for individual military commanders, only part of the story here.

### Conclusion

Liu was a man of exceptional talent and, "Given his humble background, [his] rise in the world was nothing short of meteoric."<sup>68</sup> He was also, in one telling, "free from the traditional conservatism and self-interest which characterized many Chinese officials of his time. Moreover he was too liberal-minded and practical to be moved by prejudice against Western culture."<sup>69</sup> While many such assessments are probably overblown, this analysis of Liu's background, context, and decision-making during the Sino-French War support the characterization of him as a very skilled commander with an unusually independent background. He determined that his orders were inappropriate to his situation on Taiwan and that his political position had substantially improved just before the war, both of which led him to decide to disobey a direct order from the emperor. His case therefore provides evidence that my theory travels to individuals like him from purely military backgrounds, as well as to scholar-soldiers like Xu Yanxu. In the next chapter, I further test my theory on one of Liu's Huai colleagues who held high office in Guangdong during the war: Zeng Guoquan.

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<sup>68</sup> *Spirit of the Military*, p. 53.

<sup>69</sup> ECCP p. 528



Table 1: Network Analysis Statistics, 1875

1875

Density	0.708
Triad Transitivity	0.313
Clustering Coefficient (overall)	2.382

Liu's Ego Stats

Broker	2		
Mean degree	0.667		
Clustering coefficient	0.333	nPairs: 3	
Degree	3		
Network effective size	2.469		
Efficiency	0.823		
Constraint	0.508		
Hierarchy	0.199		
Density	0.333	(Avg: 0.708)	
Degree centrality (Freeman)	3	ndegree: 0.063	
Degree centrality (Bonacich)	768.165	normalized: 0.077	
Closeness (reach)	23.667	normalized: 0.483	Mean: 26.41 SD: 7.68
Eigenvector centrality	0.011		Mean: 0.1 SD: 0.102
Betweenness (Freeman)	1.924	normalized: 0.171	Mean: 19.347 SD: 26.482
Flow betweenness	24.537	normalized: 1.088	Mean: 43.198 SD: 30.673

Table 2: Network Analysis Statistics, 1880

1880

Density	1.086
Triad Transitivity	0.359
Clustering Coefficient	3.084

Liu's Ego Stats

Broker	2		
Mean degree	0.667		
Clustering coefficient	0.333	3 nPairs	
Degree	3		
Network effective size	2.93		
Efficiency	0.977		
Constraint	0.412		
Hierarchy	0.256		
Density (egonet)	0.333	Avg deg: 0.667	
Degree centrality (Freeman)	3	nDegree: 0.059	
Degree centrality (Bonacich)	792.512	normalized: 0.052	
Closeness (reach)	26.167	normalized: 0.503	
Eigenvector centrality	0.07	nEigenvector: 0.986	Mean: 0.097; SD: 0.099
Betweenness (Freeman)	0.428	normalized: 0.034	Mean: 22.692; SD: 38.148
Flow betweenness	12.885	normalized: 0.505	Mean:54.534; SD: 51.340

Table 3: Network Analysis Statistics, 1884

1884

Density	1.067
Triad Transitivity	0.419
Clustering Coefficient	3.846

Liu's Ego Stats

Broker	5		
Mean degree			
Clustering coefficient	0.905	21 nPairs	
Degree	5.429		
Network effective size	4.414		
Efficiency	0.631		
Constraint	0.386		
Hierarchy	0.359		
Density	0.905		
Degree centrality (Freeman)	7	nDegree: 0.123	
Degree centrality (Bonacich)	463.031	normalized: 0.027	
Closeness (reach)	30.667	normalized: 0.529	
Eigenvector centrality	0.003	nEigenvector: 0.458	Mean: 0.076 ; SD: 0.107
Betweenness (Freeman)	17.443	normalized: 1.093	Mean:29.741 ; SD: 44.680
Flow betweenness	70.232	normalized: 2.20	Mean: 64.873; SD: 56.326

Figure X: 1875 Network. Liu is number 1720 in red on the right side of the graph; Li Hongzhang is in green near the center. Liu, the image shows, was not an important broker here;

indeed, he was on the edge of a relatively uniform web of connections among other officials who had worked together more often. In short, he was marginal in terms of his personal connections with other officials drawn from the Huai Army.

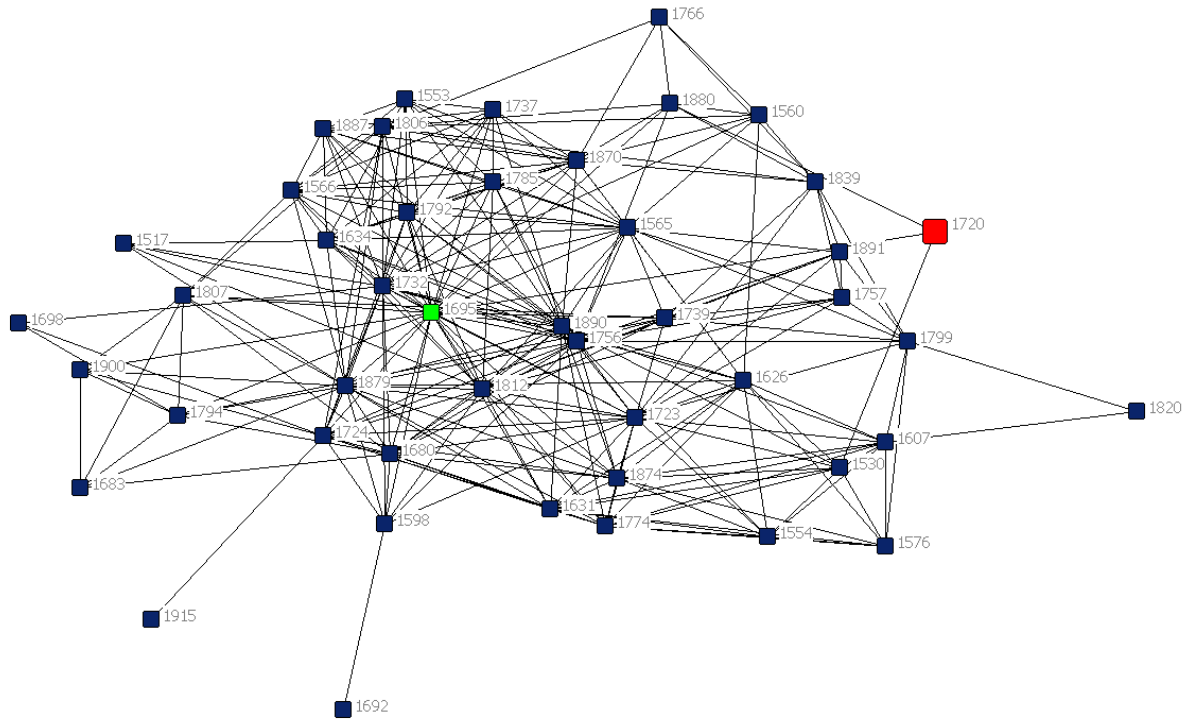


Figure Y: 1880 Network. Just like in Figure X, Liu is number 1720 in red at the right of the graph, and Li Hongzhang is in green near the center. He is still peripheral in this network structure, with no brokerage role to speak of.

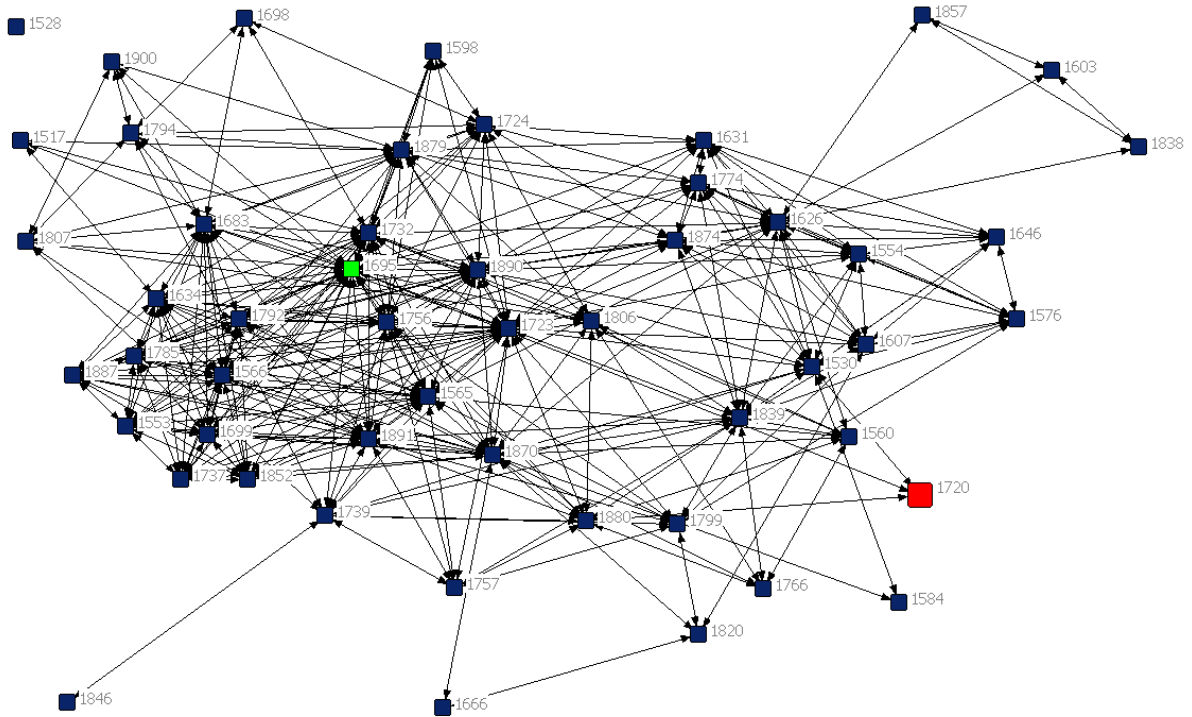


Figure Z: 1884 Network. This network is much more differentiated than the previous two; in this case, two or possibly three clusters of individuals have been to emerge. This diagram shows how Liu's position, still the red-colored node number 1720, is somewhat improved. Li

Hongzhang again is at the center of everything in green. [Further analysis of these groupings is pending.]

