

Information Reducing and Noise Combating: The Communication Logic Behind the Tribute System

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Abstract The academic community calls for providing a more general analytical framework or finding new interpretations for the tribute system. In this article, I argue that the tribute system has the bottom logic of reducing information and combating noise by introducing Claude Elwood Shannon's information theory. High quantity of information and noise bring about uncertainty, increasing the risk of miscalculation and rash actions. The tribute system functions as a communication channel, in which messages unveiling an actor's real strength and intention convinced the other actors by offering and receiving tribute and gifts, which could be seen as an effective noise-combating scheme. Through multiple rounds of offering tribute and giving back gifts, which is actually a process of successful message transmission, countries were increasingly clear of one other's real intention and capacity, and avoided misunderstanding and strategic miscalculation, thus contributing to the stability and prosperity of this region.

Keywords: • Tribute system • information • communication • East Asian international order

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1 Introduction

Few studies of the tribute system have focused on the uncertainties faced by system participants. Conflicts and wars may indeed be avoided if East Asian countries are well aware of the hierarchy and can interact with other countries according to their strengths in the hierarchy within it. However, because of the great uncertainty they face, state decision-makers may not always be able to correctly judge the strengths of other states and may find it difficult to identify their intentions. For example, Japan launched the Imjin War in an attempt to replace the hegemony of Ming China at the time. Would Japan have gone to war against a great power with absolute power if it had correctly judged the difference in power between China and Japan? Another example is that the Qianlong Emperor mistakenly treated the Burmese army's act of war as ordinary border plunder and rashly sent troops to punish them, and was dragged into the quagmire of war, eventually withdrawing his troops with heavy losses. Thus, it seems that both large and small countries may make wrong decisions due to a lack of sufficient knowledge of other countries. Hierarchy is not automatic; it requires a consensus among the participants in the system through communication and interaction. Therefore, it is necessary to use a more general research framework to explore how the tribute system functioned as a communication to reduce uncertainty.

Some scholars have consciously used general analytical frameworks to move beyond the oriental appearance of the tribute system. Even the founder of the paradigm, J. K. Fairbank, provided our subsequent researchers with one that the tribute system "served as the medium for Chinese international relations and diplomacy."2 Typical tributary behaviors and non-typical ones, including Chinese court spending envoys to spy out the enemy or foreign envoys conducting negotiations at the Chinese capital, are fitted into the medium, because all foreign relations from Chinese perspective are "ipso facto tributary relations." From this perspective, the tribute system is detached from actual tributary behaviors and expressions. As a medium, it becomes the container of all types of international intercourse, and thus is a more general analytical perspective concerning comprehensive institution practices. Zhou Fangyin viewed the tribute system from the perspective of a game-theoretic equilibrium, which is a generally instrumental analysis of tributary relations and interactions.4 As a response to Zhou's game theory, Brantly Womack illustrated asymmetry theory with the tributary system as its "best case", which is believed by himself to be "a more general mode" than Zhou's. To confirm the generality of his analytical mode, he used it to analyse several foreign relations cases of the U.S., claiming that "all mature asymmetric

² Fairbank J. K. and S. Y. Têng, "On the Ch'ing Tributary System," *Harvard Journal of Asiatic Studies*, Vol. 6, No. 2 (1941), p. 137.

³ Fairbank and Têng, "On the Ch'ing Tributary System," p. 141.

⁴ Zhou Fangyin, "Equilibrium Analysis of the Tributary System," *The Chinese Journal of International Politics*, Vol. 4, No. 2 (2011), pp. 147–178.

relationships share some characteristics of the tributary system."5 Similar to it, Khong Yuen Foong creatively applied six features of the Chinese tributary system to interpreting contemporary American diplomatic practices, pointing out that "the United States has instituted the most successful tributary system the world has ever seen."6 Jorg Kustermans studied the gift-giving behaviors in tributary relations, arguing that as a prominent role in establishing and maintaining authority, gift-giving practices are "neither particularly Chinese nor Confucian", but "recur widely across time and space."7 All of the above-mentioned papers inspire us that there may be a universal logic embedded in the tribute system.

The logic may have something to do with information. Zhou analyzed the equilibrium of the tribute system with game theory, but he did not point out that it is information that plays a critical role in determining the equilibria of a game.8 Womack reminded us of the basic fact of any asymmetric relationship: "The smaller side is proportionally more exposed than the larger side,"9 which he failed to articulate enough by telling us that it means the larger side gets much more information about the smaller side than the smaller side gets from it when interacting with each other. Information clearly appeared in some other articles. Regretfully, it is not viewed as a general analytical framework or a basic logic to research tributary relations. For example, Fairbank mentioned that when a Chinese emperor sends envoys to mourn the death of a foreign ruler, he actually wants to get information about the new ruler under the cloak of the Confucian ceremony. 10 Perdue mentioned that though Japan rejected keeping a tributary relationship with the Qing, it still tried to derive information from merchants traveling to the Jiangnan region of China.11 Sun and Xie mentioned that it was diverse information exchange mechanisms that helped Korea earn the trust of the Chinese court in the Imjin War.12 Li demonstrated that official institutions were set up in China to collect information from tributary envoys coming afar, like the Ministry of Rites(li-pu 礼部) in the Song Dynasty and the Interpreters Institute(会同馆) in the Yuan Dynasty.13

⁵ Womack Brantly, "Asymmetry and China's Tributary System," *The Chinese Journal of International Politics*, Vol. 5, No.1 (2012), p. 49.

⁶ Khong Yuen Foong, "The American Tributary System," *The Chinese Journal of International Politics*, Vol. 5, No.1 (2013), p. 1.

⁷ Kustermans Jorg, "Gift-giving as a Source of International Authority," *The Chinese Journal of International Politics*, Vol. 12, No.3 (2019), p. 410.

⁸ Gates Scott and Brian D. Humes, Games, Information, and Politics: Applying Game Theoretic Models to Political Science (Ann Arbor: University of Michigan Press, 1997), p. 118.

⁹ Womack, "Asymmetry and China's Tributary System," p. 45.

¹⁰ Fairbank and Têng, "On the Ch'ing Tributary System," p. 141.

¹¹ Perdue Peter, "The Tenacious Tributary System," *Journal of Contemporary China*, Vol. 24, No. 96 (2015), p. 1008.

¹² Sun Weiguo and Xie Xiangwei, "Ming kangwoyuanChao zhanzheng chuqi ZhongChao zongfan jian zhi xinren weiji ji qi genyuan" ("On the Crisis of Confidence between the Ming and Choson Governments in the Early Stage of the Ming and Choson Anti-Japanese War"), *Gudai wenming (The Journal of Ancient Civilizations)*, Vol. 11, No. 1 (2017), pp. 105–112.

¹³ Li Yunquan, *Chaogong zhidu shilun (On the History of the Tributary System)* (Beijing: Xinhua Publishing House, 2004), pp. 42–60.

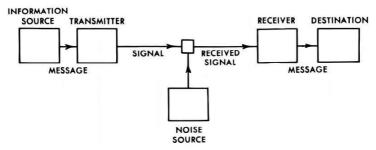
This article will introduce Claude Elwood Shannon's information theory and his communication model, sketching the tribute system out as a general communication pattern with managing information as the basic logic. The tribute system is a busy information transmission network, in which actors rely on information to seek self-preservation to the full extent or utilize power in the most efficient way. I believe information theory possesses the malleability to be applied to the tribute system. As Shannon said:

"My first thinking about [information theory], was how you best improve information transmission over a noisy channel. This was a specific problem, where you're thinking about a telegraph system or a telephone system. But when you get to thinking about that, you begin to generalize in your head about all these broader applications."14

Shannon's Information Theory and Information by His Definition

Shannon creatively pointed out that the fundamental problem of communication "is that of reproducing at one point either exactly or approximately a message selected at another point."15 Following this direction, he further constructed a general communication system model in which a noisy channel is the basic structure, composed of the information source, the transmitter, the communication channel, the receiver, and the destination.

Figure 1: A Communication System



Source: Shannon, C. E., and Weaver, W. 1949. The Mathematical Theory of Communication. Urbana: University of Illinois Press. Page 7.

When communication occurs, according to Shannon's model, what really happens is as follows: The information source "selects a desired message out of a set of

¹⁴ Horgan John, "Profile of Claude Shannon, Inventor of Information Theory," *Scientific American*, Vol. 7 (2017), https://blogs.scientificamerican.com/cross-check/profile-of-claude-shannon-inventor-of-information-theory/.

¹⁵ Shannon C. E., "A Mathematical Theory of Communication," *The Bell System Technical Journal*, Vol. 7, No. 3 (1948), p. 379.

possible messages." The transmitter encodes the selected message, or, processes the message from the information source into the signal so that it can be "sent over the communication channel from the transmitter to the receiver." Then the signal goes along the communication channel to the receiver, which is "a sort of inverse transmitter," decoding the signal back to a message and sending it down to the destination. 16 In the transmission process, Shannon pointed out an undesirable element, the noise source. Anything that brings changes to the transmitted signal is called noise.17 Basically, in a real communication system, the communication channel is always accompanied by noise, which can be regarded as the nature of communication.18 Information, in Shannon's theory, has its special sense. According to Shannon's understanding, information has little to do with semantic aspects. "Information is a measure of one's freedom of choice when one selects a message."19 Shannon proved that facing a set of possible events with known probabilities of occurrence, we can find "a measure of how much 'choice' is involved in the selection of the event or of how uncertain we are of the outcome."20 In another word, to measure information is defined by him as to measure uncertainty. In a word, the quantity of information becomes larger and larger when one faces more and more choices of all equal possibilities and falls to zero when "one's freedom of choice is gone."21

Now that information is the uncertainty that we choose one message from a set of possible messages in a communication system, the interference of noise, which changes the transmitting signal, will lead to greater uncertainty, therefore, to increase the quantity of information. Noise magnifies one's freedom of choice in selecting a message, thus incurs greater information, or greater uncertainty that the message actually selected in the destination is exactly the sending one.

Uncertainty is also widely recognized as a core impetus of several important phenomena in international relations, where it affects conflict onset, the stability comparison of bipolar and multipolar systems, interstate security dilemmas, escalating arms races and international currency flows.22 Given Shannon's theory, countries around the world are confronted with information of large quantities, which is an undesirable case. Greater uncertainty, greater information, and greater chance of conflicts and wars go hand in hand.

Hypotheses About Information in Pre-industrial Regional Interactions

¹⁶ Shannon C. E. and Weaver W., *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949), p. 7.

¹⁷ Shannon and Weaver, *The Mathematical Theory of Communication*, p. 8.

¹⁸ Wu Jun, Xinxi zhuan (On the History of Information) (Beijing: CITIC Press, 2020), p. 236.

¹⁹ Shannon and Weaver, *The Mathematical Theory of Communication*, p. 9.

²⁰ Shannon, "A Mathematical Theory of Communication," p. 389.

²¹ Shannon and Weaver, *The Mathematical Theory of Communication*, p. 15.

²² Kaplow Jeffrey M and Erik Gartzke, "The Determinants of Uncertainty in International Relations," *International Studies Quarterly*, Vol. 65, No. 2 (2021), pp. 306–319.

The tribute system established by China in East Asia through long-term grope, was a good try to lower the great information, while other states, especially great powers, were less lucky in dealing with this problem—they either neglected the necessity of reducing high value of information or adopted wrong moves to do so, thus falling into the circulation of fire and blood.

Reconsidering regional interstate interactions in the pre-industrial era from the perspective of Shannon's information theory, I propose three hypotheses:

Hypothesis 1

Countries in the pre-industrial era face a high volume of both information and noise when interacting with each other.

Hypothesis 2

The quantity of information differs in different interacting circumstances. Wars or conflicts between two countries may bear different quantities of information from that of trade between them.

Hypothesis 3

Smaller countries will be burdened with greater information than great powers after bilateral interactions.

Before the first industrial revolution, countries were broadly unproductive. Without modern communication technologies, when a monarch of a country tried to obtain the situation of another country, it had to dispatch a group of people envoys, trade caravans, or warriors, to the destination country. But which groups of people should the monarch dispatch when there is almost no previously accumulated knowledge about the country? The problem is he might never know until his people actually contact with the people of that country. The monarch is likely to dispatch too arrogant envoys, trade caravans bringing goods which the destination country does not need at all, or troops lagging far behind that of the destination country in both scale and fighting capacity. The possibilities he faces are almost infinite. Even though the two countries had exchanges before, previously accumulated information about another country could not be renewed timely due to the primitive means of transport. During the period that two countries did not contact in time because of geography and transportation, the power comparison between them could be reversed. The high quantity of information would either make a monarch move too cautiously or suffer for a rash decision. Additionally, great noise impeded the communication between two countries in the pre-industrial era, making the information quantity larger. In the communication between two countries, noise could come from the mistranslation of languages, suspicion of the other's intention, and even the pressure from a third party. All these magnify the quantity of information which has already been high because of undeveloped communication technologies and primitive transport.

As to Hypothesis 2, the core is to realize that actions in different interacting backgrounds could lead to different levels of uncertainty. Still, compare the uncertainty brought by a foreign envoy, a foreign commercial fleet, and a foreign troop pressing on to the border. The envoy incurs the greatest uncertainty, with the

commercial fleet the next, and with the troop minimum of uncertainty. The three scenarios stand for three interacting circumstances: official diplomacy, economic and trade exchanges, and wars and conflicts. In the first circumstance, vague rhetoric and ambiguity are often the case in foreign policy, thus "the more uncertain actors are about the consequences of different policies."23 Though a travel-stained envoy hands in the diplomatic paperwork consisted of seemingly sincere discourse after months of, even years of trudge, a monarch could still misperceive and miscalculate the strategic intention of the country. In comparison, commercial exchanges confine the interactions between two countries to a much more specific scope. At least the actual economic benefit a country obtains from another country could be seen as a reflection of the openness and generosity of that country, eradicating the hostility to it, which could not be done just by diplomatic paperwork. Regarding wars and conflicts, they are so explicit in expressing not only the hostility and strategic intention, but the actual power of a country than any other means of communication. If a monarch wages a war on another country as a warning, a punishment, or a reminder of its power, it can be seen as communication. In this process, wars are used to send a specific message to another country. However, if the purpose of a war is to fully wipe out the military power of another country and then annex it, it has little to do with communication. Because it can be seen in a communication system as removing the destination. Communication is out of the question if there only exists information source but a destination. A special case is that, if a country X annihilates another country Y, not to communicate with Y, but to send a message to a third party Z, then the war can be counted as a communication, not between X and Y, but between X and Z. It is quite a dilemma that countries seek to decrease the great information in communication while wars is the means of communication with the minimum of information. Do countries pursue low information value in the cost of blood and fire?

Hypothesis 3 concerns the asymmetry of information burden in a bilateral relationship. Before two countries have any concrete contact with each other, the information burden for both of them is almost equally heavy. As what has been elaborated in the discussion of Hypothesis 1, they need to be prudent enough and assume its counterpart is at least the same powerful as itself, or it might suffer great losses for arrogance. But the situation changes after several interactions between them. Both sides would evaluate the other's power and status. In general, smaller countries will be burdened with greater information than great powers, or, smaller countries suffer from greater uncertainty than great powers. Great powers generally own large territories, great military might, large populations, and abundant natural resources. All these endow them with two advantages. First, great powers always have more options in taking actions. A great power has the capability to take various actions as long as they work. These actions, some of

²³ Meibauer Gustav, "Ambiguous Specificity: The Production of Foreign Policy Bullshit in Electoral Contexts." *Politics*, Vol. 41, No. 1 (2021), p. 19.

which may be peaceful ones, some may be brutal ones, bring different costs to it. If a great power decides to achieve its goals, it can do it regardless of cost. Great powers can always choose one possibility from many, even if it is not the most economical one. Second, great powers always have a high error-tolerate rate in decision making. Even if a great power makes an unwise decision, it can rapidly adjust its strategies and reverse the unfavourable situation after recognizing it. In contrast, relatively limited resources and strength constrain a smaller country from acting freely. It must choose the most effective and economical possibility in interacting with a great power. In addition, a smaller country is more susceptible to the consequence of bad decision-making. A smaller country must be more cautious than a great power to avoid bad decisions, for it has little chance to make amends or recover from the consequences. Smaller countries therefore will "tend to be more coordinated and anticipatory in its relational behavior."24 Besides the asymmetry nature, great powers will further widen the gap unscrupulously. It has been mentioned above that different institutions in ancient China were set up to collect information from foreign envoys about their countries. Behaviors like this will make smaller countries more transparent and anticipatory in future interactions with great powers. In conclusion, the asymmetry between a great power and a smaller country determines that after they recognize the gap, the smaller country will face a higher quantity of information than the great power. With the ongoing and deeper interactions between the two sides, the burden of information to the smaller country will become heavier.

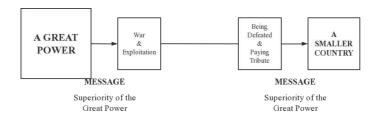
Before Tribute System: the Initial Phase of Communication—Imperial Pattern Great powers do not always take advantage. A great power, unless it is an island country, will neighbor with a series of smaller countries because of its usually vast territory. It can not only communicate with one of those neighboring countries. Forging communicative ties with all these smaller countries establishes a dandelion-clock-like communication network with a great power at its center and a series of smaller countries at its ends. Picking up one "seed", i.e., the communication between the great power and a smaller country, from the dandelion clock and observing it, we could agree that the great power is burdened with a much lower quantity of information than the smaller country. But for the great power, the quantity of information it faces is an aggregate quantity, which has to take the uncertainties from every neighboring smaller country into account. Two factors decide that this aggregate quantity will not be a small amount. First, the variety of the smaller countries complicates the communication situation, causing high uncertainty to a great power. Geographical span makes a great power owns a diversity of neighbors, who can be totally different in geography, climate, culture and convention. It is equally hard to either forge a customized communication mode for each of its neighboring countries or establish a universal

²⁴ Womack Brantly, "Asymmetry and systemic misperception: China, Vietnam and Cambodia during the 1970s," *Journal of Strategic Studies*, Vol. 26, No. 2 (2003), p. 93.

and effective communication system for all these countries in one stroke. Second, a great power has a huge number of internal affairs to bother with, which makes it impossible to extract too much attention onto its neighboring countries. It is what Womack called the "inattention" on the stronger side, which will lead to misjudges and reinforce misperception.25 The deficient attention to these smaller countries will also intensify the uncertainty faced by a great power, bringing about more information quantity to it.

Therefore, seemingly predominant great powers are as bewildered as smaller countries when facing a high quantity of information. Both a great power and a smaller country have the rigid demand to lower information in communication. However, an effective and practical scheme entails long-term exploration. Before such a scheme came into birth, namely, the tribute system, countries adopted what I called the imperial pattern to lower information in communication. How an ideal imperial pattern works is illustrated as the following figure:

Figure 2: An ideal imperial pattern



Empires in pre-industrial history happened to coincide in instinctively choosing a simple scheme—communicating by war. As discussed in Hypothesis 2, wars and conflicts bare the minimal quantity of information. Countries engaging in wars could understand their own power and others' in the most direct way. Those who always defeated its enemies and imposed organized long-term exploitation on the vanquished countries laid the foundation of its hegemonic status, and sent this message to all its neighboring countries, some of which even had not fought with them. Thus, the results of periodic wars indeed reduce the uncertainty faced by countries, especially for great powers, which could be more confident and unhurried in interacting with smaller countries. In the 4th century, the Roman Empire conducted routine military interventions alongside its border. An average every 20 to 25 years would witness a major military action in almost all its frontier areas.26 Like the Roman Empire, ancient China also waged numerous wars as a communication with its neighbors, particularly after the changes of dynasties.27 It

²⁵ Womack, "Asymmetry and systemic misperception: China, Vietnam and Cambodia during the 1970s," p. 102.

²⁶ Heather Peter, *Empires and Barbarians: The Fall of Rome and the Birth of Europe* (New York: Oxford University Press, 2010), p. 86.

²⁷ Li, On the History of the Tributary System, pp. 42–60.

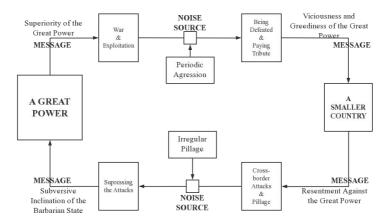
is understandable that a new regime coming into power must face great information, and it recognized the effect of wars to lower the information. By waging wars periodically, empires like Rome and China figured out the prevailing status they had and got the situation of their neighbors updated timely. For those smaller countries, also through the periodic wars, they realized the power comparison between themselves and the regional hegemony, knowing that they must move prudently. As a bidirectional communication, wars help both great powers and smaller countries lower information, dispelling illusions about the status quo. Accompanied by wars, captured resources from and taxes imposed on the smaller countries further broaden the gap between great powers and smaller countries. Great powers therefore become richer and stronger while smaller countries poorer and weaker.

However, this information reducing scheme neglected a crucial element in a communication system—noise. When great powers tried to reduce the quantity of information by periodic wars, noise increasingly accumulated in the communication channel, which affected the quality of communication. By waging wars every few years, a great power sent a clear message to a smaller country: I am the stronger side and you are the weaker side. However, after several rounds of this kind of communication, the message received by the smaller country would be inescapably intertwined with an impression that besides strength, the great power is also vicious and greedy. The impression or judgment constitutes noise. The negative impression distorted the selected message from the source, which just attempted to figure out the regional strength situation in the first place. Starting a war, whether by a great power or a smaller country, might be an instinctive act to clearly recognize its power ranking in the region, or else they could always be bothered by great information, wasting time and energy in speculation or mere fear. Besides, noise incurred smaller countries' vengeful behaviour, for example, plundering areas bordering great powers. Cross-border attacks became a means to vent the grievance of Roman neighboring vassal states, and some of these attacks, on a larger scale, became successful resorts to establish new dynasties of their own.28 Attacks and pillage from smaller countries in the border areas, in turn, enlarge the information faced by the great power, making all its previous efforts to lower information wasted. On the one hand, a great power could not estimate when and where the next round of attacks would happen. Though it has troops stationed at the border, to defeat a well-prepared and abrupt attack would not be an easy thing. In addition, the vast territory of a great power determines that reinforcements and supplies need a long time to reach the hot spot area, when the neighboring groups may have already finished their pillage and shrank to their own domain. On the other hand, another noise source appears. Through these irregular cross-border attacks, a great power may also be under the impression that its neighboring countries are just some barbarians who covet its wealth and refuse to accept its supremacy. It is noise because the impression is not what smaller countries want to transmit to a great power. Cross-border attacks in this communication system send a message about resentment and grievance of a

²⁸ Heather Peter, Empires and Barbarians: The Fall of Rome and the Birth of Europe, p. 89.

smaller country to a great power, but not a barbarian image or the intention to challenge and subvert. The impression left for the great power, as a noise, distorted the smaller country's selected message. Therefore, a great power chose to wage another round of wars to punish its neighbors, reiterating its supremacy, so as to lower the information. Great powers and smaller countries fell into a vicious circle of wars and conflicts, which I called the "imperial pattern". On the whole, the quantity of information is indeed reduced for both sides at the beginning stage of the imperial pattern, but with the wars and attacks become more and more frequent and irregular, noise gradually accumulates to an unbearable level for both sides, which in turn magnifies the information in the communication system.

Figure 3: Imperial pattern functioning with noise



It inspires us that a low quantity of information might not always be the desirable goal. Wars contain the minimum of information, but leave a 100% certain bad consequence—the cost of wars, for both great powers and smaller countries. No country would pursue this kind of minimum information: face only one possibility, which is perpetual wars and revenge. They would rather accept a larger quantity of information, that is, facing a series of possibilities, as long as some good ones may exist among them.

The unique advantage of tribute system: combating noise

The inspiration of not cutting information to its minimum happens to be in accordance with Shannon's solution of combating noise. Shannon discussed obtaining a good approximation to ideal coding, which has a characteristic that even if the signal is affected by noise, the originally selected message could still be recovered by a destination. It can be achieved "at the cost of a certain amount

of redundancy in the coding."29 In other words, maintaining a certain amount of information redundancy in the coding process helps combat noise. Even if the signal is distorted by noise, the receiving side still has the chance to restore it by relying on redundancy. Shannon further pointed out that "any redundancy in the source will usually help if it is utilized at the receiving point."30

The information redundancy tribute system introduced in is "tribute", whose prototype is the tax and wealth the vanquished country offered to the great power after a war in the imperial pattern.

The Tribute System Model and Its Interpretation under Information Theory

A typical procedure of a tributary interaction goes through the following rounds of communication:

Transitional Round

This round of communication is the prelude of a tributary interaction, which also bridges the imperial pattern with the tribute system model.

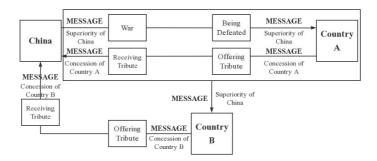
A characteristic this round shares with the imperial pattern is the use of military might by a regional great power, which successfully defeated one or more smaller countries. The victory of a great power's military actions transmitted a clear message to all the smaller countries in the region: a great power's superior power could be used to punish any challenging state as it wished. The countries receiving the message include not only those who were defeated(not annexed), but also those who heard the news and then measured the power comparison based on it. Like the defeated side rendering tribute to the great power, countries recognized their inferior status would also pay tribute to it to show their concession, representing they have no intention to challenge the great power's status, so as to avoid a head-on confrontation with it. The difference between this round with the imperial pattern is that countries not involved in the wars with the great power would also offer tribute. It constitutes a transitional form to the tribute system. It is also the case that took place in almost every Chinese dynasty, especially in the infant stage.31

Figure 4: Transitional Round

²⁹ Shannon, "A Mathematical Theory of Communication," p. 403.

³⁰ Shannon, "A Mathematical Theory of Communication," p. 403.

³¹ Li, On the History of the Tributary System, pp. 42–60.



Similar to the imperial pattern, military actions would incur noise, which would distort the message China chose to transmit, which focused on controlling borders and reestablishing the peaceful relationship with its neighbors,32 rather than what noise might imply, insatiable expansion and conquer. Therefore, China, the regional great power, needed to find a way to send the exact same message wars transmitting, meanwhile combating the noise wars bringing about.

Round one

The great power in the region, usually the Chinese empire, dispatched envoys, who brought the imperial edict with them to a smaller country of the region. The imperial edict from the Chinese emperor, transmitted two layers of message to the destination country. First, the superiority of China in East Asia. Second, the good will of China to live in harmony with countries that recognize China's superior status in terms of culture and power.

Whether through the imperial edict brought about by Chinese envoys in round one or through wars in the transitional round, a smaller country would recognize China's cultural and military status more or less. But China's good will of living in peace with smaller countries could be quite doubtful. A smaller country thus may receive a distorted message: China is powerful in many aspects, and its declaration of living in peace tries to let us drop our guard so as to annex us more smoothly. Influenced by the noise, even tribute was offered to China, the tributary action was done with fear and worry. At the same time, grievance is stewing, like what happened in the imperial pattern.

Figure 5: Round One

³² Kang David C., *East Asia Before the West: Five Centuries of Trade and Tribute* (New York: Columbia University Press, 2010), p. 149.



To prevent the tribute system from being transformed into the imperial pattern by noise, China, the information source, introduced information redundancy. Apart from the imperial edict, envoys from China would also bring gifts to smaller countries. These gifts are usually Chinese almanacs and a large number of delicate manufacturing goods, for example, Chinese silk fabrics and chinaware.33 Countries receiving these gifts could have a more concrete and direct understanding of China's cultural achievements, its advanced production techniques and its vigorous economy, compared with just speculation based on the rhetoric of China's imperial edict.

Round Two

After successfully decoding the message from China, smaller countries reduced the information. At this stage, they might recognize that China was truly a great power with cultural supremacy, and it was time to respond to its initiative of living in peace. As has been mentioned in round one, living in peace with China calls for a smaller country's subordination. This subordination does not mean that a smaller country needs to make concessions in its sovereignty or territorial integrity, instead, it entails the recognition of China's superior status in East Asia's hierarchy, in which rankings are related to cultural achievements.34

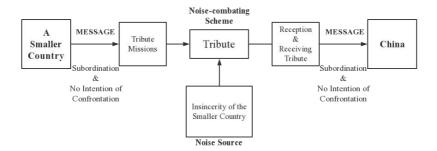
Therefore, a smaller country at this round tried to transmit a message extending its subordination and its willingness to live in harmony with China. A smaller country would dispatch tribute missions to China,35 transmitting this message. Once again, the problem of overcoming noise occurred. How to make a smaller country's declaration of subordination and good will credible? Similar to the Chinese gifts overcoming the noise about China's intention in round one, every time tribute missions visited China, they would bring a large amount of tribute.

Figure 6: Round Two

³³ Li, On the History of the Tributary System, p. 62.

³⁴ Kang, East Asia Before the West: Five Centuries of Trade and Tribute, p. 81.

³⁵ Kang, East Asia Before the West: Five Centuries of Trade and Tribute, p. 59.



The function of tribute can be analyzed from two perspectives. In a general sense, tribute serves as a symbol of obedience and amity. Sending gifts to the superiors represents the respect and loyalty of the subordinates, reflecting the authority and popularity the former has 36 Offering tribute to the winning side in a war could be in accordance with this intuition. From the perspective of information theory, tribute itself is a form of information redundancy, because tribute is loaded with certain information about a tributary country's production level, economic situation and so on, which helps overcome noise.

Through tribute missions taking the tribute to Chinese capital, a smaller country successfully transmits its message of subordination and good neighborliness. In addition, the tribute helps it combat the noise that it may be a challenger or rebellion force of the regional order.

Tribute as a Noise Combating Scheme

Why could tribute be used to combat noise? It is because that tribute itself is loaded with a certain amount of information, thus could be regarded as information redundancy.

The information that tribute contains helps reduce the information of the whole communication system and avoid eliminating it at all, while other forms of redundancy either enlarge the information of the whole system or eliminate information, causing cyclic wars and conflicts. Unlike the ambiguity and vagueness of diplomatic rhetoric, which could be fabricated to cover the real situation, tribute can not lie. Tribute honestly reflects the production level, economic situation and the development of technology of a country. Countries receiving tribute can infer from it the general condition of the countries offering the tribute. For example, if the tribute is consisted of mainly premier produce and spice, the recipient country would know that the tribute offering country might be

³⁶ Yan Yunxiang, *The Flow of Gifts: Reciprocity and Social Networks in a Chinese Village* (Stanford: Stanford University Press, 1996), p. 164.

an agricultural country, with probably fertile farmland, favorable climate or sound irrigation system, and a certain number of people. Or, if a country offers swords and horses, it might be skilled in forging weapons and sophisticated on the battlefield. Thus, through tribute, a recipient country could draw a sketch of an offering country, sorting out some possibilities from its infinite imagination and speculation of it. Unlike wars and conflicts, tribute can not reduce information to its minimum. Though a monarch has known that the tribute offering country is an agricultural country, he still needs to be cautious in addressing relations with it, because the population to maintain agricultural production could also be armed and thus become a mighty force.

An interesting example of the noise-combating function of tribute happened in 1371, when Vietnam and Champa were at war. The king of Champa dispatched envoys to China, asking for musical instruments and musicians from Emperor Hongwu, claiming that this would verify that Champa was a civilized kingdom and a legitimate member of the tribute system, which might deter Vietnam's military action.37 Applying musical instruments in deterring military action is an inconceivable scenario, even if it is from the soft power perspective. But these items actually serve as indicators of a country's civilization level and the hierarchy in the East Asian international order. Though the Chinese emperor refused the request from Champa, it can be inferred from the event that members of the tribute system not only fully understood the function of tribute/gifts in this system, but also attempted to make good use of it under the framework of the tribute system. Mauss said, when studying the total system of giving, which is similar to the tribute system in Asia in terms of tribute/gifts, "the distribution of goods, is the basic act of 'recognition'."38 If a country recognizes something concrete through "the distribution of goods", whether in military, economy or culture, it can exclude some unrealistic anticipated possibilities about another country, thus lowering the amount of information of the communication system as well as combating any related noise.

Also, as Mauss described, in all societies, whether in history or still existing around us, there is no middle ground: one has to choose trust completely or mistrust completely. Just under the circumstance, societies, their subgroups and the individuals in them learned to commit themselves into giving and giving in return, which helped them replace war, isolation and stagnation by cooperation, gifts and trade.39 In the tribute system in East Asia, this description is also applicable. Through multiple rounds of offering tribute and giving back gifts, which is actually a process of successful message transmission, countries were increasingly clear of one other's real intention and capacity, and avoided

³⁷ Li, On the History of the Tributary System, pp. 14–24.

³⁸ Mauss Marcel, *The Gift: Forms and Functions of Exchange in Archaic Societies* (London: Routledge, 2002), p. 52.

³⁹ Mauss, The Gift: Forms and Functions of Exchange in Archaic Societies, p. 104.

misunderstanding and strategic miscalculation, thus contributing to the stability and prosperity of this region.

Discussion: Spontaneous Applause to China's Tributary Initiative?

The explanation of round two looks like that smaller countries in East Asia are all voluntary advocates of China's tributary initiative, which seems too oversimplified to be the case. Indeed, the disadvantaged status does not mean that smaller countries are less sophisticated than a great power. After all, in the complex regional interactions with undercurrents surging below the surface, no country would like to expose all its information to others.

On the one hand, some countries or groups in this region truly rejected or disregarded China's initiative, thus became actors on the periphery of the tribute system; On the other hand, it is hard to discern whether a non-peripheral actor of the system was sincere in terms of exposing its real information to China. Two mechanisms embedded in the tribute system function so effectively that any attempt to disguise the real information seems impossible.

Although China transmitted a clear message in round one that it was willing to establish tribute relations with its neighbors, some political units chose not to respond to this message. For example, nomads to the north and west of China, whose acceptance of the tribute system is minimal, refused to embrace "the full meaning, legitimacy, and authority" of the tribute system.40 They had material demand for China, while engaging in tribute was just one of the options to meet the demand. Other options included trade and raids.41 In the Han Dynasty, many Chinese envoys were captured or killed by nomads, which totally damaged Chinese communication attempts and made the construction of tribute relations with them stop at round one. As a result, the unpredictable options those nomadic people reserved categorized them as the peripheral actors of the tribute system with a higher volume of information and more likely noise disturbance. Without a noise-combating scheme and information-reducing pattern, the interacting pattern between nomads and China seems more like the imperial pattern, which explains why wars and conflicts were more between nomads and China, rather than tributary countries with China.

For these peripheral actors, by keeping at arm's length with China and the tribute system, what they lost was much more than they gained. This can be discussed in two scenarios: For those who did not intend to challenge China but just to protect themselves by a high quantity of information, their action of isolation instead intensified China's distrust and suspicion to them, incurring more wars and conflicts than expected. For those who intended to challenge China's status, keeping a distance with the tribute system did stop China from grasping their

⁴⁰ Kang, East Asia Before the West: Five Centuries of Trade and Tribute, p. 148.

⁴¹ Kang, East Asia Before the West: Five Centuries of Trade and Tribute, p. 145.

overall conditions to some extent, however, in turn, they lost the up-to-date information of China, which might be a disadvantage for their challenging actions. For example, Toyotomi Hideyoshi suffered a stunning defeat in conquering China, and before the failure was Japan's long-term isolation from the tribute system.42 Without regular communication through the system, how could Hideyoshi know exactly how powerful the Ming Empire was at that time?

As for countries that decided to respond to China's message and engage in the tribute system, if they tried to disguise themselves, they would soon realize that there was little possibility to do so. Two mechanisms in the tribute system, the verification mechanism and the incentive mechanism, can distinguish real information from fabricated one, minimizing the risk of being deceived by tributary countries.

The Verification Mechanism

The verification mechanism is consisted of (a) special institutes China established in different dynasties to verify the information of tributary countries and (b) the repetitive nature of the tribute system.

Since the dawn of the Tang dynasty, the tribute system has been on the track of institutionalization, with increasingly strict administrative approaches.43 The institutions China set would have a comprehensive collection and scrutinized verification of information offered by tributary countries. The Court of Imperial Entertainment(hung-lu ssu 鸿胪寺) in Tang and Song dynasties undertook the responsibility of "recognizing the ranking and status of every tributary country"(辨其等位).44 Director of the Bureau of Receptions from the Ministry of Rites(礼部主客司郎中) in the Song dynasty, the Interpreters Institute(会同馆) in the Yuan dynasty and the Bureau of Receptions(礼部主客司) in Ming dynasty were asked to enquire into a tributary country's power, territory area, population, customs and production condition and keep them well documented.45 Before entering into the capital and receiving the scrutinized verification from central authorities, tributary envoys first encountered entry procedures at border crossings, where local authorities would determine their identity and make sure that they are qualified for tribute. Foreign tributary missions must pass through multiple-tiered interrogation from China, thus exposing too much information of their country to

For a new tributary country, which is the first time to step on China's land, without any former documents for China to check and verify, lying about and overstating itself is not practicable either because of the repetitive nature of the

⁴² Li Yangfan, *Bei wudu de tianxia zhixu(The Tianxia System Being Misread)* (Beijing: Peking University Press, 2016), p. 49.

⁴³ Li, On the History of the Tributary System, pp. 36–38.

⁴⁴ Li, On the History of the Tributary System, pp. 39–52.

⁴⁵ Li, On the History of the Tributary System, pp. 54–112.

tribute system. As early as the Northern Wei Dynasty and Tang Dynasty, China had stipulated tribute genres and amounts, which is called Chang Gong (routine tribute).46 Besides, it also stipulated the frequency of tribute according to the affinity of tributary countries with China. For example, in the Hongwu Period of the Ming Dynasty, Korea was asked to tribute three times a year, Vietnam was asked to tribute every three years, while Japan every ten years.47 If a tributary country spent ten years to produce a batch of delicate goods and boasted to China that it only cost three years, so as to exaggerate its production capacity, what should it respond when China asks it to offer the goods of the same amount and quality every three years?

Therefore, two characteristics of the verification mechanism prevent tributary countries from lying or exaggerating. But what if they choose to disguise their real condition and abase themselves? This behavior will be stopped by the incentive mechanism of the tribute system.

The Incentive Mechanism

A simple logic in this mechanism is that the honest participator will get more material interests, which is an incentive for all participators to disclose the real information.

The fundamental incentives for disclosing information have been illustrated by Joseph E. Stiglitz, "more able individuals will receive a higher wage if they can establish that they are more productive." 48 Wage in the tribute system is China's gifts in return, which is usually "in greater amounts" and is a "net loss" for China. 49 China's gifts in return are actually the core of Round Three of the tribute system. China will reward a tributary country based on its tribute. For instance, in the Tang Dynasty, China stipulated that Baozeng (reward to tributary countries) must be determined by the valuation of the tribute of a tributary country, and should be better in quality and more in quantity. 50 It leads to a disadvantageous condition for a tributary country which tries to hide its information from China: it would lose a large amount of material rewards, thus might lag behind in regional economic competition.

Receiving China's rewards of tribute is a great impetus for tributary countries to give up concealing the real information to get opportunities to improve technology and stimulate economic growth.

Figure 7: Round Three

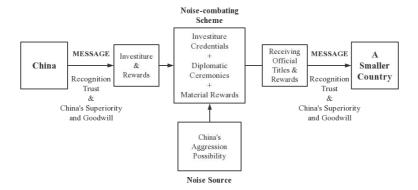
⁴⁶ Li, On the History of the Tributary System, p. 29.

⁴⁷ Li, On the History of the Tributary System, p. 74.

⁴⁸ Stiglitz Joseph E, "Information and the Change in the Paradigm in Economics," *The American Economic Review*, Vol. 92, No. 3 (2002), p. 490.

⁴⁹ Kang, East Asia Before the West: Five Centuries of Trade and Tribute, pp.109–114.

⁵⁰ Li, On the History of the Tributary System, p. 37.



Round Three

China in this round transmitted its recognition and belief of the "loyalty" of tributary countries. Two institutions function as the transmitter in this round of communication. The first institution is investiture, and the second one is material rewards.

By investiture practice, China actually sends two messages to a tributary country: (a) China, as the superior actor in the system, has recognized the legitimate sovereignty of a tributary country as well as the legitimate power of its governor.51 (b) China respects the political autonomy of the tributary country.52 In another word, China shows no interest in its internal affairs, let alone occupy it and directly govern it.

Material rewards granted by China, in the form of currency or Chinese goods, not only send the message that China has believed in the good will of tributary countries and the authenticity of the information disclosed by them, but also reiterate what has been represented in round one: China's superiority and its initiative to live in harmony.

Investiture credentials, the accompanied diplomatic ceremonies and all the currency and goods as rewards, constitute the noise-combating scheme. They function as a form of guarantee or recognition, dispelling misgivings of tributary countries.

⁵¹ Kang David C, "International Order in Historical East Asia: Tribute and Hierarchy Beyond Sinocentrism and Eurocentrism," *International Organization*, Vol. 74, No. 1 (2020), p.71. ⁵² Lee Ji Young, *China's Hegemony: Four Hundred Years of East Asian Domination* (New York: Columbia University Press, 2016), p. 50.

The mature tribute system model is not fixed overnight. It evolved from the imperial pattern to the transitional round, then solidified into the form which we are familiar with, the so-called tribute system. A successful tributary interaction goes through round one to round three. In this communication process, with the help of gifts, both sides received and decoded the initial message from each other, and sent the reply in the same way, avoiding suspicion and misunderstandings, i.e., noise. Thus the volume of information in the system was reduced, contributing to a peaceful East Asia.

Case Analysis

With information as the bottom logic, the tribute system maintained long-term regional peace and minimized outbreaks of wars in East Asia. If regional peace could be a measurement to the tribute system, then the Imjin War, a regional world war from 1592 to 1598, seems to make the system less capable and efficient. In this section, focus will be given to the Imjin War and its explanation under the communication logic of the tribute system. Whether the cause of the war or the pre-war diplomatic preparation is not out of the framework of the tribute system, and can be explained by the communication role of which.

The cause of Japan's aggression

(a) Kamikaze: the failure of Yuan China's aggression against Japan From 1266 to 1270, Kublai Khan, founder of Yuan China, successively sent five diplomatic letters to Japan, urging it to offer tribute to China but never got a positive answer.53 Not satisfied by this embarrassing result, Kublai dispatched around 900 warships, 28000 soldiers and 15000 sailors to attack Japan in 1274.54 Although Chinese troops were better equipped and more sophisticated in military tactics, they retreated in haste and left the victory for their enemy and approximately 13500 people among them died in the expedition.55

In 1281, a new expedition troop consisting of 140,000 Yuan soldiers once again tried to force Japan to yield. Before they marched to the heart of the alien country, an extraordinarily strong blow of wind, or Kamikaze in Japanese, assaulted Chinese troops, causing most of their warships crash on each other and sink into the sea, and only a small part of Yuan soldiers survived and got back to China.56 Japan won the second victory resisting the aggression of Yuan China.

⁵³ Hao Xiangman, Chaogong tixi de goujian yu jiegou: lingyanxiangkan ZhongRi guanxi shi (The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations) (Wuhan: Hubei People's Press, 2007), pp. 191–93.

⁵⁴ Hao, *The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations*, p. 195.

⁵⁵ Hao, The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations, p. 197.

⁵⁶ Hao, The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations, pp. 201–02.

Kublai's effort to include Japan into the tribute system by force totally failed because of two successive crushing defeats of expeditions. As the tribute system was the only official diplomatic interaction in East Asia, during the whole Yuan Dynasty, China and Japan did not have much political exchange.57 Kublai had intended to send a message to Japan that China is the indisputable hegemon in East Asia, but the successive failure on the battlefield sent Japan the opposite message: China is less powerful than Japan. We have discussed that war is a means of communication containing the minimum of information. No matter how powerful Yuan China actually was, Japan received a rather clear and relatively reliable message. It knew that China would not take much advantage in an expedition to it. Therefore, Japan was emboldened to reject joining the tribute system. Yuan China's failing aggression also planted a dangerous seed in the regional security—since "China is less powerful than Japan", why cannot Japan achieve parity with China, or be the center of the whole system? That was just what Hideyoshi did in the Imjin War three centuries later.

(b) The tottering communication between Ming China and Japan

The restart of China-Japan tributary relations went not smoothly. Chinese Hongwu Emperor sent two batches of envoys taking his imperial edicts to Japan to urge tribute from 1368 to 1369. The first batch of envoys was turned away, and for the second batch, five of seven Chinese envoys were killed by Prince Kaneyoshi, who disliked the contemptuous and threatening words in the edicts.58 China's third batch of envoys to Japan in 1370 finally helped Prince Kaneyoshi recognize that China had finished a new round of regime change and envoys in front of face were not from Yuan China but from Ming China.59 In 1371, Japan dispatched envoys bringing tribute to China,60 which marked the inclusion of Japan in the tribute system again. Over the ten years from 1374 to 1384, several tributary missions from Japan were rejected by Hongwu Emperor. The reason seemed to be Japan's disobedience to procedures of the tributary systems, including offering tribute without king's letters and using disrespectful rhetoric in letters.61 Hongwu Emperor even received a letter in 1381 from Prince Kaneyoshi, in which the prince expressed that Japan was not inferior to China and was not afraid of any aggression from China.62 In 1387, furious with Hu Weiyong's conspiracy with Japan to usurp the throne, Hongwu Emperor called a halt to the tributary relations with Japan.63 From the perspective of communication, Japan did not pay much effort to reduce the amount of information and produced noise several times. It

⁵⁷ Hao, The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations, p. 211.

⁵⁸ Kimiya Yukihiko, *RiZhong wenhua jiaoliu shi (History of Sino-Japanese Cultural Exchanges*), trans. Hu Xinian (Beijing: The Commercial Press, 1980), pp. 511–512.

⁵⁹ Kimiya, *History of Sino-Japanese Cultural Exchanges*, p. 512.

⁶⁰ Zhang Tingyu, ed., Ming shi (History of the Ming dynasty) (Beijing: Zhonghua Press, 2000), p. 5588.

⁶¹ Zhang, History of the Ming dynasty, p. 5588.

⁶² Zhang, *History of the Ming dynasty*, pp. 5588–5589.

⁶³ Zhang, *History of the Ming dynasty*, pp. 5588–5589.

failed to show its obedience to China's superior status in the region. On the contrary, it impressed China with an image of order-challenger and rule-breaker.

In 1401 and 1403, Ashikaga Yoshimitsu attempted to restore the tributary relations with China.64 He was granted the legitimate title as King of Japan in 1404 and was allowed to send tribute routinely.65 During this period, Japan sent tribute six times and China sent envoys to Japan seven times.66 The information was reduced for both sides by official and regular interactions and noise was combated by tribute and reward. Communication went smoothly until Ashikaga Yoshimochi decided to stop offering tribute in 1419.67 The next round of tributary relations started in 1432 and ended in 1547, during which Japan sent tribute 11 times.68 Until the outbreak of the Imjin War, no Japanese envoys had ever set foot on Chinese land nor any tribute had transferred to China.

From 1368 (Hongwu Emperor sent envoys to Japan) to 1547 (Japan offered tribute to Ming China for the last time), official tributary relations between China and Japan only lasted for less than 146 years, accounting for around 80% of this period. Though the large proportion, two major interruptions totally broke off the tributary relations and steered Japan away from the tribute system. The decrease of information for both sides heavily relies on continuous and routine tributary interactions, which help update each other's situation and transmit real intentions. Every time Japan stopped tribute, the information in the communication system would surge, producing too many possibilities for both sides. Even during periods when Japan normally offered tribute to China, surrounding tribute there took place several unpleasant incidents like Hu Weiyong's conspiracy with Japan, Prince Kaneyoshi's haughty letter, and the Ningbo Tribute Conflict,69 which can be seen as noise. As has been illustrated, too much information accumulating in the communication channel is a dangerous situation. When a country faces too many possibilities of another, miscalculation and misunderstandings breed severe consequences, like wars. The tottering communication between Ming China and Japan was an incubator for them.

(c) Information black box

Japan was confined in what I called an "information black box", in which it completely cut off communication with Ming China for 45 years from its last tribute to China in 1547 to the outbreak of the Imjin War in 1592. This

⁶⁴ Kimiya, *History of Sino-Japanese Cultural Exchanges*, pp. 516–518.

⁶⁵ Kimiya, History of Sino-Japanese Cultural Exchanges, p. 520.

⁶⁶ Kimiya, *History of Sino-Japanese Cultural Exchanges*, p. 520.

⁶⁷ Kimiya, *History of Sino-Japanese Cultural Exchanges*, p. 520.

⁶⁸ Hao, The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations, p. 229.

⁶⁹ Hao, The Construction and Deconstruction of Tribute System: A New Look at the History of Sino-Japanese Relations, p. 228.

interruption lasted much longer than the previous two interruptions of communication with Ming China—one for 17 years and the other for 13 years.

During the long period of isolation, both China and Japan had undergone tremendous transformations. China had changed its emperor twice after 1547, with Wanli Emperor on the throne in 1592. Japan almost finished unification after decades of wars, which was pursued by Oda Nobunaga and then, Toyotomi Hideyoshi.70 But whether China or Japan knew very little about each other's latest news because of the lack of communication system. For China, as it still had other tributary countries in the tribute system to receive intelligence and messages, it was blocked by the large amount of information only when facing Japan. For Japan, as it was no longer in the tribute system, it lived in insularity and was surrounded by high value of information and noise from every direction. The possibilities it faced were almost infinite so that how it acted could not be on the back of messages from outside but could only depend on what it needed and wanted. Subject to the information black box, as early as 1578, Hideyoshi persuaded Oda Nobunaga to consider occupying Korea and Ming China.71 Before the Honnō-ji Incident, Nobunaga had decided to conquer China with force and enfeoffed its lands to his sons.72 In 1586 and 1587, Hideyoshi repeated his conquering plan in some letters.73 The two great unifiers' plans to subdue Korea and China were made in an era without any effective communication with their objects. Given the need to unify the country and prevent rebellions from daimyos, an invasion of foreign countries seemed helpful and plausible for them. However, as long as any of them could understand that Ming China was an incontrovertible hegemon in East Asia and Korea was its most loyal tributary country, they could have avoided huge losses. The fact is, after 45 years of isolation from the tribute system, Hideyoshi was an abysmal lack of knowledge of Ming's real condition and the current international relations. Even no "systematic effort had been made to gather intelligence" on the countries he attempted to conquer.74 It was the illusion of a world empire and a novel system with Japan at its core that drove 158,800 Japanese into stepping on an alien land, who had no idea of what they were going to confront with.

Japan's preparation of the Imjin War

The nature of the tribute system is to transmit the real condition as well as the real intention of the information source to other members in a less expensive affirming

⁷⁰ Walker Brett L, A Concise History of Japan (London: Cambridge University Press, 2015), pp. 102–115

⁷¹ Wang Jiahua, "Lue lun fengchenxiuji qinChaozhanzheng de yuanyin" ("On the Reasons of Toyotomi Hideyoshi's Invasion of Korea"), *Riben yanjiu (Japan Studies*), No. 1 (1985), p. 35.

⁷² Akechi Kenzaburō, *Bennengsi zhi bian: Guangxiu · Xinchang · Xinji · Jiakang 1582 nian de zhenxiang (Honnō-ji Incident: The Truth in 1582)*, trans. Zheng Yinlong (Beijing: Social Sciences Academic Press, 2017), p. 138.

⁷³ Walker, A Concise History of Japan, p. 115.

⁷⁴ Hall John W. and James L. McClain, *The Cambridge History of Japan Volume 4: Early Modern Japan* (Cambridge: Cambridge University Press, 1991), p. 271.

ways than wars and conflicts. As Adrian Forsyth described rivalries in nature, "it pays to advertise your strength to your rivals; otherwise, you will waste much in the process of affirming it." 75

(a) Conquest through diplomacy: To what extent Hideyoshi's strategy overlapped with the tribute system

Given the nature of the tribute system, Japan's preparation before the Imjin War was very much like the effort to build a tribute system. Especially when Hideyoshi conducted his strategy of "conquest through diplomacy" from 1587-1592, it bore a strong resemblance to round one of the tribute system.

Perhaps misguided by the perception that Korea was subject to Tsushima, 76 Hideyoshi asked the daimyo of the island of Tsushima, So Yoshishige, to negotiate with the king of Korea, insisting that the king should come to Japan to show his obedience, otherwise Korea would be attacked.77

From 1588 to 1592, similar letters were delivered by Hideyoshi to the Ryukyu Islands, Taiwan, the Philippines, and India,78 emphasizing the power of Japan and Hideyoshi himself and demanding their obeisance.

In 1589, the King of Ryukyu wrote a letter to Hideyoshi, showing his respect to Japan and saying that he had dispatched an envoy to Japan with gifts.79 In November 1590, a Korean mission arrived in Kyoto to meet Hideyoshi. The Korean embassy handed over the letter from the Choson court, expressing the willingness to keep "friendly relations with your nation."80 The Spanish governor in Manila, Dasmarinas, also drafted a reply to Hideyoshi and sent him "a dozen swords and daggers."81 Even as far as India, a representative of Philip II was dispatched to Japan to appear before Hideyoshi in 1591.82 All this is very much like what should happen in round two of the tribute system.

Sending messages through his pen rather than his sword helped Hideyoshi demand the submission of almost every neighbor except China. It looks like Hideyoshi had

⁷⁵ Forsyth Adrian, *A Natural History of Sex: the Ecology and Revolution of Mating Behaviour* (New York: Firefly Books, 2001), p. 53.

⁷⁶ Hall and McClain, *The Cambridge History of Japan Volume 4: Early Modern Japan*, p. 271.

⁷⁷ Zhu Erdan, *Wanli chaoxianzhanzheng quanshi(The Imjin War 1592~1598) (* Beijing: Democracy and Construction Press, 2020), p. 8.

⁷⁸ Hawley Samuel, *The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China.* (Seoul: Royal Asiatic Society, Korea Branch; Berkeley: Institute of East Asian Studies, University of California, 2005), p. 89.

⁷⁹ Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China, p. 89.

⁸⁰ Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China, p. 84.

⁸¹ Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China. p. 91.

⁸² Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China. p. 92.

established the first two rounds of a new tribute system with Japan as the information source by just scribbling several letters in a few years. Or had he?

(b) Erroneous messages and lack of noise-combating scheme

Sending out the real message is of vital importance. If one is truly a great power, all it needs to do is to make the other members believe this message by communication; if one is a smaller power, it also needs to make the great power believe it so as to avoid tentative assaults. The reason China could hold the grasp of the information source of the tribute system is that China fully understood it was truly a great power after the transitional round and tried to send the real message to other countries in the next few rounds and make them believe by the noise-combating scheme. Japan, though experienced process resembling round one and two, transmitted an erroneous message. In fact, it is far from the most powerful country in East Asia. Think about the broadness of Philip II's colonies, why should he pay tribute to Hideyoshi? And why should Ryukyu and Korea, two stable tributary vassals of China, lose their minds to submit to Japan rather than the real hegemon in contact for centuries?

When an erroneous message was transmitted in the system, it was noise itself, let alone Hideyoshi did not introduce any noise-combating scheme into his effort of building a Japan-centered tribute system. First, gifts should be brought by envoys to a potential tributary country as a revelation of the strength of the information source in the round one of establishing a tribute system. However, when Japan's neighboring countries received Hideyoshi's letters, they got all but a few pieces of paper with his arrogant rhetoric. Though Manila got Japan's gifts, the gifts were very much like purchased by the envoy Harada himself, rather than ordered by Hideyoshi.83 Therefore, the noise was not overcome, governor Dasmarinas was still confused with Japan's strength, Hideyoshi's real intention and even the authenticity of the envoy.84 The reason he replied to Hideyoshi is out of caution and courtesy, which is in line with what a country normally does when facing a large amount of information. However, Hideyoshi saw it as a symbol of the submission of the Philippines. Second, there should be a large number of valuable gifts sent back to the foreign envoys to express the great power's recognition of their loyalty and implying its power. Contrary to that, when Korean envoys appeared before Hideyoshi, they were even not treated with a decent banquet. The welcome ceremony for them was perfunctory and the cuisine prepared by Japan included only pancakes and unfiltered wine.85

⁸³ Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China, p. 90.

⁸⁴ Hawley, The Imjin War: Japan's Sixteenth-Century Invasion of Korea and Attempt to Conquer China, p. 90.

⁸⁵ Zhu, *The Imjin War 1592~1598*, p. 12.

In short, before the outbreak of the Imjin war, Hideyoshi walked through the first two rounds of the tribute system, attempting to replace China as the dominant information source. Nevertheless, due to his ignorance of the current international relations and Japan's actual capability, he failed to transmit the real message. Furthermore, he seemed content with recognizing other countries' obedience by a few letters, without any effort to combat noise by giving back gifts or through investiture. Though the modality of Hideyoshi's incomplete tribute system resembled the appearance of the tribute system, he did not understand the communication logic of the tribute system and was not satisfied with the non-interference with other members' internal affairs, which a real core of the system should do. So, with the real aim of annexing more lands, Hideyoshi finally gave up his analogous tribute system and stepped back to the transitional round, choosing to "make a leap and land in China and lay my laws upon her."86

Conclusion

This article can be seen as a response to Zhang Feng's suggestion—"to understand what actually lay behind these relations (tributary relations)."87 By introducing Shannon's information theory, I depict a broader picture of the international order in historical East Asia, which focuses on reducing the amount of information and combating noise. After understanding the communicative role of the tribute system, one should also not neglect three points that are worth paying attention to: First, there is no need to button one's lip to the Sino-centric characteristic of the tribute system. Keeping the operation of such a money-consuming but peaceadvancing system calls for a powerful and rational country. As the most powerful country in most periods of time in history in East Asia, China was both the constructor and upholder of the system. The communication platform is a public good provided by China in East Asia. Admitting the Sino-centric characteristic does not mean constructing an evil empire image of China. Becoming the center of a dandelion-clock-like communication network also means facing more uncertainty, thus entails undertaking more responsibilities and spending more to make both ends meet. Besides, recognizing and accepting hierarchy in the system benefits the stability of the region. To whatever extent, the Sino-centric characteristic is neither a praise nor an insult of China. It is merely a fact of the tribute system.

Second, I have no inclination to portray a "myth of Confucian pacifism" of the tribute system. As has been discussed, the predecessor of the tribute system is the imperial pattern, a vicious circulation of wars, pillage, and revenge. Even the tribute itself evolved from war trophies and compulsory taxation. As a product of history, the tribute system experienced a bloody and barbaric period. After getting a fixed mode, it never gave up using wars as a resort to combating noise and

⁸⁶ Zhu, *The Imjin War 1592~1598*, p. 13.

⁸⁷ Zhang Feng, "Rethinking the 'Tribute System': Broadening the Conceptual Horizon of Historical East Asian Politics," *The Chinese Journal of International Politics*, Vol. 2, No. 4 (2009), p. 574.

reducing information, especially in the beginning of every new dynasty. But wars in the transitional rounds did help members in the system recognize the hegemon's strength and resolution, favoring a long period of peace of the region. Therefore, if we rethink the tribute system from the perspective of information and communication, we can evaluate war and peace on a larger scale.

Third, we should not neglect the role of culture in the tribute system, which I did not talk about much in this article. Though the external appearance of the tribute system is advertising power and strength, the bottom logic of it is still based on culture, like what Sun Tzu said, "to subdue the enemy without fighting is the acme of skill."88 We can say that the tribute system is guided by such strategic choice out of the special culture in East Asia. On the other hand, mere power superiority would not let a country own the core status automatically. Nomadic tribes had the advantages of military organization and mobile warfare, but they did not become the center of East Asian international order. Because they lagged behind in cultural achievements, which can be a symbol of power in communication. How mighty a country is, it always needs to demonstrate culture, a less costly but efficient way to advertise its power. Those who seek to achieve the same goal by aggression and expanding only would find it too expensive to persist. In East Asia, cultural superiority is as important as its physical counterpart in the recognition of hierarchy. In addition, as an official diplomatic language in East Asia, Chinese greatly boosted the well functioning of the tribute system. Common language provides people in this region a common understanding basis, which helps the deciphering of transmitted messages, avoiding misunderstandings caused by a diversity of languages.

Although the tribute system has already collapsed and has little chance to be resurrected, the enemy it had been fighting with, uncertainty, or great information, is still casting its shadow on today's international landscape. The normal interactions between sovereign countries as well as local, regional and global peace and security can still be disturbed by uncertainty at any time. As an international order functioned for two millennia, the tribute system left us a legacy of how to reduce the information, in which the transmission of the real intention, the recognition of messages, and the noise-combating schemes should not be deserted as something anachronistic, but calls for further digging and interpreting.

⁸⁸ Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press, 1963), p. 77.