

## A Geographic Analysis of Traders and Trade Goods in Japan's Late Medieval Seto Inland Sea

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### Abstract

*This paper will discuss ongoing research into the flow of both goods and people in medieval (14th - 16th centuries) Japan's Seto Inland Sea area. Prior to colonialism and contact with the West, there was already a complex, well developed maritime network in place within Japan that has received little attention. Understanding the extent of the domestic trade network reveals the thriving trade between communities within the Inland Sea, in conjunction with the better known court-centric tribute and tax system. Examining archaeological and written records concerning trade goods and collaboration among ships' captains provides a clearer understanding of the networks and developments in this region. Although the foundation for much of this research comes from the documentary record, incorporating the archaeological evidence into a GIS (Geographic Information Systems) database paints a fuller picture of the networks within the Inland Sea before contact with the West.*

**Key words:** Medieval Japan, Maritime shipping, GIS (geographic information systems), Trade routes, Bizen pottery

### Introduction

Japan has traditionally been considered a "closed country," seen as almost entirely removed from any interactions with the rest of the world until contact with the Portuguese in the sixteenth century. Scholars therefore tend to omit discussion of Japan's role in Asian trade and ignore the established trade networks within the archipelago itself. Janet Abu-Lughod's *Before European Hegemony*, though generally an excellent introduction to medieval trade routes beyond Europe, completely excludes Japan even though she devotes an entire chapter to Asia. Official documents clearly show trade connections with China and Southeast Asia throughout the premodern era, and mainland pottery and other goods are regularly

excavated throughout archaeological sites in Japan<sup>1</sup>. Much of the medieval documentation of the domestic trade, though, shows goods coming from the periphery to the central court in the Kyoto region. While these connections are important to note, it ignores the role played by trade hubs in the provinces on the cusp of contact with the West. Understanding those domestic trade routes will eventually help clarify the role that smaller ports en route to the capital region would have played in transporting foreign goods. Through a geography-based analysis of the domestic trade routes in late medieval Japan, it becomes apparent that the connections and collaborations between different local ports and ship captains facilitated a thriving local trade.

### **Sources and Methodology**

Though few trade-related documents from the medieval period have survived the centuries, one set of port records provides much information about Inland Sea shipping. The *Records of Incoming Ships at the Hyōgo Northern Checkpoint* (*Hyōgo Kitaseki Irifune Nōchō*, below, *Records*) record data for over 1900 vessels that passed through the checkpoint at Hyōgo, today part of Kobe City, in 1445 and the first two months of 1446 (Hayashiya, 1981). Each dated entry notes the port of registry of the ship, the type and volume of cargoes carried, the taxes levied on the items and dates collected, the name of the ship's captain and the name of the warehouse manager that handled the incoming items<sup>2</sup>. As the records show the flow of goods from the provinces to Hyōgo, gateway to the central court region of Kyoto, this collection has been very useful in learning about center-periphery trade relations. By analyzing the imports through a geographical lens, though, the focus becomes on the roles of the provincial ports. From there it is possible to learn more about the connections between those provincial ports and understand more about regional trade networks.

Sets of maritime regulations (*Kaisen shikimoku* or *kaisen taihō*) also reveal additional information about seafaring practices in the medieval period<sup>3</sup>. The dates of these regulations are disputed, as the language used and the age of the extant

copies suggest a late 16th century author but the dates on the documents themselves are from 1223. Even if they were written in the later era and predated to suggest an established precedent, however, their widespread recopying implies that though the written codification came later, the practices themselves were likely already widely followed. Other information about medieval trade comes from the archaeological record. Unfortunately in many cases there is little archaeological signature for the items noted in the *Records*, particularly for consumables such as rice, salt, and marine life. Site reports from locations along the Inland Sea help paint a richer picture of the flow of other items such as pottery or iron. Incorporating both the documentary information from the *Records* with the archaeological evidence into a GIS (Geographic Information Systems) database helps highlight the patterns of trade throughout the Inland Sea, suggesting new relationships between the locales and revealing some previously lesser-known trade hubs.

### **Trade Routes: Commodities**

The *Records* note nearly ninety different cargoes being shipped throughout the Inland Sea in 1445. As it is impossible to discuss all of them in depth, this paper will focus on trade patterns for salt, the most traded commodity in the *Records*, and pottery, best representative of the archaeological signature. Since salt was recorded usually noting its production point (“Aga salt,” “Mihara Salt,” “Bingo Salt,” etc.), it is relatively easy to identify the different shipping routes. Even though (Fig. 1) reflects a large amount of data, the overall color distribution indicates that the salt often was shipped directly to Hyōgo from a port close to its point of production. Mihara salt came from the ports on Awaji Island near the port of Mihara, Katamoto salt from Sanuki province ports near Katamoto, and so on. Looking only at ports that shipped more than five hundred *koku* (1 *koku* = approximately 330 lbs) of salt to Hyōgo over the year, however, reveals further information about transshipment trends (Fig. 2).

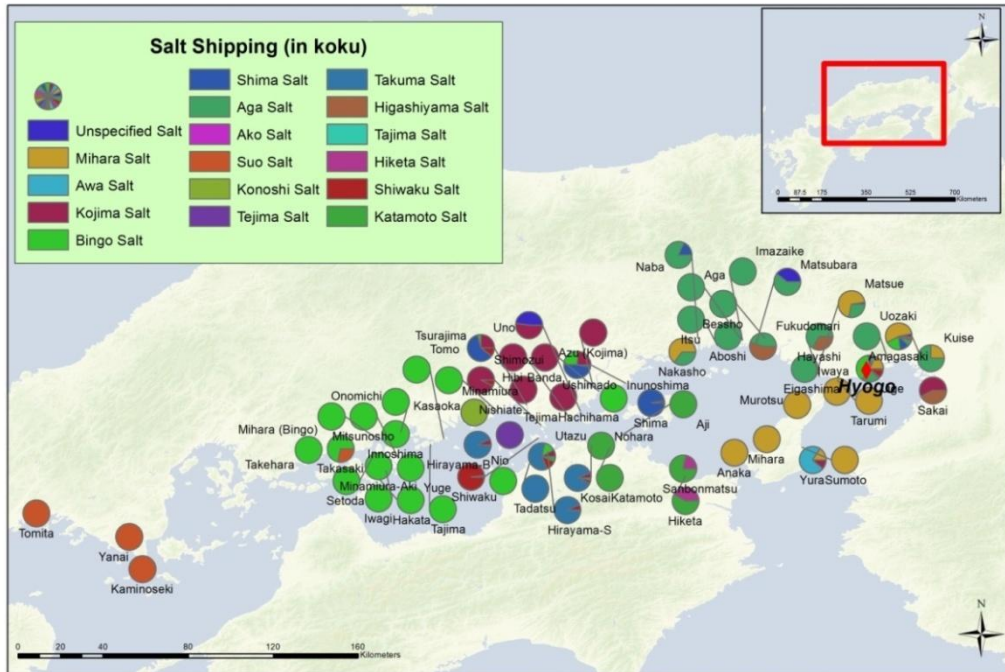


Fig. 1 All salt shipments in the Records (Michelle Damian)

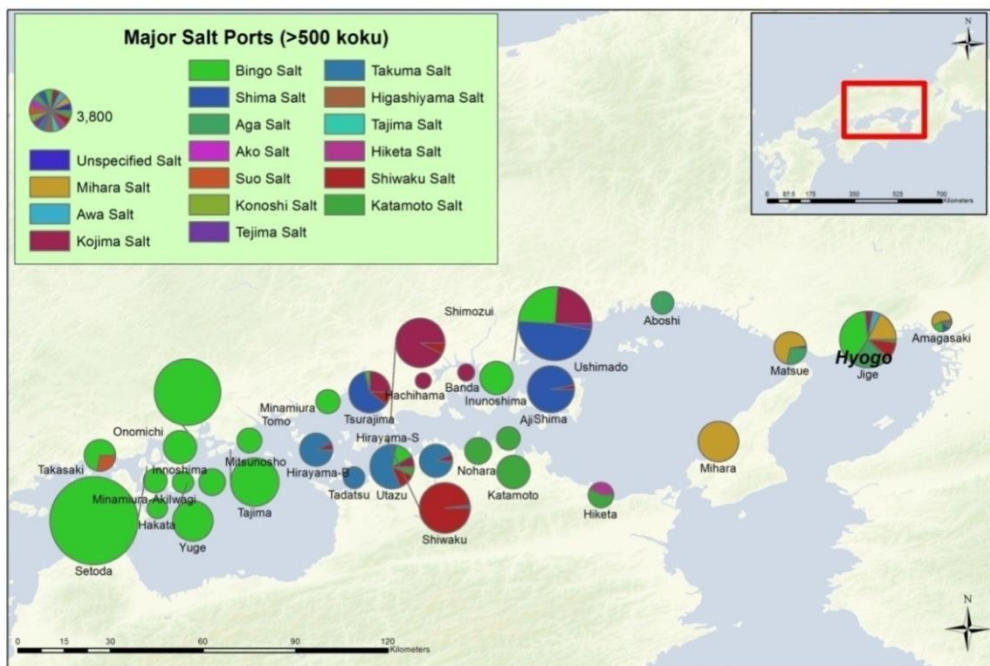


Fig. 2 Ports shipping more than 500 koku of salt in the Records. (Michelle Damian)

One of the best examples of an unexpected transshipment hub is Takasaki. Particularly in comparison to its neighbor ports of Onomichi and Setoda, Takasaki was not a major port. It shipped to Hyōgo only about one-third to one-quarter of the total amount of goods sent by either Setoda or Onomichi. Yet even Takasaki shipped a smaller quantity of items, it served as a transshipment point for Suō salt, produced in Suō province west of Takasaki. The ports of

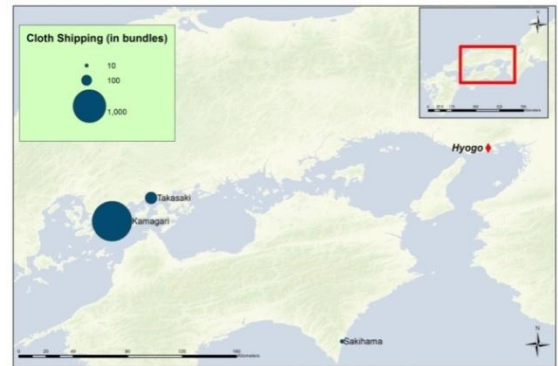


Fig. 3 Shipments of cloth in the Records.  
(Michelle Damian)

Tomita, Yanai, and Kaminoseki, actually located in Suō, sent *less* Suō salt to Hyōgo than the six hundred *koku* shipped from Takasaki in Aki province. The absence of Suō salt in other ports east of Takasaki strongly suggests that Takasaki was the primary destination for ships carrying that cargo. After those ships offloaded their cargo there, it was then in turn sent to Hyōgo. Takasaki's role becomes even more interesting when other goods and locations are also considered. Cloth often was brought to Japan from the mainland via Kyushu. When mapping the shipments of cloth to Hyōgo in the records, Takasaki and the adjacent Kamagari are apparent as the major suppliers, with Sakihama a distant third (Fig. 3). In considering rice shipments as well, the only port shipping Kyushu rice to Hyōgo is Kamagari. A fourth product named *nikomi* in the *Records* is shipped to Hyōgo only from Moji and Kamagari<sup>4</sup>. Other ports noted in the *Records* that are closer to Kyushu, including the adjacent ports of Shimonoseki and Moji as well as all of the other Suō province ports, were bypassed by the Kyushu products in favor of the further Takasaki and Kamagari, but did not go as far as the much heavier trafficked Onomichi and Setoda. One possible reason for Takasaki and Kamagari's favored role may have been an attempt to protect cargo shipments. The seas around the islands immediately to the west of Takasaki are home to strong currents and treacherous waters. Moreover, slightly southwest of Takasaki but east of

Setoda were islands inhabited by pirate clans as early as the mid-1300s (Shapinsky, 2005: 147). In the *Records*, ships coming from the western ports were generally larger but less frequent than their counterparts from the eastern ports. Their captains would therefore have had to maneuver their large ships through dangerous shoals with which they were less familiar, and needed to defend against piracy to boot. Transshipping at Takasaki or Kamagari would have allowed them to transfer their goods to captains in smaller ships that were more familiar with the waters, without crossing over the more treacherous areas to Onomichi and Setoda. Items that allow the incorporation of the archaeological record into the analysis provide much more information about the spread of trade goods throughout the Inland Sea. The most obvious of these is in the analysis of pottery. The *Records* alone note that small jugs (*tsubo*), were shipped to Hyōgo from Sakai, Katakami, and Inbe (Fig. 4). *Suribachi*, a shallow bowl used in cooking, were shipped only from Jige, and only once throughout the entire year of records. There is a notation in one shipment from Ushimado that records six *suribachi* as part of the taxes levied on a shipment of sesame seeds, but as this was not recorded as part of the official taxable cargo it is an unusual case, and cannot necessarily be factored into the analysis of the typical cargo shipments. While the type of pottery is unspecified in the *Records*, the total volume of shipping from the Bizen area (including the Katakami and Inbe kilns) and the kiln ruins from the Inbe

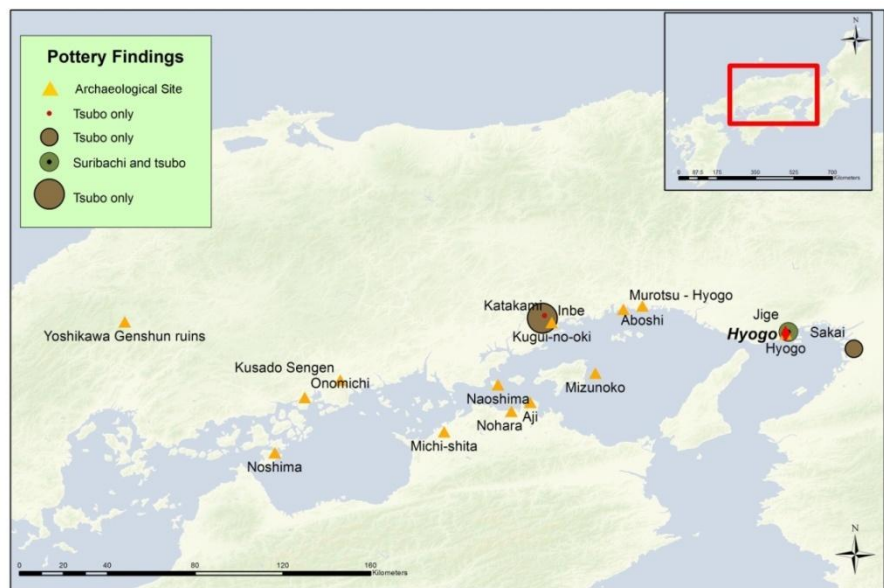


Fig. 4 Bizen pottery in the *Records* and in archaeological evidence.  
(Michelle Damian)

area strongly suggest that the majority if not all of the pottery was Bizen ware (San'yo, 1978: 62)<sup>5</sup>. The pottery coming from Sakai is more questionable, but the pottery was brought in on the same boat that contained Kojima salt, also on the Bizen peninsula. This suggests that that vessel also visited or was shipping items from Bizen, and could therefore have been transporting Bizen ware to Hyōgo as well.

While the *Records* provide information about the flow of Bizen pottery from its production point to Hyōgo, it is only a small part of the entire picture. In looking at archaeological site reports along the Inland Sea, the presence of Bizen ware is ubiquitous. Excavations in terrestrial settlements in Bingo province (Onomichi, Kusado Sengen), Sanuki (Nohara, Michi-shita site), Harima (Aboshi, Murotsu-Hyōgo)<sup>6</sup>, and even far inland in Aki (Yoshikawa Genshun site) reveal significant amounts of Bizen ware, ranging from *suribachi* cooking dishes, to *tsubo* jars, to larger vats and other implements. Underwater recoveries, which were not systematic excavations but simply pottery discovered through serendipity such as being caught up in fishing nets, also dot the Inland Sea. These are mostly located in the central inland sea area at sites near Naoshima, Aji, and Kugui-no-oki, and likely are the remnants of either shipwrecks or jettisoned cargo. The final type of site is represented only by Mizunoko-iwa, which was a shipwreck site that yielded nearly two hundred pieces of Bizen pottery (San'yo, 1978: 80-81).

Looking at the sites alone certainly suggests a wider variety of usage for Bizen ware throughout the inland sea. Not only flowing from the production point east to Hyōgo and the central court, Bizen ware was also shipped out to destinations far west of the kilns. More Kamakura and Muromachi-era Bizen ware has been discovered on Honshu than on the western areas of Shikoku, possibly suggesting more direct interaction with the former area. Two sites are of particular interest. The first is Aboshi in Harima, a destination in between the kilns near Inbe and the checkpoint at Hyōgo. A number of pieces of Bizen pottery from the 15th century were found here, especially larger vats (*kame*) (Nakagawa, 2008: 119). They show

evidence of use, and as such were likely imported to Aboshi as a final destination (Nakagawa, 2008: 124). Large numbers of pottery found in one area with no signs of usage would have been more likely to indicate a transshipment location. The information from the *Records* shows Aboshi as a small-to-medium sized port, sending sixty two ships to Hyōgo over the course of the year, most of which carried less than 100 koku of goods. It does not appear to have been a major source of transshipping based on traceable goods, but the evidence of Bizen ware used in Aboshi still suggests that there was direct trade happening with other estates along the Inland Sea. Instead of being a commercial center for incoming and outgoing goods, though, Aboshi was mainly an import destination.

The second significant archaeological site is the shipwreck at Mizunoko-iwa. Located approximately six kilometers offshore of Shōdoshima, it is one of the only underwater discoveries of a Muromachi-era shipwreck site to date. Though the ship itself has been lost to the elements, the pottery cache recovered yielded 35 large jars (*kame*), 71 large jugs (*tsubo*), 14 small jugs (*tsubo*) and 66 cooking bowls (*suribachi*), totaling 189 objects. This provides at least a minimum representation of the number and types of items that would have been shipped longer distances. The ship's intended final destination is unknown, though it may have been the Kumano area on the Kii peninsula. Bizen ware has often been discovered along the coast of Wakayama prefecture, and the wreck site places a ship leaving the kilns at Katakami and Inbe squarely along that route (San'yo, 1978: 65). The first archaeological evidence of ballast stones used on ships also comes from the Mizunoko site. Although the origin of the ballast stones has not yet been identified, studies have shown that they were not from the region near the kilns, which suggests that the vessel had loaded them at yet another port possibly from the Kishū or Shikoku area (San'yo, 1978: 87-88). The likely route of the voyage from Bizen directly to Kishū, as well as the combination of Bizen ware and ballast from a different location, suggests the direct interaction between two

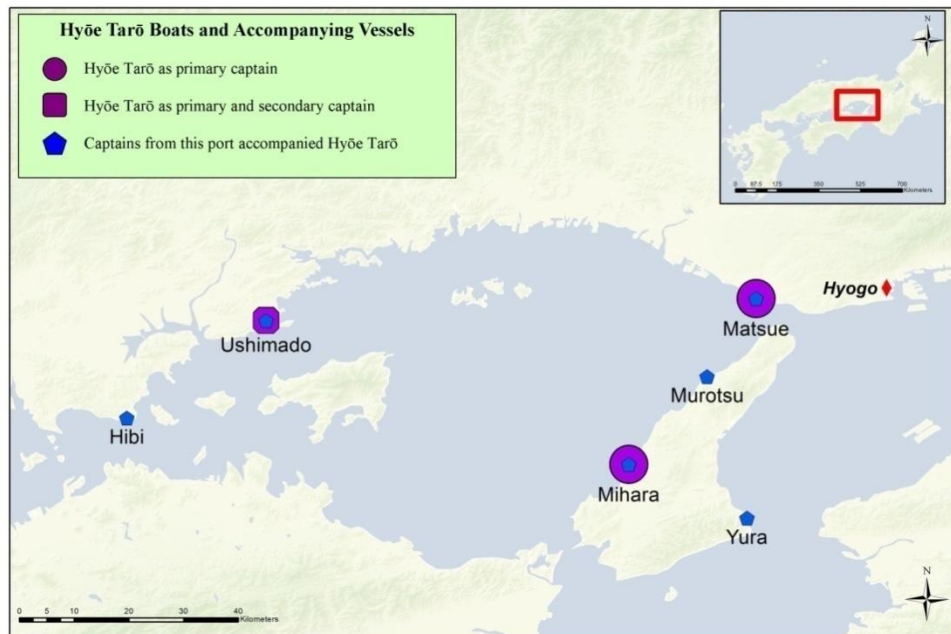


removed locales, further demonstrating the wide range of domestic ties and trade routes.

### **Trade routes: People**

The maritime regulations suggest that voyaging together was a common occurrence. Several articles refer to the responsibility of one boat to lend aid to another in trouble, or to rescue individuals in the case of a shipwreck. As the regulations also suggest disputes in the case of allocating profits when cargo was lost or ships were damaged, it is possible that sailors traveling together also acted as witnesses to provide evidence to settle those disputes (Shinjō, 1994: 777). The *Records* note 171 vessels as *edabune* (“branch ships”), a term used in the maritime regulations as referring to an accompanying ship on a voyage<sup>7</sup>. Understanding that this was a common practice further suggests stronger ties between individual captains. With common Japanese names such as Tarō Jirō or Shirō Gorō – roughly equivalent to trying to research the backgrounds of captains named “Bob” or “Joe” in the English world – and no other corroborating records, scholars have assumed that the captains in the *Records* were generally untraceable. Captaining a ship is a particular skill, though, particularly in the sometimes treacherous waters of the Inland Sea. In a finite geographical area, it is highly unlikely that there were multiple men with the same names plying the waters simultaneously. Examining the captain’s names through a geographic lens reveals that these individuals were indeed traceable and furthermore highlights collaboration between captains in their voyages. The voyages of Hyōe Tarō are an excellent example of one such ship captain’s network in play. His name appears associated with nine ships registered in Matsue, eight in Mihara, and three in Ushimado (once as primary and twice as secondary captain) (Fig. 5). The ships often arrive within one or two days of each other, and in one case a Hyōe Tarō-captained vessel from Matsue and Mihara arrive on the same day. Since the same

individual could not be physically captaining both vessels, at first glance it seems impossible that this was the same individual in every case.



*Fig. 5 Ports affiliated with Hyōe Tarō and his extended network.*

Considering the names of the captains of other ships that arrived in Hyōgo on the same days, though, the question becomes more complex. The same names appeared regularly, hailing from nearby ports – Yura, Murotsu, Hibi, and the same Matsue, Mihara, and Ushimado, though the majority were registered to Mihara. The table below details the names of the accompanying captains and the ports they were registered to, along with the type (Matsue, Mihara, or Ushimado) of Hyōe Tarō-captained vessel that they arrived in Hyōgo alongside (Table 1). Regardless of whether Hyōe Tarō's ships were from Matsue or Mihara, the names of the accompanying captains were often the same: Emon Gorō, Mata Gorō, Gorō Tarō and others, mostly from Mihara, accompanied Hyōe Tarō's boats regularly.

Hyōe Tarō Vessels		Accompanying Vessels		
Port Registry	# of Boats*	Accompanying Captain	Port Affiliation (s)	# of Boats*
Matsue	9	Emon Tarō	Mihara	1
			Hibi	1
		Gorō Tarō	Mihara	3
		Mata Gorō	Mihara	2
		Kanimori Tarō	Mihara	3
		Taifu Jirō	Mihara	1
Mihara	8	Emon Tarō	Mihara	6
		Gorō Tarō	Mihara	3
		Mata Gorō	Mihara	2
		Kanimori Tarō	Mihara	1
			Yura	1
		Taifu Jirō	Mihara	1
		Emon Jirō	Murotsu	3
		Hyōe Jirō	Matsue	2
Ushimado	3	Gorō Tarō	Mihara	1
		Emon Jirō	Murotsu	1
		Hyōe Jirō	Matsue	2

\* “# of Boats” denotes the total number of vessels captained by the same person from the same port of registry. For example, Hyōe Tarō captained nine total boats from Matsue in 1445. The captains of the accompanying vessels listed to the right may have sailed with Hyōe Tarō’s Matsue boats from one to three times, and sometimes the same individual captained boats registered in different locations (e.g., Emon Tarō who accompanied Hyōe Tarō’s Matsue boats once on a Mihara and once on a Hibi boat).

Table 1. Hyōe Tarō boats and networks

In looking at cargo carried, all of the cargo from Hyōe Tarō Mihara and Matsue vessels as well as their accompanying ships consisted of Mihara salt, with Hyōe Tarō’s ships often carrying the largest cargo. The Ushimado vessels were exceptions; when Hyōe Tarō was primary captain it carried rice and in both secondary captaincies the cargo was Shima salt. With the common cargos combined with the connections between the individual captains, it seems likely that this was indeed the same Hyōe Tarō affiliated with all of the ships. The maritime regulations suggest that the shipowner and ship’s captain could be the same or could be two different individuals. Hyōe Tarō may have based himself in Mihara where he was accepted into that network of other ships’ captains, and also owned

boats (or in the Ushimado cases where he is listed as secondary captain, perhaps shares in vessels) registered in other ports. If Hyōe Tarō were the shipowner but had someone else piloting his vessel, his name may have been written in the *Records* as the person primarily responsible for the ship and its cargo. The fact that he was an established member of the extant Mihara-based network allowed his boats from Matsue to join the voyages to Hyōgo, all carrying salt from Mihara. There are many such examples of captains' networks that are revealed through a geographic analysis of individual names in the *Records*. The implications of this on the study of medieval Japanese labor practices are worth noting. Skilled workers, such as the ships' captains, could be affiliated with ships registered to different ports in entirely different provinces. Most studies of medieval laborers focus on the agrarian sector, which were by their nature tied to the land they cultivated. Examining maritime practices shows that labor mobility may have been more possible than had been previously thought. In cases such as Hyōe Tarō's, if he was indeed the ship owner for the Matsue vessels, it also implies the ability of individuals to own property in diverse regions – a privilege generally thought to have been reserved for members of the upper classes. Examining the geographic ties between the ship's captains simultaneously suggests the potential for their mobility and their property owning.

### **Conclusion**

Though this paper focuses on domestic trade routes in medieval Japan before direct interactions with the Western world began, the principles outlined here are still relevant to later maritime connections. This analysis demonstrates the established domestic maritime networks for both people and commodities and suggests transshipment hubs. Particularly in cases such as Takasaki and Kamagari, the geographic tracking of the flow of goods shows the role that relatively smaller ports might have played in transshipping goods from the southern regions. As Western trade was funneled through the offices in Kyushu, additional research will show whether those ports continued in their middleman role in

shipping goods to eastern Japan, or whether their importance faded as infrastructure improved and the threat of piracy was squelched.

The captains' networks may have been useful in facilitating Western trade as well. Peter Shapinsky's analysis of portolans (nautical charts) from early modern Japan shows their hybrid nature, using a mixture of Western and Asian scripts and iconographies (Shapinsky, 2006: 5). Further, he suggests that the ships' crews in the 16th century were largely a mixture of nationalities and that the captains were the arbiters of knowledge on board, responsible for the safety of the ship and its crew and therefore for keeping accurate charts and records (Shapinsky, 2006: 15). The maritime networks of the inland sea show that collaboration between captains was already common practice, and could have easily extended their reach in cooperating with foreign captains in later years. The connections shown through this geographic analysis, while focused on domestic trade, are representative of the importance of the Inland Sea region as a shipping center. Privileging the geography and incorporating both documentary and archaeological evidence into the analysis further deepens our understanding of shipping and common maritime practices within medieval Japan.

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### **Endnote**

<sup>1</sup>For the purposes of this paper, the premodern era is defined as pre-Tokugawa era (i.e., prior to 1603) and the medieval period refers to the Kamakura through Muromachi/Sengoku periods (1185–1603). The focus of this paper is largely the late medieval as represented by the Muromachi era (1337–1573).

<sup>2</sup>The port of registry was not necessarily the beginning point of each boat's voyage to Hyōgo, though in many cases it is likely that they were indeed the same.

<sup>3</sup>The word “kaisen” literally translates to “ship going from place to place,” and usually refers specifically to a coastal trade ship. Since some of the articles in the regulations refer to riverboats, port regulations, and personnel issues, I have chosen to translate this as “maritime” rules or regulations.

<sup>4</sup>The actual meaning of *nikomi* is unclear. It is thought to have been some kind of fish or marine good.

<sup>5</sup>One kiln in the Furōzan area of Inbe was nearly forty meters long, which based on other contemporary kilns suggests that it was producing pottery from at least the early Muromachi era (15th c).

<sup>6</sup>Murotsu-Hyōgo is different from the port of Murotsu in the *Records*. The latter is in Awaji province.

<sup>7</sup>Flagships are referred to as *honsen/motobune* in the maritime regulations. The *Records* do not denote any boats as *honsen*, but do have several “*nagabune*” (longboat) notations which may have been another term for flagship.

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