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# How did the Weaker Actor Defeat the Stronger Actor? Koguryō's War with Sui (612–614) Revisited

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## ABSTRACT

This study will explain Koguryō's war with Sui from the perspective of the puzzle of weaker actor victory in asymmetric warfare. The war was asymmetric in terms of relative material power, i.e., conventional military capabilities. In asymmetric warfare, superior leadership is vital for victory, and Koguryō's King Yōngyang showed this. Koguryō enjoyed success in the war, because it employed an effective military strategy in which it avoided direct warfare that played to Sui's superior numbers and adopted indirect warfare designed to protract the war and wear down its enemy. The people of Koguryō were much more motivated to fight than their Chinese counterparts. Koguryō's victory demonstrates that non-material factors are no less important than material factors in asymmetric warfare and that specifically superior strategy and strong resolve form the crucial factors for the weaker actor.

**Keywords:** asymmetric warfare, Koguryō, Sui, strategy, resolve

## Introduction

In 589, after some 300 years of internal division, China was once again reunited under the Sui 隋 dynasty (581–618).<sup>1</sup> At this time, the three Korean kingdoms of Koguryō 高句麗 (37 BCE–668 CE), Paekche 百濟 (18 BCE–660 CE), and Silla 新羅 (57 BCE–935 CE) were involved in a protracted struggle for supremacy. In particular, the reunification of China had a profound impact on Koguryō, which occupied the northern section of the Korean peninsula and the part of Manchuria east of the Liao River directly bordering China. The powerful Sui dynasty was determined to bring all East Asia, including Koguryō, under its direct control. Traditionally in relations between larger and smaller states, the larger state has inevitably sought to use its greater capacity to subjugate the smaller one (Womack 2012, 46; Paul 1994, 5).

Having rejected the Sui demands for direct domination and well aware of the Sui intention to invade it in the future, in 598 Koguryō mounted a preemptive attack. Sui Emperor Wen 隋文帝 (r. 581–604) responded with a retaliatory counterattack. However, both sides failed to achieve their objectives. In 612 Sui

Emperor Yang 隋煬帝 (r. 604–618), having mobilized a huge military force said to number some 1,130,000 men, launched a “punitive expedition” against Koguryō. But this invasion of Koguryō ended in failure.

In 613, Emperor Yang again endeavored to conquer Koguryō, this time with an invasion force of some 300,000 men. While proceeding against Koguryō fortresses on the Liaodong frontier, he learned that a rebellion was under way in the heartland of the Sui Empire. This news brought the emperor’s second Koguryō campaign to an abrupt end.

In 614, amid persistent popular revolts, the Chinese emperor launched a third invasion of Koguryō. This time, Koguryō’s King Yōngyang 嬰陽王 (r. 590–618) sought to end the war with Sui by means of diplomacy. When Koguryō sued for peace, Emperor Yang, who was preoccupied with a worsening domestic situation in China proper, voluntarily withdrew his troops, and the war between Koguryō and Sui was finally brought to an end. The failure of the Chinese Sui empire to conquer Koguryō was a major factor contributing to that dynasty’s demise in 618.

Much has been written by Korean scholars regarding the major developments of Koguryō’s war with the Sui dynasty, particularly regarding the 612 Battle of the Salsu River 薩水 (present-day Ch’ŏngch’ŏn River in North Korea), and the historical implications of the war in Korean history (Kukpangbu Ch’ŏnso P’yŏnch’an Wiwŏnhoe 1992; No Taedon 1999; Sŏ Inhan 2007; Sŏ Yŏnggyo 2015). Western scholarship on Chinese military history, such as Gabriel and Boose (1994, 462–87) and Graff (2002, 138–204), has given relatively objective descriptions of the war between Koguryō and Sui, depicting China’s contemporary conditions, such as the size of the population, the total strength of the army, military organization, and weapons employed in the fighting. Western scholarship on Sui history has treated Emperor Yang’s Koguryō campaign as a crucial part of the Chinese empire’s history, specifically emphasizing its aims and outcomes. Wright (1978, 182–97) noted that the Chinese emperor’s expedition against Koguryō aimed to assure Sui’s geopolitical dominance of the whole of East Asia and that his costly campaign brought the Sui dynasty to ruin. Xiong (2006, 53–71, 214–20) has claimed that Emperor Yang’s invasion of Koguryō was driven by his ambition to bring its territory under Sui’s direct rule and that his failed military actions against the Korean kingdom were a mortal blow to the fate of the Chinese empire. Kim Poksun (1986, 95–108), Pak Kyŏngch’ŏl (1988, 139–81), Pak Hŏn (1996), Sŏ Inhan (2005), and Asmolov (1992, 103–16) have examined Koguryō’s military capabilities in order to determine the factors in the Korean success. Current Chinese scholarship largely explains Koguryō’s wars with the Sui and subsequent Tang 唐 (618–907) empires as civil wars among the Chinese rather than as international wars between sovereign, independent states in East Asia, thus justifying the invasions of Koguryō

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<sup>1</sup> This study uses the modern terms of “China (Chinese)” and “Korea (Koreans)” to indicate the premodern regions and polities that we now recognize as constituting “China” and “Korea.”

(Pak Kyöngch'öl 2004, 57–73).

This study intends to explain Koguryö's war with Sui from the perspective of asymmetric warfare between a strong actor and a weak actor in a specific dyadic context where power, specifically military strength, differs.<sup>2</sup> In other words, it aims to understand the war between the Koguryö kingdom and the Sui empire in terms of the puzzle of weaker actor victory in asymmetric warfare. By so doing, it adds a new dimension to understanding the Koguryö-Sui war.

### **Koguryö as the Weaker Actor**

At the time of Koguryö's war with Sui, the Chinese empire was a “principal power,” while the Korean kingdom was a “lesser power.” Sui was, by any standard, vastly superior to Koguryö in terms of national strength. Because it was in an overwhelmingly inferior position to Sui with regard to conventional military capabilities, Koguryö had to undertake asymmetric warfare with the Chinese empire (Kim 2016, 177–78).

Asymmetric warfare may be defined as a military confrontation between belligerents—usually states—in which the power resources differ significantly. In defining relative power capabilities, power may be broadly understood as overall material power in terms of resources. Power includes demographic, military, and economic factors; that is, the size of the active population, the total strength of armed forces and strength of weapons systems, and economic capacity, understood here to include gross national product (GNP), industrial capability, and technological prowess, in both their quantitative and qualitative dimensions (Paul 1994, 22). In short, power is conventionally understood as material power.

As to the material power ratio between the stronger actor and the weaker actor that would define asymmetric warfare, especially at its outset, international relations theorists suggest their own different distribution ratios. Paul (1994, 37) puts it at 2:1 or more, while Arreguin-Toft (2001, 96; 2005, 3, 43) uses 5:1 or more. Regardless of which ratio is employed, asymmetric warfare is waged by the stronger and weaker actors in terms of aggregate material power, specifically that of population and armed forces.

Because of the significant disproportion of national power or power resources between Sui and Koguryö, the war between the two states was wholly asymmetric. Standard Chinese and Korean history texts show that the material power of Sui and Koguryö in terms of their population and armed forces was heavily in favor of Sui.

As in other parts of the world throughout history, the population censuses and registrations were normal instruments of public administration both in traditional China and Korea, especially for purposes of taxation. Two figures relating to the population are found in both states: numbers of households (“doors”) and persons (“mouths”), although in many cases one figure or the other is lacking (Durand 1960, 209).

<sup>2</sup> Since premodern warfare had almost the same characteristics as modern warfare, we can usefully apply modern theories of warfare back to traditional East Asian history.

Despite considerable gaps in statistics in extant historical documents, several scholars have employed the results of the Chinese census of 609 (Durand 1960, 222). Although the local records show only the numbers of households, totals of both persons and households are recorded for the Sui empire as a whole: 46,019,956 persons and 8,907,936 households, with an average of 5.2 persons per household (Wei Zheng 1955, 29: 808; Pulleyblank 1961, 291). Bielenstein (Durand 1960, 224) rejected these figures and instead held that the Sui dynasty had a population of some 54,000,000 in 9,067,993 households with approximately six persons per household. Thus, immediately before the outset of the war between Koguryō and Sui the total population and households of the Sui empire appear to have numbered some 46–54 million and 8.9–9.0 million respectively.

There is no statistical evidence of the size of the seventh-century Koguryō population. Remaining historical records give only the number of households at the time of Koguryō's downfall in 668 as more than 690,000 (Kim Pusik 1973, 22: 11a; Ouyang Xiu and Song Qi 1955, 219: 6197). This historical record suggests that the ratio of households between Sui and Koguryō is about 13:1. Since the number of 690,000 represents the Koguryō households counted after the war with the Tang empire, we can assume that immediately before the outbreak of war with Sui, Koguryō probably had more households. Regardless, viewed from the standpoint of the relative numbers of households and corresponding population, Koguryō was under heavily negative asymmetric circumstances vis-à-vis Sui dynasty China.

There was also a great difference between Sui and Koguryō in terms of military strength. Historical records of the two states report the total strength of Emperor Yang's army for the expedition against the Korean kingdom in 612 as 1,133,800 combat troops (Wei Zheng 1955, 4: 81; Kim Pusik 1973, 20: 5a). In view of the contemporary circumstances of the Chinese empire, this figure is not very reliable. Graff (2002, 148) questions this figure on two grounds: First, the number of combat troops does not reconcile with the organizational structure of the Sui army; second, the mobilization of such a massive number of men under the *fubing* (府兵; soldiers of the headquarters) militia system would have greatly disrupted Sui's agricultural economy and led to an inability to feed the large armies thus created. Graff (2002, 149) believes that a figure half that of the stated 1,133,800 is much more plausible for the Sui forces against Koguryō in 612. Indeed, even that may be too high. The Tang historians who wrote the official history of the Sui dynasty may have greatly inflated the size of Emperor Yang's armies so as to highlight his incompetency and thereby justify the replacement of Sui by Tang. Regardless of the precise size, it is certain that Emperor Yang mobilized a huge army for his expedition against Koguryō and that it greatly outnumbered the army of his opponent.

Little is known about the organization of Koguryō military forces, but some information can be gleaned from Silla, Paekche, and Japanese records. It appears that in Koguryō all adult males were required to undergo some military service. The king personally commanded five "divisions" in the capital. These totaled some 12,500 men, and most were cavalry. Other detachments, ranging from 21,000 to 36,000 troops, were stationed in the kingdom's five provinces and commanded by

the various provincial governors (Kim 2012, 61–62; Asmolov 1992, 107–08).

The Koguryō military system allowed the kingdom to maintain an army of some 50,000 men. In extraordinary cases, a larger mobilization was possible, with the army able to expand to some 300,000. For example, the *Xin Tangshu* 新唐書, an official history of the Tang empire, records that “in the past Koguryō in its heyday resisted Tang with its force of 300,000 strong” (Ouyang Xiu and Song Qi 1955, 219: 6181). The *Samguk sagi* 三國史記, Korea’s oldest extant history, reports that “[in 645] Ko Yōnsu 高延壽, Northern *Yoksal* 褥薩, and Ko Hyejin 高惠眞, Southern *Yoksal*, relieved the Ansi 安市 fortress from the Tang siege with their combined Koguryō-Malgal (靺鞨; Mohe in Chinese) forces of 150,000 strong” (Kim Pusik 1973, 21: 8b; Ouyang Xiu and Song Qi 1955, 219: 6191). Koguryō organized its military forces based on conscripts drawn from the general population, but, as with the numbers for Sui, those of Koguryō are also suspect. Whatever the actual number, simply taking Koguryō’s much smaller population into account, it can be conjectured that its troop strength was certainly far less than the number the Chinese empire could field.

Greater power, especially material power, generally produces victory in war. As Napoleon Bonaparte is said to have put it, “God tends to favor the bigger battalions” (Tucker 2009, 1: xxii). History shows, however, that asymmetric warfare has not always ended with the stronger actor achieving victory. Arreguin-Toft (2001, 93–96; 2005, 2–5) concludes that in the course of the last 200 years, when the overall power ratio is 5:1 or more in favor of the stronger side, the weaker powers have been victorious in some 30 percent of all asymmetric wars. Non-material factors are no less important than material factors in determining the outcome of wars.

Because relative material power does not necessarily determine success or failure in asymmetric warfare, in order to define power in war one also must take into account structural, relational, and behavioral aspects. Such intangible and subjective factors as strategy, leadership, morale, and resolve constitute significant determinants of military power. Indeed, although convincing measures for these non-material factors are generally unavailable, they must be included in the calculation of overall power capability. Koguryō was in fact superior to Sui in non-material factors. The following sections will explain the Korean kingdom’s victory over its much stronger adversary mainly from this perspective.

### **King Yōngyang’s Leadership in Diplomatic Maneuverability**

As for the factors behind the failure of the Sui campaigns against Koguryō, military historians have stressed Sui logistical difficulties, especially regarding food. Thus, Graff (2002, 155–56) argues that Sui’s Koguryō expedition of 612 was unsuccessful because the large Sui army could not be fed once it had advanced deep into Koguryō territory. Gabriel and Boose (1994, 484–85) claim that in the absence of control of the sea enabling operations on exterior lines, the Sui army’s ever-lengthening land-based supply line prevented it from capturing P’yōngyang. Indeed, Koguryō’s rough terrain created serious difficulties in supplying Sui forces with military necessities. Also, Koguryō’s terrain, consisting mostly of hills and

mountains separated by deep, narrow valleys, did not favor Sui's large army.

King Yōngyang's adroit leadership compounded these logistic problems significantly. In asymmetric warfare, external support influences outcomes in favor of the weaker actor (Singer and Small 1968, 247–86; Ostrom and Hoole 1978, 115–36; Siverson and King 1980, 1–15; de Mesquita and Singer 1973, 237–80). While Emperor Yang failed to seek allies through diplomacy, King Yōngyang, who had extraordinary insight into the geopolitical situation in East Asia, successfully created a security environment that favored Koguryō. His diplomatic reach extended to Japan, the Korean kingdom of Paekche, northern China, and the nomadic Eastern Tujue 突厥 (a Turkish people). Specifically, he was successful in driving a wedge between the Eastern Tujue and Sui, which would exacerbate the Chinese empire's logistical difficulties.

With war impending, Sui took the initiative in seeking to secure allies. In 594, Emperor Wen dispatched an envoy to Silla, Koguryō's rival state on the Korean peninsula, and invested its ruler Chinp'yōng 眞平王 (r. 579–632) as "King of Silla" (Kim Pusik 1973, 4: 14a). In return for this gesture, in 608 King Chinp'yōng agreed to participate in a pincer attack on Koguryō (Kim Pusik 1973, 4: 15a). In 611, while Sui Emperor Yang prepared his forces to invade Koguryō, the Silla king again indicated his intention to join the campaign (Kim Pusik 1973, 4: 15a). Silla attempted to assist Sui by drawing off some of the Koguryō forces from the Liaodong region to the Silla frontier. Indeed, a Silla that threatened the southern frontier would have constituted a grave threat to Koguryō.

King Yōngyang sought to counter the possibility of a Silla invasion by winning Japanese support through closer economic and cultural ties. As a result, several Japanese military activities against Silla prevented the Silla court from sending its main force to the northern border with Koguryō. In 591–595, the Japanese government stationed some 25,000 troops in present-day Fukuoka in Kyushu, which was in close proximity to Silla. In 600, the 10,000-strong Japanese army sailed to Silla and attacked its five fortresses on the south coast. In 601, another military action against Silla was under discussion in the Japanese court. In 602, the Japanese court dispatched 25,000 troops to Kyushu (Sō 2015, 41). Japan's military confrontation with Silla turned out to be one of Koguryō's most important strategic assets.

King Yōngyang also sought the support of Paekche, another Korean kingdom. He proposed that Paekche join in a pincer attack on Silla while the Japanese tied down Silla troops in the southeastern part of the Korean peninsula. Paekche regarded Silla as an enemy since its King Sōng 聖王 (r. 523–554) had been killed in 554 by Silla King Chinhūng 眞興王 (r. 540–576), and it accepted King Yōngyang's proposal without hesitation. Paekche, as Koguryō's strategic partner, attacked Silla in 602, and a fierce battle occurred at the Amak 阿莫 fortress, a strategic Silla stronghold in the fortified zone on the contested border between the two kingdoms (Kim Pusik 1973, 4: 14b; 27: 3b). Although Paekche's attack on the Silla fortress ended in its defeat, Silla was forced to strengthen its defenses in the border area. King Yōngyang did not miss this rare opportunity to weaken Silla's military strength. In 603, Koguryō forces attacked Silla's Pukhan

Mountain 北漢山 fortress in today's Seoul, an important strategic point in the kingdom's northwestern frontier. The attack, however, ended in the retreat of the outnumbered Koguryō troops (Kim Pusik 1973, 20: 2b; 4: 14b). In the second month of 608, Koguryō forces invaded Silla's northern frontier and took captive 8,000 Silla citizens. Two months later, they captured Silla's Umyōng Mountain 牛鳴山 fortress, dealing a serious blow to Silla's northwestern defenses (Kim Pusik 1973, 20: 3a; 4: 15a). In 611, the Paekche army attacked Silla's Kajam 椴岑 fortress on the border between the two states. When the Silla fortress fell, many Silla inhabitants were killed or taken prisoner (Kim Pusik 1973, 4: 15b). Finding itself under heavy military pressure from Japan and Paekche, Silla was not able to assist the Sui military campaign against Koguryō.

The Sui dynasty was the successor to Northern Zhou 北周 (556–581). In 577, Northern Zhou unified northern China by destroying Northern Qi 北齊 (550–577) in eastern China, capturing the area in which today's Beijing is situated. Northern Qi bordered Koguryō and had a strong hatred for Northern Zhou, which had conquered their state, and for the Northern Zhou's successor dynasty of Sui. Koguryō took advantage of this and worked to strengthen anti-Sui sentiments among former Northern Qi people.

Eastern Tujue ruler Qimin 啓民 qaghan (khan) had established himself as the undisputed leader of his nomadic land thanks to Sui support, and if Sui had been able to utilize the numerous and effective Tujue cavalry in its invasion plans, it could have dealt a fatal blow to Koguryō. In 611, however, the pro-Sui Qimin qaghan died in Luoyang 洛陽 while on a visit to the Sui capital to pay tribute to Emperor Yang. He was succeeded by his son, Shibi 始畢 qaghan, which afforded Koguryō a rare opportunity to destroy the Sui-Tujue alliance, for Shibi qaghan did not support the Sui emperor as strongly as his father had. The Koguryō court now sought every possible means to prevent a military alliance between the Tujue and Sui.

In order to prepare for a Sui invasion, Koguryō constructed its mountain fortresses so as to make them mutually supporting. The hilly terrain of southern Manchuria and the northern Korean peninsula made Koguryō's mountain fortresses, which were made out of stone, almost impregnable. Yet, if mobile enemy cavalry could contain Koguryō's support forces between the mountain fortresses, the fortresses could be isolated and taken. In order to prevent Sui from utilizing the Tujue cavalry toward this end, King Yōngyang sent an envoy to Shibi qaghan to remind the new Eastern Tujue qaghan of Sui's divide-and-conquer policy regarding the Tujue. The Koguryō envoy warned the Tujue qaghan that the Sui court would put his younger brother on the throne of the khanate. This diplomatic effort was successful, for Shibi qaghan discontinued his tributary relationship with Emperor Yang (Sō 2015, 32). Indeed, he would emerge as a most dangerous foe for the Chinese emperor. King Yōngyang's diplomatic maneuvering foiled Emperor Yang's hopes of securing the Eastern Tujue cavalry, with the consequence that in the invasion of Koguryō, Sui would inevitably suffer from logistical difficulties.

Without the mobile and self-sufficient Tujue cavalry,<sup>3</sup> Emperor Yang conscripted large numbers of troops and laborers from the Sui peasantry. This

created serious logistical problems. His large army required great quantities of supplies. To transport the necessary food, he had to mobilize an enormous number of laborers and animals who themselves would require considerable quantities of provisions. Sui's invasions of Koguryō were caught in a vicious circle in which supply necessitated supply. Thanks to Koguryō pressure, Sui's logistical system would reach the breaking point. Sui's failures in logistics stand in sharp contrast with its successor state of Tang. The Tang empire was finally able to conquer Koguryō in 668, thanks in large part to its alliance with the Korean state of Silla, which provided vital logistical support.

Emperor Yang could not punish Shibi qaghan when he did not comply with his request for military assistance. If he was even slightly threatened by the Chinese, he might join with the Koguryō kingdom. If Shibi qaghan threatened the Sui capital while the main Sui army was at war with Koguryō, it might be a mortal blow to Emperor Yang. In order to protect his capital, the emperor would have to send a substantial force back to China. Emperor Yang's inability to conclude alliances against Koguryō would significantly reduce his chance for victory. From the perspective of Koguryō, together with its commanders' strategy designed to counter that of Sui, King Yōngyang's superior leadership represented by his diplomatic demarches contributed greatly to the Korean kingdom's victory in its war with the Chinese.

### **Koguryō's Indirect Strategic Approach**

Victory of the weaker actor in asymmetric warfare may be explained in various ways. In particular, the weaker actor can win in asymmetric warfare when it employs the correct strategy. Indeed, different strategic interactions may produce different outcomes in asymmetric warfare, independent of the relative power of the stronger and weaker actors.

In order to better understand strategic interactions in warfare, one must first define "strategy" from a military perspective. The term "strategy" is derived from the Greek "stratēgia," meaning generalship. Generally speaking, strategy in war is held to mean the art of winning the war itself. It is distinguished from tactics, which is defined as the art of achieving victory in battles. Strategy refers to a state's overall plan for using military means, especially armed forces, to attain its objective in war. As to the significance of strategy in warfare, Biddle (2004, 3) persuasively argues that "assessments of focusing solely on material [power] will radically overestimate well-equipped but poorly handled armies." He and Arreguin-Toft (2012, 646) make the same point that the way military forces are utilized is a better predictor of outcomes in war than the numbers of soldiers deployed or how well they are equipped.

Several studies emphasize that there are close correlations between strategic interactions and outcomes in asymmetric warfare. Stam (1996) argues that the interaction of actors' military strategies plays an important role in determining

<sup>3</sup> Part of the success of pastoral nomads in warfare resulted from the fact that they solved the problems of logistics by taking their food, herds of animals, with them.

the outcomes in war. Biddle (2004) provides convincing evidence that strategy mediates the relationship between material strength and outcomes in war. Arreguin-Toft (2005) maintains that the stronger actor loses in asymmetric warfare when it employs the incorrect military strategy in relation to its weaker opponent's strategy. In fact, in the absence of strategy, only material strength may determine war outcomes. An effective strategy is of immense importance to the weaker actor in asymmetric warfare. Indeed, the weaker combatant seeks to employ the strategy that will offset its own deficiencies and exploit its stronger opponent's innate weaknesses.

Conventional warfare takes two forms in both offense and defense: "direct warfare" and "indirect warfare." This study defines direct warfare as an attack or defense that aims to destroy the enemy's physical capacity to resist or attack. The direct type of warfare seeks to meet the enemy force and bring about its collapse in one decisive battle or series of battles. This study defines indirect warfare as an attack or defense that seeks to wear down the enemy's will to resist or attack and weaken its military might. The indirect type of warfare seeks to avoid the enemy's strength and probe for weakness. Indeed, the ancient Chinese military strategist Sunzi 孫子 (2015, 55) had said that "the way [of winning asymmetric warfare] is to avoid what is strong and to strike at what is weak." Eric Muraise likens direct warfare to boxing and indirect warfare to judo (Charney 1994, 378).

Direct warfare includes wars of attrition, blitzkrieg (lightning warfare), a strategy of limited aims as offensive strategies and static defense, forward defense, defense in depth, and mobile defense as defensive strategies (Mearsheimer 1983, 29–30, 33–43, 53–58). Indirect warfare uses the tactics of the feigned retreat that can rapidly turn into a fresh advance, of raiding parties that retire as soon as their immediate aim has been achieved, and of harassing actions that include hit-and-run attacks, repeated ambushes, and joining battles only when the weaker actor has superior resources or a high chance of victory. Indirect methods of warfare also include guerrilla warfare and the tactics of "extermination campaigns" in which the defender retires within fortresses, with the enemy left with nothing but empty countryside (Charney 1994, 378–79). It also includes psychological warfare that may break the enemy's morale. In its war with Sui, Koguryō employed all these methods of indirect warfare against its Chinese opponent.

The stronger actor instinctively prefers direct warfare, because it favors superiority in military strength. Therefore, the weaker actor must employ indirect warfare. As an instance of the weaker actor, Mao Zedong argued that "defeat is the inevitable outcome where native forces fight with inferior weapons against modernized forces *on the latter's terms*" (quoted in Mack 1975, 176, emphasis in original). Mao's maxim suggests that when the weaker actor fights its stronger opponent, the former should follow the opposite strategic interactions with the latter; for instance, indirect vis-à-vis direct.

Direct and indirect interactions may produce different outcomes in warfare. Building on Arreguin-Toft's logic (2005, 34–35), same-approach interactions (direct-direct or indirect-indirect) may lead warfare to be resolved in proportions to the power applied and imply defeat for the weaker actor, because there is nothing to

mediate or deflect the stronger actor's power advantage. By contrast, opposite-approach interactions (direct-indirect or indirect-direct) may cause warfare to be protracted and secure victory for the weaker actor, because the weak side refuses to engage where its stronger adversary has the relative power advantage. In protracted warfare, time favors the weaker actor, because what Mack (1975, 175–200) has identified as “political vulnerability” may operate against the stronger actor.

It is obvious that there is a significant correlation between strategic interactions and asymmetric warfare outcomes. When actors at war make the same or similar strategic interactions, relative power predicts the outcome. The stronger actor will win quickly and decisively. On the other hand, when the warring sides engage in opposing strategic interactions, relative power may be irrelevant to warfare outcomes, and the weaker actor will stand a better chance of winning. For this to hold true, the precondition must be met that both actors adhere to the same strategic approach throughout the course of the war. Arreguin-Toft (2005, 43–44) argues that most asymmetric wars contain a single strategic interaction from start to finish.

In its asymmetric war with Sui, Koguryō's goal was national survival. The Koreans clearly realized that the Chinese army was too large for them to meet in pitched battle and win. Therefore, Koguryō's strategy was to destroy the will of the Sui leadership to continue the war, as opposed to the Sui strategy of pitched battles to destroy its opponent's military strength. Koguryō commanders, especially Ūlchi Mundōk 乙支文德 (dates unknown), depended on indirect warfare. Koguryō defenders would retire to fortresses and make a stand there, rather than engage in pitched battle. So long as Koguryō fortresses, specifically the Koguryō line of fortifications on the Liao River, lay astride Sui's lines of operation, Sui could not put sufficient forces into the heart of Koguryō. Koguryō's generals would employ scorched earth tactics that would exhaust their enemy and weaken his morale. They planned to lure enemy forces deep into Koguryō territory and then employ their highly mobile cavalry to continually harass the Sui forces. They also employed the offer of false surrender to cause Sui to let down its guard. In addition, Koguryō waged psychological warfare to provoke enemy commanders into making tactical errors.

By the first month of 612, Sui Emperor Yang was ready to launch a massive military campaign against Koguryō. Although the numbers are suspect, Sui records give the total strength of the forces mobilized for the expedition as 1,133,800 combat troops, with approximately twice that number serving in logistical support roles (Wei Zheng 1955, 4: 81; Kim Pusik 1973, 20: 5a). Sui boasted that the invading force numbered two million, but this may simply have been an example of psychological warfare to terrify the Koguryō court into submission.

By the third month of 612, the Sui army, which had first assembled at the Zhuo Commandery 涿郡 (the area of present-day Beijing), arrived on the west bank of the Liao River, the first line of defense for Koguryō forces. After nearly three weeks of combat they succeeded in crossing the river. Sui then won a pitched battle against a smaller Koguryō army outside the Liaodong fortress, and the outnumbered Koguryō defenders withdrew into the principal advance Koguryō

base in the Liaodong region. Emperor Yang then laid siege to the Koguryō fortress (Wei Zheng 1955, 4: 82; Kim Pusik 1973, 20: 5b–6a).

The Chinese attacks on the Liaodong fortress failed. The Koguryō defenders effectively utilized the Sui army's most vulnerable point: Sui had to bring their Koguryō campaign to an end before the summer rainy season, when its massive army would fall prey to seasonal heavy rains that would impede logistical support and spread disease. The Korean rainy season would certainly shorten the period of time Sui forces could successfully stage and supply their invasion. By the sixth month of 612, with the stubborn Koguryō defenders having withstood Sui siege operations, the Sui army mounted several infantry assaults on the fortress, only to see the defenders drive them all back.

Sunzi (2015, 17) stressed that “all warfare is based on deception.” The besieged Koguryō defenders employed an elaborate deception. On several occasions when the fighting was not going in their favor, they entered into surrender negotiations in order to buy time to improve their defenses (Wei Zheng 1955, 8: 161; Kim Pusik 1973, 20: 6a–6b). The Sui commanders were obliged to report all developments to Emperor Yang and act as the emperor directed. This fact significantly favored the Koguryō side. In order to show “great power's magnanimity,” the Chinese would accept the Koguryō side's false offers to surrender. All in all, Koguryō's delaying and deceitful actions achieved success. Emperor Yang was keenly aware that the campaigning season was slipping away and, following the failure of his attacks on the Liaodong fortress, decided to attack P'yōngyang instead, believing that capture of its capital would bring Koguryō's submission.

In his invasion of Koguryō, Emperor Yang counted heavily on the Chinese navy. While the land forces mounted their offensive on the Liaodong front, Sui transports moved some 40,000 troops commanded by Lai Huer 來護兒 from Donglai 東萊 on the Shandong Peninsula into the estuary of the Taedong 大同 River, to a point about twenty miles downstream from P'yōngyang. Lai Huer's advance element then came ashore and quickly scattered the Koguryō defenders. Encouraged by this initial success, Lai Huer decided to press on to the Koguryō capital, rejecting his deputy's wise counsel to await the arrival of the Sui land forces that were to advance southward and launch a concerted attack.

As Lai Huer moved on P'yōngyang, Koguryō troops under the command of Ko Kōnmu 高建武 (later King Yōngnyu 榮留王, r. 618–642) prepared a trap for the Chinese. Ko Kōnmu feigned defeat in a battle outside the capital, and then lured the Sui forces past the outer wall of the capital in pursuit, leaving the area between the outer wall and middle wall undefended. As the Chinese troops scattered to plunder and seize captives, and relaxed their guard, a fresh Koguryō force that had been concealed in an empty Buddhist temple fell upon the Chinese. Taken completely by surprise, the Sui forces fled with heavy losses. Only a few thousand of Lai Huer's troops survived. The routed Sui troops then withdrew to a point on the coast southwest of P'yōngyang and were thus unable to make contact with the massive Sui army approaching from the north (Sima Guang 1956, 181: 5661–663; Kim Pusik 1973, 20: 7a–7b). Lai Huer then re-embarked his remaining forces and sailed

back to Donglai. This battle outside P'yöngyang proves that deception and surprise are essential in overcoming a stronger enemy in asymmetric warfare. Hart (2012, 337), a major proponent of indirect warfare, stresses that “surprise” lies in the psychological sphere rather than the physical sphere and depends on a calculation of the manifold conditions that may affect the enemy’s will to fight.

The Sui force remained a threat, however. Following the three-month deadlock in the siege of the Liaodong fortress, Emperor Yang committed nine of his thirty armies, reportedly some 300,500 men in all, to take P'yöngyang. The soldiers were issued one hundred days’ supply of grain for the operation, but by the time they reached the Yalu River most of their provisions had been consumed or intentionally discarded (Sima Guang 1956, 181: 5663–664; Kim Pusik 1973, 20: 7b–8a). Then, when they crossed the Yalu River, a disagreement arose between the Chinese commanders regarding the future campaign. One of the commanders, Yuwen Shu 宇文述 (died 616), pointed out the critical supply shortages and argued that these necessitated a withdrawal, but Yu Zhongwen 于仲文 (545–613), who had overall command, insisted on continuing the drive on P'yöngyang (Wei Zheng 1955, 60: 1455, 61: 1466; Kim Pusik 1973, 20: 8b).

Ŭlchi Mundök, who commanded the numerically inferior Koguryö forces defending the capital city, secured safe conduct to treat with Yu Zhongwen at the Sui headquarters and entered into surrender negotiations, all with the aim of ascertaining Sui strength and intentions. He soon discovered the serious Chinese food shortage. After his parley with Sui, he returned to the Koguryö camp and immediately began planning how to enhance the Chinese food shortage. The Koreans now made every effort to prevent Chinese access to grain and water, moving or concealing the grain and filling water wells with earth along the Chinese line of advance. The Koguryö commander also ordered his forces to harass the Chinese flanks ceaselessly and lure the Chinese forward, rather than attempting to stand and fight a pitched battle against heavy odds. The Sui forces found it impossible to locate and destroy the highly mobile Koguryö forces. The Korean defenders fought delaying actions, as many as seven times a day (Sima Guang 1956, 181: 5664; Kim Pusik 1973, 20: 8a–8b, 44: 1a–1b). Although the Sui forces thus won many small victories, they were unable to come to grips with the main Koguryö forces.

Early in the seventh month of 612, the Sui army had advanced to a short distance away from P'yöngyang. Although close to their goal, the Chinese force had been seriously weakened through fatigue, constant battle, and hunger. Their morale was low and their combat capabilities had markedly declined. Ŭlchi Mundök is reported to have sent a poem to Yu Zhongwen in which he praised the bravery and endurance of the Sui commander and argued that, having penetrated so deeply into Koguryö territory and successfully withstood so many hostile onslaughts, the Chinese troops could hardly be faulted and that their mission had essentially been completed. He also sent an envoy to Yuwen Shu with a false offer of surrender (Sima Guang 1956, 181: 5665; Kim Pusik 1973, 44: 2a).

The hungry and tired Sui forces now came up against the strength of P'yöngyang’s defenses. The Chinese force was of course weaker than intended

because the land force had been unable to make contact with Lai Huer on the other side of the capital city and secure the grain in his supply ships that were intended to re-provision the Sui armies advancing from the north. Meanwhile, the Koguryō defenders refused to engage in a pitched battle. In this desperate situation, the Sui commanders decided to accept the false surrender on its face and withdraw to the north (Sima Guang 1956, 181: 5665; Kim Pusik 1973, 20: 9a, 44: 2a).

The withdrawing Sui columns came under almost constant harassment from Koguryō forces utilizing guerrilla tactics. While wearing down the enemy formations, Ulchi Mundök withheld his main forces until the Sui enemies reached the Salsu River, about midway between P'yōngyang and the Yalu River.<sup>4</sup> At this point, he planned to transform the Koguryō strategy from indirect warfare to direct warfare in order to destroy his adversary's military strength. The Koguryō forces certainly used some kind of portable barriers to dam the Salsu tributaries. When perhaps half of the Sui army had crossed the river, the Koguryō soldiers removed the barriers and flooded the river. Ulchi Mundök then released his forces, who fell on the dispirited Chinese. With the Chinese who had already crossed the river not able to easily support the rear columns, what remained of the Chinese army collapsed in a panic-stricken rout. Ulchi Mundök appears to have learned a lesson from Sunzi (2015, 75) who stressed that when an enemy force crossed a river, it would be best to let half the army get across and then deliver a general attack. Now under near constant Koguryō attack, the survivors fled northward. According to Korean sources, only 2,700 of the 300,500 Sui troops managed to escape. Shocked at the crushing defeat, Emperor Yang withdrew his remaining armies from the Liaodong frontier (Kim Pusik 1973, 20: 9a–9b, 44: 2a–2b; Sima Guang 1956, 181: 5666). In eight months of fighting, the overwhelmingly outnumbered Koguryō forces had won a complete victory over their Chinese enemies.

In Emperor Yang's two additional military campaigns against Koguryō, those of 613 and 614, the pattern of warfare between the two belligerents was essentially the same: the Sui attacker practiced direct warfare and the Koguryō defender countered with indirect warfare. Koguryō forces took up defensive positions in the heavily fortified Liaodong fortress in 613 and Pisa 卑沙 fortress in 614. Both Sui efforts met with failure.

The Koguryō-Sui war is characterized by the Korean kingdom's success in military strategy. In terms of broader implications for asymmetric warfare between stronger and weaker actors, Koguryō's military victory demonstrates the significance of a correct strategy for the weaker actor.

### **Sui's Innate Weaknesses**

Wars have significant political consequences for the belligerents. Victory tends to justify the human and material costs and constitutes a valuable political asset. On the other hand, defeat cannot justify the costs suffered in warfare and is

<sup>4</sup> Historically, the Korean rivers running in an east-west direction provided physical barriers against foreign invaders from China.

therefore a serious political liability for the loser. All belligerents go to war with inflated expectations of victory, and the stronger actor in asymmetric warfare is particularly susceptible to this problem. A protracted war without victory brings serious political vulnerability to the stronger actor, who may be placed under heavy political pressure to discontinue it. When the war effort sustains unanticipated costs or military setbacks and initial overestimation of success gives way to war-weariness, political opposition to the war from a frustrated public (in democratic regimes) or countervailing political and military elites (in authoritarian regimes) causes domestic pressure to end the war short of military victory.

The outcomes of wars depend on more than war-fighting capabilities. Motivations are no less significant than strategic and tactical choices. In other words, the actor with more resolve and will to fight against adverse odds is more likely to win, regardless of material power resources. In asymmetric warfare, while the stronger actor is less resolute and more politically vulnerable, the weaker actor is more resolute and less politically vulnerable.

Mack (1975, 175–200) presents the causal relationship between what he calls “interest,” that is, resolve, and political vulnerability. According to his analysis, relative power asymmetry is inversely related to the political vulnerability of each respective actor. Power asymmetry determines relative interests, and interest asymmetry in turn determines relative political vulnerabilities. In asymmetric warfare, the weaker actor is necessarily more motivated to fight and win than its stronger opponent because only victory can ensure its survival. As a result, it will be unlikely to quit war short of its military and political goals. The weaker actor seldom suffers politically from military setbacks as warfare drags on. Its high interest (resolve) implies low political vulnerability. On the other hand, the stronger actor is less motivated than its weaker adversary because its survival is not at stake. Its lower interest in winning implies high political vulnerability. As a result, when asymmetric warfare lasts longer than anticipated, its higher political vulnerability will eventually force the stronger actor to quit war short of the desired and expected military and political objectives. In short, the weaker actor may be victorious in protracted asymmetric warfare. Mack’s thesis of weaker-actor success in asymmetric warfare goes a long way toward explaining why the stronger actor loses to a weaker opponent more frequently than one might expect.

In addition to political vulnerability, another significant principle also works against the stronger actor in asymmetric warfare. This is “cost intolerance,” an actor’s unwillingness to suffer the human and material costs imposed by its adversary and bear the human, material, and opportunity costs of using force against the adversary to achieve its objectives. Actors usually go to war when their prewar estimate of the cost of attaining their political objectives through the use of force is below the threshold of their tolerance of costs. When actors realize that the actual costs of victory are exceeding their prewar expectations, they may choose to terminate their military campaigns without attaining their political objectives (Sullivan 2007, 497, 501).

In asymmetric warfare, the stronger actor is much more likely to underestimate the cost of victory and be much less cost-tolerant than its weaker

adversary. It expects that the weaker actor will impose relatively low costs on it and that even if it fails to attain its objectives, the war will not threaten the stronger actor's survival. What matters for the stronger actor is not the gap between its cost-tolerance threshold and its weaker opponent's cost tolerance, but the gap between the price it is willing to pay and the actual human and material costs to attain its prewar objectives through the use of force. When the cost of victory exceeds the cost that it is willing to bear to achieve its objectives, the stronger actor may decide to quit the fight short of attaining its prewar aims (Sullivan 2007, 499, 502, 506). In short, asymmetry in cost tolerance does not favor the stronger actor.

In Koguryō's asymmetric warfare with Sui, political vulnerability and cost intolerance greatly favored the Korean kingdom. Sui Emperor Yang's ultimate goal was to conquer Koguryō, while the people of Koguryō fought for national survival itself. Compared with the Koguryō people whose survival hinged on war with Sui, the Chinese were less resolute in waging war and therefore more vulnerable to war outcomes. Furthermore, considering the inflexible resolve of the people of Koguryō to defend their territory, Sui's victory could be achieved only at great cost. Indeed, in the increasing confusion and chaos following successive failures in his war with Koguryō, it was almost impossible for Emperor Yang to continue it indefinitely. His Koguryō campaigns exceeded his empire's cost-tolerance threshold.

The people of Koguryō—soldiers and civilians alike—were morally ready to fight the Chinese invaders. The soldiers knew what they were fighting for and therefore their morale was very high, as evidenced by Koguryō guerrilla units who were active in the Chinese rear areas and their great resolve during battle. Civilians actively cooperated with the military in the war efforts, including scorched earth tactics (Asmolov 1992, 108–09).

The situation for Sui was quite different. In his massive efforts to prepare for the Koguryō campaigns, Emperor Yang forcibly mobilized troops and exacted grain, animals, and labor service from the peasantry, many of whom came from the former Northern Qi region where separatist sentiments were still rife. Many of the men called up by the state to serve as soldiers or laborers simply deserted and turned to banditry (Graff 2002, 151; Xiong 2006, 51, 53–54). The low morale of the Chinese soldiers and laborers is well demonstrated by the song “Do not die in vain in Liaodong,” which became popular among the Sui peasants during Emperor Yang's Koguryō expedition. The song might have been composed and diffused by Wang Bo 王薄 (?–622) who first rose in revolt against Emperor Yang in Mount Changbai 長白山 (north Shandong) in 611 (Sō 2015, 25).

Even before Emperor Yang began to raise his army for the first Koguryō campaign in 612, the Sui empire had already experienced unrest and instability. In the summer of 611, a large area of the lower reaches of the Yellow River was inundated by a catastrophic flood. In 612, the same region was hard hit by drought and epidemic disease. Thus, Emperor Yang's general mobilization of human and material resources for his Koguryō expedition further aggravated the already worsening agricultural economy in the affected region. This situation naturally caused popular disturbances, which were manifested in the form of rebellion. These would greatly impact both political vulnerability and cost intolerance during

Emperor Yang's war with Koguryō.

In 611 Wang Bo's rebellion was followed by several others. Inexplicably, Emperor Yang ignored this in mounting his invasion of Koguryō in 612, which would do great damage to his authority as emperor. Despite the spreading disorder, Emperor Yang renewed military operations against Koguryō in 613. With more effective logistical preparations to sustain his troops in the field than in the previous campaign, in the fourth month the 300,000-strong Sui expeditionary force reached the Liao River basin only to discover that the Liaodong fortress still seemed impregnable. This time, the Sui forces attacked around the clock and from all directions, in order to force their outnumbered opponents to spread themselves thin (Sima Guang 1956, 182: 5671–672; Kim Pusik 1973, 20: 10a–10b).

After the Chinese siege operations had been underway for nearly two months, Emperor Yang received word that Yang Xuangan 楊玄感 (?–613), the Sui court's minister of rites, who had been stationed at Liyang 黎陽 on the Yongji Canal 永濟渠 (linking the heart of China to present-day Beijing) in order to oversee the transport of supplies for the army, was leading a large rebellion against the emperor near the eastern capital of Luoyang (Sima Guang 1956, 182: 5676–677). Yang Xuangan's rebellion was the first defection of a major political figure at the Sui court and the largest and best organized insurgent movement against the Sui dynasty (Xiong 2006, 61). In mounting his rebellion, Yang Xuangan took advantage of the increasing popular unrest caused by Emperor Yang's decision to invade Koguryō.

The news of Yang Xuangan's rebellion brought Emperor Yang's Koguryō expedition to an abrupt end. The Chinese emperor first withdrew a substantial force to suppress the uprising. While he was in a state of indecision about complete withdrawal, Husi Zheng 斛斯政 (?–614), an associate of Yang Xuangan and deputy minister of the military, defected to the Koguryō side. Shocked at this action, Emperor Yang then decided to withdraw all Sui forces from the Liaodong front (Sima Guang 1956, 182: 5677–678; Kim Pusik 1973, 20: 11a). Yang Xuangan's rebellion illustrates the principle of political vulnerability in war with a "countervailing political elite" exerting pressure to terminate the war without military victory.

Although in the eighth month of 613 Sui imperial forces crushed Yang Xuangan's rebellion, unrest and disorder continued to spread across vast expanses of Chinese territory (Graff 2002, 154). Despite this chaotic situation that threatened the very survival of the Sui dynasty, Emperor Yang was determined to mount yet another invasion of Koguryō. Before launching his third Koguryō expedition, Emperor Yang asked his officials to present their views. But no one dared speak out for several days (Wei Zheng 1955, 4: 86). The Sui officials thus tacitly acknowledged the cost intolerance that the invasion of Koguryō would incur.

In the second month of 614, Emperor Yang ordered the mobilization of troops for a third Koguryō campaign. Exhausted and rife with rebellions, the empire lacked sufficient strength for another large-scale expedition. Emperor Yang failed to reach the Liao River with his army until the seventh month of 614, and by this time it was too late in the season to lay siege to the Koguryō fortresses in the Liao River basin. But Lai Huer's contingent force attempted to attack P'yōngyang anyway.

In these circumstances, King Yōngyang saw an excellent opportunity to terminate war with the Chinese empire. Toward that end, he mounted a major diplomatic effort. Late in the seventh month of 614 he sent an emissary to Emperor Yang with an offer of submission. The Koguryō king also revealed his intention to extradite Husi Zheng, who had taken asylum in the Korean kingdom. This Koguryō gesture made it possible for Emperor Yang to declare “victory” and withdraw his army voluntarily from Koguryō. Although Lai Huer assured Emperor Yang that further attacks would bring Koguryō’s surrender, the emperor turned down his proposal and recalled him (Sima Guang 1956, 182: 5689–691; Kim Pusik 1973, 20: 11b). The principle of cost intolerance had certainly operated in favor of Koguryō. With the withdrawal of the Sui forces in the eighth month, the war between Koguryō and Sui officially came to an end.

Emperor Yang now commanded the Koguryō king to appear in person at the Sui court to pay homage. King Yōngyang did not obey the summons, however, and the angry Sui emperor ordered preparations for a fourth expedition against Koguryō in 615. But the situation in China had degenerated to such an extent that further Chinese military operations were quite impossible (Sima Guang 1956, 182: 5691–692). Indeed, Emperor Yang barely managed to hold the empire together. In 618, shortly after Emperor Yang was captured and killed by Yuwen Huaji 宇文化及 (?–619), the son of Yuwen Shu, and his associates, the Sui dynasty came to an end. The war with Koguryō brought with it the political vulnerability and cost intolerance that undid the Chinese empire. Koguryō, too, showed signs of exhaustion, but it survived its asymmetric war with Sui.

### **Conclusion**

This study has analyzed the early seventh-century war between the Korean kingdom of Koguryō and Sui China from the perspective of asymmetric warfare characterized by a disparity in military capabilities. In asymmetric warfare, the stronger actor is more likely to win. However, in reality, the weaker actor wins more often than one might expect. This is substantiated by the war between Koguryō and Sui.

Koguryō’s war with Sui was an asymmetric conflict in terms of relative material power, in particular the size of populations and military forces. Indeed, in terms of population strength, the disparity favoring China may have been as great as 13:1. Given that, how was Koguryō able to triumph?

In asymmetric warfare, superior leadership is vital if the weaker actor is to have a chance for victory. Certainly, in the Koguryō-Sui war, King Yōngyang showed this. He demonstrated keen diplomatic skills in successfully preventing Sui Emperor Yang from employing the Eastern Tujue cavalry in the war, which was a major factor in the Chinese defeat. On the other hand, Emperor Yang proved inept at securing allies against Koguryō.

Koguryō enjoyed success in its war with Sui. Fighting for its very national survival, it employed an effective military strategy in which it avoided direct warfare that played to Sui’s superior numbers and adopted indirect, defensive warfare designed to protract the war and wear down its enemy.

In war, the motivations of actors are as significant as military capabilities. In asymmetric warfare, if it is to win the weaker actor must be more motivated and resolute than its stronger opponent. As has been shown, the stronger actor is usually more vulnerable politically to military setbacks, which may lead to the victory of the weaker actor in asymmetric warfare.

States usually go to war in a cost-benefit context. In other words, if state leaders realize that the cost of victory exceeds the cost they can bear to achieve their political and military objectives, they will usually terminate the war short of their prewar aims. In asymmetric warfare, the stronger actor is much more cost-intolerant than its weaker opponent, because prewar expectations are much higher for the stronger belligerent.

Koguryō's war with Sui was a life-and-death struggle for the Korean kingdom. The people of Koguryō were therefore much more motivated to fight than their Chinese counterparts. They were also less vulnerable politically and less cost-intolerant than their Chinese enemies, which greatly influenced the war's outcome.

Koguryō's war with Sui in 612–614 demonstrates that non-material factors, such as leadership, strategy, morale, and resolve, are no less important than material war resources, in particular the size of a population and armed forces, in asymmetric warfare. It testifies that superior strategy and strong resolve form the crucial factors for the weaker actor.

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