CERAMIC TRADE NETWORK AROUND TAIWAN STRAITS AND THE GALLEON TRADE

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PREFACE

In 1571, Spain founded Manila City for the rule of the Philippines and the Asian trade. Ferdinando Magellan crossed the Pacific Ocean half a century before that time. After the city of Manila had been built, the Manila Galleon trade route was soon established. It functioned as a long-distance and large-scale sea trade route connecting the Asian world with the American Continent until the early 19th century. Many Asian goods such as silks and spices were exported by the Spanish galleons. And some of the goods were shipped to Europe. On the other hand, many New World goods, including Mexican silver, crossed the Pacific Ocean and were brought to the Asian world. The cargoes sent to Acapulco from Manila included East Asian porcelain as well.

Many Oriental porcelains were transported from Manila to the American Continent. Though most of them were Chinese porcelains, they included Japanese porcelains(Hizen porcelains). And the merchant who played the large role in overseas export of Hizen porcelains was Zheng Chenggong (Koxinga) group. And they made the cities around Taiwan straits the main territories. In this paper, I will discuss on the ceramic trade network and the galleon trade, based on the circulation situation of the Hizen porcelain which began overseas export.

THE ORIGINS OF HIZEN WARE

Hizen Province, which existed up to the 1860s and the Meiji Restoration, is currently part of Saga and Nagasaki Prefectures. It is located in the northwest of Kyushu Island, Japan. The production of Hizen ware started in the late 16th century and is still an important industry in this region now.

There are two kinds of Hizen ware; one is Hizen glazed stoneware, so-called Karatsu ware, and the other is Hizen porcelain, including Arita ware, Hasami ware and Mikawachi ware. Hizen porcelain was the first porcelain produced in Japan. Until the

production of porcelain was mastered in the early 17th century, Japan had to import porcelain mainly from China. The Japanese ruler Toyotomi Hideyoshi (1536-1598) sent his troops to the Korean peninsula between 1592 and 1598. They brought back to Japan many Korean people including skilled pottery-makers. Some of them were brought to Hizen Province. At first, these Korean pottery-makers in Hizen produced glazed stoneware. After they found the raw materials for making porcelain near Arita in Hizen Province, the first porcelains were produced there in the early 17th century. The basic techniques thus came from Korean ceramics, but they imitated the styles of Chinese porcelain or adapted them because the domestic market wanted "Chinese porcelain". It was very fortunate for the Hizen porcelain industry that the quantity of Chinese porcelain exported to Japan was reduced from the middle of the 17th century, due to civil war and the dynastic change from Ming to Qing. As a result, the volume of production of Hizen porcelain increased, and the Hizen porcelain industry dominated the domestic market. However, it was not only the market in Japan who sought porcelain. It was in short supply in the markets in Southeast Asia and other areas as well. Therefore, Hizen porcelain started to be exported to the overseas markets instead of Chinese porcelain, but it was only Chinese junks and VOC ships that sent out Hizen porcelain from Nagasaki port. Only the Chinese and Dutch were permitted to trade in Nagasaki under the rule of the Tokugawa Shogunate until the middle of the 19th century.

Teijiro Yamawaki wrote that "inferior porcelain" was exported from Nagasaki to Cambodia via Thailand in 1647. He pointed out the possibility that the inferior porcelain was Hizen porcelain, and suggested that Hizen porcelain started to be exported to the Indochinese peninsula from about the late 1640s (Yamawaki 1988:265-410). Koji Ohashi discussed Hizen porcelain found in Vietnam and Indonesia, noting that it included types produced in the 1640s (Ohashi 1990:88-176).

The Qing administration restricted maritime access to China between 1656 and 1684 to reduce the power of Zheng Chenggong (Koxinga), who resisted the Qing forces because sea trade supported his power. After the export of Chinese porcelain almost stopped, Zheng began to deal in Hizen porcelain because he could not get access to Chinese porcelain. Thus, he became the most important merchant for the exportation of Hizen porcelain. As a result of the reduction of the quantity of Chinese porcelain for export, the number of kilns in Hizen producing export wares suddenly increased, and Hizen wares

spread in the overseas market, many pieces being found in archaeological sites in Vietnam, Thailand, Cambodia, Malaysia and Indonesia (Figure 1). However, there was no archaeological evidence that Hizen porcelain was exported to the Philippines until our research in 2004.

HIZEN PORCELAIN FOUND IN MANILA

As far as we know from recent studies (Beyer 1947: plate 16-22; Jocano 1998:138-152), Hizen porcelain has not been recorded from the Philippines before, but Chinese and Indochinese ceramics received more attention. In 2004 we investigated the ceramics unearthed at the Intramuros in Manila and found several pieces of Hizen porcelain. It was the first archaeological discovery of Hizen porcelain in the Philippines (Nogami, Orogo, Tanaka and Hung 2005). So we started doing joint research with the National Museum of the Philippines in 2005. We found about 60 shards of Hizen porcelain from the 17th century.

First, I will discuss the shards found in 2004. Figure 5:1 is a shard of blue and white dish with a bird and flowers design, produced between the 1650s and 1670s. A specimen similar to this was excavated at the Hokaoyama kiln site in Arita. Figure 5:2 is a shard of a blue and white dish with a flower design dating between the 1660s and 1680s, also from Arita. It is similar to shards excavated at the Hiekoba kiln site in Arita and is so-called "Carrack (Karaak) ware", a typical porcelain style for European export. Figure 5:3 is a shard of another blue and white "Carrack style" dish with a flower design dating between the 1660s and 1680s from Arita. It is similar to the shards were found at the Nakashirakawa kiln site. Figure 5:4 is a shard of a blue and white dish with a peony flower design, produced between the 1670s and 1690s, from Arita. Figure 5:5 is a shard of a blue and white dish with a bamboos and leaf design, produced between the end of the 17th and the early 18th century. The leaf design was not drawn with a brush but was applied with a kind of cowhide stamp called a *konnyaku*.

Next, I will present several shards of Hizen porcelain found in 2005 (Nogami, Orogo, Cuevas, Tanaka and Hung 2005). Figures 6:1-17 were unearthed at Ayuntamiento site, Intramuros. Figure 6:1 is a shard of a blue and white dish with a bird and flower design dating between the 1650s and 1670s, from Hizen. Figures 6:5 and 8 are shards of a blue and white "Carrack style" dish produced between the 1660s and 1680s in Arita. Figure

6:4 is a shard of another blue and white "Carrack style" dish produced between the 1660s and 1680s in Arita. Figure 6:15 shows a shard of a blue and white dish produced between the end of the 17th and the early 18th century in Arita. Figure 6:16 is a shard of a blue and white dish with a design of rocks and leaves. The leaves seem to be konnyaku stamped. It was produced between the end of the 17th and the early 18th century. Figures 7:1-3 were unearthed at Beaterio de la Compania de Jesus site in the Intramuros. Figure 7:1 is a shard of a blue and white dish with the Chinese hi(ri) character for sun. It was produced between the 1660s and 1680s in Hasami, Nagasaki Prefecture, and is similar to shards found at the Nakao-Uwanobori kiln site in Hasami. Figure 7:2 is a shard of a blue and white dish with a floral design produced between the 1650 and 1670s in Hizen. Figure 7:3 is a shard of a blue and white chamber pot with an arabesque design. It was produced between the 1680s and 1700s in Arita. Figures 8:1-23 are from at Plaza San Luis site, Intramuros. Figures 8:1-16 are blue and white dish shards with bird and flower designs, produced between the 1650s and 1670s in Hizen. Figures 8:18 and 19 are shards of blue and white "Carrack style" dishes with insect and flower designs, produced between the 1660s and 1680s in Arita. The specimen in Figure 8:23 is a shard of a blue and white "Carrack style" dish plate produced between the 1660s and 1690s in Arita. Figures 9:1-9 were unearthed at the Parian site, located outside the walls of Intramuros. Figures 9:1 and 4 are shards of blue and white dishes with insect and flower designs, produced between the 1660s and 1680s in Arita. Figure 9:3 is a shard of a blue and white cup with a dragon design. It was produced between the 1660s and 1680s in Hizen. Figure 9:5 is a shard of a blue and white cup with a wave and fish(carp) design. It was produced between the 1660s and 1680s in Hizen. This type of cup is one of the most popular Hizen porcelains found in archaeological sites in Southeast Asia. The specimens in Figures 9:2 and 8 are blue and white dish shards. They were produced in the late 17th century.

HIZEN PORCELAIN FOUND IN MEXICO CITY

Takatoshi Misugi introduced several pieces of Hizen porcelain found in Mexico City (Misugi 1986:96) (Figures 10: 1-4). They were found while constructing the subway in Mexico City in 1968-1970. they were all shards of blue and white dish with same design, produced in Arita during the 1660s through 1680s. And Misugi introduced several pieces of porcelain with over-glazed enamel, too. Although he identified all them as Chinese

porcelain, I think that one of them (Figure 10:5) is a shard of Hizen porcelain jar or bottle, produced in the first half of the 18th century in the *Uchiyama* area and painted at the Akae-machi area. Akae-machi means 'town (area) of over-glazed enameled wares'. Before our research in 2006, only these shards were known as Hizen porcelain found in Mexico City.

After Tanaka Kazuhiko and I found several shards of Hizen porcelain in Manila in 2004-2005, we could have a chance to research in Mexico City in 2006 with the cooperation of Eladio Terreros and George Kuwayama. We researched on ceramics excavated around the Templo Mayor site. We classified with the production age and ground and analyzed them. Although most of Oriental ceramics in Mexico City were Chinese porcelain, we found about 10 pieces of Hizen porcelain among them (Figures 11:1-10,12).

Next I will introduce them. Figures 11:1-3 are shards of a blue and white dish with a flower design dating between the 1660s and 1680s, produced in Arita. Figure 11:6 is a shard of another kind of a blue and white dish dating the late 17th century. Figure 11:8 is a shard of a blue and white shaving bowl. Figure 11:9 is a shard of dish with over-glazed enamel. All these shards were produced in Arita, especially the *Uchiyama* area. Figure 11:12 is a shard of a blue and white bottle.

Then I researched on ceramics from Mexico City with the cooperation of Eladio Terreros and Jorge Quiroz in 2009,2010. I found about 62 pieces of Hizen porcelain(Figure 11:11,Figure 12, Figure 13). Figures 12:1-2 and 13:1-2,4-5 are shards of blue and white dishes with the design of flower and insect, produced in Arita during the 1660s through 1680s. Figure 13:7 is a shard of a blue and white with landscape design, produced in Arita in the second half of 17th century. There are same porcelains in the collection of Museo Nacional del Virreinato and Museo Casa del Risco as this. Figures 11:11 and 13:9 is a shard of a blue and white bowl. The pine patterns are drawn on the surface and the five-petaled floral pattern is drawn on the inner bottom. And we can see 4 characters of kanji(太明年製) on the outside bottom. Figures 13:10-27 are the shards of the blue and white chocolate cups, produced in Arita during the 1660s through 1680s. Figures 13:28-36 are the porcelains with over-glazed enamel, produced in Arita during the 1660s through 1680s. Figures 12:8-11 and 14:10-12 are the cups and saucers with

over-glazed enamel, produced in Arita in the first half of 18th century. By the the investigation in 2009,2010, I found many pieces of chocolate cups in the second half of 17th century and some pieces of cups and saucers with over-glazed enamel in the first half of 18th century. All shards of them were produced in Arita, especially the *Uchiyama* area.

So I will point out some characteristics about the porcelains unearthed in Mexico city. At first, we can understand most of them are dishes, especially so-called "Carrack (Karaak) ware" and chocolate cups. Secondly, they were almost produced in Arita, especially the *Uchiyama* area.

HIZEN PORCELAIN FOUND IN OAXACA

Enrique Fernández Dávila and Susana Gómez Serafín reported about some Hizen porcelains unearthed from the convent of Santo Domingo in Oaxaca. In 2008, Nakajima Hisako introduced a part of them exhibited in Oaxaca Cultural Museum. And Ohashi Koji mentioned it was produced in Arita. In 2009, 2010, I researched on ceramics unearthed in Oaxaca and found many pieces of Hizen porcelain among them.

Figures 15:1-41 are the shards of a blue and white dish with the design of flower and insect, produced in Arita during the 1660s through 1680s. These are same dishes as ones unearthed in Manila, Mexico city. Figures 15:42-102 are the shards of the blue and white chocolate cups produced in Arita during the 1660s through 1680s. Figures 16:1-5 are the blue glazed chocolate cups with gold gilt, produced in Arita in the second half of 17th century. Figures 16:6-16 are the shards of chocolate cups with over-glazed enamel, dating 1650~1680s. Figure 16:19 is a shard of a blue and white *Kendi*, produced in Arita in the second half of 17th century. We can see same *Kendi* in the collection of the Museo Nacional del Virreinato as this. Figure 16:20 is a shard of saucer with over-glazed enamel, produced in Arita in the second half of 18th century.

HIZEN PORCELAIN FOUND IN VERACRUZ

In 2010, I went to Veracruz and researched on ceramics unearthed from Veracruz with the cooperation of Judith Hernández Aranda. And we found several pieces of Hizen porcelain. Figure 17:1 is a shard of a blue and white dish with a flower design, produced in Arita during the 1660s through 1680s. This was unearthed at Hotel Imperial area near

Zócalo. Figure 17:2 is a shard of a blue and white dish with flower design, produced in Arita between 1655 and 1680s. Figure 17:3 is a shard of a blue and white dish with the design of landscape, produced in Arita in the second half of the 17th century. Figures 17:2-3 are unearthed at the Parque Ciriaco Vázquez in front of INAH office. Figure 17:5 is a blue and white chocolate cup, produced in Arita during the 1660s through 1680s. This was unearthed at Hotel Imperial near Zócalo. Figure 17:4 is a shard of saucer with over-glazed enamel, produced in Arita in the first half of 18th century. This was unearthed in Cevsa in Veracruz.

DISCUSSION

Hizen Porcelain Inflow Routes to Manila

Who exported Hizen porcelain from Nagasaki? And who imported Hizen porcelain into Manila? As mentioned above, only the Dutch and Chinese could send out Hizen porcelain from Nagasaki until the middle of the 19th century. It is unlikely that Dutch ships sailed to Manila because the Dutch were hostile to Spain. On the other hand, it is known that Chinese junks entered Manila for trade. So I think that there is a high possibility that Chinese ships imported the Hizen porcelain to Manila. But it is not certain that Chinese ships went directly from Nagasaki to Manila. I suppose that some cities in Taiwan and southern China, around the South China Sea, were relay-ports for the trade network of Hizen porcelain in Chinese junks. The South China Sea, surrounded by the coasts of southern China, Taiwan, the Philippines, Malaysia, and Vietnam, was a very important area for the trade of Hizen porcelain (Nogami 2005b). Many ships carrying it sailed from Nagasaki port and went southwards across the East China Sea and entered the South China Sea near Taiwan. This area was controlled by Zheng Chenggong, the most important merchant dealing in Hizen porcelain as mentioned above, and Teijiro Yamawaki (1988) points out that ships carrying Hizen porcelain went to Amoy (Xiamen) and Anhai on the coast of southern China, the main bases controlled by Zheng, in 1657 and 1658. Although there are no records of Hizen porcelain unearthed in Amoy and Anhai, I think that these places were important relay-ports for the Hizen porcelain trade between the late 1650s and the early 1660s. So I will discuss on the Hizen porcelains found around Taiwan and on the coast of southern China.

In May 2005, I researched ceramics unearthed in Macao with Hsiao-chung Hung, Tai-kang Lu and Wai Yee Wong, receiving the cooperation of *Museu de Macau* and *Museu de Arte de Macau*. We found several pieces of Hizen porcelain among them (Nogami 2005). They were unearthed at the Monte Fortress site, a Portuguese fort completed in 1626. Figure 23:1 is a blue and white bowl with a pine and plum flower design with a *Tai-ming* character on the bottom, produced between the 1650s and 1670s in Arita. Figure 23:6 is a blue and white bowl with a landscape design produced in the second half of the 17th century in Hizen. Figures 23:8-9 are blue and white shaving basins, produced between the 1670s and 1700s in Arita. Since neither Portuguese nor Spanish ships came to Nagasaki, I think that these Hizen porcelains were imported by Chinese junks. However, it is difficult to judge whether these specimens show special characteristics restricted to Portuguese settlements, or if they are typical of other port cities in China. Figure 23:10 is a blue and white bowl, also with a *Tai-ming* character on the bottom produced between the 1650s and 1670s in Hizen.

Then in 2010, I researched on ceramics from Macao again and found several pieces of Hizen porcelain. Figures 23:2-5 are the shards of the blue and white dish with the design of *Carrack*, produced in Arita during the 1660s through 1680s. It is interesting that there are 4 marks of repair on the shard in Figure 23:5. Figure 23-7 is a shard of a blue and white cup with peony design, dating 1650-1670s.

Tai-kang Lu has recently researched on ceramics collected in Kinmen. Kinmen is located near Amoy and was one of the most important bases of Zheng Chenggong group. And Lu found a piece of Hizen porcelain (Lu and Nogami, 2008, Figure 24). The piece is a blue and white dish with the *Carrack* design, produced in the 1650s in Arita for European world. I think this is the evidence that this area was a relay-port for the Hizen porcelain trade. There is high possibility that Hizen porcelain were export from Nagasaki to Mania, via Zheng group's bases such as Kinmen especially in the 1650s.

Moreover Lu and Ming-liang Hsieh introduced several pieces of Hizen porcelain found in Pescadores. Pescadores was a part of the territory of Zheng Chenggong group. Lu researched ceramics salvaged from Makung port in Pescadores under the dredging operations in 2005. And he found several pieces of Hizen porcelain among them (Lu and Nogami, 2008, Figure 26); they are a blue and white bowl with the design of wave and fish, called *ariso* design and a blue and white dish with *Carrack* design. They were

produced for Southeast Asian market and European world market as well. On the other hand, Ming-liang Hsieh also introduced some pieces of Hizen porcelain collected in Pescadores(Figure 27). They were all shards of blue and white dishes with *Carrack* design. Of course, they were not porcelain for Taiwanese market, but for European world.

Then Zheng Chenggong sent troops to Taiwan in 1661 and defeated the Dutch in 1662. Tainan was the main location of his group until they surrendered to the Qing Dynasty in 1683. They engaged in China – Taiwan - Manila or Japan – Taiwan - Manila trade between 1662 and 1683. Therefore, Tainan was one of the most important relay-ports of Hizen porcelain trade. Fang Zhen-zhen (2003) has researched the records of customs in Manila and discusses the relationship between Manila and Taiwan in the second half of the 17th century. She notes that fifty-one ships sailed from Taiwan to Manila between 1664 and 1684. She notes the cargoes of these ships included "Japanese dishes" (Fang 2003: 82). Concerning archaeological evidence of the Hizen porcelain trade, Ming-liang Hsieh and Takashi Sakai discuss several Hizen porcelain and stoneware shards unearthed in Taiwan (Hsieh 1996, 2000, 2005). Although these specimens show connections between Hizen ware and Taiwan, they are not direct evidence that Taiwan was a relay-port for the trade network of Hizen porcelain, because they are not examples of the typical export style porcelain found in Southeast Asia and the European world. In 2003-2004, Kuang-ti Li excavated several pieces of Hizen porcelain at the Shenei site near Tainan (Li 2004). Tai-kang Lu, who analyzed them, noted that about 4 pieces of Hizen porcelain were found there, and he also informed me that a shard of Hizen porcelain was found during the construction of an underground shopping area in Tainan City. Figures 28:1-4 show pieces unearthed at Shenei site. Figure 28:1 is a blue and white dish with a "Carrack style" design. It is typical porcelain produced for the European market. We can see the same kind of porcelain among specimens from Intramuros, Manila. Figure 28:2 is a blue and white bowl with a Sen-min(Xuan-ming) character on the bottom. It was produced between the 1660s and the 1670s in Arita. The specimen in Figure 28:3 is a blue and white bowl with a wave and fish design, produced between the 1660s and 1680s in Hizen. It is typical of the porcelain produced for the market in Southeast Asia and we can see the same kind of porcelain in many archaeological sites in Southeast Asia. Figure 28:4 is a blue and white bottle with a bamboo and leaf design. It was produced between the 1660s and 1680s in Arita. Figure 28:5 is a blue and white bowl with a *Xuan-ming* character, produced between the 1660s and 1670s in Arita. Since these specimens included typical export style porcelain for Southeast Asia and European world, it is highly possible that Tainan was one of the relay-ports (Nogami, Li, Lu and Hung 2005). As for the Hizen porcelain imported to Manila, it is highly possible that many pieces of it were imported to Manila by Chinese junks via Taiwan. I think Taiwan played an important role in the trade in Hizen porcelain between the 1660s and 1680s.

The Trans-Pacific Transport of Hizen Porcelain

We can make sure that Chinese junks exported Hizen porcelain from Nagasaki to Manila, via Kinmen and Taiwan where were under the influence of the Zheng group. What kinds of Hizen porcelain were transported to the American continent by galleons?

As I have already mentioned, many Hizen porcelains were found in Mexico. Some of them have the same as *Carrack* design and shape as the shards of Hizen porcelain found in Manila. And Kuwayama has published several pieces (Figure 18) of porcelain unearthed in Guatemala (Kuwayama and Pasinski 2002:30). And three pieces of them are same kind of Hizen porcelain dish in Manila and Mexico City. It is highly possible that these porcelains were transported from Manila to the colonies in the American continent by the galleon ships. I think that this kind of dish with *Carrack* design was one of the most popular Hizen porcelains transported to the American continent.

Next I will compare the ceramics found in Manila and the ceramics found in the American continent. I point out the common characteristic that there are a lot of dishes. The lifestyle of Europe might be reflected in them. So we can look some Japanese dishes with *Carrack* design also in Manila and the American continent. However we can find some differences. Although many Hizen porcelain dishes with low quality, such as Figure 5:1, were found in Manila, we can't find them in Mexico City yet. Hizen porcelains found in Mexico City were comparatively high-quality and they were produced in Arita, especially *Uchiyama* area where was center of Arita. There is possibility that all kind of Hizen porcelain imported to Manila were not transported to America. I think they had selected them by quality before they loaded into the galleon ships for Acapulco as goods for American continent, because the capacity of the ship's hold was limited.

Tanaka Shigeko introduced a piece of Hizen chocolate cup was found in Habana (Figure 19). Ohashi Koji pays attention to the kind of cups found in Habana. For most of

Chinese cups unearthed in Havana were not coffee cups, but chocolate cups. We can see such tendency not only in Habana, but also in other area in Latin America and Manila (Nogami et al,2006). Latin America is a country of origin of the chocolate and has long history of chocolate culture since before Spain invaded Latin America. After Spain had conquered, Spain monopolized the trade of chocolate from Latin America to Europe. A lot of chocolate cups found in Latin America show that chocolate took root very deeply and widely in their life in those days.

And Zhen-zhen Fang introduced the trade record of many chocolate cups that were imported from Taiwan to Manila. For example, one thousand pieces of chocolate cups (*Ytten mill escudillas de chocolate*) were imported from Tainan to Manila in 1682 (Fang 2006:85). Perhaps these cups were also transported from Manila to Latin America.

The chocolate cups were not only Chinese porcelains but also Hizen porcelains. As mentioned above, many pieces of Hizen porcelain chocolate cups were found in Mexico city, Oaxaca, Veracruz, Antigua and Havana. Chocolate cups was also one of the most popular Hizen porcelains transported to the American continent.

At the present stage, only a very small amount of Hizen porcelain has been found on the American continent. And the range of distribution of archaeological sites with Hizen porcelain is limited in Central America and Cuba. As George Kuwayama shows us, a piece of Hizen porcelain jar remains as one of the antique collections in Peru (Kuwayama,2000, Figure 20). There is possibility that the range of distribution will not spread only to Central America, but also to South America. And it is very difficult to distinguish from Chinese porcelain to Hizen porcelain. So we often confuse Hizen porcelain with Chinese porcelain. With proper identification of materials from excavations of Spanish colonies in the American continent we should be able to find more Hizen porcelain.

Recently, Tanaka Shigeko introduced the blue and white chocolate cup unearthed from Cádiz in Spain(Figure 21). The same chocolate cups were found in Manila(Figure 6:13) and Oaxaca(Figures 15:61-62). These chocolate cups show us the possibility that Hizen porcelain were transported from Manila via mexico to Spain. It is also a future subject to clarify the actual condition of the Atlantic Ocean route.

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REFERENCES

- Beyer, H. Otley 1947, Outline Review of Philippine Archaeology by Island and Provinces, *The Philippine Journal of Science* 77:3-4, pp.205-390.
- Fang, Zhen-zhen 2003, "Mingzheng shidai Taiwan yu Feiliping de maoyi guanxi—yi ma ni la haiguan jilu wei zhongxin(「明鄭時代台湾與菲律賓貿易関係—以馬尼拉海關紀録為中心」)(Trade relations between Taiwan and the Philippines in Ming Dynasty (Zheng Cheng Gong time) mainly on the customhouse record of Manila)", <u>Tai wan wen xian(『台湾文献』)(Taiwan Historica)</u> 54: 3, pp.59-105.
- ______2006, "Ming mo qing chu tai wan yu ma ni la de fan chuan mao yi(『明末清初臺湾與馬尼拉的帆船貿易(1664-1684)』)(The Sea Trade between Taiwan and Manila in the end of Ming dynasty and the early of Qing dynasty)", Dao xiang chu ban she 稲郷出版社(Dao Xiang Press Company) (Taipei:Taiwan)
- Fang, Zhen Zhen and Fang, Shu Ru 2006, *Tai wan xi ban ya mao yi shi liao*(『臺湾西班 牙貿易史料(1664-1684)』)(The historical documents on the tarde between Taiwan and Spain), Dao xiang chu ban she 稲郷出版社(Dao Xiang Press Company) (Taipei:Taiwan).

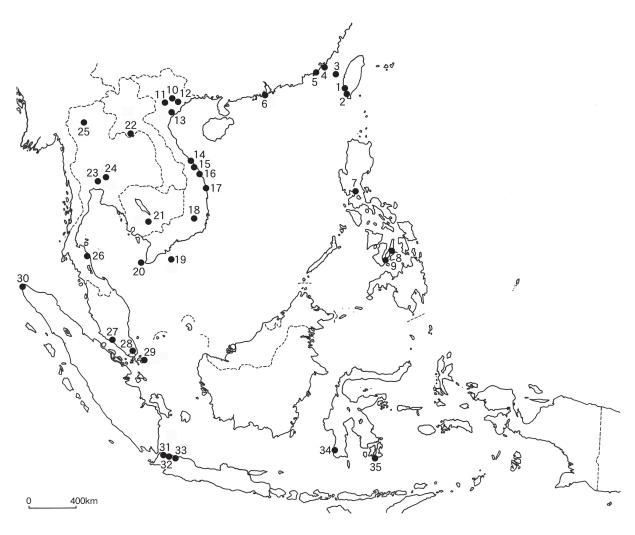
- Hsieh, Ming Lliang 1996, "Zuoying Qingdai Fengshan xian jiucheng jule chutu taoci buji (「左営清代鳳山県旧城聚落出土陶瓷補記」) (Supplement on Ceramics Excavated from Fengshan Walled City in Zuoying of Ching Dynasty)", <u>Taiwanshi Yanjiu(『台湾史研究』) (The Studies of Taiwan History)</u>. Vol.3:1. Taibei: Institute of Taiwan History, Academia Sinica.
- ______2000, Taiwan Anhei to Saei iseki shutsudo no tojiki (「台湾安平と左営遺跡 出土の陶磁器」) (Ceramics excavated from Anping and Tsuoying sites), Sakai, T. (ed.), Banten, Tyrutayasa Iseki Hakkutsu Chosa Hokokusho (『バンテン・ティルタヤサ遺跡発掘調査報告書』) (The Excavation Report of Tirtayasa Site, Banten), pp.82-84. Tokyo: Institute of Asian Culture, Sophia University.
- ______2008, "Peng hu fa xian de shi qi shi ji rib en fei qian qing hua ci. (「澎湖發現的十七世紀日本肥前青花瓷」)(Japanese Hizen blue and white of the 17th century discovered in Pescadores)", Gu Gong Wen Wu (『故宮文物』) (The National Palace Museum Monthly of Chinese Art) 303, Taipei:Taiwan.
- Jocano, F. Landa 2001, *Filipino Prehistory*, Manila: Punlad Research House Press.
- Kuwayama, George 2000, "Chinese Ceramics in Colonial Peru", *Oriental Art* XLVI:1, pp.2-15.
- Kuwayama, G. and Pasinski, A. 2002, "Chinese ceramics in the Audiencia of Guatemala", <u>Oriental Art</u> XLV:4, pp.25-35.
- Li, Kuang Ti 2004, <u>Sanshe ji Shenei yizhi shouxiang shuili gongcheng yingxiang fanwei qiangju kaogu fajue gongzuo jihua(『三舎及社内遺址受相関水利工程影響範</u> 囲搶救考古発掘工作計画』 (Rescue Excavations at Sanshe and Shenei).

- Lin, Jin Rong 2006, *Jin men di qu shi yong de tao ci qi wen hua tan yuan (『金門地區 使用的陶瓷器文化探源』)*. Nei zheng bu ying jian shu jin men guo jia goan yuan guan li chu. (內政部営建署金門國家公園管理處)
- Lu, Tai-kang, Nogami, Takenori 2008, Hizen ware Found in Ma-gung Harbor, Pescadores (Peng-hu Archipelago) and Kinmen (「澎湖馬公港與金門所發現的肥前瓷器」), *Forum For Historical Artifacts*(『史物論壇』)6, pp.93-119, Nankang: Tainan County Government and Institute of History & Philology, Academia Sinica.
- Misugi, Takatoshi 1986, <u>Sekai no sometsuke (『世界の染付』) (Blue and White Ceramics of the World)</u> 6, Tokyo: Dohosha.
- Nogami, Takenori 2005 a, "*Macao shutsudo no Hizen jiki*(「マカオ出土の肥前磁器」) (Hizen porcelain found in Macao)", *Kindai Koko*(『金大考古』) 50, pp.7-11.
- ______2005 b, "Gareon boueki to Hizen Jiki-Manila shuhen kaiiki ni tenkai shite tousen no katsudou totomoni(「ガレオン貿易と肥前磁器―マニラ周辺海域に展開した唐船の活動とともに―」)(Hizen ware Transported by Galleon Ships: Including the Role of Chinese Junks around the South China Sea)", <u>Journal of Sophia Asian Studies</u>(『上智アジア学』) 23, pp.239-60.
- ______2010, jiunanaseikikouhan-jiuhachiseikizenhan ni okeru Hizen jiki no America tairiku heno ryutuu(「一七世紀後半~一八世紀前半における肥前磁器のアメリカ大陸への流通」), Kotsushi kenkyu(『交通史研究』) No.72, pp1-23. _____2011, Hizen jiki no kaijo koueki network no kenkyu(肥前磁器の海上交易ネットワークの研究), Zaidanhoujin Nabeshima houkoukai kenkyu josei kenkyu houkokusho(『財団法人鍋島報效会研究助成研究報告書』)No.5, pp.121-139.
- Nogami, Takenori and Judith Hernández Aranda 2011, *Veracruz shutsudo no Hizen jiki* (「ベラクルス出土の肥前磁器」) (Hizen Porcelain Found in Veracruz), *Bulletin of Archaeology, The University of Kanazawa* vol.32,pp47-50.
- Nogami, Takenori, Li, Kuang Ti, Lu, Tai Kang and Hung, Hsiao Chun 2005, "Tainan shutsudo no Hizen jiki(「台南出土の肥前磁器」) (Hizen porcelain found in Tainan)", <u>Kindai Koko『金大考古』</u> 48, pp.6-10.

- Nogami, Takenori, Orogo, Alfredo B., Tanaka, Kazuhiko and Hung, Hsiao Chun 2005, Hizen porcelain found in Manila, Philippines(「マニラ出土の肥前磁器」), *Kindai Koko*『金大考古』 48, pp.1-5.
- Nogami, Takenori, Orogo, Alfredo B., Cuevas, Nida T., Tanaka, Kazuhiko and Hung, Hsiao Chun 2005, *Gareon sen de hakobareta Hizen jiki* (「ガレオン船で運ばれた肥前磁器」) (Hizen porcelain transported by galleon ships), *Suichu Kokogaku Kenkyu* (『水中考古学研究』) (The Journal of Underwater Archaeological Studies) Vol.1, pp.104-115.
- Nogami, Takenori, Eladio Terreros, George Kuwayama, José, Á Ivaro Barrera and Alicia, Islas Domínguez and Tanaka, Kazuhiko 2006, "Taiheiyo wo watatta toujiki—Mexico hakken no Hizen jiki wo chushin ni— (「太平洋を渡った陶磁器 ーメキシコ発見の肥前磁器を中心に一」)(Ceramics were crossed the Pacific Ocean —mainly Hizen porcelain found in Mexico—)", Suichu Kokogaku Kenkyu (『水中考古学研究』) (The Journal of Underwater Archaeological Studies) Vol.2, pp.88-105.
- Ohashi, Koji 1990, Hizen porcelain exported toward Southeast Asia, *Umi o Wattata Hizen no Yakimono Ten*(『海を渡った肥前のやきもの展』 (Hizen Ceramics

 <u>Abroad)</u>, The Kyushu Ceramic Museum ,Arita, pp.88-176.
- Tanaka, Shigeko 2010, Four Arita chocolate cups and evidence of a previously unknown trade route in the 17th century, *Hizen Ceramic Exported All over the World*, Society of Kyushu Early Modern Ceramic Study, pp307-312.
- Yamawaki, Teijiro 1988, *To Ran sen no Imari yushutsu* (「唐蘭船の伊万里輸出」) (The export of Imari by Chinese and Dutch ships), *Arita Choshi Hensan Iinkai* (ed.), *Arita Choshi Shogyo Hen* (『有田町史商業編 I』) (The History of Arita-cho, Volume on Business 1), pp.265-410.
- Wan, Su chin 2010, Taiwan Saei Zeelandia oyobi Tapenken iseki shutsudo no 17 seiki Hizen toujiki-Tei shi shudan niyoru touji boueki no giron wo kanete-(「台湾左営、ゼーランディア城及び大坌坑遺跡出土の 17 世紀肥前陶磁器—鄭氏集団による陶磁貿易の議論を兼ねて」)(The 17th century Hizen porcelain excavated from the Fort Zeelandia, the Tapenken site and the Zuoying site in Taiwan- and the topic

on the ceramic trade of the Koxinga's Group-, <u>Suichu Kokogaku Kenkyu</u>(『水中 考古学研究』)(The Journal of Underwater Archaeological Studies) Vol.3, pp.113-136.



1 Tainan 台南, Taiwan	14 Quang Tri	27 Melaka, Malaysia
2 Kaohsiung 高雄	15 Huê	28 Kota Tinggi
3 Pescadores 澎湖諸島	16 Hôi An	29 The Geldermalsen
4 Kinmen 金門	17 Bin Dinh	30 Gien site, Sumatra
5 東山冬古湾沈船遺跡	18 Lâm Dông	31 Banten Lama, Jawa
6 Monte Fortress site, Macao	19 Côn Dao	32 Tirtayasa site
7 Intramuros, Manila	20 Kien Giang	33 Batavia
8 Cebu city	21 Ôdôngk, Cambodia	34 Benteng Somba Opu site, Sulawesi
9 Boljoon	22 Vientiane, Laos	35 Benteng Wolio site, Buton
10 Ha nôi, Vietnam	23 Ayutthaya, Thailand	
11 Ho'a Binh	24 Lop Buri site	
12 Hai Hu'ng	25 Chiang Mai	
13 Thanh Hoa	26 Nakhon Si Thammarat	

Figure 1 The map of Southeast Asia showing the position of archaeological site with Hizen ware

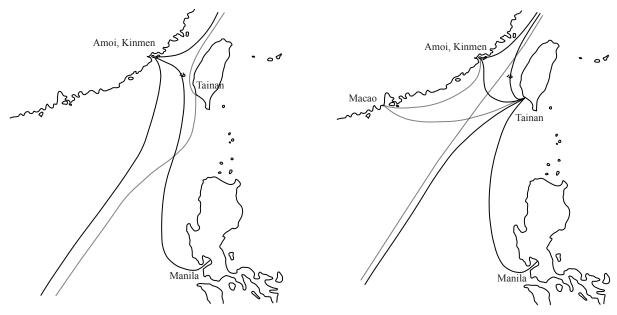


Figure 2 The map showing the trade route of Hizen porcelain (1650-1660s)

Figure 3 The map showing the trade route of Hizen porcelain (1660-1680s)

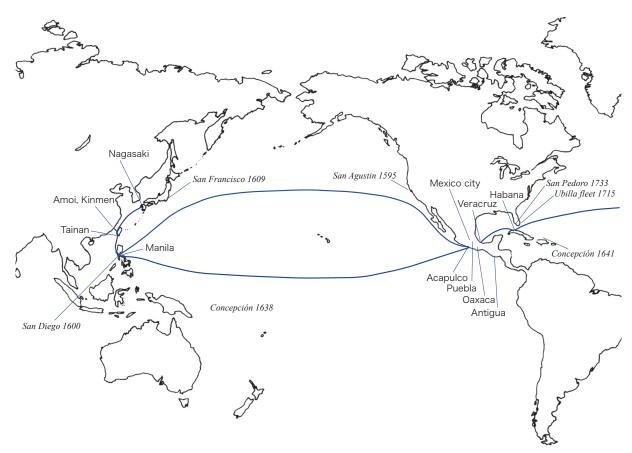


Figure 4 The map showing Galleon Trade

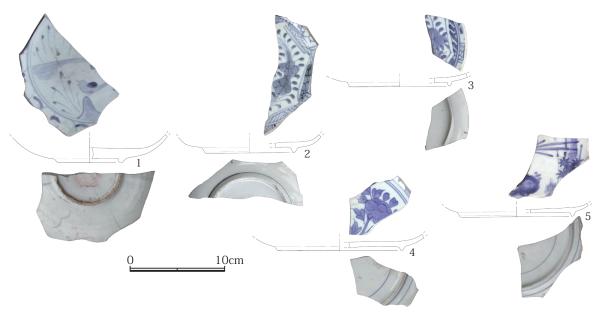


Figure 5 Hizen porcelains from Intramuros, Manila (Courtesy: National Museum of the Philippines)

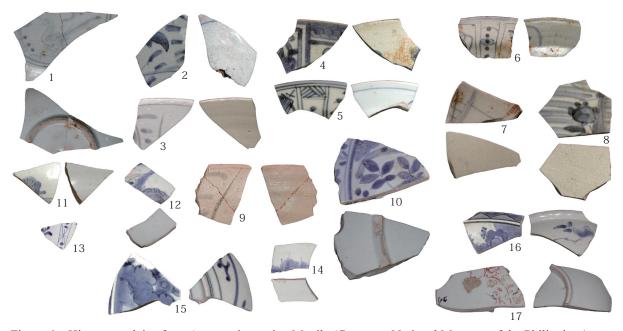


Figure 6 Hizen porcelains from Ayuntamiento site, Manila (Courtesy: National Museum of the Philippines)



Figure 7 Hizen porcelain from Beaterio de la Compania de Jesus site (Courtesy: National Museum of the Philippines)

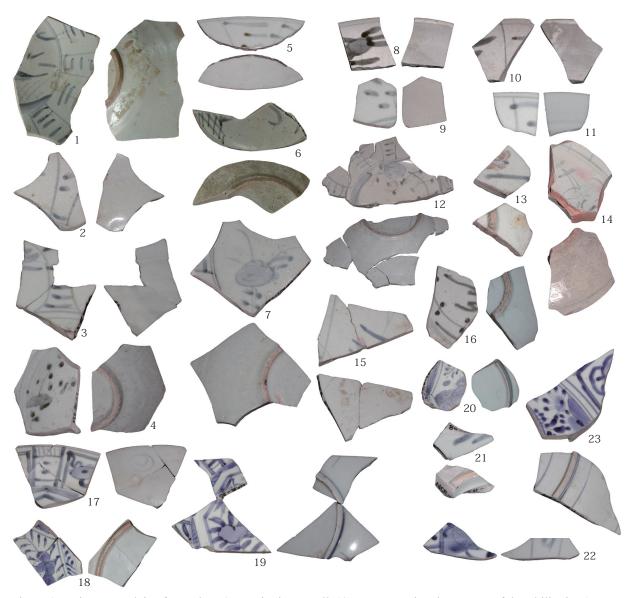


Figure 8 Hizen porcelains from Plaza San Luis site, Manila(Courtesy: National Museum of the Philippines)



Figure 9 Hizen porcelains from Parian site, Manila(Courtesy: National Museum of the Philippines)

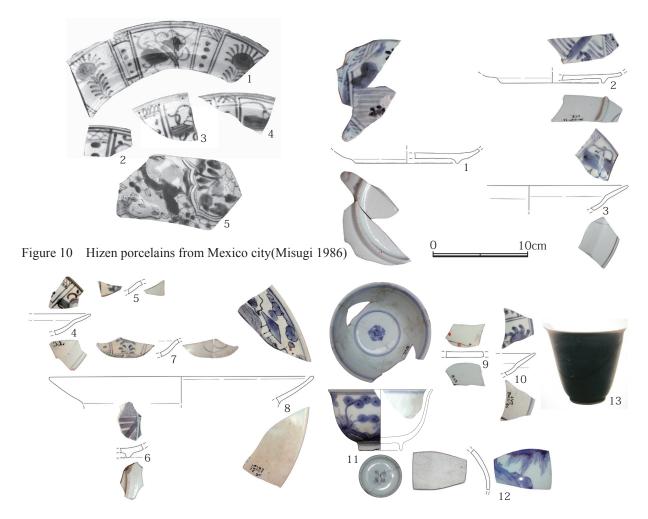


Figure 11 Hizen porcelains from Templo Mayor site-2006,2009- (Courtesy: INAH)

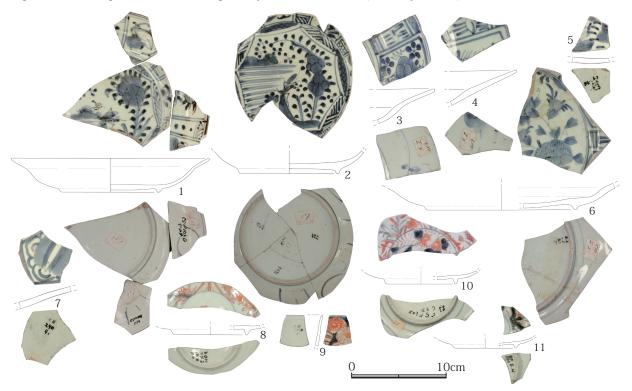


Figure 12 Hizen porcelains from Mexico city-2009-(Courtesy: Ceramoteca INAH)



Figure 13 Hizen porcelains from Templo Mayor site-2010- (Courtesy: INAH)

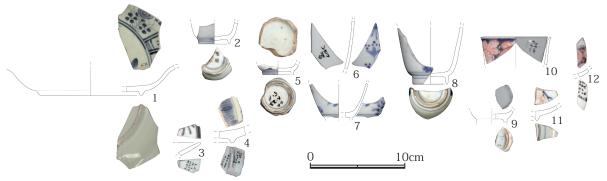


Figure 14 Hizen porcelains from Mexico city-2010-(Courtesy: Ceramoteca INAH)

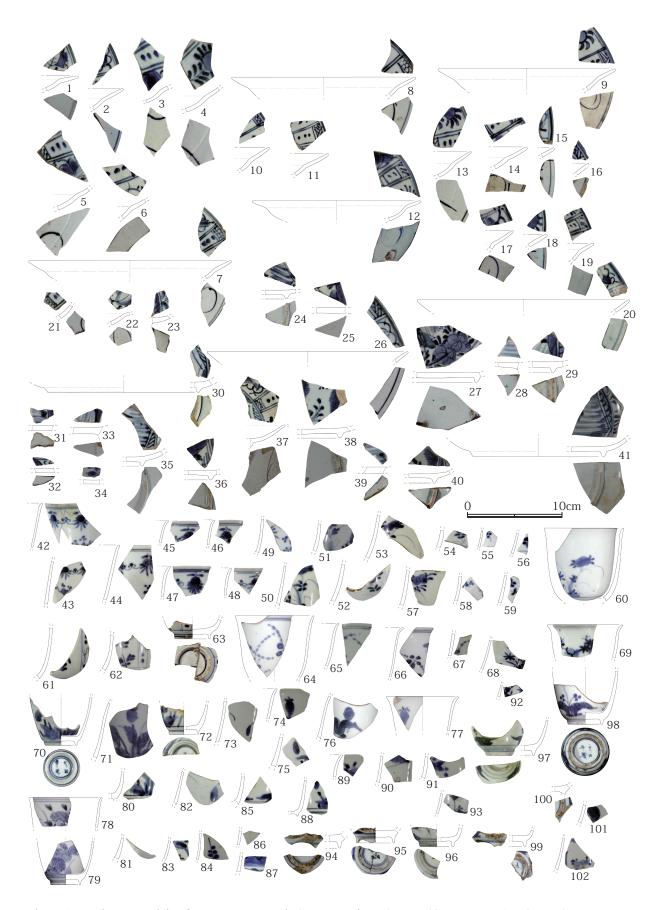


Figure 15 Hizen porcelains from ex convento de Santo Domingo,Oaxaca (Courtesy: INAH-Oaxaca)

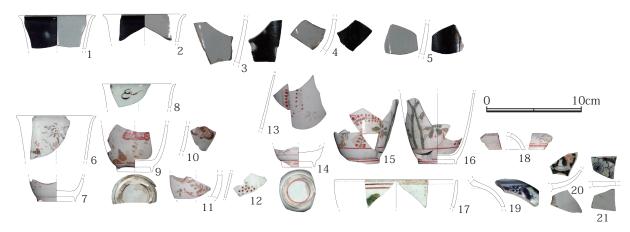


Figure 16 Hizen porcelains from ex convento de Santo Domingo,Oaxaca (Courtesy: INAH-Oaxaca)

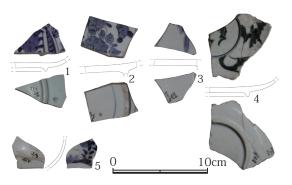


Figure 17 Hizen porcelains from Veracruz (Courtesy: INAH-Veracruz)



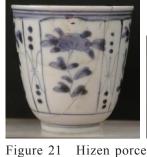
Figure 19 Hizen porcelains from Habana (Tanaka 2010)



Figure 20 The collection of Jose Ignacio Lamberri (Kuwayama 2000)



Figure 18 Hizen porcelains from Antigua Gatemala (Kuwayama et al 2002)



2010)





Figure 22 The collection of Museo Nacional de Artes Decorativas, Madrid (Tanaka 2010)

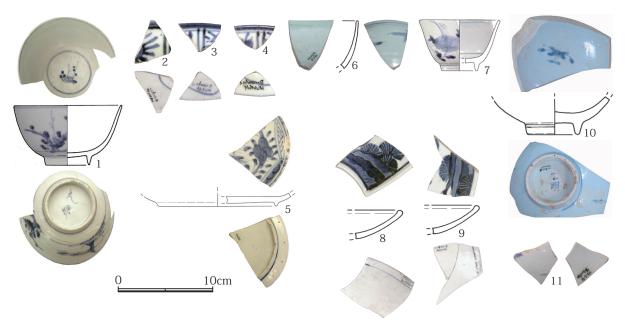


Figure 23 Hizen porcelains from Monte Fortress (Courtesy: Macao Musum)



Figure 24 Hizen porcelains from Kinmen islands (Lin

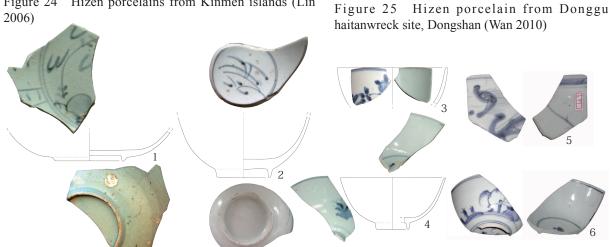


Figure 26 Hizen porcelains from Ma-gung Harbor, Pescadores (Lu and Nogami 2008)



Figure 27 Hizen porcelains from Ma-gung Harbor, Pescadores (Hsieh 2008)

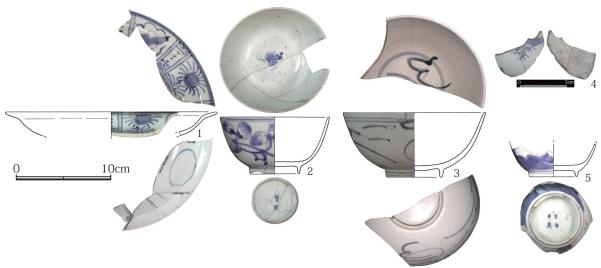


Figure 28 Hizen porcelains from Shenei site and Tainan city (Li 2004)